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Political Economics of the Financial Crisis

Final Paper

A Time of Crisis, A Time of Change

Abstract

The United States is still recovering from one of the worst recessions in recent memory, and many questions still surround the origins of where it all started. This paper provides an overview of the events leading up to the crisis and discusses some of the glaring numbers that most certainly indicated the onset of the financial collapse. Current economics has come under fire for failing to account for such a terrible meltdown, and although mainstream economics currently reigns supreme as the prevailing method of understanding complex economic issues, a more theoretical view of the recent crisis using political economy may provide some of the clearest explanations of what went wrong. The stock market bubble of the early 2000s precipitated the housing market bubble several years later, and both in their own ways led to the larger recession of 2007-2009. Also, by taking a closer look at some of the failed economic policies that were so stubbornly held to be true, this paper attempts to discuss some of the ways that political economists propose a reform of the current state of economics.

Introduction

The Great Recession of 2007-2009 altered the way that the field of economics is viewed, largely because much of the public outcry has been centered around the question of: why were economists unable to predict such a huge failure of the economy? While there are constant discussions about the its' origins, it is first important to understand why the current field of economics failed to account for the crisis. Then, by utilizing the theoretical framework of political economy, I will examine some of the developments in the economy in the period leading up to the crisis and show that these events are actually explained very accurately by some of the great economics thinkers such as John Maynard Keynes, Karl Marx, and Hyman Minsky. At the same time, I will summarize the rise of the housing market bubble of the mid 2000s and use data to present some of the problems that may have contributed to the eventual recession. Finally, I will discuss whether there are any ways that we might be able to reform the current economic discipline and the flawed policies that came out of it in the past few decades.

The Failure of Mainstream Economics

The traditionally accepted as well as dominant theory in economics for several decades, mainstream economics takes a largely free-market stance and argues that regulation is a limiting factor to economic growth. In the first years of the new millennium, this theory prevailed and the markets were heavily de-regulated. Prior to that point, steady market regulation was a structural foundation and had long been a characteristic of the United States economy. During the height of the housing market boom Alan Greenspan, the past Chairman of the Federal Reserve, even rejected calls to regulate the subprime lending market (Krugman, 2009; p. 5). This evidenced the sheer power of mainstream economic theory on policy-making decisions, as subprime loans are largely considered to be one of the main reasons for the collapse of the

housing bubble that sent us into the recession. In the same light, cries to regulate the risky derivatives market also fell on deaf ears (The Warning [Documentary], 2009). Then, the crisis occurred, but mainstream economists still firmly held that there was nothing more that they could have done to predict such a disaster.

Due to its inabilities to account for much of the crisis, mainstream economics has faced increasing backlash in recent years. One of the main theoretical foundations of mainstream ideology is the theory of rational expectations. This assumes that all economic agents behave as if they have perfect knowledge of the market and furthermore, make the most rational decisions when it comes to matters of the economy (Kay, 2011; p. 6). Another assumption of mainstream economics comes in the form of Efficient Market Theory, which holds that the price of shares is always correct and that the market always operates efficiently because it is fully reflecting all information.

In stark contrast to the mainstream economic approach to understanding financial crises is the political economy approach, which seeks to take a more realistic stance on crises and how they occur in the economy. The political economy approach accepts the notion that people's behaviors will not always be rational and thus some of their decisions will lead to an inability to make good on incurred debts. As such, these deviations from perfect rationality will create financial instabilities in the market. Because of this, the long-term characteristics of the United States economy are that these financial instabilities will occur in cycles over time and the economy will fluctuate from periods of growth to periods of recession. It also takes the stance that lightly regulated markets are best in order to allow for investors to choose their own ideal level of risk (Kregel, 2013; p. 164). By using this theoretical framework of political economy, we are able to explain both the stock bubble of the early 2000s as well as the housing bubble of the mid 2000s. Since the political economy approach does not assume perfect rationality, prices can be expected to experience various levels of deviation from market accuracy over time, either in the form of artificial inflation or deflation.

Mainstream economics assumes that leverage is not a bad thing, while the political economy approach to the financial crisis sees dangerously high leverage and corporate debt as one of the main causes of the crisis. In the next section, I will explore how the housing market played a key role in facilitating major financial instability that led to the 2007-2009 crash. In many cases, it was the joining of risky derivatives with mortgage bonds that spelled trouble for the whole economy, as these trades were made as a way of increasing the potential return on investments by eliminating the risk of holding certain assets. However, the trades spiraled out of control, and paired with the questionable loans that were given out to prospective homeowners the housing bubble that started after the stock bubble in the early 2000s funneled right into the Great Recession. The derivatives market is a prime example of how companies and banks used leverage to get a competitive advantage, so it is important to once again consider the failure of mainstream economics to recognize the inherent problems that drove the economy into the recession.

Origins of the Housing Market Bubble of the Mid 2000s

One of the obvious explanations for the occurrence of the 2007-2009 crisis was that the collapse of the housing bubble facilitated the much more problematic stock market crash. However, this was really a case of all of the factors coming into play together to cause the overall economic crash in 2008. The housing bubble did lead to the 2008 market crash, but the housing bubble was essentially created by the earlier stock market bubble in the early 2000s. This stock bubble was largely a byproduct of the tech boom, and start-up companies quickly grew into market giants, overtaking previously successful companies at the top of the market (Baker, 2009; p. 29). During this time, a rapidly increasing percentage of people's total domestic profits were coming from the stock market. From 1998 to 2003, this percentage rose from around 27% to upwards of 40% of all profits (Figure 1). This evidences the fact that consumers were relying heavily on the earnings that they would see from the stock market without taking into account

the notion that what they were actually investing in was an artificial inflation in their holdings. While the stock market flourished in the bubble, banks were busy making derivatives deals to further increase their profits. Some banks had realized that if they bundled different types of risk together, they would be in line to make huge gains. However, these new bundles tied risky derivatives to the housing market, so a whole new problem reared its head. The real estate market was now poisoned with poorly constructed derivatives trades.

Furthermore, the widespread success in the booming stock market of the early 2000s only spurred people to consume more and more. The growth of the stock market was creating more disposable income for consumers, but this was quickly being spent and the levels of debt were spinning out of control. People were now using their newfound wealth to buy material goods, including houses (Baker, 2009; p. 74). In 1975, the overall amount of consumer debt was 736.3 billion dollars, which seems like a lot but it was only 62% of consumers' disposable incomes (Figure 2). By 2000, consumer debt had risen to 6.9 trillion dollars and accounted for 96.8% of disposable incomes. Yet it got worse. In only a five year span, this number had increased to 127.2% of consumers' disposable incomes, meaning that people were not even making enough money to pay off the debts that they had incurred. The overall consumer debt jumped to 11.5 trillion dollars. As far as payments on these debts were concerned, from 1998 to 2005 the percentage of the average individual's income that went to pay off existing debts jumped from 12% to 14%, a very noticeable jump (Figure 3).

Looking at this with the lens of a theoretical political economy approach, this surge in debt was explainable. While the stock market was booming, few noticed the fact that it was unsustainable and even fewer warned against it. Hyman Minsky promoted some of the core theoretical framework of political economy, saying that "stability creates instability" to refer to the tendency of people to build up debt in the good times and then have that same debt be the main cause of why the good times came to an end (Cooper, 2008; p. 151). The period right before the Great Recession is a prime example of this argument, and we can see from the data the extreme rise in debt during the stock bubble of the early 2000s. Since stocks were soaring and

debt was rising at the same time, we can see this as exemplifying what Minsky would have called the good times. Then, this amount of debt become unsustainable and as we will see in further discussion of the collapse of the stock bubble and the subsequent rise and fall of the housing market, led to the end of the good times.

The Efficient Market Hypothesis of the mainstream economists would say that markets are always efficient and that such a crisis could not be predicted. Robert Lucas, a leading macroeconomist and supporter of mainstream theory, essentially sums up mainstream economics' stance on financial crises when he argues that the crisis was not predicted because economic theory predicts that such events cannot be predicted (Kay, 2011; p. 1). However, by examining the theoretical framework laid out by Minsky, we can see that what happened leading up to the Great Recession of 2007-2009 was in fact exactly within what he had discussed in his theories. His Financial Instability Hypothesis contradicts the Efficient Market Hypothesis and the broader mainstream economic theory, much like Keynes's theories do. The Financial Instability Hypothesis asserts that financial markets can generate their own internal forces, which subsequently cause waves of credit expansion and asset inflation followed by waves of credit contraction and asset deflation (Cooper, 2008; p. 13). These events are expected to happen, and this assumes that financial crises are simply an inherent part of the system.

Eventually, the stock market bubble of the early 2000s burst and investors were left scrambling. The obvious place to turn for a quick recovery was the real estate market. The stock market bubble had increased demand in the housing market exponentially, and housing prices were on the rise. While the price of homes would ordinarily not have been able to withstand the hit to the stock market, the Federal Reserve cut interest rates to their lowest rate in almost fifty years (Baker, 2009; p. 75). This helped sustain the rising prices in the housing market for homes that were already overvalued, and this only served to fuel the subsequent housing bubble. Low interest rates allowed for people to still be able to make payments on homes that they may no longer have been able to afford after the collapse of the stock bubble.

The housing bubble started in the early to mid 2000s, when home prices radically increased in sale price. In one specific case, a home sold for $160,000 in 1996 but sold for $445,000 in 2004 (Baker, 2009; p. 67-68). At the same time that home prices were so drastically rising, the average mortgage rates were falling (Figure 4). It became much easier for people to take out a loan because the rates were lower. These two can be seen to share something of an inverse relationship though, since lower mortgage rates pushed more individuals into the housing market. With more potential homebuyers, the demand for homes also rose. Figure 4 lends credence to this assertion, since home prices were at their highest point in 2005 and conveniently enough this is when mortgage rates hit their lowest point since prior to 1970. Thus, more people were finding themselves able to afford to take out a mortgage on a home that they ordinarily would not be able to afford. This phenomenon was essentially because of the creation of subprime loans. While subprime loans were loans that were commonly issued to buyers who had good credit histories, they were also were given to prospective buyers with very poor credit histories as well (Baker, 2009; 94). As such, these loans brought some of the largest amount of risk with them.

By 2006, the subprime sector of the housing market accounted for a quarter of the loans issued, and these loans typically were issued at 2%-4% higher interest rates than the average loan (Baker, 2009; 94). For banks, this was an easy choice. Investment banks typically preferred issuing these subprime loans because of the higher interest rates (Inside Job [Documentary], 2010). At the same time, Alt-A mortgages made a big rise. These mortgages were questionably even more risky than sub-prime loans, since individuals were often simply required to pay the accrued interest on their mortgage. They were not really making any payments on the mortgage itself, and while this was good for people for the short term, in the long run they were not reducing their overall mortgage at all. Even worse, banks had long campaigned in Washington D.C. to end market restrictions and regulations, and with the repeal of the Glass-Steagall Act they finally began to face fewer regulations. Because of this, they gained greater freedom to trade derivatives as a way of insuring against the risk of some of the questionable loans that they

were making. Since they could pass off the risk to investors in return for marginal payments, banks saw no downside to issuing such risky mortgage bonds. Now, the risk of taking the profit hit for a loan default now fell to someone else. Markus Brunnermeier lent credence to this idea, saying that "banks essentially faced only the 'pipeline risk' of holding a loan for some months until the risks were passed on, so they had little incentive to take particular care in approving loan applications and monitoring loans" (Brunnermeier, 2009; p. 82).

The Housing Market Crisis

A combination of factors led to the collapse of the housing bubble, but most notably it was the poor lending practices of banks who issued subprime loans to those individuals who could not afford to make their payments that caused the most damage. When housing prices finally peaked at the height of the housing bubble, they were incredibly inconsistent with the average individual income as well as with population growth. Income did increase steadily from 1996 to 2001 through the stock bubble, but growth was mediocre in comparison with the incredible income growth right after World War II (Baker, 2009; 77). Since this period had not seen such a huge rise in the average price of homes, the logical conclusion would be that such income growth was obviously not the cause of the skyrocketing home prices. However, the rising price of homes in the period around the stock bubble falsely led to a disturbing trend in investing. Investors began to assume that prices could only continue to increase, so with no indications of anything different, people were more inclined to go out and purchase a second home or even holding on to an existing home when moving. Dean Baker discussed this behavior, saying that the "expectation of higher house prices in the future means buyers will pay more today. This willingness, in turn, causes prices to rise" (Baker, 2009; p. 72). After taking horrible losses in the collapse of the stock bubble, investors flocked toward the booming real estate market. Prices were further driven up in the short-run by poor decisions made by homeowners. People began to buy second homes, and houses were not sitting long enough for

their prices to decline. Eventually the bad loans made by banks caught up with people, and the default rate on mortgages began to rise dramatically. This started a rapid trend toward the collapse of the housing bubble. All of a sudden, fewer people were looking to buy homes, and prices plummeted. Investors who bought homes seeking to turn profits were unable to sell and were left with payments that they could not afford. Many bad things resulted from the housing bubble, but the combination of cheap credit and low lending standards which initially resulted in the housing frenzy ended up laying the foundations for the 2007-2009 crisis (Brunnermeier, 2009; p. 82).

Productivity Increases & Wage Increases

Jan Kregel argues that had Minsky been around for the most recent crisis, he would have most certainly argued that the economic crisis of 2007-2009 could have been avoided by an increase in wages in line with the rise in productivity (Kregel, 2013; p. 170). Levels of productivity increased in a disproportionate amount with real wages starting in approximately 1954 (Figure 5). By the time the housing market collapsed and the crisis was beginning, productivity had increased by over five times the amount that real wages had increased. The traditional mainstream view of wages and unemployment is that there should always be a strong tendency for wages to be related to demand, which would lead to full employment (Skidelsky, 2009; p. 93). If this had been true, then during the recent crisis wages would have adjusted proportionally to demand and people would not have become unemployed. However, Keynesian theory argued against this, and held that there could be such a thing as involuntary unemployment which would force workers out of jobs.

Another troubling problem that indicated something may have been amiss was the skyrocketing average of corporate profits. While modest corporate gains can serve to indicate the overall health of the economy, exorbitant corporate gains could serve to indicate an imbalance in the economy. Much like we saw in class, sometimes the positive numbers can be

misleading. "Named America's Most Innovative Company" for six years in a row (Tett, 2009; p. 83), Enron was a leader in free-market competition and a corporate giant. After reporting revenues of $101 billion dollars in 2000, Enron reported bankruptcy on December 2nd, 2001 (The Enron Scandal [Documentary], 2001). It turned out that through all those years of supposed profit, the company was actually operating deep in debt and was using accounting tricks to hide their poor performances. In the years spanning 1990-2005, corporate profits rose 106.7% (Figure 6). From 2001 to 2005 alone, profits rose approximately 80%, a staggering number. At the same time, in 2005 the average worker was only paid 4.3% more than they were in 1990. If profits were not going to the workers, where were they going?

Wage Exploitation, Income Inequality & Trade

On a similar note, another inherent cause of the Great Recession of 2007-2009 was the wage disparity between citizens. From the period 2001-2007, the average wages of the wealthiest 1% of Americans almost doubled while the wages of the other 99% remained fairly stagnant (Figure 7). By 2007, the wealthiest Americans were earning almost 800% more than even the top 20%. Figure 8 shows the average pay of a CEO in comparison to the average worker, and in the period leading up to the crisis, CEO's were receiving exorbitant amounts of money. In 2004, the average CEO made 431 times the amount that an average worker received. Mainstream economics does not account for the crisis, and would assume that wages would be correct because of the rational expectations theory. However, according to Marx's theory, economic crises are inherently potential, and that financial crises are intrinsic to capitalist economies. Marx argued that the capitalist productive process is simultaneously a process of exploitation and domination of the working class by the class of capitalists (Milios, Dimoulis, & Economakis, 2002; p. 42-43).

On a similar note, Structural Keynesian theory can help explain the roots of the financial crisis by examining the income inequality over time in the United States. Since the period right

after the Great Depression, income inequality has been increasing. In 1952, the percentage of overall income held by the top 10% of Americans hovered around 32%, but by 2007, this number grew to around 50% (Figure 9). The top 10% of earners in the United States were receiving half of the income! This number also increased rapidly in the past thirty years, since the percentage change from 1952 to 1977 was negligible. Structural Keynesianism views this change as related to the neoliberal growth model and argue that it created a thirty year period of stagnant wages and led to the greater income inequality that is noticeable in the data (Palley, 2009; p. 12). The essential premise of their argument is that over the past thirty years, the United States has relied on rising debt and asset price inflation to fill the hole in aggregate demand (Palley, 2009; p. 3). This hole in aggregate demand was a byproduct of the model's effect on wage stagnation and widened income inequality. As seen in previous sections of this paper, this postulation is backed up by the data that suggests rising debt as well as asset price inflation during this time.

From a Structural Keynesian perspective, this model is at the heart of the roots of the crisis. In place of wage growth spurring demand growth, it relied on borrowing and asset price inflation (Palley, 2009; p. 1). This assumption is seen in Figure 10, where the prevailing percentage of total domestic profits has shifted to favor financial profits over manufacturing profits. In 1965, manufacturing profits accounted for over 50% of the total and financial profits only accounted for less than 15% of the total (Figure 10). Shifting forward to the year 2000, both percentages hovered around 28% but in the following five years, financial profits jumped to nearly 40% of the total whereas manufacturing profits only accounted for about 12%. As seen in Figure 6, wages stayed fairly stable in these years. It was the inflating stock market bubble that was driving growth, and profits derived from the markets were increasingly reliant on the bubble.

Going into even further exploration of how the theoretical framework of political economy can explain some of the factors leading to the crisis, an additional facet of the Structural Keynesian argument is that an increasing trade deficit by the United States played a key role in causing the 2007-2009 recession. In the years directly prior to the crisis, the United States became increasingly reliant on imports, the off-shoring of jobs, and the off-shoring of investment

(Palley, 2009; p. 11). At the beginning of 1998, the trade deficit in the United States was hovering round 10%, which simply indicated that we were slightly importing more, investing more in foreign economies, and sending more jobs overseas (Figure 11). However, by 2008 this percentage had increased to around a 60% deficit. This was one of the negative effects of the crisis, since this further drove up the prices of commodities and led to more unemployment.

Another negative effect that came from the crisis had to do with the bailout of failing banks. The first major bank to fail and signal the onset of the crisis was Lehman Brothers, and the government decided not to bail out the bank. This decision did not work well, and then banks began to receive bailouts much more quickly. This created a problem, since there was public outrage that the same banks who had made risky decisions and got the country in the mess in the first place were now off the hook for having to "foot the bill" for their failure (Skidelsky, 2009; p. 171).

Consumption Spending and Savings Rate

Another development in the economy that can be seen to have had an impact on the 2007-2009 crisis was a continuous increase in consumption spending by the public. While Dean Baker makes a valid assessment that the collapse of the housing bubble facilitated the 2008 recession by forcing down overall consumption (Baker 2009; p. 118), the roots of the recession can also be traced back to the unsustainable increase in consumption spending and a declining savings rate. Jan Kregel also agrees with this idea, saying that the crisis was largely driven by consumption spending (Kregel, 2013; p. 170). This notion can be bolstered by examining the level of personal saving as a percentage of disposable personal income in the period leading up to the crisis (Figure 12). In the 1970s and 1980s, personal savings peaked at just under 15% and averaged around 10% for the duration of these years. However, in the 1990s and early 2000s, savings rates steadily declined until they hit approximately 1% in the years 2002 and again in 2005. In the years right before the 2007-2009 recession, the level of saving was at its lowest

point in over fifty years. Interestingly enough, there was a noticeable trend that before each documented recession since the 1960s, the savings rate would steadily decrease until the onset of the recession. Then, at the beginning of the recession, the savings rates would increase again because individuals would begin conserving their wealth. Such pronounced decreases in the rates of saving is bad enough, but even worse, while the percentage of saving was decreasing the percentage of consumption spending was also increasing: people were spending more and saving less. Figure 13 evidences this upward trend in real personal consumption expenditures. From the first quarter of 1995 to the start of the crisis in the third quarter of 2007, consumption spending went up by approximately 50%, from 6 trillion dollars to around 9.3 trillion dollars (Figure 13). With such high rates of consumption spending, the level of investment necessary to sustain higher levels of growth was not attainable.

Are Crises Intrinsic to Capitalist Economies? Do the Theories Help See Them Starting?

After examining many of the root causes of the 2007-2009 crisis, we are still left with the stark reality that there were so many things that led to the recession and that the field of economics failed to adequately realize the situation and the dire nature of the economy. While mainstream theory failed to predict or account for much of the crisis, the theoretical framework of political economy allows for a better understanding of why some of the things happened as they did. The political economy approach allows for crises to occur, and since it is evident from the recessions of the past that they do indeed occur, this lens also provides the opportunity to practice better risk management in the future. More importantly, there are ways for accounting for crises; Structural Keynesians present the neoliberal growth model and Minsky presents the Financial Instability Hypothesis.

To answer the question of whether or not crises are intrinsic to capitalist economies, Minsky argued that the capitalist financial systems have a natural tendency to demonstrate financial instability (Palley, 2009; p. 5). He saw financial instabilities as growing from the

progessive decline in the ability of the system to absorb external shocks during economic expansion. Through the theory of political economy, increasing financial fragility is inevitable in the capitalist system (Kregel, 2013; p. 164). And while Keynes may not have predicted that the financial collapse would occur when it did, he would have certainly thought that a financial collapse was likely given the extent to which governments had abandoned any serious attempt to avert such a thing (Skidelsky, 2009; p. 50). This perhaps speaks best to the point that the political economy theories can see trends that may indicate the emergence of a financial crisis, but it will only be through a reform of the current economic system that the field of economics will embrace this approach. While certain individuals may be able to spot these trends ahead of time, it will take a majority of the discipline accepting these trends for any type of real precautionary measures or policy-making to be accomplished.

Conclusion: What Can Be Done?

After the Great Recession of 2007-2009, it has become evident that something must change in the economics discipline if we are going to minimize the impacts of future crises. If one thing is clear, it is that there always have been, and presumably always will be, financial downturns due to instabilities in the system. John Maynard Keynes theorized that there is an inherent and inescapable uncertainty associated with the future (Skidelsy, 2009; p. xvi). If this theoretical framework of political economy is accurate, then it becomes not a question of "how did such a crisis happen?" and more of a question of "how do we prepare for the next one?". Perhaps the even more important question would be: is it possible to reform the economics discipline and economic policies?

In that vein, there is nothing to say that a widespread reform cannot happen in the economics discipline, especially since it was once dominated by Keynesian economics with influences by Marx and Minsky. It would essentially be less of a reform in the system and more of a return to past economic theory. As a matter of fact, this is most likely the best thing that

could happen to the economics discipline, since it is currently dominated by monetarist theory which has failed to fully explain or even account for the Great Recession of 2007-2009. This mainstream approach to economics holds that the collapse can be linked to an instability in the supply of money, and more specifically that the crisis was caused because of mistakes that were made in the policymaking aspect of the economy. According to this dominant paradigm in economics, the inflation of assets was caused because the Federal Reserve did not adequately control the money supply and made it too easy to get credit and have more money (Skidelsky, 2009; p. xx). Because mainstream economics assumes that the markets are naturally self-regulating, this theory was unable to grasp the notion that markets are naturally unstable. After the fact, mainstream economists explained the failure of their theory to recognize financial crises by saying that there was no way for them to predict such unpredictable events. This answer is most definitely insufficient and limits the field of economics from advancing to the point where economists actually work to predict and mitigate the effects of future crises.

In a theoretical light, Keynesian theory maintains that markets are cyclically unstable in the absence of publicly-supported investment (Skidelsky, 2009; p. 4). Regarding mainstream economics, if the fundamental logic behind the theory is inaccurate, it does not matter how well hypotheses are postulated or if the best conclusions are drawn since the origins of the material supporting those conclusions are essentially misguided (Crotty, 2013; p. 138). Despite the fact that the mainstream approach failed to explain most of the most recent financial crisis, it is still widely taught at universities across the United States and is the prevailing set of beliefs in the economics field.

However, with the proper measures and adequate reform, it is possible for economics to regain solid footing and re-emerge as a trusted field for the future. While he does not feel that change will come quickly, Skidelsky does argue for important reforms within the way economics is taught in schools. His theory is that economics should be taught in a more well-rounded fashion, so that students will not simply know the mathematical basis of economics but also know the theoretical reasoning as to why certain mathematical approaches work (Skidelsky,

2009; p. 189). Another specific alteration that would help reform the economics discipline would be to separate macroeconomics from the study of microeconomics, since both are very heavily math driven examinations of the economic situation. By focusing more heavily on the theoretical side of economics, and in this specific case the theory of financial crises, economics students would be more familiar with Keynes, Marx, and Minsky and would more ideally be sent into the field with a less math-based education and more policy/theory-based education. In this regard, students would also be able to gain a good understanding of multiple different economic perspectives such as the political economy approach instead of simply being indoctrinated with mainstream theory. Perhaps the most important thing to come from this regarding future crises is that the political economy theory does accept that bubbles occur in the market, and that they arise due to a deviation from the assumption that everyone behaves rationally. If more economists would be open to a wider range of theoretical approaches, we may be able to avoid such a crisis as seen from 2007-2009.

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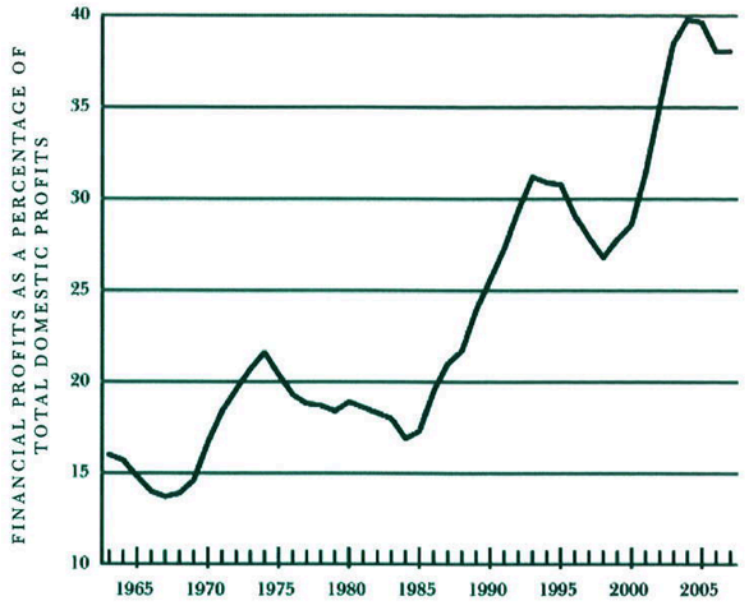
The Warning. PBS, 2009. Film.

Appendix

Figure 1. ***Financial Profits as a Percentage of Total Domestic Profits (Five-year moving average)***



Source: Table B-91. Corporate Profits by Industry, 1959–2007, *Economic Report of the President, 2008.*

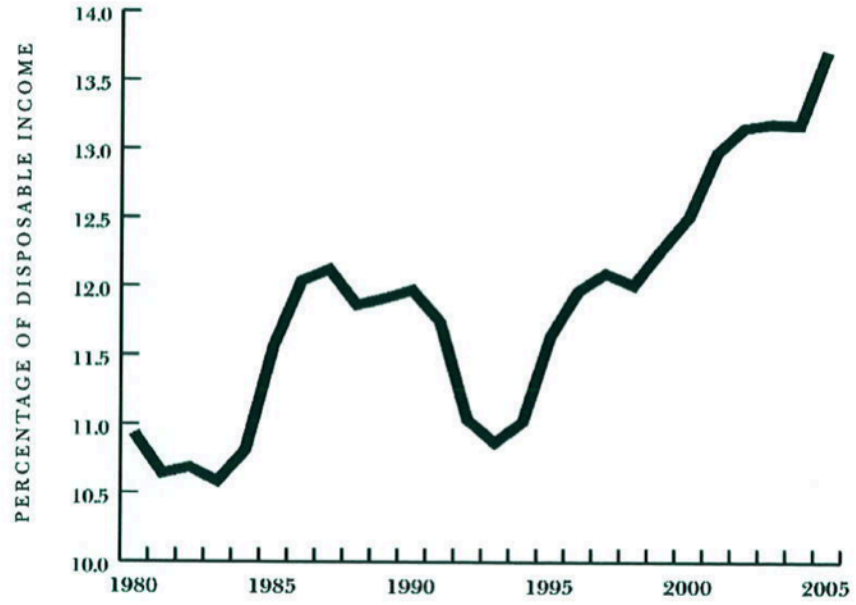
Figure 2. ***Outstanding Consumer Debt as a Percentage of Disposable Income (in billions of dollars)***

	Consumer Debt	*Consumer Disposable Income*	*Debt as % of Disposable Income*
1975	736.3	1,187.4	62.0
1980	1,397.1	2,009.0	69.5
1985	2,272.5	3,109.3	73.0
1990	3,592.9	4,285.8	83.8
1995	4,858.1	5,408.2	89.8
2000	6,960.6	7,194.0	96.8
2005	11,496.6	9,039.5	127.2

Note: Disposable income after paying taxes

Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts of the United States, Historical Series and Annual Flows and Outstandings, Fourth Quarter 2005 (March 9, 2006). Available at http://www.federalreserve. gov/releases/Z1/Current/

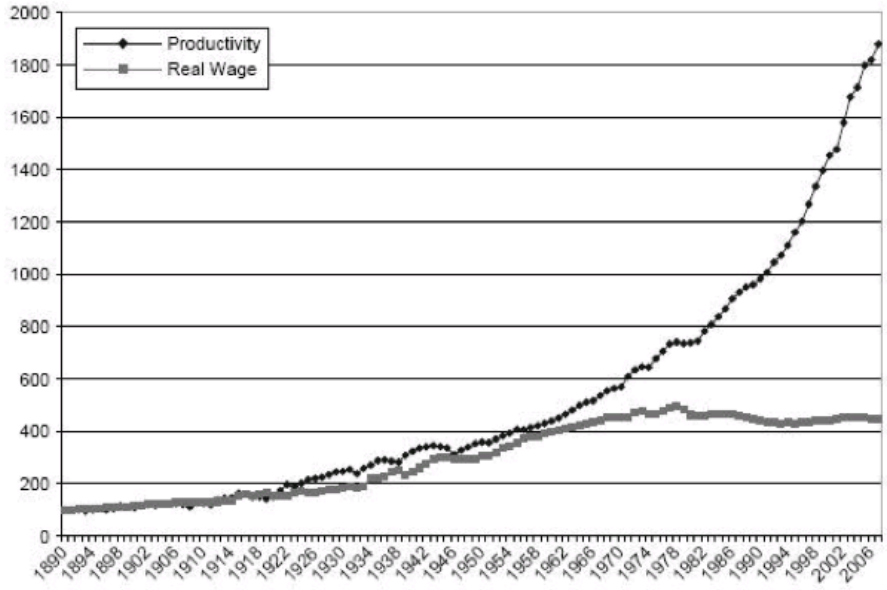
Figure 3. ***Consumer Debt Service ratio (Debt Service Payments to Disposable Income)***



Source: Board of Governors, Federal Reserve Board, Household Debt Service and Financial Obligations Ratios, www.federalreserve.gov/releases/housedebt/

Figure 4. ***House Price and 30-year Fixed Mortgage Rate***

Figure 5. ***Productivity and Real Wage in the U.S. (Index 1980 = 100)***



Sources: US Department of Labor, Bureau of Labor Statistics; US Department of Commerce, Bureau of the Census, *Historical Statistics of the United States.*

Figure 6. ***Cumulative Percentage Change in Economic Indicators***

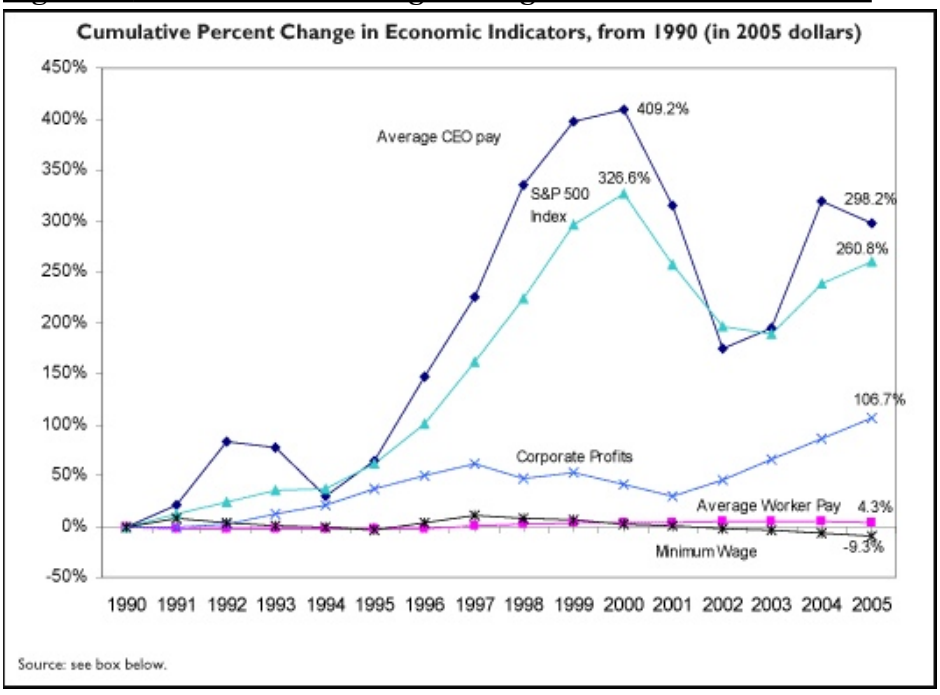


Figure 7. ***Average Household income and change in share of Income***

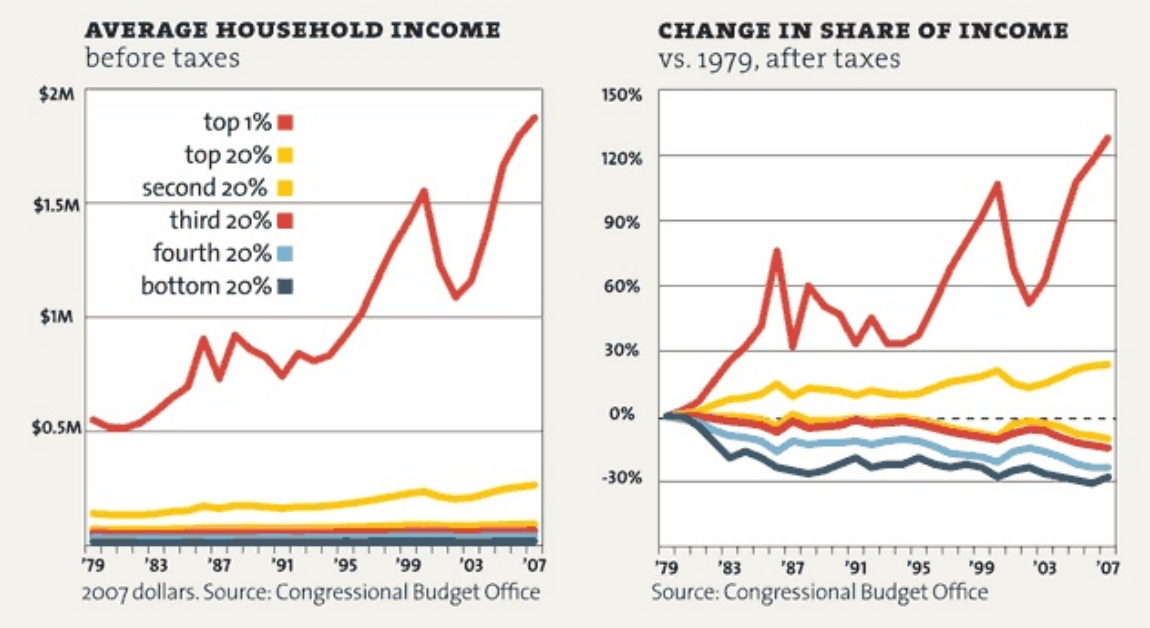


Figure 8. ***CEO Pay***

Figure 9. ***The Top Decile Income Share, 1917-2010***

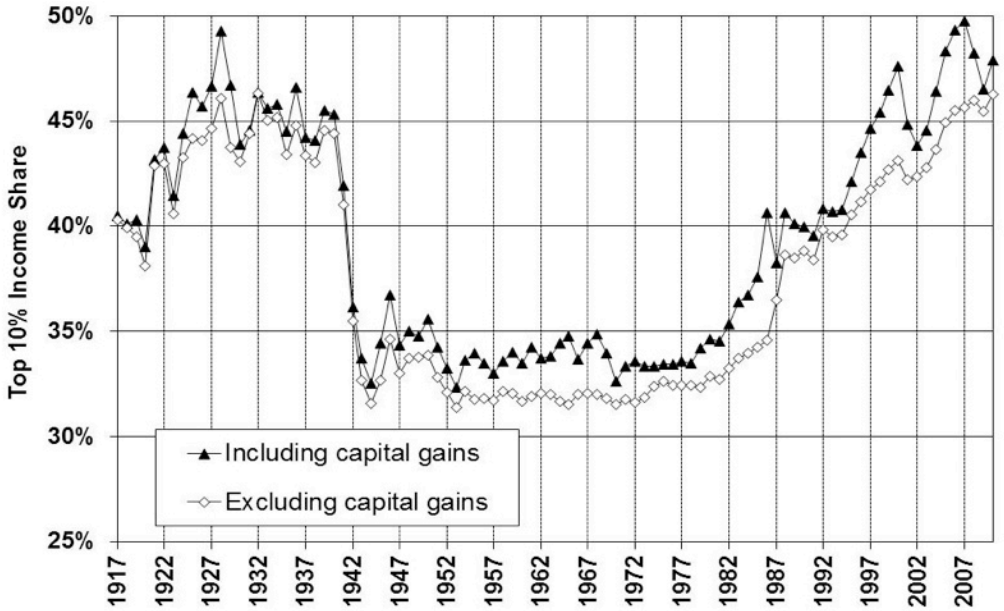
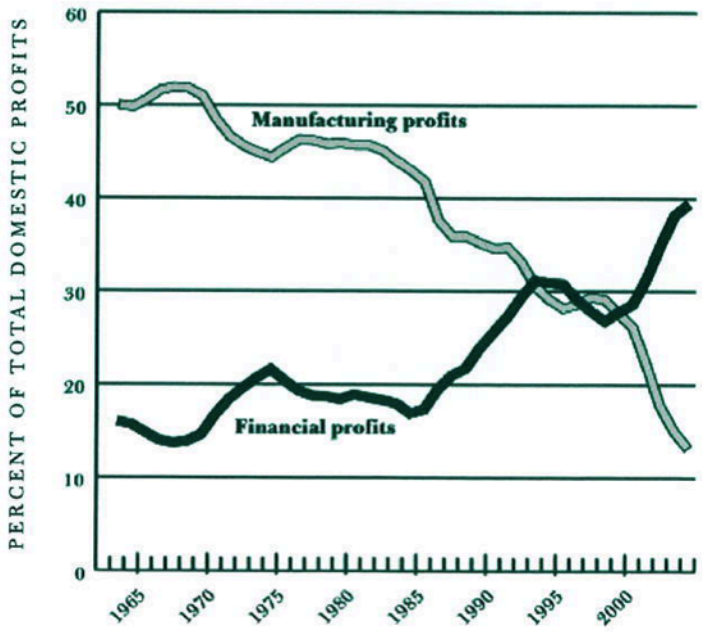


Figure 10. ***Financial and Manufacturing Profits as a Percentage of Total Domestic Profits (Five-year moving average)***



Source: Calculated from Table B-91 *Economic Report of the President, 2006.*

Figure 11. Monthly Trade Deficit of the United States: 1998-2008

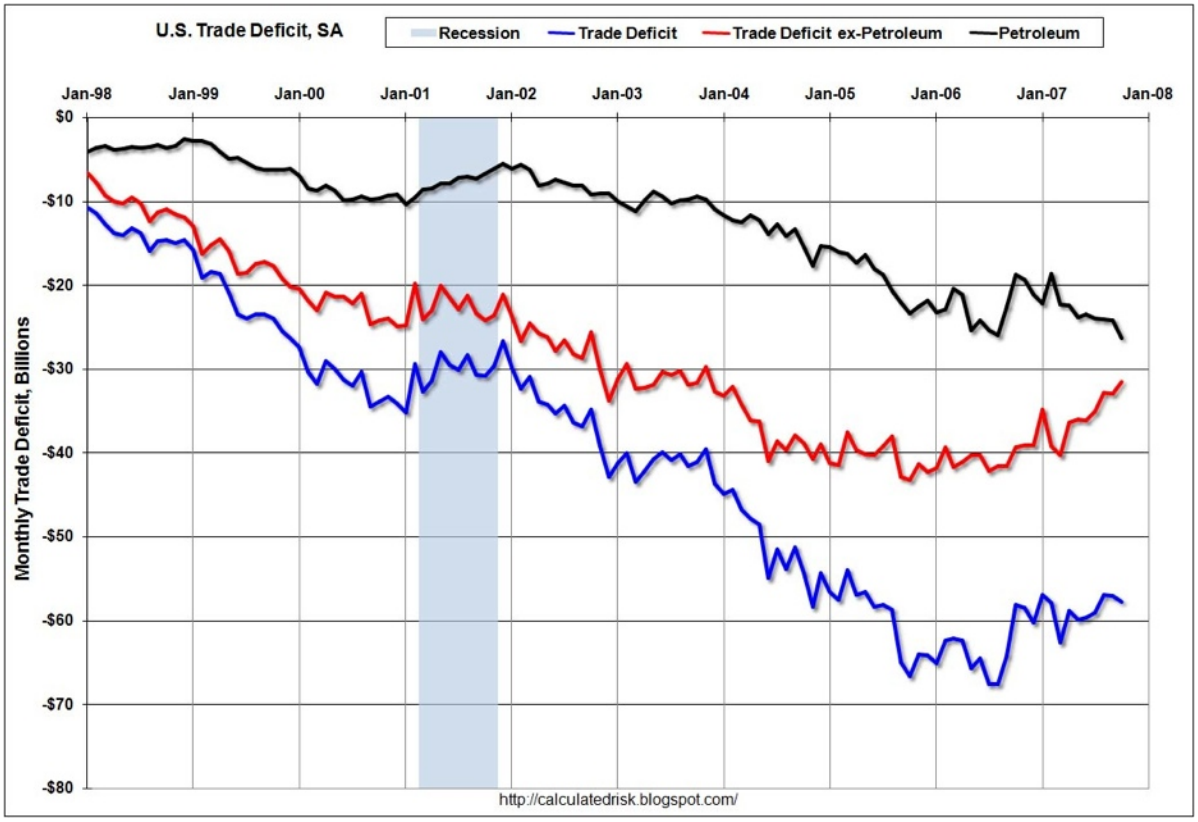


Figure 12. ***Personal saving as a percentage of disposable personal income***

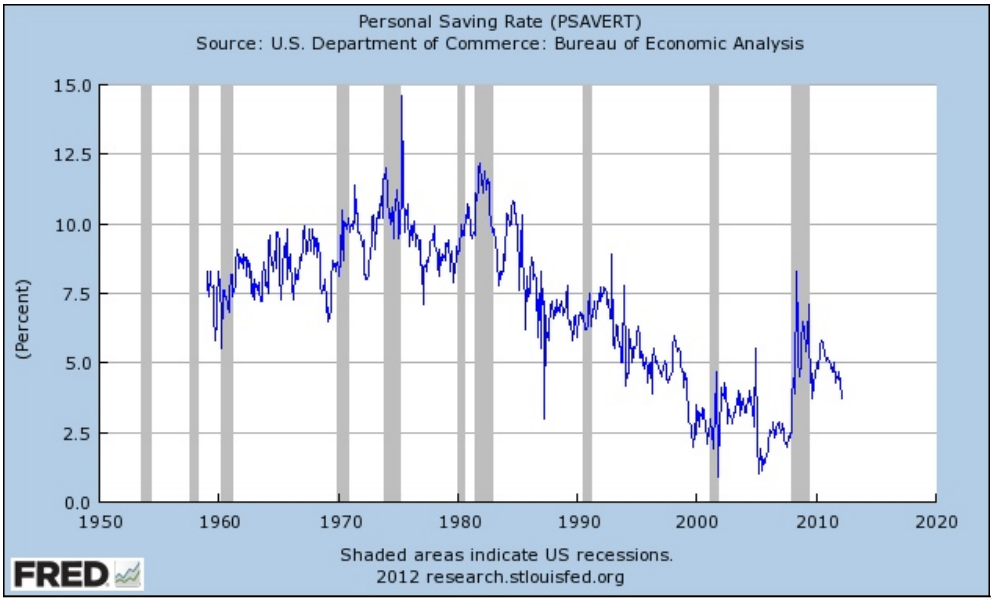
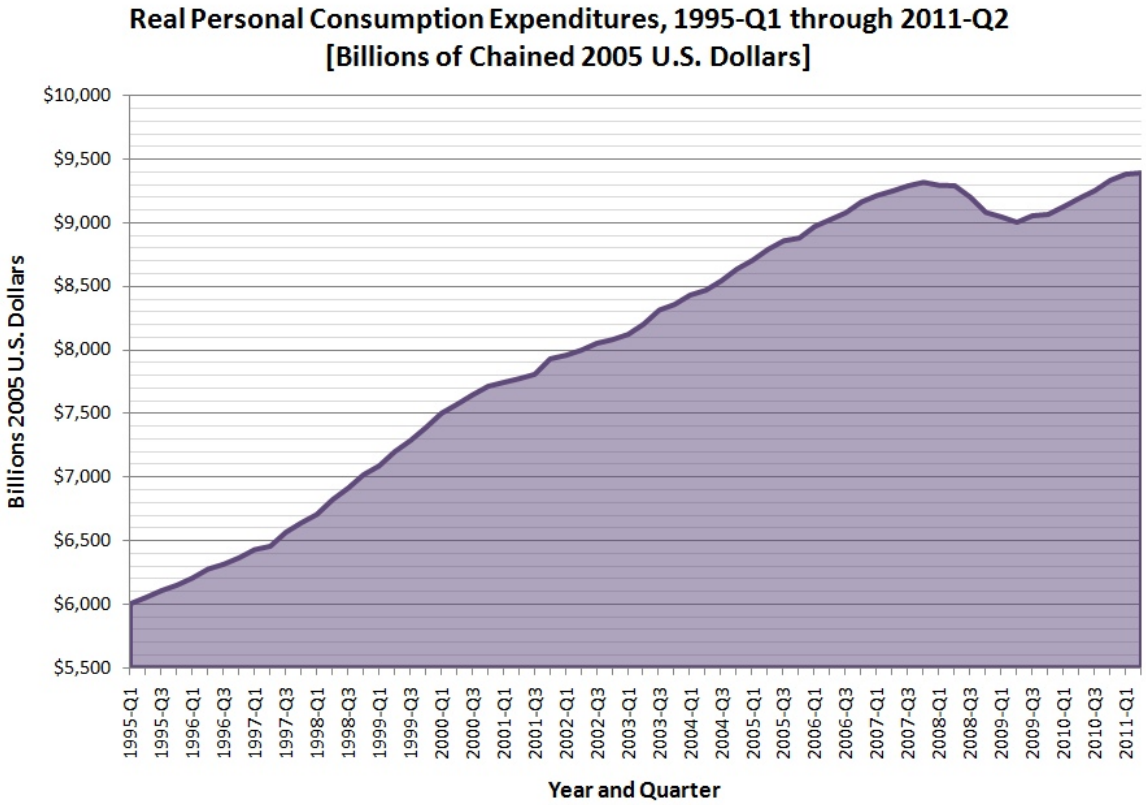


Figure 13.



Source: U.S. Bureau of Economic Analysis, National Economic Accounts, Table 2.3.6. Accessed 10 September 2011.