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Distribution Shifts and Declines in Autonomous Consumption: A Great Recipe for a Great Recession

Abstract

The Great Recession has been drawing the attention of many due mainly to its global impact that has been considered very similar to the Great Depression. So have been the root causes. Among the competing explanations, the present study focuses on two of them that were the same factors - among others - to explain the root causes of the Great Depression: the dramatic shift in income distribution and the sudden drop in autonomous (or wealth-based) consumption. Accordingly the present study examines first, the role of income distribution shifts to demonstrate the fact that such a shift placed a significantly larger share of U.S. national income in the hands of the top one percent of income recipients at the same time as median real incomes were declining that in turn led to increased reliance on Mortgage Equity Withdrawal (MEW) and increases in debt ratios for middle income households. Second, it focuses on the role of wealth-based consumption by drawing attention to the similarities of the Great Depression and the Great Recession in regard to these two topics. The study concludes that although there are competing explanations for the Great Recession, the two factors are significant due to the fact that they have the potential to turn an ordinary recession into a depression or prolong it for a very long time.

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First Advisor

Yavuz Yasar, Ph.D.

Second Advisor

Tracy Mott

Third Advisor

Robert Urquhart

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Key words: Income distribution, autonomous (or wealth-based) consumption, Mortgage Equity Withdrawal (MEW), Great Depression, Great Recession.

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Chapter 1: Introduction

When world financial markets entered their state of virtual free-fall in 2008, my intuitive sense was that we were paying the price for the financial excesses of the immediate past. I had some familiarity with the recent dynamics of income distribution in the United States but little knowledge of the arcane world of derivatives and hedge funds and their multi-trillion dollar bets that when it came to United States housing prices, what goes up would *not* come down. Now almost three years later we are still in the throes of the most severe and most protracted worldwide economic downturn since the Great Depression. And despite massive fiscal and monetary counter-cyclical measures in both the United States and Europe, unemployment remains high in most countries and economic recovery is both problematic and anemic. As we have entered 2011, some, including Federal Reserve Chairman Ben Bernanke, have found encouragement and optimism in a recent sharp drop in the unemployment rate in the United States, but there are numerous reasons to suggest this improvement may be short-lived. First, it is clear there is little appetite in the U.S. Congress for more stimulus funding and instead the focus has turned – even within the Obama administration – to deficit reduction. But, as Joseph Stiglitz observes in his book, *Freefall: America, Free Markets, and the Sinking of the World Economy* (2010)

paperback edition), "...the naïve response – cut back spending and/or raise taxes – will only make matters worse, as the markets response to Spain's retrenchment showed so dramatically. There is a metaphor that likens governments to households; however, this way of looking at public finances is not just wrong, but dangerous. Households that are living beyond their means – that is their spending exceeds their income – and can't find a bank to finance their consumption spree have no choice but to cut back on spending. A large enough cutback will bring the household accounts into order. But when governments cut spending, growth slows, unemployment increases, and income – and tax revenue – declines. The accounts may not improve or may improve only a little."¹

In testimony to Congress in early March 2011, Federal Reserve Chairman Ben Bernanke took a similar stance, warning that current proposed budget cuts could cut about 0.2 percent from the growth rate and that in turn could translate into "a couple hundred thousand jobs."

Second and perhaps most critically, we are entering a time where federal stimulus money to state and local governments and school systems will be depleted. Since these state and local governments now have little room to balance their budgets without resorting to reductions in employment, it is highly likely that employment in the total government sector will be reduced, which is of course the very antithesis of the Keynesian policy prescription that is needed. Joseph Stiglitz notes that a Government Accountability Office (GOA) report to Congress in March 2010 found that 88 percent of communities reported that their fiscal problems were worse in 2009 than they had been the previous year², and current headlines such as the budget

battles in Wisconsin only suggest further intensification. In the case of public school systems, almost all of them derive their financial support from property tax revenues, which are based on home values. Now as local property tax assessors are pressured by homeowners to reduce the assessed value of their properties to reflect the reduced market values of their homes as a result of the now burst housing bubble, schools too will have to increase class size and cut teacher positions in order to balance their expenditures with their revenues. Will any private sector expansion be large enough to offset these government sector trends and effect further reductions in unemployment? Based on the reluctance of private employers to increase employment thus far, an affirmative answer is certainly not assured.

All of this is a bit of a digression but an illuminating one. As my research delved into the onset and continuation of the Great Depression I was struck at how much the Depression was an evolutionary process and how much it had an ebb and flow to it. Just when things seemed to be getting better, repeatedly, they got worse. And of course international developments, including the issue of the continuation or abandonment of the Gold Standard, also complicated national policy initiatives and produced new problems both in the United States and Europe. ‘Beggars thy neighbor’ policies were followed widely as one country after another placed their national self-interest above international recovery. Today we have China curbing its growth while the rest of the world still lags in recovery, and the continuing and unfolding regime change in the Mid East is driving world energy prices upward and threatening to undermine any continuing recovery in many countries because increased energy prices

cut into available discretionary income that might otherwise strengthen consumption and widen economic growth.

It is, as Yogi Berra famously remarked, “déjà vu all over again.”

While there are many similarities – as well as profound differences – between the Great Depression and this ‘Great Recession,’ this thesis will concentrate on what I believe are two of the most important similarities. First, both downturns were characterized by a sudden drop in autonomous (or wealth based) consumption. MIT economist Peter Temin argues, convincingly I believe, in his book, *Did Monetary Forces Cause the Great Depression?*, that it was this drop in autonomous consumption – not a sudden decline in investment as Keynes had focused on with his emphasis on the importance of a decline in the marginal efficiency of capital – that triggered and exacerbated the Great Depression. As he writes: “The depression was severe because the fall in autonomous spending was large and sustained.”³ However, in my analysis of the Great Recession, I place an equally important emphasis on the role of income distribution, which preceded both downturns and in the case of the Great Recession led many to finance rising consumption with real estate wealth via the new financial phenomenon of home equity loans. As established by the research of Piketty & Saez⁴ both downturns were preceded by significant changes in the distribution of income in the United States with relatively higher shares flowing to the top income segments and relatively less flowing to the majority of households. In the case of the present downturn, flat or declining real incomes for most households during the most recent decades was the driver of the new phenomenon of ‘Mortgage Equity Withdrawal’

(MEW) as cash constrained middle income homeowners tapped their real estate wealth to finance part of their consumption.

But in order to understand how we got to where we were before the present financial crisis began, we need to examine two separate but interrelated and ongoing developments that have characterized the U.S. economy since the 1970s: the emergence of neoliberalism and the rise of financialization. While these are usually discussed as separate phenomenon, they are related by what might well be called a mutually beneficial parasitism. Neoliberalism aided and abetted the rise of financialization by beating back barriers to its almost untrammelled growth; while the growing economic and political power of the financial sector as financialization continued further supported and advanced the ideology of neoliberalism.

Where to begin? The logical point seems to be to begin at the beginning by reviewing the economic history of the Great Depression and then to proceed to discuss the major competing and historically dominant theories that have been offered to explain it. Both the history of the Great Depression and major competing explanatory theories will be addressed in Chapter 2.

My third chapter will cover the recent (and I believe continuing) ‘Great Recession.’ Again I will begin at the beginning with the shift away from the Keynesian paradigm that started in the 1970s with the resurgence of neoliberalism and the concurrent financialization of the U.S. economy. The decades from the 1980s onward were characterized both nationally and internationally by deregulation and freer international capital flows, and by increasing income inequality. As we shall see, these

developments set the stage and led to the build-up of the forces that created the financial crisis and implosion that preceded the downturn in the real economy.

Chapter 4 will examine in more detail the trends in income distribution in the United States that led to stagnant and declining real median incomes that in turn fed increased reliance on housing wealth to finance consumption expenditures. Here I will examine changes in income distribution in the United States that placed a significantly larger share of national income in the hands of the top one percent of income recipients and how these changes may have played a role in the simultaneous development of asset bubbles in housing and the explosive growth of investment in derivatives and hedge funds in the first decade of the new millennium. It is my contention that both these asset bubbles can be best understood as the reverse sides of the same coin: a higher share of national income to the top one percent drove the development of the asset bubbles in equities and in the uncharted realms of derivatives and hedge funds – including the altogether surreal concept of “synthetic collateralized debt obligations” – while on the reverse side of the coin a lower share of national income to middle income households fed their reliance on use of wealth from home equity to finance their continued consumption. This is the special and unique form of autonomous consumption that characterizes and differentiates this Great Recession: Never before had so many borrowed so broadly against their housing wealth; never before had so many mortgage backed securities been distributed so widely around the world.

Finally, Chapter 5 will briefly summarize my arguments and draw some wider and more general policy conclusions. I will argue that traditional policy is now almost powerless

to deal with U.S. economic problems going forward and that it may soon be time to consider more innovative measures.

Chapter 2: The Great Depression

A brief history

More than eight decades have passed since the Stock Market Crash of October 1929 heralded the beginning of the Great Depression, a catastrophic contraction of worldwide economic output that remains unequalled – for the present at least – in all of economic history. Economic historians and economic theorists remain divided even today about its origins and precipitating causes, but there is little dispute about its larger characteristics. While the economic downturns in the 1800s involved banking panics, bankruptcy and deflation in various proportions, there is simply no parallel for the levels of underutilization of capacity, including labor, as occurred in the 1930s⁵. The value of goods and services produced by the American economy in the 1930s fell by one half, and correcting for the fall in prices, real output fell by over a third. Unemployment rose to over one quarter of the labor force while investment ground to a nearly complete halt.

The popular perception of the Depression as being one major downturn precipitated by the stock market crash that persisted for more than a decade, fails delineate its important ebbs and flows. Based on conventional dating, the decline in production actually began slowly and almost imperceptibly in mid-year 1929. But the

change in financial markets that resulted from the Crash was dramatic indeed. The Federal Reserve, which had kept interest rates high in 1928 and 1929 in a failed attempt to dampen financial speculation, immediately reversed course and dropped the discount rate from 6.0 percent to 2.5 in just one year. As 1929 came to an end, there was a flood of reassuring official pronouncements as the Hoover administration simultaneously sought to reassure the country there was no emergency while cajoling businessmen to help prevent one. Many businessmen cooperated with Hoover's urging to maintain wage rates. Hoover argued that if businesses cut wages, the drop in sales for their businesses would more than outweigh any savings from lower labor costs, an argument that is presciently Keynesian in its very nature. In early 1930, there seemed to be some rays of hope as stock prices stopped declining and industrial production picked up slightly. Indeed in March 1930 the editors of *Business Week* sought to reassure the country and the business community that the worst might well be over: "The early spring showers of easy money that have fallen on the stock and bond markets this week started the speculative sap rising, but the buds on the trees of business evidently need a little more statistical sunshine from industry and trade before they dare open."⁶

As 1930 unfolded, however, it became more apparent that prosperity was not just around the corner. Agricultural prices plummeted in 1930 after falling slowly through much of the 1920s. Construction and automobile production also fell sharply, while the earnings of companies declined and bankruptcies increased. By mid 1930 it was becoming clear that the expected quick turn-around had not materialized. As

agricultural prices fell and construction businesses failed, the banks that had made loans to these sectors also found themselves under profit margin pressure. In the fall of 1930, there was a sharp increase in bank failures, which scared both depositors and bankers alike and precipitated an increased preference for currency by depositors and an increased level of reserves by bankers, both of which persisted throughout the entire Depression. In addition, price deflation became widespread.

But despite these many deflationary pressures, there again appeared to be a recovery in the making in early 1931. But this time, it was an international event that aborted any U.S. recovery: The collapse of Credit Anstalt, the largest bank in Austria in May 1931 and a more generalized domino-like collapse of the entire European financial system. While the Austrian government guaranteed the liabilities of Credit Anstalt, and foreign creditors agreed to stop withdrawals, this meant that the assets of the creditors involved lost their liquidity. German banks were affected quickly as their creditors started to withdraw their deposits in anticipation of further trouble. The German government instituted currency controls in July 1931 in response to a dramatic drop in foreign reserves. As other currencies experienced troubles, and as each free market in each currency was restricted or suspended in various ways, holders of these currencies attempted to protect themselves by selling their positions and the resulting pressure helped speed the downturn in markets.

As a result, the pressure then shifted to Great Britain. Great Britain in turn decided against controls and instead made the monumental decision to abandon the gold standard which had set a fixed price in gold for the Pound and had been the

cornerstone of international finance for more than a century. With the British decision to go off the gold standard, the pound depreciated. With the pound depreciating, holders of U.S. dollars began to speculate against a similar movement in U.S. currency. The U.S. response from the Federal Reserve was neither controls nor devaluation. Instead the Federal Reserve Board raised interest rates enough to stem the outflow of funds. MIT economist Peter Temin argues that the pressure against U.S. currency was mild enough so that this policy could have some success but that the more intense European speculation required more drastic measures.

Thus in 1931 the continuing deflationary pressures coming from the international collapse and the further decline in expectations from the same source obliterated any chance of recovery. Instead, wages, prices, and production all fell while short-term interest rates and bankruptcies rose. Expectations of further declines were becoming a powerful self-fulfilling prophecy by the end of 1931, leading of course to even further declines. A confidence destroying economic freefall was clearly underway.

According to Temin, a “bottom of sorts” was reached in the summer of 1932 but recovery was again aborted by the Presidential campaign and the long lame duck period between Roosevelt’s election in November 1932 and inauguration in March 1933. Confidence in the banking system finally collapsed completely in this period and Roosevelt was inaugurated in the midst of a convulsive banking panic. As a result FDR imposed a federal bank holiday and closed all U.S. banks immediately upon his

inauguration. He simultaneously undertook a whirlwind of fireside chats and activities intended to restore confidence and to combat continuing deflationary pressures.

To gauge how far we had fallen by this time, it is useful to simply state a few vital economic statistics. From 1929 to 1932, gross national product had fallen by 29 percent in constant dollars; total consumption expenditures had fallen by 18 percent; the stock of money had fallen by 27 percent as measured by M1 or by 33 percent if measured by M2; and wholesale prices fell by 31 percent while consumer prices declined some 25 percent.

If it was a long but quick road down, it would prove to be a long but slow road back up. Gross national product did not again surpass its 1929 level until 1937. While the money supply as measured by M1 had exceeded its 1929 level by 1936, it was not until 1939 that the broader measure M2 had surpassed its 1929 level. And wholesale and consumer prices remained about 12 percent and 14 percent respectively *below* their 1929 levels even into 1939 and the European start of World War II hostilities. But the Great Depression did not end with Roosevelt's election and inauguration. Like a well crafted and complex mystery novel, there were many surprises ahead. Most notably, and possibly relevant to our situation today, after production and employment began to recover in 1933-36, there was another downturn in 1937.

Major theories and dominating paradigms

If there is broad agreement about the basic economic measures that defined and delineated this massive decline, the agreement ends there.⁷ While many theories have been offered to explain it, there have been two that have dominated the theoretical

landscape over the decades: the Keynesian economic paradigm that prevailed until the 1970s and the monetarist explanations that came to dominate subsequently and led to the resurgence of neoliberalism beginning in the 1980s. The controversy over the causes of the Great Depression had its intellectual roots in the depths of the Great Depression itself with the 1936 publication of John Maynard Keynes' major work, *The General Theory of Employment, Interest, and Money*. Keynes' criticism of neoclassical theory, especially its inability to provide an adequate explanation for rising unemployment even as wages declined, had a great and powerful appeal for many at that time. But even today, there is still debate over why and how the Depression came to be such a major and unequalled downturn. As Temin writes in his 1976 book, *Did Monetary Forces cause the Great Depression?*

“Given the magnitude and importance of this event, it is surprising how little we know of its causes. The reactions of people to the Depression, the policies undertaken during the Depression, and the effects of the Depression have all been the object of extensive study. *But the economic collapse itself has suffered a form of intellectual neglect.*”⁸

This intellectual neglect is at least partially because of an overall neglect of business cycles with the important exception of Hyman Minsky's work.⁹ That neglect in turn is because of the fact with better understanding of recessionary forces and the appropriate policy responses, major recessions were largely avoided. – a fact that led some economists and observers to confidently suggest that we had reached the end of the business cycle. For decades after the Great Depression, the world escaped any major economic downturns. Yes there were downturns, but comparatively speaking to what occurred in the Great Depression they were mild and short-lived. And often in

fact what recessions did occur were simply the policy manifestations of William McChesney Martin's often quoted witticism that his job as Federal Reserve Chairman is to "take away the punch bowl just when the party is getting good."¹⁰

The question remaining unanswered at this point is why the sudden and unique severity of this decline? What were its causes? Were the origins in the monetary system and policy? Or were other factors involved? As his title suggests, Temin's book calls into question what had become by 1976 the prevailing conventional wisdom regarding the causes of the Great Depression – the Milton Friedman/monetarist notion that it was caused solely and wholly by monetary forces, including bank panics and bank failures, the decision by the Federal Reserve in 1931 to again increase interest rates in response to the British devaluation, and too stringent growth in the money supply. Without attempting definitively to resolve this disagreement, it is perhaps useful to examine the divergent views of Friedman and Temin and summarize the major arguments made by each. The alternative explanation offered by Temin, the MIT economist who is one of the pre-eminent experts on the history of the Great Depression is that the Great Depression cannot be explained simply by monetary forces or banking panics *but that an autonomous drop in consumption was at its heart.*

Friedman's theory of the Great Depression is articulated in his major opus, *A Monetary History of the United States*. This 860 page book covers monetary events from 1867 to 1960 and devotes approximately 200 of those pages to discussions of monetary policy and monetary centered events during the 1920s and 1930s. For monetarists, especially Friedman, money is not the root of all evil; it is the root of all

economic activity. To paraphrase Sartre, the existence of money precedes economic essence. And equally important, according to Friedman, the causal chain runs from money to income, not the reverse. Historically, when money was virtually synonymous with gold and silver, and there were deposits of each to be mined in the mountains of Colorado and California, it is relatively simple to see how this may have indeed been true. Miners found gold in the hills and brought it to the nearby towns and cities where they could buy whatever their finds would fetch. As a result of this new found gold, houses were built, taverns flourished, towns grew into cities, and schools and churches sprang up. The economic engines revved higher and higher, jump-started by new gold and new money. But was there a similar story at work in the 1930s? Or was the world radically different then?

The Monetary History of the United States was published concurrently with two other articles co-authored by Friedman.¹¹ In one article co-authored by Meiselman, the authors showed that the level of income is more closely correlated with the stock of money than with “autonomous spending” over almost the entire last century. There was, however, as Temin points out, one important exception – the decade of the 1930s.¹² Friedman discusses in great detail every aspect and every measure of the money supply: interest rate movements, currency-deposit ratios, bank failures, increases in “high-powered” money, and the minutes of virtually every Federal Reserve Board meeting throughout the entire period. But while his book is scholarly and well documented in many of its details, there is no where to be found any clear, cogent,

concise statement of the theoretical arguments he is making. As Temin argues in his criticism, the hypothesis is quite simply assumed.

And of course, per Friedman and Schwartz, a decrease in the money supply also precedes a decline in economic activity. In Friedman's view, such a decline along with the stock market crash and a wave of bank failures was the cause of the Great Depression and the secondary downturn in 1937-38. In discussing the secondary Depression that developed following partial recovery in the early 1930s, Friedman writes:

“As we have seen, neither the retardation of the rate of rise in the money stock nor the subsequent decline in the money stock – any more than the preceding rapid rise – can be attributed to the contemporaneous course of business; they were produced by deliberate policy measures that offset the expansionary influence of the continuing gold inflow. The sharp decline in the rate of growth of the money stock *must surely* have been a factor curbing expansion, and the large decline, a factor intensifying contraction.”¹³

It is wonderfully ironic that Friedman opens his massive and highly detailed opus with a frontispiece quote from Alfred Marshall:

“Experience in controversies such as these brings out the impossibility of learning anything from facts till they are understood and interpreted by reason; and teaches that the most reckless and treacherous of all theorists is he who professes to let facts and figures speak for themselves, who keeps in the background the part he has played, perhaps unconsciously, in selecting and grouping them, and in suggesting the argument post hoc ergo propter hoc.”¹⁴

Indeed all of Friedman's entire theoretical argument rests upon a tenuous foundation of post hoc ergo propter hoc reasoning. He carefully and exhaustively charts changes in money supply, gold inflows and outflows, and then on the basis of the observation that the peaks and valleys in money supply come before the peaks and valleys in business activity, concludes that this establishes the causal supremacy of

money. An alternative explanation is simply that the indices we use to gauge economic activity might not show changes as quickly as the money supply in as much as banks balance their books daily but most businesses typically do not measure their sales and profits on a daily basis but instead monthly or quarterly or even annually. Consider, for example, a small representative firm which had been profitable until the start of a downturn in business. During its period of profitable operation, its cash reserves are rising and its bank balances (reflected in the money supply) are therefore increasing. (A large company may turn this surplus cash into some other asset, but smaller businesses generally do not and they retain the surplus in a liquid form knowing from experience that they may someday need a “rainy day fund.”) As fewer customers come in its doors and spend less when they do, its profits turn to losses and its cash reserves decline along with its individual contributions to M1 and M2 aggregates. It is not until the end of the quarter, or more possibly the entire year, that this firm begins to report declining activity that is then reflected as a decline in its contribution to output ¹⁵ Did a change in the money supply cause its business to decline? No, a change in its sales – or more precisely a drop in its share of aggregate demand – did. This simple example illustrates that what Friedman showed, shows nothing. Uncertainty as to how quickly any shifts in demand and sales are reported and become evident – or indeed which came first the chicken or the egg – then undermines his entire argument. Examining monetary data provided by Temin also suggests that overall the Federal Reserve did not cause the contraction: High powered money, which includes cash held by the public and bank vault cash and which is most easily controlled by the Fed

actually increased every year from 1929 to 1933 with the only exception being a drop by about \$200 million in 1930 before increasing \$400 million in 1931. Over the five year period high powered money rose from \$7.1 billion in 1929 to \$8.2 billion in 1933. The problem was rather twofold: banks increased their excess reserves and the public, not trusting bank safety, preferred to hold on to cash. As a result, the ratio of bank deposits to currency held by the public dropped from an 11 to 1 ratio in 1929 to 5.1 to 1 in 1933.¹⁶

And there is another major problem with Friedman's argument here. It assumes that the velocity of money remains constant while empirical evidence suggests it most definitely does not. In the case of the recent recession, research by the St. Louis Federal Reserve Bank has shown that as the financial crisis intensified in 2008 there was a precipitous drop in the money multiplier and a concurrent sharp increase in excess reserves being held by banks. We know for certain that bank reserves also increased dramatically during the Great Depression, as Temin has pointed out, and it can be reasonably posited that the money multiplier collapsed as well.

In contrast, Temin is rigorous in stating and evaluating both his hypothesis and Friedman's. In addition, Temin makes use of modern econometric analysis to analyze both his and Friedman's hypotheses, even though he asserts with characteristic intellectual honesty that such tools have limited use in resolving this controversy. While such tools were available to Friedman in the early 1960s they came into wider use and allowed more sophisticated modeling by the mid 1970s when Temin did his work.

In his discussion of what he calls the “money hypothesis”, e.g. Friedman’s and Schwartz’s view that a fall in the money supply was the cause of the Depression, Temin quotes a passage from one of their articles published concurrently with the larger work:

”An initial mild decline in the money stock from 1929 to 1930, accompanying a decline in Federal Reserve credit outstanding, was converted into a sharp decline by a wave of bank failures beginning in late 1930.

The quantity of moneyfell not because there were no willing borrowers – not because the horse would not drink. It fell because the Federal Reserve System forced or permitted a sharp reduction in the monetary base, because it failed to exercise the responsibilities assigned to it in the Federal Reserve Act to provide liquidity to the banking system.”¹⁷

As Temin argues, the clear, but unstated implication here is that a fall in the supply of money caused the level of income to fall. If the demand for money is stable, a fall in its supply then requires a movement in the demand curve, that is, a fall in income to equilibrate the supply and demand for money. According to Friedman’s view, the banking panics were then the proximate cause of the Depression and behavior and policy missteps of the Federal Reserve System were the underlying cause. Temin then asks, “What evidence do Friedman and Schwartz muster to support these propositions?” He answers his own rhetorical question by noting, “Their narrative is long and complex, but it offers far less support for these assertions than appears at first. In fact, it assumes the conclusion and describes the Depression in terms of it; it does not test it or prove it at all.”¹⁸

There are other reasons for rejecting the “money hypothesis” of Friedman and Schwartz. They assumed the stock of money was determined by the Federal Reserve independently of market forces. The banking panics that they argue played such an important role in the development of the Great Depression must have been independent

of interest rates and income for their arguments to hold. While they introduce Canada into the discussion in an attempt to bolster their argument, it does the opposite. Canada had no banking crises but yet experienced a sharp drop in output and employment as well as a sharp drop in its money stock. If banking panics were so important in the development of the downturn, why was there a downturn in Canada with none?

Temin concludes his critique with this summary indictment:

“Friedman and Schwartz’s main conclusions are that the level of income fell as sharply as it did in the early 1930s because of a massive fall in the stock of money. This stock in turn fell primarily because of the sustained effects of multiple banking crises, that is, because of a restriction in the supply of money. *But an account of the supply of money cannot be taken for an account of the stock of money unless it is known that demand plays no role.* The *Monetary History* appears to have been designed to show just this – but it turns out to be a narrative based on such an assumption, not an argument for it. Friedman and Schwartz referred elsewhere to the *Monetary History* to show that the stock of money was historically determined independently of income and that the correlation between money and income therefore must be interpreted to mean that movements in the stock of money determine movements in income. The *Monetary History*, however, does not provide independent evidence for this proposition. It follows that the hypothesis about the cause of the Depression must be regarded as unproven as well.”¹⁹

The “Spending Hypothesis”

In summarizing what he calls the “spending hypothesis,” Temin observes:

“According to the spending hypothesis, the Depression was generated by a fall in autonomous spending. At a given level of income, desired investment and consumption fell. Various reasons for this fall can be given, but the two most frequently cited focus on construction and the stock market. Construction – which was a substantial component of investment – fell because the housing stock exceeded the demand after 1925. And consumption fell sharply after 1929 in response to the stock market crash. The fall in these components of autonomous spending then produced a fall in real income and prices by the multiplier process. *The Depression was severe because the fall in autonomous spending was large and sustained.*”²⁰

While Temin observes (writing in 1976) that the majority of economists who had studied the Great Depression up until that time argued for one version or another of this basic spending hypothesis, that may have been no longer true by the late 1970s when Friedman's monetarism held sway. Temin's discussion of the spending hypothesis begins with a review of some of the econometric models that were developed over decades to explore the hypothesis. However, as he notes, many of these models suffer from the same bias as Friedman's, that is to say these models assume the spending hypothesis to be true and proceed to construct a story on that basis. In addition, these models fail to describe fully the dynamic interactions implicit in the macro economy where causes often interact with effects in an intricate feedback loop.

Temin suggests that the story of the Great Depression is complex and that there are multiple interacting causes and effects including the nearly complete absence of "equilibrating forces." His arguments examining the behavior of autonomous consumption are long and complex and cannot be easily summarized. His conclusions, however, can be stated with relative ease:

"It is worth emphasizing that the fall in consumption was unusually large in 1930, because the conventional literature assumes it was investment that experienced the unusual fall. But although the composition of the fall in investment differed in 1930 from the composition in other shorter depressions, the magnitude of the fall was not larger. Investment fell in 1930, as it falls in all recessions, but it did not fall more than usual. The Depression was not caused by a dramatic collapse of investment."²¹

Before leaving this discussion of the Great Depression, let us briefly examine one final theory as to its origins. In his book *The Making of Economic Society*,

economist Robert Heilbroner suggests that what he calls the “maldistribution” of income was possibly one additional factor. As he writes:

“There can, however, be a very serious *maldistribution* of the income payments arising from production. For not all the proceeds arising from production may be placed in the hands of people who will *exercise* their purchasing power. Incomes paid out to the lower-paid strata of the labor force do, indeed, return to the stream of purchasing power, for the working-man tends to spend his wages very quickly. But incomes that take the form of profits, or business accruals, or as very high individual compensations may not quickly turn over as purchasing power. Profits or high incomes may be saved. They may eventually return to the great stream of purchasing demand, but income that is saved does not “automatically” return via the route of consumption expenditure. Instead, it must find a different route – the route of investment, of capital building.”²²

To take the argument a bit further, shifts in income distribution toward the higher income strata will result in reduced consumption and aggregate demand, *and* increased savings, which may in times of an economic bubble also increase the level of financial speculation prevalent in an economy. Along with the decline in autonomous (or wealth based) consumption, the role of maldistribution is a central idea of this thesis, as stated in my introduction. I will discuss it in greater detail in a subsequent chapter because there is much compelling evidence that the distribution of income in the United States in the recent decades of our history has strong parallels to the patterns seen prior to the Depression. Then and now, along with declines in autonomous consumption, the maldistribution theory may help explain why the current downturn is so severe and so long lasting because both accelerate the decline in consumption at a greater rate than what would occur if increased unemployment were the only characteristic of a recession.

Chapter 3: The Great Recession

A brief history

Like the Depression, the Great Recession had immediate origins in the financial sector with a near worldwide financial collapse in 2008. And like the Depression, the Great Recession is complex and has multiple causes, including the resurgence of neoliberalism and the rise of financialization as well as increased income inequality and high levels of leverage both for homeowners and Wall Street. As we have done in discussing the Depression let us begin by summarizing the agreed upon facts of the Great Recession and then turn our discussion to its possible theoretical causes.

Just as was the case in the Depression, the Great Recession actually began with a slight decline in output the year prior to the more major collapse of financial markets in 2008. And since output increased in the second half of 2009, official National Bureau of Economic Research (NBER) dating for the Great Recession has it starting in December 2007 and ending in June 2009. However, optimism was repeatedly misplaced during the Great Depression and may yet prove to be misplaced today.

In a paper presented at the 50th Economic Policy Panel Meeting held in Tilburg in October 2009, Barry Eichengreen and four joint authors discuss similarities, differences, and lessons by comparing the Great Depression to the ‘Great Credit Crisis,’²³ which is their preferred term to the ‘Great Recession.’ One of their principal

arguments is that the present crisis – like the Great Depression – is a global phenomenon and that simply looking at the picture in terms of what is happening in the United States where Nobel Laureate Paul Krugman called this downturn “half a Depression” may lead to a more optimistic view than is warranted. Among the evidence Eichengreen et al cite:

- The decline in manufacturing globally from the global peak in industrial production in 2008 was as severe as the global manufacturing decline in 1929-30;
- Even perhaps more alarming, world trade, which fell by about 36 percent from 1929 to 1932 fell by a full 20 percent in just the first nine months from April 2008 to January 2009, a faster rate of decline than even in the early phases of the Great Depression; and,
- Global equity markets also fell even more rapidly in the first year of the recent crisis than they did in the first year of the Great Depression.

Given the changes in information technology generally and computerized inventory management systems in particular that have occurred since then, one might well expect that such reactions to the downturn would naturally occur more rapidly as adjustments to current production are made much more quickly in response to reduced sales. That said, what is important here is that by such measures, the recession of 2007-2009(?) came on with an equal force and fury as occurred in the beginning stages of the Depression.

By all measures, the present downturn has been serious and sustained. With the financial markets in freefall in 2008, consumption, output, and employment all fell significantly. As we continued forward in 2009, the economy shed as many as 750,000 jobs a month and the unemployment rate rose sharply. While the job loss rate has now slowed, the job creation rate has not recovered adequately to reduce unemployment significantly and as a result, the numbers of those unemployed for six months or longer has reached levels not seen since records were first kept in 1948. In the first quarter of 2010 some found comfort in the fact that 150,000 new jobs were created but amazingly only a paltry *one percent* of the unemployed found jobs in the first quarter of 2010.²⁴ And as we have moved forward now into 2011 we are seeing phantom reductions in unemployment that are the result of more and more discouraged job seekers simply dropping out of the workforce and giving any hope of new employment. In addition to the high levels of unemployment that persist, there are significant numbers who are *underemployed* and who are working part-time jobs or are employed in jobs that do not full make use of their education and skills. A Gallup poll conducted in February 2010 found that 19.9 percent or 30 million U.S. workers was underemployed and working part-time, or unemployed and seeking full time work. Only half the underemployed reported they had enough money to cover basic necessities. And some wonder why there is no significant rebound in consumption when this ten percent of the population has virtually no discretionary income? (Not to mention the lowest income quintile – another 20 percent of the

population – that has been permanently without discretionary income for years and who often struggle to make ends meet by working two or more low-paying jobs.)

In January 2011, the official report of the Financial Crisis Inquiry Commission (FCIC) was made available to the public. This document contains an enormous amount of historical detail that documents what went wrong and why. To summarize its findings, it may be useful to begin with its major conclusions that are outlined in its first chapter. The FCIC report states:

- We find this financial crisis was avoidable.
- We conclude widespread failures in financial regulation and supervision proved devastating to the stability of the nation's financial markets.
- We conclude dramatic failures of corporate governance and risk management at many systemically important financial institutions were a key cause of this crisis.
- We conclude a combination of excessive borrowing, risky investments, and lack of transparency put the financial system on a collision course with crisis.
- We conclude the government was ill prepared for the crisis, and its inconsistent responses added to uncertainty and panic in the financial markets.
- We conclude there was a systemic breakdown in accountability and ethics.
- We conclude collapsing mortgage-lending standards and the mortgage securitization pipeline lit and spread the flame of contagion and crisis.
- We conclude over-the-counter derivatives contributed significantly to this crisis.
- We conclude the failures of credit rating agencies were essential cogs in the wheels of financial destruction.

This is a broad and sweeping indictment, indeed. Yet regrettably the Commission could not reach bipartisan agreement and the existence of two minority reports (one signed by three of four Republican appointed members, another by the most conservative free market advocate, Peter Walliston of the American Enterprise Institute) probably means that like most commission reports, it will have little impact on policy. Walliston appears to argue that it was all the government's doing and that there would be no market failure here except for the misguided efforts of the federal government to extend home ownership to a wider segment of the population. (Such an argument is more than vaguely reminiscent of Friedman's arguments about the causes of the Depression. It shows that neoliberalism is alive and well, at least in the halls of the American Enterprise Institute.)

Commenting in detail on the FCIC report would require another 662 page report itself and is beyond the scope and outside the focus of this thesis. But several of its conclusions are closely related to my focus, namely, "widespread failures in financial regulation and supervision proved devastating to the stability of the nation's financial markets" (read the resurgence of neoliberalism); and "a combination of excessive borrowing, risky investments, and lack of transparency" (read the Subprime crisis and excessive reliance by middle income consumers on Mortgage Equity Withdrawal (MEW) to finance consumption); and "the mortgage securitization pipeline lit and spread the flame of contagion and crisis" and "over-the-counter derivatives contributed significantly to this crisis" (read the rise of financialization). And of course, the decline in autonomous (or wealth based) consumption only began to occur after the real estate bubble burst and many middle income families could no longer rely on MEW to support

their consumption. Estimates of how much home equity was used to finance consumption vary widely. Greenspan and Kennedy published a paper in 2007²⁵ that summarized other findings and developed their own estimates. The paper concludes that if re-payment of non-mortgage debt is included then equity extraction from equity lines and refinancing supported about 1.7 of total personal consumption expenditures (PCE) from 1991-2000 but rose to almost three percent from 2001-2005.

It is my view that this crisis did not occur as suddenly as most now imagine or have supposed. Yes it came into our national and international consciousness with the abrupt and cataclysmic declines in financial markets in 2008. But the underlying forces that led to this crisis occurred much earlier with the emergence of neoliberalism (beginning in the 1970s and accelerating in the 1980s) and the continuing phenomenon of financialization, which has been evident since the 1960s and which accelerated with the repeal of Glass-Steagall in 1999. Beginning with the Tax Reform Act of 1986, income distribution began to shift away from middle income gains and toward the higher income brackets. The changes brought by neoliberalism involved both ideological and policy shifts. As we shall see it was these forces and trends that set the stage and brought the financial world to the brink of collapse.

Roots in the emergence of neoliberalism

One of the longer term causes of the financial bubble we experienced in the United States prior to the freefall in financial markets in 2008 can be found in the resurgence of neoliberalism. The reigning Keynesian economic paradigm began to be questioned by more and economists after the oil price shocks of the 1970s distorted the

traditional relationships between inflation and unemployment. The first stage in the resurgence of neoliberalism was the return of monetarist ideas and the quantity theory of money, which gained wide support because it purported to be able to explain (and curb) double digit inflation. But gradually, neoliberalism became a wider force: it morphed from monetarism to an anti-government, anti-regulatory ideology with a nearly complete reliance on markets to solve problems. The marvels of capitalism could be unleashed if only government got out of the way and let capitalism be capitalism. Perfect markets would lead to a perfect world. It was a Democratic President, Carter, not the Republican Reagan, who first began the dismantling of government regulatory controls with the deregulation of the airline industry in the late 1970s. The process continued unabated through both the Reagan and Bush I administrations. And there was no departure from the established free-market ideology with the return of a Democratic president to the White House in 1992. In fact, what may be the most critical step in deregulation for the financial industry occurred late in Clinton's second term with the repeal of the Glass-Steagall Act, which was supported by then Federal Reserve Chair Alan Greenspan as well as by Clinton's Treasury Secretary Robert Rubin, who subsequently found highly remunerative employment at the top level of a well-known Wall Street firm. With its repeal, the historical barriers that had forcefully separated traditional depository banking from investment banking and Wall Street speculators were undone. Not only did the regulatory apparatus undergo dismantling, with the fall of the Soviet empire and the gradual shift of formerly socialist countries to market economies, capitalism no longer had what we might call a countervailing force. The

hegemony of capitalism and free markets was complete. But as Lord Acton warned centuries ago, “power corrupts and absolute power corrupts absolutely.”²⁶

There were two important and related developments in corporate governance and the nature of the mortgage origination process. With the resurgence of neoliberal ideas and the rise of finance, corporate decisions regarding profits shifted away from the historical policy of “retain and invest” toward a policy aimed at supporting stock share prices. Under the guise of enhancing “shareholder value” an increasingly larger share of profits was instead distributed to shareholders or used to finance buy-backs, which also enhanced share values. As William Lazonick shows, even in the midst of financial crisis in 2008 the 438 companies of the Standard and Poor’s 500 he analyzed saw net income drop from \$583 billion in 2007 to only \$132 billion but they still collectively paid out \$5 billion more in dividends in 2008 than in 2007. As a result the dividend payout ratio jumped from .41 to 1.86 that year²⁷ With fewer retained earnings to finance new plant and equipment, firms that needed to expand their productive capacity instead relied on debt and increased leverage. In the mortgage market, there was a shift away from the historical model of “originate and hold,” to a policy of “originate and distribute.” Under the originate and hold model, mortgage companies held on to the loans and made money by the interest earned; under the originate and distribute model, mortgages were packaged into securities and distributed widely to other financial investors. In this new model, most income came from fees generated in the origination and securitization. Since the originators no longer faced any consequence from bad loans once they were packaged into Mortgage Backed Securities (MBS) by Wall Street firms and then sold around the world, this encouraged lax underwriting standards, but it also

increased the amount of capital the loan originators could “re-cycle” into more loans. Mortgage loan volume and leverage grew as a consequence of both these changes.

The rise of financialization

At the same time as deregulation continued apace, so too did the rise of the financial sector in economic importance. “Financialization” is a term that has been employed to describe the gradual shift of a larger portion of the U.S. economy, whether measured in employment or profits, into the financial sector. In her empirical study, “The financialization of the U.S. economy,” Greta Krippner specifically defines financialization “as a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade or commodity production.”²⁸ Her examination covers the U.S. during the second half of the Twentieth Century. While the shift in employment is not particularly significant (especially relative to the decline in manufacturing and a parallel increase in service sector employment) with total FIRE (finance, insurance, and real estate) employment rising from about four to perhaps seven percent of total U.S. employment during the entire half century from 1950 to 2000, a different picture emerges in other measures. For example, the financial share of current dollar GDP actually exceeds that of other services until about 1990 and shows a parallel pattern of increase to the service sector as manufacturing shows a gradual decline.²⁹ An even more dramatic picture emerges when comparing the manufacturing, services and FIRE share of profits. The FIRE sector rises from only about 11 percent of total profits in 1950 to about 44 percent of total corporate profits in 2000, a rise by a factor of four.

She concludes that “financialization – rather the rise of the service economy or post-industrialization – emerges as the most important ‘fact’ about the economy.”³⁰

In view of this “financialization” that has occurred in the U.S. economy, let us supplement this empirical picture painted by Krippner with the theoretical underpinnings of financialization in the work of Hyman Minsky. Minsky’s financial instability hypothesis makes two central assertions (1) that periods of relative economic tranquility encourage innovative financial developments – or further “financialization” of the economy – that are endogenous and ultimately destabilizing, and (2) that major downturns – as opposed to more minor recessions – are always preceded by a severe financial crash. Minsky’s argument for his financial instability hypothesis starts with an analysis of finance and its importance to the modern business entity or household. In periods of relative “tranquility” there are continuing innovations in the world of finance and its products and processes. Minsky’s two main criticisms of the Standard Theory (Neoclassical-Keynesian Synthesis) are that it fails first to understand what Keynes meant by uncertainty and second that financial instability is an inherent and endogenously determined flaw of capitalism. .

Minsky also criticizes the Standard Theory or the Neoclassical-Keynesian Synthesis because it treats money “in a cavalier way.” He argues that neither standard Keynesianism nor any variant of monetarism “integrate the financial structure of our economy into the determination of income, prices, and employment in any essential way.”³¹ Rather than seeing money as an exogenous variable with its supply determined outside of economic activity, Minsky sees money as endogenously determined. When

banks lend to businesses to allow those businesses to acquire new capital assets, money is created; when businesses repay those loans, it is destroyed. The decisions by modern corporations to undertake new financing for complex capital equipment depends upon the prospects for profits by which those loans may be repaid. While there may be “margins of safety” to increase likelihood of repayment, there is also an underlying uncertainty. Businesses will likely ignore the uncertainty when prospects for more sales and profits appear good, but when those prospects appear diminished, then the inherent uncertainty will not be so easily disregarded. It is because of changing prospects for profit that business investment fluctuates so greatly during economic cycles. In all this Minsky is very much arguing in the truest Keynesian tradition. More recently, Randall Wray has examined the evidence in support of an exogenously determined money supply. He argues that institutional innovations imply an endogenous supply and that formal empirical tests also support this view. Wray’s basic argument is that banks do not passively accept deposits and then lend out the funds but rather the reverse: they seek out credit-worthy businesses as clients and then seek out available fund sources through a number of mechanisms.³²

Of great importance to the most recent decade, Minsky (writing in 1986) further asserted that the U.S. regulatory structures (SEC, FDIC etc.) put in place after the Great Depression, along with the countercyclical reality of “Big Government” had worked to prevent a repeat of the collapse that occurred in the 1930s. However, with the 1999 repeal of Glass-Steagall, the all important safeguards that separated banks from

investment banking were undone. And the anti-regulatory, pro-market bias of neo-liberalism further weakened the general regulatory climate.

The growth of derivatives markets as an extension of ‘financialization’

Let us now turn to one of the specific manifestations of innovations in the financial sector in the decade prior to the onset of the financial crisis: the explosive growth in derivatives markets world-wide. This growth, which began in the late 1980s and accelerated during the 1990s and early part of the new decade prior to the financial crisis, can simply be seen as a continuation of the ongoing process of financialization of the U.S. economy. (As already noted, the Financial Crisis Inquiry Commission cited this growth in derivatives markets as a central factor in the financial crisis.) So to understand fully the financial meltdown that is at the heart of the 2007-2009 worldwide recession, we need to more fully understand how and why the markets for these financial instruments developed. According to Rene Schultz³³ the earliest data available for exchange-traded derivatives is their December 1986 level when the notational amount outstanding was a mere *\$615.7 billion*. The notational (or notional) value is the value of a derivative’s underlying assets at the spot price. In the case of options or futures contracts, this is the spot price multiplied by the number of units. With an average annual growth rate of 27 percent each year, the notational value of both exchange traded OTC derivatives had grown to *\$106 trillion* by 2002 and stood at over *\$531 trillion* in 2008 according to *New York Times* reporter Steve Lohr (November 5, 2008). In contrast, as Schultz notes, the total value of corporate debt and equity amounted to only *\$31 trillion* worldwide at the end of 2003.

In finance the generic term “derivatives” simply means something whose value is derived from, or depends upon, something else. The “something else” is termed the underlying. While derivatives have existed for years in manifestations such as pork-belly futures, it has only been in the past three decades, and primarily the last nine years, that their creation and trading came to dominate financial markets around the world.

According to Schultz, there are several basic forms. First, forward contracts simply obligate one party to buy the underlying commodity or financial instrument at a certain time in the future, the “maturity,” at a fixed price while obligating the counter party to sell the underlying at that price. Second, there are options which can be written on any underlying. Options theoretically enable their holders to leverage their resources and limit their risks. Third, there are swaps. A swap is a contract to exchange cash flows over the life of a contract. The principal used to compute the cash flows is called the notational amount but is not itself exchanged. A swap is really just a portfolio of forward contracts. Finally, there are exotic derivatives, which cannot be created simply by putting together options and forward contracts. Instead, the payoff of exotics is a complicated function of one or many underlying values. Another type of exotic derivative is a binary option, which pays or does not pay on the basis whether a certain condition is met.

The growth of derivatives markets was greatly enhanced by the development of the Black-Merton-Scholes pricing model in the middle 1970s. This made it theoretically possible for traders and investors to price options, evaluate risk, and hedge

risks quite simply and quickly. The growing speed and power of computers also contributed to the growth of these markets by making it easier to price derivatives using this method.

The International Bank of Settlements (BIS) has kept estimates of the size of derivative markets worldwide. Counting both exchange traded and over the counter markets, it estimated the total notational value of derivatives at \$208 trillion in the middle of 2003. As noted earlier, the total value of corporate debt and equity worldwide was only \$31 trillion worldwide at the end of 2003.

However, as Shultz notes in the 2004 NBER paper, the net sums involved are far less but still substantial. In one hypothetical example that seems now prophetic the paper notes: “Suppose that the whole world had to write off all derivative contracts. For each swap contract, one party would write off an asset, the positive value of the contract at that time, and the counterparty would write off a liability. Now, just add up the positive value of all contracts at that time. By this measure, the aggregate value of OTC derivatives outstanding in June 2003 was \$7.9 trillion according to the BIS. This amount is large, but not compared to the notational amount of contracts outstanding.” Assuming a similar ratio today, and using the current \$508 trillion estimate of notational value of derivatives worldwide reported by the *New York Times* in November 2008, then there was potentially a \$19.3 trillion write down cost as a result of this financial meltdown of the derivatives market. (The total U.S. loss of wealth has now exceeded \$17.5 trillion according to the Fed Flow of Funds report, but this

includes traditional equity declines and declining real estate values as well as these devalued “toxic” derivative based assets.)

Let me now turn to the supposed economic rationale for derivatives, as argued by Schultz and other assorted neoliberal proponents:

“The main gain from derivatives is therefore to permit individuals and firms to achieve payoffs that they would not be able to achieve without derivatives or could only achieve at much greater cost. Because individuals and firms could not obtain the payoffs of derivatives efficiently by manufacturing them on their own, derivatives make markets more complete – i.e., they make it possible to hedge risks that otherwise would be unhedgeable – for these individuals and firms. When individuals and firms can manage risk better, risks are born by those who are in the best position to bear them and firms and individuals can take on riskier but more profitable projects by hedging those risks that can be hedged. As a result, the economy is more productive and welfare is higher.”³⁴

One wonders if Schultz would still argue today that these developments made welfare higher. But regardless of that, how exactly can there only be gains and never losses? How exactly can risks be eliminated or even mitigated without someone else facing increased risks? If too a large number of risks are hedged by a single party such as AIG, what happens to the level of systemic risks? Why weren't these simple but fundamental questions even asked by investors and brokerage houses? And finally, who exactly is financially able to bear all the macro risks? In the end it was not Morgan Stanley or Bear Stearns or Merrill Lynch or even AIG – it was the U.S. Treasury (and the taxpayers who fund it), the Federal Reserve, and central banks around the world that were left to bear all the costs of these excesses in leveraged arbitrage.

However some economists were skeptical even if their warnings came very late in the game. In a 2006 paper prepared for the International Monetary Fund (IMF), “Has Financial Development Made the World Riskier?”³⁵, a former IMF chief economist, Raghuram Rajan, at least asks the right question and clearly expresses concern over growing risks and the factors moving markets in a dangerous direction. Rajan argues that the factors driving change included technology, deregulation and institutional change, the movement toward arm’s length transactions or disintermediation which led to the “commodification” of financial instruments and accelerated the internationalization of financial markets. He also argues that the compensation structure in the financial industry has encouraged “perverse” behavior, including incentives to take on excessive risk or to hide the real nature of the risks being undertaken:

“One is the incentive to take risk that is concealed from investors – since risk and return are related, the manager then looks as if he outperforms peers given the risk he takes. Typically the kinds of risk that can be concealed most easily, given the requirement of periodic reporting, are risks that generate severe adverse consequences with small probability but, in return, offer generous compensation the rest of the time. These are known as tail risk.”³⁶

In addition, we now know that there was not a normal distribution here, and that the tails were a lot fatter than had been assumed. There was also the problem of risks being more highly correlated than had been assumed and that intensified the effects of contagion as the crisis unfolded.

Another important element cited by Rajan’s article in addition to underestimating tail risk is the tendency and incentive for brokers to herd. “Herd

behavior can move asset prices away from fundamentals,” he notes and adds that incentives for risk and herd behavior can reinforce each other in an asset price boom.

Moreover, the central premise behind the entire hedge fund industry is that certain “alpha” managers are smarter than markets and that they can beat the markets by hedging their bets. “One common measure of performance is Jensen’s alpha, that is, the excess returns produced by the manager over the risk-free rate, per unit of risk taken.” He notes that there is little systemic evidence that past performance ensures future performance but argues that investors do chase after managers who generate high returns because they think (incorrectly) that certain managers have ‘hot hands.’³⁷

The Financial Crisis Inquiry Commission called Rajan as one of their expert witnesses. In his testimony before the commission he revealed that when he first presented his warnings in 2005 at the Fed’s Jackson Hole Conference that August, a contemptuous Larry Summers called Rajan “a Luddite” implying that he was simply opposing technological progress. “I felt like an early Christian who had wandered into a convention of half-starved lions,” Rajan remarked later.³⁸ Along with Warren Buffet’s warning about the dangers of derivatives, and the empirical evidence in the form of the 1998 collapse of the hedge fund Long Term Capital Management (LTCM), Rajan’s warning went unheeded. The Federal Reserve Board and other regulators *could* have known and *should* have known that serious danger was ahead. But largely because the mortgage machine was making so many people so much money – from the originators of sub-prime loans to the Wall Street firms that packaged these loans as securities and sold them worldwide to the rating firms that gave them triple A ratings –

no one in a position of power and authority apparently wanted to hear the warnings.

The “originate and distribute” mortgage machine hummed along.

Chapter 4: Income distribution shifts and wealth based consumption

Now let us turn to the important role played by distribution shifts in these financial developments and how these shifts led to an increase in autonomous (or wealth-based) consumption. What can be said in the way of a general summary is the distribution shifts that resulted in declining real incomes for most middle class Americans, coupled with rising real estate values and easy access to either home equity lines or refinancing, simply led many to borrow against their homes in order to get needed cash to finance consumption. The tragedy underlying this that none of this leveraged borrowing would have been either prudent or necessary if income distribution had fairly distributed the gains from increased productivity. At the same time as the economy was undergoing continuing financialization and as neoliberal ideas gained dominance, there was a concurrent shift in income distribution with increased income shares flowing to top income segments.

Turn of century findings

In the United States, this shift intensified with the passage of the Tax Reform Act of 1986. As Giovanni Andrea Cornia and Sampsa Kiiski (2001)³⁹ note in their U.N. discussion paper, for several decades the academic literature on income inequality within countries suggested that trends had remained stable. The existing pattern of the 1950s and 1960s saw a widespread increase in egalitarianism in both capitalist and

socialist regimes. But with the resurgence of neoliberalism, new policies emphasized stringent macroeconomic stabilization, deregulation of domestic product and factor markets, privatization and a reduced role for government in economic affairs.

Known as the ‘Washington Consensus’ these new policies were supposed to reduce rent-seeking, improve competition, and promote the convergence of living standards between rich and poor nations, all perhaps laudable goals. However, it also assumed that long term income distribution was broadly stable and that poverty is “best reduced through growth-oriented, rather than distributive, policies.”⁴⁰ What we now know, however, is that long term income distribution is not stable, and that market oriented growth has only widened the gaps in wealth among and within countries.

By the time of their work at the beginning of the Twenty-First Century, the resulting growth in inequality was clear. Conducted in the late 1990s and published in 2001, Cornia and Kiiski’s survey included seventy-three countries representing eighty percent of population and ninety-one percent of total world output. Cornia and Kiiski found evidence of increased inequality in approximately two-thirds of the countries surveyed. While acknowledging that the pattern was not uniform, they concluded that it represented “a clear departure” from the inequality trends recorded since the end of World War II. While specific factors were found by econometric analysis to be of relatively higher or lower significance in different countries, the paper documents increases in the Gini coefficient in the U.K., the United States, much of Europe, Japan, China, and other Asian countries, and other major OECD countries as well. Of the forty-eight countries showing an increased Gini coefficient, the change was less than

five points in only six countries but ranged between 10 and 20 points in 10 countries while two former Soviet block countries recorded increases in the Gini of more than 20 points.

Specifically in regards to the growth of inequality in the United States, Cornia and Kiiski concluded that the stagnant and eroding minimum wage, which even after the July 2008 increase remains lower in real terms than in 1968, could alone account for almost 30 percent of the rise in earnings concentration. Another 20 percent of the rise in inequality in the United States economy could be attributed to the fall of unionization. In contrast, the authors note, earnings concentration did not increase in countries with collective bargaining institutions, adequate minimum wages and social protection systems. Another general factor found to be increasing inequality widely in many countries was the shift toward skill-intensive technologies.

Thomas Piketty and Emanuel Saez (2003)⁴¹ examined trends in income distribution in the United States over almost the entire 20th century from 1913 to 1998 and concluded that significant changes have occurred over time. What is most striking in their findings is that the increases in income to the wealthiest were highly concentrated among the super-rich – those at the 99 percentile and above. The top one percent of income recipients received about eight percent of total national income in the late 1970s, but by 1998 their share had grown to 15 percent, almost doubling⁴². In just the two years immediately following the Tax Reform Act of 1986, their share increased over four percent, or more than 57 percent of the total shift through 1998. In contrast,

the shares going to the 90-95 percentile ranges were almost flat, and the 95-99 percentile shares increased slowly and then actually declined slightly in the late 1990s.

By using IRS income tax return data, Piketty and Saez were able to study the shares of income accruing to top income groups during this entire 85 year period. Their conclusion is that top income shares display a U shaped pattern over the century. Their analysis argues that while progressive income taxes and the after-shocks of the Depression and World War II may have prevented large fortunes from fully recovering until the late 1960s, top shares are now higher than they were before World War II. One chief difference they identify is that the “working rich” have replaced the rentiers at the top of the income distribution. Piketty and Saez demonstrate that the share of the top ten percent of tax units is also U-shaped and that it fluctuated between 40 to 45 percent during the interwar period. It declined substantially to about 30 percent during World War II and then remained stable at 31 to 32 percent until the 1970s when it increased again. By the mid-1990s the share had crossed the 40 percent level and by 1998 was close to the pre-World War II level. Based on the patterns in their data, they conclude that the evidence suggests that the twentieth century decline in inequality took place “in a very specific and brief time interval.” The authors identify a smooth increase in inequality in the last three decades of the Twentieth Century and argue that this is more consistent with “slow underlying changes in the demand and supply factors” in labor markets.

Piketty and Saez devote considerable attention to data that document one of their central tenets, namely the change in the nature of the top income segment from

rentiers to the “working wealthy.” With CEO salaries increasing at an average of over ten percent each year during the entire decade of the 1990s, their average salary more than doubled in the last decade of the Twentieth Century. This change from old wealth rentiers, who tended to be conservative and cautious in their investing since their objective was primarily to preserve existing wealth, to nouveau riche who rose through corporate ranks and whose investment objective may have been to parlay their substantial incomes into still larger fortunes, may well also have been a factor in the explosive growth of new financial instruments with unclear but substantial risks, a topic to which we shall return later.

Ian Dew-Becker and Robert Gordon (2005) come to much the same conclusion albeit via a different route. In their paper, “Where Did the Productivity Go?”⁴³, which was presented at a 2005 Brookings Institute conference, they demonstrate that rather than being widely distributed, the economic gains from increased productivity have only benefited the top one percent. They refer to this top group as “superstars” while Piketty and Saez refer them as “the working rich.” Dew-Becker and Gordon show that in the five year period from 1999 to 2004, real median family income declined by 3.8 percent. Over the ten years from 1995 to 2004, they show that median income increased only 0.9 annually, while productivity increased at a 2.9 percent each year on average. Hence a median wage/productivity distribution gap of 20 percent developed in that time.⁴⁴

David Autor, Lawrence Katz, and Melissa Kearney (2008)⁴⁵ provide additional documentation of changes in distribution patterns. While these various studies

emphasize differing explanations of the causes of the changes in distribution, they concur in the conclusion that income distribution is trending toward increased inequality and that the recent distribution of income has resulted in the highest shares of income flowing to the top income segments of the U.S. population since the late 1920s and prior to the stock market crash of 1929 and the onset of the Great Depression.

But not only did income flows concentrate at the top of the economic pyramid, there was an even more pronounced trend in wealth concentration. While it is true that approximately 50 percent of the U.S. population has owned at least some stock during the 1998 to 2008 period that does not mean the distribution of wealth is no longer highly concentrated at the top. In fact, according to Edward N. Wolff,⁴⁶ the top 20 percent of wealth holders received *99 percent* of the total gain in wealth during the years 1983-89 while the bottom 80 percent gained just *one percent*. As Wolff notes, “Though the increase in income inequality has received most of the attention, the period between 1983 and 1992 has also witnessed a disturbing increase in the concentration of wealth. In many ways, this trend is even more dramatic than the changes in income disparities.”⁴⁷ Wolff has recently updated his research and has shown that this trend in wealth concentration continued on into the 21st century with some changes. For example, median wealth increased from 1989 to 2007, reflecting primarily increased home values; and because of the wide paper gains in wealth due to real estate price appreciation, the share of wealth held by the top one percent actually declined slightly. But projections to 2009 made by Wolff indicate a sharp decline in

median wealth has resumed, reflecting the reduced home values and decreased value of stock portfolios.

More recent work on distribution changes

In his book, *Inequality, Consumer Credit and the Saving Puzzle*, Chris Brown (2008) examines all these issues in extensive detail and comes to the same basic conclusions. He takes a longer historical view of credit market expansion and begins his discussion of credit expansion in the 1920s. In order to drive purchases of consumer durables such as automobiles, pianos and other high ticket items, an entire industry of “captive finance” companies developed at that time. By 1925, there were, according to historical records, more than 1500 specialty finance companies which collectively filled the void left by the reluctance of traditional banks to directly finance these purchases. In addition to captive finance companies, the lengthening of loan maturities also drove consumer durable purchases upward in the post-World War II economy. Brown also delves deeper into the shift in social consciousness and social acceptability that allowed the shift from a cultural bias toward thrift to the greater acceptability of debt:

“Borrowing becomes a habit through borrowing. The arguments developed above suggest that the emergence of a social habit structure conducive to debt-financing would have been impossible without an enlargement of socially approved borrowing opportunities. Several factors have contributed to a secular improvement of borrowing power for families located at virtually every economic station. These include the captive finance company (see Banner 1958), changes in Federal Reserve policy regarding the rediscount of consumer receivables (see Brown 2005), credit scoring and the securitization of consumer receivables (see Brown 2007).”⁴⁸

And of course, the widening of credit availability would never have happened without the repeal of state usury laws, which in some Midwestern states were still on the statute books into the 1970s.⁴⁹ Once these interest rate ceilings were eliminated, consumer credit was expanded to greater numbers of low and middle income consumers because lenders could charge whatever rate of interest the market would bear. I would argue that the widening and proliferation of credit card debt at high interest rates made the subsequent shift to home equity loans seem both reasonable and prudent. When the tax deductibility of interest charges was eliminated on consumer credit cards and revolving accounts in 1986 but home mortgage interest expense remained deductible, the stage was set for the huge expansion of mortgage debt in the 1990s and early 2000s.

According to Brown, there is an emerging consensus in the heterodox literature that can be summarized by five key points of agreement.⁵⁰

1. In terms of the collective interests of the business elite, income inequality is both good and bad. It is good because it means a larger share of the social dividend goes to profit. It is bad because of the deleterious impact of maldistribution on effective demand, which may ultimately lessen future growth of the social dividend.
2. Consumer credit expansion, by augmenting the stock of liquid claims to goods, can in the short-term counteract the effects of a “hollowed out” distribution function.

3. The massive uprooting of Protestant antagonisms toward debt is an established fact in modern social life, a development that has been expedited and accelerated “by the operation of a ubiquitous and relentless institutional machinery that exhorts people to spend and borrow.”
4. The behavior of the personal saving rate is one statistical manifestation of the increased dependence on credit expansion to achieve growth.
5. Debt-layering increases the share of current income claimed by debt-servicing, giving rise to doubts about the sustainability of debt-financed growth.⁵¹

Brown was writing in 2007, and of course at present in 2011, there is now no longer doubt about the sustainability of debt-financed growth. It is clearly no longer sustainable, and we may be at the limits of its viability even when it comes to sovereign debt, Greece and other nations being cases in point. One of the reasons generally that prospects for full recovery may be so dim is simply the massive amounts of debt that must be serviced out of current income.

Most recently, Engelbert Stockhammer (2010) of Vienna University has connected the crisis to income distribution and the rise of neoliberalism.⁵² His summary introducing his paper bears quoting at length:

“The financial crisis that began in the summer of 2007 has since turned into the worst economic crisis since the Great Depression. Its immediate causes are to be found in the malfunctioning of the financial sector: securitization of mortgages allowed for a fast growth of credit and lowered credit standards as banks believed they had passed on credit risk; this fueled a property bubble; statistical models, that turned out to be based on short time samples, were promised to reduce risk by constructing ingenious portfolios; well-paid rating agencies decorated the new assets with triple A ratings; banks shifted credit off

balance sheets into structured investment vehicles; finally, capital inflows from Asian countries that wanted to accumulate reserves provided ample liquidity for this process. Obviously the financial system needs to be fundamentally overhauled. While these mechanisms were indeed important, this paper argues they are only half the picture. The focus on the flaws in the financial system may hide other causes of the crisis. The polarization in income distribution, in particular, tends to get glossed over as a potential cause of the crisis. This is not to deny the importance of financial factors. The crisis erupted as financial crisis for good reasons. The underlining accumulation regime had financial expansion as one of its key building blocks. However, what is at stake is more than financial system. This paper will argue that the present crisis should be understood as a crisis of neoliberalism. Financial deregulation is one of the components of neoliberalism, the polarization of income distribution is another one; it is their interaction that provided the grounds for the crisis.

The role of autonomous (or wealth-based) consumption

We turn now to the connections between these widely documented changes in income distribution in the United States and the reliance by many middle income homeowners on the new phenomenon of Mortgage Equity Withdrawal (MEW), a leveraged form of autonomous (or wealth-based) consumption, to fill the gaps left in their household budgets by flat or declining real incomes. Several recent studies on distribution have turned their focus to the impact of the distribution shift on the middle class and how this fed reliance on housing wealth to finance consumption. Aldo Barba and Massimo Pivetti (2008)⁵³ argue in their *Cambridge Journal of Economics* paper, “Rising household debt: its causes and its macroeconomic implications – a long-period analysis,” that rising household indebtedness has allowed growth to continue and that “low wages appear to have been brought to coexist with relatively high levels of aggregate demand, thus providing the solution to the contradiction between the necessity of high and rising consumption levels, for the growth of the system’s actual

output, and a framework of antagonistic conditions of distribution which keeps within limits the real income of the vast majority of society.”⁵⁴

Barba and Pivetti report important empirical data from their analysis of both the Fed Flow of Funds (FOF) and the Survey of Consumer Finance (SCF). Among their findings: Consumer credit outstanding increased from about 18 percent of personable disposable income in 1980 to 25 percent in 2006; Similarly, home mortgages increased from 46 percent to 102 percent of personal disposable income from 1980 to 2006; and finally, mortgage equity withdrawal (MEW) increased from about one percent in 1980 to around seven percent in 2006, according to Barba and Pivetti. As already noted, estimates of the importance of MEW vary and the Barba and Pivetti estimates are considerably higher than that of Greenspan and Kennedy. However, Greenspan and Kennedy use period averaged numbers while the Barba and Pivetti estimate is for specific years. While in absolute terms, most of this indebtedness is concentrated among higher income segments, Barba and Pivetti point out that in terms of percentage of disposable income the highest debt levels were reached by lower and middle income segments.

In their analysis, Barba and Pivetti point out that the high level of middle class debt has in the past been “rationalized” by neoliberal theorists as having been a favorable development because it can be seen as means of maximizing utility and smoothing consumption over life cycles. “The financial liberalization of the 1980s thus emerges as an explanation of both the rising household debt and the economic rationality of that rise: the increase in debt is consistent and cannot be considered

excessive, being motivated by previously precluded utility maximizing choices.”⁵⁵ As a matter of fact, the authors note, these life cycle interpretations of recent consumer credit developments have been questioned on the basis of weak empirical evidence of saving behaviors based on timing of life. Instead, Barba and Pivetti go on to argue, the increase in lower income segment debt can be seen to be a substitute for declining real wages as these individuals struggle to maintain, in the words of English Classical Economists, their “customary necessities” despite decreasing national income shares and decreased real incomes.

In the United States, one of these “customary necessities” it turns out, was health care. Rather than being driven by profligate spending, Lance Taylor and others have shown elsewhere⁵⁶ that one of the main drivers of increased consumption expense by middle income consumers was a doubling of the percentage spent on healthcare services, which saw its percentage go from about 6.0 percent in 1980 to around 12.0 percent in 2003. This affected middle income consumers who were seeing flat real incomes and simultaneously being forced to pay higher health insurance premium shares, higher co-pays, and higher deductibles for their health care. To fill this growing income deficit, real estate “wealth” was tapped to finance continued consumption – at least until the housing bubble burst. Interestingly enough, the increase in the percentage of disposable income coming from MEW reported by Barbra & Pivetti from 1980 to 2006 (six percent) is equal to the increased outlays on health care expense. While this is not to suggest some MEW did not support other consumption activities – including some that might be termed ‘profligate’ – it makes it likely that the increased burden of medical insurance and expense

that fell on middle class consumers played a role on the increased reliance on mortgage debt. The Federal Reserve's Survey of Consumer Finances for 2004 confirms this conjecture: it found that 45% of homeowners who tapped their home equity used that money for expenses such as medical bills, taxes, electronics, and vacations, or to consolidate debt; another 31% used it to finance home improvement; and the rest purchased more real estate, cars, investments, clothing or jewelry.⁵⁷ Just in how the proceeds from equity withdrawal were used paints a picture of income polarization: Many used it for medical bills, taxes and to consolidate debt, while others on the other (gaining) side of distribution trends used it for vacations, jewelry or to buy cars or even additional property.

Relatively high interest rates for credit cards and other installment credit and low rates for real estate loans – plus the fact that housing loan interest was deductible on taxes while the others were not – made this trade-off especially attractive for many middle income families. Equally important, more frequent refinancing and home equity loan appraisals further drove subsequent home valuations higher and thus fueled further price appreciation in a positive feedback loop. This is because real estate agents and professional appraisers check data bases for *recent* sales and financing activity when estimating a market value for a home that is going to be sold or refinanced in some manner. (Remember, under agency theory for real estate agents, the agent listing a property represents the interests of the *seller*, not the buyer, even if he or she also brings a buyer into the transaction. It is therefore that agent's legal and ethical responsibility to obtain the maximum purchase price possible.) Then in turn the rapid

run-up in home prices fueled further optimism for continuing gains which made the upfront risk of borrowing to Subprime and Alt-A buyers seem greatly reduced. And of course purely speculative housing investment activity, such as the widespread practice of “flipping” – which refers to the purchasing and then immediate re-sale of a home at a higher price in order to pocket the profit – also contributed to the accelerating housing bubble in the early 2000s.

While it was clear that a 10-20 percent decline in real estate values could and would imperil financial markets, risk analysts assigned a near zero probability to that occurrence.⁵⁸ But probability and uncertainty are different concepts, and risk analysts failed to understand the inherent uncertainty in markets. As Keynes said in his reply to Viner, “The orthodox theory assumes we have a knowledge of the future of a kind quite different from that which we actually possess.”⁵⁹ As Wall Street firms began the development and sale of “securitized” mortgage packages, they all assumed that the future was subject to accurate statistical projections. In pricing their securities they all used the same pricing model, so there was a built in tendency to “herd.” But as Paul Davidson argues, Keynes rejected the idea that the future was predictable, saying that in many cases uncertainty leaves us “with no scientific basis on which to form any calculable probability whatever. We simply do not know.”⁶⁰ In a parallel observation, Minsky notes, “Unlikely events will not cause a radical change in the estimates of the frequency distribution of the outcomes at a roulette table whereas they are quite likely to cause marked change in the expectation of the future that guides economic activity.”⁶¹

How and why might a decline in autonomous (or wealth-based) consumption have played a role in the development of the Great Recession? Keynes of course argued that consumption would not fall to zero when a household lost its current income, and that therefore some consumption would be supported by drawing down on savings or other assets. Rising real estate wealth during the recent bubble period therefore allowed consumption to be sustained before the onset of the Great Recession as argued by Barbra and Pivetti. As the last decade unfolded, lack of real gains in income for sub-prime borrowers, coupled with the Fed's decision in 2005-6 to temporarily boost interest rates so that new Chairman Ben Bernanke could establish his "inflation fighter credentials" with financial markets⁶², coincided with resets for many sub-prime borrowers which then precipitated the first wave of defaults among the sub-prime borrowers. (While many would have defaulted even without an increase in interest rates, the rise in interest rates only made payments escalate more and pushed more into defaults.) It was the interaction of these defaults with the securitization of mortgage debt on a worldwide basis that pricked the financial market bubble and brought about our rapid decline. As the real estate bubble began to deflate with the first defaults, heavy leverage against home values meant many more middle income home owners were almost immediately without any positive equity in their homes.⁶³ Heavy leverage among Wall Street firms – sometimes as high as forty to one or even greater – meant many of them were soon sliding down Minsky's slippery slope toward "Ponzi finance." Finally as jobs were lost in 2008-09, large numbers of middle income homeowners found themselves with negative equity in their homes, and when faced

with default or foreclosure had little or no incentive to attempt to prevent it. At present, the flood of foreclosures in this market segment continues to prevent any real recovery in the housing market.

But there was also a three-pronged effect on consumption that parallels the autonomous drop in the Great Depression identified by Temin⁶⁴. As real estate values plummeted, most homeowners could no longer tap home equity to finance consumption as they had done in prior years. The rate of change was dramatic indeed. While academic research studies often take several years before publication, private research sometimes can provide estimates that are more quickly available. Charles Biderman, chief executive of Trim Tabs, a California firm that tracks funds flowing in and out of financial markets, points out that as late as 4th quarter 2007, consumers pulled out approximately \$100 billion from home equity – a rate equal to \$400 billion annually. In 4th quarter 2008, this amount had dropped to \$10 billion or only \$40 billion annually, an annual decline of \$360 billion.⁶⁶ With consumption in the \$10 trillion range, this translates into a 3.5 percent decline in consumption from the loss of MEW. Through November 2009, total U.S. credit outstanding had fallen in 14 of the previous 15 months for a total decline of \$117 billion or about four percent of its peak value in July 2008.⁶⁷ Based again on total consumption in the economy in a \$10 trillion range, that shift away from credit use cut consumption growth by about one percent. Finally, there was a post crash change in the savings rate. It had been negative at points just prior to the financial meltdown but shifted upward to about four percent of disposable income. This increase in savings of about four percent acts to reduce consumption by

another four percent. Adding these three changes together then results in a negative 8.5 percent departure from growth trend in consumption.⁶⁸ In addition, there was massive loss of wealth from stocks, bonds, and derivatives and hedge fund investments. The total U.S. loss of wealth was estimated to exceed \$17.5 trillion per the Fed Flow of Funds report. An indirect effect of loss of wealth was to turn many consumers more cautious about spending and thus to reduce present consumption, whether from wealth or income, and to increase savings in an effort to rebuild wealth. And finally, consumers began to reduce their use of revolving credit. At this point it is important to recall that Temin points out that the decline in autonomous consumption during the Depression was *less than one-fifth* the total decline in consumption. With output falling some one-third in real terms and unemployment rising to about 25 percent, income-based consumption also fell sharply. Temin does not argue that the early decline in autonomous consumption was the *only* cause of the general decline in consumption, but that it was the *precipitating factor* in the decline. Once the Depression started, it clearly had other factors that helped sustain it. I would offer the analogy that the role of a drop in autonomous consumption in precipitating a major decline is somewhat like the way nuclear weaponry sets off a hydrogen fusion bomb – a smaller, more easily detonated fission bomb is the trigger that sets off the larger and more powerful destructive force. Because autonomous consumption is by definition wholly and completely dependent upon wealth, and not just wealth but the *feeling of well-being* that comes from having wealth, it is highly vulnerable to financial and equity market declines and may recede far more rapidly than consumption from income, which will

only begin to recede after unemployment begins to rise or as business income declines. Thus in major recessions and depressions, there may be a multi-phased retreat from pre-crash levels of consumption. The loss of wealth, and its associated sense of security, then triggers a shift in the savings rate as consumers seek to return to a sense of security and well being. (The same need to feel secure may also have manifested itself in the Depression era increased preference for currency – it made its holders more secure than deposits at what might prove to be questionable banks. While the flight to currency was evident in every downturn before deposit insurance was enacted with the establishment the Federal Deposit Insurance Corporation (FDIC), it was even more pronounced in 1929-1933.) And of course, this multi-phased mechanism of decline is very likely to be even more dramatic when distribution trends have developed resulting in a large part of the population struggling to make ends meet. That distinction and difference may be one of the key reasons that the massive October 1987 financial market declines did not result in a major recession, but the declines of 1929 and 2008 did. At only one-fifth of the 18 percent decline in consumption experienced during the Depression, this means the size of the drop in autonomous consumption accounted for only about three or four percent of the total drop . In this Great Recession, just the decline in MEW approximates that same amount. We know for certain that MEW has declined sharply, that credit use was curtailed, and that there was a significant shift in the savings rate. There may also have been a slight decline in consumption from other wealth because of the massive declines in financial markets and other assets.⁷⁰

In a recent Google Tech Lecture⁷¹ entitled “Maynard’s Revenge: Keynesianism and the Crisis,” economist Lance Taylor of The New School argues a view that is similar to what I argue here. Taylor cites nine important interacting factors as being essential to understanding the recent and continuing Great Recession.

1) A major shift in political economy occurred, beginning in about 1980 and involved the resurgence of neoliberalism.

2) Real interest rates and wage shares both began to trend down;

3) The ratio of household debt to income doubled;

4) An equity price boom began in the 1980s and continued into the late 1990s but thereafter there were negative real equity returns. A parallel housing price boom peaked in the mid-2000s;

5) These asset price bubbles allowed households to continue to support consumption even with rising income inequality;

6) The real “twin” to rising household indebtedness was a foreign trade deficit;

7) The continued fall in real interest rates post-911 further supported the asset bubbles;

8) “Light touch” regulation was important and it was rationalized by the emergence of high-tech finance theory;

9) Keynesian macroeconomics was supplanted by a return again to Says Law and ‘Supply Side’ economics.

Taylor also argues that the transmission of the financial crisis to the real economy occurred through the collapse of the housing bubble, which deprived middle income

families of any further use of home equity loans to support consumption and therefore precipitated a drop in total consumption.

Connecting some theoretical dots

There is a long theoretical tradition in economics suggesting that income distribution, autonomous consumption, and heavy debt leverage can all be important factors in economic downturns. Keynes and especially Kalecki long ago emphasized the importance of income distribution specifically in the Depression and in determining growth rates generally. As Heilbroner argued, one of the main reasons this is so is because low income wage earners tend to spend most of their income rather quickly and so through the established concept of the Keynesian multiplier, there is growth. There is a huge differential in savings rates from low income households to the highest. A recent paper by Karen Dynan, Jonathon Skinner, and Stephen Zeldes (2004)⁷² addresses the important question, “Do the Rich Save More?” and answers that all the evidence they examined suggests they most definitely do. While their study complicates the issue by examining both current income and the “permanent income” concept articulated by Friedman, they report that their analysis of the consumer expenditure (CEX) data suggest that for each \$10,000 increase in current annual income, there is a 7 percent increase in the savings rate. Using the survey of consumer finances (SCF) data, they demonstrate that the top five percent saved about 37 percent of current income while the top one percent saved around 51 percent in the last decade of the Twentieth Century as the stage was set for the Great Recession. Thus when there is a higher percent of income flowing to the top income segments – as there was both

before the Depression and before the Great Recession – there is a built-in tendency for slower economic growth. As a caveat this may not be evident yet during the boom stage since consumption and economic growth may continue robustly, either through speculative profits or the accumulation of debt, but when the downturn comes, it will impact as a more negative growth rate during the downturn and lessen growth during any subsequent recovery. Thus maldistribution means that any downturn will be more severe and long-lasting and the recovery more tenuous as indeed it has proved to be in this Great Recession.

Similarly, since Keynes, there has been a theoretical basis to suggest that a general decline in wealth, which can be precipitated through financial market crashes, can lead to a decline in autonomous (or wealth-based) consumption. It was, after all, Keynes who first pointed out that while consumption was a function of income, it would not fall to zero in a household that found itself without any current income, that is, so long as that household has savings and or other financial assets to draw upon. Thus he conjectured that a component of consumption came from wealth – his C_0 intercept represented autonomous consumption and thus the consumption curve in a Keynesian framework did not flow through the origins. As Ozlem Onaran, Engelbert Stockhammer and Lucas Grafl note in their working paper, “The finance-dominated growth regime, distribution, and aggregate demand in the US,”⁷³ in the late 1990s a five percent marginal propensity to consume out of financial wealth was often quoted. When consumption did not fall as sharply as was expected after the dot.com bust in 2000, attention was turned to housing wealth. Several subsequent studies subsequently

found an even higher marginal propensity to consume out of housing wealth, including that by Case and Shiller (2001). But note that the percentage of wealth that is likely to be consumed, even in the best of times, is but a fraction of the marginal propensity to consume out of income. This suggests that what households can and will consume out of wealth is somehow perceived as “surplus” wealth – it is that “marginal” amount that a household feels can be devoted to consumption and still leave adequate financial resources to deal with future needs as well as to address a general uncertainty about what may lie ahead. Because the uncertainty about the future will increase markedly in times of economic distress, it could be argued that autonomous consumption is likely to be subject to the same “animal spirits” issues that Keynes saw in investment. And like investment, it may therefore be subject to wider downward swings when the *future appears unhinged*, as it did in 2008. An objection may be raised here as to why this did not occur in response to the dot.com bust in 2000. And the answer I believe is that the rate of appreciation in real estate values was large enough that for most households, their “perceived wealth” was actually higher at the end of 2000. Since for most households a larger part of their paper wealth was to be found in their homes and not in their share of dot.com stocks, the loss of stock market value affected mostly those with heavy dot.com investments in their portfolios.

But to understand our present situation, we need to add a final component to the theoretical mix – that of Hyman Minsky and his analysis of the build-up in debt and leverage. While Minsky’s analysis of the build-up in debt and leverage during “periods of tranquility” was originally applied to corporations, it can be extended to households

as well. The same slippery slope can face households as faces corporations in periods of economic distress. As cash flows decline for either of them, financial commitments that were manageable prior to the downturn are no longer so. While debt is taken on during the boom, it must be serviced or retired during the bust. At present, whether we are talking about countries, firms, or individual households, debt is a severe burden for many and it will continue to dampen effective demand as the costs of servicing debt eat up a larger portion of current income cash flows. Indeed, these costs (including service on the national debt) will rise significantly if interest rates begin to increase. Thus I would argue that while the Federal Reserve has reached its limits on what it can achieve by quantitative easing (QE) and by lowering interest rates to near zero, it also must avoid raising rates unless and until there is evidence that any recovery is firmly established.

Chapter 5: Summing up and some wider policy conclusions

This paper has argued principally that distribution shifts – ones that placed more income in the hands of the few, and less income in the hands of the many – were a fundamental underlying factor in creating the conditions that ultimately led to the financial market collapses in 2008. Most simply, we as a nation attempted to widen home ownership without first understanding that equitable income growth was essential to that undertaking. Without income growth, those objectives could only be achieved with “no-doc, low-doc and liar loans.” As the mortgage machine made billions and billions of dollars of these loans that almost appear to be “designed-to-fail,” the entire basket of securitized loans and allied financial products packaged and sold by Wall Street firms around the world was corrupted and ultimately proved to be “toxic.” In the decade prior to this Great Recession, continuing lack of real income gains for most households led many homeowners to tap their home equity to finance their consumption. The result was the new phenomenon of Mortgage Equity Withdrawal (MEW). Not only was this living off of wealth, it was living off of *borrowed* wealth. When the housing bubble collapsed, these phantom paper gains in real estate wealth also collapsed, and so too did the peculiar and perverse form of autonomous consumption represented by MEW.

Had there not been an early and major countercyclical intervention in both fiscal and monetary policy, there is every reason to believe that this downturn could have been as severe as that of the Depression as Eichengreen et al show in their work. The

financial market losses involved were greater, both in nominal and real terms, and trade and output all fell even more rapidly than in response to the Crash of 1929. While Temin argues that a drop in autonomous consumption was the precipitating factor in *starting* the Depression, he also clearly states that “a lack of equilibrating forces,” helped sustain and extend it. This time, thankfully, there have been equilibrating forces at work. But the staying power of those equilibrating forces is at its end. Fiscal policy is at its limits because of political realities – there is simply no political support for more deficit spending measures, and even if there were, it can be argued that the response of financial markets could prove its undoing as interest rates would likely increase. But here the Federal Reserve Board can lean against markets by keeping them low. But budget cutting is also problematic and deficit reduction measures could well be counterproductive and cost hundreds of thousands of jobs. Similarly, monetary policy has used all the known tricks in its arsenal. Interest rates have been held near zero and quantitative easing has greatly expanded the money supply. With any increase in inflation rates, we may in fact be nearing negative real interest rates in the near future --although some economists suggest this might be a good thing. Thus the question must be raised: Is the United States facing a lost decade as Japan did when its real estate bubble collapsed? Are we looking at five or more years of unemployment hovering around nine percent or more?

A bumpy road ahead

There are, in short, few arrows remaining in the usual policy quiver and at best, a bumpy road lies ahead. Decades ago, MIT economist Lester Thurow wrote a book titled *The Zero Sum Game*. In it he argued that we had reached a point where gains for some could only come at the expense of others. I would argue that traditional policy now faces a zero sum game as well. We are in a kind of “damned if you do and damned if you don’t” quandary. If we cut deficits there are problems. If we increase deficits there are other problems. If we extend quantitative easing, we may keep interest rates low, but it is questionable how much good this might do. But certainly if we don’t continue this policy, interest rates are likely to increase. Not just monetary policy, but *all* policy has been reduced to “pushing on a string.” If indeed we are now nearing a genuine recovery in economic output and employment, this quandary will resolve itself. But if we continue only slow growth and don’t soon get the robust growth in employment that is needed to pull down unemployment rates, then there will indeed be a very bumpy road ahead.

Another MIT economist, Walt Rostow once offered up the analogy that developing countries needed to grow fast enough to reach “take-off speed” for their economies to reach self-sustaining growth.⁷⁴ The aerodynamics of flight suggests another analogy that may be applicable to our present situation. There is a point at which the speed of an aircraft is no longer fast enough to generate enough upward lift on its wings to sustain flight: This is called “stall-speed” and when an aircraft slows to this point it begins to drop straight down out of the sky. The question before the

world's economies today is whether the collective rates of growth worldwide are adequate to keep them from falling again. Debt service is a severe burden for many and will continue to dampen effective demand for households, firms, and sovereign governments. Even small crises in small countries can and will have possibly dangerous impacts on larger countries. And if the world's largest economy continues to have nearly 10 percent unemployment and as much as 20 percent of its population underemployed⁷⁵ and under-utilized, while countries such as Spain are at a full 20 percent unemployment and are severely burdened with debt, those individual scenarios add up to continuing downside risks of resumed recessions.

If there is new hope on the horizon it may be because the recently effective reduction in Social Security taxes has resulted in an increase in after tax discretionary income, at least in the United States. But while that helped to increase incomes some one percent in January 2011, consumption the same month grew by just two-tenths a percent as consumers remained cautious. Early on in this downturn, I suggested a total freeze on social security taxes as a means to directly inject additional income into the economy. I also suggested it was important to cut social security taxes, not federal income taxes, because of their regressive nature. Thus reducing or cutting them would prove progressive and would serve as a partial antidote to the maldistribution of income that has existed and persisted now for decades. (For almost 25 years as already argued, the major share of gains from shifts in income distribution has benefited top income groups. They also are the main beneficiaries of reductions in capital gains taxes and across the board cuts in income tax rates.) I continue to argue that unless something is

done to address this fundamental maldistribution, we should expect slower growth and a painfully slow reduction in unemployment. Present distribution patterns may not block completely our economic recovery, but what recovery is experienced will be weaker than it would be with a more egalitarian income distribution.

There is empirical evidence to support this view. Ozlem Onaran, Engelbert Stockhammer and Lucas Grafl start their investigation by developing a “Post-Kaleckian” economic model to examine the effects of financialization on several key economic variables and then run regressions to test several hypotheses. Unlike earlier work, their approach incorporates the financial and housing wealth effects upon consumption. They are able to confirm that consumption propensities between profit and wage income vary as expected. They also confirm a high propensity to consume out of rentier income. They are able to explain 12.4% of changes in consumption during 1980-2007 by changes in housing wealth and another 5.5% by changes in financial wealth.⁷⁶ However, they also conclude that overall “the changes in functional income distribution and wealth effects during the finance dominated era of 1980-2007 has had an overall neutral effect on aggregate demand.”⁷⁷ However, that is exactly what I would expect during this period when rising housing wealth was adequate to cancel out the effects of maldistribution. However, their final conclusions do not differ greatly from mine as they state:

“Pro-capital as well as pro-rentier distribution has created stagnant demand, and the effects of the asset market bubbles have offset these negative effects only through risky debt-mechanism. The policy lesson for sustainable growth is to correct this imbalance in distribution, and avoid reliance on debt for consumption. Given that private demand is rather neutral with respect to

distribution, or even slightly wage-led, there is room for correcting income distribution without affecting the growth potential of the economy.”⁷⁸

Is it time for an incomes policy?

What if we *actually were* rational enough about our economic situation to cast off treasured ideologies and long established fear mongering about inflation, and say, “To get our economy moving again, we need to increase household income for the majority of households. We need to address and redress the fundamental maldistribution of income that has allowed CEO pay to double (and double again) while real median income has declined.” What if we said, “We are willing to accept an increase in our inflation rate as a price we must pay for an income policy that would address the inequities that we have tolerated so silently so long?” (Why indeed is a doubling of CEO pay okay, but a slight increase for most workers fraught with inflationary perils?) What if we adopted “the Google solution” economy wide? What if we by legislative fiat ordered that everyone who earns up to the FICA income base of approximately \$100,000, simply have their income increased by 10 percent as Google did recently and voluntarily for all its employees? It would be a wonderful world indeed if firms nationwide, especially those which are doing well profit-wise, would do voluntarily what Google did for its employees, but their singular preoccupation with profits and stock prices makes that unlikely.

There are, I realize, both political and legal arguments – as well as economic ones – that could and would be made in response to this proposal. As in the case of many aspects of New Deal legislation, there would be legal challenges that would be

litigated all the way to the Supreme Court. Inflation hawks would again raise the fear of hyper-inflation and the specter of wheelbarrows full of worthless Weimar Republic currency being needed by German housewives to buy a bag of groceries. (I am inclined to point out sarcastically that technological change in the existence of debit cards in today's economy really would solve *that* problem.) Politically there isn't a U.S. Senator, with the likely exception of Bernie Saunders, who would be willing to support this idea at present. So I propose the idea not as a likely option but as an abstract intellectual argument that makes economic sense for a variety of reasons. However, if in four or five years, we are still mired in this recession that won't go away, then perhaps more minds will be open to more imaginative policy solutions. For those who consider a ten percent increase in income to be too excessive, I would remind them of our history. The Brotherhood of Railway and Airline Clerks in *rejected* a 36 percent increase in their pay in 1970 and went on strike. Those were distant days when labor had bargaining power to raise real wages not just for its supporters but for everyone in the economy, and as a consequence real incomes were increasing.

The Google solution

The Google solution would order a one-time across the board increase in pay for all employees of all institutions in the United States up to the Social Security tax base of about \$100,000 to compensate them for the productivity increases they have already achieved but for which they have not yet been compensated. (In citing the findings of Dew Becker and Gordon, I noted already that there is approximately a 20 percent productivity increase-median wage gap. In suggesting 10 percent, I am only

proposing to fill half that gap.) At the outset, I acknowledge and admit that such a policy – if it were to be enacted – is likely to increase the rate of inflation in the economy. But at present our inflation rates are low and thus it is a better time to take such a step than if serious inflationary pressures were already existent. In addition, such an increase could further improve productivity by improving worker morale. A number of recent surveys have shown widespread worker “burn-out” in the American economy as many employees have been pressed to do more and more work for less real income. For example a survey by the Conference Board published in January 2010 found that worker dissatisfaction was at a 22 year high⁷⁹. Thus it is not unreasonable to suggest that better pay could improve morale and in the process help boost productivity. And obviously any productivity increases that resulted would offset inflationary pressures.

And if inflation is a *cost*, it should be weighed against the multiple *benefits* that would accrue from such a policy. Here are some of the important benefits:

- The Google solution would cut government deficits by increasing the taxable income base. Given that large U.S. deficits loom ahead indefinitely, this would lessen the possible impact of those deficits on future interest rates. But even more important, such a policy would boost state revenues as well and enable them to avoid some of the reductions in employment that are now looming immediately ahead. What we really want is a significant increase in real wages, which would be difficult to legislate. But still, a ten percent rise in money wages could do some good.

- A similar benefit would also accrue to the Social Security system. Its revenues would increase by ten percent immediately and each year subsequently since the pay increase is limited to the taxable FICA base. This is a huge and important benefit to the system's solvency. (By the way, one of reasons the system faces the enormous deficits it does is that at least 10 percent of national income was shifted in recent decades toward top income recipients whose wages are far above the limit, and away from lower income workers whose entire pay was subject to the tax. Thus these high increased incomes were not subject to FICA taxes, except for their first \$100,000 of income each year.)
- An increase in wage income would provide new support for the housing market by pushing more buyers into income-qualifying range. It could also reduce the frequency of defaults going forward by giving underwater homeowners extra income – some of which might even be used by some of them to increase their monthly mortgage payment and bring down their mortgage balance closer to the current market value of their homes.
- There could be a large increase in aggregate demand, as the Google solution incomes policy boosts take home pay and allows more households to afford to purchase more of everything than they presently can. The broadness and permanence of the improvement in their discretionary income might even be enough to encourage most consumers to start spending again, which many have been reluctant to do because of the debt burdens they face.

- But perhaps even more important, given the 40 cent per gallon increase in gasoline prices in the United States in just the past month as a result of civil strife in Libya, a boost in incomes is now needed just to prevent economic backsliding. For every ten cent a gallon increase in gasoline prices there is \$40 million dollars *per day* less for consumers to spend on everything else according to Peter Buetel, an oil analyst quoted by MSNMoney.com. Thus at present prices, there is \$160 million a day less to fuel economic recovery or \$4.8 billion less per month. Annualize it and there is roughly \$58 billion a year being sucked out of our economy by rising gasoline prices – and that is based on prices stabilizing at \$4.00 per gallon. This same rapid run-up in energy costs in 2009 accelerated the rates of economic decline in the wake of the financial crisis and historically it was also the most important driver of the recession of 1974-75. Rising energy prices may fuel gains in stock indices by driving energy stocks upward, but their effect on virtually everything else is negative indeed.

Historically, again and again, for the approximately 40 years I have personally followed economic events and policy, when we have faced policy trade-offs between inflation and unemployment, we have chosen to do whatever favored lowering inflation risks. We did that first in the recession of 1969-70 when Johnson administration Vietnam era decisions to produce both “guns and butter” first started to raise inflationary pressures and we did it again in 1973-75 when OPEC energy price increases first created double digit inflation rates. It was because of this that my home

state Senator, Hubert Humphrey, originated the dual policy mandate for the Federal Reserve, to encourage both price stability and low unemployment when he served as Chair of the Joint Economic Committee in the late 1970s. And it was because of his dedication to this cause that when Humphrey-Hawkins was finally passed in 1978 following his death in 1977, the U.S. Congress chose to name the statute after him.

But in those days, the inflation rates were higher than the unemployment rates, at least until the relationship reversed itself in the wake of the 1980-82 downturn. The situation is radically different today, and now the unemployment rate is far higher than the inflation rate and also presents a far more serious problem for the economy generally. It may well indeed be time for policy to “tilt” in favor of reducing unemployment and to accept the attendant risks that inflation rates will increase. Besides, we have ample tested tools in the policy arsenal to combat inflation but few indeed are available presently to reduce unemployment to acceptable rates. Indeed, the increase of the U.S. official unemployment rate back up to a full nine percent in April 2011 from 8.8 percent in March may be a manifestation of the dynamic I suggested in my introduction. Even though private employers are increasing employment, lay-offs in many public sector jobs by cash-strapped state governments, municipalities and schools are canceling out those gains and unemployment may remain persistently and unacceptably high.

When one thinks about, unemployment is in and of itself the ultimate in unfair distribution. Not only is the unemployed worker losing his income, he is losing his sense of worth and of achievement and accomplishment. We have too callously

accepted the necessity of this fate for a large sector of our workers. Unemployment compensation does not compensate for these losses and these disparities.

ENDNOTES

¹ Joseph Stiglitz, *Freefall: America, Free Markets, and the Sinking of the World Economy*, (2010) P.318-319.

² Ibid. P 311.

³ Peter Temin, *Did Monetary Forces Cause the Great Depression?* 1976, P.9

⁴ Thomas Piketty and Emmanuel Saez., “Income Inequality in the United States, 1913-98,” *The Quarterly Journal of Economics* Vol. CXVIII February 2003, Issue 1

⁵ Peter Temin, *Did Monetary Forces Cause the Great Depression?* 1976, P. xi

⁶ Ibid, passage originally quoted by Temin, P.78

⁷ Space, and the more limited and focused scope of this thesis does not allow me to discuss all of these theories in any detail. For a quick summary of others, see Brian Snowdon and Howard Vane, *Modern Macroeconomics: Its Origins, Development, and Current State* (2005).

⁸ Op. Cit., Temin, P. xi. Emphasis added.

⁹ See Hyman Minsky’s 1982 book, *Stabilizing an Unstable Economy* for his analysis on this issue.

¹⁰ This quote is almost apocryphal but it is universally attributed to Martin. One story has Martin first making the comment just after John Kennedy’s election in 1960. In an interview with *Time Magazine* published in 1970, Martin said that the Reserve Board’s unpopular actions arose out of its necessary role of “leaning against the wind.” He said: “I’m the fellow who takes away the punch bowl just when the party is getting good.”

¹¹ Op. Cit. Temin, P. 14

¹² Ibid. P 14

¹³ Milton Friedman and Anna Schwartz, *A Monetary History of the United States*, 1963 P. 544-45. Emphasis added to illustrate Friedman’s tendency to assume his conclusion rhetorically.

¹⁴ Ibid, P xviv.

¹⁵ From personal experience I would argue that many small businesses and large ones as well are reluctant to report losses for fear that their banks or investors will react negatively, and there is often an effort through “creative accounting” or moving items off-balance sheet to delay the bad news involved as long as possible in the hopes that the negative trend will be reversed. These machinations have been central to the Enron meltdown as well as others.

¹⁶ Op. Cit., Temin, P 5.

¹⁷ Passage quoted by Temin, P 15. The article by Friedman and Schwartz from which this quote was taken originally appeared in the *Review of Economics and Statistics*, February 1963.

¹⁸ Ibid. P 14

¹⁹ Ibid, P 30-31, emphasis on demand added by me.

²⁰ Ibid, P. 9, emphasis on the critical role of sustained decline in autonomous consumption is mine.

²¹ Ibid P 171-72, Language inserted in brackets is mine.

²² Robert Heilbroner, *The Making of Economic Society*, 1975, P 145.

²³ Miguel Almunia, Agustin Benetrix, Barry Eichengreen, Kevin O’Rourke and Gisela Rua, “From Great Depression to Great Credit Crisis: Similarities, Differences, and Lessons.” This paper was presented at the 50th Economic Policy Panel Meeting in Tilburg, October 23-24, 2009 at the University of Tilburg and was funded by the European Commission’s Seventh Research Framework Programme.

²⁴ Op. cit. Stiglitz, P. 303.

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- ²⁵ See Greenspan and Kennedy, "Sources and Uses of Equity Extracted from Homes," published first in 2007 in the Federal Reserve's Finance and Economics Discussion Series (FEDS), P. 12
- ²⁶ Lord Acton's exact words were "All power tends to corrupt and absolute power corrupts absolutely," which he wrote in a letter to Mandell Creighton on April 5, 1887, and which was published in a book titled *Historical Essays and Studies*, 1907.
- ²⁷ William Lazonick, "The New Economy Business Model and the Crisis of U.S. Capitalism," *Capitalism and Society*, Volume 4, Issue 2, 2009, Article 5, P.38.
- ²⁸ Greta Krippner, "The financialization of the U.S. economy," in *Socio-Economic Review* (2005) 3, P. 173-208
- ²⁹ Data points are estimated from charts on P. 178-79. See Greta Krippner, "The financialization of the U.S. economy," in *Socio-Economic Review* (2005) 3, P. 173-208
- ³⁰ *Ibid.* P. 198
- ³¹ Hyman Minsky, *Stabilizing an Unstable Economy*, 1986, P. 17
- ³² Randall Wray, "Review of Evidence Supporting the Endogenous Money Approach," Chapter 8 in *Capitalism and Economics*.
- ³³ Rene Schultz, "Should We Fear Derivatives?", NBER Working Paper Series, "Working Paper 10574, June 2004
- ³⁴ *Ibid.*, P. 15
- ³⁵ Raghuram G. Rajan, "Has Financial Development Made the World Riskier?" IMF paper 2006
- ³⁶ *Ibid.*, P. 316
- ³⁷ This is of course the reason investors flocked to Bernard Madoff's doors.
- ³⁸ See page 17 of the FCIC report.
- ³⁹ Giovanni Andrea Cornia with Sampsa Kiiski, U.N. Discussion Paper No. 2001/89 "Trends in Income Distribution in the Post-World II Period," September 2001
- ⁴⁰ *Ibid.* P.4
- ⁴¹ Thomas Piketty and Emmanuel Saez., "Income Inequality in the United States, 1913-98," *The Quarterly Journal of Economics* Vol. CXVIII February 2003, Issue 1
- ⁴² More recently estimates cited by Lance Taylor suggest that this percentage had continued to increase to about 22.5 percent of national income by about 2007 when realized capital gains are included in income shares to the wealthiest.
- ⁴³ Ian Dew-Becker and Robert J. Gordon, "Where Did the Productivity Go: Inflation Dynamics and the Distribution of Income," The Brookings Institute Panel on Economic Activity, September 2005.
- ⁴⁴ This conclusion is mine, not one stated by the authors.
- ⁴⁵ David H. Autor, Lawrence F. Katz, and Melissa Kearney, "Trends in U.S. Wage Inequality: Revising the Revisionists," *The Review of Economics and Statistics*, May 2008, 90(2): 300-323
- ⁴⁶ Edward N. Wolff, "Recent Trends in the Distribution of Household Wealth," Chapter 1 in *Back to Shared Prosperity: The Growing Inequality of Wealth and Income in America*, Ray Marshall, Editor, 2000.
- ⁴⁷ *Ibid.* P. 58
- ⁴⁸ Chris Brown, *Inequality, Consumer Credit, and the Saving Puzzle*, 2008, P. 52
- ⁴⁹ I sat in the gallery in the Minnesota Senate in 1978 and listened to the debate over the repeal of the state usury law. Proponents argued that without repeal consumer credit would no longer be available to Minnesotans. The repeal passed that year.
- ⁵⁰ For a more complete discussion see Brown, Op. cit. P. 16
- ⁵¹ Brown was writing in 2007 for a book that was published in 2008 so this comment must be seen as prescient.
- ⁵² Engelbert Stockhammer, Discussion Paper no. 19, "Neoliberalism, Income Distribution and the Causes of the Crisis," *Research on Money and Finance*, June 2010
- ⁵³ Aldo Barba and Massimo Pivetti, "Rising household debt: its causes and its macroeconomic implications – a long-period analysis," *Cambridge Journal of Economics*, 2009, 33, 113-137
- ⁵⁴ *Ibid.*, P. 113
- ⁵⁵ *Ibid.*, P. 119

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- ⁵⁶ Nelson Barbosa-Filho, Codrina Rada, Lance Taylor, and Luca Zamparelli, “Cycles and Trends in U.S. Net Borrowing Flows: Pro-Cyclical Household Net Borrowing, Counter-Cyclical Government, Consumption and the Current Account, and Elusive Twin Deficits,” New School Schwartz Center for Economic Policy Analysis Working Paper 2007-5
- ⁵⁷ See Financial Crisis Inquiry Commission Final Report, P. 87.
- ⁵⁸ Kristopher Geradi, Andreas Lehnert, Shane Sherlund, and Paul Willen, “Making Sense of the Subprime Crisis,” Brookings Papers on Economic Activity, Fall 2008 Conference Draft, September 2008
- ⁵⁹ John Maynard Keynes, “The General Theory of Employment,” *The Quarterly Journal of Economics*, February, 1937, P. 22
- ⁶⁰ Paul Davidson, “The Post-Keynesian School,” Chapter 8 in *Modern Macroeconomics: Its Origins, Development and Current State*, by Brian Snowdon and Howard Vane, 2005, P 468
- ⁶¹ Minsky, Op. Cit., P.21
- ⁶² I cannot fail to note that the same issue confronted Alan Greenspan when he succeeded Paul Volcker. The Fed began to raise interest rates in September 1987 and financial markets collapsed the next month.
- ⁶³ The Wall Street Journal reported in October 2009 that almost 10.7 million households, or 23 percent of mortgage holders, were underwater in the third quarter, and 5.3 million have mortgages that are 20 percent higher than the value of their home as prices have plummeted since the recession began
- ⁶⁴ Temin in his 1976 book, *Did Monetary Forces Cause the Great Depression?*, shows that there was an unusual drop in autonomous consumption in the United States in 1929-30. While investment also declined dramatically he notes it did not decline more than it usually does in a recession.
- ⁶⁶ This information originally appeared in a Denver Post business section article by Aldo Svaldi, January 11, 2009.
- ⁶⁷ Federal Reserve System press release, January 8, 2010.
- ⁶⁸ .Note that I am not saying that consumption dropped this sharply, but that this was a departure from the growth trend of about five percent annually.
- ⁷⁰ There certainly is anecdotal evidence that wealthy Americans also curtailed their consumption – some of which may indeed have been from wealth, not income, in response to the financial crash as Lexus and Mercedes sales dropped as did retail sales at Neiman-Marcus. However, since this is difficult to measure, I have not attempted to estimate its impact.
- ⁷¹ Accessed at <http://www.youtube.com/watch?v=y1YS6AlkeZk>
- ⁷² Karen Dynan, Jonathon Skinner, and Stephen Zeldes, “Do the Rich Save More?,” *Journal of Political Economy*, 2004, vol. 112, no. 2, P. 397-444.
- ⁷³ Ozlem Onaran, Engelbert Stockhammer, Lucas Grafl, “The finance-dominated growth regime, distribution, and aggregate demand,” Working Paper No. 126, February 2009, accessed at <http://www.wu.ac.at/inst/vw1/papers/wu-wp126.pdf>. See page 5.
- ⁷⁴ For a detailed discussion of Rostow’s ideas, see John Davis, “The European economies in the 18th century” chapter 4 in *An Economic History of Europe: From Expansion to Development*, edited by Antonio Di Vittorio.
- ⁷⁵ A Gallup poll conducted in February 2010 found that 19.9 percent or 30 million U.S. workers was underemployed and working part-time or unemployed and seeking full time work. Only half the underemployed reported they had enough money to cover necessities.
- ⁷⁶ Op. Cit., Onaran et al. See pages 14-17.
- ⁷⁷ Ibid., P. 27
- ⁷⁸ Ibid, also P. 27
- ⁷⁹ Accessed at <http://www.dailyfinance/2010/01/05/American-job-dissatisfaction-hits-22-year-high/>

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