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# The Global Financial Crises of 2007–2010 and the future of capitalism

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### ABSTRACT

This paper presents an analysis of the 2007–2010 Global Financial Crisis which started with the sub-prime crisis in the U.S. and became global very fast. It argues that the financial system in the United States is a complex interlocking structure of markets, institutions and regulators. The causes and culprits of the crisis, the misaligned incentives of participants and exogenous events such as the wars in Afghanistan and Iraq, precipitated failure in key markets: commodities, sub-prime housing, equities, and credit. One of the strategic consequences of this crisis is that the US will lose its dominance in world power, the frequent crises and vulnerabilities of the Neoliberalism and examines the future of capitalism. Of the alternatives to economic system, the capitalism is the most viable economic system. However, it must adopt real and efficient allocation of resources to maximize welfare of all parties and seriously address the income inequality. It must reject crony capitalism, enact true financial regulation of institutions and markets, end corporate socialism and address the system's structural deficiencies.

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## 1. Introduction

This paper presents an analysis of the Global Financial Crisis of 2007–2010, the causes, impacts, global policy responses and the future of capitalism.

“On October 9, 2007 the Dow Jones Industrial Average sets a record by closing at 14,047. One year later, the Dow was just above 8000, after dropping 21% in the first nine days of October 2008. Major stock markets in other countries had plunged alongside the Dow. Credit markets were nearing

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paralysis. Companies began to lay off workers in droves and were forced to put off capital investments. Individual consumers were being denied loans for mortgages and college tuitions. After the nine day U.S. stock market plunge, the head of the International Monetary Fund had some sobering words: “Intensifying solvency concerns about a number of the largest U.S.-based and European financial institutions have pushed the global financial system to the brink of systemic meltdown.”<sup>1</sup>

The crisis Global Financial Crisis is considered to be the worst financial crisis since the Great Depression of the 1930s. However, the duration of the recent crisis is approaching those of the Depreciation years. [Table 1](#) highlights recessions in the modern era.

The U.S. housing bubble, which peaked in 2007, caused the values of securities tied to U.S. real estate pricing to plummet, damaging financial institutions worldwide. Economies worldwide slowed as credit tightened and international trade declined. Governments and central banks responded with unprecedented fiscal stimulus, monetary policy expansion and institutional bailouts. While many causes for the financial crisis have been suggested, with varying weight assigned by experts, the United States Senate in issuing the Levin–Coburn Report found “that the crisis was not a natural disaster, but the result of high risk, complex financial products; undisclosed conflicts of interest; and the failure of regulators, the credit rating agencies, and the market itself to rein in the excesses of Wall Street.”<sup>2</sup> Excessive leverage can be added to this litany of factors, sometimes as high as 40:1.

Just months after the financial crisis began, in 2007 [Anthony Herbst and Joseph Wu \(2009\)](#) focused on its differences with prior crises:

“The financial crisis of this first decade of the 3rd millennium has features that make it both severe and somewhat intractable. It might not be an exaggeration to call it a worldwide economic pandemic. It propagated quickly due to modern communications and worldwide financial markets integration. Governments intervened relatively early, but without clear central coordination or a unified plan. This created uncertainties and was part of the cause for a slowing or even freezing of some credit and derivative markets. It seems accurate to say that the financial sector is “front and center” of the drama; the real sector, manufacturing and trade, plays an offstage role. The mindset of some key policy makers could be seen as viewing the financial sector not as providing lubrication to the mechanism of production and trade, but as the central theme itself.”

“It is a challenge to discuss the current pandemic without recognizing the political wrapper surrounding many aspects of it, and the threads running through it. We shall try to do so as necessary without slipping into an advocacy role. But we feel it would obscure much of the problem and its prospective solutions to pretend that there are not powerful political forces with vested interests at work. The economic and behavioral factors clearly are affected by political influences, and it would make for an incomplete job to ignore them entirely.”

Herbst and Wu, however, did not identify the looming problem with sovereign debt that took center stage in 2011 in the U.S. and in Europe. The financial system in the United States is a complex interlocking structure of markets, institutions and regulators. The misaligned incentives of participants and exogenous events such as the protracted military engagements in Afghanistan and Iraq, precipitated failure in four key markets: commodities, sub-prime housing, equities, and credit. The events that followed comprised the Global Financial Crisis and the Global Recession. An important consequence of the events is the diminishing dominant role of the United States in the world economy.

Given the global economy's vulnerability, this paper examines the future of capitalism. The conclusion follows that capitalism is the appropriate economic system to adopt for efficient allocation of resources and maximization of welfare. However, an appropriate balance must be struck between the market and

<sup>1</sup> See, “IMF in Global ‘Meltdown’ Warning,” *BBC News*, October 12, 2008.

<sup>2</sup> See, Levine, Carl, and Coburn, Tom (2010). U.S. Senate Report.

**Table 1**

Recession in the modern era.

Beginning–end	Duration (Months)	Lag between end and declaration of end (Months)
December 2007–??	??	–
March 2001–November 2001	8	20
July 1990–March 1991	8	21
July 1981–November 1982	16	8
January 1980–July 1980	6	12
November 1973–March 1975	16	–
December 1969–November 1970	11	–
April 1960–February 1961	10	–
August 1957–April 1958	8	–
July 1953–May 1954	10	–
November 1948–October 1949	11	–
February 1945–October 1945	8	–
May 1937–June 1938	13	–
August 1929–March 1933	43	–

Source: PEW Research. <http://pewsocialtrends.org/files/2010/11/759-recession.pdf>.

the state in order to allow innovation and creativity to surge while curbing abuses and staving off catastrophic market failure.

The paper is organized as follows: [Section 2](#) provides a chronological account of the recent Global Financial Crisis; [Section 3](#) discusses the global response; [Section 4](#) presents alternative viewpoints regarding the future of capitalism; [Section 5](#) concludes the paper.

*The problem in the financial sector today is not that a given firm might have enough market share to influence prices; it is that one firm or a small set of interconnected firms, by failing, can bring down the economy.*<sup>3</sup>

–Simon Johnson, Professor, MIT and Former Chief Economist, IMF

## 2. The chronology and causes of the stage I crisis

Nouriel Roubini and Stephen Mihm in their book, *Crisis Economics (2010)* provide a balanced account of the recent financial crisis that is historical and global in perspective.

“For the past half century, academic economists, Wall Street traders, and everyone in between have been led astray by fairy tales about the wonders of unregulated markets and the limitless benefits of financial innovation. The crisis dealt a body blow to that belief system, but nothing has replaced it. Throughout the 19th and early 20th centuries, crippling panics and depressions hit the nation again and again. The crisis was less a function of sub-prime mortgages than of a sub-prime financial system. Thanks to everything from warped compensation structures to corrupt ratings agencies, the global financial system rotted from the inside out. The financial crisis merely ripped the sleek and shiny skin off what had become, over the years, a gangrenous mess.”

The book is a road map of how we got into the crisis—of how and why markets fail. The authors argue that blaming greed is a “tired explanation.” They point out that the recent crisis was different not because of an increase in greed but because of a dangerous *redirecting* of greed through new channels of

<sup>3</sup> See, Johnson, Simon (2009). “The Quiet Coup,” *The Atlantic*, May 2009.

compensation. While accounting for the importance of the United States in how things unfolded, the analysis benefits from a more international perspective. Its central thesis concerns crisis economics, shows that “far from being the exception, crises are the norm, not only in emerging but also in advanced industrial economies.” Such crises have always been with us and so they will remain with us. The book makes the case that “crises are hardwired into the capitalist genome.”<sup>4</sup>

Dr. Roubini (also known as “Dr. Doom” in the financial media) might well feel that he has the right to speak on the subject, having sounded a warning in September 2006 that a catastrophic burst of the U.S. housing bubble was coming. The book also benefits from Mihm's depth of historical knowledge, noting that “history promotes humility,” or at least a historical perspective should. This is most effective in identifying how far beyond the subprime mortgage bubble the roots of the present crisis go, an analysis that follows an account of older crises and how economists interpreted them. Roubini and Mihm argue that the events of 2008 would have been familiar to the financial observers of one hundred or even two hundred years ago, despite inevitable differences in the particulars of each crisis and certain unique elements that surfaced for the first time in the recent collapse.

Ensuring the stability of the system falls on regulators such as central banks and agencies that oversee securities firms and exchanges. Market manipulation and fraudulent practices are the focus of law enforcement. Ideally, in consumer credit markets, abusive lending practices are investigated and ended promptly when confirmed and ending them is possible. Rating agencies are intended to provide objective estimates of borrower credit quality. Exchanges serve the public by providing liquid markets with fast, reliable execution, and secure settlement mechanisms.

Since the early 1980s and the advent of the asset backed securities markets, the regulatory landscape has changed dramatically. Many financial innovations have occurred, allowing for the transfer of risk between counterparties in previously unimaginable ways. One of the most useful forms of financial engineering has been the widespread practice of asset securitization. This allowed for the sale and securitization of balance sheet assets to counterparties who are willing to assume the investment risk. Its success freed up the balance sheet of financial institutions, finance companies and corporations, enabling them to redirect their capital to new projects, which in turn, could then be sold and further securitized if market demands existed.

Previously, a provider of capital, the “originator,” would “originate to hold”, i.e., extend capital to counterparties and hold the assets on its balance sheet. Now, under securitization, previously illiquid assets turn into liquid assets. In addition to trading away risk, institutions have greater flexibility in terms of diversification and hedging. The downside is that unmonitored counterparties can assume excessive amounts of risk and create unstable institutions. This new “originate to distribute” model creates new information asymmetries. Incentives for screening borrowers declined under this model. The more capital constrained the originator, the stronger the incentive to reduce screening quality. The resulting quality of the underlying mortgage assets was poor, (Purnanandam, 2011).

In October 2006, the yield curve flattened, signaling the potential for a recession. By the summer of 2007, housing prices started to decline, leading to what would be the burst of the housing bubble. As home prices declined, many owners found themselves holding negative equity in their property, or owing more than what their homes were originally worth.

The data on the economic effects in the housing market were unambiguous. The S&P/Case-Shiller 20-City Composite Index fell 19% year-to-year in January 2009, the fastest on record. All 20 cities showed a decrease in prices, with 9 of the 20 areas showing rates of annual decline of over 20% year-to-year.

Global Imbalances are another major factor in the crisis. Imbalances grew in the early 2000s and peaked at 6.5% of US GDP in 2006. Congress threatened steep tariffs against China, and the Bush administration sought various remedies, including an IMF consultation with surplus nations. With trade, credit, and commodity prices showing signs of some recovering, the [International Monetary Fund \(2009a,b\)](#) recently revised its projections of US current-account deficit to 3.3% of GDP in 2010 and 3.4% in 2011. Also UK, Canada, Australia, India, Turkey, France, and southern European nations

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<sup>4</sup> See, Steven D. Andrews (2010).

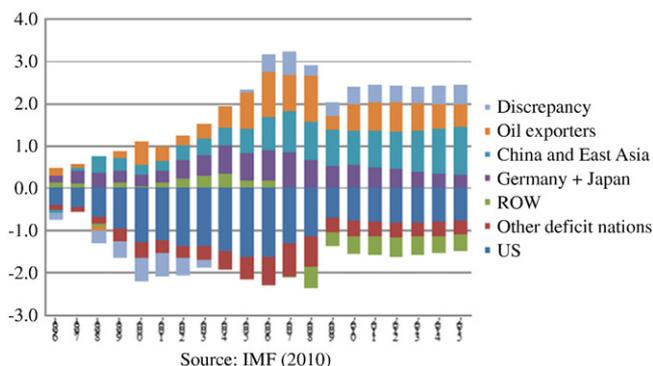


Fig. 1. Global Imbalances, 1996–2009, with projection to 2015 (% of World GDP).

are projected to run steep trade deficits (Fig. 1). The mirroring surplus nations are the familiar China, Japan, emerging East Asia, Germany, and oil producing nations.

Mark Jickling (2010) summarizes the causes of the financial crisis as outlined in the final report of U.S. Financial Inquiry Commission in Table 2:

Academe was divided into two camps: “Alarmists” argued that America was in for a sudden stop and hard landing — capital flight followed by collapse of the dollar, rise in interest rates, and decline in output (Mann, 1999, 2004; Sinai et al. 2004; Obstfeld & Rogoff, 2009, 2005; Summers & Lawrence H., 2004; Cline, 2005a,b, 2007; Geithner, 2006; IMF, 2008; Bergsten, 2007; Feldstein, 2008). Concerns began to show, including, declining US private savings, growing budget deficits, rising energy prices, Asia’s focus on tradables, and relative exchange rates. Mainstream analysts placed the “unsustainable” level for the US at a 5%–6% current-account deficit; Obstfeld and Rogoff (2009) suggested that the “hard” landing meant a more than 30% drop in the dollar’s value.

James Cook (2011) argued that the “housing bubble” or subprime crisis was actually the greatest money and credit excess in the history of the world. The immense damage to the global economy especially the U.S., from the bursting of this bubble continues to haunt us. The calamity of this magnitude was not foreseen by political leadership, economists, Wall Street, or even the multilateral organizations except for Kurt Richebacher, a German economist of the Austrian School Economics, who predicted a dire financial outcome:

“In our view, the obvious major risk is in the impending bust of the gigantic housing bubble. Home ownership is broadly spread among the population, in contrast to owning stocks. So the breaking of the housing bubble will hurt the American people far more than did the collapse in stock prices in 2000–2002. Someday, the same will happen to the bond and stock market... Another big risk is the dollar.”

(Cited by Cook, 2011)

“Optimists” on the other hand saw the imbalances as a symbiotic pattern that channeled surplus nation savings to safe and liquid destinations, which in turn, enjoyed greater availability of credit (Dooley, 2004). In this “Bretton Woods II” world, the US current-account deficit would be near-permanent, and, as long as fiscal deficits were kept in check, they would also be sustainable.<sup>5</sup> Cooper (2005, 2007) argued that it was

<sup>5</sup> See, Suominen, Kati (2010), June 14).

**Table 2**

Causes of the financial crisis.

- 
1. Imprudent mortgage lending
  2. Housing bubble
  3. Global imbalances
  4. Securitization
  5. Lack of transparency and accountability in mortgage finance
  6. Rating agencies
  7. Mark-to-market accounting
  8. Shadow banking system
  9. Non-bank runs
  10. Off-balance sheet finance
  11. Government-mandated sub-prime lending
  12. Failure of risk management systems
  13. Financial innovation
  14. Complexity
  15. Human frailty
  16. Bad computer models
  17. Excessive leverage
  18. Relaxed regulation of leverage
  19. Credit Default Swaps (CDS)
  20. Over-the-counter derivatives
  21. Fragmented regulation
  22. No systemic risk regulator
  23. Short-term incentives
  24. Tail risk
  25. The Black Swan: The impact of the highly improbable
- 

Source: Jickling (2010)

much ado about little: formulated in the 1930s, savings measures failed to account for sizable savings in America's knowledge-based economy. Argued that the large difference between US net assets and debts was "dark matter" that reflected accounting problems and not reality.

In these accounts, lending was neither imminent nor hard, *ceteris paribus*. Some argued <sup>6</sup> that since capital markets were becoming more flexible, not only would America be able to borrow more, but also the world economy would absorb any US adjustment accordingly (Greenspan, 2004). Others hypothesized that America's unique attributes kept it safe from sudden shocks and hard landings. <sup>7</sup> For one, the US was arguably too big to fail: US capital markets are so large relative to the world market that departing investors would undermine the world economy and thus their own fortunes. Furthermore, since the US debts are denominated in dollars, depreciation would not, as in ailing emerging markets, cause US liabilities to rise in relative terms.

Few analysts took the middle ground. Studying 26 industrialized country adjustments, drawing on Freund (2000) argued that unwinding from large current account deficits takes a long time and is associated with slow growth and that consumption and government-driven deficits do lead to depreciation. They found that the aftershocks of smaller, persistent deficits were not associated with slower growth or exchange rate depreciation. Similarly exploring historical data, also argued that a disorderly adjustment may be less likely than the Alarmist group were presuming.

Some advocate reforms in regulation that includes greater international cooperation to create a more unified regulatory system. Though it may be peripheral to the issue of the financial crises, some advocate greater enforcement of international standards and practices with respect to convenience regulatory regimes (i.e., tax havens) is required. Sanctions considered against tax havens are: "increased disclosure requirements, withholding taxes on transactions, a ban on the use of interest paid in a

<sup>6</sup> *ibid.*<sup>7</sup> *ibid.*

blacklisted country to offset tax, reviewing tax treaty policy, putting political pressure on global companies to withhold investment to a haven, [and] a reduction in aid.” No crisis should be wasted by those seeking higher taxes, it seems. However, taxes were not at the root of the stage one financial crisis, nor likely at the second stage where sovereign debt is.

The crisis impacted multiple sectors and industries. [Martin Wolf \(2008\)](#) argued:

“the crisis has also marked a turnaround in private leverage in high-income countries. The ratio of private gross debt to US gross domestic product rose from 123% in 1981 to 293% in 2009. By the third quarter of last year, the ratio had fallen to 263%. The financial sector led the way in both directions: gross financial sector debt rose from 22% of GDP in 1981 to 119% in 2008. It was down to 98% in the third quarter of 2010. Deleveraging will probably continue. Even if it does not, another such period of rising leverage seems inconceivable.”<sup>8</sup>

Unemployment rates that approach or exceed 10% are observed in the majority of developed industrial economies. Major global financial institutions experience sharp reductions in market values. Injections of capital are required from the public and private sectors to improve their balance sheets. In the United States, in the hard hit automobile-manufacturing sector for example, General Motors and Chrysler received assistance from the federal government, went through restructuring and made a comeback.

Other factors not covered by main media outlets include corporate greed fostered by asymmetry of gains and losses, and unregulated markets precipitating abuses and manipulations, market structures “*Too Big to Fail*” mentality and policies funded by a few oligarchs, crony capitalism, and corporate welfare system. This has widened the gap between rich and poor and the inequality in the distribution of resources and power are manifested in recent books and movies, including,

- Capitalism: A Love Story
- Inside Job
- The Big Short: Inside the Doomsday Machine
- Reckless Endangerment: How Outsized Ambition, Greed, and Corruption Led to Economic Armageddon
- Too Big to Fail: The Inside Story of How Wall Street and Washington Fought to Save the Financial System –and Themselves
- Wall Street: Money Never Sleeps
- Liar’s Poker
- Boomerang: Travels in the New Third World
- Moneyball
- 13 Bankers: The Wall Street Takeover and the Next Financial Meltdown
- The Greatest Trade Ever: The Behind-the-Scenes Story of How John Paulson Defied Wall Street and Made Financial History, and
- Margin Call

The recent *Occupy Wall Street Movement* that is now global is another example of the social outrage over the Wall Street and Corporate Excesses and absences of effective regulatory oversight and criminal prosecution of those who brought the crisis to the nation and the world. In this regard, [Joseph Stiglitz \(2011a,b,c\)](#) argued:

“The financial sector’s inexcusable recklessness, given free rein by mindless deregulation, was the obvious precipitating factor of the crisis. The legacy of excess real-estate capacity and over-leveraged households makes recovery all the more difficult. But the economy was very sick before the crisis; the housing bubble merely papered over its weaknesses. Without bubble-supported consumption, there would have been a massive shortfall in aggregate demand. Instead, the personal saving rate plunged to 1%, and the bottom 80% of Americans were spending, every year, roughly 110% of their income. Even if the financial sector was fully repaired, and even if these profligate Americans hadn’t learned a lesson about the importance of saving, their consumption would be

<sup>8</sup> See, [Wolf, Martin \(2009\)](#).

limited to 100% of their income. So anyone who talks about the consumer “coming back” – even after deleveraging – is living in a fantasy world.”

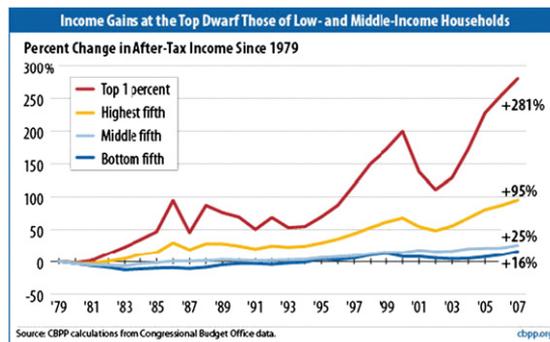
– Joseph Stiglitz – <http://www.project-syndicate.org/commentary/stiglitz143/English>

Max Fisher (2011), an associate editor at *The Atlantic*, argued that *Income Inequality*, as a contributing factor to the crisis and its persistence, is more severe in the U.S. than it is in nearly all of West Africa, North Africa, Europe, and Asia. Using the CIA World Factbook data and based on the *Gini Coefficient*, the U.S. is less equal than China, Russia and many African nations. The U.S. is on par with some of the world's most troubled countries, and not far from the perpetual conflict zones of Latin American and Sub-Saharan Africa. Our income gap is also getting worse, having widened both in absolute and relative terms since the 1980s.

Emmanuel Saez (2011 and 2009) argued that the inequality is among the main causes and culprits of the crises and until it is addressed, crises cycles will only be repeated:

“...while the bottom 99% of incomes grew at a solid pace of 2.7% per year from 1993 to 2000, these incomes grew only 1.3% per year from 2002 to 2007. As a result, in the economic expansion of 2002–2007, the top 1% captured two thirds of income growth.”

The linkage of income inequality to the cause of the stage one crisis is a bit tenuous, but its role in prolonging the crisis seems stronger and more defensible. The gaps in after-tax income between the richest 1% of Americans and the middle and poorest fifths of the country more than tripled between 1979 and 2007. Taken together with prior research, the new data suggest greater income concentration at the top of the income scale than at any time since 1928.



### 3. The global response

At the 2009 G20 Summit in London, UK, the participants agreed to dedicate fiscal stimulus in support of the global recovery and confirmed its commitments to free trade and discouraged protectionist measures. Global imbalances were created by net exporters such as China and Middle Eastern nations, who acquired large foreign currency reserves in U.S. dollar-denominated assets. Consequently, interest rates in the United States were at low levels for an extended period of time. Countries with current account surpluses created “excessive savings,” while countries with current account deficits demanded “excessive consumption.” In the absence of the sub-prime market collapse, this imbalance would have unwound under some other form of market failure. (Verick & Islam, 2010)

The United States continued the market-oriented programs designed to transfer risk from troubled institutions and provides access to capital in order to strengthen corporate balance sheets

of financial institutions. Future actions include higher levels of stakeholder supervision by domestic and international entities. The massive stimulus programs agreed to by the G20, and initiated independently by member countries, “counter[ed] the economic meltdown”, but created uncertainty regarding the long-term stability of economic institutions.<sup>3</sup> The following section of the paper addresses this issue.

Henry Paulson (2010), the former Goldman Sachs CEO before becoming the U.S. Treasury Secretary in 2006, in *‘On the Brink’* provides his personal and “inside” account of those in charge of staving off the impending disaster and holding the system together. His account goes a long way in verifying Kaletsky’s assessment of his non-interventionist perspective. Paulson, like many in the Bush administration, was utterly averse to the idea of bailing out financial institutions with taxpayers’ money. The book delivers a clear sense of Paulson’s frustration: “We couldn’t keep using duct tape and baling wire to try to hold the system together.” Paulson traces the root of the problem to the mortgage market and “living beyond our means,” and demonstrated as a zealous market fundamentalism that firmly believed in allowing the system to self-correct. In the extreme stressful days of the crisis, Paulson, a Christian Scientist argues that Christian religion “has always been a big influence” on him. Amid the turmoil of the ailing collapsing financial system, Paulson’s beliefs informed his reluctance to administer swift and effective intervention to the financial system and records one occasion to his wife, “You needn’t be afraid. Your job is to reflect God, infinite Mind, and you can rely on Him.”

To stabilize the economy in response to these shocks, the Federal Reserve reduced short-term interest rates. It is important to recognize that the historically low interest rates on the US Treasury reduce the deficit by billions of dollars each year. At the same time it has destroyed the retirement savings returns of millions of senior citizens while aiding major banks in earnings that re-capitalized them. It is ironic that the Federal Reserve has created a money machine for the Federal Reserve member banks to borrow at near-zero interest from the Fed and then use the funds to buy US Treasury securities that yield several 2% to 3%. That offers little incentive to take risks lending to industry and commerce even if there were demand by those sectors in the economic malaise affecting the economy.

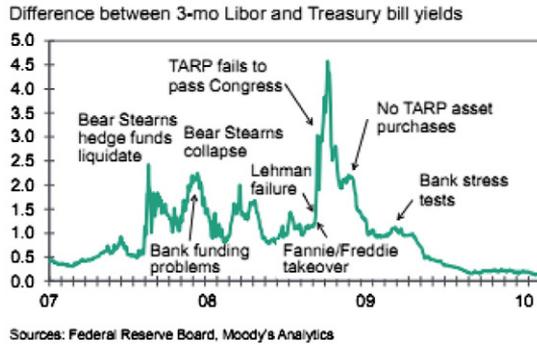
Alan Blinder and Mark Zandi (2010) argued that the U.S. government’s response to the financial crisis and ensuing Great Recession included some of the most aggressive fiscal and monetary policies in history. The response was multifaceted and bipartisan, involving the Federal Reserve, Congress, and two administrations. Yet, almost every one of these policy initiatives remain controversial to this day, with critics calling them misguided, ineffective or both. The debate over these policies is crucial because, with the economy still weak, more government support may be needed, as signaled recently in both the extension of unemployment benefits and the Fed’s consideration of further easing.

Blinder and Zandi use the Moody’s Analytics model of the U.S. economy to simulate the macroeconomic effects of the government’s total policy response. They find that its effects on real GDP, jobs, and inflation to be huge, and probably helped avert what would have been called, Great Depression 2.0. For example, they estimate that, without the government’s response, GDP in 2010 would have been about 11.5% lower, payroll employment would have been less by some 8½ million jobs, and the nation would now be experiencing deflation. They divided these effects into two components—one attributable to the fiscal stimulus and the other, attributable to financial-market policies such as the TARP, the bank stress tests and the Fed’s quantitative easing—they estimate that the latter was substantially more powerful than the former. Nonetheless, they claim that the effects of the fiscal stimulus alone appear very substantial, raising 2010 real GDP by about 3.4% while holding the unemployment rate at about 1½ percentage points lower, and adding almost 2.7 million jobs to U.S. payrolls. These estimates of the fiscal impact are broadly consistent with those made by the CBO and the Obama administration.

They argue that because of the Federal Reserve’s extensive use of quantitative easing to respond to the financial crisis, Federal Reserve assets were added to the model for this exercise. Fed assets are specified as a function of the federal funds rate target described above. When the funds rate implied by the equation falls below zero, the Fed’s balance sheet expands. And the more negative the implied funds rate, the greater the assumed balance sheet expansion. Specifically, for every 100 basis points

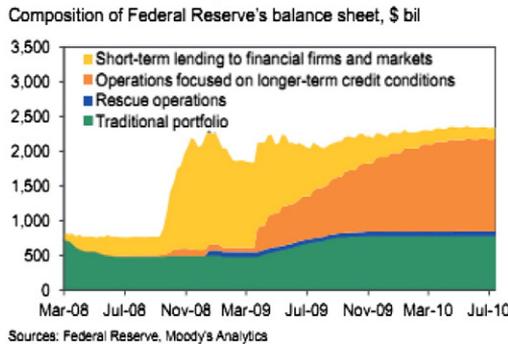
that the desired (but unachievable) funds rate becomes negative, the Fed is presumed to expand its balance sheet by \$1.2 trillion.

**Chart 1: The Financial System Has Stabilized**

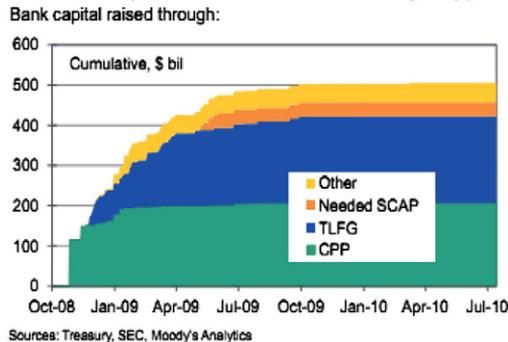


Currently, the implied funds rate is near negative 2%, which suggests that the Fed should be holding close to \$3 trillion in assets—compared with the Fed's actual current holdings of \$2.4 (see Charts 9 & 10).

**Chart 9: The Fed Expands Its Balance Sheet**



**Chart 10: Capital Raised Thanks to Policy Support**



We would be remiss if we failed to mention that the [Blinder & Zandi \(2010\)](#) analysis and conclusions are not universally accepted. We include them to provide the reader with information that rounds out what is a complex and controversial situation.

Simon Johnson (2009), a former chief economist of the International Monetary Fund and a professor at MIT Sloan School of Management, has argued that

“the crash has laid bare many unpleasant truths about the United States. One of the most alarming, is that the finance industry has effectively captured our government—a state of affairs that more typically describes emerging markets, and is at the center of many emerging-market crises. If the IMF’s staff could speak freely about the U.S., it would tell us what it tells all countries in this situation: recovery will fail unless we break the financial oligarchy that is blocking essential reform. And if we are to prevent a true depression, we’re running out of time.”<sup>9</sup>

#### 4. The future of capitalism

*Is “boom and bust” a permanent feature of the capitalist order? Do global markets need global regulation – and are today’s supranational institutions the right ones to provide it? Is the dream of a Third Way between today’s global capitalism and yesterday’s discredited socialism still alive?*<sup>10</sup>

– Joseph E. Stiglitz: I Dissent: Unconventional Economic Wisdom

These days, the economic establishment and their supporters in government seem to offer the same answer to every question: let markets decide. Policymakers and thinkers who suggest alternatives are shrugged off as leftist dinosaurs fighting yesterday’s battles. Most economists do not dare to challenge the conventional wisdom with the exception of Joseph E. Stiglitz, Martin Wolff, and Simon Johnson to name a few. As a consequence of both unprecedented monetary and fiscal stimuli, the U.S. federal government spending and the money supply have expanded. The U.S. budget deficit has increased, which eventually may lead to increased taxes, interest rates, and inflation. The aim has been to prevent future crises by modifying regulations and improving institutions.

Contrast capitalism with its alternatives and the U.S. economic model becomes more preferable. Extremely regulated regimes can result in systems such as communism, command economies, or despotism. There is no incentive for initiative and innovation on the part of individuals. The state, or central planners, direct all economic activity, or outright confiscate economic resources. These systems have not been shown to maximize either per capita income or social welfare. A key difference between capitalism and other systems is that in a true and efficient capitalism property rights are crucially important. Without property rights capitalism’s advantages are hobbled or negated. Vernon Smith (2011) states this as

“...the major problem in economic theory is the preoccupation with modeling for its own sake and not asking the fundamental questions. These fundamental questions have to do with dynamics; they have to do with property rights. Basic questions like: “How can it be that specialization, exchange, and property rights came about?” You can’t have one without the other. We think today of property rights as something that comes from the state. That couldn’t possibly be how they originated.”

Even though western industrial capitalism has not solved all these problems, it is still the preferred framework under which to work for a solution. On a global basis, there are huge distributional inequities between the rich and the poor. Conspicuous consumption tends to be a feature of many advanced economies. The demonstration of wealth is distasteful to many, but the consumer spending generated in the process has secondary effects on employment and associated government revenues. Demand in large sectors of advanced economies, including the United States, is driven by government spending. This implies that many systems commonly supported as *laissez-faire*, or free market systems, operate along the lines of a state capitalist or paternalist framework.

<sup>9</sup> See, Johnson, Simon (2009).

<sup>10</sup> See, Stiglitz, Joseph (2011a,b,c).

Examples of State Capitalism exist apart from fiscal policy. Investment of large blocks of foreign currency reserves puts the sovereign in the role of risk taker and magnifies political influence overseas. Many countries purchase equities on their own exchanges as part of market stabilization efforts. Natural resource exporters are largely state controlled enterprises. The participation of the state in the market can lead to misplaced incentives and distortions such as protectionism and capital controls.

Visionary entrepreneurs such as Bill Gates, the first or second richest man in the world, suggest modifications of the current structural framework to allow for better optimization of social welfare across a broader spectrum of metrics: political freedom, social justice, income inequality, environmental protection, etc.

“Capitalism has improved the lives of billions of people — something that's easy to forget at a time of great economic uncertainty. But it has left out billions more. They have great needs, but they can't express those needs in ways that matter to markets. So they are stuck in poverty, suffer from preventable diseases and never have a chance to make the most of their lives. Governments and nonprofit groups have an irreplaceable role in helping them, but it will take too long if they try to do it alone. It is mainly corporations that have the skills to make technological innovations work for the poor. To make the most of those skills, we need a more creative capitalism: an attempt to stretch the reach of market forces so that more companies can benefit from doing work that makes more people better off. We need new ways to bring far more people into the system — capitalism — that has done so much good in the world.”<sup>11</sup>

– Bill Gates: Making Capitalism More Creative

Paul Krugman (2002) has questioned the interlocking relationships in the United States between corporate and political leadership, and whether these ties result in “crony capitalism”— the inefficient allocation of resources based on personal relationships rather than maximization principles. The market for life settlements and excessive income earned by individuals, (e.g. hedge-fund managers) raises questions about misaligned incentives, unethical markets, and whether unfettered self-interest maximizes social welfare.<sup>12</sup>

There are several lessons to be learned from the current crisis that can improve the economic system. Due to dynamic linkages, no nation is isolated from the effects of global crises. These linkages are in part the result of deregulation and the removal of cross-border barriers to entry. Developing countries that are now open to shocks but less able to absorb them have been among the victims of the crisis.

The crisis caused significant downward adjustment in “working hours, wages and employment across countries.” (Verick & Islam, 2010, p.26, 31–32) The most vulnerable groups in the European Union were the youth, the poorly educated and temporary workers. Other groups susceptible to layoffs were men and migrant workers. In the United States, the unemployment rate varied significantly by socioeconomic status. The unemployment rate for households earning \$12,160 or less was 30.8% in the fourth quarter of 2009, versus 3.2% for households with income greater than \$138,700. The authors argue that the most concrete signal of economy recovery will be the removal of slack in the labor market.

Central bank policy requires more focus on growth, employment and financial sector stability, and less focus on price stability. The focus on inflation detracted from the ability of the Federal Reserve to pursue policies directed toward achieving sustainable growth, maximum employment, and improvements in the ability of the financial sector to absorb shocks. Central banks need to develop new doctrine to deal with financial crises. Existing doctrine states that the central bank cannot identify a bubble in an asset market before it bursts, nor do they have the appropriate policy instruments to “deflate” them. Additionally, it is commonly believed that it is more efficient for a central bank to deal with the consequences of a market collapse than to intervene. Both current Federal Reserve Chairman Ben Bernanke and former Federal Reserve Chairman Alan Greenspan hold these existing doctrines to be flawed. And there are social justice considerations that receive little mention in the mainstream US press.

The Fed's super-low interest rates have shifted returns to savers, to retirees in particular, to levels that require dis-saving, while recapitalizing banks with near-zero borrowing they can invest in US Treasury

<sup>11</sup> See, Gates, Bill (2010).

<sup>12</sup> See, Krugman, Paul (2002).

securities that pay several percent interest. One can understand the argument this creates over subsidizing and rewarding those behind the stage one financial crisis while simultaneously harming savers.

William C. Dudley, President and CEO of the Federal Reserve Bank of New York, believes the outlook for the U.S. economy is positive. The current policy of monetary easing and fiscal stimulus is appropriate. The U.S. economy is flexible, resilient and “prices and wages respond relatively quickly.” However, there are three challenges facing the U.S. economy. Regulatory reform is required to make the financial system stable and better able to absorb shocks. Policymakers must develop “exit strategies” for monetary and fiscal stimulus. Global economic growth needs to be rebalanced, equating to “a smaller share of consumption relative to GDP in the United States and offsetting shifts in Asia.”<sup>2</sup>

Higher levels of international cooperation and coordination are required given the globalization of financial markets and rapid transmission and amplification of shocks. The expansion of global governance organizations, such as the G-8 from eight members to twenty (G-20), has provided far more comprehensive international representation. The narrow composition of this organization raises questions on the political legitimacy of its decisions in some quarters. At two recent G-20 summits, Pittsburgh, PA in 2009, and Toronto, Canada in 2010, the summit focused on continuing its policies from previous meetings, while working toward global recovery from the financial crisis. At the Pittsburgh Summit, the G-20 agreed to address imbalances in the global economy by launching the Framework for Strong, Sustainable and Balanced Growth. The Framework committed G-20 countries to evaluate their national policies to ensure that they were collectively consistent with more sustainable and balanced growth. Leaders agreed to strengthen financial regulatory systems through a variety of measures and evaluate progress to reduce excessive risk taking and to encourage a culture of prudent behavior focused on the long term. The World Bank and the International Monetary Fund (IMF) have played an integral role in the response to the economic crisis by providing resources to achieve financial stability and assistance to those hardest hit by the downturn. In Toronto, the G-20 reviewed these institutions in order to enhance their governance and strengthen their lending capacities in order to remain solvent.

During 2008, the World Economic Forum engaged over 250 financial executives, regulators, policymakers and senior academics to develop potential long-term evolutionary scenarios for the global financial system. These scenarios go beyond simply extending current trends and explicitly take into account critical uncertainties, potential discontinuities and system dynamics. These scenarios can be used to support strategic decision-making and facilitate collaborative action.

Facing a changing global balance of power, and the rising influence of China, countries may be persuaded to adopt a similar model. Journalist Michael Lind states that many governments and foreign citizens no longer look to US leadership in issues of industry and finance. Progressive reformers are supporting “a slightly modified variant of the unsustainable system that produced the present disaster.”<sup>3</sup> Investment in venture capital and R & D in the U.S. were expected to create an economy free of inflation and business cycles. Reformers advocating more change believe that this idea is false.

Post-crash, governments will seek to correct past excesses by enacting additional regulation. Entrepreneurs will innovate to avoid burdensome regulations. The excess returns generated by these innovations will attract new entrants until the industry becomes saturated. Eventually, less scrupulous players will abuse the market framework and cause a crisis or crash. The cycle begins anew. Determining the optimal level of regulation is critical to estimating the level of marketplace innovation and ultimately the level of economic growth. In light of discussion about “too big to fail” the current situation suggests that objectives to down-size financial institutions have not only gotten off to a slow start, but that those too big to fail in 2007 are in 2011 still larger. This suggests that the reality of political power is in favor of status quo ante for the largest US banks.

Comparing the development of South Korea and Ghana over the period 1950–2005 demonstrates the long-term effects of different levels of regulation and innovation.<sup>4</sup> The expanded range of freedom that comes with rising living standards can impact a range of human activities outside the economic sphere: social, political and moral, increasing tolerance and reducing conflict. The role for government under this paradigm consists of providing price stability, transparency and rule of law. As Allan H. Meltzer states, capitalism “is the only system that increases both growth and freedom” (Meltzer, 2012).

Anatole Kaletsky (2010) in *Capitalism 4.0*, argues that capitalism is ultimately tied to humanity. In no way did the crisis “destroy nor diminish the fundamental human urges that have always powered the capitalist system—ambition, initiative, individualism, the competitive spirit” or what John Maynard Keynes called “animal spirits” that will ensure the creation of “a new version of capitalism.” *Capitalism 4.0* posits

three broad versions or stages of capitalism, each initiated by a period of upheaval. Kaletsky identifies each stage with the politicians or economists who codified it and those who destroyed it. For example, the most recent iteration, which he calls Capitalism 3, began with Margaret Thatcher, Ronald Reagan and economist Milton Friedman and ended with George W. Bush, Henry Paulson and Alan Greenspan though some may not agree. He argues that the primary reason for the near collapse of the financial system ignorance, complacency and stupidity of regulators, greed by Wall Street bankers and speculators and series of misjudgments by the U.S. Treasury Secretary Henry Paulson. In Kaletsky's view, an erroneous market fundamentalism nurtured under Capitalism 3 led to a failure to see the essential role of swift government intervention when needed. The irony for Kaletsky is that "a U.S. treasury secretary and former Goldman Sachs chairman had come closer to destroying capitalism than Marx, Lenin, Stalin, and Mao Ze Dong combined."

In Kaletsky's world, capitalism is "an evolutionary system that reinvents and reinvigorates itself through crises." However, Daniel Tompsett (2010) argues that

"the particulars of capitalism and its administration do slowly change, reinvent and reinvigorate in response to crises, but only as a human construct that leads to inevitable cycles of boom and bust. Just because the system does allow for an upward trend and the generation of wealth, this does not mean that it isn't defined and characterized by inevitable collapse and ruin, nor that we are any less *bound* to it ... global capitalism will be replaced by nothing other than global capitalism."

Daniel Tomsett (2010) in concluding his reviews of three recent books related to the recent crisis, namely, *Capitalism 4.0: The Birth of a New Economy in the Aftermath of Crisis* by Anatole Kaletsky, 2010; *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System* by Henry M. Paulson, Jr., 2010; and *Crisis Economics: A Crash Course in the Future of Finance* by Roubini & Mihm, 2010, argues:

"Though at times radically different in their interpretation of the latest crisis and what should be done to prevent future catastrophes, these three books do identify several related themes. Capitalism and our approach to it go back to us; it reflects what we are and where we are coming from. There is no human being, no matter how well qualified, who can keep a grip on every possible eventuality, remain immune from self-interest, predict every turn of events, and control the system to the point of avoiding disaster. Further, these books demonstrate that the appetite to do everything we can to prop up a deeply fallible system, despite the risks, is still alive and well, regardless of the sense that other, perhaps bigger catastrophes lie ahead.

What none of these authors provides is an alternative to the economic system that we have chosen, believing it (though flawed) to be the best option available. They have faith in the present system. But if we know that this system is founded on aspects of human nature that are in fact often selfish—in Kaletsky's words, "ambition, initiative, individualism, the competitive spirit"—then isn't it fair to suggest that a true solution requires changing or redirecting these elements within us? And if we cannot do that to ourselves, as the state of the present system strongly suggests, then are we as individuals even free to put down the tools of capitalism? Are we so enslaved by our own nature that we cannot allow ourselves to be shown the way to a system that is truly good, lasting and rightly governed? Perhaps it's time to look beyond ourselves to the infallible Being who can change the desires of the human heart and cure us of the "urges" of self-interest and gain."

## 5. Stage II financial crisis — sovereign debt

Historically, sovereign and non-sovereign risks exist in emerging markets with weak legal institutions. However, because of the current financial crisis, other securitized markets that may experience dislocation, such as auto loans and credit-card receivables, now face real consequences from sovereign risk.

The integrity of the European Monetary Union and the Euro as a common currency is similarly questioned. Jean-Claude Trichet, President of the European Central Bank, argues that relative to the mosaic of national currencies, which characterized Europe for the past 50 years, the Euro, “Has kept its value in terms of price stability in a remarkable way.” Additionally, the Eurozone, in the aggregate has demonstrated greater fiscal discipline than either the U.S. or Japan. “In 2011, the public fiscal deficit of the Eurozone was around 4.5% of its GDP, while in the United States or Japan it will be about 10% of GDP.” Trichet does acknowledge the “serious weakness” in governance made apparent through the crisis. “Loose fiscal policies and insufficient attention to competitive indicators have not been surveyed rigorously and corrected in time...European countries have to correct the present situation.”<sup>13</sup>

The situation in Europe is exacerbated by macroeconomic crises affecting four specific countries: Portugal, Ireland, Greece and Spain. For a detailed study of the Spanish crises, see (Shachurove & Shachmurove, 2011). Spain’s most recent macroeconomic data is “lackluster.” The Spanish economy faces three main challenges: High unemployment, weak structural fundamentals, and meager real income prospects. Portugal, Ireland and Greece have to tighten fiscal policy. Growth rates in these economies are expected to be low. The amount of assistance provided to these nations is under intense political scrutiny. EU finance ministers recently delayed the release of a €110 billion tranche of funds slated for Greece. The intent is to ensure Greece complies with all promised austerity measures prior to any additional funding. The recession in Greece is expected to last through 2012. A restructuring of Greek sovereign debt is expected to result in investor losses of as much as 50%.<sup>14</sup> Attempts to resolve the crisis created friction within the European Union. France and Germany have accused each other of protectionism. “Free market reforms” are necessary to maintain an integrated Union.

The effects of the crisis in Asia were moderated by macro-prudential policies instituted by individual central banks. The Bank of Japan credits its stock purchasing program as having helped stabilize the Japanese banking sector. This program was instituted in 2002 in response to the crippling result of non-performing loans on bank balance sheets. Credit flowed more freely in the Japanese economy as a result. This policy was temporarily reintroduced in 2009 to dampen the effects of the Global Financial Crisis. The Bank of Japan also extended subordinated loans to financial institutions in need of capital. Japan’s export sector is facing serious challenges. From 1979 to 2008 the current account was in surplus. In 2009, Japan, for the first time in 30 years has its first trade deficit. The balance of payments is improving at a slower rate than expected. The appreciation of the Yen will deter a prompt reversal in trade flows.

China entered the crisis with solid fundamentals: moderate inflation and a current account surplus. China’s trade surplus decreased from 10% of GDP in the first half of 2008 to 6 ½% of GDP. This reduction was due to declining U.S. import demand. By 2009, China’s industrial production had recovered. Driven by domestic demand, this shift in the pattern of growth has helped aid global economic growth.

The global financial crisis was less severe in the oil producing countries. Jump in the oil prices generated current account surpluses for the OPEC who are “vulnerable to energy price fluctuations. Because of the global recession their income and currency reserves declined, investment and development projects have to be deferred or terminated.”<sup>15</sup>

The United States is projected to decline in its hegemonic status. Additional consequences of this shift in global and economic power may create “financial regionalism,” a world in which post-crisis blame-shifting and the threat of further economic contagion create three major blocs on trade and financial policy, forcing global companies to construct tripartite strategies to operate globally. Alternatively, we may face, “Re-engineered Western-centrism,” a highly coordinated and financially homogenous world that has yet to face up to the realities of shifting power and the dangers of regulating for the last crisis rather than the next.

A recent survey by the [Pew Research \(2010\)](#) found that fifty-five percent (55%) of all adults in the labor force stated that since the Great Recession of 2007–2010, they have suffered unemployment, a cut in pay, a reduction in hours or have become involuntary part-time workers. The survey also finds that the recession has led to a new frugality in Americans’ spending and borrowing habits, a diminished set of expectations about their retirements and their children’s future, and a concern that it will take several years, at a

<sup>13</sup> See, [European Central Bank \(2011\)](#).

<sup>14</sup> See, [International Monetary Fund \(2011a,b\)](#)

<sup>15</sup> See, [Yochanan Shachmurove \(2009\)](#).

minimum, for their family finances and house values to recover. However, the duration of recession during the crisis is the longest since the Great Depression years of the 1930s.

In the U.S. with the official unemployment rate at 9.1%, the duration of unemployment has surpassed the record since the Great Depression years. The FDI flows and cross border M&As have declined by more than 20% from the previous peak of \$1.8 trillion in 2007. The Shadow Government Statistics (SGS) that economist John Williams tabulates and publishes indicate that the true unemployment rate in the US is at 1930s depression levels of 25%. “The seasonally-adjusted SGS Alternate Unemployment Rate reflects current unemployment reporting methodology adjusted for SGS-estimated long-term discouraged workers, who were defined out of official existence in 1994. That estimate is added to the BLS estimate of U-6 unemployment, which includes short-term discouraged workers.”<sup>16</sup>

## 6. Conclusions

As the global financial crisis exposed vulnerabilities in economic institutions throughout the world, the task is to improve the existing order or to move in an entirely different direction. This paper recommends the former. Prior to the crisis, there were many events in the financial market that precipitated it, particularly in the market for securitized assets. The dynamic linkages and transfer of risk that allowed for such rapid growth and expansion also enabled the spread of the crisis when macroeconomic variables reversed. The ability of global institutions to absorb shocks needs to be improved. There are many potential sources of financial instability that need to be addressed. Additionally, a potential shift in the global balance of power may alter capital flows and regulatory regimes. The following paragraph by Professor Joseph Stiglitz (2011) argued that to understand what needs to be done, one needs to understand the economy's problems before the crisis hit.

“During the early 20th century, productivity growth in agriculture led a labor movement from typical rural areas to urban areas in a movement that showed a decline in farm incomes during 1929 to 1932 and led to what many would refer to as the “trapped” rural sector. Many of the laborers found themselves short on resources and quickly saw significant reductions in income – in excess of 50% – as aggregate demand in urban and manufacturing fell. What has recently happened in America is very similar to the events mentioned above. Productivity increases in manufacturing led and out-paced growth in demand in a somewhat inorganic movement that led to a shift from manufacturing employment to those in services.”

Another prevalent problem is growing income and wealth inequality. Caused by what many believe to be globalization, growing inequality – the shift in income from those spending to those who do not – is quickly becoming one of the main contributing factors. Such disparities were quickly apparent when energy prices soared and the global economy slowed and led to a shift in purchasing power from the US and Europe to energy-dominant, oil exporters who rightfully chose to save much of this income and took advantage of volatile energy prices.

Another key and perhaps the final contributing factor to a slow and weakened global aggregate demand has been emerging markets' massive buildup of foreign-exchange reserves. Seeking to avoid such mishaps as the mismanagement of the 1997–98 East Asian crises by the International Monetary Fund and the U.S. Treasury, many countries sought to avoid losing their economic sovereignty by building large reserves. Such efforts led to a buildup of \$7.6 trillion in emerging and developing economies and many such reserves were not spent and allocated. Despite this, many countries today that built up such large reserves were better able to weather the economic crises and such efforts are more than ever, strongly incentivized.

Also, the income gap is further growing today as many workers are faced with lower wages and fewer hours. The United States has yet to shake-off its dependence on oil as prices per barrel of oil move above \$100 a barrel and money is transferred to oil-exporting countries.

<sup>16</sup> See, Shadow Government Statistics (2011).

We in turn need to look at the government and the key role it plays in financing services that the people want, including: education and health care. Government also plays a key role in restoring competitiveness in Europe and United States through government financed education and training. Yet, the transformation of economics by the implied need to move labor out of traditional manufacturing sectors, coupled with strict fiscal policies all but ensure that the economic transition will be slow at best. Strong government expenditures and regulations, structural reform of international financial systems that promote massive buildup of reserves, and addressing the inequality in the distribution of income and power are needed to fix the U.S. and the global economy. As we started with a quote from German Chancellor's Merkel, we conclude with the same quote if we care about the capitalist system that we come to admire.

“[We must] redirect the markets so that they serve the people, and not ruin them”

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