

The Crisis and Beyond: Thinking Outside the Box

Claude Hillinger
University of Munich

Abstract In this paper the author attempts an analysis of the current financial/economic crisis that is wider ranging and more fundamental than he has been able to find. He discusses alternatives to the financial bailouts and shows how the crisis could have been dealt with more efficiently and at little cost to taxpayers. Finally, the author discusses fundamental reforms that would reduce the volatility of financial markets and increase their efficiency. He reviews some social science literature that views the current crisis as an episode in the secular decline of the United States and more generally of the Western Democracies. The timidity of current reforms, which is striking when compared to those that followed the excesses of the Gilded Age and the Great Depression, can be understood in this framework. The author concludes that the industrialized world is now dominated by a ‘financial-political complex’ that maximizes speculative profits in good times and socializes losses in times of crisis.

Special Issue

[Managing Financial Instability in Capitalist Economies](#)

JEL E31, E42, E58

Keywords Deficit financing; financial crisis; financial instability; full reserve banking; sovereign default; toxic assets

Correspondence Claude Hillinger, University of Munich, Ludwigstr. 33/IV, D-80539 Munich, Germany, e-mail: hillinger@lmu.de

Citation Claude Hillinger (2010). The Crisis and Beyond: Thinking Outside the Box. *Economics: The Open-Access, Open-Assessment E-Journal*, Vol. 4, 2010-23. doi:10.5018/economics-ejournal.ja.2010-23. <http://dx.doi.org/10.5018/economics-ejournal.ja.2010-23>

If our response to the crisis focuses only on the symptoms rather than the underlying causes of the crisis, then we shall bequeath to future generations a serious risk of another crisis even worse than the one we have experienced.

Mervyn King (2009).

In the 1930s there were all kinds of alternative understandings, from socialism to more extensive governmental involvement. There was a range of different approaches. But what I am struck by now is the narrow range within which palliatives are being modeled. We are supposed to work with the financial system. So the people who helped create this system are put in charge of the solution. *There has to be some major effort to think outside the box.*

Sheldon S. Wolin¹

1 Introduction

From the beginning of the current crisis as an American mortgage crisis, to a more general financial crisis, to a global economic crisis, to a crisis of ‘PIIGS’ and of the European Union, I have followed the writings of economists, and the pronouncements of politicians, usually to the effect that whatever policies they adopted were ‘without alternative’. My interest is precisely in the alternatives that are alleged not to exist. I am under no illusion regarding the likelihood that many of the proposals that I am making have a chance of being realized in the foreseeable future, but I feel that it is my duty as a scientist to describe the world as I see it, irrespective of whether this view is acceptable to the ruling elites.

To make this point more concrete, consider full reserve banking, proposed by Milton Friedman² and advocated also in the present paper. It would eliminate the

¹ Quoted from a conversation by Hedges (2009, p. 149); italics supplied.

greatest cause of financial instability. Yet, Friedman's advocacy had no effect; at the onset of the present crisis bank reserves were worldwide close to zero. Should Friedman not have made his valid argument given that it could not penetrate the power structures that exist around the financial and banking industries?

Discussions of the crisis have tended to focus on specific proposed remedies. I find it useful to give, in Section 2, a more general discussion of the *types* of policies available and their advantages and disadvantages in relation to both *efficiency* and *equity*.

In discussing concrete policy proposals, I follow a rough chronology, discussing first those that should have been taken as the crisis evolved, then the more fundamental reforms that should be considered for the long run. The initial crisis responses everywhere were bailouts involving magnitudes previously encountered only in astronomy. It is, I believe of more than passing interest to consider what the alternatives would have been.

Short term reactions to the crisis that could have been taken are the subject of Section 3. The first proposals deal with the financial derivatives that have come to be known as 'toxic assets'. I argue that toxic assets that are unethical by their very construction should be declared invalid. This applies in particular to naked credit default swaps (CDSs). Financial institutions are in general both the issuers and the holders of toxic assets. It would have been desirable to force these institutions to reveal their holdings of toxic assets, to classify them into broad classes and to mandate the cancellation of cross obligations for each class, valuing the assets at face value. These two proposals would have eliminated the bulk of toxic assets at no direct cost to taxpayers.

Although nearly three years have passed since the beginnings of the US mortgage crisis, it is by no means over. Both foreclosures and the voluntary abandonment of housing continue at a brisk pace. Two measures would have prevented much of this. The first is an across-the-board cut in the values of existing sub-prime mortgages, to be reflected in the same proportional cut in mortgage payments. The second is a moratorium on payments for families in temporary financial difficulties due to unemployment, illness, or any other reason.

² Friedman repeated this proposal on a number of occasions. The clearest and most complete statement of his views on macroeconomic policy generally including the full reserve proposal is Friedman (1948).

These measures would have, at comparatively low direct cost to the taxpayer, relieved much of the misery resulting from the mortgage crisis and they would have placed the costs where they belong—with the perpetrators.

It is often claimed that there is no alternative to governmental borrowing to finance the deficits incurred for stabilization purposes. I argue that better alternative is to finance the deficits with fresh money.

The final topic in this section is the newly evolving PIIGS crisis involving the possibility of sovereign default on the part of some weaker member nations of the European Union. Here again a bailout of the weaker members of the Union by the stronger members was decided. I argue that it would be better to leave the PIIGS alone to renegotiate their debts.

In Section 4 I discuss structural reforms that would make the economy more stable and more efficient. The fundamental reform of the financial sector calls for the complete separation of commercial and investment banking and the imposition of full reserves on both sectors. The principal supporters of full reserve banking have been Libertarians who have viewed it as a step towards the elimination of central banks and of discretionary monetary policy. I view these as logically distinct issues that should be kept separate to avoid confusion and I concentrate on the economic argument for full reserve banking.

The financial industry is one of the least efficient. There are three reasons for this: **a.** Consumers do not understand the products of the financial industry, are unable to evaluate them rationally, and are therefore sold inferior products. **b.** Modern corporations, including those in the financial industry operate very largely without any control from their owners—those who directly or indirectly hold the corporations stock. **c.** Of all of the financial transactions that take place, only a minute fraction, namely the new issuance of stocks or bonds, actually serve to finance corporations.

My final proposal is based on the conviction that the problems described above cannot be solved by bureaucratic interventions, but that they will be solved more or less automatically if ownership control over corporations is restored. I propose entities analogous to the traditional savings and loan associations, but with two important differences: **a.** They should be genuine cooperatives actively managed by their members. **b.** In addition to making all types of loans to individuals, they should also be enabled to make loans or equity investments in firms. Such *savings and investment associations* (SIAs) would require enabling legislation and then

could evolve over time to ultimately challenge and replace exiting financial institutions.

In Section 5 I review some recent literature that argues that the United States has become so dominated by financial and business interests that it has in effect become a plutocracy. The dominance of special interests precludes structural changes required to serve the general interest. I argue that other western democracies have largely followed the US along this path.

Section 6 concludes that we have now in the industrialized world a ‘financial-political complex’ that maximizes speculative profits in good times and transfers some of these to the political sector in the form of campaign contributions. The political sector in turn socializes the losses in times of crisis.

2 A Typology of Policy Options

Policies to deal with the crisis are being advocated and discussed in many different places. What I feel has been missing is an understanding of what kinds of policies are available *in principle* and what the advantages and disadvantages of each kind are. I will discuss here three broad types of policy measures that can be adopted in order to deal with a perceived problem. In order of their popularity, which is unfortunately the inverse order of their usefulness, they are: **a.** establishing some agency to deal with the problem, **b.** establishing some clear rules for the agents that have been involved in the problem, **c.** enabling those who are affected by the problem so that they themselves can solve it.

2.1 Regulatory Agencies

In order to prevent a recurrence of the current crisis, politicians are intensively debating a. limitations on executive bonuses, and b. new regulatory agencies to watch over financial markets. The idea of governmental regulating of executive compensation is widely and correctly seen as populism. This leaves regulation as the principal alternative. This solution is popular with politicians; it requires little intellectual effort and satisfies the public’s yearning to have someone in charge. The problem with regulatory agencies is that once the crisis that led to their establishment fades, and with it public attention, the agencies tend to come more

and more under the influence of the industries that they are supposed to regulate. That is precisely what happened with the agencies that were supposed to control the financial markets before the crisis. It is hard to see why, after some reorganization, this will be different in the future. Paradoxically, the fact that regulatory agencies are generally so inefficient is one reason for the ease with which they are adopted—special interests, knowing that they do not have much to fear are likely to accept them as the lesser evil and will refrain from any strenuous opposition to their establishment.

An important but neglected issue when considering the creation of a regulatory agency is: does genuine scientific knowledge exist to guide the agency in carrying out its function? In some fields such as environmental protection or disease control such knowledge undoubtedly exists. In others, specifically in the areas of monetary policy and the control of capital markets, this is in not the case. Here the mathematical/statistical models supplied by economists have been used by the agencies to supply the appearance of science for their policies. This function has neither helped the agencies' performance, nor has it been good for the economics profession.

In the United States the Federal Reserve exerts a powerful influence on macroeconomics. In a well researched article Grim (2009, p.1) writes:

The Federal Reserve, through its extensive network of consultants, visiting scholars, alumni and staff economists, so thoroughly dominates the field of economics that real criticism of the central bank has become a career liability for members of the profession, an investigation by the Huffington Post has found.

This dominance helps explain how, even after the Fed failed to foresee the greatest economic collapse since the Great Depression, the central bank has largely escaped criticism from academic economists. In the Fed's thrall, the economists missed it, too.

One of the most important functions of a regulatory agency for the financial markets is to counteract the excessive appetite for risk that characterizes booms. Rajan (2009) has pointed to the fact that the euphoria characteristic of booms permeates all sectors of society and that there is no reason for assuming that regulators would be exempt. Also, there is immense political pressure on

regulators not to take any action that might deflate a financial bubble. The actions and pronouncements of ex Fed Chairman Allen Greenspan in the years leading up to the crisis evidence the validity of Rajan's argument.

2.2 Rules

By a rule I mean a law that specifies some relatively simple condition that agents must adhere to. Examples in the present context are ratios that specify minimum required bank reserves to deposits, or minimum equity that banks must maintain relative to total assets.

Passing a rule means that a substantive decision has been made. The advantage of a rule is that it is usually fairly clear and relatively easy to enforce. This contrasts with the lack of transparency often characteristic of the rulings of regulatory agencies. The lack of transparency connected with the various crisis bailout programs has been noted by critics. Of course, regulatory agencies can and do pass rules, but passing the job to agencies both prolongs the time until a rule is formulated and gives more chances to special interests for influencing the outcome.

Of course, a rule may be good or bad, depending on the quality of the analysis on which it is based and the influences of ideology and special interest. For example, the Basel II agreement specified that banks must value their asset at current market prices rather than at historical cost. This decision seems to have been influenced by the neoliberal ideology that the market is always right. But, in a crisis the prices of financial assets may decline precipitously, driving banks towards insolvency and making the crisis worse than it would otherwise be.

Having a simple rule has great advantages, but it is often objected that it cannot take account of the individual characteristics of the cases that might fall under it. However, attempts at complex regulation, or relegation to courts, in order to take individual circumstances into account, usually do not lead to greater fairness, but to greater costs. One difficulty is that lawmakers are unable to foresee the details of the cases that may arise under a given law. A further problem is that the more detailed the legislation is, the more these details are subject to the influence of lobbies who try to inject those details that benefit their clients. There is wide agreement that in all advanced societies the laws have become too complex without having become particularly fair. Indeed, legislatures seem to be mainly

occupied with passing laws intended to remedy defects of previous laws, while producing new defects that will be the motivation for future legislation. Simple rules will be prominent in the proposals made in this paper.

2.3 Empowerment

The basic assumption that underlies both capitalism and democracy is that individuals are both the best judges of and the best defenders of their own interests. This statement is subject to the caveat that individuals must be sufficiently well informed to be able to determine their interest and they must be empowered to defend their interests. If these conditions are given, the role of the state can be minimal, essentially reduced to the prevention of criminal behavior. Creating the conditions for empowerment is therefore the best policy; unfortunately it is also the most difficult to devise and to realize. Generally new institutions are required that can be designed only with creative thought. Empowerment also means that existing institutions will lose power and existing special interest will lose income; both will strenuously oppose the empowerment solution. Existing institutions that were helpless in preventing the current crisis will argue that they need more power, not less, to prevent the next. A good example is the vast increase in the powers of the Federal Reserve in spite of the fact that it not only failed to see the coming crisis, but was largely instrumental in creating it.

3 How the Crisis Should Have Been Dealt With

3.1 Basic Toxicology

Since the term came into use around 2006/2007, much has been written about toxic assets and their role in causing the near collapse of the banking system and consequently the world economic crisis. Toxic assets are those for which the market has dried up because market participants no longer know how to value them and believe that in any event they are worth much less than previously thought. When assets in the portfolio of a bank turn toxic, the ratio of its assets to

its liabilities may fall below the legal requirement with the consequence that the bank, unless bailed out, would be closed.

During 2007/8, when the crisis was still primarily a US mortgage crisis, the assets that were regarded as toxic, or potentially so, were collateralized debt obligations. CDOs are derivatives that bundle and repackage primary income producing securities. CDOs are divided into ‘tranches’ with different risk. In case of defaults on the primary securities, investors in the different tranches are paid out in the order of seniority. Investors in tranches with lower seniority received higher returns to compensate for the higher risk.

During the years of the US housing boom, CDOs were wonderful money making instruments. Banks sold subprime mortgages to families that could not afford them, convinced that they would pass on the risk to the investors in CDOs. Investors who bought the CDOs did not understand the risk and were lulled into a false sense of security by the ratings given to CDOs by the rating agencies that also profited handsomely. The banks themselves invested heavily in CDOs so that the risk that was supposed to be passed on, in the end largely stayed with them.

As the financial crisis unfolded, it became clear that another derivative asset, that was quantitatively even more important, was becoming toxic and was threatening the international financial system: credit default swaps (CDSs) and their more toxic variant, naked CDSs. An ordinary CDS insures a creditor against the default of the debtor, in principle a reasonable financial instrument. The issuers of CDSs, above all AIG, began to sell CDSs freely to anyone who demanded them, regardless of whether they were actually creditors of the company against whose default they were buying insurance. These ‘naked’ CDSs were simply bets on the default of the company in question. So far so bad, but the situation was made much worse by the fact that financial deregulation had removed the prohibition against short sales when the price of a stock is already declining. If a company is in some trouble and the price of its stock is declining, then a speculator can short sell the stock, thereby accelerate the decline, and perhaps encourage more speculation against the stock. The company’s reputation is impaired and it may be driven into a bankruptcy it could otherwise have avoided. The holders of the relevant naked CDSs then collect.³

³ The market for CDSs suffered from a variety of other structural and regulatory flaws. A good overview is given by Whalen (2009).

Buying naked CDSs and speculating against the debtor company is analogous to buying insurance on somebody else's house and then putting the torch to it. Both naked CDSs and short sales on the 'down tick' should never have been allowed.⁴

3.2 Detoxifying the Financial Markets

The popular political mantra that the policies taken are without alternative is nowhere less justified than with regard to the trillion dollar bailouts of financial institutions. I propose three measures that would have dealt with the toxic asset problem at no direct cost to taxpayers and with greater speed than the bailouts. Moreover, these proposals would largely *eliminate* the toxic assets, rather than quarantining them in bad banks where they remain as ultimate liabilities of the taxpayers.

3.2.1 Outlawing Naked CDSs

Regarding the size of the CDS market, I found the following in Prins (2009):

In an incestuous frenzy, institutions bought and sold credit protection to one another, with money they borrowed from one another. Since 2000, the CDS market exploded from \$900 billion to more than \$45.5 trillion. That's about twice the size of the entire U.S. stock market. (p. 60).

The speculative frenzy referred to by Prins was not in the rather humdrum business of insuring outstanding loans; it was rather the speculation with naked CDSs. With respect to these there are two issues: The first refers to those institutions, above all AIG; that issued naked CDSs and would have defaulted on them in the absence of government intervention. It is defensible that the government secured the legitimate obligations of these institutions in the interest of the stability of the financial system. However, that they did the same for the morally tainted bets that naked CDSs are is indefensible.

I would have gone one step further: Ideally the principal international monetary authorities should simply have declared all naked CDSs to be void. At

⁴ Several proposals for restricting short sales are currently under consideration by the SEC.

one stroke, and at no cost to taxpayers, this would have eliminated the largest chunk of toxic assets in the financial system. The balance sheets of financial institutions would immediately have been greatly improved, since the CDSs had been marked down as assets on the balance sheets of buyers, not as liabilities on the balance sheets of sellers. Declaring these securities void would therefore in the aggregate reduce the liabilities of banks much more than their assets.

3.2.2 Collateralized Debt Obligations

The financial crisis began in the US when default rates on mortgages began to rise and as a consequence the market in these securities dried up and their values had to be drastically marked down on the balance sheets of financial institutions. In an earlier paper (Hillinger 2008b) I had proposed that the values of subprime mortgages as well as the payments on them should be cut, by 40 or 50 percent. This would have greatly reduced the burden on the affected home owners and the loss to the issuers would be moderate, since they would still receive half or more of the payments on mortgages that would otherwise default completely. I still think that this would have been an appropriate measure, but it is now clear to me that the CDO problem is part of a wider problem, namely the treatment by the Obama administration of the household sector generally. The biggest problem of the US housing sector has become the default rate on prime mortgages, either because of rising unemployment, or because home owners are abandoning their houses when their value falls below the remaining cost of the mortgage.⁵ I turn to this broader topic in the next section.

3.3 Helping the Household Sector through the Crisis

3.3.1 Ameliorating Unemployment

There is a profound disparity in Obama's crisis management between the dimension of the corporate bailout and the relatively modest and hesitant aid going directly to households. Of course, the argument is always that everything that is

⁵ Liebowitz (2009) has argued that the American mortgage crisis was from the beginning a crisis of variable rate mortgages, not specifically of subprime. He shows that the rise of both prime and subprime mortgage defaults correlates with the rise in mortgage rates.

being done has the aim of aiding the general economy and thus ultimately the households. There is however nothing in economic theory that suggests that households will ultimately benefit more from the trickle down effects of corporate subsidies than from direct measures.

In terms of supporting the economy, the measures of the Obama administration were largely inefficient and much good could have been done by using these funds to support households directly. A related question is how social programs, particularly those intended to combat a crisis, should be financed. I will argue in the next section that they should be financed with fresh money, not by borrowing.

Social programs in the industrialized world are highly complex and differ from country to country as do their cultures and traditions. It is usually possible to choose from a bundle of reasonable measures and the details would, in any event have to be worked out in concrete situations. I therefore limit myself to pointing out the general sort of measures that could and should have been taken, particularly in the US and that to some extent have actually been implemented elsewhere.

It is well known that the social safety net is more highly developed in Europe than in the US. The program that is most directly relevant for ameliorating a recession is unemployment compensation. In the US this is limited to 26 weeks with a possible 13 week extension at times of high unemployment, thus reaching a maximum of about 10 months. In Germany the regular duration after a minimum of three years employment is 18 months, nearly double the US duration. This is not the only difference. In Germany, the government offers extensive training possibilities to the unemployed.⁶ Germany also has a program of 'Kurzarbeit' which allows workers to work part time with the government making up part of the income loss. During economically depressed times, this allows firms to keep employees rather than laying them off. During the crisis the duration of this program was extended from 6 to 18 months. This program is also coupled with training possibilities for the employees. A principal aim is to enable firms to keep qualified employees that they will need when the recession ends. The program is being credited with contributing substantially to the relatively benign record of the German labor market so far.

⁶ Many of these have been of dubious quality, but that is a separate issue, any government program can be well or poorly run.

It seems clear the US should have done, and still should do, much more to support the labor market. Directly such measures have the greatest impact on the welfare of the general population; by supporting consumer spending and loan repayments they counteract the overall recession. Compared to the financial bailouts, such programs have the moral advantage of benefitting the victims, not the perpetrators of the crisis.

3.3.2 Ameliorating Defaults

The income support programs described in the previous section would reduce defaults on mortgages and other obligations, but would still leave some major problems in this area that should be dealt with in a more direct fashion.

The programs of the Obama administration for mortgage relief are complex, require homeowners to attempt renegotiations with their mortgage suppliers and ultimately have to be decided in the courts. These negotiations are time and resource consuming and the results, in terms of actually granted relief, have been unimpressive. I propose instead clear and incisive rules that would be immediately applicable and proved relief to many home owners.

Regarding subprime mortgages, I already suggested above that their value as well as the associated payments be cut by 40–50 percent. This would accomplish at one stroke what now has to be attempted in negotiations that often fail because the mortgage companies are unwilling to voluntarily make concessions. Mortgage rates have fallen sharply and this rule would simply enforce the immediate reduction of all subprime mortgages.

Defaults on prime mortgages are by now outstripping those on subprime. There are two reasons: One is inability to pay, due, increasingly, to unemployment. The other is the abandonment of houses when mortgages go ‘under water’, meaning that the remaining payments are worth more than the value of the house. A rule to provide immediate and broad relief could be formulated along the following lines: Using regional indexes of housing prices for the period 2000–2007, as well as of declining housing prices in 2008–2009, estimate the ‘bubble inflation’ on housing prices in each of the years 2000–2007. This is a task not beyond the ability of a good econometrician. Some arbitrary assumptions would have to be made, but this is in any event unavoidable. The rule would then specify that all prime mortgages of a given year and a given region would have

their value and associated payments reduced by the amount of the bubble inflation. This rule should largely do away with the problem of ‘under water’ mortgages as well as easing the payments on others.

These rules will solve many but not all problems. Defaults may occur for many reasons, such as illness or divorce. Such cases may ultimately have to be resolved in court.

3.4 Financing Deficits

The theory of stabilization policy calls for governments to run surpluses in good times and to use the accumulated assets to finance deficits in bad times. The reality is different. Generally, the governments of the industrialized nations—but not only these—run deficits in good times and widen these out in bad times. In the present crisis, government debt has increased dramatically due to the financial bailouts. Currently 20 of the 27 member nations of the European union are in violation of the EU rule that new debt should be less than 3 percent of GDP. Reducing the burden of debt is generally regarded as the most important as well as most difficult task that is going to face governments when the recession ends.

A mantra that politicians frequently repeat is that there is no alternative to borrowing in order to finance deficits. However, there is one!: Governments can create fresh money, a process often referred to as ‘printing money’, even though most money nowadays is not in the form of printed paper.

Before proceeding, some background information is in order. Generally, governments cannot legally print or otherwise create money. If they run a deficit, they must finance it by borrowing, either from the public through the issue of bonds, or directly from the central bank. The treasury pays interest on its debt to the central bank, but this is returned to the treasury, after deducting the expense of running the central bank. In theory, the treasury debt to the central bank has to be repaid, but in fact, the debt is always rolled over and expanded to allow for a growing money supply. The entire process is somewhat of a charade. The motivation behind it is the idea that politicians cannot be trusted to run a responsible budgetary policy. In the same spirit, lawmakers often impose ceilings on their own borrowing that subsequently are invariably raised, or broken.

When a deficit is financed by borrowing from the public there is no money creation, since the money that is injected through government expenditures was

previously withdrawn. Since it is likely that most of the funds lent to the government were parked before in financial assets, the deficit financing will still have a net positive effect on the real economy. However, the borrowing will have raised interest rates, making it more difficult for firms to finance investments. Deficits financed by borrowing are therefore less expansionary than those financed with fresh money.

In the current crisis, central banks have massively intervened in the bond markets, buying up the bonds that their governments had issued for the bailout of the financial sector. The net effect is the same as if the treasuries had borrowed directly from their central banks, except for one important difference: Both in the initial marketing and in the subsequent central bank purchases of government bonds investment banks take their cut. Reportedly this is the principal factor in the quick turnaround of investment bank profits and new escalating bonuses for their executives. In addition wealthy individuals who had to be induced to first buy and then sell the bonds have profited. Ultimately paying for this merry go-round is the taxpayer.

Deficits financed with fresh money do lead to inflation. The important point in this connection is that as long as the money creation remains an episode that is terminated along with the deficit spending, the resulting inflation will also be episodic and will come to an end as the monetary impulse exhausts itself. Most forecasts for the world economy expect sluggish demand and slow growth for a number of years following the crisis. There are even fears of a deflation such as characterized Japan's 'lost decade'. Given such prospects, the expectation of an inflationary episode would have a desirable stimulating effect. The long-run effects of government debt are much less positive. An (unlikely) repayment would have a deflationary effect on economies that are likely to be weak for some years. The more likely scenario is that the already heavy burdens of interest payments on the public debt will increase and will keep governments from making other, more desirable expenditures.

3.5 Dealing with Sovereign Default

From its inception in 2007 until the early months of 2010 the crisis revolved about the threatened insolvencies of financial and industrial enterprises leading to massive bailouts, takeovers and bankruptcies. In early 2010 markets began to be

increasingly concerned about the possibility of default on the part of sovereign states. The initial focus was on Greece. Greek statistics had been massively manipulated to enable the country to join the European Union. The European Statistical Office estimated that while the reported Greek deficit was an EU conform less than three percent of GDP, the true deficit was near 12 percent. It became known that Goldman Sachs had sold complex financial instruments on behalf of the Greek government, with the purpose of enabling it to hide current liabilities. Other banks engaged in similar transactions with other Mediterranean governments.

European governments were rather slow in formulating and implementing a bailout package for Greece. Specifically, Germany apparently wanted to delay action until after the important election in North-Rhine Westphalia on the 9th of May. With the Greek aid package in limbo, attention shifted to other heavily indebted European nations: the so called PIIGS—Portugal, Italy, Ireland, Greece and Spain, all considered being in danger of having to default on their external government debt. The political discussion turned increasingly to the perceived possibility of a contagion of sovereign default threatening the continued existence of the Euro currency and of the European Union itself.

While the European Union procrastinated on an aid package to Greece, estimates of its required size kept rising until on Sunday May 2, 2010, The EU and the IMF agreed on providing loan guarantees totaling 110 billion Euros. The interest rate on Greek government bonds dropped sharply, but after some days began to rise again. Criticism of the aid package came to be expressed in newspapers and talk shows. Most prominently. Deutsche Bank CEO Joseph Ackerman said that Greece will not be able to repay its debt and that a future restructuring was inevitable. This prediction is plausible since at the end of the 3 year bailout period all of the bailout funds will have been added to the debt.

A week later, on Friday May 7 the crisis escalated. Officials were worried by the rising interest rates on Greek debt and by reports that hedge funds were planning a coordinated attack on the Euro. Equally worrisome was the prospect of a contagion in the markets for sovereign debt from Greece to the other PIIGS states. Meetings and other contacts involving the heads of state and finance ministers of the European Union, the European Commission, the IMF and a number of central banks occupied the entire weekend. Meetings continued through the weekend with the aim of announcing decisive action to stop the speculation

against the Euro and against Greek debt before the opening of Far Eastern markets on Monday morning. The initial deadline had been set at the opening of the Sydney exchange but could not be met. The deadline was then moved to the opening of the Tokyo exchange about 90 minutes later. Fifteen minutes before that deadline a compromise was finally achieved and announced.⁷

At the center of the proposed package is a €750 billion credit facility to help European governments that may face difficulties in refinancing their debt. Of this total, €440 billion are pledged by member states of the Union, 60 billion by the European Commission and €250 billion by the IMF. Additional measures were also taken. The European Central Bank agreed to purchase bonds of affected European governments, particularly Greece. Finally, central banks around the world announced that they would restore currency swap agreements to supply European banks with foreign currency if needed.

The following seem to me to be the most important aspects of the decision process and its outcome: **a.** The mechanisms of the European Union were revealed as being unsuited to a time of crisis. Decisions require agreement among the 27 governments of the Union that are characterized by widely differing economic interests and ideological commitments. Decisions reached at that level must then be approved by 27 often fractious parliaments. The resulting decision processes in the crisis were characterized by extended periods of inaction followed by hectic activism. **b.** The pronouncements of leading politicians were based on fear, warning of the collapse of the common currency and the falling apart of the Union if the proposed bailouts were not agreed upon. No economic analysis was provided as to why these outcomes would be likely. **c.** The bailouts are being described as aid to member states of the Union, based on solidarity. The truth, widely recognized both by opposition parties and the public, is that the ultimate beneficiaries are again the banks: banks that are holding government debt issued by Greece and other PIIGS states and banks that issued CDSs on these bonds and would have to pay up in case of default. **d.** It is striking that the solution to sovereign default that has been well established over centuries, renegotiation of the debt, was never seriously considered.

⁷ The weekly *Der Spiegel* has compiled an hour by hour narrative of these meetings that is available at: <http://www.spiegel.de/international/europe/0,1518,695110,00.html>

The intensive public debate that is currently raging around the PIIGS crisis is largely ignorant of the historical record of sovereign default and offers little economic analysis that would identify the gainers and losers under alternative scenarios. I attempt to supply some of this background here. For this task I rely heavily on the recent book by Reinhart and Rogoff, *This Time Is Different* that gives a quantitative history of some eight centuries of sovereign default and other financial crises. Following are the main stylized facts regarding sovereign default that they extracted from their dataset.

- a.** Sovereign default, as well as other financial crises, have been common throughout the history of the modern world. This is true even of serial sovereign default.
- b.** Sovereign default is characteristic of developing nations, including the now developed nations at earlier stages.

Indeed, in its early years as a nation-state, France defaulted on its external debt no fewer than eight times...Spain defaulted a mere six times prior to 1800, but, with seven defaults in the nineteenth century, surpassed France for a total of thirteen episodes. Thus, when today's European powers were going through the emerging market phase of development, they experienced recurrent problems with external debt default, just as many emerging markets do today.

From 1800 until well after World War II, Greece found itself virtually in continual default, and Austria's record is in some ways even more stunning. Although the development of international capital markets was quite limited prior to 1800, we nevertheless catalog the numerous defaults of France, Portugal, Prussia, Spain, and the early Italian city-states. At the edge of Europe, Egypt, Russia, and Turkey have histories of chronic default as well. (p.xx).

- c.** Complete default is rare. Default is usually partial involving often protracted negotiations leading to payment reductions or rescheduling.

Russia's 1918 default following the revolution holds the record, lasting sixty-nine years. Greece's default in 1826 shut it out of international capital markets

for fifty-three consecutive years, and Honduras's 1873 default had a comparable duration. (p. 12–13).

- d.** Default has usually been a matter of *choice*, not necessity. In most cases, the defaulting country could have continued to meet its obligations had it chosen to do so. This is due to the fact that, unlike the case of domestic debt, there is no international bankruptcy law, or authority to enforce such a law. While there are a number of sanctions that creditors can impose on countries that default, their cost may be less than the gain that results from not paying.
- e.** The authors see the root cause of sovereign default as well as other crises in 'debt intolerance':

Debt intolerance is defined as the extreme duress many emerging markets experience at external debt levels that would seem quite manageable by the standards of advanced countries. The duress typically involves a vicious cycle of loss in market confidence, spiraling interest rates on external government debt, and political resistance to repaying foreign creditors. Ultimately, default often occurs at levels of debt well below the 60 percent ratio of debt to GDP enshrined in Europe's Maastricht Treaty, a clause intended to protect the euro system from government defaults. (p. 21).

Debt intolerance in turn results from the combination of two circumstances: One is the tendency of governments to borrow excessively as long as they are able to do so, in order to postpone having to make painful economic decisions. The other is the 'fickleness of confidence' in financial markets:

Perhaps more than anything else, failure to recognize the precariousness and fickleness of confidence—especially in cases in which large short-term debts need to be rolled over continuously—is the key factor that gives rise to the this-time-is-different syndrome. Highly indebted governments, banks, or corporations can seem to be merrily rolling along for an extended period, when bang! Confidence collapses, lenders disappear, and a crisis hits. (p. xxxix).

The Euro Zone crisis repeated the patterns of argumentation and policy action characteristic of earlier stages of the crisis: Gigantic bailouts, directly or ultimately benefiting the banks and other actors in the financial markets, are said to be the

only alternative to a systemic collapse. I believe that this argument was and is false. In the earlier state of the crisis it would have been better to allow banks to default and to reorganize them while protecting their depositors and creditors, not their shareholders and managers. In the sovereign debt crisis, renegotiation would ultimately leave the countries with a reduced debt burden and hence in a better economic condition. The bailouts are *increasing* the debt of the receiving nations and impoverishing the donor nations. The politicians who arranged these bailouts claim that the ultimate beneficiaries will be the populations of their countries. Actually, the ultimate beneficiaries are the financial interests holding bonds of the PIIGS states, or have issued CDSs on these bonds and would have to pay up in case of default.

4 Fundamental Reforms

4.1 The Dysfunctional State of Financial Markets

It is the veil of custom that keeps societies from realizing how poorly, from a social/economic perspective, financial markets perform even in the best of times. Their primary function is to channel savings to investments. This function is served when firms issue new equity or debt obligations or when consumers borrow. But these are only a small fraction of all of the transactions that take place. In most transactions securities are passed from hand to hand without any new funds going to either businesses or consumers. The only sectoral flow that is taking place is from the general public to the financial sector in the form of a great variety of often hidden fees.

When a private investor goes to a bank or broker in order to get advice, he is generally faced by a salesperson working at least partly on a commission basis. The advice given is more likely to be determined by the commissions that can be earned than by the best interest of the investor.

In the years of a stock market boom, and right up to the bursting of the boom, banks suggested that investors not lose out on the large gains to be made by investing in stocks. After the bust they emphasize guarantee products telling the customer that he has a chance of a nice profit without risk of loss. The customers do not understand how much potential profit they are losing to pay for the

guarantee, or how little it is worth to receive just the nominal value of an investment after say ten years.

Generally, the lower on the income scale individuals are, the less their financial sophistication, the worse the financial advice they get and as a result, also the worse generally the performance of their investments. Currently, in Germany a woman is suing a bank that advised her to invest all of her retirement savings in 'safe' Lehman Brothers debt obligations. Wealthier individuals generally fare better and in the best position are the very wealthy families with their family offices, where the managers are their own employees. In this way the financial industry is contributing to the increasing disparity of wealth.

The most fundamental shortcoming of the financial markets as presently constituted is that they do not lead to an effective control of the managements of firms on the part of the shareholders. Instead, there is effectively a self-perpetuating cartel of top managers, the business schools that produce them, and the management consultancies. This cartel recruits the following generations of managers and determines who will rise to the top.

This system has two consequences. One is the custom of excessive manager salaries and bonuses that has recently drawn so much public attention and criticism. The other is the inefficiency in the allocation of resources between firms. In economic theory, efficiency requires that this allocation be made by the owners of the capital. Under the present system this occurs only on the rare occasions when firms issue new shares. The consequence is that firms finance their growth very largely out of retained earnings. Managers have an incentive to maximize the growth of their firms, since the salaries that are customarily paid to top managers are closely related to the size of their firms. Most firms therefore pay out little or nothing in the form of dividends that could be invested elsewhere by their recipients. Capital does not flow to those areas of the economy where profits are greatest as economic efficiency would require. The owners of capital, if they had complete control over it, would seek out the investment opportunities that promise the largest returns. The incentives for the managers are different, they generally maximize their incomes by increasing the size of their own firms, even when other firms are more profitable. This effect is reinforced by the fact that old established industries, particularly if they employ a large labor force, are politically influential and tend to benefit from governmental support and subsidies not given to newer

and smaller firms. All of this contributes to an aging and increasingly sclerotic society.

In the basements of the investment banks there are huge computers running day and night, processing data from financial markets around the world, looking for and executing promising trades. What is the social benefit of this activity? As far as I can see there is none. The gains made by the banks are at the expense of less sophisticated traders and if the losses are sufficiently large, then the taxpayers are asked for a bailout. The increase in speculative activity contributes to the volatility of markets. In the real economy it is accepted that the state exercises some control over what firms are allowed to produce, or to sell. Why should this not also be the case for financial markets?

The financial industry and above all central banks have succeeded in surrounding themselves with an aura of science that suggests that in order to understand basic aspects of finance one needs the equivalent of a PhD in mathematics. This prevents an understanding of finance that is based on elementary common sense.

I suggest that the deepest level cause of this dysfunction is the separation of ownership from management. The shareholder owners no longer decide on hiring, firing and remuneration of ‘their’ managers and they have only a partial control over the allocation of their capital among alternative investment opportunities. The most fundamental reform would therefore be to restore owner control of corporations.

4.2 Why Fundamental Reforms of the Financial Sector Are so Difficult

In the real economy it is generally understood that the government has a responsibility to regulate the products that firms want to bring to the market so as to prevent harmful or socially undesirable consequences. For example, pharmaceutical products are regulated almost everywhere. In the financial markets this regulatory function of the government is much less recognized or performed. For example, naked CDSs should never have been allowed. Yet, even now that

their disruptive role in the causation of the financial crisis has been well described, they have not been forbidden.⁸

One reason for this reluctance is that politicians in the United States and England have been sold on the idea that only the largest financial firms can effectively compete internationally. Since most of these are headquartered on Wall Street or in the City of London, the implication is thought to be that any restrictions that would reduce the size of the largest firms would reduce the dominant position of these financial centers.

A deeper reason is the difference between social science, specifically economics, and natural science. Regulation of the real economy has much to do with genuine science. For example, the approval of drugs is essentially a question of pharmacology, specification rules for buildings and other structures are based on civil engineering. Industries have often been able to pay some scientists to serve their interests, but they have not been able to subvert entire professions. For a long time the tobacco industry found some scientists who would argue that the dangers of smoking had not been ‘proven’; some scientists associated with the oil industry still argue that greenhouse gases are not the causes of global warming. Ultimately the weight of scientific opinion makes such claims unbelievable. In economics an analogous process of first establishing what is factually the case, then securing professional agreement on it and finally carrying this knowledge into the public and political realms simply has not taken place. Instead, the economics profession has followed the dominant ideological trends. Over the past decades that has been the neoliberal ideology according to which it is best to leave markets unregulated.⁹

4.3 Are There Simple Solutions?

The first thing that comes to my mind in relation to fundamental reforms is that the subject scarcely enters public debates. Fundamental reforms, at least in their basic conception, are simple. The belief in the existence of simple solutions that will work has been lost. In large measure this is a consequence of the failure of the

⁸ These and naked short sales have now been forbidden in Germany. However, as critics point out, very few of these securities are actually traded on German exchanges.

⁹ The argument that economics has been ideologically driven is made at length in Hillinger (2008a).

great ideological movements of the Twentieth Century: fascism, communism and most recently neoliberalism. Each of these movements had a simple solution to the world's ills. Profundity in my view is the ability to identify those simple ideas that are valid out of the vast universe that are false. The latter are the usual products of simple minds and it is this association that makes the successful advocacy of simple ideas, no matter how valid, so difficult.

'There are no simple solutions' is another popular mantra that politicians often advance. If one looks at the proposals that are being debated in the political realm, one does not find them to be complex. If they are broadly applicable, they tend to be vacuous in the sense that they state some desirable goal, but no mechanism for reaching it. For example, the German government is planning to create a new agency charged with the early detection of imbalances in financial markets. Clearly, this is something that should have been done by existing central banks and other financial institutions. Nothing is said as to why the new agency would perform any better than the old ones. Governmental regulations that have a substantive content tend to be highly specific. The broad institutions of society, such as the financial markets, are regulated by an agglomeration of regulations that were made to deal with specific problems as they arose, or to benefit some influential special interest. The resulting system of laws is certainly complex, but it is not a complexity resulting from rational design.

The complexity of governmental institutions is actually desirable from the point of view of those who are in charge of them; because by making the functioning of the institution inscrutable, criticism is deflected, or cannot even be articulated. It also helps to hide the often symbiotic relationship between governmental agencies and special interests.

4.4 Beyond the Veil of Custom: Fundamental Financial Reforms

In this section I ask what kinds of financial institutions we should ideally have. For this purpose, two sorts of questions need to be answered: What are the functions that need to be performed and what are the *unalterable characteristics of financial markets* that need to be taken into account when designing institutions to perform these functions. The most important functions are **a**. To provide depository facilities for storing money with complete safety, with the possibility of withdrawal at any time, and convenient methods for effecting payments. These are

the functions of money as traditionally defined: to serve as a means of payment and as a store of value. **b.** To organize and facilitate the flow of funds from savings to investment. **c.** To provide a variety of insurance services.

Next I discuss the financial instabilities that impair the performance of these functions, particularly in a time of crisis. There are two types of instability that may however take many forms and interact. One kind of results from the fact that the liquid reserves kept by banks are only a minute part of their deposit liabilities. Banks are therefore unable to meet a large and sudden demand for withdrawals. People, who, rightly or wrongly, believe that such withdrawals may be imminent, act rationally when they attempt to withdraw their own funds first. These are self-fulfilling expectations that create the situation that they feared.

The other instability is that of the financial markets. The basic cause of this instability is that the value of a financial asset is not anchored in the real economy in the same way as the value of a real good or service. The prices of the latter cannot deviate greatly from the cost of producing them, i.e. the cost of labor and the rent of machines, which are relatively stable. The prices of financial assets depend not only upon expectations regarding future earnings, that are highly uncertain, but beyond that, they depend upon the expectations that people have about the expectations of others. But even this is not enough; even if all people had the same expectations regarding future income streams; it is not clear how these should be discounted to present values. According to economic theory, individuals will convert expected future income streams to expected future utility streams; these are discounted by a subjective discount rate to yield a discounted present utility which is then compared with the utility of current consumption. On the basis of this comparison individuals make their decisions to save and invest. These decisions in turn impact the prices of financial assets and their expected returns. This description makes clear that the process of searching for equilibrium of the financial markets will not only be long drawn out, but also affected by much uncertainty and liable to waves of collective optimism or pessimism. The idea of rational markets that instantaneously find their equilibrium is, when applied to financial markets, a fantasy. The wholesale adoption of this fantasy as reality by much of the economics profession has done much harm over the past decades.

The two types of instability interact with each other and with the real sector thereby causing instability of the entire economy. For example, a decline in the prices of financial assets may negatively impact the balance sheets of banks and

lead to a run on bank deposits. Both of these developments impact the real economy negatively by reducing demand and ultimately production and incomes. Negative developments of the real sector then reinforce expectations in the financial markets.

While a degree of instability is in the nature of the financial markets, the extent and force of this instability is very much dependent on institutional detail. This is the subject of the following sections.

4.5 Reform of the Payments Sector

Originally this section was titled ‘Reform of the Banking Sector’, but subsequently I became convinced by Telser (2008) who argued that in contemporary economies there are significant means of payment, such as credit cards, which are not issued by banks but are just as important for the safety and controllability of the payments system as traditional bank accounts. The traditional idea of separating commercial banking and investment banking therefore needs to be broadened to separate all accounts that are involved in payments from investment activities. Since almost all of the public debate has had the narrower focus, I will initially adopt that focus also, but then broaden the discussion towards the end.

4.5.1 Separating the Payments and Investment Functions

Before proposing reforms of an institution, it is useful to state what functions the institution is expected to perform and why and to what extent it has failed to perform these. In his speech on banking reform, Mervyn King (2009, p. 6) has stated these functions succinctly:

The banking system provides two crucial services to the rest of the economy: providing companies and households a ready means by which they can make payments for goods and services and intermediating flows of savings to finance investment. Those are the utility aspects of banking where we all have a common interest in ensuring continuity of service. And for this reason they are quite different in nature from some of the riskier financial activities that banks undertake, such as proprietary trading.

Now that we know what banks are supposed to do, let us look at how they have failed to do it. That they were massively dysfunctional in the current crisis needs no elaboration, but, perhaps that was a rather singular aberration. On the contrary, the current crisis has a recurrent pattern that is typical and can be observed as far back as we have data. The most comprehensive study of this subject is Reinhart and Rogoff (2008) who examined banking crises and their impact with a sample of 66 countries dating back to 1800. They find that basic patterns are similar for high income, middle income and low income countries and these patterns are also stable over time with one exception: Following a banking crisis, fewer countries in recent decades defaulted on their sovereign debt.

Following is a summary of their findings:

The historical frequency of banking crises is quite similar in high- and middle-to-low-income countries, with quantitative and qualitative parallels in both the run-ups and the aftermath. We establish these regularities using a unique dataset spanning from Denmark's financial panic during the Napoleonic War to the ongoing global financial crisis sparked by subprime mortgage defaults in the United States.

Banking crises dramatically weaken fiscal positions in both groups, with government revenues invariably contracting, and fiscal expenditures often expanding sharply. Three years after a financial crisis central government debt increases, on average, by about 86 percent. Thus the fiscal burden of banking crisis extends far beyond the commonly cited cost of the bailouts. Our new dataset includes housing price data for emerging markets; these allow us to show that the real estate price cycles around banking crises are similar in duration and amplitude to those in advanced economies, with the busts averaging four to six years. Corroborating earlier work, we find that systemic banking crises are typically preceded by asset price bubbles, large capital inflows and credit booms, in rich and poor countries alike.

It is clear that banks have experienced a degree of instability not seen in the real economy and that this instability has impaired their functioning and imposed huge costs on society. Given the pervasiveness of crises in history, it is surprising how little attention has been given to them, particularly in mainstream economics. Almost invariably, each boom that precedes a crisis is accompanied by claims of

exceptionalism; the current boom is always said to be different and the beginning of a new era of permanent growth, rather than the prelude to a crisis. Exceptionalism fades in the crisis and the search for explanations begins anew, unfortunately largely oblivious insights found in the past.

As a consequence of the present crisis there has been a renewed interest in authors outside the economic mainstream who have focused on the instability of capitalist economies, most prominently Marx, Keynes and Minsky¹⁰. Minsky regards his own work as an elaboration of the ideas of Keynes and argues that these have been ignored by the modern economic mainstream. The key idea with both Keynes and Minsky is that the prices of financial assets depend on expectations of future and that such expectations are both volatile and subject to mass sentiments.

One can accept the above analysis and still ask if there are not institutional features that could be changed to reduce the extent of fluctuations and to ameliorate their consequences. In this section I raise this question specifically in relation to the banking sector.

One cause of banking sector instability that has long been recognized and motivated important post-Gilded Age reforms is the merging of commercial and investment bank activities. Such mergers were prohibited by the Glass-Steagall Act, the repeal of which has been identified as an important contributing factor to the crisis. It is evident that if banks are allowed to speculate with the money of bank depositors, the danger of bankruptcy will increase. Both the current Governor of the Bank of England, Mervyn King and the former Chairman of the Federal Reserve Paul Volker (2009) have pleaded for the separation of commercial banking and investment banking.

There are those who claim that such proposals are impractical. It is hard to see why. Existing prudential regulation makes distinctions between different types of banking activities when determining capital requirements. What does seem impractical, however, are the current arrangements. Anyone who proposed giving government guarantees to retail depositors and other creditors, and then suggested that such funding could be used to finance highly risky and

¹⁰ Minsky (1975) is a very readable short introduction to the thought of both authors.

speculative activities, would be thought rather unworldly. But that is where we now are. (King, 2009).

Both King and Volker express skepticism regarding the announced policies of their governments for dealing with future crises. In essence, these involve establishing regulatory authorities that would identify banks that are ‘too big to fail’, monitoring them closely and taking regulatory measures to rein them in whenever their risks appear to reach dangerous levels. Similar approaches are also being taken within the Euro Zone countries. There are no objective criteria for determining which banks constitute a systemic hazard. That Lehman Brothers was in this category became apparent only *after* it had been allowed to collapse. Equally difficult is to determine the level of risk. The usual risk measure for banks, the ratio of own to total capital may appear to be perfectly safe and then suddenly become inadequate as conditions change. Finally, the very act of defining banks that cannot be allowed to fail improves their credit worthiness and thus gives them an unfair advantage relative to competitors.

Given the power of the financial lobbies, it is not surprising that the proposals of King and Volker are not finding favor with their respective governments. Coming out of this crisis there is an even greater concentration at the top of the financial industry with the associated risk of an even bigger crisis in the future.

An aside on ‘banks that are too big to fail’: Such banks exist only to the extent that they are defined as such in the minds of policy makers. The systemic risk does not come from such a bank’s failure *per se*; it comes about if claims on the bank become worthless. The two events are distinct and the first does not imply the second. A failed bank can and should be taken over by the state along with any remaining assets. The state can then honor claims on the bank, restructure it and ultimately sell it to the private sector. That is the superior alternative to bailing out failing banks.

I return to the argument made by Telser (2008) and mentioned at the beginning of this section. The separation of commercial banking from investment banking is desirable but not sufficient since it does not cover the means of payment that do not originate with the commercial banks. These are credit and debit cards as well as checking facilities offered with money management accounts by brokers. These are as much means of payment as a check drawn on a bank account. Should a firm such as Visa or Master Card become insolvent the threat to the payments system

would be as great as from the failure of any bank. The only way to insure the integrity of the modern payments system is to prohibit all participating institutions from engaging in risky investments.

4.5.2 Full Reserve Banking

The second fundamental reform that I advocate is full reserve banking (FRB). It strengthens the idea that the suppliers of payment facilities should not be allowed to engage in risky investments by prohibiting them from engaging in any investments at all. After all, there are no investments without risk. Furthermore, the investments made by the suppliers of payment facilities are necessarily longer term than their liabilities. This is most clearly the case for commercial banks that make consumer loans on the basis of deposits that can be withdrawn at any time. Credit card companies faced with defaults on their loans to card holders may experience difficulty in reimbursing merchants for sales made against their cards. Credit defaults have been increasing and some commentators have warned that a credit card crisis, similar to the subprime mortgage crisis may be in the making. It seems clear that if the soundness of the payments system is regarded as being supremely important, as it should be, FRB applied to all suppliers of payment systems should be seriously considered.

The idea of FRB was advanced by Henry Simons (1934, 1936) at the University of Chicago. It was one element in a broader design of economic institutions for a society with a maximum of freedom and a minimum of discretionary activities on the part of the state. Along with Jacob Viner and Frank H. Knight, Simons represented the first generation of the Chicago School that in the following generation was led by Milton Friedman and George Stigler. Friedman (1948) advanced ideas similar to those of Simons, including FRB. Finally, the entire set of ideas became part of the Austrian school of economics and is thought to be part of the libertarian tradition.

I have considerable sympathy for the Chicago/Austrian/Libertarian (CAL) program. For example, I agree with Friedman that discretionary anticyclical policies will not be successful because there is a lack both of the required scientific knowledge and political will. Nevertheless I want to consider FRB in isolation, apart from features with which it has no logical connection, or where the claimed connection is in my view incorrect. Thus, a principal source of support for FRB

has been the idea, dear to the hearts of CAL adherents, that FRB would preclude active monetary policy and make the Federal Reserve obsolete. I will argue that the reverse is true, that it would be *easier* to conduct an effective monetary policy (should one wish to do so) under FRB than under fractional reserves.

Among pragmatic reformers, full reserve banking has not enjoyed anywhere near the support that has been given to the idea of the separation of commercial and investment banking. The most likely reason is that separations and mergers among firms including banks are common, whereas there has been no experience with full reserve banking. For the latter, the veil of custom is therefore more impenetrable.

Generally commercial innovations came about because of a recognized need. This is true for the invention of first commodity money, then paper money and later checking accounts as well as for the origin of joint stock companies and many other innovations. Fractional reserve banking did not arise in response to a social need. It came about because it enabled first goldsmiths and then banks that used this innovation to increase their profits relative to those who did not. The current crisis has amply shown that mere short run profitability is not a sufficient condition for a financial innovation to be socially desirable.

The basic argument for FRB is simple. If bank reserves in the form of cash or deposits at the central bank are only a small fraction of their deposit liabilities, then banks will not be able to satisfy an unexpectedly large and sudden demand for withdrawals. Since all depositors know this, there will be a mass movement towards withdrawal even on the part of those not in current need of their funds. The periodic occurrence of such 'banking crisis' has been much ameliorated by the introduction of deposit insurance; it has not been banned as illustrated by the run on the Black Rock savings bank in England which was one of the triggers of the current crisis in that country.

Partial reserve banking is procyclical. In a boom the demand for credits is high and banks are generous in granting them. This triggers the process of monetary expansion. The reverse is true in a recession.

It has been suggested that fractional reserves enable the banks to finance an expanding real economy, but I fail to see a supporting argument for this belief. There is nothing in economic theory to suggest that the creation of money on the part of the banks is necessary, or desirable in order for banks to perform their two basic functions: the management of payments and the channeling of funds from

savings to investment. This is not to say that the change from the present system to one of FRB would be simple; no major change of institutions ever is. The change would best be effected at the same time as other changes involving financial markets that are discussed below.

Support for FRB came from the Chicago School and more recently from the Austrian School of Economics and was thus connected to the neoliberal concern of keeping the state as much as possible out of the economy. In the present context I agree with this position in so far as FRB very largely obviates the need for governmental interventions to prevent the collapse of the payments system. The neoliberal supporters of full reserve banking are however motivated by a second consideration as well: They believe that under FRB there could not be a monetary stabilization policy. The reverse is actually true. A principal difficulty in conducting an effective monetary stabilization policy is that the lag by which the effects of an increase in the money supply work themselves out is ‘long and variable’.¹¹ After reviewing empirical literature on the quantity theory of money, Dwyer and Hafer (1999, p.33) write:

Some of the evidence above is based on average inflation rates and money growth rates over thirty years. If it takes a generation for the relationship between money growth and inflation to become apparent, perhaps it is not surprising that central bankers and practitioners put little weight on recent money growth.

The voluminous work in macroeconomic theory and econometrics notwithstanding, monetary policy very largely consists of ‘leaning against the wind’, more precisely against the wind that blew a few months earlier since it takes that long for the first relevant statistics to appear. No central banker would claim to know the path of the economy years or even decades into the future just as he does not know the timing of future effects of present policies. An expansionary policy to fight a recession may have its principal effect in inflating a subsequent boom.

Governments and central banks can evidently change the money supply under FRB, for example by running a deficit or through open market operations. The

¹¹ Friedman often used this phrase in arguing against the feasibility of an effective monetary stabilization policy.

difference is that the initial change is the only change since there is no money multiplier to expand the money supply through successive rounds of bank lending. There will still be multiplier effects and lags in the real sector, so that stabilization policy would still pose an intellectual challenge, but the conduct of monetary policy would be much easier.

4.5.3 A New Idea

Shy and Stenbacka (2008) have advanced a proposal that should make it easier to gain political support for and to implement a fundamental reform of the banking sector. Their idea is instead of going to a complete FRB system in one step, to simply require banks to offer FRB accounts in addition to whatever other accounts they are presently offering. They do not use the FRB terminology, instead specifying that banks cannot engage in any lending on the basis of these deposits. That is another way of defining the same thing. The bank customers would then have a choice between absolutely safe FRB accounts and others.

These FRB accounts should be insured, preferably privately, or through a government guarantee. Unlike the present deposit insurance, this would not be insurance against bankruptcy. Bankruptcy would not endanger these accounts; their management would simply be taken over by another bank. Insurance here would be solely against fraud, such as fraudulent withdrawals or transfers. Regarding the riskier partial reserve accounts, governments should declare that they will no longer receive explicit or implicit government guarantees so as not to give an unfair competitive advantage to these accounts.

The beauty of this proposal is that it is very simple to implement and allows the banks to continue all of their current activities. As more and more of the funds needed for transaction purposes are shifted into the FRB accounts, the current danger to the payments system from potential bank failures will disappear.

4.5.4 A Shadow Banking System

The financial crisis that began with a banking panic in the United States in August 2007 was not so much a crisis of the traditional banking sector, but rather originated in a novel ‘shadow banking’ sector that evolved over the past three decades largely unnoticed by regulators and academics. This is the thesis of

Gorton (2010).¹² The shadow banking sector supplies the traditional banking sector with liquidity. The essence of the mechanism is that traditional banks bundle and securitize the loans that they make to households and firms and sell the resulting securities to the shadow banks consisting of investment banks and other financial firms. This is the so called ‘repo’ market. Financial and commercial firms deposit surplus funds with the shadow banks, and in return receive securitized assets as collateral. Before the crisis, the market value of the collateral was the same as the deposited sum. However, when doubt developed regarding the future values of the securitized assets, depositors started to demand more collateral which the shadow banks were unable to supply. This avenue of supply of liquidity to the traditional banks dried up.

One reason for the evolution of the shadow banking sector is that the large sums that firms need to deposit for short periods would not be insured if deposited with the traditional banks. Since with full reserve banking any deposited amount would be safe, the incentive to having the shadow banking sector would largely disappear.

4.6 Regulatory Reforms of Financial Markets

In this section I discuss reforms that governments could implement and that would greatly stabilize the financial markets. They are: **a.** requiring all financial products to be licensed, **b.** specifying the activities in which firms of a given type are allowed to engage, **c.** breaking up financial conglomerates.

4.6.1 The Licensing of Financial Products

It is by now common place that the financial crisis was to a large extent exacerbated by the proliferation of complex financial derivatives that were understood by no one. That the uncontrolled issuance of novel financial products can cause great harm is one of the lessons of the current crisis. The implication is that firms should not be allowed to freely create and market financial products.

¹² Gorton has summarized the evidence and his arguments in testimony to the U. S. Financial Crisis Inquiry Commission, downloadable at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1557279.

Instead the rule should be that a financial product can only be marketed after it has been approved by the relevant regulatory authority. The fundamental criterion should be that a substantial social benefit can be expected from the introduction of the product. The benefit should be clear and substantial, because the proliferation of financial instruments that are ill understood is undesirable. It increases the ability of financial institutions to create and sell products that enhance their short term profits without an equivalent benefit to investors. At the same time it increases the difficulty of effective regulation. Also, there is the danger that ill understood investments will fail and endanger the stability of the financial system.

I do not claim that it is easy to decide which products provide a sufficient social benefit to justify their existence. I do argue that the burden of proof that in this regard should fall on the potential issuer of the product. Cautionary examples are the derivatives that played such a large role in causing the present crisis. Another category of financial products that we would be better off without are the so-called ‘certificates’ that have been issued in great variety in Europe. A certificate is essentially a bet that a certain financial asset, or index, will behave in a certain way. For example, an investor who believes that some stock will appreciate can buy a certificate that will participate more than proportionately in an increase of the price of that stock. There is of course a cost; should the price of the stock, instead of rising fall and penetrate a certain barrier, then the certificate becomes worthless. Investors can bet on rising or falling prices of many assets, or on sideways movements. Common to all of these bets is their lack of transparency. The average investor has no means for objectively determining the odds involved in these bets. The attraction of certificates to investors is based on the fact that they appeal to irrational emotions, either of excessive confidence, or excessive fear. Lack of transparency allows the issuers of these products to charge high fees.

4.6.2 Licensing Financial Activities

Activities by financial firms may be undesirable even if they involve no novel or exotic products. I am thinking particularly about the vast increase in proprietary trading in which primarily investment banks engaged, but to a lesser degree also most financial institutions. I do not see any social purpose served by these activities. In the short run bank profits are increased; in the longer run there is an increase in the probability that the institution will bankrupt or have to be bailed

out. There may be more activities in this category than I am able to identify. The subject overlaps with the preceding section since most activities involve products. There is also an overlap with the following section since activities that are unobjectionable when carried out in isolation may become objectionable in certain combinations.

4.6.3 Forbidding Financial Conglomerates

In the debates about long run financial reforms the problem of ‘banks that are too large to fail’ occupies a deservedly prominent place. The solution that appears to be favored by governments is to identify such banks and to subject them to strict controls. This proposal is subject to the general problem that controls tend to be lax and inefficient once the crisis that motivated them fades from memory. Another problem is the lack of criteria for identifying banks that would pose a systemic danger if they failed. The authorities recognized the systemic relevance of Lehman Brothers only when it was too late. Once banks have been identified as being systemically relevant it is not clear what requirements should be imposed to insure their safety. For example, an own capital to debt ration that might be needed in a crisis would be regarded as too onerous in good times. Finally, the explicit or implicit guarantee given to a bank that is classified as being too big to fail would give that bank an unfair competitive advantage.

An alternative proposal that has been gaining strength is to break up banks that are too big to fail. This would do away with the need to establish special control mechanisms for systemic banks. It leaves the problem of how to identify such banks.

I prefer to begin with a different question: Do we wish to have financial conglomerates, i.e. financial firms that pursue several lines of business that are not closely related? If, as I believe, the answer to this question is negative, and conglomerates are split into their constituent parts, we will no longer have banks that are too big to fail. The separation of commercial and investment banking will also take place as part of a larger separation process. Financial conglomerates are undesirable for the following reasons:

a. Any part of a conglomerate can accumulate losses that bankrupt the conglomerate as a whole, including its healthy units. This occurred several times during the current crisis, most dramatically in the case of AIG. More generally,

most bank failures were caused by some particularly risk-prone unit within the bank. The systemic damage would have been much less if the failing units had been standalone firms.

b. A unit of a conglomerate can place riskier securities in the market than a comparable independent firm because customers know that the liabilities of the unit fall on the conglomerate as a whole.

c. Conglomerates increase the risk that there will be no effective oversight because the top management fails to understand what some units are actually doing. Again, AIG is the prime example.

Having to bail out financial firms that are too big to fail has imposed horrendous costs on the taxpayers of many nations. The costs are thus obvious; what about benefits. I find it hard to think of any argument that would suggest that the units of a conglomerate are more efficient than they would be as standalone firms. It is true that some administrative functions could be performed more efficiently in a larger organization, but these can equally be outsourced to specialized firms. Generally, the arguments against splitting up large financial conglomerates boil down to arguments in favor of large size. Moscovitz and Housel (2009) have examined these arguments and have found them to be entirely without merit. I summarize here their main findings:

a. Bank customers do not favor large banks with monopoly power. Large corporations generally divide their business among several banks to obtain a better competitive position. This also shows that firms do not depend on large banks in order to obtain large loans.

b. Studies of bank mergers do not reveal any economies of scale.

c. The fear that when domestic conglomerates are broken up the new smaller units will not be able to compete with large foreign conglomerates is unfounded. Firstly, there is no evidence of greater efficiency of larger banks. Secondly, several European conglomerates have already been broken up—the list so far includes Lloyds, Royal Bank of Scotland, Northern Rock and ING.

d. The principal beneficiaries of bigness are the top executives of the firms involved, as the Table 1 indicates.

Corporate CEOs tend to regard themselves as being responsible for the growth rates achieved by their companies. By that logic, JP Morgan has to pay its CEO on

average 37.23 million for one percent growth, which is about 68 times the amount of 551,293 paid by the Bank of the Ozarks.

Table 1: Big Bank vs. Small Bank Profitability

Year	JP Morgan Chase (\$2 trillion total assets)		Bank of the Ozarks (\$2.9 billion total assets)	
	Return on Assets	CEO Compensation	Return on Assets	CEO Compensation
2005	0.7%	\$22.3million	1.6%	\$464,997
2006	1.1%	\$39.1 million	1.4%	\$774,064
2007	1.1%	\$34.3 million	1.2%	\$825,588
2008	0.2%	\$19.7 million	1.2%	\$912,336
Average	0.775%	\$28.85 million	1.35%	\$744,246

Source: Capital IQ, a division of Standard & Poor's.

Excessive salaries and bonuses paid to financial executives have been a principal focus of public wrath, and various measures for limiting these are being discussed, or have already been implemented. The impact of such regulation appears to be slight. The reforms proposed in this paper, by reducing the size of financial firms as well as their speculative activities, would automatically lead to lower compensation for executives and traders.

I close this section with an eloquent quote from Nuriel Rubini, the most prominent economist to foresee the crisis and to warn of future crisis if there are no fundamental reforms:¹³

... the model of the financial supermarket where within one institution you have commercial banking, investment banking, underwriting of securities, market-making and dealing, proprietary trading, hedge fund activity, private equity activity, asset management, insurance—this model has been a disaster. The institution becomes too big to fail and too big to manage.

¹³ The interview can be downloaded at:
http://www.alternet.org/story/146900/nouriel_roubini%3A_how_to_break_up_the_banks%2C_stop_massive_bonuses%2C_and_reign_in_wall_street_greed

It also creates massive conflicts of interest. If you look at the cases against Goldman Sachs and Morgan Stanley, leaving aside whether there was any fraud or illegal activity—that's for a court to decide—there is still a fundamental conflict of interest. These institutions are always on every side of every deal. That's an inherent conflict of interest that cannot be addressed with Chinese walls [internal company barriers between different aspects of its business].

There are no benefits from these economies of scale and scope, as we've seen from the disasters at Citigroup, AIG and others. And there are massive conflicts of interest. So I would separate all of these financial businesses under separate institutions, and I would go back to the kind of restrictions that we had under Glass-Steagall.

4.6.4 Evolution of New Financial Institutions

The principal political and economic institutions of western democracies evolved from below. Not only were they not imposed centrally, they often had to overcome the resistance of vested interests of the monarchy, the aristocracy and the church. I believe that efficient capital markets in the twenty first century also require a new institution that can only evolve from below.

As I already stated above, at the deepest level the current dysfunction of the financial markets is due to the disjunction of ownership and management that leaves the managers free to follow their own agendas that generally differ from those of the owners. The most comprehensive way to establish owner control would be through investment cooperatives. Ordinary investors would buy shares of the cooperative and in return obtain voting rights. These might be some combination 'of one investor one vote' and a voting share based only on the invested amount. Analogously to the family offices of very wealthy families, the cooperative could have professional investment managers who would be salaried employees of the cooperative, possibly with a bonus based on performance. The cooperatives would invest directly in firms, either with equity or with loans. Alone or with other cooperatives they would also send members of the cooperative to the board of a company in which they invested. The granting of consumer or mortgage credit would also be a possibility.

I do not want to go into more detail because such institutions would have to evolve and there may in fact evolve a variety of such cooperatives with different specializations. To some extent the evolution will also depend on the legal frameworks that are created. An early form might be a cooperative that invests in local companies about whom it is easier to be well informed.

Savings and loan associations that are formally cooperatives exist in many countries, but they are cooperatives in form only; the ‘members’ do not actively appoint and control the management. A genuine cooperative requires sophisticated members who can participate in the decisions and in the work that has to be done. Genuine cooperatives have for this reason existed mainly in agriculture among independent farmers. Much interest and some sophistication regarding investments already exist in the general population. This is evidenced by many internet investment blogs. There are also investment clubs in many countries where individuals manage their investments together. It would simply be a further step to the investment cooperatives that I am proposing.

5 Why Fundamental Structural Reforms Are Unlikely

The basic tenor of this paper is positive in the sense that I propose policies and institutions that would in my opinion improve economic performance, at the same time reducing the inequality of wealth. Unfortunately the chances of adoption for these proposals are quite remote. This section will be devoted to a brief discussion of why this is so.

5.1 The Larger Picture

The inability of a society to develop rational, if necessary also radical, policies to deal successfully with the problems facing it is a sign of the decline that occurs when it ages and loses its vigor. That this is so for the United States has been argued in a number of important recent books. With a time lag, the situation is not very different for the industrialized democracies of Europe. The common vision of this literature is that democracy in the United States has eroded; the institutions remain formally intact, but their substance has been subverted to serve the special interests over the general interest. The principal means of this subversion have

been corporate control over the mass media, dependence of politicians on corporate campaign contributions and the power of lobbies.

The most comprehensive and scholarly exposition of these themes is Wolin (2008). He uses the term ‘inverted totalitarianism’ for a system that maintains the trappings of democracy, but not its essence. I find this term somewhat confusing and prefer ‘pseudo democracy’. A further theme extensively discussed by Wolin is the incompatibility with democracy of imperialism generally and the American variety in particular. The same theme has been treated with much detail Johnson (2006) as well as in his earlier books.

Pseudo democracy, particularly in its modern media dominated form, produces an alienated, delusionary mass public, afflicted by multiple forms of social disintegration. This has been the subject of many books. Certainly one of the best is Hedges (2009) *Empire of Illusion*, which has the added advantage of giving many references to important earlier work. An even more recent book by internet guru Jaron Lanier (2010) reaches similar conclusions, but from a slightly different angle. He argues that the internet, far from producing the superior collective mind that its pioneers had envisioned, instead simply produces the stupid and intolerant mass mind that we have known from past mass movements. In a review of the book, Hedges (2010, p. 1) put it as follows:

The Internet has become one more tool hijacked by corporate interests to accelerate our cultural, political and economic decline. The great promise of the Internet, to open up dialogue, break down cultural barriers, promote democracy and unleash innovation and creativity, has been exposed as a scam. The Internet is dividing us into antagonistic clans, in which we chant the same slogans and hate the same enemies, while our creative work is handed for free to Web providers who use it as bait for advertising.

A related work, unfortunately available only in German, is Grünewald (2006). He describes the findings from a large set of in-depth interviews. The key finding is that the mass of Germans live in a virtual world defined by the media and unrelated to their real needs. They observe events in their society with emotional detachment, as if witnessing a movie. Opinions are adopted and discarded without any strong commitment. Values are taken to be relative, so often is truth. The book evidences that the cultural evolution of a European country is not much different from that of the US.

The books that I have mentioned describe a social and cultural decline and specific developments that contributed to it; they do not inquire regarding a deeper level of causation that quite generally leads to a life cycle of societies, analogous to that of individuals, passing through the stages of growth, maturity, age and finally death. The question of why societies decline has been a focus of the research of Mancur Olson (1982, 2000). It is natural for individuals and groups to try to advance their specific interests within the larger society. The smaller and more homogeneous such a group is, the more effectively it can advance its particular interest. The society as a whole is the largest and most inhomogeneous group and thus least able to defend, or even to comprehend, its own interests. With the passage of time, narrow interests therefore tend to advance relative to the general interest. Moreover, this process is self-reinforcing: The more influence the special interests acquire, the better they are positioned to increase their influence even further.

The final book that I would like to mention in this section is Starobin (2009). He discusses not only the rise and subsequent decline of the United States, but in addition explores various visions of a world subsequent to American dominance.

I end this section by quoting from an Op-Ed piece by Bob Herbert in *The New York Times*, October 27, 2009:

Americans have tended to watch with a remarkable (I think frightening) degree of passivity as crises of all sorts have gripped the country and sent millions of lives into tailspins. Where people once might have deluged their elected representatives with complaints, joined unions, resisted mass firings, confronted their employers with serious demands, marched for social justice and created brand new civic organizations to fight for the things they believed in, the tendency now is to assume that there is little or nothing ordinary individuals can do about the conditions that plague them.

5.2 Elites, Social Science, Economics

Powerful special interests acquire over time auxiliary service personnel that helps them to maintain and extend their power. An important function is the provision of a suitable ideology to guide the actions of the power holders and legitimize their

position in the larger society. At various times and places this function has been performed by priests, philosophers and more recently by social scientists and publicists.

The crisis could not have assumed anything like the dimension that it took had not the neoliberal ideology permeated the top levels of decision making in the financial industry as well as among regulators. Even the most influential of all deregulators, ex Fed chairman Allen Greenspan, has admitted as much.¹⁴ The ideology could not have become so influential among decision makers, had it not first swept the economics departments and business schools. Ideology in general and particularly the role of ideology in social science are important, but neglected topics. I have discussed this in Hillinger (2008a). Here I will limit myself to discussing some recent remarks by Paul Krugman (2009):

It's hard to believe now, but not long ago economists were congratulating themselves over the success of their field. Those successes — or so they believed — were both theoretical and practical, leading to a golden era for the profession...

Few economists saw our current crisis coming, but this predictive failure was the least of the field's problems. More important was the profession's blindness to the very possibility of catastrophic failures in a market economy...

As I see it, the economics profession went astray because economists, as a group, mistook beauty, clad in impressive-looking mathematics, for truth...

By 1970 or so, however, the study of financial markets seemed to have been taken over by Voltaire's Dr. Pangloss, who insisted that we live in the best of all possible worlds. Discussion of investor irrationality, of bubbles, of destructive speculation had virtually disappeared from academic discourse.

I have no quarrel with Krugman's description of the state of economics, either in these quotes, or in his lengthy article, but his explanation in terms of economists' attraction to beauty is at best a side aspect. Beauty is in the eye of the

¹⁴ You can watch his statement on You Tube at:
<http://www.youtube.com/watch?v=3ggPHNuEEH8&feature=fvw>

beholder and few outsiders think of mathematical economics as being beautiful.¹⁵ There were two other and more powerful reasons for the triumph of neoclassical economics: First, the fact that mathematical models demonstrating the efficiency of markets appeared to supply a scientific foundation for the ideology of neoliberalism that was spreading among political and business elites. Secondly, the use of mathematics in economic theory, along with the use of sophisticated statistical techniques in econometrics, were taken to be *prima facie* evidence of the scientific maturity of the discipline.

Regarding the future of macroeconomics, Krugman writes:

Economics, as a field, got in trouble because economists were seduced by the vision of a perfect, frictionless market system. If the profession is to redeem itself, it will have to reconcile itself to a less alluring vision—that of a market economy that has many virtues but that is also shot through with flaws and frictions...What's probably going to happen now—in fact, it's already happening—is that flaws-and-frictions economics will move from the periphery of economic analysis to its center.

I agree with Krugman regarding the direction that economics is taking. For decades high prestige accrued to economist who could elegantly navigate topological spaces; now it is more likely to reward access to nuclear resonance tomography. Where I differ is that I am not sanguine about this development. The study of the non-rational aspects of human behavior has long been the domain of sociology and psychology. I don't claim that these fields are irrelevant to economics, but they are not economics. I do not believe that the study of brain scans in experimental economics, or of reams of high frequency financial data in macroeconomics, will by itself produce better economic policies, or lead to the creation of better institutions. Much, perhaps most, malfunctioning of economic institutions involves the rational reactions of individuals to perverse incentives. Devising incentives which will lead to better social outcomes requires the analysis of rational, not of irrational behavior.

¹⁵ I once loaned a copy of Paul Samuelson's *Foundations* to a colleague from the math department; he returned it after a few days with the comment 'not interesting'!

5.3 A Case History of Fundamental Reforms

Since the outbreak of the crisis, politicians and other commentators have been demanding ‘fundamental reforms’. Often this means no more than that they wish to reform the bonus systems for executives of banks and other corporations and that they demand a better capitalization for banks. Our societies and particularly the politicians seem to have lost the very conception of truly basic institutional reforms. It therefore seems useful to look back at an era when such reforms were not only thought about, but also vigorously advocated and ultimately put into place.

Wealth and Democracy by Kevin Phillips (2002) examines the alternating periods of economic expansion followed by financial excess and the concentration of wealth until the bubble bursts and is followed by a period of economic retrenchment accompanied by political and economic reforms. In the view of Phillips, the period of American history that most resembles the financial excesses leading up to the current crisis was the Gilded Age which extended roughly from 1865 to 1900. The first wave of opposition to the excesses of the Gilded Age was the Populist movement; largely rural and focused on the advocacy of cheap money. At the 1896 Democratic national convention the Populist candidate William Jennings Bryan held his famous ‘cross of gold’ speech, but was narrowly defeated.

As farm conditions improved, the Populist movement petered out. It was succeeded by the Progressive movement; more urban, more sophisticated, more durable and more successful. Phillips assigns to the Progressive era a period of around 40 years and the presidencies of Theodor Roosevelt, Woodrow Wilson and Franklin D. Roosevelt. I have no quarrel with this, but I would like to also suggest a different division of the time axis. Suppose we describe a period of increasing concentration of wealth and of increasing influence of wealth on politics as a ‘movement to the right’ of the political spectrum, and a period of increasing equality and increasing popular influence on politics as a ‘movement to the left’. Furthermore, I suggest a focus on a long term trend, ignoring minor reversals, or periods without a clear trend. From such a perspective, one can argue that the United States was moving to the right from Colonial times through the Gilded Age. Considering the extensive social programs of the Kennedy and Johnson administrations and the fact that both social spending and social legislation had

been expanding even faster under Nixon than under Johnson¹⁶ and that the reversal of Progressive era reforms began only under Reagan; it seems reasonable to speak of a movement to the left for a near century, extending from around 1890 to the Reagan inauguration in 1981. This interpretation is also supported by Table 2, which shows peak wealth as a multiple of median wealth increasing from 1780 to 1875 and declining from 1912 to 1982.

Table 2: The Largest American Fortunes—Dollar Values and Multiples of Median Family Wealth

1790	1803	1830	1848	1868
\$1mil.	\$3 mil.	6 mil.	\$20 mil.	\$40 mil.
4000	10,000	17,000	50,000	80,000
1875	1890	1912	1921	1940
\$105 mil.	\$200 mil.	\$1 bil.	\$1 bil.	\$1.5 bil.
210,000	370,000	1,250,000	800,000	850,000
1962	1982	1992	1995	1999
\$1 bil.	2.bil.	\$8 bil.	\$11 bil.	\$85 bil.
138,000	60,000	185,000	240,000	1,416,000

Source: Phillips (2002), Chart 1.5.

I will not attempt coverage of all the reforms and social programs initiated during the long period of movement to the left, limiting myself instead to two quotations that give both an idea of the magnitude of changes made. My first quotation, from Phillips, discusses the aftermath of the election of Theodore Roosevelt:

The Republican Roosevelt...was the first president to seriously grapple with the excesses of the Gilded Age...

The turnabout was extraordinary. Although Bryan had lost his political battle in 1896, within six or seven years many of his ideas and issues were marching forward again—and even winning—under more sophisticated Progressive leadership. Years later, Bryan's widow, editing his memoirs in

¹⁶ Nixon had even seriously considered the adoption of a guaranteed minimum income.

1925, claimed as his legacies the federal income tax, popular election of U.S. senators, publicity of campaign contributions, woman suffrage, a department of labor, more stringent railroad regulation, monetary reform, and, at the state level, initiative and referendum. (pp. 47–48).

This brief quotation makes clear that the post Gilded Age drive for reform was entirely different from the reforms, or reform discussions, that are taking place in the wake of the current crisis. This difference will be discussed further below.

My second quote from Weissman (2009, p.1) involves a jump forward in time to the administration of George W. Bush. The topic here is the repeal of legislation and regulation that had been enacted during the Progressive era and later to reign in financial markets.

Over the 1998–2008 period, the financial sector spent more than \$5 billion on U.S. federal campaign contributions and lobbying expenditures.

This extraordinary investment paid off fabulously. Congress and executive agencies rolled back long-standing regulatory restraints, refused to impose new regulations on rapidly evolving and mushrooming areas of finance, and shunned calls to enforce rules still in place.

He describes 12 instances of such deregulation; I quote the first 4 items on his list.

1. The repeal of Glass-Steagall

The Financial Services Modernization Act of 1999 formally repealed the Glass-Steagall Act of 1933 and related rules, which prohibited banks from offering investment, commercial banking, and insurance services. In 1998, Citibank and Travelers Group merged on the expectation that Glass-Steagall would be repealed. Then they set out, successfully, to make it so. The subsequent result was the infusion of the investment bank speculative culture into the world of commercial banking.

The 1999 repeal of Glass-Steagall helped create the conditions in which banks invested monies from checking and savings accounts into creative financial instruments such as mortgage-backed securities and credit default swaps,

investment gambles that led many of the banks to ruin and rocked the financial markets in 2008.

2. Off-the-books accounting for banks

Holding assets off the balance sheet generally allows companies to avoid disclosing ‘toxic’ or money-losing assets to investors in order to make the company appear more valuable than it is. Accounting rules—lobbied for by big banks—permitted the accounting fictions that continue to obscure banks' actual condition.

3. CFTC blocked from regulating derivatives

Financial derivatives are unregulated. By all accounts this has been a disaster, as Warren Buffett's warning that they represent ‘weapons of mass financial destruction’ has proven prescient—they have amplified the financial crisis far beyond the unavoidable troubles connected to the popping of the housing bubble. During the Clinton administration, the Commodity Futures Trading Commission (CFTC) sought to exert regulatory control over financial derivatives, but the agency was quashed by opposition from Robert Rubin and Fed Chair Alan Greenspan.

4. Formal financial derivative deregulation: the Commodities Futures Modernization Act

The deregulation—or non-regulation—of financial derivatives was sealed in 2000, with the Commodities Futures Modernization Act. Its passage orchestrated by the industry-friendly Senator Phil Gramm, the Act prohibits the CFTC from regulating financial derivatives.

Weissman lists eight further instances of deregulation.¹⁷

There is one important deregulation not included in this list and in fact little noticed: it is the gradual reduction in reserve requirements for transaction accounts at commercial banks, leading to their virtual abandonment. This has two aspects:

¹⁷ 5. SEC removes capital limits on investment banks and the voluntary regulation regime. 6. Basel II weakening of capital reserve requirements for banks. 7. No predatory lending enforcement. 8. Federal preemption of state enforcement against predatory lending. 9. Blocking the courthouse doors: Assignee Liability ‘Escape’. 10. Fannie and Freddie enter subprime. 11. Merger Mania. 12. Credit rating agency failure.

One is the steady reduction in the ratio of required reserves; the other is the exception of all transaction accounts other than checking accounts. Effective reserve requirements are now less than the vault cash that banks habitually keep for current transactions. deCarbonnel (2009) gives an excellent review of these ‘reforms’. He cites Federal Reserve documents that show **a.** The FED felt that reserve requirements were no longer needed since the FED stood ready to bail out the banking system if required. **b.** Reserve requirements were thought to be an unfair ‘tax’ on banks. Reserve requirements in the Euro Zone have remained at 5 percent¹⁸, but it is clear that since the Basel II agreement on bank regulation the focus is on the capital structure of banks not on reserve ratios.

The quotations from both Weissman and Phillips illustrate an important point: The laws and regulations at issue were formulated by people who were thinking in a common sense manner about what it takes for institutions to function as intended. It is not difficult to understand that allowing banks to speculate with their depositor’s money is not a contribution to the stability of the banking system. In current debates and in government actions to deal with the crisis this common sense understanding of how institutions function is often lacking.

Regarding corruption and the collusive behavior of wealth and politics I first give some quotations from Phillips that paint the broad picture, followed by a discussion of some of the more recent episodes:

It stands to reason that bribery, embezzlement, fraud, swindling, and other ‘hard’—criminal—forms of avarice rise with the heat of soaring stock indexes, market worship, and the glorification of consumption and gain.

The 1980s and 1990s saw political and governmental corruption in the United States recapture the laxity of the Gilded Age and Roaring Twenties. In the late twentieth century, however, venality was also endemic among the other Group of Seven industrial nations—Japan, Germany, Italy, France, Canada, and Britain—a moral convergence to match the contagion of market-driven philosophy....

Less obtrusive but at least as important has been the corollary corruption of thinking and writing—the distortions of ideas and value systems to favor

¹⁸ See O’Brian (2007).

wealth and the biases of ‘economic man’. In this sense, too, the eighties and nineties echoed the Gilded Age and the 1920s. (317–318).

Clearly, there is a fundamental difference in the quality of reforms that were implemented then and those that are being considered now. In the following section I mention some of the factors that plausibly account for at least a part of the difference.

5.4 The Obama Administration: ‘Change’ or Continuity?

5.4.1 The Continuity of Influence and Corruption

Barak Obama’s presidential campaign and victory raised inordinate hopes in millions of people, not only in the United States, but world wide. ‘Yes we can’ has echoed all over the globe. Politicians throughout the world are studying and trying to imitate the strategies that led to his electoral success. ‘Change’ and ‘hope’ were iconic words that Obama endlessly repeated, with ‘hope’ evidently meaning the hope for change. Anyone familiar with the literature already reviewed must have been skeptical regarding Obama’s ability to initiate changes comparable to those that followed the Gilded Age. Unlike Theodore Roosevelt, the first post-Gilded Age reform president, Obama is not supported by a strong reform movement that exists independently of him and on which he could draw to fill the key positions of his administration. Instead, through the Clinton, Bush and Obama administrations, much of the key personnel are unchanged. This is particularly true in the area of economics and finance.

At this writing, the Obama administration is in its second year in office and there has been a substantial amount of reporting, by journalists and others, on the continuing dominance of the financial sector over politics and the resulting corruption. I want to reference here just a few items from this literature and also mention some of the facts that seem most relevant.

One fact that emerges is that the influence of the financial sector, reaching back at least to the Clinton administration, is concentrated in a single firm: Goldman Sachs.

Indeed, Goldman Sachs has been nicknamed ‘Government Sachs’ by its rivals, for it always seems to have at least one of its top officials strategically placed

inside government to bend federal financial rules to its benefit. In the 1990s, for example, two Goldman foxes—Robert Rubin and Larry Summers—were inside the Clinton administration henhouse, where they helped craft the deregulation scams that enriched their former banks, before the scams caused the crash of our economy.

Following that crash, up stepped Hank Paulson, who had been Goldman's CEO before George W. plucked him off the Street to run the very bailout that has now deposited so much of our money in his bank. With Bush's demise, Hank is gone, but not Goldman. That sly Goldman Fox from the Clinton years, Larry Summers, is back, this time in Barack Obama's henhouse, where he's top economic advisor. (Hightower 2009).

The history of the recent financial crisis, which doubles as a history of the rapid decline and fall of the suddenly swindled-dry American empire, reads like a Who's Who of Goldman Sachs graduates. By now, most of us know the major players. As George Bush's last Treasury secretary, former Goldman CEO Henry Paulson was the architect of the bailout, a suspiciously self-serving plan to funnel trillions of Your Dollars to a handful of his old friends on Wall Street. Robert Rubin, Bill Clinton's former Treasury secretary, spent 26 years at Goldman before becoming chairman of Citigroup—which in turn got a \$300 billion taxpayer bailout from Paulson. There's John Thain, the [...] chief of Merrill Lynch who bought an \$87,000 area rug for his office as his company was imploding; a former Goldman banker, Thain enjoyed a multibillion-dollar handout from Paulson, who used billions in taxpayer funds to help Bank of America rescue Thain's sorry company. And Robert Steel, the former Goldmanite head of Wachovia, scored himself and his fellow executives \$225 million in golden-parachute payments as his bank was self-destructing. There's Joshua Bolten, Bush's chief of staff during the bailout, and Mark Patterson, the current Treasury chief of staff, who was a Goldman lobbyist just a year ago, and Ed Liddy, the former Goldman director whom Paulson put in charge of bailed-out Insurance giant AIG, which forked over \$13 billion to Goldman after Liddy came on board. The heads of the Canadian and Italian national banks are Goldman alums, as is the head of the World Bank, the head of the New York Stock Exchange, the last two heads of the Federal Reserve Bank of

New York - which, incidentally, is now in charge of overseeing Goldman. (Taibbi 2009).

The most dramatic incident exemplifying the clout of Goldman Sachs occurred on September 15, 2008. It was a day of hectic meetings at the Federal Reserve culminating in two momentous decisions: To let Lehman Brothers go under and to rescue AIG: Lehman Brothers were the principal competitors of Goldman Sachs, while AIG faced claims from Goldman Sachs potentially totaling 20 billion. Present when these decisions were made was Goldman Sachs CEO Lloyd Blankfein.¹⁹

That Goldman emerged more recently as the principal villain in the PIIGS crisis was already discussed in Section 3.5.

The direct influence wielded by Goldman Sachs is unique, but all industries try to obtain influence by channeling funds to politicians and their election campaigns. The most direct evidence that we have regarding the expectations that different sectors have regarding political candidates comes from campaign contributions. Table 3 totals contributions made to the Obama and McCain campaigns.

Table 3: Contributions to Obama and McCain Campaigns, Millions of Dollars

	Business	Non-Business	Financial	Health	Labor
Obama	178	106	39	19	0.5
McCain	84	11	29	7	0.3

Source: OpenSecrets.org.

The first column shows that Obama received more than twice as much as McCain from the business sector. Various factors may have influenced this outcome. For example, the McCain/Paley tandem may have seemed too erratic and undependable to many business executives. Whatever the role of such factors may have been, the huge edge for Obama certainly indicates that the business sector was not afraid of him. That Obama topped McCain by a factor of nearly 10 in the

¹⁹ This was revealed by the financial journalist of the New York Times, Gretchen Morgenson in an article on September 28, 2008. Goldman Sachs has claimed that 10 of the 20 billion were otherwise covered.

non-business sector is of course a reflection of his sensationally successful internet campaign. The financial and health care sectors are the ones where both the electorate and the candidates saw the greatest need for radical reforms; both sectors heavily favored Obama. The final column shows that within the non-business sector the contributions of labor are a comparative pittance, reflecting the decline of the labor movement.

Table 4 on the congressional campaigns also shows a substantial edge for the Democrats. I do not have a business vs. non-business breakdown, but it is clear that most contributions came either directly from the business sector via the political action committees (PACs), or from wealthy individuals with business ties.

Table 4: Contributions to Congressional Campaigns, 2008, Millions of Dollars

	House	Senate
Democrat	97	57
Republican	59	35

Source: OpenSecrets.org.

The traditional orientation of America's political parties, the Republicans towards business and the Democrats towards labor, is clearly no longer valid. Instead, the business sector dominates both parties and throws its support to one or the other as the occasion demands.

In the light of the above, little by way of fundamental reform can be expected from the Obama administration. I conclude this section by referring to an article by the former chief economist of the IMF Simon Johnson who uses a different argument to arrive at a similar conclusion.

In Johnson (2009) he notes the basic similarity of the US financial crisis with the various crises of the developing economies over the past decades. In all cases powerful actors, closely connected to and receiving privileges from their governments were able to vastly enrich themselves. Ultimately, their excesses led to the collapse of their economies. The governments of these countries, being weak and in desperate need of obtaining hard currency, which only the IMF would be willing to supply, were forced to accept the conditions imposed by the IMF. Generally this involved nationalizing the banks and allowing the bankruptcy of at least some of the oligarchs. The difference in the case of the US is that it is (still)

the world's most powerful country and has the unique privilege that its debt is in its own currency, which it can print without limit. The IMF therefore has no clout that would allow it to impose reforms on the US. Johnson's prediction is that the US will muddle along with minimal reforms and will as a result experience a prolonged depressed economy, analogous to Japan's 'lost decade'.

5.4.2 Obama's Record

As I am writing these lines, the Obama administration has entered its second year. Enough time has passed for a first assessment of the Obama record: is it more in line with his campaign rhetoric 'Change', 'Hope' and 'Yes we can' and the high minded aims proclaimed in his presidential addresses, or is it, as the earlier sections would lead us to expect hesitant to challenge special interests. Many critics, with whom I agree, have argued that it is the latter. The full argument can only be made when one compares possible alternatives to the policies that were adopted. That is the purpose of the paper as a whole. A few aspects related to this question will be discussed in this section.

I am not an expert regarding the details of the various US bailout programs, nor would such detail be very illuminating for my purpose. I concentrate on the most important aspects. Prins and Hayes (2009) estimate the total volume of the bailout, including direct payments as well as guarantees the ultimate cost of which is unknown and will be accruing over a period of years, as 17.5 trillion. A better feeling for this magnitude is obtained by translating it to a per capita basis: it is equivalent to 60,000 dollars for every adult and child. Overwhelmingly, the funds went to the behemoths of the financial industry, the automotive industry received less than one trillion and direct assistance to consumers amounted to less than 2 trillion.

Regarding the financial sector, it is noteworthy that regional banks that had adhered to the traditional practice of financing local businesses, had stayed clear of the speculative mania with derivatives and thus had not contributed to the crisis, went empty handed. As a consequence of the crisis they are bankrupting at a steady rate and a total of 200 banking failures due to the crisis have been forecast.

The American subprime mortgage crisis was the seed of the world financial and economic crisis. Households that lost their homes because they could no longer service their mortgages are the ones most severely and most unjustly

impacted by the crisis. The severity of the loss of ones home needs no elaboration. The injustice resides in the fact that many unsophisticated low income people where persuaded to buying houses that they could not afford. The financial industry profited then, and after being bailed out at huge expense to taxpayers, is profitable again. No comparable largess has accrued to their victims.

As I am writing, I checked the internet for the latest data on foreclosures and found the following:

Sept. 10 (Bloomberg) —Foreclosure filings in the U.S. exceeded 300,000 for the sixth straight month as job losses that boosted the unemployment rate to a 26-year high left many homeowners unable to keep up with their mortgage payments.

I quote from an editorial in *The New York Times*, July 5, 2009, titled ‘Not Much Relief’:

Unless substantially more relief is forthcoming, Moody's Economy.com projects that some seven million homes will fall into foreclosure this year and next. Of those, nearly 4.5 million will result in distress sales, prolonging the recession by adding to the downward pull on house prices, home equity and household wealth. And those dire projections may prove too optimistic.

Banks say they are overwhelmed by the clamor for relief and are working hard to meet demand. We have heard that before. In May 2007, a group of banks and loan servicers went to Washington to promise a solution for troubled borrowers. The problem has only gotten worse.

A more plausible explanation is that banks feel no great urgency to act. They are being buoyed by immense government support. And the Obama plan—which provides up to \$75 billion in subsidies and incentive payments to help lenders and borrowers come to new loan terms—imposes no real penalty on lenders if the modifications don't happen.

Even those cases in which mortgage modification is granted are no cause for jubilation. According to government statistics cited by Morgan Housel on the investment site Fool.com, July 2, 2009, more than 60 percent of modified mortgages are delinquent after only 6 months. A July 7, 2009 article on the same site points out that the subprime crisis has morphed into a prime crisis: As of

March, 2009, prime foreclosures are running at more than twice the rate of subprime.

Comparing both the magnitude and the effects of aid given on the one side to the financial sector and on the other to households and homeowners, the difference is striking and disturbing, both in relation to magnitudes and the effects achieved. Equally disturbing is the fact that the government has started a program that is laying the foundation for the next mortgage crisis, equal to or bigger in magnitude than the present one. The new subprime takes the form of mortgages that are guaranteed by the Federal Housing Administration (FHA). For the real estate industry this is a proposition with which they cannot lose, since the bailout is already guaranteed. No wonder, these mortgages are being pushed vigorously onto all takers, regardless of their financial status. No down payment is required and as an incentive the buyer is actually left with some cash on signing!²⁰

I will briefly survey some other aspects of the Obama administration's policies: The bailout is not only astronomically large, it is also deeply flawed. This has been pointed out by prominent economists including Paul Krugman and Joseph Stiglitz. The most complete analysis is due to Snower (2009), who also cites the earlier literature. He writes:

... there is something fundamentally wrong with the Geithner Plan—it generates a potentially gigantic amount of redistribution and, furthermore, the redistribution is completely unnecessary, since it is completely irrelevant to the job of bailing out the banks.

Another passage in Snower's paper sheds light on the politics of the bailout:

... the banks' toxic assets, along with the resulting bailouts and guarantees are fiendishly complicated and opaque. Not surprisingly, strategies that are complicated and misguided receive far less public scrutiny than those that are uncomplicated and misguided. This is one reason why the financial crisis was permitted to occur—the financial instruments were too complicated for their buyers, sellers, or regulators to understand. By the same token, the complexity of Geithner Plan also contributes greatly to its chances of political success, for now most voters don't understand the terms of the bailout. (This, I will argue, is the strongest point in its favour.)

²⁰ Warnings on the subject have appeared in *The Wall Street Journal*.

As I am writing in April 2010, the Obama administration's idea of a post bailout structural reform of the financial sector has become clear in the form of the Dodd bill which the administration is supporting. The key feature of the bill is the establishment of a 'resolution authority' intended to prevent the chaotic and panicky reactions to which governments felt compelled when faced with the imminent collapse of major banks. The aim is as laudable as the achievement by means of this bill is illusory. I quote from Johnson (2010):

Of course, officials are lining up to solemnly confirm that 'too big to fail' will be history once the Dodd bill passes.

But this is simply incorrect. Focus on this: How can any approach based on a US resolution authority end the issues around large complex cross-border financial institutions? It cannot.

The resolution authority, you recall, is the ability of the government to apply a form of FDIC-type intervention (or modified bankruptcy procedure) to all financial institutions, rather than just banks with federally-insured deposits as is the case today. The notion is fine for purely US entities, but there is no cross-border agreement on resolution process and procedure—and no prospect of the same in sight.

Why exactly do you think big banks, such as JP Morgan Chase and Goldman Sachs, have been so outspoken in support of a 'resolution authority'? They know it would allow them to continue not just at their current size—but actually to get bigger. Nothing could be better for them than this kind of regulatory smokescreen. This is exactly the kind of game that they have played well over the past 20 years—in fact, it's from the same playbook that brought them great power and us great danger in the run-up to 2008.

There have been a number of high level meetings to discuss the regulation of the global financial markets, thus far with meager results. A serious approach to this problem should include an international agreement setting up a civil court, operating under clear rules, and charged with bankruptcy resolution in the case of internationally operating firms.

6 Conclusions

Massive deregulation, inspired by the neoliberal ideology, has been largely responsible for the severity of the crisis that we are experiencing. This is by now the standard view. Much less discussed is the rejection of market solutions as soon as these imply losses rather than profits for the financial interests. In prosperous times the deregulation of markets is supported with the claim that this leads to efficiency and economic growth. In a time of crisis the argumentation is reversed; now it is claimed that the governments must come to the aid of failing entities, be they banks, enterprises or even sovereign states. The most horrible consequences are predicted if the aid is not forthcoming. The market solution for a failing firm is bankruptcy and for an insolvent state it is renegotiation of its debt. This solution was not even considered by policy makers in the case of Greece and the other PIIGS.

The massive intervention of governments on behalf of failing enterprises, banks and sovereign states is something relatively new in the history of capitalism. Analogously to the ‘military-industrial complex’, of which Eisenhower had warned, there seems now to exist a ‘financial-political complex’ in which the financial interests support political campaigns and influence public opinion via the mass media that they either own or support with their advertising; the politicians in return bail out the financial interests, when these get into trouble, using for this purpose their powers of taxation and money creation. In the wake of the crisis these policies have led to massive anger in the general population. Whether this anger will lead to real reforms, or to merely cosmetic ones, remains to be seen.

Acknowledgement For helpful comments I am indebted to Manfred Holler, Steve Keen, Ralph Musgrave, Bernd Suessmuth and unknown referees. Not surprisingly, they also differed on many issues. Their comments and my responses are in the Comments and Questions section to the discussion paper:

<http://www.economics-ejournal.org/economics/discussionpapers/2010-1>

References

- deCarbonnel, Eric, (2009). US Banks Operating Without Reserve Requirements. Published at *Market Skeptics* at: <http://www.marketskeptics.com/2009/03/us-banks-operate-without-reserve.html>.
- Dwyer, Gerald P. Jr. and Hafer R. W. (1999). Are Money Growth and Inflation still Related? *Federal Reserve Bank of Atlanta Economic Review*, 84 (2): 32–43.
- Friedman, Milton (1948). A Monetary and Fiscal Framework for Monetary Stability. *American Economic Review*, 38 (3): 245–264. Reprinted in: *Essays in Positive Economics*, The University of Chicago Press, 1953.
- Gorton, Gary (2010). *Slapped by the Invisible Hand: Banking and the Panic of 2007*, Oxford University Press: Oxford.
- Grim, Ryan (2009). Priceless: How the Federal Reserve Bought the Economics Profession, Published at *AlterNet*, *Huffington Post* at: <http://www.alternet.org/story/142603/>.
- Grünewald, Stephan (2006). *Deutschland auf der Couch*. Campus Verlag: Frankfurt.
- Hedges, Chris (2009). *Empire of Illusion: The End of Literacy and the Triumph of Spectacle*. Nation Books: New York.
- Hedges, Chris (2010). Are Corporations Using the Internet to Accelerate Our Cultural, Political and Economic Decline? Published at *AlterNet*, *Truth Dig* at: <http://www.alternet.org/story/145683/>.
- Hillinger, Claude (2008a). Science and Ideology in Economic, Political and Social thought, *Economics: The Open-Access, Open-Assessment E-Journal*, Vol. 2, 2008-2. <http://www.economics-ejournal.org/economics/journalarticles/2008-2>.
- Hillinger, Claude (2008b). How to Solve the US Financial Crisis at No Cost to the Taxpayer. *Real World Economics Review*, 48 (6): 306–311. <http://www.paecon.net/PAERReview/issue48/Hillinger48.pdf>.
- Johnson, Chalmers (2006). *Nemesis: The Last Days of the American Republic*, Metropolitan Books: New York.

- Johnson, Simon (2009). The Quiet Coup, *The Atlantic Online*, May. <http://www.theatlantic.com/magazine/archive/2009/05/the-quiet-coup/7364/>.
- Johnson, Simon (2010). Dems Might Pass Financial Reform That Does Nothing to Protect from Big Threats to Our Economy. Published at *Alternet, The Baseline Scenario*, March 25, <http://www.alternet.org/story/146179/>.
- King, Mervyn (2009). Speech by the Governor of the Bank of England to Scottish Business Organisations, Edinburgh, 20 October. <http://www.bankofengland.co.uk/publications/speeches/2009/speech406.pdf>.
- Krugman, Paul (2009). How Did Economists Get It So Wrong? *The New York Times*, September 2. http://www.nytimes.com/2009/09/06/magazine/06Economic.html?pagewanted=1&_r=3&em.
- Lanier, Jaron (2010). *You Are Not a Gadget*, Alfred A Knopf: New York.
- Liebowitz, Stan J. (2009). ARMs, Not Subprimes Caused the Mortgage Crisis. Published at *The Economists Voice*, November 2009. <http://www.bepress.com/ev/vol6/iss12/art4>.
- Minsky, Hyman P. (1975, 2008). *John Maynard Keynes*. McGraw-Hill: New York.
- Moscovitz, Ilian and Housel, Morgan (2009). It's Time to End Too Big to Fail, *The Motley Fool*, November 13. <http://www.fool.com/investing/general/2009/11/13/its-time-to-end-too-big-to-fail.aspx>.
- O'Brian, Yueh-Yun C. (2007). Reserve Requirements Systems in OECD Countries. FEDS Working Paper No. 2007-54. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1038201.
- Olson, Mancur (1982). *The Rise and Decline of Nations*. Yale University Press: New Haven.
- Olson, Mancur (2000). *Power and Prosperity*. Basic Books: New York.
- Phillips, Kevin (2002). *Wealth and Democracy*. Random House: News York.
- Prins, Nomi (2009). *It Takes a Pillage: Behind the Bailouts, Bonusses, and Backroom Deals from Washington to Wall Street*, John Wiley and Sons: New York.

- Prins, Nomi and Hayes, Christopher (2009). Meet the Hazzards. Published at *The Nation*, September 23. http://www.thenation.com/doc/20091012/prins_hayes.
- Rajan, Raghuram G. (2009). The Credit Crisis and Cycle-Proof Regulation. *Federal Reserve Bank of St. Louis Review*, 91 (5): 397–402.
- Reinhart, Carmen M. and Rogoff, Kenneth S. (2009). *This Time Is Different: Eight Centuries of Financial Folly*, Princeton University Press: Princeton.
- Shy, Oz and Stenbacka, Rune (2008). Rethinking the role of banks: A call for narrow banking. Published at *The Economists Voice*.
<http://www.bepress.com/ev/vol5/iss2/>.
- Simons, Henry C. (1934). Some Proposals for a Liberal Economic Policy. *Public Policy Pamphlet No. 15*, University of Chicago Press. Preprinted in: *Economic Policy for a Free Society*, University of Chicago Press, 948.
- Simons, Henry C. (1936). Rules vs. authorities in monetary policy, *Journal of Political Economy*, LIV: 1–30. Preprinted in: *Economic Policy for a Free Society*, University of Chicago Press, 948.
- Snowder, Dennis J. (2009). Redistribution through the Geithner Plan. Published at *VOX*. <http://www.voxeu.org/index.php?q=node/3593>.
- Starobin, Paul (2009). *After America: Life After the American Century*. New York, Viking.
- Taibbi, Mark (2009). The Great American Bubble Machine. Published at: *Rollingstone.com*.
http://www.rollingstone.com/politics/story/28816321/the_great_american_bubble_machine.
- Telser, Lester G. (2008). Securing the Means of Payment: The Ultimate Requisite of a Modern Economy. Published at: *The Economists Voice*.
<http://www.bepress.com/ev/vol5/iss3/art7/>.
- Volker, Paul A. (2009). Statement before The U.S. House of Representatives Committee on Financial Services Washington, DC, March 17.
http://www.house.gov/apps/list/hearing/financialsvcs_dem/volcker.pdf.
- Weissman, Robert (2009). \$5 Billion in Lobbying for 12 Corrupt Deals Caused the Multi-Trillion Dollar Financial Meltdown. Published at: *Multinational Monitor*. <http://www.alternet.org/story/130683/>.

- Whalen, Christopher (2009). What is Really Killing the Big Banks? Published at: *The Globalist*. <http://www.theglobalist.com/printStoryId.aspx?StoryId=7529>.
- Wolin, Sheldon S. (2008). *Democracy Incorporated: Managed Democracy and the Specter of Inverted Totalitarianism*. Princeton University Press: Princeton.

Please note:

You are most sincerely encouraged to participate in the open assessment of this article. You can do so by either recommending the article or by posting your comments.

Please go to:

www.economics-ejournal.org/economics/journalarticles/2010-23

The Editor