Book Review

Atif Mian and Amir Sufi. *House of Debt: How They (and You) Caused the Great Recession, and How We Can Prevent It from Happening Again.* University of Chicago Press. USA. 2014. 192 pages.

This is a review and a summary of some of the key arguments presented by Mian and Sufi in their recent book "House of Debt." It highlights the contribution of Mian and Sufi by showing how they have solved the mystery of why there was a huge drop in aggregate demand during the Great Depression of 1929 and also following the recent Global Financial Crisis of 2007-08. The article shows how major economists like Keynes, Friedman, Lucas and others tried and failed to provide an adequate explanation of this mystery. The key to the mystery is the huge amount of levered debt present during both of these economic crises. The solution suggested by Mian and Sufi is to replace interest based debt by equity based contracts in financial markets. This solution resonates strongly with Islamic teachings on finance. These links are also highlighted in this article.

JEL classification: B22, E12, E32
Keywords: Great Depression, Global Financial Crisis, Debt-Deflation, Levered Debt

1. INTRODUCTION

Ben Bernanke has called explaining the Great Depression (GD) the "Holy Grail" of Macroeconomics. In the course of providing a convincing and surprising explanation of both GD and Great Recession (GR) which followed the Global Financial Crisis (GFC) of 2007-08, Mian and Sufi (2014) remark nonchalantly that Keynes did not have access to the wealth of data that is now available. "House of Debt" is a tour-de-force which succeeds in solving a problem which eminent economists like Keynes, Friedman, and many others failed to do. Not only does the book explain the root causes of the GFC and GR, but it also shows how the continuing economic problems created by it can be resolved. In addition, Mian and Sufi suggest radical changes that need to be made to avoid such crises in the future. Even though the authors do not mention the Islamic angle, the main message of the book resonates strongly with Islamic ideas about finance. In particular, replacing debt and interest with equity based contracts is the key to avoiding recurrent financial crises in a capitalist system. In this review, we make some of these connections explicit.

Mian and Sufi have written a thriller; a detective story in which we pursue many false leads, rejected by empirical evidence, before identifying the culprit (interest based debt) by putting together a variety of clues. This review offers a spoiler: a summary of the main arguments. The most exciting part, which is the strong empirical evidence offered in support of all of the assertions, is omitted from this brief summary. Although Mian and Sufi modestly attribute their success to the data, this data was available to all. Their tremendous contribution lies in focussing on the relevant portions and extracting extremely valuable information from delicate and subtle clues. We review some basic elements of the explanation to be provided, before plunging into the details.

1.1. Boom-and-Bust Cycles

Both GD and GR occurred in the aftermath of an asset price bubble. What are these bubbles, and how do they occur? Well known examples are stock market and real estate, where investors optimism leads to purchases and continuously rising prices. Rising prices lead to quick profits and high returns, which attract even more investors. Eventually, prices become unsustainably high and some event which shakes investor confidence leads to sell-offs. As panic spreads, sell offs multiply, leading to rapid declines in prices. If the bubble is sufficiently large, this collapse can have disastrous consequences for the economy as a whole, as we discuss in greater detail later.

A crucial underlying element in the process is the instrument of levered debt. Bubbles can become much larger if investors and speculators can borrow money to buy the speculative asset (land or stocks). The lenders who provide this debt have apparent safety valves in terms of collateral and insurance. Thus they do not have a stake in real outcomes of investment. If equity based investment was the rule, lenders would be forced to examine more closely the nature of the investment they are making, and would usually be able to differentiate between sound and unsound investments. The debt contract creates a certain indifference to outcomes, which leads to disastrous overloading of investments in basically unsound projects. One of the core concepts presented by Mian and Sufi is that use of equity based contracts would either completely avoid, or vastly mitigate, the otherwise harsh consequences of these asset bubbles.

2. A HISTORY OF THE GFC

The book by Mian and Sufi unravels the mystery of the GFC and the subsequent GR, peeling off layers step by step, and getting to the root cause near the end. We summarise their explanation in a direct historical and causal sequence.

2.1. The East Asian Crisis

Financial de-regulation in the Reagan-Thatcher era led to a vast expansion of capital available for investment in the USA and UK. Rates of return to investments in the western world were low, and capitalists sought to open up foreign markets, where higher rates were available. In particular, a combination of carrot and stick were used by USA and IMF to force the highest growing East Asian economies to open up to foreign investments in the 1990's. As a result, millions of dollars flowed into these economies, creating asset price bubbles in lands, buildings, and stock markets. Eventually the bubble burst, leading to massive capital flight out of the East Asian countries. This sudden withdrawal of foreign capital created an economic crisis. In a strange twist of fate, this crisis eventually led to the GFC via a causal chain described by Mian and Sufi that is discussed in the next section.

Islam stresses that earnings must relate to provision of products or services. Ownership of capital is not considered a service to society; thus, earnings on capital are permissible only if the lender shares in the risk of business. Had the principle of equity based loans been followed by investors in East Asia, the resulting crisis could have been averted. However, investment was done on the basis of standard debt contracts, which guarantee returns to the investor, regardless of whether the investment succeeds or fails.

This is inherently unjust since the wealthy parties providing the loans get returns without risk, while the debtors suffer extremely adverse consequences in case of failure. This leads to dramatic increases in poverty and inequality following financial crises, as has been repeatedly observed empirically in the past few decades.

2.2. Consequences of the East Asian Crisis

Sudden withdrawal of money leads to a collapse in asset prices which depresses aggregate demand in an economy. It also threatens viability of financial institutions, like banks, which operate on trust. Central Banks respond to these crises by providing liquidity—they create high powered money and provide it to financial institutions by various means, so as to avert financial crisis. In the East Asian crisis, financial institutions had liabilities in dollars, and Central Banks did not have sufficient foreign reserves to rescue them. They were forced to appeal to the IMF, which did provide the required liquidity, but at the cost of extremely stringent conditions. All over the world, governments respond to crises by providing relief, and liquidity. To protect interests of the foreign creditors, East Asian governments were forced to do the opposite—IMF required them to raise the interest rates and taxes, and balance budgets by cutting social welfare programmes precisely when they were most needed.

The misery inflicted by painful austerity measures forced on East Asia by IMF was noted all over the world. To avoid being caught in a similar trap, Central Banks all over the world sought to increase their holdings of dollars. From 1990 to 2001, central banks bought around $100 billion annually. From 2002 to 2006, the rate of reserve accumulation just about *septupled*. Central Banks prefer to hold dollars in highly liquid, but also extremely safe interest bearing assets, rather than cash which has zero interest. Thus, there was a massive increase in demand for super-safe assets denominated in dollars.

It is worth noting that in retrospect, this was the wrong response to the East Asian crisis. Many of the proposals made in the aftermath of the crisis suggest that various types of capital controls were necessary to prevent the crisis, and also to resolve the post-crisis economic problems. At the moment, Central Banks all over the world are over-loaded with dollars, which has allowed the USA virtually unlimited leverage in using seigniorage and the inflation tax to finance wars and bailouts for the wealthy. However theories of liberalisation, the Washington Consensus, and the might of the multinational institutions prevented even the contemplation of solutions based on restrictions on capital flows, which were the root of the problem.

2.3. Reverse Say's Law Combined with Gresham

A new asset—a near money—was created to satisfy this massive increase demand for dollars by Central Banks. A new type of security which was backed by mortgages (MBS) was created. The theory was that this was a super-safe security. The MBS utilised diverse pools of mortgages, thereby lowering risks. They also utilised complex prioritised payoff structures, which supposedly provided further safeguards against failure. All mortgages required insurance, which was another guarantee against failure. The ratings agencies also gave these "private label" securities the highest AAA ratings, certifying them as super safe. These financial gimmicks deceived investors, and created a huge

demand for these mortgage backed securities, which paid much higher returns compared to the safer government issued treasury bills. As money poured into these MBS, over the five years from 2002 to 2007, mortgage debt doubled from $7 trillion to $14 trillion.

Say's law also operates in the reverse: demand generates supply. The multi-trillion dollar demand for MBS led to the creation of the supply of mortgages. Prior to 2002, default rates in the mortgage industry in USA never went over 6.5 percent historically. However, in the five year period preceding the crisis, the rules were re-written. Mortgage initiators found that mortgages could be resold to these security agencies with no questions asked. The mortgage packaging agencies in turn sold these mortgages bundled into securities, to investors seeking dollar backed securities. In this supply chain of mortgages, no one had primary responsibility to ensure that the underlying mortgage was sound. The presence of mortgage insurance added to the apparent safety of these investments. In fact, in presence of insurance, it was rational for investors to ignore the probability of default—the insurance would pay in event of default.

Over the period of 2002 to 2007, these enormous inflows of money to purchase "private label" MBS created a huge amount of "toxic" debt. These were mortgages that all informed parties knew would never be repaid. The easy availability of loans for mortgages led to a dramatic rise in values of property – an asset price bubble which may be termed the "revenge of East Asia". Eventually, defaults started piling up. In 2007, a new phenomenon was observed: defaults on mortgages occurred within months of origination of the mortgage. Default rates reached historic highs of over 10 percent. As jittery investors moved out of these mortgage-backed securities, the entire market for them collapsed. The sudden withdrawal of credit led to a collapse in values of housing to the tune of $4 trillion. With this collapse in housing values, about a quarter of the mortgagers went "under-water" ! That is, the amount of debt they owed on their houses was greater than the value of the house which had been pledged as collateral for the debt. On a narrow cost-benefit basis, it would be rational from them to stop payments on their mortgage loans and allow the bank to foreclose on their property.

The collapse of market for MBS led to the global financial crisis. It also had huge negative impacts on the US Economy, leading to a massive increase in unemployment. Today, seven years after the crisis, unemployment, homelessness, hunger and poverty are at the highest levels seen in the USA since the great depression. In addition to piecing together the story outlined above, the key contribution of Mian and Sufi is to explain exactly how the collapse of asset price bubble in housing led to an economy wide crisis.

3. PARTIAL EXPLANATIONS

In explaining the Great Depression, Keynes noted that there was a shortfall in aggregate demand. Because goods were not demanded, they were not produced, even though the economy had the capacity to produce them. This contraction in supply led to unemployment of all resources, including labour. This was by itself a major theoretical problem for contemporary economists, who did not believe that such a phenomena could occur. Low aggregate demand would lead to lower prices which would increase the aggregate demand to match available supply. Similarly, persistent unemployment was a mystery, since this should lead to reduced wages, causing an increased demand for

labour, wiping out unemployment. Keynes argued that there were price rigidities which prevent these adjustments from taking place.

3.1. Keynesian Monetary Policy

Keynes proposed two solutions to the problem. One was through monetary policy. Increasing the supply of money in hands of the public would lead to increased demand. Supply would respond by increasing production, leading to more income for the factors of production, including labour. This would reduce unemployment and lead to further increase in demand, eventually overcoming the shortfall in demand and leading to full employment. Keynes noted that monetary policy might fail to work due to the famous "liquidity trap." Monetary policy supplies banks with liquidity, which could be borrowed at low interest rates by people to purchase commodities. If they were to do so, the aggregate demand would increase, leading to increased production, employment and incomes. However, people might not be willing to borrow at zero interest rate either to consume or to invest, in which case monetary policy could prove ineffective.

3.2. Keynesian Fiscal Policy

If monetary policy is ineffective, then fiscal policy must be used. This involves the government directly employing people in productive activities or else undertaking investment projects. Direct employment of people would put the money in their pockets that they need to spend to generate aggregate demand. Once they start spending, production would pick up in response to the increased demand. This would lead to a virtuous cycle, eventually restoring full employment. Keynes compared this to "priming the pump"—an initial intervention by the government was needed to start up the process.

3.3. Fisher's Debt-Deflation

Although Keynes was entirely correct in his perception that the problem was due to a shortfall in aggregate demand, he did not have any clarity regarding how this shortfall came about. In fact there was a huge deflation caused by the Great Depression. Price and wages fell by about 30 percent, refuting the idea that prices are sticky downwards. Keynes also missed the crucial role of debt in causing the Great Depression. Irving Fisher did note the relevance of debt, and also provided a solution which was ignored and forgotten. However, the recent GFC has revived interest in this proposal, which seems very relevant and important to the current situation. Fisher's proposal involves moving to 100 percent reserves to eliminate leveraged debt generated by the fractional reserve banking. This will be discussed later.

The Great Depression was also preceded by a spectacular boom in asset prices, including the price of stocks and land. Just as in the GFC and in other boom-bust episodes, ingenious financial innovations allowed people to borrow on the basis of these inflated asset prices. Mian and Sufi write that "From 1920 to 1929, there was an explosion in both mortgage debt and instalment debt for purchasing automobiles and furniture." Instalment financing revolutionised the sales of durable goods. It became socially acceptable to buy durable goods on instalments—that is, debt against future income. According to Fisher's analysis, it was the huge overhang of debt following the

collapse of stock market bubble, that led to the Great Depression. This debt prevented the usual adjustment mechanisms from working, as we now discuss.

A shortfall in aggregate demand would lead to a reduction in prices, which would normally restore demand. In the Great Depression, businesses cut down on production and reduced prices, as required by the adjustment mechanism. However, maintaining profitability required reducing wages at the same time. These cutbacks led to decreased employment and decreased incomes for the employed, reducing the ability of workers to pay back their debts. The debt burden, fixed in nominal terms, increased as a result of this process of deflation of prices and wages. Instead of stimulating aggregate demand, deflation led to a reduction in aggregate demand, which led to further decreases in production, prices and wages. This vicious cycle was termed the debt-deflation cycle by Irving Fisher; as he put it in 1933, "I have . . . a strong conviction that these two economic maladies, the debt disease and the price-level disease, are, in the great booms and depressions, more important causes than all others put together."

3.4. Friedman's Monetary Causes

Milton Friedman also studied the Great Depression and came up with rather different causes. His ideological bias towards unregulated free markets forced him to look to some type of government failure as the cause of the depression. There was a severe contraction of the money supply in the great depression, documented in Friedman and Schwartz (2008). According to the free market ideologues, the unregulated economy works perfectly well left to its own devices. However the government failed to fulfil its function of providing an adequate supply of money to prevent the contraction. The solution was for the government to restore money supply to the levels required for economy to function properly.

Friedman's theories were put to the test by his disciple Ben Bernanke who was in charge of the Federal Reserve Bank during the GFC. He followed the advice of Milton Friedman to the letter. As the crisis deepened, the spigots were turned on and money flowed freely. Unfortunately, this was not enough to stem the tide. To Bernanke's surprise, heavy unemployment, deep recession and other adverse economic consequences occurred anyway, proving that Friedman's analysis is not on the mark. There is no doubt that the depth of the recession would have been even more severe had the monetary policy been contractionary as at the time of the Great Depression. At the same time, it is equally clear that it is not solely bad monetary policy that causes deep downfalls in aggregate demand and prolonged recessions with heavy unemployment. Nor has an extremely expansionary policy sufficed to cure the problems created by the GFC.

4. THE MIAN-SUFI SOLUTION

As we have seen, explanations and remedies from eminent economists as well as worldly and experienced men of affairs were shown to be inadequate in the GFC. In fact, we have chosen only a very small subset of the explanations proffered for the Great Depression. Large numbers of alternatives, as well as confident claims that economists have solved the fundamental problem of preventing recessions, were swept away by the Global Financial Crisis. Knowledge of the history of all the renowned heroes who failed in the quest for the Holy Grail is essential to the appreciation of the accomplishment of

Mian and Sufi. There are many pieces of the complex puzzle stitched together by these authors. Some of the key elements were grasped by the predecessors, but the big picture was not. The core element of their analysis is “levered debt” which drives financial crises. We begin by providing a deeper analysis of asset price bubbles.

4.1. Failure of the Quantity Theory

We noted that it was flows of hot money into East Asia which led to the East Asian crisis. Similarly it was an excess supply of money for mortgages that led to the GFC. Many other similar episodes are documented in history. Conventional economic theorists, including Keynes and monetarists, hold that money is neutral in the long run. That is, an excess supply will eventually translate into a proportionate increase in prices without having any real effects. However, history bears clear testimony to the contrary. The puzzle is why have economists ignored this strong and clear empirical evidence?

The reason may be a shared consensus on the views of Lucas (2004) that: “Of the tendencies that are harmful to sound economics, the most poisonous is to focus on questions of distribution.” As shown by Mian and Sufi, understanding effects of distribution is one of the keys to understanding the GFC. Lack of understanding of distributional effects led Lucas to make the embarrassing claim that “the central problem of depression-prevention has been solved” just before the GFC. The reason for the failure of the quantity theory is distributional. If the money is distributed proportionately to all, then the quantity theory might work as stated. However, if it all goes to some specific subpopulation which differs in characteristics from the general population, than the effects can be very different. In particular if it all goes into hands of wealthy investors who wish to further increase their wealth, it may end up creating an asset bubble, leading to economic collapse. On the other hand, if it goes to the hands of those who are deeply in debt, and those who have high marginal propensity to consume, it may cause an increase in aggregate demand which could lift an economy out of recession. To be effective, monetary policy needs to be targeted at the right group of people.

4.2. Bubble Creation Due to Levered Debt

Both bubbles and post-bubble crashes vary in depth and severity. If a group of wealthy investors has optimistic beliefs about the future of an asset, their investments can create a bubble in the asset price. As long as they don’t borrow to invest, the post-bubble crash will not have large effects on the economy. The wealthy have diversified portfolios, and losing even a significant chunk of some subset will not cause any harm to the economy.

The situation changes when the wealthy borrow to invest. A key insight of Mian and Sufi is that big bubbles result when pessimists and optimists both buy into the bubble. This is possible due to the combination of interest-based debt and insurance, both of which insulate the pessimists from the effects of a crash. Pessimists provide money as loan to both speculators and optimists, who hope to make gains from appreciation of asset prices. Interest based debt with collateral and insurance insulate the pessimists from the effects of a crash. In practice, during the GFC, the asset prices collapsed in the bubble, driving down the value of the collateral. Also, AIG, the largest insurance company in the world, became insolvent, and was rescued by the USA to prevent a

collapse of the financial system. So in effect, the debtors were protected from the harm caused by the collapse of the bubble.

The situation becomes much worse when the debt is levered. During the GFC, buyers of houses could acquire mortgage debts with only 5 percent or less as equity, leading to leverage factor of 20 to 1 or higher. Leverage makes available to optimists and speculators a hugely larger pool of money, which can finance a hugely larger bubble. In this case, the collapse and crisis cause substantially more damage and are prolonged over a larger period of time.

The Islamic equity contracts would forestall these problems. Those who wish to finance investors MUST participate in the risk of investments. Also, conventional insurance contracts are not permissible under Islamic law. The Islamic alternative is a cooperative insurance, which protects from individual risk, but not from systemic risk. This means that investors must take systemic risk into account under an Islamic system, which would prevent pessimists from buying into the bubble.

4.3. Shortfall in Aggregate Demand

While other authors have picked up the pieces of the puzzle described so far, the singular contribution of Mian and Sufi lies in explaining why aggregate demand falls after a collapse of the asset bubble. Their crucial insight requires looking at dis-aggregated demand. They break up the economy into borrowers and lenders. The lenders are wealthy, while the borrowers are less wealthy. Mian and Sufi provide strong empirical evidence that it is the distributional aspects of debt-based borrowing which lead to the collapse of aggregate demand. As already documented, economists tend to neglect distributional effects. Failure to dis-aggregate demand between borrowers and lenders has created a mystery which eluded Keynes, Friedman, Lucas, Fama and other eminent economists.

It turns out that the classes which borrowed money to finance home purchases have a much higher marginal propensity to consume than the wealthy lenders. Collapse in asset prices wipes out the savings of this borrower class. This is aggravated by the harsh nature of levered debt, which is structured so that the poorer class is wiped out first, before any damage is done to the protected lenders. An equity-based contract would share the losses more equally. This collapse in the wealth of borrowers leads to a drastic shortfall in aggregate demand for two reasons. First, loss of income for this class with high marginal propensity to consume leads to a high drop in aggregate demand. Second, the borrowers have not only to repay debts, but also to build up their savings back to desired levels. If the loss was shared proportionately, or borne primarily, by the wealthy lenders, the shock to aggregate demand would be much less. This would substantially reduce the magnitude of the recession.

4.4. Wrong Theories and Wrong Solutions

Failure to understand the reasons for the shortfall in aggregate demand has led to a large number of wrong solutions. For example, Keynesian monetary policy would be effective only if money was targeted to the right class, the debtors who have lost their savings in the asset bubble crash. Similarly fiscal policy is also a crude instrument, which would not easily reach the debtors. Mian and Sufi remark that fiscal and monetary

policies work but with very low efficiency, because the remedy is not focused on the source of the problem.

Similarly, Friedman's idea that expansionary monetary policy would resolve the problem fails to work. As Mian and Sufi show, the Federal Reserve pursued a hugely expansionary monetary policy, but this did not have any effect on the money supply. The reserves of the banking system increased, but the money supply did not, contrary to the theory taught in monetary textbooks in universities.

The reasons for the failure of Friedman's monetary prescriptions (which were followed by Bernanke during the GFC), are closely related to the ideas of Irving Fisher, who noticed the same phenomenon during the Great Depression. The creation of money by the banking system depends on the existence of people willing to borrow money from banks. In a situation where there is a huge amount of toxic debt, people are unwilling to borrow. Also, banks need extra care in order to lend under these same circumstances. Fisher proposed an alternative system of 100 percent reserve banking, where money creation would be fully in control of the Central Banks, instead of being controlled by the willingness to lend and borrow in the private sector. This system would permit much greater control of the money supply by the Central Bank. Nonetheless, while alleviating the symptoms this would still not target the remedy effectively.

The most important wrong solution and remedy is the one that actually drove policy decisions, and continues to be the dominant view, even though it is fundamentally wrong. This is treated separately in the next subsection.

4.4.1. *The Banking View*

The view which currently dominates decision making is different from the ones outlined above. According to the banking view, the central cause of economic system malfunctions is a weakened or impaired financial system. The crash of the asset price bubble led to a severe reduction in the assets of the financial system, which impaired its ability to lend money. Providing liquidity to the financial system would revive this ability, and thereby the economy. Mian and Sufi argue that the problem is excessive debt, and the banking view proposes even more debt as a solution, which is obviously wrong headed.

One piece of evidence offered in favour of the banking view by Bernanke is the dot-com crisis which happened a few years before the GFC. As in the GFC, there was a stock price bubble in the dot-com stocks, which was roughly of the same magnitude as the bubble in real estate prices. The collapses of that bubble only created a minor disturbance, unlike the crash of the real estate bubble. The explanation offered by Bernanke is that the financial system was more vulnerable to decline in real estate prices, and therefore more severely affected by the GFC. Sufi and Mian provide a great deal of empirical evidence in refutation of the banking view. The explanation they offer is simpler. The dot-com bubble affected only the wealthy who had invested in these stocks, and not the general public. The loss of wealth did not affect aggregate demand because this class has a very low marginal propensity to consume.

It is a strong belief in the banking view which led to a trillion dollar bailout of banks, when a much smaller bailout of the mortgagors would have effectively solved the crisis created by the collapse of the MBS (mortgage backed securities) and prevented the

recession. The bailout of the banks did nothing to address the problem, which was a dramatic reduction in the wealth of homeowners—even those who did not borrow were affected by the general collapse in housing prices. This class was the one which spends the most, and had to switch to savings to re-build their wealth for retirement purposes. This led to a dramatic shortfall in the aggregate demand and the subsequent recession. The banker bailouts led to profits and bonuses for managers of banks whose irresponsible investments caused the recession, and encouraged more irresponsible behaviour by these same financial institutions. At the same time, since the money did not reach the distressed class with the high MPC, the aggregate demand continues to be low, and the unemployment and recession continues to linger.

5. FRAUD AND DECEPTION

Asset price bubbles are often (but not always) created using fraud and deception. This occurs on many levels. On the micro level, securities are portrayed as safe, and gains are made to appear attractive relative to others. Mian and Sufi report results of a study about fraud in market of the MBS: "Another striking finding from the study was the *depth* of fraud across the industry. The authors found that just about every single arranger of securitisation pools was engaged in this type of fraud. It was endemic to private-label securitisation." The fraud here refers to mis-representations of the safety of the mortgage. Documentation was systematically missing or misleading, and mortgages were falsely classified into low risk categories. But fraud also took place in many other ways. There was information available that could have shown that these mortgages were high risk. But insurance agencies and rating agencies all looked the other way, thereby aiding and abetting the fraud.

We are often told by free market ideologues that governments are corrupt and inefficient; therefore we should go for privatisation. However, widespread and systemic corruption of a multi trillion dollar magnitude is evident in the private sector. Enron and many other corruption scandals in the private sector show that this proposition is not self-evident as often asserted. In fact, given that the same people participate in the public and private sector, it is hard to see how one sector could differ from the other in terms of corruption.

Marketing of fraudulent assets is perhaps not as serious a problem as the marketing of fraudulent theories which is essential to maintaining a system drastically tilted in favour of the top 0.1 percent. It is these false theories, such as the banking view expounded above, which sustain the system in the long run. These theories prevented economists from seeing the crisis coming, and also prevented formulation of suitable responses to the crises.

5.1. Macro-Fraud or Failure of Economists

Prior to the East Asian Crisis, economists were largely in favour of financial liberalisations. Vast movements of capital into East Asian economies were viewed with approval as means of further speeding up the growth of these economies. Even after the collapse, economists did not generally point their fingers at the culprit: surplus hot money in hands of the wealthy seeking easy risk free returns. Chang (2000) has analysed a lot of misleading causes given for the crisis such as crony capitalism, industrial policy,

government guarantees, excessive corruption and others, and has shown that these cannot be held responsible the crisis. It appears as if false theories are fabricated in order to prevent recognition of the real causes of the crisis.

A similar problem occurred both before and after the GFC. Before the GFC, none of the leading schools of macro-economic thought were prepared to entertain the possibility of a serious and systematic overpricing of the stock market and real estate due to a bubble. This is because it is one of the fundamental principles of conventional economics that competitive prices effectively de-centralise production and consumption decisions, leading to efficient outcomes in free markets. Nobel prize winner Eugene Fama was also nominated for the "dynamite prize" by heterodox economists, seeking to recognise those who contributed the most to the economic blowup of 2007. Theories of rational expectations in stock market do not recognise the possibility of bubbles. Many who were not handicapped by such theories did recognise serious problems well before the crisis. Even the US Congress, ordinarily remote from academic pursuits, created a committee to investigate the failure of economic theory to predict the crisis, and its failure to provide suitable solutions after the crisis. The charter of the committee states that:

> The chief steward of the U.S. economy from 1987 to 2006 said he was in a state of "shocked disbelief" because he had "found a flaw in the model that [he] perceived [to be] the critical functioning structure that defines how the world works." Adherence to this model had prevented him from envisioning a critical eventuality: that the "modern risk management paradigm," seen by Greenspan as "a critical pillar to market competition and free markets," could "break down."

We have already discussed the banking view, which dominated post-crisis analysis and response. Whereas it seemed obvious to nearly everyone that the way to resolve the mortgage crisis would be to provide support to people who were losing their homes, a trillion dollar bailout was given to those who collaborated in the fraud which generated the crisis. The basis of this misplaced generosity was wrong theories about how the market and the economy function. Recent research by Gilens and Page (2014) show that decisions in Congress are closely aligned with the interests of the rich and powerful elites, rather than the majority voters; USA democracy is in fact a plutocracy—rule of the rich. Mian and Sufi argued that an important contributing factor in the failure to anticipate the crisis and the failure to propose suitable remedies lies in faulty economic theories. They aim to rectify the problem with their book.

5.2. Disaster Capitalism

A very surprising aspect of this story is how democratic governments can take action extremely damaging to the interests of the vast majority of the public? For instance, in the wake of the GFC, the homeowners with underwater mortgages were hurting. It seems intuitively obvious that medicine should be applied to the wound. There was public sentiment for relief of homeowners, and some bills were passed in this direction. Yet the legislation was rendered in-effective, and public sentiment was manipulated and changed. Mian and Sufi document how leading public figures argued that we should not pay for loser's mortgages, and how irresponsible borrowers should be

made to suffer—at the same time, analogous arguments about how fraudulent bankers should bear financial responsibility for the collapse they caused were side-stepped and ignored. Sufi and Mian spend some time on exonerating the mortgagors, and explaining why punishing the bankers would not lead to economic collapse, and would be fair and just.

Klein (2007) offers a deeper perspective on this issue, suggesting that economic or political crises provide an opportunity for the wealthy, and are sometimes manufactured or exaggerated for this purpose. Regulations constrain the wealthy and powerful, while laissez-faire allows them to create wealth without constraints. Arguments of Sufi and Mian show clearly that financial crises wipe out the borrowers without affecting the fortunes of the rich. Just like war profiteering creates billions for a small minority while causing immense damage to large numbers, financial crises also strengthen the stronghold of a tiny elite at the expense of the populace. Economic data from diverse sources show how the holdings of wealth in the hands of the top 0.1 percent has been steadily increasing, while the bottom 90 percent has seen a steady erosion of wealth beginning from the Reagan-Thatcher era of liberalisation. After the GFC, which only increased the wealth of wealthy, legislation to prevent future crises has been blocked or rendered ineffective, or even reversed. Alkire and Ritchie (2007) have documented how the battle of ideas has been carried out to provide the theoretical framework to support this victory of rich.

6. CONCLUSIONS

Mian and Sufi suggest a number of remedies more precisely and efficiently targeting the debtors. Simple ones are forgiveness of debts, as well as re-writing of mortgage debts so as to bring them in line with property values (called debt cram-down). Using empirical evidence, they show that these remedies which provide relief to the mortgagors would have solved the economic problems at substantially lower cost than the trillion dollar bailout to bankers which did not prevent the recession. Their solutions retain current relevance since more than 20 percent of mortgages are still "under-water", aggregate demand is still low, and unemployment, homelessness and hunger are still at record highs in post GFC USA. However, Mian and Sufi are pessimistic about the possibility that their remedies will be adopted. The lobby in favour of the banking view very strong, and the political system is unlikely to create the consensus required for a radical change of course. Instead they suggest that the crisis which occurred is endemic to the system, and an overhaul of the system is required to prevent such crises in the future. The main reform they suggest is a shift from interest based debt to equity based financing of investments.

In the Islamic world, financial sectors are not well-developed, and so asset bubbles and similar crises have not been experienced, except on a small scale. This is why Muslims have been much more enthusiastic in embracing Western financial institutions. The analysis of Mian and Sufi shows that debt based systems are prone to crises which create oppression and misery for the masses while providing massive profits for a few. Current efforts at creating Islamic financial systems are based on attempts to imitate Western institutions within the confines of the Shariah. We would be much better of creating a genuine alternative, founded on Islamic principles. Some of the key principles as they relate to finance are the following.

Experimenters in behavioural economics have firmly established that actual human behaviour is very different in the social sphere as opposed to the economic sphere. The social norms governing transactions in one realm are very different from those of the market realm. We would not dream of putting a price on a mother's love for her children. In the Islamic system, debt is only for charitable purposes; it is not meant to be a financial instrument. The transition from providing loans as a social act of kindness and charity, to the provision of loans for profit was part of Polanyi's (2001) Great Transformation from a paternalistic and regulatory society to a commercial and market based society. Giving debt to a person in need is an expression of universal brotherhood which is much admired and encouraged in Islam. The Islamic rules relating to debt make this amply clear. One should provide relaxation in time to debtors, and penalties cannot be charged for late payments. Interest cannot be charged on debts. Debts cannot be traded or transferred. Elimination of debt as a financial instrument would go a long way towards eliminating asset price bubbles and consequent financial crises, as established by Mian and Sufi.

A second essential component of Islamic rules relating to finance is that the earning of money must be related to provision of some service. Ownership of capital is not a service to society. However participating in the risk of a business venture is a service. Thus equity based participation is a permissible way to earn a return on capital while interest based debt is not. The full implications of this position are traced in Zaman (2014). This paper also points out that current attempts to create Islamic banks similar to western banks actually violate the spirit of Islamic financial regulations, and cannot achieve the gains possible within a genuinely Islamic system.

A third essential component of Islamic teachings is that contemporary forms of insurance constitute gambling and are not permissible. Insurance is a zero-sum transaction which creates an adversarial relationship between the insurer and the insured, leading to many types of moral hazard. The GFC was caused by the use of insurance to provide the appearance of safety to fraudulent mortgages, to enable marketing them to unsuspecting investors. Islamic insurance is termed "Takaful" to distinguish it from contemporary western formats of insurance. The Takaful contract is similar to mutual insurance, where a group of people insure each other against individual failures. This is a cooperative contract which does not insure the group as a whole against systemic risk. This means that if the group as a whole buys into an asset bubble, they would not be protected. Transactions based on equity and takaful, and the prohibition of levered debt would be sufficient to provide adequate protection against the worst types of bubbles, which cause the failure of the system as a whole. Thus, as many have noted, Islamic rules of finance are of value even to those who are not Muslims.

REFERENCES

Alkire, Sabina and Angus Ritchie (2007) *Winning Ideas: Lessons from Free-market Economics*. Oxford Poverty and Human Development Initiative.

Chang, Ha-Joon (2000) The Hazard of Moral Hazard: Untangling the Asian Crisis. *World Development* 28:4, 775–788.

Friedman, Milton and Anna Jacobson Schwartz (2008) *A Monetary History of the United States, 1867–1960*. Princeton University Press.

Gilens, Martin and Benjamin I. Page (2014) Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens. *Perspectives on Politics* .

Klein, Naomi (2007) *The Shock Doctrine: The Rise of Disaster Capitalism*. Metropolitan Books.

Lucas, R. E. (2004) The Industrial Revolution: Past and Future. *The Region*, *Annual Report of the Federal Reserve Bank of Minneapolis,* 5–20.

Mian, Atif and Amir Sufi (2014) *House of Debt: How They (and You) Caused the Great Recession, and how We Can Prevent it from Happening Again*. University of Chicago Press.

Polanyi, Karl (2001) The Great Transformation: The Political and Economic Origins of Our Time Author. Karl Polanyi, Publisher: Beacon Press. 360.

Zaman, Asad (2014) Building Genuine Islamic Financial Institutions. Paper presented at Third International Conference on Islamic Business (ICIB-2014) at Riphah University, Islamabad on February 10-11.

Asad Zaman

Pakistan Institute of Development Economics,
Islamabad.