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Global Economic Crisis 2008: A Contemporary Reappraisal With An Ethical Perspective

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1. AN OVERVIEW

Economic ups and downs are not unfamiliar. These have been there for long and variously deliberated upon by many renowned economists since the days of Kondratieff¹. Typically, however, these fluctuations have been small, confined to individual economies and, of shorter durations². The 'Great Depression which struck severely Germany, the United Kingdom and the United States before it hit across many parts of the industrialized world, particularly those in Europe for four years, 1929 through 1933, was different in many ways³. However, this economic event will always be remembered for the new direction and fresh agenda it gave to economic theory as epitomized by the magnum opus of Lord John Maynard Keynes, namely, *The General Theory of Employment, Interest and Money*. Despite serious criticisms from reputed contemporary economists, economic theory did get shifted to an entirely new track after its publication in 1936. It was indeed for the first time that a policy framework for government was substantively incorporated into economics.

It may be noted that the work of Keynes together with that of Schumpeter and Kalecki in different ways laid the foundations for business cycle theory⁴. This makes one to recall that over the last six decades or so, economic analysis has incorporated the use of rigorous mathematical techniques together with equally rigorous statistical methods in building up theoretical models as well as in pursuit of a variety of comprehensive empirical findings. The objective has been to articulate evidence on how economies function, how short run predictions can be made and eventually how alternative policy packages can be designed and evaluated.⁵

Let us recall the early damages of the Global Economic Crisis 2008 as reported by Wade (2009). In the United States GDP decreased by about 6 per cent in the last quarter of 2008 on an annualized basis. In January 2009 industrial production was 10 per cent lower than a year earlier. More than 3 million houses were foreclosed in 2008 with the result that at least 10 million persons had to move to rented or makeshift houses. In December 2008 exports of Japan fell by more than one third. For Germany GDP was down by over 8 percent in the last quarter of 2008. Similar declines were recorded for Taiwan, South Korea, Malaysia, and Singapore. Unemployment increased in all countries. The total damages have, by now, been much larger almost everywhere. Table 1 below indicates the persisting decline in all parts of the world. The situation has indeed been getting worse rather than improving. What 2013 actually brings has to be watched, though the prospects do not look encouraging.

¹ Theories of business cycles have for long been a major component of economic analysis.

² Rama Mohan (2009) draws our attention to the IMF findings about 113 episodes of financial crises in

¹⁷ countries, of which 29 where only a slowdown of growth 29 were recessions and 55 showed no economic downturn. See Akin and Kose (2007)

³For a detailed account of different developments seen retrospectively see Bernanke (2009) chapter 3. ⁴Nayak (2009) discusses some aspects of this theme

⁵ For India we may refer to exercises like Pandit and Krishnamurty (2004) and Dua and Banerji (2010)

Though the rates of decline have been smaller compared to those during the Great Depression the Global Economic Crisis, 2008, has been different in many significant ways. First of all, and in simple terms, it has engulfed a greater part of the world. Nor has the crisis been preceded by a boom, as far as one can see. In a way the situation was rather bad in

	2010	2011	2012	2013	2014
World	5.3	3.9	3.2	3.5	3.5
Advanced Economies	3.2	1.6	1.3	1.4	1.8
United States	3	1.8	2.3	2.0	2.4
Euro Area	1.9	1.4	-0.4	-0.2	0.9
Emerging Economies	7.5	6.3	5.1	5.5	5.5
China	10.4	9.3	7.8	8.2	7.4
India	10.8	7.9	4.5	5.9	7.2
World Trade Volume	12.2	5.9	2.8	3.8	3.8

 Table 1: Growth Rates Across the World

Source: Money & Finance, 2014 and 2015

several respects for the preceding year or more. Moreover, since the crisis is not yet over, its time span is eventually bound to be much longer and damages far greater than we can calculate now. On top of these somewhat quantitative aspects, the roots of the recent crisis have been far more complex in many ways; some of which we may consider as follows.

The world economy has undergone vast and complex changes over the recent decades. It is far more globalized with large movement of trade flows and vastly larger capital flows of different kinds. More seriously, the new technology, particularly that for information is highly sophisticated and powerful. Finally, the role and modus operandi of the state, the relevant market systems and also the mindset of policy makers and economic agents have undergone complex changes. With all this, it is not surprising that neither theory nor the available empirical methods could keep track of new developments with any measure of accuracy. No wonder, the crisis was neither predicted nor been fully understood even after it had struck. Going well beyond money, as widely understood, the crisis has involved a far more complicated, much deeper as well as considerably wider world of finance.

It must be admitted that nearly all economic observers including academics, policy makers, corporate strategists and finance regulators failed to understand what they were witnessing. Reddy (2009), draws our attention to some of the following developments. It must be noted, however, that many in economics with socio-ethical implications have been analytically examined by Pandit (2016) and Pandit (2015) in a broad perspective. The fact that United States and some other large economies have been adding to international imbalances by persistently running large current account deficits has not attracted the attention

it should have. Not many have taken note of the rising inequalities as indicated by nearly constant real wages despite growing production. While central banks have rightly focused their policies targeting inflation, this was, by no means, enough. How subprime lending by major banks had put together desperate borrowers and irresponsible lenders was not paid enough attention. The need for financial market regulation was overlooked at several levels.

Before we proceed further, it is legitimate to ask that since much has already been written and widely discussed in many ways, do we really need to undertake another study like the present one? For many compulsive reasons I think we do. First, even though much has been written on the subject, each treatment is largely guided by a specific view of the problem and selectively chosen empirical observations with regard to the different developments. The need for a systematic and comprehensive appraisal appears to be justified. While one would, largely agree with many of the specific views of what happened, there has to be a coherent link at every stage so as to be able to build an overall picture that is consistent and convincing. In any case since the story is still unfolding on the margins we have more clues to go by and equally the need to have another look at the problem as narrated so far.

In addition, one may even argue that the crisis has prominently been the result of the moral standards having fallen short of the need, like never before. Let us mention some of the issues. More than all this "Greed is Good" is a dictum widely seen to be respectable. This is quite relevant. While we need to think in terms of political economy combining the state and the economy, we also need to think in terms of psycho-economy by combining the individual behavior and the hard economic theories. Confining oneself to partial views and in isolation of the rest is unlikely to be useful

Quite as expected, various aspects and issues relating to economic policy have been in focus in nearly all deliberations of the crisis. But policy itself, as noted earlier, is characterized by the structure of the economy, commitments of the state, architecture of markets as well as of other social institutions relevant to a given context. These have enormously changed since the seventies, as mentioned earlier. Needless to say that the mindset of economic agents related to their motivations and commitments is a basic input to what is undertaken and what is achieved. In particular, focus today has once again been on the Keynesian economics, which had earlier been dubbed as a paradigm that had put macroeconomic theory on the wrong track. Chairman of the World Bank is reported to have remarked that while no one dared to be a Keynesian a decade back no one can afford to be a non-Keynesian today.

In a way some journey back into the evolution of macroeconomic theory together with alternative combinations of relevant institutions is unavoidable. Further, all this has eventually to be connected on to the phenomenal growth of financial systems across the world. These together with their global offshoots have, in fact, been at the root of the recent crisis, as mentioned earlier. All these facets of the world economy have to be viewed as constituting one integral whole so as to be able to talk meaningfully about the problems as well as the solutions. What will get implemented and what will be effective has no simple answer. Finally, as stated

earlier, one has to be concerned about the ethical and moral issues that have been vital at all levels and all aspects of the crisis. This connects well to the term, "moral democracy" as used by some commentators. In the subsequent sections we first try to look into how it all started. This takes us well into the way financial sector works now consequent on the changes over the past three decades or so. In the next section an attempt is made to portray how the wider system is architectured. For this we first pay some attention to the evolution of economic theories which condition economic calculations and the resultant economic policy syndromes depending primarily on the way markets play the central role.

In one of the subsequent sections we take up more specifically into the nature and functioning of the state which plays a vital role in policy formulation and, more specifically, in dealing with the regulatory processes which govern markets. This is followed by a discussion of the role of ethics and morality or, more vitally, human values, which we believe are crucial in all situations. Section 6 takes a closer look at the Indian economy to see how it has been affected and what the prospects are. The final section, takes an overview of the crucial stages of the crisis, the essential links and then what needs to be done to avoid such catastrophes in the future.

2. THE FINANCIAL ARCHITECTURE

The episode of "subprime lending" in United States which triggered the crisis looks incredibly simple and therefore tempting to start with. Every householder in his or her pursuit of security and often identity seeks to own a residence. The steadily rising house prices added to the urge for housing and led to a great demand for housing loans. But, since most of the borrowers were poor and under the burden of earlier heavy loans⁶, they would not have qualified for what is referred to as prime lending. However, the rates of interest having been low for quite some time and opportunities for investment shrinking, banks were 'desperate to lend'. They were driven by the fact that the house prices were rising and would provide a safe mortgage. To quote Reddy (2009), the demand for housing market put together the desperate borrowers and irresponsible lenders. Thus, was born the phenomenon of "sub-prime lending"⁷. How good the credit rating was, is an open question; but it is commonly believed to have been poor.

It may be recalled that while offering loans banks, as usual, face different kinds of risks. These arise mainly from three sources, namely, possible default, interest rate changes and liquidity deficit. The years preceding 2008 did indeed witness a high rise in mortgage default rates, which in any case cannot always be prevented even if the deal involves mortgage based securities (MBS). When the prices of the mortgage items themselves go down, which indeed

⁶Semmler and Bernard (2009) and Schiller (2007) note that the debt service in US and several other countries was as high as 15 per cent of household disposable income due to the high interest rates that had prevailed in the 1980s and 1990s.

⁷ Reddy (2009) tells us that once the stage was set, as it was, anything other than subprime lending could have served as the trigger; quite correct

did happen, the problem is greater. It also needs to be noted that liquidity risk depends not only on the quantity of assets held but also the pattern of funding. Long term loans cannot be backed by short term borrowings beyond a point.

It hardly needs to be said that no financial institution can work by itself in isolation. Much depends on how different institutions are linked and what commitments they have to each other. For, the simple fact is that A's assets are B's liabilities and each of these have a pattern of maturity, risk base and volume composition. This unavoidably takes one into several aspects of financial architecture. More specifically, we need to look at the critical features of the New Financial Architecture (NFA), which has taken shape all over the world, particularly in the US and other advanced countries, over the last four decades or so.

A widely held view about NFA is that a good part of it lacks transparency. Crotty (2009) argues that NFA is not firmly based on an agreed theory. In many cases it creates perverse incentives which can lead to a crisis⁸. Financial engineering (or, innovations) have given rise to complex securities like collateralized debt obligations (CDOs), which are hard to understand and harder to evaluate even for experts. In this context we may note that "A mortgage backed CDO is a complex security that converts cash flows from the mortgages in its domain into tranches or slices that have different risk characteristics", says Crotty.

NFA did indeed permit commercial banks to use such devices to get rid of their risky incomes are transferred as payments. In this way risk gets transferred to pension funds and similar other agencies. Semmler and Bernard (2009) assert that despite available information, default rates were deliberately ignored. Eventually, the highly globalized financial markets engulfed many financial agencies at the international level, particularly those in Europe and Japan. At all levels and everywhere participants, regulators and policy makers chose to ignore the asset bubble that was in progress.

The underlying economic process was indeed circular. For, banks persisted on issuing loans against the mortgage of housing and other real estate assets because their prices were going up. Prices kept going up because the demand for houses kept rising. The herd behavior apparently governed the market movements. However, what goes up must come down is after all the law of nature. The risk factors did eventually outbalance the return and the housing market crashed with a massive downturn in prices. But before this happened banks had already corporatized their risky assets using OBCs and MBSs as windows. A good part of their assets got sold worldwide engulfing markets in UK, Germany, Japan and other countries as well as some in the US itself. This way the seeds of the crisis were sown worldwide.

Reddy (2009) notes how this process worked in three stages; starting with the crisis across financial sectors; engulfing the real sectors at the second stage and globalization at the third one. At each stage the impact has been circular and vicious. Involvement of international

⁸ For details, see Chacko et. al., (2006), and Das (2006). For issues specific to this crisis, see Reddy (2009)

agencies like the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (World Bank or, WB) could not have remained aloof, for good or for bad. How far the emerging market economies (EMEs) and erstwhile less developed economies got affected to which we may turn later, is important.

The United States has a long record of small commercial banks frequently getting out of business. However, this led to no major problems because all assets used to be insured and all activities regulated. The question of a crisis did not arise. The fact that the recent crisis started with very large commercial banks stands in sharp contrast. Rest of the financial sector indeed came in much later. A widely held view is that this is because the large banks had undertaken what has been labeled as "shadow banking", by indulging in excessive investment services avoiding the prevailing regulations. This was possible because of the repeal of the Glass - Steagall Act⁹ at the end of the century.

How far and, if at all, commercial banks should be allowed to underwrite securities has been under debate for long. The main issue has been about how far the perceived conflict between this function and the normal functions of a commercial bank are valid. There has also been the question of the competitive market strength of commercial banks. It all started in the US with the adoption of the Glass-Steagall (GS) Act in 1933 under which commercial banks could not undertake investment banking. The Act was modified in 1989 to permit a cautious underwriting of corporate securities to a limited extent. However, it was in November 1999 that all provisions of the Act were repealed through the Financial Modernization Act. What have been the expert views? Let us report one as follows.

"....Initial evidence on bank entry into the securities underwriting market suggests a pro-competitive effect. (But) whether this remains the case in the longer term remains to be seen......" Gande (2008) Page 186

There should now be no doubt about the disastrous consequences of steady deregulation of the financial sector illustrated by abolition of the GS Act.

Another important issue relating to the way financial system is structured and functions relates to the notion of a lender of last resort (LOLR). It is in this context that the fragility of the banking sector, particularly in the United States, has received considerable professional attention. One may refer to the work of Vives (2008) who strongly emphasizes the need for various types of regulations to be put in place. Steps must be taken, in particular, to ensure that incentives to take large risks are minimized. The need for a LOLR in the system is, in any case, necessary. Bhaduri (2009) effectively draws our attention to the foregoing problem being more directly relevant to the entire financial system. The fact that the network of credit interdependence across institutions is circular rather than vertical cannot be ignored. This itself is due to the fact that innovations built on a capital base need to be ultimately get supported by

⁹Patnaik (2009) describes this as promotion of theft by abolishing the anti-theft laws.

a lender of the last resort. Every member institution of the network has assets which are liabilities elsewhere. In a way one should not get caught up in the individual entities losing sight of the total system.

The crisis has primarily been a network crisis (Shang 2009, 2010). The emphasis is quite correctly on the absence of regulation as the root cause of what happened. Quite clearly, the need for a basic effort to reform the entire financial architecture is the most urgent. Some items on this agenda that have been suggested include total government ownership of the banking system (Chandrasekharan, 2009); downsizing of the existing large banks (Subrahmanian and Williamson, 2009) and the creation of an unavoidable link between financial institutions and an overall monetary authority (Bhadhuri, 2009). We shall return to this later but it appears necessary to say that whatever restructuring is taken up must adequately get coordinated with the nature of the state, structure of the economy and the prevailing technology. Clearly, all suggestions need to be critically evaluated because it is not just the finance world; many other entities in the system have to be recast.

3. INSTITUTIONS, ECONOMIES AND THEORIES

There are two closely related issues which have been widely debated since the global crisis struck some years back. One is about the ability of economic analysis to explain how such a crisis could occur. The second relates to the appropriate policy that is relevant to both ex-post analysis as well as ex ante anticipations. Frequently the debate does turn to ideological issues which bring in the nature of institutions; prominently involve the market and the state. Whichever way one may see it two basic issues relate to the role that the state must play and how much and in what way society may depend on the market. To address those issues, however, and to put different issues in the right perspective we need to delve a bit into the evolution of economic theory. For, it is necessary to know how major economic developments took shape over time and what role the relevant institutions played. Since a detailed treatment is not feasible, we shall only highlight the most important landmarks.

It is tempting to turn once again to Keynes and his *General Theory*. This is because, as highlighted earlier, it was this work which, on the one hand questioned the ability of the market to ensure full employment and on the other, emphasized the necessity of state intervention. Both of these broke away from the established doctrines at that time¹⁰. Keynes' work was greatly motivated by the way the Great Depression affected human lives. No wonder, most discussions on the recent crisis tend to start with the Great Depression as discussed earlier. However, his reputed contemporaries were not impressed by the ideas put forward by Keynes. For them it was merely an exaggeration of possible disequilibrium caused by wage-price rigidity. The problem was, indeed, much deeper.

Elaborate early explanation by Modigliani (1944) and Klein (1949) clarified matters by posing "effective demand" as the central focus. Nonetheless, it did not gel sufficiently well

¹⁰ The seminal work by Klein (1948) was appropriately titled as *The Keynesian Revolution*.

with notions related to the Walrasain equilibrium¹¹. We had to wait for Clower (1965), Leijonhufvud (1968), Malinvaud (1977), Hicks (1974), and Benassy (1982) to give us alternative ways of looking at the market mechanism, particularly, in relation to output and employment. The central objective of these studies has been to down play our faith in the price adjustment process as a corollary of which Keynes had highlighted the importance of effective demand. The end state is indeed one of equilibrium, but not Walrasian. The notion of equilibrium itself has to be understood as a more general phenomenon.

The emphatic assertion of Keynes that if the capitalist system had to survive it must articulate and implement activist monetary and fiscal policies because markets, by themselves are not dependable in this context turned out to be correct and timely. For, the quarter century beginning with the end of the Second World War in 1945 during which the Keynesian paradigm was widely adopted as the appropriate policy framework in most industrialized countries is often referred to as the golden age of capitalism. It is over this period that developed countries in Europe and North America together with Japan went through a phase of high growth, near full employment, major technological achievements, expansion in trade more or less stable currencies, low inflation and many other things one wished for. This is remarkably well brought out by the average rates of growth and unemployment for eight

major economies¹². These are as follows. It is also shown that there was no major recession between 1945 and 1973.

		-		
Period	Growth Rate	Unemployment Rate		
1920-1938	2.2	7.5		
1950-1973	4.8	2.6		
1973-1990	2.9	5.7		

 Table 2: A Historical Perspective

Over the recent decades growth has typically been lower and unemployment higher, but let us not get into this class of issues any further.

By about the end of the seventies the free market and largely open economies like Taiwan, South Korea, Thailand, Singapore and Malaysia, in East Asia, were able to record an impressive economic performance in comparison to India and China, which remained glued to growth rates below 5 per cent with state governed planning growth policies; however, in two different ways. This put in question the role of the state in promoting prosperity. It was about the same time that financial markets with their innovations came to the center stage and

¹¹We need to express gratitude to Hicks who brought in the role of economic policies using the IS-LM framework as widely elaborated in text books. Hicks himself, however, later felt that this was an over-simplification which concealed a good deal.

¹²These include United Kingdom, United States, Canada, West Germany, Sweden, France, Italy and Japan. See Dow (1998), pages 33 and 34.

blossomed all around. The expanding information technology reinforced this process further remarkably well. The new way of looking at economic issues; eventually leads one to the **"Neo-Liberalism**" paradigm with its great faith in capabilities of the market system.¹³.

The emergence of a yet another paradigm in macroeconomic theory and its startling implications in the early seventies brought into focus a new way of looking at how economic agents use information in response to given situations. In other words, and in simpler terms, this is basically concerned with how economic agents form expectations when they decide about future. This gave birth to what is widely known as the Rational Expectations Hypothesis (REH)¹⁴. REH gave rise to a remarkably new strand of macroeconomics, known as New Classical Economics (NCE) challenging practically every view that prevailed then. In the present context the major implication of NCE was that there was no role for state policy; there was indeed, no way the market outcomes could be influenced.

This went many steps beyond "monetarism" as articulated during the fifties largely by the Chicago School led by Milton Friedman. Whereas monetarism and the associated neoclassical macroeconomic theory did provide some space for policy in the short run, NCE deleted even that. There was no role for economic policy of the state either in the short run or in the long run. As per the Phelps-Friedman hypothesis put forward in 1968 every economy had to live with a certain rate of unemployment christened as the non-accelerating inflation rate of unemployment (NAIRU) even in the short run. By the onset of the eighties Keynes was mentioned in class rooms in US as one who had put macroeconomics on the wrong track. Interestingly, this was not the case in Europe where the basic Keynesian economics continued to be discussed seriously with careful contextual qualifications and modifications.

Quite as expected, at the political level there was a clear shift in favor of the so called free market mechanism with which the state need not interfere. The stage was dominated by two stalwarts in political leadership circles supporting this ideology in the United Kingdom and the United States.¹⁵ Breakdown of the communist regime in the Soviet Union in the late eighties and a shift in the political economy system in China at the same time gave an unprecedented impetus to an ideology which one may, in the present context, call as "market fundamentalism". Why is all this discussion relevant to the crisis under consideration here will be taken up now.¹⁶

4. ECONOMIC POLICY, FINANCE AND THE MARKET

¹³ This may be further followed up in Harvey (2005).

¹⁴ The basic paper elaborating on REH written by Muth in 1961 remained neglected for nearly a decade. For a detailed discussion on REH and its implications reference may be made to Begg (1982)

¹⁵ Ms. Thatcher headed the Conservative government in UK and Mr. Reagon led the Republicans in US.

¹⁶ Attention may, in particular be drawn to Wade (2009), Patnaik (2009), Bhaduri (2009), Vakulabharam (2009) and other papers published in the special issue of *Economic and Political Weekly* devoted to the Global Economic Crisis.

Since the society consists of agents who have different social affiliations, economic conditions, capabilities and, of course, the associated vulnerabilities, it is far too complex for outcomes to be left entirely to the pure market system. This has come to be more true and analytically more acceptable today than it was a century back, partly because in those times markets functioned more or less in isolated local environments as a result of which they were simpler and better understood. The process of adjustment was easier than it can be today. Without going into details let us recount some of the vital factors that appear to be relevant in the present context in view of how the world is structured today.

- a) Even when the market happens to be a desirably effective institution there has to be some agency which sets the rules of the game, enforces them and modifies them whenever required to allow for unavoidable changes as best as possible. No agent can be granted the power and freedom which may typically lead to exploitation and misallocation of resources.
- b) If, for some unavoidable reasons things do not work out as intended or desired there has to be a refuge of the last resort to take care of the damages.
- c) Invariably, there are many markets and these are usually interdependent. To ensure that these work properly the need for co-ordination which may not emerge from within the market system cannot be overlooked.
- d) Society is typically characterized by a high degree of inequality in resources across agents and groups of agents. While the market may be quite efficient it may usually tend to increase inequalities. Over longer spans of time problems get bigger if classes of agents do not, at least, have enough social and economic mobility.
- e) Several components of the economic system cannot, in any case, be covered by the market mechanism. Besides the well known case of public goods and utilities an excellent case today involves activities related to environment.
- f) Finally and most significantly, agents are endowed with imperfect, inadequate and more likely asymmetric information which leads to socially perverse outcomes. The associated problem of moral hazards may not be eliminated but its damages need to be minimized.

Turning now to our main concern we may recall that traditionally much of macroeconomic analysis moved around the saving-consumption choice of households and the investment behavior of producers. The fact that savers and investors were different created the need for intermediation by financial institutions. It is this segmentation of the two decision makers which indeed gives legitimacy to the Keynesian notion of effective demand¹⁷. Typically, savings could be held either as deposits with banks and similar agencies or as government securities. Over time with industrialization getting accelerated increasing space came to be occupied by corporate bonds and equities typically at the national level. This is how the situation prevailed till the late sixties or so. The subsequent decades have witnessed rapid globalization of capital movements recent decade. This has opened the economy to new sources of risk over the recent decades.

¹⁷ In somewhat primitive economies where saving decision were guided by investment decisions, e.g., a rural economy, the question of effective demand was not relevant. Say's law could be taken to be valid.

The emergence of a large financial system with its diverse functions has by itself been a welcome development. The problem has, however, arisen with this having gone hand in hand with market fundamentalism, as it were. Let me elaborate on this. A basic point that needs to be taken into account with regard to markets is, as mentioned above, the role of information. The critical assumption underlying the proposition that market outcomes are efficient has been that all agents have full information. However, in today's complex world this is far from the truth. Information is not only limited but also widely asymmetric across agents. The problem may not be severe for certain types of goods and many of the services. But, in case of financial markets this is enormously more compounded by the inherent uncertainty that characterize them.

During the last three decades or so, the process of the state getting passive with regard to economic matters and the economy getting increasingly dependent on the market process has been excessively fast. Wade (2009) specifically contrasts the big-bang approach of the western countries with the gradual and careful strategy adopted by China in assigning an increasing role to the market processes¹⁸. Taking this line of reasoning further some commentators have seen the global crisis as a blessing in disguise in so far as it should give a wake-up call to the neo-liberalists who now tend to dominate decision making in different spheres at the highest levels. How far we may depend on the effectiveness of the wake-up call is not obvious.

The central assertion so-called Neo-Keynesian theory under the turns out to be that money illusion pervades all segments of the economy. For central banking the implication is that it must focus on stabilizing the financial sector and not the rate of inflation or the rate of interest. This is powerfully put forward as follows.

".....Central banks should refrain from their current way of operating...... Their main objective should not be the price stability but financial stability, and, their main tool should not be the interest rates but a proactive policy towards understanding systemic risk......"

Tymoigne (2009), page 249

It is further argued that,

"interest rates are grossly ineffective to manage the economic system and may promote economic fragility, inflation, speculation and misdistribution of income and economic recession." (op. cit.).

Looking at the damages which have taken the form of unemployment, acute distortions in the distribution of income and wealth Subrahmanian and Williamson (2009) point out how these social costs are taken by the neoliberals to be small relative to the benefits of the free

¹⁸ Where India stands in this comparison has not been commented upon but we know that the process of change has been gradual.

market system. More broadly the bigger damage is the decreasing commitment to a strict adherence to and consequently the effectiveness of the prevailing institutional norms. As stated earlier, the way normal commercial banking was converted into investment banking after the Glass-Steagall Act was repealed is a good example of what was deliberately and consciously done to cause the crisis. This is, in general, how most regulations were abandoned. In simpler terms and normal circumstances investment, real or financial, must be motivated as a process leading to social welfare first and individual gains later. But the way it usually functions does not properly reflect this role of the financial sector as an intermediary.

With the emergence of a rather large rent seeking class which focused on individual gains as the primary objective; social welfare came to be only secondary. And, this was largely possible because the regulatory system broke down¹⁹. Could the free market system take care of the situation? It is therefore tempting to get back to the commonly held view that an unhindered competitive market system is reliable., efficient and optimal. This may, indeed not always be so, if we go by reputed experts on finance theory. One area quoted in this context is that related to dynamic limit order markets. No need to say that this is basic to how financial markets usually function. We are specifically told that,

".....The process of price formation in dynamic limit order markets differs fundamentally from sequential Walrasian market and from dynamic dealer markets. The Walrasian market clearing price reflects an aggregation of supply and demand throughout the economy. In contrast, investors arrive and trade asynchronously in a limit order market; so, there is no unique market wide market clearing price....."

Parlour and Sippy (2008), page 66.

With respect to competitive equilibrium in the banking sector the situation is not different. It has, in fact, been emphatically pointed out that the prevalence of switching costs and networks on one side and, asymmetric information on the other render the standard competitive model unsuitable. More specifically, the assertion is that,

"....The standard model of perfect competition is not appropriate for the banking sector. Financial intermediation arises, in fact, in response to the incompleteness of the market. The main sources of friction in banking that lead to imperfect competition are switching costs and networks, particularly in retail banking, and asymmetric information, particularly in corporate banking......"

Vives (2008), pages 442-443

On top of it all, we see that policymakers apparently convinced of the free market philosophy have not really stuck to it. For, resources to which the ordinary tax paying citizens are entitled were conveniently diverted to bail out big financial institutions. After all, one cannot have it

¹⁹ See Prasaud (2009) for more on this class of issues.

both ways. Is it puzzling that this was done by governments run by advocates of the free market?²⁰

5. ECONOMIC IMPACT ON INDIA

How a particular economy is affected by international developments depends on the type and strength of its linkages with the rest of the world and also on its own internal strength and structure. It is in the latter context that Nachane (2009) brings in the "decoupling hypothesis" advocated by reputed academics and influential policy makers in the emerging market economies (EMEs). While we need not get into details on this subject, we may recall some salient point²¹. The main contention is that many of the prominent EMEs have had an impressive growth because of their inner strength and are unlikely to be adversely affected by the crisis in the large western economies. It is further argued that these EMEs would, in fact, help the western economies eventually to get stabilized. How far this is right or wrong depends clearly on the nature of linkage, mentioned above and also the relative strength of domestic factors in promoting stability and growth. As expected, India and China figure prominently in this context.

Turning to linkages these relate broadly to three areas; namely, a) trade in merchandise and services, b) capital flows and c) financial markets. The last one can further be seen as working through actual flows as well as asset market impacts. With regard to trade it is important to note that for countries like India the services or the invisible part remains important even though less so now in view of the large remittances by Indians working abroad. With respect to merchandise it needs to be said that recession in major countries reduces the demand for exports which in turn will also have an adverse impact on industrial activity. A downturn in imports also is quite likely. It is necessary to note that over the last decade or so there has been a significant change in our trade profile with increased dependence on imports as necessary for growing exports.

One major question, that arose a decade back related to whether the then slowdown was caused by the crisis. Rakshit (2009) argues coherently that this was not the case. It is, of course, admitted that in the post crisis years, it has been remarkably difficult for the economy to get back to the earlier growth track. But the initial slowdown then has to be traced to domestic factors including specific policies. While one can make some inferences, an exact separation of the two effects is difficult.²² With the impressive growth now the content of the discussion has substantively changed.

It may be helpful at this stage to mention some relevant aspects of how the Indian economy is structured.²³ First, over the recent decades overall GDP growth has increasingly

²⁰ This has been forcefully pointed out by Krugman (2010a).

²¹ For more on this we refer to Nachane (2009) and Akin and Kose (2007)

²² A detailed and competent analysis has been carried out by the Reserve Bank of India. See RBI (2010)

²³ We need not go into details but those interested may look at various contributions to Pandit and Krishnamurty (2004). While some parameters may have undergone changes but the linkages would roughly be the same.

come from the services sector. The direct contribution of agriculture has decreased in proportional terms but this sector continues to prop up both supply as well as demand in a strong way as indicated by a recent study (Mani, Bhalachandran and Pandit, 2011). It is also argued that reduced public investment in agriculture has adversely influenced the overall GDP growth. This is being mentioned because the current slowdown in India's GDP growth has partly to be traced to lower and unstable growth in the agricultural sector. One may also state that industrial growth, particularly in the organized sector has been shown to be demand driven²⁴ (Mani, Rao and Pandit, 2012).

With regard to links with the international economy, needless to say that the relevant magnitudes have enormously increased under India's new economic policy regime. Exchange rate is flexible but the currency is not yet fully convertible²⁵. The very recent developments have seen the rupee substantially depreciating despite a fairly long record of stable adjustments in the short-run. Public investment is no longer as dominant as it used to be but it does remain important for growth, particularly for providing better infrastructure.

Turning more specifically to the impact of the crisis, the general view is that the impact has been rather small for a number of reasons. Rakshit (2009) argues that slowdown of the Indian economy

"...had started at least six months before the outbreak of the US financial turbulence and considerably ahead of the surge of September 2008..."

This is indicated, he goes on to explain, by the lower annualized growth of the index of industrial production. The slowdown itself was initiated by the slower rate of private investment, lower foreign remittances and a decline in exports – all preceding the crisis. The slowdown is, in part, attributed to wrong policy decisions e.g., excessive liberalization of foreign institutional investments (FIIS) and related heavy debt burden that the economy is carrying. This has, in part induced lower public investment which has, in turn, a slowing down effect on private investment. Whatever judgment one may make on the foregoing issues it is clear that the impact of the crisis on India has fortunately been low. Without going into details we may mention the possible reasons as follows.²⁶

- a) A countercyclical monetary policy which prevented asset bubbles,
- b) High priority for a comfortable level of foreign exchange reserves,
- c) Careful attention meant to prevent high inflation,
- d) Proper regulation of banks with focus on retail functions (Rajan and Pandit, 2012),
- e) Good saving investment balance though at a low level. The situation relating to the earlier years of this decade seems to have substantially changed in recent years towards higher growth but the financial sector is by no means healthy.

²⁴ We are quite sure that this is even more true of the services sector.

²⁵Nachane (2007) had argued correctly against this much well ahead of the crisis.

²⁶ See Mohan (2009), Reddy (2009), Nachane (2009) and Rakshit (2009) for more details.

6. THE ETHICAL PERSPECTIVE

Innovations in financial markets were intended to promote reduction of risk and its structure across the economy so as to raise human welfare. We have this from no one less knowledgeable or less influential than Mr. Bernanke (2008) himself when he said

"Our goal should be a financial system in which innovation leads to higher levels of economic welfare for people and communities at all income levels."

Yet, the quantum of risk has actually got more accentuated – quite the opposite of what was intended. All this because the system allowed it to happen. Krugman (2010b) argues that the financial system needs to be cut down to a size consistent with the lower role it should be intended to play. While one cannot but agree with these views the bigger question is about the route society must take and, equally important, where to start from. At the outset, it is necessary to examine once again how and by how much the real economy is influenced by the financial sector (Krugman, 2010c). Ultimately a sensible balance must be struck between the roles assigned to the market, particularly to that for finance, and the state. Fundamentalism of any kind cannot be relied upon for the smooth functioning of the system to promote human welfare. That the need for a code of ethical behavior at all levels is basic can hardly be overstated. Let us explicitly turn to this set of issues.

The problem does not get resolved just by agreeing that that a proper balance must be struck between the market and the state. It only starts with questions relating to what the proper balance has to be and how it can be achieved. Clearly, such a balance must be dynamic so as to be able to adjust to the continuing technological developments and institutional innovations. However the need for ethical commitments of both market players as well as regulators is very crucial. The basic questions that remain are what the state should do and what should be left to the market at one level and in each case clarity about what is and what is not right. These are deeper ethical questions which have confronted those involved with policy formulation and implementation. Though these have been there for over five decades from Arrow to Sen²⁷ a proper incorporation into the mainstream economic analysis in classrooms and corridors of policy formulation are still awaited.

It is rather surprising that in the voluminous discussions on the economic crisis, issues relating to ethics and morality have not received an explicit attention as they should have. For example, clear reference has been made to social democratic vision of a moral society²⁸ but, not adequately elaborated upon. One notable exception has been that of Reddy (2012) who deals with ethical issues without explicitly using the usual terminology. The problem has to be seen in terms of the individuals who should be morally motivated; and also, with regard to the proper design of the overall system which governs decision making in different ways. In

²⁷ More specifically one may refer to Arrow (1950) and Sen (1987)

²⁸ See Wade (2009)

other words, the system must ultimately be guided in every way and at every level by the need to ensure the collective good. How the ethical dimensions are particularly vital to finance was cogently brought out in a conference on "Ethics and the World of Finance"²⁹. The participants included top echelons of nearly 30 leading financial institutions, a number of top regulators and several academic specialists in finance, management and, economics³⁰.

Why are ethical issues far more relevant to financial markets than these are elsewhere provokes remarkably important observations. These include the following. First, it must be noted that the very basis of financial systems is **TRUST**. Ordinary citizens trust a bank when they deposit money or insurance companies when they buy a policy and so on. As a result, financial institutions deal with resources that belong to the common man. These have to be dealt with cautiously as sacred entities. This is very much like what is generally said about public funds with which one has to be more careful than with private personal funds. Second, it is widely believed that financial systems have lately been guided by the disastrous presumption that **"profits are private whereas losses are public"**. It may be shown, as has been done by Sivakumar and Krishnaswami (2012) how enlightened religious codes of conduct are relevant to economic crises like the one under discussion.

In different ways these observations bring out the same principles, as they highlight the great role for ethics. To provide a pious setting and to highlight how ancient the problem is, Chancellor of the Institute (Sri Sathya Sai Baba) emphasized why risky ventures must be undertaken only with consent and in consultation of all concerned agents. Drawing upon Mahabharata The principle was explained in terms of the suffering that Pandavas, had to face when their eldest brother Yudhishtira gambled without the permission of either his brothers or his wife, who was in fact put on stake. This was clearly unethical and the consequences could not have been less disastrous. It has not been very different in the present context, to which we turn now.

Major ethical faults of the financial sector in its functioning have been sharply highlighted by Reddy (2012), as mentioned earlier. It is argued coherently that if the financial system has to serve its purpose of raising human well being it must ensure that it values the trust that the society places on it. This has, unfortunately not been the case recently. We may note in this context that

(a) Those involved in this sector have enjoyed disproportionate gains at the cost of the common man.

(b) Global players in financial markets resorted to questionable practices.

(c) The general public was left in the dark about irregularities in the functioning of large financial intermediaries.

²⁹ The conference was held at the Sri Sathya Sai Institute of Higher Learning (SSSIHL) on August 28-29, 2009. We shall refer to the publication of the proceedings as SSSIHL (2009)

³⁰ These included the Governor, RBI, former Governor, RBI, Deputy Chairperson SEBI and Chairman, IRDA. See Subbarao (2009), and Reddy (2011) Ch. 2

(d) Credit advances were invariably motivated by pure commercial advantages rather than great social causes.

(e) There was resistance to agreed regulations, and finally,

(f) Existence of nexus between political, financial and the corporate segments for mutual benefits.

All of these assertions are well substantiated by facts.

One is puzzled to see how basic ethical norms were violated all along. A review of major developments reveals amazing facts particularly with regard to market regulations. Some of these are worth a mention. First, regulators allowed large banks to measure their own risk and set their own capital requirements, which, in fact, permitted them to take excessive risks³¹. Second, it is well known that in financial decision making a due attention is paid to prescribe a safe default rate. But somehow this key precaution was deliberately ignored³². A deeper and wider problem is as to how shadow banking came into existence. As mentioned earlier this was done by abandoning the erstwhile regulations under which simple commercial banks were not permitted to undertake investment banking³³.

Prasaud (2009) rightly asserts that "the key purpose of bank regulation should be to internalize (and therefore minimize) the wider social costs of bank failure." In the present case the market was manipulated to encourage and permit "greed". No doubt, today functioning of the economic system including decision making for the state is largely motivated by the so called *Mahamantra:* "Greed is Good". Greed has become not merely respectable but even desirable. Where are we going? It is easily forgotten that the system is openly cheating the society. How one behaves seems to depend merely on what side of the wall one is located. How the new global financial system has adversely affected the poor in developing countries is clearly highlighted by Bagchi and Dymsky (2007).³⁴

Of the several manipulations undertaken one that takes us aback relates to how credit ratings were mapped into risk weightings which, in turn, led to incentives for creation of risky loans. These were combined in various diversified portfolios which improve credit rating without lowering the yield³⁵. There are many similar ways in which bright finance experts used their innovative skills. All these have rendered products hard to understand even for knowledgeable people. This has even made it easy to resort to accounting and other frauds³⁶. What is most deplorable has been the apparent consensus in the profession for violating basic moral and ethical norms. This leads to a wide belief that the failure was deeply systemic

³¹ See Crotty (2009)

³²Semmler and Bernard (2009)

³³ Repeal of the Glass-Steagall Act in 1999 amounted to promoting unjustified deregulation.

³⁴ See Jha (2009) for a review article.

³⁵ See Prasaud (2009) for more on this.

³⁶ Black (2009) describes the results as epidemics of accounting frauds and more deeply "criminogenic environment".

leaving no scope for a fair deal consistent with the basic rules and social commitments. The victims have ultimately been common and often deprived citizens across the world.

The foregoing account of how and to what extent violation of ethical norms were motivated indicates a number of things. First, it is clear that the recent global crisis was considerably, if not entirely, caused by unprincipled search for business by banks in violation of ethical norms. Second, and more deeply, the moral crisis was basically systemic, which was exploited by financial institutions, rating agencies, financial innovators and even auditors. Third, the state remained a passive spectator, uncommitted to the task of upholding the basic principles embodied in different regulations to protect the system. Fourth, as mentioned at the outset, a proper balance between the market and the state could not materialize because the needed ethical commitment was missing at all levels.

Finally, it is widely important to understand that the ethical bent of mind gets rooted in the system of education that is being promoted universally. It appears that the best young minds today are working for financial institutions all across the world. They are behind the innovations we see coming up every now and then. Are they motivated by what their efforts may mean to the society at large and what if these work the wrong way? Do they think about the enterprises which pay them salaries typically out of line with the normal pattern; and above all, do they ever put themselves in the position of the deprived fellow citizens? In simple terms does our education promote sensitivity to what we see day in and day out all across the world on top of building the necessary capabilities. One is afraid this is not so. It needs to be realized that the instruments that may be carved out are much like double edged knives which can cut either way. The best lessons one can recall here are those embedded in the philosophy of **TRUSTEESHIP** much emphasized by Mahatma Gandhi.³⁷ The central theme is that all of us are enjoying powers, resources and capabilities which we have to use like trustees for the benefit of the entire humanity.

7. THE WAY AHEAD

At the outset it has to be noted that major ups and downs from time to time cannot be ruled out. These have come to stay because the way modern economies are structured and the way these are linked. Financial system has grown crucial in both cases. It needs, however, to be ensured that, as far as possible,

- a) The situation never gets out of control,
- b) The unavoidable damages are as small as possible,
- c) Common citizens are protected at all costs,

³⁷ For an elaborate exposition see Rao (1970)

d) Whatever the losses these are borne by those who would, in normal circumstances, corner the benefits. In other words, most damages are accepted as a part of the corporate profit and loss accounts.

e) Several suggestions can be considered to attain the foregoing objectives. But before we take up these it is necessary to remember that the primary conditions, significant constraints and modes of thinking and functioning are not identical everywhere, despite globalization. It is therefore necessary to chalk out locally effective solutions rather than prescribe and adopt global solutions. A useful view point relevant in this context is put forward by Wade (2009) as follows:

"...Finally a caveat. All the prescriptions about what governments should and should not do must steer clear of the assumption common to the Leninist or Fabian forms of state socialism that "the centralized state" must be the prime actor and regulator, the answer to society's problems. The political left has to integrate the central state role described about with expanding the scope for people to lead their lives by their own initiative and through and in cooperation unenforced by the state...."³⁸

All this would rule out at least the obnoxious things like accounting frauds which

Black (2009) puts as:

"Wave of fraud was not random, but was caused because deregulation allowed S&LS to invest in assets that had no readily ascertainable market value and generate substantial amounts of non-cash accounting "income" while hiding real losses. "

Regulations must ensure that investments are intended to raise capabilities of the economy and not merely be speculative in the sense of being motivated by individual profits. Unfortunately, no one has come out clear. Be these rating agencies, accounting firms or appraisers. It is appropriate to bring in the following quote focused in a different direction.

"......Institutions face an important probability of failure and a potentially severe moral hazard problem; and, failure has associated with it a large social cost, which may be of a systemic nature......The need for regulation is particularly acute when charter values are low, such that incentives to take risk are high – making it so that banking failure has a large impact...... The three pillars on which modern regulatory reform is based are capital requirements, supervision and, market discipline......"

Vives (2008), op. cit.

The central pillar ultimately turns out to be just the moral and ethical commitment of all agents in the system

Many observers of the contemporary system have draws our attention to the excessive greed that has not only characterized human behavior but also become respectable in recent

³⁸ See Wade (2009) for the deeper reasoning.

times. The need for a fundamental change towards human values, ethics and a moral code is obvious. However, Reddy (2012) remarks, like many others, that in the final analysis, "moral behavior is a matter of individual choice." The only way, therefore, to ensure that the choice is always right, is to build it directly into our education system; not only at homes and in the schools but in institutions of higher education. With particular emphasis on the world of finance it is tempting to conclude with a quote as follows.

"....The best way to do this (formation of a fair practice code for finance professionals and regulators on a "Code of Ethics") is to build good moral behavior into the culture of Wall Street....."

Schiller (2012)

Going well beyond the Wall Street, value based education appears to us as the only way to do it; effectively and efficiently.

It is clear that problems associated with the financial sector have grown more severe in recent years. There has also been a large expansion in this sector in domestic economies as well as in the international system. Understandably, the need for well designed policy regulation in both segments has become unavoidable. Even at the international level agencies like IMF and IBRD need to coordinate their policies in consultation with different countries. Finally, one is inclined to highlight papers in a recent issue of the *Economic and Political Weekly* (dated March 18, 2016). We need not critically and in any detail look into the issues raised but it is useful and equally tempting to highlight these as follows.

- A) The simple Keynesian including its extended paradigms are no longer useful to deal with policy issues that we face today. This is even more so as regards the alternative theoretical paradigms. This is partly because banking is not today what it used to be till a couple of decades back. Clearly, the usual monetary policy needs to be considerably redesigned.
- B) In most countries major financial and other structural reforms need a new analytical approach involving stochastic general policy framework. Even for India many segments of monetary system are now endogenous.
- C) As highlighted frequently in the preceding discussion most economies have vastly opened up, particularly the ones like those of India and China so that the role of capital account is considerably large and in need of proper management. Moreover, as expected movements are no longer slow but fast and volatile.
- D) We also are in a situation where banking systems need to be considerably improved.
 We can no longer ignore nonperforming assets and the related modes of inefficiency.

Finally, a bit of deeper thought would reveal that in each of the above problems the requirement of ethical mode of thought and behavior cannot be ignored.

REFERENCES

- Akin, C. and A. Kose (2007) Changing Nature of North-South Linkages: Stylysed Facts and Expectations, IMF Working Paper WP/07/280
- Arrow, K. J. (1950) Social Choice and Individual Values, New York: John Wiley
- Bagchi A K and Gary A Dymski, eds. (2007) *Capture and Exclude: Developing Economies and the Poor in Global Finance*, New Delhi: Tulika
- Begg, D. H. K. (1982), *The Rational Expectations Revolution in Macroeconomics: Theories and Evidence*, Oxford: Philip Allen
- Benassy J P (1982) Economics of Market Disequilibrium, New York: Academic Press

Bernanke, Ben S (2007) The Great Depression, Princeton: Princeton University Press

- Bernanke, Ben S (2009), *Financial Innovation and Consumer Protection*, Speech at The Federal Reserve System, Sixth Bi Annual Community Affairs Research Conference, Washington, D. C.
- Bhaduri, Amit (2006) The Politics of Sound Finance, Economic and Political Weekly, Nov.4
- Bhaduri, Amit (2009) Understanding the Financial Crisis, *Economic and Political Weekly*, March 28.
- Black, William K. (2009) Those who Forget The Regulatory Successes of the Past Are Condemned to Failure, *Economic and Political Weekly*, March 28.
- Chandrasekhar, C.P. (2009), Must Banks Be Publicly Owned? *Economic and Political Weekly*, March 28
- Chacko, George, Anders Spoman, Hideto Motohashi and Vincent Dessain (2006) Credit Derivatives, Philadelphia: Wharton School
- Clower, R. (1965) The Keynesian Counter Revolution: A Theoretical Appraisal, in F. H. Hahn and F. P. R. Brechling, eds. *The Theory of Interest Rates*, London: Macmillan
- Crotty, James (2008) Structural Causes of the Global Financial Crisis: A Critical Assessment of the New Financial Architecture, Political Economy Research Institute. (PERI) WP No.180
- Crotty, James and Gerald Epstein (2009), Avoiding Another Meltdown in the US Financial System, *Economic and Political Weekly*, March 28.
- Crotty, James (2009) Structural Flaws in the US Financial System, *Economic and Political Weekly*, March 28
- Das, Satyajit (2006) Traders, Guns and Money: Known and Unknown in the Dazzling World of Derivatives, Harlow: Prentice Hall
- Dow, Christopher (1998) *Major Recessions, Britain and the World*, New York: Oxford University Press
- Dua, Pami, and Anirvan Banerji (2010) Synchronization of Recessions in Major Developed and Emerging Economies, *Margin – The Journal of Applied Economic Research*, Sage, Vol.10
- Gande, Amar (2008), Commercial Banks in Investment Banking, Ch. 6 in Thakor and Boots (2008)
- Harvey D (2005) A Brief History of Neo-liberalism, New York: Oxford University press
- Hicks, J. R. (1937) Mr. Keynes and the Classics: A Suggested Interpretation, *Econometrica*, Vol 5, April

Hicks, J R (1974), The Crisis in Keynesian Economics, Oxford: Basil Blacwell

- Jha, Rajiv (2009) Development in the Time of Finance: Review Article, *Economic and Political Weekly*, November 7
- Klein, L R (1947) The Keynesian Revolution, New York: Macmillan
- Klein, L R (1947) Theories of Effective Demand and Employment, *Journal of Political Economy*, Vol. LV, 108-131
- Krugman, Paul (2010 a) Punks and Plutocrats, New York Times / Hindu March 30
- Krugman, Paul (2010 b) Financial Reform 101, New York Times / Hindu April 03
- Krugmam, Paul (2010 c) Looters in Loafers, New York Times / Hindu April 20
- Krugman, Paul (2010 d) Do Not Cry for Wall Street, New York Times / Hindu April 24
- Leijonhufvud, A. (1968) On Keynesian Economics and Economics of Keynes, London: Oxford University Press
- Malinvaud, E. (1977) The Theory of Unemployment Reconsidered, Oxford: Basil Blackwell
- Mani, Harish, R. Prabhakar Rao and V. Pandit (2012) Indian Registered Manufacturing Sector: A Simulated Maximum Likelihood Analysis, *Journal of Quantitative Economics*, NS, Vol. 16
- Mani, Harish, G. Bhalachandran and V. Pandit (2011), Public Investment in Agriculture and GDP Growth: Another Look at the Intersectoral Linkages and Policy Implications, Working Paper No. 201, CDE, Delhi School of Economics, Delhi
- Modigliani, F. M. (1944) Liquidity and the Theory of Interest and Money, *Econometrica*, Vol. 5
- Nayak, Pulin (2009), Between Keynes and Schumpeter, *Economic and Political Weekly*, March 28
- Nachane, DM (2008) The Unity of Science Principle and the Unreasonable Effectiveness of Neoclassical Economies, *Economic and Political Weekly*, March 22
- Nachane, DM (2009) The Fate of India Unincorporated, *Economic and Political Weekly*, March 28
- Nachane, DM(2007) Liberalization of the Capital Account: Peril and Possible Safeguards, *Economic and Political Weekly*, Sept.8
- Parlour, Chine A. and J. Sippy (2008), Limit Order Marketing: A Survey, Ch. 3 in Thakor and Boots (2008)
- Pandit, B. L. (2015) The Global Crisis and the Indian Economy, Singapore, Springer
- Pandit, V. (2012) Global Economic Crisis: An Ethical Perspective, *Indian Economic Journal*, 60 (3)
- Pandit, V. (2016) Ethics, Economics and Social Institutions, Singapore, Springer
- Pandit, V. and K. Krishnamurty, eds. (2004), *Economic Policy Modeling for India*, Delhi: Oxford University Press
- Patnaik, Prabhat (2009) The Economic Crisis and Contemporary Capitalism, *Economic and Political Weekly*, March 28
- Prasaud, Arvind D (2009), Causes, Cares and Myths, *Economic and Political Weekly*, March 28
- Rajan, Raghuram (2009) *A Hundred Steps*, Report of the Committee on Financial Sector Reforms New Delhi: Sage
- Rajan, S. Sounder and V. Pandit (2012) Efficiency and Productivity Growth in Indian Banking, *Margin: Journal of Applied Research in Economics*, Sage, forthcoming
- Rakshit, Mihir (2008) The Subprime Crisis: A Primer, Money and Finance vol.3, No.3
- Rakshit, Mihir (2009) Global Economic Crisis: Stagflationary Phase, Money and Finance
- Rakshit, Mihir (2009) India Amidst the Global Crisis, *Economic and Political Weekly*, March 28

- Rama Mohan, T.T. (2009) The Impact of the Crisis on the Indian Economy, *Economic and Political Weekly*, March 28
- Rao, V. K. R. V. (1962), *The Gandhian Alternative to Western Socialism*, Bombay: Bhartiya Vidya Bhawan
- Ravenhill, John ed. (2008) Global Political Economy, London, Oxford University Press
- RBI (2010), Global Financial Crisis and the Indian Economy, *Report on Currency and Finance*, Bombay: Reserve Bank of India
- Reddy, Y.V. (2009) India and the Global Financial Crisis, New Delhi, Orient Black Swan
- Reddy, Y.V. (2010) *Global Crisis, Recession and Uneven Recovery*, Hyderabad: Orient Black Swan
- Reddy, Y.V. (2012), *Society, Economic Policies and the Financial Sector*, Per Jacobsson Foundation Lecture, 2012, Basel, Switzerland
- Robinson, Joan (1965) "Kalecki and Keynes" in Collected Papers, Vol.3 London: Blackwell
- Schiller, R. (2000) Irrational Exuberance, Princeton, Princeton Univ. Press
- Schiller, Robert J. (2012) *Finance and the Good Society*, Princeton: Princeton University Press
- Semmler, William and Lucas Bernard (2009) Banking, Complex Securities and the Credit Crisis, *Economic and Political Weekly*, March 28
- Sen, Amartya (1987) On Ethics and Economics, Delhi: Oxford University Press
- Sheng, Andrew (2009) The First Network Crisis of the 21st Century, *Economic and Political Weekly*, March 28
- Sivakumar N and Sundara Krishnaswami (2012) Global Financial Crisis: Dharmic Transgressions and Solutions, *International Journal of Social Economics*, Vol. 39, No. 1/2
- SSSIHL (2010) *Ethics and the World of Finance*, Prasanthi Nilayam: Sri Sathya Sai Institute of Higher Learning Publications Section
- Subbarao, D. (2009), Ethics and the World of Finance, RBI Monthly Bulletin, September
- Subrahmanyam, Arvind and John Williamson (2009) The World Crisis: Reform to Prevent Recurrence, *Economic and Political Weekly*, March 28
- Subrahmanyam, Arvind (2009) Preventing and Responding to the Crisis of 2008, *Economic and Political Weekly*, Jan. 10
- Thakor, Anjan V. and Arnoud W. A. Boots, eds., (2008) *Handbook of Financial Intermediation and Banking*, Amsterdam: Elsever and North Holland
- Tymoigne, Eric (2009) Central Banking, Asset Pricing and Financial Fragility, London: Routlege
- Vakulabharanam, Vamsi (2009) Towards a Marxian Understanding, *Economic and Political Weekly*, March 28
- Vives, Xavier (2008), Competition and Regulation in Banks: Overview of Section6 in Thakor and Boots (2008)
- Wade, Robert (2009) Steering Out of the Crisis, Economic and Political Weekly, March 28

SUGGESTED ADDITIONAL READINGS

Ackerloff, George and Paul M. Romer (1993), *Looting: The Economic Underworld of Bankruptcy for Profit*, Brooking Papers on Economic Activity, 2; 1-73

Black, William K. (2005) *The Best Way to Rob a Bank is to own it*, Austin Texas, University of Texas.

- Botz, Dan La (2009), Capital and Labor: The 1930s and Today, *Economic and Political Weekly*, March 28.
- Brunnemister, M, Andrew Crocket, Charles Goodhart, Avinash Persaud and Hyun Shin (2009) *The Fundamental Principles of Financial Regulation*, Geneva, Report on World Economy, No.11
- Campbell, J. and R. Schiller (1988) Stock Prices, Earnings and Expected Dividends, *Journal of Finance*, Vol43, No.3, July
- Desai, M (2002) Marx's Revenge: The Resurgence of Capitalism and the Death of Statist Socialism, London, Verso
- Dua, Pami ed., (2004), *Business Cycles and Economic Growth*, New Delhi; Oxford University Press
- Epstein, Gerald ed. (2005), *Financialisation and the World Economy*, Northampton, Mass: Edward Elgar
- Erturk, Korkut (2009) Global Deflation and How to Fight It? *Economic and Political Weekly*, March 28
- Jayadev, Arjun and Anush Kapadia (2009), When the Facts Change: How can the Financial Crisis Change Minds? *Economic and Political Weekly*, March 28
- Marglin, Stephen (2008), *Dismal Science: How Thinking Like an Economist Undermines Community*, Cambridge Macs: Harvard University Press
- Merton, R.C. (1974) On the pricing of Corporate Debt: The Risk Structure of Interest Rates, *Journal of Finance*, Vol.2
- Onaran, Ozlem (2009) Crisis of Distribution, *Economic and Political Weekly*, March 28
- Prasad Easwar and Reghuram Rajan (2008) Financial Reforms for India; *Finance and Development*, September
- Rama Mohan, T.T. (2009) The Impact of the Crisis on the Indian Economy, *Economic and Political Weekly*, March 28
- Schonbucher, P. (2003) Credit Derivatives Pricing Models, West Sussex UK: John Wiley
- Soros George (1998) *The Crisis of Global Capitalism: Open Society Endangered*, New York: Public Affairs
- Stiglitz, J. E. (2010) Risk and Global Economic Architecture: Why Full Financial Integration May Not Be Desirable? NBER, WP 157, February 2010
- Tavakoli, J. (2003) *Collaterised Debt Obligation and Structural Finance*, West Sussex, UK: John Wiley
- Vasudevan, Raman (2009) Dollar Hegemony and the Subprime Market Collapse, *Economic and Political Weekly*, March 28
- Wade Robert (1988), Village Republics, London: Cambridge University Press