सत्यमेव जयते

GLOBAL ECONOMIC CRISIS

AND

ITS IMPACT ON INDIA

RAJYA SABHA SECRETARIAT
NEW DELHI
JUNE 2009

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PREFACE

This publication titled "Global Economic Crisis and its Impact on India" is the next in a series of 'Occasional Papers' being brought out on topical issues from time to time for the benefit of the Members of Parliament.

In an increasingly interdependent financial world the recent Global Economic Crisis has had a cascading effect on the economies across nations. The crisis also impacted the Indian economy, though on the subdued scale and magnitude *vis-à-vis* the USA and other developed countries. This paper attempts to analyse the various issues and factors that led to the crisis in the US and its varied impacts on the Indian economy. The crisis responses by the Government and the RBI as also the policy options have been outlined to facilitate proper understanding of the subject and its wider ramifications.

It is hoped that Members would find this paper relevant and useful.

NEW DELHI
June 2009

V.K. AGNIHOTRI,
Secretary-General
Rajya Sabha.

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I

"The policy makers left the financial industry free to innovate — and what it did was to innovate itself, and the rest of us, into a big, nasty mess."[1]

PAUL KRUGMAN

Introduction

The current global economic crisis is widely viewed as a glaring example of limitless pursuit of greed and overindulgence at the expense of caution, prudence, due diligence and regulation. It is true that people who break the rules create consequences and, like a stone thrown in a pond, its ripples move ever outward. Wall Street firms broke the financial rules and regulations and the people of the world in general and the US in particular are being called upon to bear the brunt of it.

Financial crises of some kind or the other occur sporadically virtually every decade and in various locations around the world. Financial meltdowns have occurred in countries ranging from Sweden to Argentina, from Russia to Korea, from the United Kingdom to Indonesia, and from Japan to the United States.[2] Each financial crisis is unique, yet each bears some resemblance to others. In general, crises have been generated by factors such as overheating of markets, excessive leveraging of debt, credit booms, miscalculations of risk, rapid outflows of capital from a country, unsustainable macroeconomic policies, off-balance sheet operations by banks, inexperience with new financial instruments, and deregulation without sufficient market monitoring and oversight.

Despite their inherent fragility, financial institutions underpin economic prosperity. A well functioning financial system in a country channels funds to the most productive uses and allocates risks to parties who are able to bear them. This propels economic growth and opportunity. That is why when financial crises develop, they tend to be very costly. Generally, countries that suffer financial crisis experience vital interruptions in their growth rates.

Economic analysts have attributed that the stimulus for booms in contemporary capitalism has increasingly come from asset bubbles. They have shown that the likelihood of crises increases with the strength and duration of economic booms and that banking crises are occasioned by shocks in asset prices, output, terms of trade and interest rates[3] . The US economy

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1 Paul Krugman, "Innovating Our Way to Financial Crisis", *New York Times*, December 3, 2007

2 Luc Laeven and Fabian Valencia, "Systemic Banking Crises: A New Database", International Monetary Fund Working Paper WP/08/224, October, 2008, p.80

3 Demirguc-Kunt, Asli and Enrica Detragiache, "Does Deposit Insurance Increase Banking System Stability? An Empirical Investigation", *Journal of Monetary Economics*, Vol. 49 (7), October 2002

has ever more come to rely on bubbles to initiate and sustain economic booms. The dot-com bubble whose bursting had caused the previous crisis was followed by the housing bubble which started a new boom. This has now come to an end, precipitating a major financial crisis and initiating what looks like a major depression reminiscent of the 1930s[4] . This has been a dominant perception in the recent times in the wake of current financial crisis.

[4] The presentation of Prabhat Patnaik at the Interactive Panel on the Global Financial Crisis, New York, 30 October, 2008

II

Backdrop of the crisis

(i) Boom in World Economy and Thriving Asset Prices

The years that preceded the recent turbulence saw an exceptionally strong performance of the world economy – another phase of what has come to be known as the "Great Moderation". Following the global slowdown of 2001, the world economy had recovered rather rapidly, posting record growth rates in 2004, 2005 and 2006. The long period of abundant liquidity and low interest rates prior to the crisis led to a global search for yield and a general under-pricing of risk by investors. Lending volumes increased substantially in many countries, due to a decline in lending standards and increased leverage, contributing to bubbles in asset prices and commodities.

The strong performance in financial markets was fortified by the strength of asset prices. Globally, property prices had been rising rapidly acting as a critical support for household spending. Their prolonged strength had been especially in evidence in several developed countries including the US. Across a wide spectrum of asset classes, volatilities and risk premia looked exceptionally low compared with fixed income credit, equity and foreign exchange markets.

(ii) Growth in US Economy - Interest Rate Cut and Deregulation

According to one influential school of thought represented by among others, Paul Krugman, there was 'global imbalances', the phenomenon of huge current account surpluses in China and few other countries coexisting with the unsustainably large deficits in the US. This imbalance was caused by the propensity of the countries with high saving rate to park their savings often at low yields, in the US. The flood of money from these countries into the US kept interest rates low, fuelled the credit boom and inflated real estate and other asset prices to unsustainable levels.[5]

The long period of growth in the 1990s was accredited to the availability of easy liquidity on which thrived the Wall Street. The low interest rates due to global conditions and a deregulated political economy provided 'vitality' to the US financial system. The US Federal Reserve cut its key rate, the federal funds rate, to 1% in mid-2003 and held it there until mid 2004, roughly the period of most rapid home-price increase.[6] Besides, a large number of adjustable-rate mortgages were issued after 2000, particularly to sub-prime borrowers. These mortgages were more responsive than the fixed-rate mortgages to the cuts that the Federal Reserve had made. Those who wanted to get into real estate investments were demanding the adjustable-rate

[5] ''Origins of the Crisis'', *The Hindu* (Editorial), March 11, 2009

[6] Robert J. Shiller, The Subprime Solution, Princeton: Princeton University Press, 2008, p. 48

mortgages. The sub-prime borrowers wanted these mortgages in greater numbers as they were far too keen to gain a foothold in the burgeoning housing market. It has, therefore, been viewed by many that the rate cuts might have had the effect of boosting the boom. The banking and regulatory structures that were changed in the late 1990s and early 2000s generated the demands for loans, besides facilitating easy loans.

(iii) Rapid increase in credit

Against the backdrop of the historically low interest rates and booming asset prices, credit aggregates, along side monetary aggregates, had been expanding rapidly. Despite the rapid increase in credit, however, the balance-sheets and repayment capacity of corporations as also the households did not appear to be under any strain. The high level of asset prices kept the leverage ratios in check while the combination of strong income flows and low interest rates did the same with debt service ratios. In fact, in the aggregate the corporate sector enjoyed unusually strong profitability and a comfortable liquidity position, even though in some sectors leverage was elevated as a result of very strong leverage buyout (LBO) and so-called “recapitalization” activity. But debt-to-income ratios in the household sectors exhibited a marked upward trend, on the back of a major rise in mortgage debt.[7]

(iv) Failure of the US Leadership in Anticipating the Crisis

During the housing boom, most of the US authorities failed to comprehend the problem. Alan Greenspan, the then head of Federal Reserve, in his book 'The Age of Turbulence', recalled what he used to say about the housing boom: "I would tell audiences that we were facing not a bubble but a froth – lots of small local bubbles that never grew to a scale that could threaten the health of the overall economy."[8] Even President Bush during his presidency never mentioned about the housing boom in public pronouncements while it was happening. Ben Bernanke, the then Chairman of the President's Council of Economic Advisers, said in 2005: "House prices have risen by nearly 25 per cent over the past two years. Although speculative activity has increased in some areas, at a national level these prices increases largely reflect strong economic fundamentals, including robust growth in jobs and incomes, low mortgage rates, steady rates of household formation, and factors that limit the expansion of housing supply in some areas."[9] It is believed that the leaders in US were aware of the possibility of real estate bubbles but they did not anticipate its devastating consequences. As a result, the speculative housing market got considerable encouragement in terms of investment leading to tangible losses to all stakeholders in the event of the crisis.

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[7] Claudio Borio, “The Financial Turmoil of 2007 A Preliminary Assessment and Some Policy Considerations”, BIS working paper 251, 2008

[8] Alan Greenspan, The Age of Turbulence: Adventures in a New World, New York: Penguin, 2007, p. 231

[9] *The Economic Outlook*, October 20, 2005

III

Genesis and development of the crisis

(i) Sub-prime[10] mortgage

The current global economic crisis has originated in the sub-prime mortgage crisis in USA in 2007. With easy availability of credit at low interest rates, real estate prices in US had been rising rapidly since the late 1990s and investment in housing had assured financial return. US home-ownership rates rose over the period 1997-2005 for all regions, all age groups, all racial groups, and all income groups.[11] The boom in housing sector made both banks and home buyers believe that the price of a real estate would keep going up. Housing finance seemed a very safe bet. Banks went out of their way to lend to sub-prime borrowers who had no collateral assets. Low income individuals who took out risky sub-prime mortgages were often unaware of the known risks inherent in such mortgages. While on the one hand, they were ever keen to become house-owners, on the other, they were offered easy loans without having any regard to the fact that they were not in a position to refinance their mortgages in the event of the crisis. All this was fine as long as housing prices were rising. But the housing bubble burst in 2007. Home prices fell between 20 per cent and 35 per cent from their peak and in some areas more than 40 per cent; mortgage rates also rose. Sub-prime borrowers started defaulting in large numbers. The banks had to report huge losses.

(ii) Securitization[12] and Repackaging of Loans

The mortgage market crisis that originated in the US was a complex matter involving a whole range of instruments of the financial market that transcended the boundaries of sub-prime mortgage. An interesting aspect of the crisis emanated from the fact that the banks/ lenders or the mortgage originators that sold sub-prime housing loans did not hold onto them. They sold them to other banks and investors through a process called securitization. Securitization, as a financial process, has gained wide currency in the US in

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[10] **Sub-prime** is a financial term that denotes financial institutions providing credit to borrowers deemed sub-prime (sometimes referred as under-banked). Sub-prime borrowers have a heightened perceived risk of default, those with a recorded bankruptcy or those with limited debt experience. Sub-prime lending means extending credit to people who would otherwise not have access to the credit market

[11] Robert J. Shiller, The Subprime Solution, Princeton: Princeton University Press, 2008, p.5

[12] **Securitisation** is a structured finance process, which involves pooling and repackaging of cash flow producing financial assets into securities that are then sold to investors. Securitisation means turning something into a security. For example, taking the debt from a number of mortgages and combining them to make a financial product which can then be traded. Banks who buy these securities receive income when the original home-buyers make their mortgage payments.

the last couple of decades. Indeed, as recently as 1980 only 10 per cent of US mortgages were securitized compared to 56 per cent in 2006.[13]

In the context of the boom in the housing sector, the lenders enticed the naive, with poor credit histories, to borrow in the swelling sub-prime mortgage market. They originated and sold poorly underwritten loans without demanding appropriate documentation or performing adequate due diligence and passed the risks along to investors and securitizers without accepting responsibility for subsequent defaults. These sub-prime mortgages were securitized and re-packaged, sold and resold to investors around the world, as products that were rated as profitable investments. They had a strong incentive to lend to risky borrowers as investors, seeking high returns and were eager to purchase securities backed by sub-prime mortgages. This kind of dangerous risk-shifting took place at every stage of the financial engineering process.

The booming housing sector brought to the fore a system of repackaging of loans. It thrived on the back of flourishing mortgage credit market. The system was such that big investment banks such as Merrill Lynch, Morgan Stanley, Goldman Sachs, Lehman Brothers or Bears Stearns would encourage the mortgage banks countrywide to make home loans, often providing the capital and then the Huge Investment Banks (HIBs), would purchase these loans and package them into large securities called the Residential Mortgage Backed Securities (RMBS). They would package loans from different mortgage banks from different regions. Typically, an RMBS would be sliced into different pieces called tranches. The Huge Investment Banks would go to the rating agencies who would give them a series of rating on various tranches. The top or senior level tranche had the right to get paid first in the event there was a problem with some of the underlying loans. That tranche was typically rated AAA.[14] Then the next tranche would be rated AA and so on down to the junk level. The lowest level was called the equity level, and it would take the first losses. The lower levels paid very high yields for the risk they took.

As it was hard to sell some of lower levels of these securities, the HIBs would take a lot of the lower level tranches and put them into another security called a collateralized debt obligation[15] (CDO). They sliced them up into tranches and went to the rating agencies and got them rated. The highest tranche was typically rated again AAA. The finance investment banks took sub-prime mortgages and turned nearly 96 per cent of them into AAA bonds. The outstanding CDOs are estimated at $ 3.9 trillion against the estimated size risk of the sub-prime market of $1 to $ 1.3 trillion. This is a revealing index of the multiplier effect of securitization structures and CDOs. There

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[13] *Global Economic Outlook,* 2008

[14] **AAA** is the best credit rating that can be given to a corporation's bonds, effectively indicating that the risk of default is negligible.

[15] A **collateralised debt obligation** is a financial structure that groups individual loans, bonds or assets in a portfolio, which can then be traded.

was no method of reporting on CDO issuance or on sub-prime loans outstanding. Indeed, many of the originators were mortgage brokers who had no reporting obligation.

(iii) Excessive Leverage[16]

The final problem came from excessive leverage. Investors bought mortgage-backed securities by borrowing. Some Wall Street Banks had borrowed 40 times more than they were worth.[17] In 1975, the Securities Exchange Commission (SEC) established a net capital rule that required the investment banks who traded securities for customers as well as their own account, to limit their leverage to 12 times. However, in 2004 the Securities and Exchange Commission (SEC) allowed the five largest investment banks – Merrill Lynch, Bear Stearns, Lehman Brothers, Goldman Sachs and Morgan Stanley – to more than double the leverage they were allowed to keep on their balance sheets, *i.e.* to lower their capital adequacy requirements.

The Basel-II framework evolved by the Bank of International Settlements (BIS) in 2006 sets a CRAR of 9 per cent for adoption by banking regulators globally. However, at the end of the year 2007, the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) had an effective leverage of an astounding 65 times and 79 times, respectively. And the leverage ratio for the big five investment banks at 2007 year end was 27.8 times for Merrill Lynch, 30.7 times for Lehman Bros., 32.8 times for Bear Stearns, 32.6 times for Morgan Stanley and 26.2 times for Goldman Sachs. These investment banks had become the reference point of excessive leverage.

This was far too risky. The system went into reverse gear after the middle of 2007. US housing prices fell at their fastest rate in 75 years. Sub-prime borrowers started missing their payment schedules. The banks and investment firms that had bought billion of dollars worth of securities based on mortgages were in trouble. They were caught in a vicious circle of credit derivative losses, accounting losses, rating downgrades, leverage contraction, asset illiquidity and super distress sale of assets at below fundamental prices causing another cascading and mounting cycle of losses, further downgrades and acute credit contraction. Initially started as a liquidity problem, it soon precipitated into a solvency problem, making them search for capital that was not readily available. Bear Stearns was sold to the commercial bank J.P. Morgan Chase in mid-March 2008; Lehman Bros filed for bankruptcy in mid-September 2008; Merrill Lynch was sold to another commercial bank, Bank of America and finally Morgan Stanley and Goldman Sachs signed a letter of intent with US Federal Reserve on September 22, 2008 to convert themselves

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[16] **Leverage** means borrowing money to supplement existing funds for investment in such a way that the potential positive or negative outcome is magnified and/or enhanced. It generally refers to using borrowed funds, or debt, so as to attempt to increase the returns to equity.

[17] Niranjan Rajadhyaksha, ''Meltdown deconstructed'', *The Hindustan Times*, 14 October, 2008

into bank holding companies. The year 2008 will go as the worst year in the history of modern finance wherein the sun of powerful and iconic Wall Street investment banks set in.

The institutions that have reported huge losses are those which are highly leveraged. Leveraged investors have had to return the money they borrowed to buy everything from shares to complex derivatives[18] . That sends financial prices even lower. All this led to massive bailout packages in USA, as the government stepped in to buy and lend in a financial market.

The ever increased leverage strength of investment banks epitomized the deregulatory regime. Leverage is a double edged sword. It is the life blood of business and economic growth when used wisely and moderately. Indeed, economic activity would come to a grinding halt if no credit or leverage were available from the banks and financial institutions. And without lending, the banking system would have no avenue to deploy their deposits except in treasury securities. The role of leverage and credit is, therefore, central to growth. Yet, excessive leverage is fraught with dangerous consequences.

(iv) Misleading judgements of the Credit-Rating Organisations

The role of the Credit-Rating Organisations (CROs) in creating an artificial sense of security through complex procedure of grading had contributed to the financial mess. The giants of credit rating agencies like Standard and Poor (S&P), Moody's, Fitch had dominated the global ratings market for a long time. They were the agencies which had been deemed by the US capital markets regulator Securities and Exchange Commission (SEC) as Nationally Recognized Statistical Rating Organisations (NRSRO). As NRSROs, these CROs had a quasi regulatory role and were required to disclose their methodologies. But, these credit rating agencies used poorly tested statistical models and issued positive judgments about the underlying loans. No safeguards were put in place for assembling an appropriate information system to deal with the delinquencies and defaults that might eventually arise.

Specialist credit rating organisations, which have the mandate to inform investors how safe a security really is, did not, apparently, do their job well enough. Although individuals and firms should do their own due diligence, it is only to be expected that between alternative investment choices, if other considerations are the same, investors are likely to pick the higher rated securities. As a result, risky products were sold as rewarding ones. CROs awarded credit ratings to the high value asset-backed securities as investment

[18] A **derivative** is a financial contract whose payoffs over time are derived from the performance of assets. With a derivative, one makes some kind of bet or deal with some other party where the payoff depends on what some assets will do in the future. Depending on market conditions, one may or may not be a good deal when the time comes, but having it can reduce a party's risk. Derivatives can be used to hedge, or reduce risk, or they can be used for speculation, offering a lot of risk for the possibility of a big reward.

grade, suggesting that they were safe even when the underlying collateral was all sub-prime. Even many regulatory agencies, investors and bond insurers rely on CRO credit ratings to substitute for their own due diligence[19] . But it was hard to understand as to why the CROs created the ambience of security by assigning AAA ratings to the toxic CDOs, if they were aware of the ground realities. The President of Standard and Poor (S&P) Credit Rating Organisation made a naive observation that "virtually no one anticipated what is occurring".[20]

CROs received fees to rate securities based on information provided by the issuing firm. Jerome S. Fons, who was the Managing Director for credit policy at Moody's until 2007 told the US House Committee on Oversight and Government Reforms that "the securities issuers pay the agencies to issue ratings and the agencies' interests can eclipse those of investors".[21] The fees offered to the CROs for assigning credit ratings were so high that it became virtually difficult for them to resist the temptation despite doubts about the quality of the securities. The ratings provided by the rating agencies remained inconsistent with market signals and adversely impacted the investors interests.

(v) Mismatch between Financial Innovation and Regulation

It is not surprising that governments everywhere seek to regulate financial institutions to avoid crisis and to make sure a country's financial system efficiently promotes economic growth and opportunity. Striking a balance between freedom and restraint is imperative. Financial innovation inevitably exacerbates risks, while a tightly regulated financial system hampers growth. When regulation is either too aggressive or too lax, it damages the very institutions it is meant to protect.[22]

In the context of this crisis, it would be pertinent to know that in US the financial institutions, during the past forty years, focused considerable energy on creating instruments and structures to exploit loopholes in the regulation and supervision of financial institutions. Financial globalization assisted in this process by enabling corporations and financial institutions to escape burdensome regulations in their home countries by strategically booking their business offshore. Regulatory authorities proved ineffective in acknowledging that large and complex financial institutions were using securitization to escape restrictions on their ability to expand leveraged risk-taking. Central Banks in US and Europe kept credit flowing to devious institutions that – as originators of risky loans or as sponsors of securitization conduits – had sold investors structured securitization whose highest quality tranches were so lightly subordinated that insiders had to know that the instruments they had designed

[19] ''The 2007 Meltdown in Structured Securitization: Searching for Lessons, Not Scapegoats'', Policy Research Working Paper 4756, The World Bank, October, 2008 [20] Summary Report of Issues Identified by the Securities and Exchange Commission Staff's Examinations of Select Rating Agencies, July 2008

[21] *ibid*

[22] ''The 2007 Meltdown in Structured Securitization: Searching for Lessons, Not Scapegoats'', Policy Research Working Paper 4756, The World Bank, October, 2008

were significantly over-rated. In the US, in particular, an unprecedented expansion of Federal Reserve liquidity facilities and Federal Home Loan Bank advances helped some of the most blameworthy institutions to avoid asset sales.[23]

It is important to understand that the goal of financial regulation and supervision is not to reduce risk-taking of the financial institutions, but to manage the safety net. This goal implied that supervisors have a duty to see that risks can be fully understood and fairly priced by investors. No one should expect that, in a risky world, risk-neutral regulation and supervision can eliminate the risk of financial crises. The loopholes in supervision clearly sowed the seeds of the current crisis. In tolerating an ongoing decline in transparency, supervisors encouraged the very mis-calculation of risk whose long-overdue correction triggered the crisis. The neo-liberal push for deregulation served some interests well. Financial markets did well through capital market liberalization. Enabling America to sell its risky financial products and engage in speculation all over the world may have served its firms well, even if they imposed large costs on others. Today, the risk is that the new Keynesian doctrines will be used and abused to serve some of the same interests.[24] The talent has been wasted at the expense of other areas "how much has our nation's future been damaged by the magnetic pull of quick personal wealth, which for years has drawn many of our best and brightest young people into investment banking, at the expense of science, public service and just about everything else?"[25]

The crisis has taken by surprise everyone, including the regulators. The regulators failed to see the impact of the derivative products which clouded the weaknesses of the underlying transactions. "The financial innovation" – two words that should, from now on, strike fear into investors' hearts... to be fair, some kinds of financial innovation are good. ... but the innovations of recent years… were sold on false pretenses. They were promoted as ways to spread risk... What they did instead – aside from making their creators a lot of money, which they didn't have to repay when it all went bust – was to spread confusion, luring investors into taking on more risk than they realized.[26] Quite clearly, there was a mismatch between financial innovation and the ability of the regulators to monitor. Regulatory failure comes out glaringly.

(vi) Imperfect Understanding of the Implications of Derivative Products

In one sense, derivative products are a natural corollary of financial development. They are financial instruments that are used to reduce financial risk. Derivatives are a way to "hedge" against various unintended risks. The investor in the derivatives believes that he can diversify risk by combining one

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[23] *Ibid.*

[24] Joseph Stiglitz, "Getting bang for your buck", *The Guardian*, December 5, 2008

[25] Paul Krugman, "The Madoff Economy", *New York Times* (Opinion), December 19, 2008

[26] Paul Krugman, "Innovating Our Way to Financial Crisis", *New York Times*, December 3, 2007

loan in one place with another loan of the same type at another place under one common instrument and then sells it to another investor. This combination reduces the risk and the investor believes that what he holds, has a balanced risk.

Such being the positive features of derivatives, the question arises as to what went wrong in the mortgage crisis. It is widely believed that the borrowers may have mis-represented their income. Or, the loan issuer may not have verified their incomes. Or, they may have borrowed 95 per cent of the value of their houses such that if property prices decline by, say, 20 per cent, the asset cover may become inadequate. In all of these cases, should interest rates rise sharply, from say 6 per cent to 10 per cent, these borrowers may no longer be able to meet their monthly payments[27]. Besides, in the present case, rating agencies played havoc by certifying the derivative products as investment grade, trapping many financial institutions into investing in these products. In all, there was an imperfect understanding of the implications of the various derivative products.

Experts have held that the derivatives have the potential to benefit the investors, provided there is thorough understanding of the varied facets of the derivative products including transparent dealings with the borrowers. If the derivate products become too complex to discern, where risk lies, they become sources of concern[28]. Because of the volatility of derivatives for banks and their corporate clients, Warren Buffet, one of the most successful investors in the world, back in 2003 called the "derivatives" as "weapons of financial mass destruction, carrying dangers that while now latent are potentially lethal".[29]

Even as the authorities deal with the immediate problems arising from the crisis, the regulators need to pay attention to how to deal with derivatives.

(vii) Fair value accounting rules

Fair value accounting rules require banks and others to value their assets at current market prices. The broad aim of fair value accounting is to enable investors, financial system participants, and regulators to better understand the risk profile of securities in order to better assess their position. In order to achieve this, financial statements must, in the case of instruments for which it is economically relevant, be sensitive to price signals from markets, which reflect transaction values. Investors and regulators hold that the fair value accounting standard should not be weakened because it is a key component of accurate and fully transparent financial statements, which in turn are the bedrock of financial activity. But the asset holders maintain that accounting standard should be reformed to fully reflect the reality of financial activities. They have argued that in times of illiquid and falling markets, it has been

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[27] Ajit Balakrishnan, ''Brave new world of derivatives,'' *Business Standard*, November 11, 2008

[28] C. Rangarajan, 'The financial crisis and its ramifications'', *The Hindu*, November 8, 2008

[29] Warren Buffet: Chairman's letter to share-holders of Berkshire Hathaway Inc. for year 2001

difficult or impossible to value assets accurately. Fair-value accounting has resulted in assets being valued at distressed sale prices, rather than at their fundamental value, creating a downward spiral[30] . The requirements of fair value accounting ensured that what began initially as a sub-prime crisis morphed into a general credit deterioration touching prime mortgages and causing their credit downgrades and system-wide mark downs.

(viii) Typical characteristics of US financial system

The financial system of USA has changed dramatically since the 1930s. Many of America's big banks moved out of the "lending" business and into the "moving business". They focused on buying assets, repackaging them, and selling them, while establishing a record of incompetence in assessing risk and screening for creditworthiness. Hundreds of billions have been spent to preserve these dysfunctional institutions. Nothing has been done even to address their perverse incentive structures, which encourage short-sighted behaviour and excessive risk taking. With private rewards so markedly different from social returns, it is no surprise that the pursuit of self-interest (greed) led to such socially destructive consequences. Not even the interests of their own shareholders have been served well.[31]

In the United States, the crisis was shaped by typical nature of the US financial system having a complex mortgage financing value chain with opaque securitization structures, a large 'shadow financial system' involving various poorly regulated intermediaries (investment banks, hedge funds, structured investment vehicles – SIVs) and instruments (credit default swaps). Prudential oversight was lax, allowing poor lending standards, the proliferation of non-transparent securitization structures, poor risk management throughout the securitization chain, and the build-up of excessive leverage by financial institutions. The weaknesses in prudential oversight were partly due to particular characteristics of the US financial system, such as the existence of different regulatory regimes for investment banks, commercial banks and government-sponsored enterprises (Fannie Mae and Freddie Mac), as well as the complex and fragmented supervisory architecture, comprising several federal and state agencies with competing and overlapping mandates.

(ix) Failure of Global Corporate Governance

One of the reasons for current crisis in the advanced industrial countries related to the failures in corporate governance that led to non-transparent incentive schemes that encouraged bad accounting practices. There is inadequate representation and in some cases no representation of emerging markets and less developed countries in the governance of the international economic institutions and standard setting bodies, like the Basle Committee on Banking Regulation.[32] The international economic organization such as IMF has been wedded to particular economic perspectives that paid little

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[30] ''Fair-value accounting rules not fair", *The Banker*, November 3, 2008

[31] Joseph E. Stiglitz, "The Triumphant Return of John Maynard Keynes", *Guatemala Times*, December 5, 2008

[32] Presentation by Joseph Stiglitz at the Interactive Panel of the UN General Assembly on the Global Financial Crisis at UN Head Quarter, October 30, 2008

attention to the inherent risks in the policies pursued by the developed countries. The IMF has observed that market discipline still works and that the focus of new regulations should not be on eliminating risk but on improving market discipline and addressing the tendency of market participants to underestimate the systemic effects of their collective actions.[33] On the contrary, it has often put pressure on the developing countries to pursue such macro-economic policies that are not only disadvantageous to the developing countries, but also contribute to greater global financial instability. The discriminatory policies adopted by the multilateral economic institutions underscored their critical deficiencies in securing credibility, legitimacy and effectiveness.

In his latest book, George Soros, a very successful investor and financer, stated that the currently prevailing paradigm that financial markets tend towards equilibrium is both false and misleading. He asserted that the world's current financial troubles can be largely attributed to the fact that the international financial system has been developed on the basis of that flawed paradigm.[34]

(x) Complex Interplay of multiple factors

It may be said with a measure of certainty that the global economic crisis is not alone due to sub-prime mortgage. There are a host of factors that led to a crisis of such an enormous magnitude. The declaration made by the G-20 member states at a special summit on the global financial crisis held on 15th November 2008 in Washington, D.C. identified the root causes of the current crisis and put these in a perspective. During a period of strong global growth, growing capital flows, and prolonged stability earlier this decade, market participants sought higher yields without an adequate appreciation of the risks and failed to exercise proper due diligence. At the same time, weak underwriting standards, unsound risk management practices, increasingly complex and opaque financial products, and consequent excessive leverage combined to create vulnerabilities in the system. Policy-makers, regulators and supervisors, in some advanced countries, did not adequately appreciate and address the risks building up in financial markets, keep pace with financial innovation, or take into account the systemic ramifications of domestic regulatory actions. Major underlying factors to the current situation were, among others, inconsistent and insufficiently coordinated macroeconomic policies, inadequate structural reforms, which led to unsustainable global macroeconomic outcomes. These developments, together, contributed to excesses and ultimately resulted in severe market disruption.[35]

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[33] International Monetary Fund "The Recent Financial Turmoil — Initial Assessment, Policy Lessons, and Implications for Fund Surveillance," April 9, 2008

[34] George Soros, "The New Paradigm for Financial Markets: The Credit Crisis of 2008 and What it Means," *Public Affairs*, 2008, p.i.

[35] The Statement from G-20 Summit on "Financial Markets and the World Economy" held in Washington on 15th November 2008

IV

Varied Dimensions of the Crisis

(i) Global spread of the crisis

Experts have held that the nature of US economy has contributed to the globalization of the crisis. America's financial system failed in its two crucial responsibilities: managing risk and allocating capital. It is viewed that a massive set of micro-failures gave rise to a massive macro-failure. Not only had the US financial sector made bad loans, they had engaged in multi-billion dollar gambles with each other through derivatives, credit default swaps, and a host of new instruments, with such opacity and complexity that the banks couldn't even ascertain their own balance sheets, let alone that of any other bank to whom they might lend. Credit markets froze.[36] The dysfunctional US financial sector has immensely contributed towards the distortions in the global financial system.

Regrettably, many of the worst elements of the US financial system were exported to the rest of the world.[37] Therefore, the financial turmoil which emerged in the US not only engulfed that country but also the whole world. Nations, far away from the US are scared by the collapse of some of the giants of the financial world. It is somewhat difficult to believe that some of the biggest investment banks and housing corporations have become the relic of the past. It has created havoc in the world economy and the ripples of credit contraction and distrust in the present financial institutions across the globe have become a sad reality.

The current crisis has deeply impacted the national economies of both developed and developing world. The global financial capital in this era of globalization has virtually touched all economies depending upon the extent to which they have been opened up. National economies across the globe are facing multiple vulnerabilities with dwindling capital flows, huge withdrawals of capital leading to losses in equity market, loss of jobs, pressure on national currencies and high interest rates and so on. There is a crisis of confidence and trust between the investors and the customers. Those who perceive it as a contagion limited to the developed countries needs to reassess their premise of understanding. Every economy in the world is affected in one way or the other by the financial crisis across the Atlantic. Its severity can be gauged from the fact that a meeting of G-20 countries was called by the then U.S. President George Bush to devise some sort of blueprint to combat economic crisis. The heads of G-20 countries while recognizing serious challenges to the world economy and financial markets, maintained that "We are determined

[36] Joseph Stiglitz, " Crises today and the future of capitalism", *The Hindu*, December 22, 2008

[37] Joseph Stiglitz, "The fruit of hypocrisy; Dishonesty in the finance sector dragged us here, and Washington looks ill-equipped to guide us out", *The Guardian*, September 16, 2008

to enhance our cooperation and work together to restore global growth and achieve needed reforms in the world's financial systems".[38]

While the crisis may have originated in developed countries and in the sub-prime-cum-structured finance markets, it has spread widely to other countries and markets *via* several different mechanisms. The initial impact stemmed from the direct exposure of emerging market financial institutions to sub-prime- related securities. In general, such impact was relatively small and emerging countries appeared to be resilient to the crisis. However, the second-round effects have been much more severe and have primarily stemmed from the de-leveraging process and the reversal of capital flows. Such outflows have manifested in faltering stock market, increasing interest rates and pressures on exchange rates, thus creating negative feedback loops.

The abundant global liquidity and financial integration that preceded the crisis has made many countries more vulnerable to financial contagion even where the core problems are home-grown. The decline in house prices is not solely a US phenomenon, and there are several countries that are currently undergoing significant real declines in asset markets.

Moreover, the rapid decline in projected economic growth for developed countries will hit hard those countries dependent on commodity prices, remittances, and exports. The consequent slowdown in economic growth and worsening of current account and fiscal positions are also expected to reduce the ability of these countries to mitigate the effects of the crisis.

(ii) Financial globalization

It has been viewed that the process of financial globalization has undermined the demand management in the capitalist countries and removed a host of regulatory measures, which were advocated by John Maynard Keynes. It is a fact that currently the demand generation is coming from the stimulation of private expenditure, often associated with creation of bubbles in asset prices rather than from the public expenditure, associated with maintaining stability in asset prices. With the free global mobility of finance, the autonomy of the State to intervene meaningfully in the national economy has been significantly undermined. This has also considerably exposed the system to the whims and caprices of the speculators, causing grievous damage to the stability and sustainability of the system by affecting productive investment and augmenting the level of demand, output and employment. In this liberal setting, enforcement of regulation has become the greatest casualty. In the market driven economy, the ability of the market to be self-adjusting and self-correcting was given too much credence.

(iii) Decline in the Credibility of International Financial Organizations

The financial crisis has brought international financial organizations and institutions into sharp focus. These include the International Monetary Fund,

[38] The Statement from G-20 Summit on "Financial Markets and the World Economy" held in Washington on 15th November, 2008

the Financial Stability Board, the Bank for International Settlements, the World Bank, the Group of Seven (G-7), Group of Twenty (G-20), and other organizations that play a role in coordinating policy among nations, provide early warning of impending crises, or assist countries as a lender of last resort. The architecture of any international financial structure with oversight, regulatory, or supervisory authority is yet to be determined. However, the interconnectedness of global financial and economic markets has highlighted the need for stronger institutions to coordinate regulatory policy across nations, provide early warning of dangers caused by systemic, cyclical, or macroprudential risks[39] and induce corrective actions by national governments.

The Washington Action Plan from the G-20 Leader's Summit in November 2008 also contained specific policy changes that were addressed in the April 2, 2009 Summit in London. However, larger issues such as governance and reform of the IMF remain critical in re-establishing the credibility of international financial organizations.

(iv) State Capitalism and Protectionism

The basic economic philosophy of free-market capitalism has come under considerable strain. The crisis has generated doubt about the basic idea of deregulation, non-governmental intervention in the private sector, and free and open markets for goods, services and capitals. In the aftermath of the crisis, the need has been felt for greater regulation for financial products, increased government intervention in the oversight and management of banks, financial institutions. Trends towards state capitalism, in which governments either nationalize or own shares of companies, are rising, even in the west. Nationalization of banks, insurance companies and other financial institutions as well as government liquidity injections and loans to private corporations have become part of rescue and stimulus packages.

There is a strong possibility of countries resorting to protectionism as they try to stimulate their own economies. Through provisions to buy domestic products instead of imports, financial assistance to domestic producers, or export incentives, countries have been attempting to protect national companies often at the expense of those foreign. The world economic crisis and declining global trade flows have raised concerns that countries may attempt to restrict imports, promote exports, or impose restrictions on trade that benefit their own economies at a cost to others. Though the rules of the World Trade Organization (WTO) can substantially minimize the protectionist influence of national policies, but there is ample scope for increases in trade barriers. Moreover, there are opportunities to favor domestic producers at the expense of foreign producers through industry-specific relief or subsidy programmes, broad fiscal stimulus programmes, buy-domestic provisions, or currency depreciation.

[39] See Congressional Research Service, USA Report titled ''*Macroprudential Oversight: Monitoring the Financial System*'', March 6, 2009.

(v) Credit Crunch[40]

Usually, economic downturns have resulted in panics due to sudden changes in financial market sentiment. People literally panicked when something went wrong such as a failure by a borrower to meet the payment obligations. The result was that people withdrew money from banks and banks failed to lend. In such a situation, maintaining sufficient liquidity in the financial system has remained a formidable problem. Therefore, injection of capital into banks has been widely viewed as an enabling measure to provide additional liquidity and improve solvency. The recovery packages unveiled by different national governments are steps in this direction. But the irony is that even when the central banks can inject liquidity, they cannot erase losses nor can they erase risk.[41]

In the past, problems in the credit market were reflected in the solvency of banks. In the last two decades, however, securitization was supposed to reduce the likelihood of problems in financial markets by dispersing risk. And while risk was dispersed, it was not reduced. Instead, a new kind of risk has been created. That is, there is some uncertainty as to the location of risky assets. The lack of information or lack of transparency has contributed to the seizing up of credit markets. Moreover, much of the risk turns out to reside with banks. The difference now is that one often does not know where that risk resides until trouble emerges. "But what has really undermined trust is the fact that nobody knows where the financial toxic waste is buried. Citigroup wasn't supposed to have tens of billions of dollars in sub-prime exposure; it did. Florida's Local Government Investment Pool, which acts as a bank for the state's school districts, was supposed to be risk-free; it wasn't (and now schools don't have the money to pay teachers)".[42]

There is a high degree of uncertainty about the length and depth of the credit crunch. Spreads on asset backed securities have widened and the markets for high yield bonds and inter-bank lending have been considerably squeezed. Major Banks have written off sizable losses thereby adding to a constriction of credit.

(vi) Crisis of Confidence and Credibility in the Financial Market

When a few leading institutions failed, the entire financial system got enveloped in an acute crisis. In the mood of pervasive fear, banks stopped lending to each other in the financial centres. Banks were not interested in proactive lending. The financial markets in the West have frozen in panic. The whole episode has exposed unbridled greed and pervasive corruption enabled by governments that lost sight of their responsibility to protect their citizens. The credibility of the dominant stakeholders has been shattered.

[40] Credit crunch is a situation when banks hugely reduced their lending to each other because they were uncertain about how much money they had. This, in turn, resulted in more expensive loans and mortgages for ordinary people.

[41] *Global Economic Outlook*, 2008, Deloitte Research.

[42] Paul Krugman,"Innovating Our Way to Financial Crisis", *New York Times*, December 3, 2007.

Trust, that most precious and essential element in human exchange, has vanished. The world faces setbacks that are already causing untold suffering.[43] Echoing similar views, Prof. Amartya Sen said that exaggerated pursuit of conflict of interest in the US economy led to a gigantic collapse of trust and confidence.[44]

(vii) Failure in addressing global issues such as Climate Change

The global economic crisis in the developed countries and elsewhere also has contributed towards the limited global efforts in reaching agreement on international issues such as climate change. Global economic growth rate is slowing. Budgets of national economies are also tightening. In this scenario, there is a greater possibility of fewer resources to address the global problem of climate change. With the severity of economic crisis, the agenda for concerted global action for substantial reduction in Green House gases has been accorded less priority. But in order to ensure sustainable development, the issues concerning climate change must receive due priority in the scheme of development, especially while creating jobs, ensuring energy supplies, inducting new technologies, etc. Clearly, the world today is faced with two crises. The global financial crisis is almost immediate; the more existential is climate change. The urgency of the first is no excuse for neglecting the second. To the contrary, it is an opportunity to kill two birds with one stone.[45]

[43] Speech of the President of the 63rd Session of the UN General Assembly at the meeting of the Interactive Panel on the Global Financial Crisis, New York, 30 October, 2008.

[44] *The Hindu*, February 24, 2009.

[45] Ban Ki-Moon, Susilo Bambang Yodhoyono, Donald Tusk and Andres Fogh Rasmussen, ''Crisis is Opportunity'', *The Hindu*, November 13, 2008.

V

Impact of Economic Crisis on Europe

The cross-border investment by banks, securities brokers, and other financial firms made financial markets in the United States and Europe highly integrated. As a result of this integration, economic and financial developments that impact national economies are difficult to contain and are quickly transmitted across national borders. As financial firms react to a financial crisis in one area, their actions can spill over to other areas as they withdraw assets from foreign markets to shore up their domestic operations. Banks and financial firms in Europe have felt the repercussions of the US financial crisis as US firms operating in Europe and as European firms operating in the United States have adjusted their operations in response to the crisis. In nutshell, the crisis has underscored the growing interdependence between financial markets and between the U.S. and European economies. As such, the synchronized nature of the current economic downturn probably means that neither the United States nor Europe is likely to emerge from the financial crisis or the economic downturn alone.

The crisis has adversely impacted the economic activities of Europe, touching all vital areas of growth of the national economies and the economic prosperity of the people. The economic downturn has become a global, synchronized recession. Tighter financial conditions, falling wealth, and greater uncertainty have triggered a sharp decline across all types of demand. This drop in demand has sparked an unprecedented collapse in trade: euro area exports have dropped by an annual rate of 26 percent in the last quarter of 2008. The plunge in demand, together with the reversal of commodity price increases, has pushed headline inflation to very low levels in advanced economies and has diminished concerns about inflation in many emerging economies, the IMF says in its Regional Economic Outlook: Europe.

Europe's share in global trade has declined sharply, eroding prospects for European export. In addition, rising rates of unemployment and concerns over the growing financial and economic turmoil are increasing the political stakes for European governments and their leaders. The impact has been so severe that economic growth in Europe is expected to slow by nearly 2% in 2009 to post a 0.2% drop in the rate of economic growth. Economic growth, as represented by gross domestic product (GDP), is expected to register a negative 1.6% rate for the United States in 2009, while the euro area countries could experience a combined negative rate of 2.0%, down from a projected rate of growth of 1.2% in 2008.[46] Besides, the global economic crisis is

[46] *World Economic Outlook, Update,* The International Monetary Fund, January 2009.

straining the ties that bind together the members of the European Union[47] in pursuit of common goals and interests. The differential effects of the economic downturn, however, are dividing the wealthier countries of the Eurozone[48] from the poorer countries within the EU and in East Europe and are compounding efforts to respond to the financial crisis and the economic recession. European countries are concerned over the impact the financial crisis and the economic recession are having on the economies of East Europe and prospects for political instability[49] as well as future prospects for market reforms. It is widely viewed that worsening economic conditions in East European countries could make matters worse for financial institutions in the EU.

Within Europe, varied measures have been taken by the national governments as well as private firms to withstand the crisis. While some have preferred to address the crisis on a case-by-case basis, others have looked for a systemic approach that could alter the drive within Europe towards greater economic integration.[50] Great Britain has proposed a plan to rescue distressed banks by acquiring preferred stock temporarily. Iceland, on the other hand, has had to take over three of its largest banks in an effort to save its financial sector and its economy from collapse. The experience of Iceland raises very important questions about the kind of protection to be given by the nation to its depositors against financial crisis elsewhere and about the level of financial sector debt without risking system-wide failure.

According to a report by the International Monetary Fund (IMF), many of the factors that led to the financial crisis in the United States created a similar crisis in Europe.[51] A host of factors, such as the low interest rates, complex mortgage securitization process, leveraged debt of banks and financial institutions, rise of perverse incentives and complexity for credit rating agencies, expanded linkages between national financial centers that stimulated expansion in credit and spurred economic growth. This rapid rate of growth pushed up the values of equities, commodities, and such tangible assets as real estate. In July 2007, these factors combined to undermine the perceived value of a range of financial instruments and other assets and increased the perception of risk of financial instruments and the credit

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[47] Members of the European Union are: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.

[48] Members of the Euro area have adopted the Euro as their common currency. Member countries are: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.

[49] Phillip P. Pan, "Economic Crisis Fuels Unrest in East Europe", *The Washington Post*, January 26, 2009.

[50] ''The Financial Crisis: Impact on and Response by the European Union'', Congressional Research Service Report for Congress, USA, March 9, 2009.

[51] *Regional Economic Outlook: Europe*, International Monetary Fund, April 2008, p. 19-20.

worthiness of a broad range of financial firms. As creditworthiness problems in the United States began surfacing in the sub-prime mortgage market in July 2007, the risk perception in European credit markets followed. The financial turmoil quickly spread to Europe, although European mortgages initially remained unaffected by the collapse in mortgage prices in the United States.

Another factor in the spread of the financial turmoil to Europe has been the linkages that have been formed between national credit markets and the role played by international investors. The rise in uncertainty and the drop in confidence that arose from this crisis undermined the confidence in major European banks and disrupted the inter bank market. As a result, central banks have become incapable of financing large securities portfolios. The increased international linkages between financial institutions and the spread of complex financial instruments has meant that financial institutions in Europe and elsewhere have come to rely more on short-term liquidity lines, such as the inter bank lending facility, for their day-to-day operations. This has made them quite vulnerable to any drawback in the inter bank market.

The Central banks in the United States, the Euro zone, the United Kingdom, Canada, Sweden, and Switzerland staged a coordinated cut in interest rates on October 8, 2008 and launched a large coordinated attack against the widening global financial crisis, lowering short-term interest rates in unison.[52] The actions, however, could not address the wide-spread concerns facing financial markets. The speed with which the financial crisis spread across national borders and the extent to which it threatened to weaken economic growth in Europe baffled many perceptive observers of world economy. This crisis did not just envelope U.S. financial institutions; it has exposed the underbelly of the global economic and financial linkages.

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[52] Jon Hilsenrath, Joellen Perry, and Sudeep Reddy, ''Central Banks Launch Coordinated Attack; Emergency Rate Cuts Fail to Halt Stock Slide; U.S. Treasury Considers Buying Stakes in Banks as Direct Move to Shore Up Capital'', *The Wall Street Journal*, October 8, 2008, p. A1.

VI

A. Responses to the Global Financial Crisis

The actions of the United States and other nations in coping with the global financial crisis first were to contain the contagion, minimize losses to society, restore confidence in financial institutions and instruments, and lubricate the wheels of the system in order for it to return to full operation.[53] Attention is focused on stimulating the economy and stemming the downturn in macroeconomic conditions that is increasing unemployment and forcing many companies into bankruptcy. It is estimated that as much as 40% of the world's wealth may have been destroyed since the crisis began.[54] There still is considerable uncertainty, however, over whether the worst of the crisis has passed and whether monetary and fiscal policies taken so far will be sufficient to cope with the global recession. It is also unknown whether the current crisis is an aberration that can be fixed by fine-tuning the system, or whether it reflects systemic deficiencies that require major overhaul.

The responses of the countries across the globe to various facets of the crisis are enumerated as under:

(i) Containing the Contagion and Strengthening Financial Sectors

The first phase has been intervention to contain the contagion and strengthen financial sectors in countries. On a macroeconomic level, this has included policy actions such as lowering interest rates, expanding the money supply and actions to restart and restore confidence in credit markets. On a microeconomic level, this has entailed actions to resolve underlying causes of the crisis including financial rescue packages for ailing firms, guaranteeing deposits at banks, injections of capital, disposing of toxic assets, and restructuring debt. This has involved decisive measures from the Government. Actions taken include the rescue of financial institutions and takeovers of certain financial institutions, and Government facilitation of mergers and acquisitions.

Mostly, all these short term solutions to the crisis proposed in the US have aspects of a bailout to them. This is true of the interest rate cuts by the Fed; the Fed's lending to the troubled institutions; tax rebate checks mailed out to individuals; the extension of loan limits by the Federal Housing Administration; and the extension of mortgage ceilings by the Government-sponsored enterprises Fannie Mae and Freddie Mac.[55] In the aftermath of the crisis, particular attention was paid to ensure the capital adequacy of the

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[53] "Global Financial Crisis: Analysis and Policy Implications", Congressional Research Service Report for Congress, April 3, 2009.

[54] Edmund Conway, "WEF 2009: Global crisis 'has destroyed 40pc of world wealth'," *Telegraph.co.uk*, January 29, 2009, Internet edition.

[55] Robert J. Shiller, 'The Subprime Solution, Princeton: Princeton University Press, 2008, p.87

banks and other lending institutions, which came under increasing pressure with the continued substantial falls in their assets. Care was taken to recapitalize the banks so as to avoid further freeze-ups of the system, which may spread rapidly in the crisis.

But, the very assumption that the rescue plans have the potential to bring about remarkable change in the financial system is fraught with limitations. Several economists and experts have criticized the rescue plans of the National Governments by calling these as free gifts to those who have mismanaged the system at the expense of the taxpayers. Noted economist Paul Krugman while commenting upon the US administration's plan for banking systems rescue, said that these rescue plans are shaping up as a classic exercise in "lemon socialism": Taxpayers bear the cost if things go wrong, but stockholders and executives get the benefits if things go right.[56] Similarly, another noted economist, Joseph Stiglitz brought out yet another critical dimension of rescue plans. In environmental economics, there is a basic concept called the polluter pays principle. It is a matter of fairness, but also of efficiency. Wall Street has polluted our economy with toxic mortgages. It should now pay for the clean-up.[57] There was also another dimension to the bailout packages, which questioned the very logic of these initiatives. The causes for the current global crisis which were brought about by turbo charging cheap credit are not yet understood or there is a complete denial on this score. The crisis was precipitated by the incapacity of the borrower to return the loans that were virtually forced (through sub-prime terms) on him and not due to the incapacity of the lender. Any amount of bailout strengthening the lender will provide no succor to the borrower who continues to be ruined with the crisis already throwing millions of people out of their jobs across the globe. This only further weakens the economic strength of the borrower. The bailout may fatten the pink-stripe suited financial executives but it does not either solve the global crisis or provide relief to the common civilian who is its worst victim.[58]

(ii) Coping with Macro-economic Effects

Countries across the world are coping with the macroeconomic impact of the crisis on their economies, firms, investors, and households. Many of these countries, particularly those with emerging and developing markets, have been pulled down by the significant capital outflow from their economies and by falling exports and commodity prices. In these cases, governments have turned to traditional monetary and fiscal policies to deal with recessionary economic conditions, declining tax revenues, and rising unemployment. However, the slowdown is indeed global. The implication of this slowdown is seen in substantial decline in growth rates in the United States and other

[56] Paul Krugman, ''Bailouts for bunglers'', *The Hindu*, February 3, 2009.

[57] Joseph Stiglitz, ''Good day for democracy; Now Congress must draw up a proposal in which costs are borne by those who created the problem'', *The Guardian*, October 1, 2008.

[58] Sitaram Yechury, ''Davos Meet: Theatre of the absurd'', *Pragoti*, February 7, 2009.

nations. All leading economies such as USA, UK, Germany, Brazil, Mexico, Russia, China, Japan, South Korea are experiencing a growth recession. There is no major economy that can play the role of an economic engine to pull other countries out of their economic depression.

In response to the recession or slowdown in economic growth, many countries have adopted fiscal stimulus packages[59] designed to induce economic recovery or at least keep conditions from worsening. The global total for stimulus packages now exceeds $2 trillion, but some of the packages include measures that extend into subsequent years, so the total does not imply that the entire amount will translate into immediate Government spending. The stimulus packages by definition are to be fiscal measures (government spending or tax cuts) but some packages include measures aimed at stabilizing banks and other financial institutions that usually are categorized as bank rescue or financial assistance packages. The $2 trillion total in stimulus packages amounts to approximately 3% of world gross domestic product, an amount that exceeds the call by the IMF for a large fiscal stimulus totaling 2 per cent of global GDP to counter worsening economic conditions world wide.[60] The IMF estimated that as of January 2009, the U.S. fiscal stimulus packages as a percent of GDP in 2009 would amount to 1.9 per cent, for the euro area 0.9 per cent, for Japan 1.4 per cent, for Asia excluding Japan 1.5 per cent, and for the rest of the G-20 countries 1.1 per cent.[61]

Many countries have borrowed from the international market to carry debt denominated in euros or dollars. The exchange rates of local currencies have also plunged, which means the cost of paying back all those loans denominated in foreign currencies has suddenly become 20, 30, even 40 per cent more expensive. Not only are households and companies defaulting, but a number of countries are also in jeopardy of defaulting on their sovereign debt.[62] This isn't just a borrower's problem. It's also a problem for the lenders. What makes the situation particularly fragile is that many of the highly leveraged banks don't have a financial cushion against massive losses. In big countries such as France and Germany, the Government can probably afford to step in and recapitalize troubled banks, much as the U.S. Government has done with Citigroup. But in smaller countries with big banking sectors – Austria, Italy, Ireland, Belgium, Sweden and the Netherlands – the exposure to troubled loans is a sizable percentage of GDP. In those cases, any Government rescue would cripple the economy, as it has in Iceland.

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[59] Stimulus packages include packages by USA ($787 billion), China ($586 billion), the European Union ($256 billion), Japan ($250 billion), Mexico ($54 billion), and South Korea ($52.5 billion).

[60] Camilla Anderson, ''IMF Spells Out Need for Global Fiscal Stimulus'', International Monetary Fund, IMF Survey Magazine: Interview, Washington, DC, December 29, 2008.

[61] Charles Freedman, Michael Kumhof, Douglas Laxton, and Jaewoo Lee, ''The Case for Global Fiscal Stimulus'', International Monetary Fund, IMF Staff Position Note SPN/09/03, March 6, 2009, p. 14.

[62] Steven Pearlstein, “Asia, Europe Find Their Supply Chains Yanked. Beware the Backlash,” *The Washington Post*, February 20, 2009, pp. D1, D3.

(iii) Regulatory and Financial Market Reform

In order to bring about fundamental reforms in national regulatory systems, world leaders began a series of international meetings to address changes in policy, regulations, oversight and enforcement. Some are characterizing these meetings as Bretton Woods II.[63] The G-20 Leaders' Summit on Financial Markets and the World Economy that met on November 15, 2008, in Washington DC, was the first of a series of summits to address these issues. The second was the G-20 Leaders' Summit on April 2, 2009, in London[64] , and the third is to be held in November 2009.

The immediate concerns addressed by the US and other nations relate to systemic deficiencies so as to prevent future crises from occurring. Much of this involves regulation and oversight of financial markets, derivatives, and hedging activity, as well as standards for capital adequacy. In the November 2008 G-20 Summit, the leaders approved an Action Plan that sets forth a comprehensive work plan.

At the G-20 Summit on Financial Markets and the World Economy on November 15, 2008, in Washington DC, the leaders of these nations concluded that major changes are needed in the global financial system. The G-20 recommendations imply that most saw the system as functional but major measures were needed to reduce risk, to provide oversight, and to establish an early warning system of impending financial crises. The G-20 leaders also agreed, however, that "needed reforms will be successful only if they are grounded in a commitment to free market principles, including the rule of law, respect for private property, open trade and investment, competitive markets, and efficient, effectively-regulated financial systems."[65]

At the London Summit, the G-20 leaders addressed the issue of coordination and oversight of the international financial system by establishing a new Financial Stability Board (FSB) with a strengthened mandate as a successor to the Financial Stability Forum to collaborate with the IMF to provide early warning of macroeconomic and financial risks and the actions needed to address them. The Summit left it to individual countries to oversee globally active financial institutions and reshape regulatory systems to identify and take account of systemic risks. The London Summit called for the regulation of hedge funds, a crack down on tax havens, and for regulatory oversight and registration for Credit Rating Agencies.[66]

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63 The Bretton Woods Agreements in 1944 established the basic rules for commercial and financial relations among the world's major industrial states and also established the World Bank and International Monetary Fund.

64 Information on the London G-20 Summit is available at http://www.londonsummit.gov.uk/en/

65 Declaration of the G-20 Summit on Financial Markets and the World Economy November 15, 2008, Washington DC.

66 G-20 Nations "London Summit – Leaders' Statement," 2 April 2009 [http://www.londonsummit.gov.uk/resources/en/PDF/final-communique].

B. Overview of the Crisis and the Developments

It can be said with a measure of certainty that the world is currently in the midst of the most severe financial and economic crisis since the Great Depression. What began as a sub-prime mortgage crisis in the US has then spread to Europe and later to the rest of the world, turning into a widespread banking crisis in the US and Europe, the breakdown of both domestic and international financial markets, and then later into a full blown global macroeconomic downturn. The global economic outlook has deteriorated sharply over the last few months. It's the first time in memory that all global growth centres are deeply affected. In its World Economic Outlook, published in early October 2008, the International Monetary Fund (IMF) forecast global growth of 3.9 per cent in 2008, and of 3.0 per cent in 2009. The IMF has since revised its forecast for global growth downwards to 3.7 per cent for 2008, and 2.2 per cent for 2009. Many economists are now predicting the worst global recession since the 1970s. Several countries, notably the United States, the UK, the euro area and Japan are all officially in recession. More worryingly, current indications are that the recession will be deeper and the recovery longer than earlier anticipated. The confidence in global credit markets continues to be low, and credit lines remain clogged. The tight and hesitant conditions in the credit markets are precipitating erosion of demand which, in turn, is feeding a recession – deflation vicious cycle.

The speed of the contagion that spread across the world like a wild fire is rather unprecedented. Almost all sovereign governments and central banks of the world have been busy in evolving adequate policy responses both fiscal and monetary policy measures, to contain the contagion or to minimize the impact of the crisis on their national economies. Central banks around the world are responding to the developments by aggressive and unconventional injection of liquidity, monetary easing and relaxation of collateral norms and eligibility criteria for their lending to financial institutions.

The significant characteristic is that this is a financial crisis that turned into an economic crisis, which is developing into an employment crisis and could soon turn out to be a social and human crisis unless urgent action is taken. Given the unprecedented nature of the crisis and its world-wide influence, the nature of the response has been equally proactive, as exemplified by the coordinated action committed to by the G-20 in their Summits in Washington and also in London. Along with the coordinated fiscal and monetary policy actions, a comprehensive re-examination of the financial regulatory and supervisory framework is also underway around the world.

C. Decoupling Debate

The global financial crisis has underscored the role and importance of USA as a major centre of the financial world. It has been well recognized that regional financial crises, from time to time, can occur without seriously impacting the national economies across the world. But when the US financial system stumbles, it may bring major parts of the rest of the world down with it.[67]

There is a large body of opinion that holds that the US is the prime mover of the international financial system. The rest of the world may not appreciate it, but a financial crisis in the United States often takes on a global hue. However, those who believe in decoupling hold that the European and Asian economies, especially emerging ones, have broadened and deepened to the point that they no longer depend on the US for growth, leaving them insulated from a severe slow down there.[68] They contend that it is possible for globalization and decoupling to coexist. Even, data suggest decoupling is no myth.[69] Since the start of 2009, emerging market bourses have averaged 30 per cent growth, while those of the US, Europe and Japan have been flat or falling. In dollar terms, Chinese and Indian bourses are up 40 per cent and Russian and Brazilian ones nearly 50 per cent. The GDP of China and India is still growing at fairly high rates, while developed countries will suffer a GDP fall of 1.3 per cent in 2009, according to the IMF. So, while the world remains interconnected, both bourses and real economies are going in different directions in the west and emerging markets.[70] Indeed, emerging markets are now seen as growth havens and are even considered as the new global locomotives.

Economists, however, continue to argue about whether or not emerging economies will follow America into recession. One predominant view is that it makes no sense to talk about decoupling in an era of globalization: economies have become more intertwined through trade and finance. Global interdependence of economies is rising. “Decoupling is a misleading idea...the linkages between developed and emerging market economies are now much more complex than before,”[71] said IMF Managing Director Dominique Strauss-Kahn. The view that the financial crisis in US will not have any negative cascading effect on the rest of the world is untenable.

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[67] US Financial Crisis: The Global Dimension with Implications for US Policy, CRS Report for Congress, November 18, 2008.

[68] Conard de Aenlle, ‘‘Decoupling: Theory vs. reality’’, *The New York Times*, February 7, 2008.

[69] ‘‘Emerging Markets: Decoupling is not a myth’’, March 6, 2008, www.economist.com.

[70] ‘‘Long live decoupling’’, *The Economic Times* (Editorial), 25 May 2009.

[71] Quoted in *The Financial Express*, February 11, 2008.

VII

Impact of the Economic Crisis on India

(i) Offshoot of Globalized Economy

With the increasing integration of the Indian economy and its financial markets with rest of the world, there is recognition that the country does face some downside risks from these international developments. The risks arise mainly from the potential reversal of capital flows on a sustained medium-term basis from the projected slow down of the global economy, particularly in advanced economies, and from some elements of potential financial contagion. In India, the adverse effects have so far been mainly in the equity markets because of reversal of portfolio equity flows, and the concomitant effects on the domestic forex market and liquidity conditions. The macro effects have so far been muted due to the overall strength of domestic demand, the healthy balance sheets of the Indian corporate sector, and the predominant domestic financing of investment.[72]

It has been recognized by the Prime Minister of India that ''...it is a time of exceptional difficulty for the world economy. The financial crisis, which a year ago, seemed to be localized in one part of the financial system in the US, has exploded into a systemic crisis, spreading through the highly interconnected financial markets of industrialized countries, and has had its effects on other markets also. It has choked normal credit channels, triggered a worldwide collapse in stock markets around the world. The real economy is clearly affected. ...Many have called it the most serious crisis since the Great Depression."[73]

(ii) Aspects of Financial Turmoil in India

(a) Capital Outflow

The main impact of the global financial turmoil in India has emanated from the significant change experienced in the capital account in 2008-09, relative to the previous year. Total net capital flows fell from US$17.3 billion in April-June 2007 to US$13.2 billion in April-June 2008. Nonetheless, capital flows are expected to be more than sufficient to cover the current account deficit this year as well. While Foreign Direct Investment (FDI) inflows have continued to exhibit accelerated growth (US$ 16.7 billion during April-August 2008 as compared with US$ 8.5 billion in the corresponding period of 2007), portfolio investments by foreign institutional investors (FIIs) witnessed a net

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[72] Dr. Rakesh Mohan, Deputy Governor, RBI, "Global Financial Crisis and Key Risks: Impact on India and Asia" remarks made at IMF-FSF High-Level Meeting on the Recent Financial Turmoil and Policy Responses at Washington D.C. on October 9, 2008

[73] Prime Minister of India's statement at the Summit of Heads of State or Governments of the G-20 countries on "Financial Markets and the World Economy" held at Washington on November 15, 2008.

outflow of about US$ 6.4 billion in April-September 2008 as compared with a net inflow of US$ 15.5 billion in the corresponding period last year.[74]

Similarly, external commercial borrowings of the corporate sector declined from US$ 7.0 billion in April-June 2007 to US$ 1.6 billion in April-June 2008, partially in response to policy measures in the face of excess flows in 2007-08, but also due to the current turmoil in advanced economies.

(b) Impact on Stock and Forex Market

With the volatility in portfolio flows having been large during 2007 and 2008, the impact of global financial turmoil has been felt particularly in the equity market. Indian stock prices have been severely affected by foreign institutional investors' (FIIs') withdrawals. FIIs had invested over Rs 10,00,000 crore between January 2006 and January 2008, driving the Sensex 20,000 over the period. But from January, 2008 to January, 2009 this year, FIIs pulled out from the equity market partly as a flight to safety and partly to meet their redemption obligations at home. These withdrawals drove the Sensex down from over 20,000 to less than 9,000 in a year. It has seriously crippled the liquidity in the stock market. The stock prices have tanked to more than 70 per cent from their peaks in January 2008 and some have even lost to around 90 per cent of their value. This has left with no safe haven for the investors both retail or institutional. The primary market got derailed and secondary market is in the deep abyss.

Equity values are now at very low levels and many established companies are unable to complete their rights issues even after fixing offer prices below related market quotations at the time of announcement. Subsequently, market rates went down below issue prices and shareholders are considering purchases from the cheaper open market or deferring fresh investments. This situation naturally has upset the plans of corporates to raise resources in various forms for their ambitious projects involving heavy outlays.[75]

In India, there is serious concern about the likely impact on the economy of the heavy foreign exchange outflows in the wake of sustained selling by FIIs on the bourses and withdrawal of funds will put additional pressure on dollar demand. The availability of dollars is affected by the difficulties faced by Indian firms in raising funds abroad. This, in turn, will put pressure on the domestic financial system for additional credit. Though the initial impact of the financial crisis has been limited to the stock market and the foreign exchange market, it is spreading to the rest of the financial system, and all of these are bound to affect the real sector. Some slowdown in real growth is inevitable.

Dollar purchases by FIIs and Indian corporations, to meet their obligations

[74] Dr. Rakesh Mohan, Deputy Governor, RBI, “Global Financial Crisis and Key Risks: Impact on India and Asia” remarks made at IMF-FSF High-Level Meeting on the Recent Financial Turmoil and Policy Responses at Washington D.C. on October 9, 2008.

[75] P.A. Seshan, “Concern over impact of U.S. crisis”, *The Hindu*, October 13, 2008

abroad, have also driven the rupee down to its lowest value in many years. Within the country also there has been a flight to safety. Investors have shifted from stocks and mutual funds to bank deposits, and from private to public sector banks. Highly leveraged mutual funds and non-banking finance companies (NBFCs) have been the worst affected.

(c) Impact on the Indian Banking System

One of the key features of the current financial turmoil has been the lack of perceived contagion being felt by banking systems in emerging economies, particularly in Asia. The Indian banking system also has not experienced any contagion, similar to its peers in the rest of Asia.

The Indian banking system is not directly exposed to the sub-prime mortgage assets. It has very limited indirect exposure to the US mortgage market, or to the failed institutions or stressed assets. Indian banks, both in the public sector and in the private sector, are financially sound, well capitalised and well regulated. The average capital to risk-weighted assets ratio (CRAR) for the Indian banking system, as at end-March 2008, was 12.6 per cent, as against the regulatory minimum of nine per cent and the Basel norm of eight per cent.

A detailed study undertaken by the RBI in September 2007 on the impact of the sub-prime episode on the Indian banks had revealed that none of the Indian banks or the foreign banks, with whom the discussions had been held, had any direct exposure to the sub-prime markets in the USA or other markets. However, a few Indian banks had invested in the collateralised debt obligations (CDOs)/ bonds which had a few underlying entities with sub-prime exposures.[76] Thus, no direct impact on account of *direct exposure* to the sub-prime market was in evidence.

Consequent upon filling of bankruptcy by Lehman Brothers, all banks were advised to report the details of their exposures to Lehman Brothers and related entities both in India and abroad. Out of 77 reporting banks, 14 reported exposures to Lehman Brothers and its related entities either in India or abroad. An analysis of the information reported by these banks revealed that majority of the exposures reported by the banks pertained to subsidiaries of Lehman Brothers Holdings Inc., which are not covered by the bankruptcy proceedings. Overall, these banks' exposure especially to Lehman Brothers Holdings Inc. which has filed for bankruptcy is not significant and banks are reported to have made adequate provisions. In the aftermath of the turmoil caused by bankruptcy, the Reserve Bank has announced a series of measures to facilitate orderly operation of financial markets and to ensure financial stability which predominantly includes extension of additional liquidity support to banks.[77]

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[76] www.rbi.org.in

[77] Dr. Rakesh Mohan, Deputy Governor, RBI, "Global Financial Crisis and Key Risks: Impact on India and Asia" remarks made at IMF-FSF High-Level Meeting on the Recent Financial Turmoil and Policy Responses at Washington D.C. on October 9, 2008

(d) Impact on Industrial Sector and Export Prospect

The financial crisis has clearly spilled over to the real world. It has slowed down industrial sector, with industrial growth projected to decline from 8.1 per cent from last year to 4.82 per cent this year.[78] The service sector, which contributes more than 50 per cent share in the GDP and is the prime growth engine, is slowing down, besides the transport, communication, trade and hotels & restaurants sub-sectors. In manufacturing sector, the growth has come down to 4.0 per cent in April-November, 2008 as compared to 9.8 per cent in the corresponding period last year. Sluggish export markets have also very adversely affected export-driven sectors like gems and jewellery, fabrics and leather, to name a few. For the first time in seven years, exports have declined in absolute terms for five months in a row during October 2008-February 2009.[79]

In a globalised economy, recession in the developed countries would invariably impact the export sector of the emerging economies. Export growth is critical to the growth of Indian economy. Export as a percentage of GDP in India is closer to 20 per cent. Therefore, the adverse impact of the global crisis on our export sector should have been marginal. But, the reality is that export is being and will continue to be adversely affected by the recession in the developed world. Indian merchandise exporters are under extraordinary pressure as global demand is set to slump alarmingly. Export growth has been negative in recent months and the government has scaled down the export target for the current year to $175 billion from $200 billion. For 2009-10, the target has been set at $200 billion.

(e) Impact on Employment

Industry is a large employment intensive sector. Once, industrial sector is adversely affected, it has cascading effect on employment scenario. The services sector has been affected because hotel and tourism have significant dependency on high-value foreign tourists. Real estate, construction and transport are also adversely affected. Apart from GDP, the bigger concern is the employment implications.[80] A survey conducted by the Ministry of Labour and Employment states that in the last quarter of 2008, five lakh workers lost jobs. The survey was based on a fairly large sample size across sectors such as Textiles, Automobiles, Gems & Jewellery, Metals, Mining, Construction, Transport and BPO/ IT sectors. Employment in these sectors went down from 16.2 million during September 2008 to 15.7 million during December 2008.[81] Further, in the manual contract category of workers, the employment has declined in all the sectors/ industries covered in the survey.

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[78] *The Hindu*, February 16, 2009

[79] Annual Policy Statement for the Year 2009-10, RBI

[80] N.K. Singh, “A matter of trust”, *The Hindustan Times*, October 20, 2008

[81] Report on Effect of Economic Slowdown on Employment in India (October – December 2008), Government of India, Ministry of Labour and Employment, Labour Bureau, Chandigarh, January 2009, p. 10

The most prominent decrease in the manual contract category has been in the Automobiles and Transport sectors where employment has declined by 12.45 per cent and 10.18 per cent respectively. The overall decline in the manual contract category works out to be 5.83 per cent. In the direct category of manual workers, the major employment loss, *i.e*, 9.97 per cent is reported in the Gems & Jewellery, followed by 1.33 per cent in Metals.[82] Continuing job losses in exports and manufacturing, particularly the engineering sector and even the services sector are increasingly worrying. Protecting jobs and ensuring minimum addition to the employment backlog is central for social cohesiveness.

(f) Impact on poverty

The economic crisis has a significant bearing on the country's poverty scenario. The increased job losses in the manual contract category in the manufacturing sector and continued lay offs in the export sector have forced many to live in penury. The World Bank has served a warning through its report, "The Global Economic Crisis: Assessing Vulnerability with a Poverty Lens," which counts India among countries that have a "high exposure" to increased risk of poverty due to the global economic downturn.[83] Combined with this is a humanitarian crisis of hunger. The Food and Agriculture Organization said that the financial meltdown has contributed towards the growth of hunger at global level. At present, 17 per cent of the world's population is going hungry. India will be hit hard because even before meltdown, the country had a staggering 230 million undernourished people, the highest number for any one country in the world.[84]

(iii) Indian Economic Outlook

India is experiencing the knock-on effects of the global crisis, through the monetary, financial and real channels – all of which are coming on top of the already expected cyclical moderation in growth. Our financial markets – equity market, money market, forex market and credit market – have all come under pressure mainly because of what we have begun to call 'the substitution effect' of : (i) drying up of overseas financing for Indian banks and Indian corporates; (ii) constraints in raising funds in a bearish domestic capital market; and (iii) decline in the internal accruals of the corporates. All these factors added to the pressure on the domestic credit market. Simultaneously, the reversal of capital flows, caused by the global de-leveraging process, has put pressure on our forex market. The sharp fluctuation in the overnight money market rates in October 2008 and the depreciation of the rupee reflected the combined impact of the global credit crunch and the de-leveraging process underway. [85]

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[82] *Ibid*, p. 14

[83] "The Global Economic Crisis: Assessing Vulnerability with a Poverty Lens", *The World Bank Policy Note*, Newsletter n. 5, February 2009

[84] Kum Kum Dasgupta, "Less on our plate", *The Hindustan Times*, December 30, 2008

[85] "The Global Financial Turmoil and Challenges for the Indian Economy" Speech by Dr. D. Subbarao, Governor, Reserve Bank of India at the Bankers' Club, Kolkata on December 10, 2008

In brief, the impact of the crisis has been deeper than anticipated earlier although less severe than in other emerging market economies. The extent of impact on India should have been far less keeping in view the fact that our financial sector has had no direct exposure to toxic assets outside and its off-balance sheet activities have been limited. Besides, India's merchandise exports, at less than 15 per cent of GDP, are relatively modest. Despite these positive factors, the crisis hit India has underscored the rising trade in goods and services and financial integration with the rest of the world.

Overall, the Indian economic outlook is mixed. There is evidence of economic activity slowing down. Real GDP growth has moderated in the first half of 2008/09. Industrial activity, particularly in the manufacturing and infrastructure sectors, is decelerating. The services sector too, which has been our prime growth engine for the last five years, is slowing, mainly in construction, transport & communication, trade and hotels & restaurants sub-sectors. The financial crisis in the advanced economies and the slowdown in these economies have some adverse impact on the IT sector. According to the latest assessment by the NASSCOM, the software trade association, the developments with respect to the US financial markets are very eventful, and may have a direct impact on the IT industry. About 15 per cent to 18 per cent of the business coming to Indian outsourcers includes projects from banking, insurance, and the financial services sector which is now uncertain.

For the first time in seven years, exports had declined in absolute terms in October. Data indicate that the demand for bank credit is slackening despite comfortable liquidity. Higher input costs and dampened demand have dented corporate margins while the uncertainty surrounding the crisis has affected business confidence.

On the positive side, on a macro basis, with external savings utilisation having been low traditionally, between one to two per cent of GDP, and the sustained high domestic savings rate, this impact can be expected to be at the margin. Moreover, the continued buoyancy of foreign direct investment suggests that confidence in Indian growth prospects remains healthy.[86] Inflation, as measured by the wholesale price index, has fallen sharply, and the decline has been sustained for the past few months. Clearly, the reduction in prices of petrol and diesel announced in the past months should further ease inflationary pressures.

[86] *Ibid.*

VIII

India's Crisis Responses and Challenges

(i) State of Economy in Crisis Time

There have been several comforting factors going into the slowdown. First, our financial markets, particularly our banks, have continued to function normally. Second, India's comfortable foreign exchange reserves provide confidence in our ability to manage our balance of payments notwithstanding lower export demand and dampened capital flows. Third, headline inflation, as measured by the wholesale price index (WPI), has declined sharply. Consumer price inflation too has begun to moderate. Fourth, because of mandated agricultural lending and social safety-net programmes, rural demand continues to be robust.[87] After averaging nine per cent growth over the last four years, economic activity in India has slowed since the last quarter of 2008. And, the slowdown caused by the painful adjustment to abrupt changes in the international economy had resulted in making changes in the growth projections. The Economic Advisory Council to the Prime Minister in its review of the economy for the year 2008-09 has revised the GDP growth to 7.1 per cent. However, the Annual Policy Statement of RBI has projected real GDP growth of 6.0 per cent for 2009/10. Domestic demand, in the form of both private consumption and investment expenditure, has slackened although government final consumption rose on account of discretionary fiscal stimulus measures. The global crisis brought to the fore the strong interactions between funding liquidity and market conditions. Both the Government and the Reserve Bank responded to the challenge of minimising the impact of the crisis on India in a coordinated and consultative manner.

(ii) RBI's Crisis Response

On the financial side, the Reserve Bank of India took a series of measures in matching risk management with fiduciary and regulatory actions. The Reserve Bank's policy response was aimed at containing the contagion from the global financial crisis while maintaining comfortable domestic and forex liquidity. The Reserve Bank shifted its policy stance from monetary tightening in response to the elevated inflationary pressures in the first half of 2008-09 to monetary easing in response to easing inflationary pressures and moderation of growth engendered by the crisis. Through the Reserve Bank's actions, the cumulative amount of primary liquidity potentially available to the financial system is about 7 per cent of GDP.[88] Taking a cue from the Reserve Bank's monetary easing, most banks have reduced their deposit and lending

[87] Speech delivered by Dr. D. Subbarao, Governor, Reserve Bank of India at the Financial Management Summit 2009 organized by the Economic Times on May 22, 2009 in Mumbai

[88] Statement by Dr. D. Subbarao, at the International Monetary and Financial Committee, Washington D.C, April 25, 2009

rates. Besides, a calibrated regulatory framework was put in place by the RBI to address the issue of systemic risk, which included prudential capital requirements, exposure norms, liquidity management, asset liability management, creation of entity profile and reporting requirements, corporate governance and disclosure norms for non banking finance companies defined as systemically important.[89]

(iii) Government's Crisis Response

The Government launched three fiscal stimulus packages between December 2008 and February 2009. These stimulus packages came on top of an already announced expanded safety-net programme for the rural poor, the farm loan waiver package and payout following the Sixth Pay Commission Report, all of which added to stimulating demand. The combined impact of these fiscal measures is about 3 per cent of GDP.[90]

There are several challenges in the direction of implementing the fiscal stimulus packages, particularly stepping up public investment; revival of private investment demand; unwinding of fiscal stimulus in an orderly manner; maintaining the flow of credit while ensuring credit quality; preserving financial stability along with provision of adequate liquidity; and ensuring an interest rate environment that supports the return of the economy to a high growth path.

It is believed that the fiscal and monetary stimulus measures initiated during 2008- 09 coupled with lower commodity prices will cushion the downturn by stabilizing domestic economic activity. On balance, real GDP growth for 2009-10 is placed at around 6.0 per cent. Inflation, as measured by variations in WPI, is projected to be around 4.0 by end-March, 2010. Consumer price inflation too is declining, albeit less sharply. Notwithstanding several challenges, the Indian economy remains resilient with well functioning markets and sound financial institutions. The macro-economic management has helped in maintaining lower volatility in both financial and real sectors in India relative to several other advanced and emerging market economies. The Government pursued the opening of the economy and globalisation in a way that blend the market and the state in a more judicious way than some of the other economies.

(iv) The Risks and Challenges

While the risks from the uncertainties in the global financial markets continue to persist, there are risks on the domestic front too. The challenge is how to manage the recovery. The fiscal and monetary responses so far will have to weigh in the state of the economy going forward in the coming months. If the global recovery takes root and private investment demand

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[89] Remarks of Shyamala Gopinath, Deputy Governor RBI, at the Ninth Annual International Seminar on Policy Challenges for the Financial Sector, co-hosted by The Board of Governors of the Federal Reserve System, The IMF, and The World Bank on **"***Emerging from the Crisis – Building a Stronger International Financial System"*, June 3-5, 2009**,** Washington, D.C.

[90] *Ibid.*

revives faster, there could be less of a case for further stimulus. Risk management in the macro-economy is a formidable challenge. Clearly there are no easy ways; however, three aspects: monetary policy, fiscal policy, and financial stability merit special mention to understand the contour of uncertainties.

(a) Monetary policy

On the monetary policy front, managing the risk calls for maintaining ample liquidity in the system. The RBI has done so the past six months through a variety of instruments and facilities. And in the April 2009 policy review, it has extended the tenure of many of these facilities. Some will argue, and rightly so, that this might be sowing the seeds of the next inflationary cycle. And this is exactly the kind of risk one has to grapple with. So while the Reserve Bank will continue to support liquidity in the economy, it will have to ensure that as economic growth gathers momentum, the excess liquidity is rolled back in an orderly manner.[91]

The rise in macroeconomic uncertainty and the financial dislocation of last year have raised a related problem. The adjustment in market interest rates in response to changes in policy rates gets reflected with some lag. In India monetary transmission has had a differential impact across different segments of the financial market.

While the transmission has been faster in the money and bond markets, it has been relatively muted in the credit market on account of several structural rigidities. However, the earlier acceleration of inflation coupled with high credit demand appears to have added to these rigidities by prompting banks to raise deposits at higher rates to ensure longer term access to liquidity. High deposit rates in turn have not allowed banks to cut lending rates at a faster pace consistent with the growth and inflation outlook. Although deposit rates are declining and effective lending rates are falling, there is clearly more space to cut rates given declining inflation. Making liquidity available in sufficient quantity, as RBI has done, should also help by giving confidence to banks of the availability of funds.

(b) Fiscal policy

The challenge for fiscal policy is to balance immediate support for the economy with the need to get back on track on the medium-term fiscal consolidation process. The fiscal stimulus packages and other measures have led to sharp increase in the revenue and fiscal deficits which, in the face of slowing private investment, have cushioned the pace of economic activity.

Providing stimulus packages may be a short-term help, but sustainability of the recovery requires returning to responsible fiscal consolidation. The

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[91] Speech delivered by Dr. D. Subbarao, Governor, Reserve Bank of India at the Financial Management Summit 2009 organized by the Economic Times on May 22, 2009 in Mumbai

borrowing programme of the Government has already expanded rapidly. The Reserve Bank has been able to manage the large borrowing programme in an orderly manner. Large borrowings by the Government run against the low interest rate environment that the Reserve Bank is trying to maintain to spur investment demand in keeping with the stance of monetary policy.

(c) Financial stability

Beyond monetary and fiscal policies, preserving financial stability is the key to navigating these uncertain times. A sound and resilient banking sector, well-functioning financial markets, robust liquidity management and payment and settlement infrastructure are the pre-requisites for financial stability. The banking sector in India is sound, adequately capitalized and well-regulated. By all counts, Indian financial markets are capable of withstanding the global shock, perhaps somewhat bruised but definitely not battered.[92]

Amidst the din of the financial turmoil and the all-consuming fixation on rate cuts over the last six months, a seminal report on the health of the Indian financial system has brought encouraging news. In March this year, the Government and RBI jointly released the report of the Committee on Financial Sector Assessment (CFSA) that was co-chaired by Deputy Governor, RBI and Finance Secretary, Government of India. The report is the culmination of work started in September 2006 to undertake a comprehensive self-assessment of India's financial sector, particularly focusing on stability assessment and stress testing and compliance with all financial standards and codes.

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[92] *Ibid.*

IX

The Options Ahead

(i) Diversifying Exports

There is an imperative need to boost the exports, keeping in view its growth impulses and employment potential. Emphasis has been laid on renewing efforts not only to improve competitiveness, but also diversify the export basket and destinations. We need to be cognizant of the fact that due to financial turmoil, the consumption pattern of the developed countries and their demands for goods and services have undergone a sea change and this will be less likely to be reversed in near future. We need to imaginatively think where else can we sell our products and what would be the preferred consumption patterns of these newer markets.[93]

(ii) Boosting Domestic Consumption

It has been suggested by many experts that unless we boost domestic consumption, it will be difficult to compensate for the loss of external demand arising out of export squeeze. But, it is not that easy to replace exports by domestic consumption. It is a common knowledge that the products and processes of goods and services meant for exports are significantly different from the one preferred by domestic consumers. Changing production systems to suit domestic demand requires in-depth analysis and commencing new lines of production and processes.[94]

(iii) Enhancing Public Spending

It has been argued that along with the measures to support the financial system, we must increase public spending. There can be no dispute with the contention that public spending should remain at a high level in a situation like the present one. Fiscal profligacy is not a dirty word anymore. There is a world-wide feeling that pampering enhanced public outlays during the period of crisis is a key policy option. It has been commonly held that public outlays on infrastructure projects need to be optimum and particularly, project implementation needs to be accorded top priority, keeping in view its multiplier effects on growth. We need to put in place a sound mechanism of project management which would provide for minimal regulatory hurdles and process delays and functional autonomy to implementing agencies so as to ensure the pace and quality of public projects. Several stimulus packages have been announced that indicate commitment to enhanced public spending. But such a package is meaningful only if money does not remain clogged up in the system. Unfortunately, of 900 infrastructure projects worth Rs.418,567 crore, 346 are running behind schedule. Of 516 Central Government projects costing

[93] N.K. Singh, "Think beyond stimulus plans", *Mail Today*, March 16, 2009

[94] *Ibid.*

over Rs.100 crore each, more than half have serious time and cost overruns.[95] For infrastructure spending to spur the economy, it is critical that usual delays and lags are avoided and the projects are enabled to take off quickly. And, a clear cut policy with full commitment to increase the rate of investment has the potential to engender growth and revive confidence. In India, the Finance Minister has pointed out, there is a huge infrastructure gap which could be bridged by stepping up investments from the current level of five per cent of the GDP to more than nine per cent by 2014.[96] When private investors are reluctant, we have to depend upon public investment to stimulate investment. We have a large public sector functioning with efficiency, as has been demonstrated by a sustained increase in its profitability. The Government may mobilise some of our public sector corporations engaged in the sectors of power, transport, construction and communication to expand investment in our infrastructure. Many of these enterprises have long experience of successful execution of such projects, and if the programmes can be properly designed to share the risk and incentivise the success, these enterprises may again prove their worth and perform.[97] Besides, we need to invest significantly in the social sector – in our educational and healthcare infrastructures. Increased public spending will help address the huge domestic demand for both urban and rural sectors for better infrastructures and improved social services.

(iv) Generating Employment

Employment generation is the key to minimize the impact of the economic crisis on the social side. The need is all the more imperative as massive jobs have been lost due to economic slowdown and export shrink. As the sectors that fuelled high annual economic growth brace themselves for hard times, job creation in these areas has also weakened. Specific measures to facilitate employment are called for in segments that are badly affected by the economic slowdown. Critical to protecting the households will be the ability of governments to cope with the fallout and finance programs that create jobs, ensure the delivery of core services and infrastructure, and provide safety nets.

In India, nearly 60 per cent of the people rely on agriculture and the rural economy. It generates less than 20 per cent of the income or output. Greater employment opportunity for this sizeable population in productive ways in rural areas and in the urban economy would clearly be a priority going forward. Here again the size and strength of the domestic economy provide advantages for investments in education and appropriate skill formation. With half the population under the age 25, there is also a huge upside for employment.[98]

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[95] N.K. Singh, "Lame ducks & a rabbit trick", *The Hindustan Times*, March 9, 2009

[96] "The neglect continues", *The Hindu* (Editorial), February 19, 2009

[97] Arjun K. Sengupta, "The financial crisis and the Indian response", *The Hindu*, October 24, 2008

[98] Interview of Vinod Thomas, Director-General and Senior Vice-President, Independent Evaluation Group at the World Bank by Meena Menon, titled 'Of a crisis and an opportunity' published in *The Hindu*, January 6, 2009

(v) Provisioning Credit to Productive Sectors

What is needed at present is to focus on the financial system and enable it to fulfill adequately its functions in terms of the provision of credit to productive sectors. The domestic credit system must also fill the gap created by the drying up of external sources. We ought to be thinking of a scheme to provide additional funds for long term capital requirements, since the ability to raise funds from the capital market is bleak.

We need to pursue a conscious policy of expanding credit to the Small and Micro Enterprises (SMEs). This sector with only 10 per cent import content and with a proven ability to expand production through small amount of investment can very rapidly increase output and employment in our system. This sector has suffered most when the banks are in no mood to support SMEs with limited profitability and with practically no collateral. Only a directed public policy of providing financial support can galvanize them.[99]

Adequacy of liquidity with the lending agencies will not be enough. Injection of rupee by RBI into the system will not necessarily increase bank lending unless borrowers have the confidence in the sustainability of our economy to induce them to increase their investment and the banks have the confidence that these borrowers will be able to pay back. The main element that is missing in the system is enough confidence of our economic actors in our ability to get over the crisis within a short period. In its absence, there is hardly any way that either the demand for credit and finance for investment or the bankers' willingness to meet that demand can increase.[100]

(vi) *Need for Structural Reforms*

Along with monetary and fiscal policies, there is a need to bring about structural reforms to sustain the growth momentum. For instance, we need to pursue agrarian reforms. Agriculture has had declining Government investment for years. Government spending in agriculture has not led to building durable assets that could help agricultural production and diversify rural employment. Similarly, we must invest in inducting environment friendly technology and promoting environment friendly projects for sustainable development. We also need to improve regulatory framework so that the economy is revived to move along a high growth trajectory.

(vii) *Increased purchasing power of the people*

One of the ways to minimize the impact of the economic crisis on the people is to enhance purchasing power among the masses. It is true that productive capacity of the economy has been enhanced enormously, but the majority of people are too poor to be able to buy. The problem, therefore, does not relate to increasing production, but increasing the purchasing power

[99] Arjun K. Sengupta, "The financial crisis and the Indian response", *The Hindu*, October 24, 2008

[100] *Ibid*.

of the masses.[101] This assumes critical significance, especially in India, where 70 per cent of the people live on incomes of Rs.20 a day. The solution to the economic crisis lies in raising the purchasing power of the masses. Tax cuts and price reductions can do this.[102]

Summing Up

India has by-and-large been spared of global financial contagion due to the sub-prime turmoil for a variety of reasons. India's growth process has been largely domestic demand driven. The credit derivatives market is in nascent stage; the innovations of the financial sector in India is not comparable to the ones prevailing in advanced markets; there are restrictions on investments by residents in such products issued abroad; and regulatory guidelines on securitization do not permit rabid profit making. Financial stability in India has been achieved through perseverance of prudential policies which prevent institutions from excessive risk taking, and financial markets from becoming extremely volatile and turbulent.

Despite all these, the global economic slowdown has hit the vital sectors of our economy, posing serious threats to economic growth and livelihood security. The crisis is forcing countries around the world to test the limits of their fiscal and monetary tools. India is no exception. A series of fiscal and monetary measures have been taken by the Government and the RBI to minimize the impact of the slowdown as also to restore the economic buoyancy.

India has been consciously pursuing a high growth path in order to achieve the key objectives of rural regeneration, poverty alleviation, inclusiveness and sustainable development. Only growth without inclusiveness, or growth without jobs, will not ensure balanced and all-round development of all sections of the society. That's why, in the current crisis, the questions that how long it would last and how much it would impinge on the growth rates have assumed critical significance. The present impact of the slowdown on India's growth rate is certainly not alarming. India still is one of the fastest growing economies in the world. There is a just prediction in the Word Bank's report 'Global Development Finance 2009' that India would clock the highest GDP growth rate of 8 per cent in the year 2010. The sheer size of Indian economy would help regain its lost ground. With the right mix of monetary and fiscal policies plus domestic reforms of the productive sectors, as an economy, India has the potential to emerge from this global recession stronger than before.

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[101] Markandey Katju, "Reflections on the global economic crisis", *The Hindu*, March 9, 2009

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