Chapter 1
Introduction
1 Introduction

1.1 Introduction

20th century witnessed the great deal of financial and economic integration among the developed and developing economies. Financial integration particularly has taken deep roots in the world economy and has been responsible for many crises. There has been a new and frightening form of currency collapse, leading to combined banking and currency collapse. This has led to high interest rates, capital flight and contraction of real economy.

The events in Chile, Argentina and Uruguay during 1982-1983 exemplified these modern crises. This was later replayed in Mexico, Thailand, Indonesia, Korea and elsewhere. During all such crises, it should be noted that the Great Depression remained as the most important and major economic event of 20th Century. East Asian crises of 1990’s put forth the most serious challenge and necessitated the need for global governance of finance to prevent such financial crisis.

The sub-prime crisis which started in US in August 2007 soon transformed into a global financial and economic crisis underlined the fact to transform the current global regulatory and supervisory mechanism. It is also essential in circumstances where there are rapid financial innovations. This has also questioned the effectiveness of current international financial mechanism to prevent and avoid global crisis.

Financial crisis are as old as capitalism and can be traced back to Dutch tulip mania of 1636-37 and the South Sea Bubble of 1719-20. It is only that the nature, content, and the magnitude of financial crisis are slightly differently or more or less same depending upon the context of the economic landscape of the country. All Financial Crisis arrive with brutal force of financial excesses indulged in by the banking sector and left with important lessons for policy makers. According to Reinhart and Rogoff 2008, there has been 239 Financial Crisis during the period 1800-2006 of which 126 took place in Latin America, 73 in Europe 26 in Africa and 14 in Asia.

On the basis of World Monetary System, the period between 1875 to 2007 can be broadly marked into;
1. Gold Standard Era (1875-1913)
2. Inter-War Period (1913-1939)
3. Bretton Woods (1945-1971) and
4. Floating Exchange Rate Period (1973- till Date)

Bordo et al 2001, classified the period of 1880-2000 on the basis of World Monetary System. According to Bordo, the number of crisis during the specific periods is as under

Table 1.1: Number of crisis during each specific period

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Period</th>
<th>No. of Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gold Standard Era</td>
<td>58</td>
</tr>
<tr>
<td>2</td>
<td>Inter-War Period</td>
<td>51</td>
</tr>
<tr>
<td>3</td>
<td>Bretton Woods</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>Floating Exchange Rate Period</td>
<td>399</td>
</tr>
</tbody>
</table>

Source: Laeven and Valencia (2008)

It is quite evident from the above table that the post Bretton Woods Period has seen more Economic Crisis on account of deregulation of financial markets. Absence of capital controls has converted the Financial Markets into less or more Speculative Market. The emergence of floating exchange rates, in an era of capital mobility and inflation created a fertile opportunity for Speculative Exchange Rates and thus has seen a series of financial and economic crisis leading to US Sub-prime Crisis.

In order to understand Financial Crisis, one needs to know the functioning of financial systems and its relationship with economy. A lot has been said in this relation in Economic Crisis Literature. Charles Kindleberger (1978) has said that Economic Crisis occurs spontaneously as the result of mob psychology or panic. Mitchell (1941) says that Economic crisis is inevitable and is an intrinsic part of business cycle and results from shocks to economic fundamentals.

Jan Priewe reviews different interpretations of the global financial crisis of 2008–2009 (and its aftermath), focusing first on the proximate causes in the financial sector of the United States and then on the deeper ultimate causes. The latter were mainly the global imbalances in trade and in cross-border capital flows, the systemic root of which lies in what the author refers to as a “new Triffin dilemma”. This dilemma relates to the shortcomings of the present global currency system that uses the United States dollar as the key reserve currency, which has to serve both national and global objectives. Other
ultimate causes were the trend towards “finance-driven capitalism” in many OECD countries, most pronounced in the United States, and growing income inequality. The author contends that the confluence of the proximate and ultimate causes paved the way for the crisis.

Daniela Magalhães Prates and Marcos Antonio Macedo Cintra suggest that the spread of the current crisis to emerging-market economies shows that the macroeconomic reforms implemented since the financial crises of the 1990s were not sufficient to shelter countries from financial and exchange rate volatility. Even though countries, especially in Latin America and Asia, implemented prudent macroeconomic policies and accumulated large amounts of foreign exchange reserves, they were again hit by large swings in capital flows and subsequent volatility in their exchange rates. The reason for the failure of this policy stance is the hierarchical and asymmetric set-up of the global monetary and financial system, in which the issuer of the key currency, the United States, has a very large degree of freedom in the conduct of fiscal, monetary and exchange rate policies while the resulting volatility has to be borne by other countries. The proposed solution is a tightening or reintroduction of capital controls.

Jörg Mayer describes how the growing importance of financial investors in the markets for primary commodities has led to increased commodity price volatility. He dissects the different types of returns for financial investors and shows how the involvement of this investor group in the markets concerned has led to the prices of a number of commodities moving in tandem with equity prices and with the exchange rates of currencies affected by carry trade. Empirically, he shows that price volatility has increased the most for wheat, maize, soybeans and soybean oil. He asserts that this “financialization” of commodity markets is thus at least partly to blame for the greater price volatility, although he concedes that there are also other factors at play. As a solution, he proposes that the regulation of commodity exchanges as well as the design and viability of physical buffer stocks and intervention mechanisms be reconsidered. In addition, there should be a greater emphasis on policies to increase commodity production and productivity.

Sebastian Dullien takes an empirical look at the transmission mechanisms of the crisis around the world. Countries with large current-account imbalances were especially hard hit by the crisis. Interestingly, not only countries with large deficits but also those with large surpluses were strongly affected. Among the existing exchange-rate regimes, countries with currency boards suffered the greatest impacts. He points
out that countries with very open capital accounts run a greater risk of a deep recession, while those with medium inflation rates appear to have performed better during the crisis than those with low inflation rates. He concludes that these facts cast doubts on claims that free capital flows help countries to cushion against shocks and that macroeconomic policies should aim more at current account imbalances.

Laike Yang and Cornelius Huizenga analyzed how China has coped with the global financial and economic crisis: the crisis affected China’s real economy rather than its financial system. It caused a dramatic fall in China’s foreign trade and foreign direct investment inflows, higher unemployment rates and strong price fluctuations. The Government responded quickly to tackle the adverse effects of the crisis through a sizeable stimulus package that succeeded in maintaining high growth in both 2009 and 2010.

Abhijit Sen Gupta presents a case study on the impact of the economic and financial crisis on the Indian economy, and outlines the policy reactions of the Indian government to the crisis. He explains that India was already experiencing a domestic downturn when the crisis hit. The fall in exports and capital inflows and a domestic liquidity crunch further exacerbated the downturn. Both monetary authorities and the government reacted swiftly, with expansionary monetary and fiscal policies which contributed to a quick recovery of the Indian economy. However, the effective use of fiscal policy also resulted in a larger budget deficit, and this raises questions about an appropriate exit strategy from the very accommodative monetary policy stance.

André Nassif compares Brazil’s and India’s responses to the crisis. In an economic environment in which the risk of depression is global, the timeliness and intensity of economic policy responses matter. In September 2008, when the global crisis spread to Brazil and India through the financial channels, it might have been expected that both countries would be negatively affected in a similar manner. However, while the Brazilian economy fell into recession in 2009, India’s real GDP grew by over 6 per cent. This remarkable performance meant that India was the second least adversely affected country by the global crisis after China. Nassif shows that the monetary and fiscal policy responses to the global crisis by Indian policymakers were superior to those in Brazil.

Patrick Osakwe describes Africa’s exposure to the crisis. He argues that, contrary to common perceptions, the crisis also had adverse impacts on Africa. In many African countries, not only the export volume, but also export prices fell sharply, particularly
those of commodities, which account for a large share of Africa’s total exports. As a result, foreign exchange earnings as well as government revenues dropped. In addition, exchange rates fluctuated wildly owing to volatile capital flows. While African countries reacted with expansionary monetary and fiscal policies, the poor nevertheless felt the impact acutely, with poverty rising throughout the region. In order to safeguard against the adverse effects of future financial crises that originate elsewhere, Osakwe recommends an explicit policy of diversification of export markets and export products.

Alejandro Márquez presents a summary of the Report of the Commission of Experts of the President of the UN General Assembly on Reforms of the International Monetary and Financial System, commonly referred to as the Stiglitz Commission Report. He believes that such an exercise is particularly useful since the report, as with many policy documents, is too long and written in jargon that limits its readership. Conveying the main ideas of the report allows a better appreciation of why the financial and economic crisis should be used as an opportunity to reform the international financial and economic system.

Ricardo Ffrench-Davis underlines the difference between what he calls “financieristic” macroeconomic balances and real ones. Policymakers who adopt the first type concentrate their efforts on keeping inflation and fiscal deficits low, disregarding the variables relevant for the real balances, namely unemployment, growth and the real exchange rate. These goals have been achieved in many Latin American countries at the expense of growth and more effective employment of both labour and capital, generally under the auspices of the international financial institutions. He alleges that following such types of policies in the spirit of the Washington Consensus led to the current global crisis. The author argues that, in accordance with endogenous growth theory, policymakers should concentrate on achieving growth by aiming at real macroeconomic balances.

Jürgen Zattler examines the role that Special Drawing Rights (SDR), consisting of a kind of artificial basket of four leading currencies, could play in the present global monetary system. Zattler holds that, given the obvious weaknesses of the post-Bretton Woods monetary system, which is basically a “dollar standard”, a new role for SDRs needs to be considered. Currency reserves, presently held mainly in dollars, could be diversified by using SDRs. They could also be used for private international transactions rather than only official ones. Emerging countries’ bonds might be issued in SDRs, and countercyclical policies could be financed with SDRs. In addition,
implementation of climate change policies in developing countries could partly be financed with SDRs.

Detlef Kotte discusses options for improving the structure of international financial governance with a view to reducing the predominant influence of financial markets in determining the conditions for macroeconomic policy-making. He suggests that dependence on the dollar as a reserve currency could be reduced by allowing an independent international institution to create international liquidity to support countries that face externally caused currency crises. He believes the key to greater stability lies primarily in the creation of a multilaterally agreed framework for exchange-rate management that aims at stabilizing real exchange rates in conjunction with a strengthened institutional setting for macroeconomic policy coordination among the systemically important countries. In developing countries and emerging-market economies, the use of capital controls would help stabilize the macroeconomic context for investment in real productive capacity and contribute to their successful integration into the global economy.

In short, the most common causes of economic recession are:

- Unsustainable Macroeconomic Policies
- Large Current Account Deficit
- Excessive Credit Booms
- Policy Paralysis etc.
1.2 Economic Recession

1.2.1 Meaning
Recession this word has been derived from the Latin word ‘Recessus’ meaning “a going back, retreat”. Thus, Economic Recession refers to a period of decline in economic activity. A Recession is a business cycle contraction which results in the slowdown in economic activity. A Recession is a significant decline in activity across the economy, lasting longer than few months. The technical indicator of a recession is two consecutive quarters of negative economic growth as measured by a country’s gross domestic product (GDP).

Economic recession is a period of general economic decline and is typically accompanied by a drop in the stock market, an increase in unemployment and a decline in the housing market. Recession is less severe than a Depression.

An economic recession is typically defined as a decline in gross domestic product (GDP) for two or more consecutive quarters. GDP is the market value of all goods and services produced within a country in a given period of time. For example, the value of all mobile handsets produced within India for one year. It should be noted that GDP only takes into account the new products that have been manufactured and therefore, if second hand mobile handsets are sold in the market, their value will not be included in the calculation of GDP.

1.3 Definitions
Statistician Julius Shiskin suggested several rules of thumb which help to define recession. According to Julius the important indicator of recession is two down consecutive quarters of GDP. Many economists also prefer a definition of a 1.5 to 2 percentage points rise in unemployment within 12 months.

In the United Kingdom, recessions are generally defined as two consecutive quarters of negative economic growth as measured by the seasonal adjusted quarter-on-quarter figures of real GDP. The European Union also accepts the same definitions.

The International Monetary Fund (IMF) defines recession as “a decline in annual per capita real GDP (Purchasing Power Parity weighted), backed up by a decline or worsening for one or more of the seven other macroeconomic indicators- Industrial
production, trade, capital flows, oil consumption, unemployment rate, per capita investment and per capita consumption”

According to Paul Mckinney recession is “a period of general economic decline and is typically accompanied by a drop in the stock market, an increase in unemployment, and a decline in the housing market. Generally, a recession is less severe than a depression. The blame for a recession generally falls on the federal leadership or the entire administration”

According to Lakshman Achutan and Anirvan Banerji “a recession is a self-reinforcing downturn in economic activity, when a drop in spending leads to cutbacks in production and thus jobs, triggering a loss of income that spreads across the country and from industry to industry, hurting sales and in turn feeding back into a further drop in production- in effect a vicious cycle.

The National Bureau of Economic Research (NBER) defines recession as “a significant decline in economic activity spread across the economy, lasting more than few months, normally visible in production, employment, real income, wholesale-retail sales and other indicators. A recession begins when the economy reaches a peak of activity and ends when the economy reaches its trough.”

All the above definitions highlights the important indicator of recession i.e. decline in economic activity for two consecutive quarters which is visible in production, employment, real income etc. The definition given by IMF is much more exhaustive. The definition given by L Achutan and A Banerji depicts the causes and effects of recession which leads to a vicious cycle. All these definitions a criticized on one or other ground. In practice one simple and quantitative technical definition of recession is given by Silesian University in Opava, School of Business Administration in Karvina, Department of Mathematical Methods in Economics which says “a recession is a period of time when a nations GDP declines for at least two consecutive quarters in a quarter-to-quarter comparison. Moreover, other factors such as real personal income, employment, industrial production and wholesale and retail sales are used to determine whether an economy is in a recession or not (Rachlin, 2009). A deep recession influencing more than one country and lasting for a long time is called depression. Hence, depression is defined as a sustained long-term downturn in economic activity in one or more economies”
To conclude recession is a decline in two consecutive quarters in GDP which triggers unemployment, decline in production, expenditure real per capita income etc.

1.4 Factors that Cause Recessions

High interest rates are a cause of recession because they limit liquidity, or the amount of money available to invest.

Another factor is increased inflation. Inflation refers to a general rise in the prices of goods and services over a period of time. As inflation increases, the percentage of goods and services that can be purchased with the same amount of money decreases.

Reduced consumer confidence is another factor that can cause a recession. If consumers believe the economy is bad, they are less likely to spend money. Consumer confidence is psychological but can have a real impact on any economy.

Reduced real wages, another factor, refers to wages that have been adjusted for inflation. Falling real wages means that a worker's paycheck is not keeping up with inflation. The worker might be making the same amount of money, but his purchasing power has been reduced.

1.5 History

The traces of financial crises are as old as capitalism and dates back to the Dutch tulip mania of 1636-37 and the South Sea Bubble of 1719-20. All Financial Crisis arrive with brutal force of financial excesses indulged in by the banking sector and left with important lessons for policy makers.

According to Reinhart and Rogoff 2008, there has been 239 Financial Crisis during the period 1800-2006 of which 126 took place in Latin America, 73 in Europe 26 in Africa and 14 in Asia.

On the basis of World Monetary System, the period between 1875 to 2007 can be broadly marked into;
1. Gold Standard Era (1875-1913)
2. Inter-War Period (1913-1939)
3. Bretton Woods (1945-1971) and
4. Floating Exchange Rate Period (1973- till Date)

Bordo et al 2001, classified the period of 1880-2000 on the basis of World Monetary System. According to Bordo, the number of crisis during the specific periods is as under

<table>
<thead>
<tr>
<th>Period</th>
<th>No. of Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Standard Era</td>
<td>58</td>
</tr>
<tr>
<td>Inter-War Period</td>
<td>51</td>
</tr>
<tr>
<td>Bretton Woods</td>
<td>17</td>
</tr>
<tr>
<td>Floating Exchange Rate Period</td>
<td>399</td>
</tr>
</tbody>
</table>

![Figure 1.1 Crisis During Each Period]

*Source: Laeven and Valencia (2008)*

It is quite evident from the above table that the post Bretton Woods Period has seen more Economic Crisis on account of deregulation of financial markets. Absence of capital controls has converted the Financial Markets into less or more Speculative Market. The emergence of floating exchange rates, in an era of capital mobility and inflation created a fertile opportunity for Speculative Exchange Rates and thus has seen a series of Financial and Economic Crisis leading to US Sub-prime Crisis.
1.6 Recession in World and in India

The global financial turmoil which triggered in August 2007 became a major event in September 2008. This economic crisis is viewed as an example of limitless greed and overindulgence at the cost of prudence, diligence, caution, rules and regulations. The occurrence of financial crisis is very common and occurs every decade in various countries around the world. Countries ranging from Argentina to Sweden, Korea to Russia, Indonesia to UK and from USA to Japan, all have witnessed financial slowdowns. The point to be noted is that each of the crisis which occurred in these countries was unique, yet was having certain similar properties to others. The common factors which initiated crisis can be listed as excessive leveraging of debt, credit booms, overheating of markets, unstable economic policies (micro and macro), miscalculations of risks, excessive and rapid outflow of capital from an economy, deregulations, etc. The US financial system was blown out as a result of defaults of sub-prime mortgage loans. In the eagerness to earn more profits, financial institutions in the US financed the sub-prime borrowers. Loans were sanctioned to those who had a history of defaulting loans and even to those who had no income or assets. Everything was going in a smooth manner till the real estate prices were rising. Proper repayment of loans was made by borrowers to claim the advantage of inflated real estate prices. However, this bubble of inflated real estate prices burst in mid-2007. Huge fall in the real estate prices was witnessed and borrowers started missing their loan repayment or defaulting. The profits of the banks started decreasing, some went into losses and some went bankrupt.

The financial crisis or recession became much more intensified with the bankruptcy of Lehman Brothers in September 2008. The sub-prime mortgage sector on the US is the proximate cause of the financial recession coupled with loose monetary policies and global imbalances in the current account deficit. There was Current Account Deficit in US but on the other hand there was substantial surplus in Asia, Particularly in China and OPEC (Oil Producing and Exporting Countries) in the Middle East and Russia. These imbalances in current account deficit put huge stress on the financial system.

The monetary policy of US and other advanced economies were aggressively eased to the extent that the US policy rates reached 1 Percent in 2003. Excessively
loose monetary policy boosts consumption and investment in the US. With low interest rates the assets prices especially real estate prices recorded huge profits, further were providing a momentum to increased demand. Thus, there was an excess demand in the US markets which was met up by China and other East Asian Economies by supplying goods and services at a cheaper rate resulting into an increased surplus in these countries.

The world experienced a synchronized downturn with steep fall in output and trade. Global economic activities contracted because of weak credit markets, falling production and shrinking of global trade. International Monetary Fund (IMF) in its publication World Economic Outlook, published in October 2008, estimated world output growth at 3.9 percent in 2008 which was far below the estimated world output growth of 2006 and 2007 which was around 5 percent. Moreover the revised forecasts of IMF for 2008 was 3.9 percent to 3.7 percent and for 2009 was 3.0 percent to 2.2 percent. This was a clear indication of Recession. Several countries like US, Japan, UK, and EU were officially in recession.

The happenings in US markets are considered as a benchmark for global capital markets. The recession in US markets affected normal, routine trade credits and supplier’s credit. This resulted into cyclical downturns. The year 2008-2009 was a dismal year for stock markets across the world. The indices took a deep fall indicating depressed equity valuations resulting into low P/E Ratios in all the markets across the world. The situation in Japan was much worst.
1.7 Background of the Current Economic Crisis

1.7.1 Increased Asset Prices and Boom in World Economy

Before 2007 the world economy saw an exceptional strong performance. This phase after the global slowdown of 2001 is known as the “Great Moderation” period. The world economy witnessed a rapid recovery after the shocks of 2001 slowdown posting a record economic growth rates for 2004, 2005 and 2006. This period saw abundant liquidity and low interest rates. This resulted in increased lending. The declining standards and regulations in lending triggered bubbles in asset prices and commodities. The increase in asset prices was considered as an indicator of strong financial performance in financial markets. The real estate prices increased globally and looked very low as compared to the volatilities and risk premia. Following graph depicts the increase in asset prices in US.

![Figure 1.2: Increase in Asset Prices in US](image)

The regular interest rate cut by the federal bank and deregulation there was huge current account surpluses in China and other developing economies. This global imbalance resulted in high saving rate to invest money in the US. The increased investments in US kept interest rates low and thus increased the credit boom and inflated real estate prices and other commodities to unsustainable levels. The US Federal Reserve cut their rates to 1 percent in mid-2003 to mid-2004.
This was the period in which there was a rapid rise in the home prices. These mortgages were attracted by sub-prime borrowers.

**Figure 1.3: Growth in US Economy**

### 1.7.3 Rapid increase in credit
Against the backdrop of historic low interest rate of 1 percent and rapid increasing asset prices, the demand for home loans was expanding rapidly. The high level asset prices helped to keep a check on leverage ratios combined with high income flows and low interest rates.

### 1.7.4 Failure of US Leadership to anticipate Economic Crisis
During the boom in real estate price, low interest rates and huge housing boom, the US authorities failed to understand and comprehend the problem of upcoming economic crisis. The remarks made by US leadership regarding the boom in real estate prices indicates that they were aware of real estate bubbles but they failed to anticipate the effect of it. This negligence resulted in considerable encouragement for investment in real estate leading to tangible losses to all investors in the event of crisis.
1.8 Origin of the Economic Crisis

Every economic crisis results because of a multiple causes which forms a vicious circle and then tend to repeat itself. Following factors are considered responsible for the economic crisis of 2007

1.8.1 Sub-prime Mortgage
The global economic crisis or recession originated mainly because of the sub-prime crisis in US during 2007. Easy availability of credit at lowest interest rates coupled with the inflated real estate prices, people started procuring loans for investment in real estate. Real estate was seen as the most secured and promising investment avenue. During the course of time, financial institutions also went out of their way to lend sub-prime borrowers without any collateral security. Sub-prime borrowers, very often, are unaware about the risks associated with such mortgages. These sub-prime borrowers were happy to be the owner of house property without having any fear or any regard of the fact that they were not in a position to repay the debt or refinance it in times of crisis. Everything was going smooth until the housing bubble burst in 2007.

**Subprime Mortgage Originations**

*In 2006, $600 billion of subprime loans were originated, most of which were securitized. That year, subprime lending accounted for 23.5% of all mortgage originations.*

**IN BILLIONS OF DOLLARS**

![Subprime Mortgage Origination Chart]

Figure 1.4: Subprime Mortgage Origination
Real estate prices came down by 20 percent to 40 percent resulting in higher mortgage rates. There was increased numbers of defaulters- majority being sub-prime borrowers. This resulted in huge losses to financial institutions and many of them were closed down.

1.8.2 Reconstruction and Repackaging of Loans
The housing bubble burst in 2007 triggered the sub-prime crisis in US. A unique feature which was seen during this sub-prime crisis was that the borrowers were not holding the housing property. They were selling them to other banks and investors through a process called “Securitization”. Securitization is a structured finance process, which involves pooling and repackaging/ reconstruction of cash flow producing financial assets into securities that are sold to investors. Securitization means turning something into security. This process of securitization was very popular in US during 1980’s. Eyeing the boom in real estate markets the process of securitization was responded in a very good manner by other investors without demanding appropriate documentation. These sub-prime mortgages were securitized and reconstructed and were resold to the investors. This method proved very costly to the leading financial institutions.

1.8.3 High Leverage
Excessive high leverage is another important factor for the economic crisis of 2007. Investors who purchased mortgage backed securities by borrowings realized that they have bought the real estate at 40 times higher than they worth. Many of the leading financial institutions including Lehman Brothers, Merrill Lynch, Goldman Sachs, and Morgan Stanley were allowed to keep more than double leverage on their balance sheets to lower the capital adequacy requirements. This was too risky. As soon as the sub-prime borrowers started missing their installments the financial institutions realized that they were in huge trouble. The real estate prices in US fell at their fastest rate in the last 75 years. This resulted into liquidity crisis which sooner became a solvency problem for banks. Financial institutions reported huge losses which were highly leveraged. The US government intervened with massive bailout packages.
1.8.4 Mismatch between Financial Innovation and Regulation
Governments across the globe do prefer to regulate the financial institutions to avoid any crisis and to strengthen and promote the economic welfare. While doing so they need to balance between security and growth. Too much regulation hampers the growth whereas too lax regulations damage the financial institutions. In case of US economy, Financial Globalization assisted this process of regulation and growth. But the process of securitization enabled financial institutions to take advantage of expanding their leveraged risks. These loopholes in supervision and mismatch between innovation and financial innovation sowed the seeds of economic crisis.

1.8.5 Failure of Global Corporate Governance
One of the factors responsible for economic crisis in the developed economies is the failure in corporate governance that led to non-transparent incentive schemes. This encouraged the bad accounting practices. The leading International economic organizations like IMF paid little attention to the inherent risks in the policies pursued by the developed economies. It is observed that developed economies do put pressure on the developing economies to pursue such macroeconomic policies that are advantageous to developed economies. Such discriminatory polices resulted in failure of global corporate governance.
1.9 World Economic Crisis and India

The economic recession which started in US soon became global. Every economy across the globe was affected in one way or other. India was not an exception. The increased integration of the Indian economy with the rest of world assured that India will face the effects of recession sooner or later. The international developments were leaving some downside marks on the Indian economy. The growth rates during the periods reveal the fact that there was a decrease in the GDP. The details are given in the following table.

Table 1.2: Growth Rate (in %)

<table>
<thead>
<tr>
<th>Sector</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>Apr-Dec 2011-12</th>
<th>Apr-Dec 2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>6.3</td>
<td>8.0</td>
<td>8.1</td>
<td>-0.2</td>
<td>1.2</td>
<td>-2.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Crude Oil</td>
<td>0.4</td>
<td>-1.8</td>
<td>0.5</td>
<td>11.9</td>
<td>1.0</td>
<td>1.9</td>
<td>-0.4</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>2.1</td>
<td>1.3</td>
<td>44.6</td>
<td>10.0</td>
<td>-8.9</td>
<td>-8.8</td>
<td>-13.3</td>
</tr>
<tr>
<td>Refinery Products</td>
<td>6.5</td>
<td>3.0</td>
<td>-0.4</td>
<td>3.0</td>
<td>3.1</td>
<td>4.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>-7.9</td>
<td>-3.9</td>
<td>12.7</td>
<td>0.0</td>
<td>0.4</td>
<td>-0.5</td>
<td>-3.4</td>
</tr>
<tr>
<td>Steel</td>
<td>6.8</td>
<td>1.9</td>
<td>6.0</td>
<td>13.2</td>
<td>7.0</td>
<td>9.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Cement</td>
<td>8.1</td>
<td>7.2</td>
<td>10.5</td>
<td>4.5</td>
<td>6.7</td>
<td>5.8</td>
<td>6.1</td>
</tr>
<tr>
<td>Electricity</td>
<td>6.3</td>
<td>2.7</td>
<td>6.2</td>
<td>5.6</td>
<td>8.1</td>
<td>9.3</td>
<td>4.6</td>
</tr>
<tr>
<td>Overall Index</td>
<td>5.2</td>
<td>2.8</td>
<td>6.6</td>
<td>6.6</td>
<td>4.4</td>
<td>4.8</td>
<td>3.3</td>
</tr>
</tbody>
</table>

*Source: PIB, Ministry of Commerce and Industry, Index of Eight Core Industries, dated 31.1.2013*

The biggest threat was of reversal of capital. The increased integration of Indian financial markets with the rest of the world projected a slowdown of economy for a medium term. The worst effect of recession was on the share markets. The reversal of foreign equity capital affected the liquidity position and the share market crashed to their lowest. The sector wise impact of recession on Indian economy is discussed below.
1.9.1 Impact on Capital Account
As seen in all cases around the world, the main impact of recession was on the capital account in India. The net capital flows from US witnessed a fall from US$17.3 billion in April-June 2007 to US$13.2 billion in April June 2008. The portfolio investment by Foreign Institutional Investors (FII’s) also witnessed an outflow of US$6.4 billion in April-September 2008 as compared with net inflow of US$ 15.5 billion in April-September 2007. The 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.

![Graph showing impact on capital account](image.png)

Figure 1.5: Impact on Capital Account in India

1.9.2 Impact on Stock Market
The financial turmoil caused by foreign institutional investors (FII’s) left its mark on the Indian share market. The stock market prices fall severely on account of the withdrawals by FII’s. The FII’s had invested over Rs. 10,00,000 crores during January 2006 to 2008. This huge inflow of capital boosted the markets and the share market increased beyond 20,000 points. But the period of January 2008 to January 2009 witnessed huge capital outflows resulting into a sharp dip in the share markets below 9,000 points in just one year. The liquidity of stock markets was largely affected. The stock prices fell by more than 70 percent to 90 percent of their value. The situation is so worse that corporate are
finding it difficult to raise funds from fresh issues even after fixing offer prices below market quotations. The weakening of rupee against US dollar was also a big concern. Investors were seen to be shifting from equity stocks to mutual funds or fixed deposits.

1.9.3 Impact on Indian Banking System
The strong fundamentals in Indian banking system prevented it from the global recession. Another important factor that prevented Indian banking sector from recession is that Indian banking system is not directly exposed to the sub-prime mortgages. It has very limited exposure to the US mortgage markets. Indian banks, whether public or private are financially sound, well regulated and well capitalized. The most important highlight of Indian banking system was its capital to risk-weighted assets ratio (CRAR). As per the Basel norms the CRAR should be around 8 percent whereas the CRAR of Indian banking system as on March 2008 was 12.6 percent. The detailed study undertaken by Reserve Bank of India (RBI) revealed that none of the Indian banks had any direct exposure to the sub-prime markets in the US or other markets. The RBI took a series of measures to facilitate efficient operations of financial markets and to ensure financial stability. Additional liquidity support was also extended to banks by RBI.
1.9.4 **Impact on Industrial Sector**
Economic recession slows down the economic growth by reduction in industrial production. The Indian industrial sector projected a decline of 3.28 percent from 8.1 percent in 2007 to 4.82 percent in 2008. Service sector, which contributes more than 50 percent in GDP and is assumed to be the major engine of growth, is slowing down. Towards the end of 2008, the industrial growth came down to 4 percent as compared to 9.8 percent in 2007 year end.

Recession has also affected the export sector. The export driven sectors like gems, jewelry, leather, fabrics, and agro produce were adversely affected. The export figures were the lowest during the last seven years. Exports contribute upto 20 percent to the GDP of India. The adverse effect on exports is alarming and is pressurizing global demand. The export growth has been negative and the government had scaled down the export target for 2008 to US$175 billion as compared to US$ 200 billion for 2007.
1.9.5 Impact on Employment

Service sector and manufacturing sector generates large employment in India. If the manufacture sector and service sector is adversely affected by recession, it will also have a cascading effect on employment. The decrease in the number of foreign tourists has affected the hotel and tourism industry. Real estate, construction are also affected. The survey of Ministry and Employment reveals that five lakhs workers have lost jobs in 2008. The employment in service and manufacturing sector fell to 15.7 million as on December 2008 from 16.2 million as on September 2008. The employment in Automobile and transport sector declined by 12.45 percent and 10.18 percent respectively.

Figure 1.8: Impact of Recession on Employment
1.9.6 Impact on Poverty

The decrease in industrial production and increased number of job losses resulted in increase in poverty. The World Bank served a warning regarding high exposure to increased risk of poverty due to the economic recession. The Food and Agriculture Organization said that the economic recession has contributed towards the growth of hunger at global level. The situation in India is much worse. There will be 230 million undernourished people in India - the highest for any country in the world.

The developing countries, especially India, exhibited relative resilience to the recession. There was a fall in the share market prices and a pressure was seen in exchange rate. But the overall Investment sentiment was positive reflecting strong economic performance and favorable investment opportunities. The strong economic fundamentals, credit policy reforms better structuring of banking debt, large foreign exchange reserves, smaller presence of foreign banks etc., played key role in protecting Indian economy from the ill effects of recession.

But the recessionary economic situation has left its mark in the form of higher funding costs, large amount of current account deficits, decreased value of currency etc. it should be noted that Indian economy do not have direct exposure to troubled financial institutions, they are not immune to the adverse effects of financial crisis.

The present research is an attempt to measure the effect of this recession on the investor’s portfolio in general and the impact on the portfolio of investors coming from Marathwada in particular.
1.10 Important Concepts

Account closure (depositor account)

The closure of beneficiary and pool accounts by the investor and the clearing member or at the discretion of the participant, if the client has defaulted in its obligations towards the participant.

Active portfolio Strategy

A strategy that uses available information and forecasting techniques to seek a better performance than a portfolio that is simply diversified broadly.

Asset Allocation

The process of determining the optimal division of an investor’s portfolio among different assets. Most frequently this refers to allocations between debt, equity, and cash.

Asset allocation fund

A mutual fund that splits its investment assets among stocks, bonds, and other vehicles in an attempt to provide a consistent return for the investor.

Asset Management

The function of managing assets on behalf of a customer, usually for a fee.

Asset Management Company

The company which handles the day to day operations and investment decisions of a unit trust.

Averaging

The process of gradually buying more and more securities in a declining market (or selling in a rising market) in order to level out the purchase (or sale) price.
**Basis Risk**

The risk that the relationship between the prices of a security and the instrument used to hedge it will change, thereby reducing the effectiveness of the hedge. In other words, risk of varying fluctuations of the spot and the futures price between the moment at which a position is opened and the moment at which it is closed.

**Bear Market**

A weak or falling market characterized by the dominance of sellers.

**Bearer Securities/Bearer Bonds**

Securities which do not require registration of the name of the owner in the books of the company. Both the interest and the principal whenever they become due are paid to anyone who has possession of the securities. No endorsement is required for changing the ownership of such securities.

**Blue Chip**

The best rated shares with the highest status as investment based on return, yield, safety, marketability and liquidity.

**Bond**

A negotiable certificate evidencing indebtedness – a debt security or IOU, issued by a company, municipality or government agency. A bond investor lends money to the issuer and, in exchange, the issuer promises to repay the loan amount on a specified maturity date. The issuer usually pays the bondholder periodic interest payments over the life of the loan.

**Bonus Shares**

Shares issued by companies to their shareholders free of cost by capitalization of accumulated reserves from the profits earned in the earlier years.
**Boom**

A condition of the market denoting increased activity with rising prices and higher volume of business resulting from greater demand of securities. It is a state where enlarged business, both investment and speculative, has been taking place for a sufficiently reasonable period of time.

**Broker**

A member of a Stock Exchange who acts as an agent for clients and buys and sells shares on their behalf in the market. Though strictly a stock broker is an agent, yet for the performance of his part of the contract both in the market and with the client, he is deemed as a principal, a peculiar position of dual responsibility.

**Brokerage**

Commission payable to the stockbroker for arranging sale or purchase of securities. Scale of brokerage is officially fixed by the Stock Exchange. Brokerage scales fixed in India are the maximum chargeable commission.

**Bubble**

A speculative sharp rise in share prices which like the bubble is expected to suddenly burst.

**Bull**

A market player who believes prices will rise and would, therefore, purchase a financial instrument with a view to selling it at a higher price. Opposite of a bear.

**Bull Market**

A rising market with abundance of buyers and relatively few sellers.

**Call option**

An agreement that gives an investor the right, but not the obligation, to buy an instrument at a known price by a specified date. For this privilege, the investor pays a premium, usually a fraction of the price of the price of the underlying security.
**Cash Market**

A market for sale of security against immediate delivery, as opposed to the futures market.

**Close-ended Fund**

A type of Investment Company that has a fixed number of shares which are publicly traded. The price of a closed end share fluctuates based on investor supply and demand. Closed ended funds are not required to redeem shares and have managed portfolios.

**Credit rating**

Credit ratings measure a borrower’s creditworthiness and provide an international framework for comparing the credit quality of issuers and rated debt securities. Rating agencies allocate three kinds of ratings: issuer credit ratings, long-term debt, and short-term debt. Issuer credit ratings are amongst the most widely watched. They measure the creditworthiness of the borrower including its capacity and willingness to meet financial needs. The top credit rating issued by the main agencies – Standard & Poor’s, Moody’s and Fitch IBCA – is AAA or Aaa. This is reserved for a few sovereign and corporate issuers. Ratings are divided into two broad groups – investment grade and speculative (junk) grade.

**Credit rating agency**

Credit rating agency means a body corporate which is engaged in, or proposes to be engaged in, the business of rating of securities offered by way of public or rights issue.

**Cross hedging**

Practice of altering the risk characteristic of a predetermined position in one cash good by taking out a position in a future or forward contract which is based on a good which differs significantly from that of the initial cash position.
**Derivative Market**

Markets such as futures and option markets that are developed to satisfy specific needs arising in traditional markets. These markets provide the same basic functions as forward markets, but trading usually takes place on standardized contracts.

**Derivative**

(1) A security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract for differences or any other form of security;

(2) A contract which derives its value from the prices, or index or prices, of underlying securities.

**Dividend**

Payment made to shareholders, usually once or twice a year out of a company’s profit after tax. Dividend payments do not distribute the entire net profit of a company, a part or substantial part of which is held back as reserves for the company’s expansion. Dividend is declared on the face value or par value of a share, and not on its market price.

**Equity**

The ownership interest in a company of holders of its common and preferred stock.

**Exchange traded funds (ETF)**

A security that tracks an index but has the flexibility of trading like a stock.

**Face Value**

The value that appears on the face of the scrip, same as nominal or par value of share/debentures.
Financial crisis

Sharp, brief, ultracyclical deterioration of all or most of a group of financial indicators – short term interest rates, asset (stock, real estate, land) prices, commercial insolvencies and failures of financial institutions.

Futures Contract

An exchange traded contract generally calling for delivery of a specified amount of a particular financial instrument at a fixed date in the future. Contracts are highly standardized and traders need only agree on the price and number of contracts traded.

Hedge

An asset, liability or financial commitment that protects against adverse changes in the value of or cash flows from another investment or liability. An unhedged investment or liability is called an “exposure”. A perfectly matched hedge will gain in value what the underlying exposure loses or lose what the underlying exposure gains.

Hedge Funds

Private investment pools that invest aggressively in all types of markets, with managers of the fund receiving a percentage of the investment profits. The name is something of a misnomer since a hedge fund’s raison d’etre is quite the opposite of hedging.

Index Fund

A mutual fund which invests in a portfolio of shares that matches identically the constituents of a well-known stock market index. Hence changes in the value of the fund mirror changes in the index itself.

Index futures

Futures contract based on an index, the underlying asset being the index, are known as Index Futures contracts. For example, futures contract on NIFTY Index and BSE-30 Index. These contracts derive their value from the value of the underlying index.
Index option contracts

The options contracts, which are based on some index, are known as Index options contract. The buyer of Index Option Contracts has only the right but not the obligation to buy / sell the underlying index on expiry. Index Option Contracts are generally European Style options i.e. they can be exercised / assigned only on the expiry date.

Initial Public Offering (IPO)

The first public issue by a public limited company.

Insider

Any person who, is or was connected with the company or is deemed to have been connected with the company, and who is reasonably expected to have access, connection, to unpublished price sensitive information in respect of securities of a company, or who has received or has had access to such unpublished price sensitive information.

Institutional Investors

Organizations those invest, including insurance companies, depository institutions, pension funds, investment companies, and endowment funds.

Investment banker

Financial conglomerate which conducts a full range of investment related activities from advising clients on securities issues, acquisitions and disposal of businesses, arranging and underwriting new securities, distributing the securities etc.

Investment Company

A corporation, trust or partnership that invests pooled unit holder/ shareholder money in securities appropriate to the organization’s objective. Mutual funds, close-ended funds and unit investment trusts are the three types of investment companies.

Leverage

The use of borrowed money to finance an investment.
**Listed Company**

A company which has any of its securities offered through an offer document listed on a recognised stock exchange and also includes Public Sector Undertakings whose securities are listed on a recognised stock exchange.

**Listing**

Formal admission of a security into a public trading system.

**Listing Agreement**

An agreement which has to be entered into by companies when they seek listing for their shares on a Stock Exchange. Companies are called upon to keep the stock exchange fully informed of all corporate developments having a bearing on the market price of shares like dividend, rights, bonus shares, etc.

**Market capitalization**

The market value of a company, calculated by multiplying the number of shares issued and outstanding by their current market price.

**Market Price**

The last reported sale price for an exchange traded security.

**Merchant Banker**

Any person who is engaged in the business of issue management either by making arrangement regarding selling, buying or subscribing to securities or acting as manager, consultant, adviser or rendering corporate advisory service in relation to such issue management.

**Merger**

The non-hostile and voluntary union of two companies.

**Money laundering**

Process of converting the proceeds of illegal activities – disclosure of which would trigger financial losses or criminal prosecution – into real or financial assets whose origins remain effectively hidden from law enforcement officials and from society in general.
Money Market

The market encompassing the trading and issuance of short-term non-equity debt instruments, including treasury bills, commercial paper, bankers’ acceptance, certificates of deposits etc. The market may be local or international.

Money market mutual funds

Schemes investing exclusively in safer short-term instruments such as treasury bills, certificates of deposit, commercial paper and inter-bank call money, government securities, etc.

Mortgage backed securities

Securities backed by mortgage loans, including pass-through securities, modified pass-through securities, mortgage-backed bonds, and mortgage pay-through securities.

Mortgage Trust

Unit trust which invests in mortgage loans. Effectively the unit trust invests money in real estate and receives an interest return with security over the property which has been purchased. The interest which is charged on mortgage trust loans is normally higher than that other sources of finance like banks so that the investor usually receives a very competitive rate or return.

Mutual Funds / Unit Trusts

Mutual Fund is a mechanism for pooling the resources by issuing units to the investors and investing funds in securities in accordance with objectives as disclosed in offer document. A fund established in the form of a trust to raise monies through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments.

New Issue

Shares of a company offered to the public, through a public issue, for the first time to be listed on the stock Exchange.
Offer Document

As per SEBI DIP guidelines, offer document means Prospectus in case of a public issue or offer for sale and Letter of Offer in case of a rights issue.

Offer for Sale

An offer of securities by existing shareholder(s) of a company to the public for subscription, through an offer document.

Offer Price

Price at which units in trust can be bought. It often includes an entry fee. It also refers to the price at which securities are offered to the public.

Ombudsman

An independent person appointed to hear and act upon citizen’s complaint about government services. Invented in Sweden, the idea has been widely adopted. For example, groups of banks, mortgage lenders and insurance companies in various countries have appointed ombudsmen to attend to the complaints of their customers. Customers who use the ombudsman’s (free) service retain their full right to take legal action should they not agree with the ombudsman’s decision.

Open ended scheme

An open-ended fund or scheme is one that is available for subscription and repurchase on a continuous basis.

Opening Price

The rate at which the first transaction in a security is struck after the opening of the market.

Option

The contractual right, but not obligation, to buy (call option) or sell (put option) a specified amount of underlying security at a fixed price (strike price) before or at a designated future date (expiration date). The option writer is the party that sells the option. As per the Securities Contract Regulation Act (SCRA), “option in securities”
means a contract for the purchase or sale of a right to buy or sell, or a right to buy and sell, securities in future, and includes a teji, a mandi, a teji mandi, a galli, a put, a call or a put and call in securities.

**Order book**

It is an ‘electronic book’ that shows the demand for the shares of the company at various prices.

**OTC (over the Counter)**

A financial transaction that is not made on an organized exchange. Generally the parties must negotiate all the details of each transaction or agree to use simplifying market conventions.

**Par Value**

The face value of securities.

**Participating Preference Shares**

The right of certain preference shareholders to participate in profits after a specified fixed dividend contracted for is paid. Participation right is linked with the quantum of dividend paid on the equity shares over and above a particular specified level.

**Ponzi Scheme**

A classic contrick that has been repeated many times both before and since Charles (Carlo) Ponzi gave it its name in the 1920s. The scheme begins with a crock setting up as a deposit taking institution. The crook invites the public to place deposits with the institution, and offers them a generous rate of interest. The interest is then paid out of new depositors’ money, and the crook lives well off the old deposits. The whole scheme collapses when there are not enough new deposits coming in to cover the interest payment due on the old ones. By that time the modern day Ponzi hopes to be living under an alias in a hot country with few extradition laws.

**Portfolio**

A collection of securities owned by an individual or an institution (such as a mutual fund) that may include stocks, bonds and money market securities.
**Portfolio investment**

Investment which goes into the financial sector in the form of treasury bonds and notes, stocks, money market placements, and bank deposits. Portfolio investment involves neither control of operations nor ownership of physical assets.

**Portfolio manager**

Any person who pursuant to a contract or agreement with a client, advises or directs or undertakes on behalf of the client (whether as discretionary portfolio manager or otherwise) the management or administration of a portfolio of securities or the funds of the client as the case may be.

**Portfolio Turnover**

A measure of the trading activity in a fund’s investment portfolio – how often securities are bought and sold by a fund.

**Position limit**

The maximum number of listed option contracts on a single security which can be held by an investor or group of investors acting jointly.

**Prospectus**

Any document described or issued as a prospectus and includes any notice, circular, advertisement or other document inviting deposits from the public or inviting offers from the public for the subscription or purchase of any shares in, or debentures of, a body corporate.

**Put Option**

An option that gives the right to sell a fixed number of securities at a specified price (the strike price) within a specified period of time.

**Rolling settlement**

The practice on many stock markets of settling a transaction a fixed number of days after the trade is agreed.
Screen based trading

Form of trading that uses modern telecommunication and computer technology to combine information transmission with trading in financial markets.

Secondary Market

The market for previously issued securities or financial instruments.

Sensitive Index

A share price index based on 30 active scrips developed by the Bombay Stock Exchange with 1978-79 as the base year.

Short position

In futures, the short has sold the commodity or security for future delivery; in options, the short has sold the call or the put and is obligated to take a futures position if he or she is assigned for exercise.

Short squeeze

A situation in which a lack of supply and an excess demand for a traded stock forces the price upward. If a stock price starts to rise rapidly, the trend may continue to escalate because the short sellers will likely want out. For example, say a stock rises 15% in one day, those with short positions may be forced to liquidate and cover their position by purchasing the stock. If enough short sellers buy back the stock, the price is pushed even higher.

Stagflation

The combination of sluggish economic growth, high unemployment and high inflation.

Stock dividend

A dividend paid to stockholders in shares of stock of the issuing corporation, issued to stockholders or record out of the unissued stock of the corporation, involving no payment of cash, and used to reflect positive interest in the security.
**Stock Index Future**

A futures contract whose price varies in line with the movements of a stock market index.

**Stop Loss Order (or) Stop Order**

An order to sell a security when it declines to a specified price.

**Stock exchange**

Anybody of individuals, whether incorporated or not, constituted for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities.

**Stock option**

The right to purchase shares of common stock in accordance with an agreement, upon payment of a specified amount; a compensation scheme under which executives are granted options to purchase common stock over an extended option period at a stated price.

**Underwriter**

One who does underwriting. A financial organization that handles sales of new securities which a company or municipality wishes to sell in order to raise money. Typically the underwriters will guarantee subscription to securities say, an issue of equity from the company at a stated price, and are under an obligation to purchase securities up to the amount they have underwritten, should the public not subscribe for the issue.

**Underwriting**

An agreement with or without conditions to subscribe to the securities of a body corporate when the existing shareholders of such body corporate or the public do not subscribe to the securities offered to them.
Volume of Trading

The total number of shares which changes hands in a particular company’s securities. This information is useful in explaining and interpreting fluctuation in share prices.
References:
