

**Major Research
Project Report on
GLOBAL
FINANCIAL CRISIS
OF 2008 AND ITS
IMPACT ON INDIAN
CAPITAL MARKET**

Submitted by

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2K20/DMBA/42

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CERTIFICATE OF ORIGINALITY

This is to certify that this project titled “Global Financial Crisis of 2008 And Its Impact on Indian Capital Market” for the partial fulfillment of the requirement for the award of Master of business Administration is an original work to the best of my knowledge and it does not consists of any material published earlier or written by anyone else. This has been done under the guidance of Dr. Saurabh Agrawal. The content here is submitted to Delhi School of Management, Delhi Technological University.

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DECLARATION

I hereby declare that this report is entirely my own work. It is being submitted to the Delhi Technological University, in partial completion of the Master of Business Administration degree. It has never been submitted to any other university for any degree or examination.

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ABSTRACT

In recent years, India's economy has become more open. In the Balance of Payments, gross capital and current account flows increased from about 22% in the 1980s to over 100% in 2009-10. With this greater openness, the Indian economy would be influenced by global market patterns and real and financial shocks. Furthermore, the connection between advanced countries' IIP cyclical components and India increased from 0.12 in 1970-1992 to 0.50 in 1993-2010. Financial integration has increased as a result of these changes in the extent to which Indian trade and economic cycles are linked with global cycles, making it vital to analyse the stroke of this Crisis. The current research focuses on global financial crisis' extent and causes, as well as India's response. The influence of the financial and real sectors, as well as policies, are analysed in assessing the stroke of the crisis of 2008 on the India and its markets. The first component of the paper looks at the brunt of this crisis on India. In the second half of the paper, India's financial and real sectors' role is examined, and then, the study examines India's response to the crisis of 2008.

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EXECUTIVE SUMMARY

In this project, a complete study has been conducted to learn about the Crisis of 2008 and its Effect on India and its Capital Markets. First we study what was the Global Financial Crisis followed by studying the severity of the Global Financial Crisis. Next we study about the Impact of Crisis on the Indian Economy. Once we understand how India as an economy was affected by the crisis, we try to understand the Indian Capital Market and how was it affected by the crisis. We go through the performance of Indian Capital Market during the period 2001-2010. Then we see the impact of crisis on the Indian Stock Market. Post this we go through the studies conducted to see impact on some Indian stocks. Then we perform analysis on Indian stocks for three stages, pre-crisis, during crisis and post crisis. Going forward we go through the reasons responsible for the occurrence of Global Financial Crisis. Next we see the reasons responsible for the impact on India and how long did the impact last. Coming next we see the actions of the Indian securities markets and its regulators in response to the crisis and how has India recovered from the same. Going ahead we see whether India is better equipped for such crises as compared to 2008. Coming towards the end we see what we can take away as learning from this crisis. Lastly, we try to find some advice for investors and have a future outlook for Indian Stock Market.

LITERATURE REVIEW

The reasons of the global financial crisis have been studied by a number of experts. The New Financial Architecture (NFA) and the significant financial deregulation process linked to its institutions and practises, according to Crotty (2009), is the core cause of the current financial sector crisis. He contends that this financial crisis is just a recent incident in a cycle of financial crises dating back to the late 1970s, in which changes in financial regulations alternated with government support to allow for renewed growth in the aftermath of each tragedy. Crotty gives an enlightening depiction of tragedy progressively developing and then impacting through a meticulous consecutive critique of the supporters' of the NFA's main assumptions and statements.

Morgan (2009) examines the pre-crisis financial architecture's sequential and cumulative failures, but focuses more on the functions performed by central banks, identifying basic flaws in central bank policy in theory and practise. Then come Perez (2009) and Tregenna (2009), who provide two viewpoints on dynamics before crisis. Perez looks at previous boom and bust periods, the 1990s 'dotcom' internet craze and the early 2000s liquidity bubble, and claims that they are two aspects of a same structural phenomenon that occurred before and throughout the crash of 1929. The monetary interconnectivity of developing countries like India and China with established economies like the United States and other European countries can no longer be ignored, making it important to study the stroke of the crisis on them.

In a study, the experts looked at global financial integration and the stroke of this crisis on Indian markets and economy. India was influenced from the global downturn in a variety of ways, according to the study, including capital markets, flow of trade and currency rates. With exports decreased, GDP of India dropped by around 2% in the year 2008-2009. The removal of barriers to entry for firms dealing in education and related training, the increase of delivery in urban utilities and physical infrastructure, and legalities are all issues that need to be addressed.

Patnaik (2008) and Kregel (1998 & 2008) observed that one feature of the current global crisis that distinguishes it, is the failure of major mainstream experts to project its onset, assess its stay and intensity, or state the causes that led to its initiation. The lack of foreseeing faculties gets particularly obvious in growing Asia, particularly China and India.

According to Bergsten (2008) and Kohn (2010), Indian and China, along with other developing countries in Asia, were viewed as major shock handlers globally, having a prediction that the global downfall would be prevented from becoming a meltdown because of the ongoing expansion and increased growth rates. These beliefs were backed by research that demonstrated existence of economic cycle dispersion in various developed and developing geographies during the considered time. R Mohan, the Deputy Governor of RBI, talked during the IMF-FSF meeting in 2008 about the stroke of this crisis on developing along with Asian countries. He mentioned that growth of India is primarily driven by demand at domestic level, and that the nation has sufficient foreign exchange reserves.

Furthermore, prudent policies that limit excessive risk trading have contributed to the country's financial stability. According to Ghosh (2006), India's win reacting to the 2008 crisis may owe to four decisions: IMF participation, ongoing liberalization, and growing foreign sector expansion. According to the report, political involvement has benefited in emergency economic stabilization efforts.

INTRODUCTION TO GLOBAL FINANCIAL CRISIS OF 2008

The financial catastrophe that happened between 2008 and 2009 is known as Global Financial Crisis of 2008–2009. This impacted individuals and institutions all around the world, including millions of Americans. Financial institutions started to fail, and many of them were bought up by larger firms, causing the US government to offer bailouts to keep many of them afloat. The disaster, nicknamed "The Great Recession" by many, did not strike out of nowhere. Many reasons led to the crisis, and the effects of those elements are still being felt today. In a nutshell, let's look at the Crisis of 2008-2009.



The first two decades of the twenty-first century were marked by economic and financial turmoil. The .com bubble burst in 2000, and then the US sub-prime mortgage crisis of 2007-08, continued by, the European financial downturn of 2011. Monetary policy in the United States and other major economies was dramatically eased following the collapse of the dot-com boom. The policy rate in the United

States reached 1% in June 2003 and stayed there for a long period, until June 2004. Following that, monetary accommodation was gradually reduced.

According to an empirical review of US monetary policy from 2002 to 2006, the actual policy was far less stringent as compared to what a simple Taylor rule could demand, particularly in 2002-04. This turned to be a major divergence from Taylor Rule. After the dot com bubble burst, excessively loose fiscal policy stimulated spending and investment in the United States. Asset prices surged substantially as a result of the decreased nominal and real rates of interest, especially in housing and real estate, promoting consumption and investment from the effects of wealth. As a result, net demand in the United States has consistently exceeded domestic output, resulting in massive and growing current account deficits in the United States over time, given the macroeconomic identity.

The rest of the world, particularly China and other East Asian nations responded to the United States' strong domestic demand by offering goods and services at low prices, which caused the surpluses to be significant here. Sustained current account surpluses in certain of these Emerging Market Economies showed lessons gained from the Asian financial downfall. Moreover, when relatively cheap goods were available from China and other countries, price was stable in United States. As a result, advanced economies' inflation rates remained low, allowing for the continuance of accommodative monetary policy. Due to these supporting financial policies, there was not proper balance worldwide after 2000. Other than producing massive imbalances worldwide, accommodating financial policy and presence of the protracted ultra-low rates of interest aided the search for return and loosened standards for lending. A continued increase in asset costs, specifically house costs, fuelled by highly accommodative monetary policy and lax standards of lending, as well as innovations in finance, caused a huge increase in mortgage credits to homely, specifically those with poor credit scores, during the period 2002-2006. The majority of these loans had small first teaser payments and little margin money. The "originate and distribute" concept resulted in the majority of these mortgages being securitized. Due to significant increase in complicated derivatives of credit and the utility of credit ratings, mortgages that were fundamentally sub-prime were combined into a variety of tranches and were sold to various investors in Asia,

United States and Europe. Innovations in finance, mal-practices in lending, high usage of model to originate and distribute and packaging into AAA tranches based on the rating, and other factors that led the financial institutions to get in a stage of apparent excessive indebtedness.

The opacity in such transactions, increasing losses, and decreasing net worth of large banks and financial organizations all contributed to a fall in trust between banks. As a result of rising globalisation in finance, financial organizations and banks in other main advanced nations, particularly Europe, are impacted by losses and monetary write-offs. Money markets between banks were practically stopped, resulting in unusually huge disparities. As Europe was ravaged by the financial crisis in the United States, many countries increased their social spending. Spain and Ireland both required money to protect banks there from becoming bankrupt. The joblessness rate had reached an all-time high. And the real estate bubble, which had also spread to several countries, had finally burst at the opportune time. Tax revenues decreased as a result. Then Germany made the error of requiring bondholders to share a percentage of the government's losses in the case of default. Investors became concerned about the safety of European bonds. Hence, they began withdrawing their money. Bond prices plummeted, banks collapsed, and economies slowed as a result. Prior to the global financial crisis of 2008, nations like Italy and Greece in Europe, that were previously regarded as untrustworthy and had large current account deficits, were able to borrow large sums of money and use the funds for public spending due to the strong Euro and lower interest rates. Inflows plummeted, as did tax receipts, as a result of the 2008 financial crisis, and Greece remained with a huge sum of public debt followed by the crisis of debt in 2011.

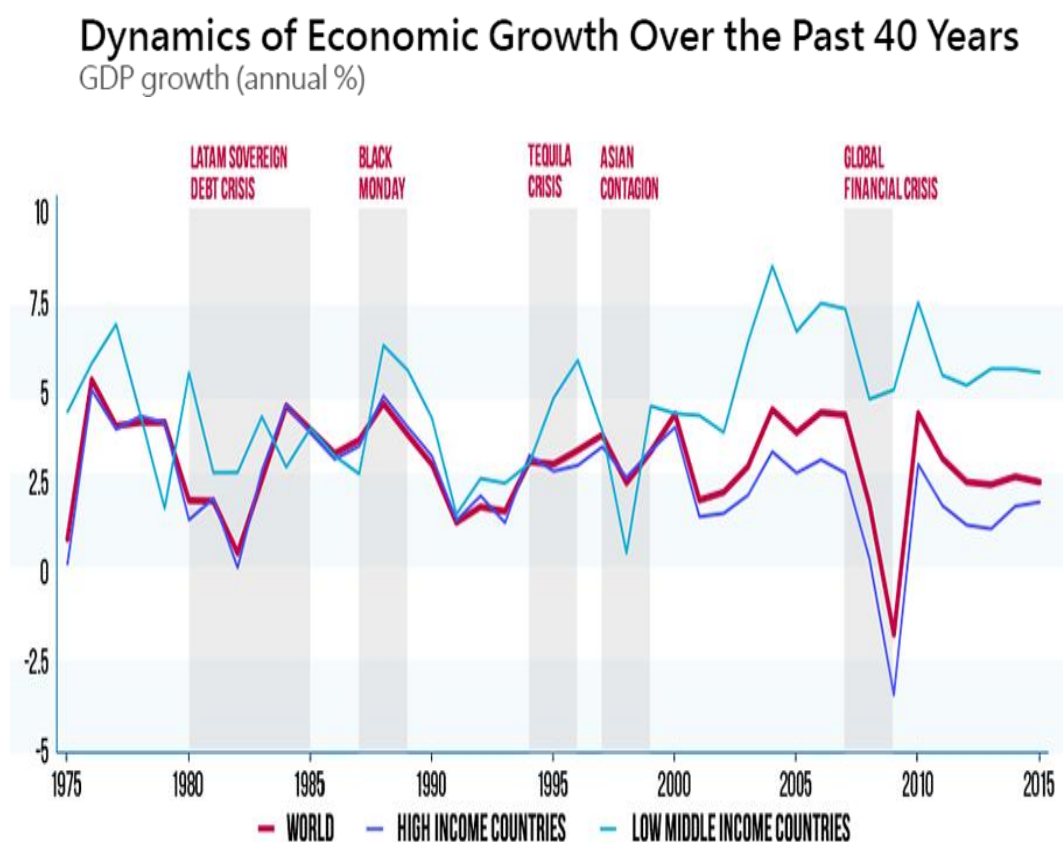
Highly accommodating financial policy in the main advanced nations after the dot.com disaster time therefore planted the seeds of the worldwide crisis of 2008 and the European crisis of debt in year 2011. During the period of heavy economic and financial crisis, the economy of India was somewhat reasonably safeguarded. As large withdrawal of FII investments began from Indian Capital market in January 2008, the global financial crisis was transmitted to India, resulting in a capital market crash in India. Because the capital market crash was the most significant consequence of the 2008 worldwide crisis on India, evaluating performance of capital market in the post-crisis period is crucial.

In addition, a thorough analysis of the stroke of the latest debt crisis of Euro-zone on India's capital market is essential.

Indian economy is being impacted by the global economic slump, and the manufacturing sector is already pressured. While the United States is in the midst of a recession, Europe is also suffering difficulties. The European Union's economy is in trouble, unemployment is on the rise, and each family's economic power has plummeted, with just a few people anticipating that this will be a temporary situation. The first and most significant suggestion is that the government should immediately increase infrastructure expenditure to 7% of GDP, and subsequently to 9% in the next 1-2 years. Manufacturing is crucial for employing the large number of semi-skilled people that enter the workforce each year. The international banking system's reputation, as well as the real economy, has been hurt by the global recession that began in 2008 as a result of the subprime mortgage crisis and the exceptional default or rescue of major financial institutions. As a result of this combined disaster, the credit crunch is wreaking havoc on the economies of globalised countries. Developing countries that are not fully integrated with international markets appear to be less affected, and local microfinance institutions may provide additional protection against recession, even if foreign support to donor-driven NGOs or not fully independent microfinance banks is slowing and international capital collection is harder and more expensive.

SEVERITY OF GLOBAL FINANCIAL CRISIS OF 2008

Financial crises have been an inherent part of the industry since its inception. Bankers and financiers readily admit that it is naive to expect that such disasters can be avoided in a business as large, global, and complex as banking. Excessive optimism, lax regulatory oversight, poor bookkeeping, herd mentalities, and, in many cases, a sense of invulnerability have all been implicated in a number of financial crises during the last 40 years.



According to a 2001 World Bank research, the world had 112 systemic crises in banks between the second half of 1970s and first half of 2001. Major crises, along with the 2008 one, have a few similar characteristics. A quest for ever-higher rewards in financial markets, a permissive regulatory environment, and a mismatch in risk appetite and extent to bear this, and a resulting asset bubble, usually in the real estate industry, which gets ignored by regulators for various reasons, are some general examples. Most, if not all, of these characteristics can be found in the recent financial sector crisis.

However, unlike earlier crises, which were usually isolated to a region or a small number of countries, the current crisis arose in the epicentre of global capitalism, the United States, and its contagion spread swiftly throughout the whole global economy. Nations including India and China, where sectors of finance were less linked with the worldwide system of finance, were not hampered from the first hit of 2008 crisis, and banks there were majorly unscathed. But, because of output and advanced economies trade, these massive economies and their Asian neighbors were unable to avoid the second-round consequences, which adversely harmed their trade flows.

The intensity of the 2008 crisis could be predicted by the sharp decrease of industrialized economies' equities market. Wall Street lost a remarkable market value of US\$8 trillion during a small period of time when sub-prime housing bubble crashed (Brunnermier 2009). Surprisingly, in comparison to US markets, the decrease in market capitalization and drop in prices of shares was seen to be substantially higher in periphery nations (Table 1). Global stock markets have fallen quicker during the present crisis than they did in 1929, according to Eichengreen and O'Rourke (2009).

Table 1: Stock Market Crash and Exchange Rate Changes of Selected Countries

	Stock Market Changes June–December 2008 (%)	Exchange Rate Changes June–December 2008 vis-à-vis US\$ (%)
PRC	-48	1
Hong Kong, China	-40	1
India	-41	-13
Republic of Korea	-36	-20
Argentina	-51	-13
Brazil	-49	-31
Mexico	-29	-26
Japan	-36	18
Eurozone	-37	-11
US (S&P 500)	-36	-

The financial crisis quickly turned into a complete worldwide financial depression after credit markets got frozen, and demand in all developed nations collapsed and prices of commodity plummeted, because of which exporters cut back on spending and lay off massive numbers of people. As a result, global industrial production plummeted.

Developed and major other nations, such as India and China, experienced some drop in production of industries in 2008 last quarter. During the last two quarters of 2008 fiscal year, industrial output in some most export-oriented countries, such as Brazil and Japan, fell by somewhat 10%. Labor retrenchment and rising unemployment were nearly unavoidable as industrial output fell. As per the International Labour Organization's Global Employment Trends Report, more than 50 million people could lose their jobs due to the crisis of 2008. were expected to lose their jobs as a result of the crisis.

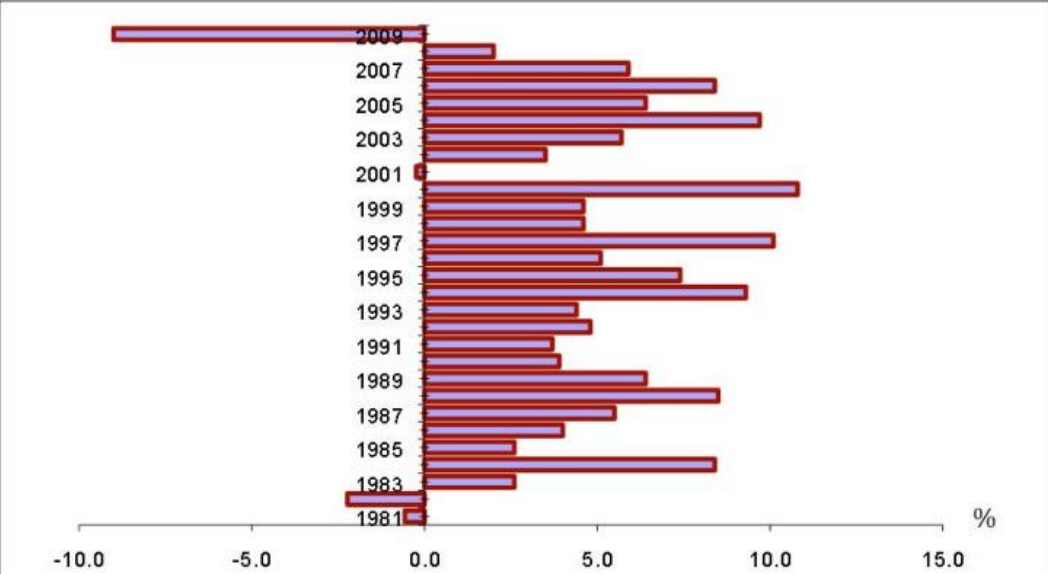
The intensity and unexpectedness of the crisis can be determined by the global economic outlook of IMF as well. It altered its predictions four times in the last ten months (from July 2008 to April 2009), all downwards. During July of 2008, IMF predicted that the global economy will grow at a rate of 3.9 percent in 2009. However, in November 2008, this figure was decreased to 2.2 percent, and in January 2009, it was further reduced to 0.5 percent. Finally, in April 2009, the IMF predicted a global recession in 2009, with global GDP growing at a negative 1.3 percent for the first time in 60 years. Comparisons to experience of Japan after the collapse of real estate bubble in Japan during late 80s, followed by subsequent stagnation in the 1990s have been drawn to warn that Western economies could be in for a long period of sluggish economic growth. Initially, the IMF forecasted a 1.8 percent positive growth rate during 2010, directing a slight V-shape rebound. However, this changed till July 2009, followed by a far stronger rebound prediction in 2010. Because developed countries are predicted to remain in recession, developing countries are expected to lead the global recovery.

Table 2: IMF Growth Projections

	GDP Estimates for 2009				GDP Estimates 2010	
	Jul 2008	Nov 2008	Jan 2009	Apr 2009	Jan 2009	Apr 2009
US	0.8	-0.7	-1.6	-2.7	1.1	-0.04
United Kingdom	1.7	-1.3	-2.8	-4.0	0.2	-0.4
Germany	1.0	-0.8	-2.5	-5.0	0.1	-1.0
Japan	1.5	-0.2	-2.6	-6.1	0.6	0.5
France	1.4	-0.5	-1.9	-2.9	0.7	0.4
Canada	1.9	0.3	-1.2	-2.5	1.6	1.1
Italy	0.5	-0.6	-2.1	-4.4	-0.1	-0.4
Russia	7.3	3.5	-0.7	-5.9	1.3	0.5
PRC	9.8	8.5	6.7	6.5	8.0	7.5
India	8.0	6.3	5.1	4.5	6.5	5.6
World	3.9	2.2	0.5	-1.3	3.0	1.8

Here, danger is the bleak economic prognosis, as shown by the IMF estimates, which could lead a large number of countries to change to protectionism in order to assure adequate demand in local industry and avoid more job losses. According to a study by Gamberoni and Newfarmer (2009), from a total of 23 members of the Informal G-20 group, 17 held a meeting during November 2008 in Washington, and used protectionism from some or the other viewpoint since the start of the current global crisis, even after agreeing to not follow any protective steps. It could be concerning since this would accelerate the worldwide trade downturn, that has reached historic lows due to the beginning of recession in October 2008. Because of substantial export contractions in the globe's biggest exporting nations, such as China, Japan and Germany, worldwide trade rise decreased between 2007 and 2008 from 6% to 2%. (Figure 1) Moreover, World Trade Organization predicts that global trade may decrease by around 9% in year 2009–2010, marking the largest drop in global trade since World War II.

Figure 1: Annual Growth of Global Trade Volumes 1981–2009, Actual and Forecast

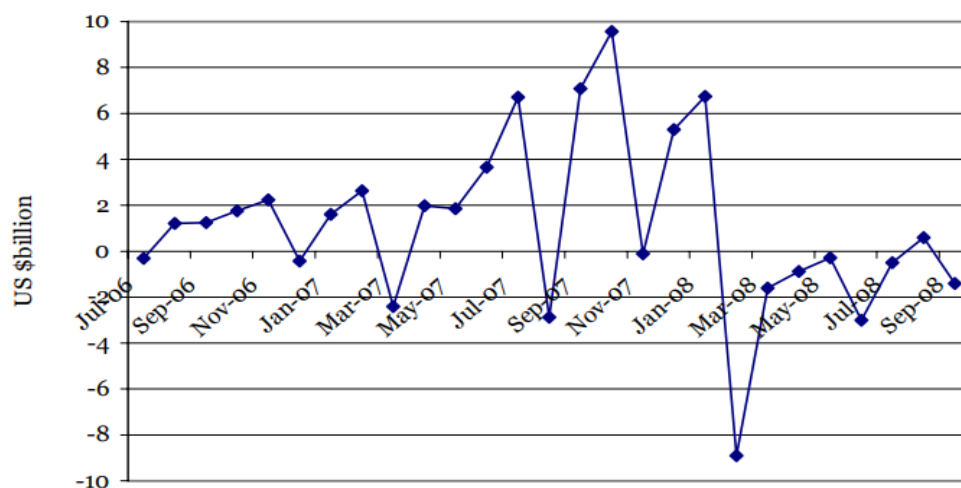


In essence, the current crisis is really global in scope, and it has the potential to come out as the worst after the Great Depression. Thankfully, unlike in the Great Depression, seriousness of this crisis was recognized early, and, especially, governments in established as well as developing countries coordinated in the response to their policy. Governments across the world launched multiple fiscal stimulus programmes, central banks also poured massive quantities of cash into the system. South Africa and the People's Republic of China, for example, have launched mega-stimulus packages of roughly 24 percent and 8 percent of their GDPs, respectively. In exact terms, US announced a \$8.1 trillion bailout package. Table 3 shows that when the stimulus packages of nine selected countries are added together, the total rises to nearly \$10 trillion (USD), or around 20 per cent of global GDP. After such attempts, it could be believed that the worldwide economy would soon get up and this recession would last less than the one that occurred in 1929.

IMPACT OF CRISIS ON THE INDIAN ECONOMY

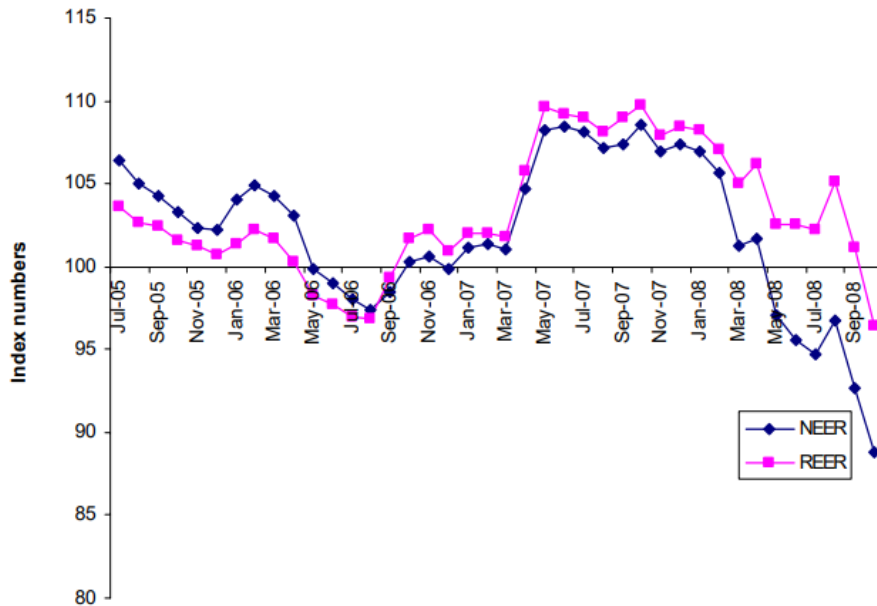
India can undoubtedly take solace in the fact that the global financial woes have not yet resulted in a significant banking crisis, as they have in the United Kingdom and a number of other countries. Whereas banks in the United Kingdom and Europe were substantially exposed to the mortgage-backed securities supplied by the US financial system, Indian institutions were not. This has to do with India's prudential regulation standards, and more significantly, the incremental nature of financial sector changes, as we'll describe in the next section. However, there are a lot of variables to be concerned about. First, since February 2008, there has been an exodus of foreign institutional investments (FIIs) from India. For international institutional investors seeking higher returns, India was a particularly desirable place among growing economies. With the advent of the monetary crisis in US and other Western nations, big international portfolio investors are avoiding emerging market investment prospects in favour of safer havens, primarily the United States and Japan. Between April 2007 and January 2008, there was a \$40 billion net influx of portfolio investments into India. Between February and September 2008, such big inflows resulted in a \$16 billion net outflow of portfolio investments. (see Figure 1).

Figure 1: *Monthly Inflows of Portfolio Investment into India, in US\$ billion, July 2006 to September 2008*



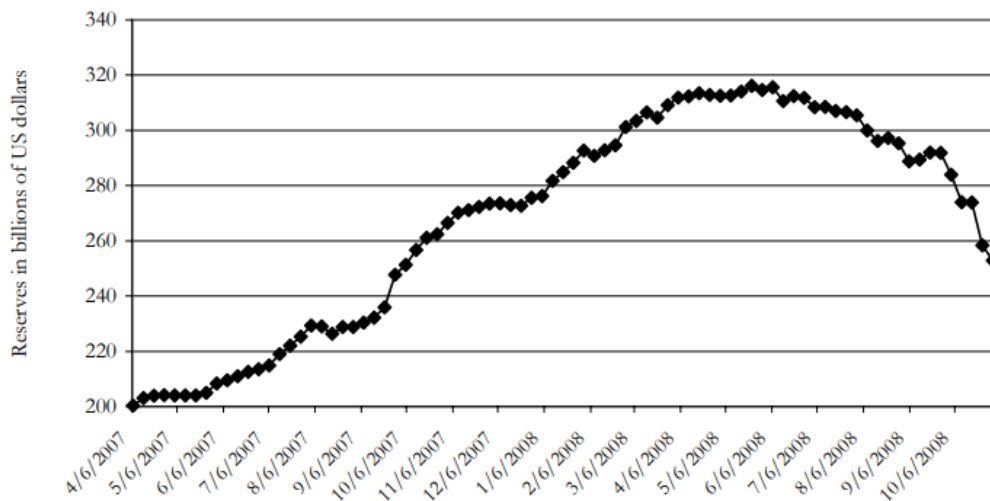
Withdrawal of FII investments from India has resulted in a slew of new issues. India's stock markets have experienced a significant drop. Since April 2008, the Indian rupee has been progressively losing ground against USD. In 2007, INR appreciated significantly versus USD and other major currencies.

Figure 2: Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee (Base year = 2006-07) (6-Currency Trade Based Weights)



In 2007, India began amassing reserves. With FII outflows and the rupee depreciating, the RBI attempted to defend the rupee by selling dollars. As a result, foreign exchange reserves have been depleted (see Figure 3).

Figure 3: India's Total Foreign Exchange Reserves in Billions of US dollars, Weekly Data, April 2007-October 2008



The global financial crisis caused a catastrophic recession in India's real economy, which was the country's main issue then. The Central Statistical Organization forecasts of real growth in GDP during the last quarter of 2007-08 and the initial quarter in 2008-09 show indicators of a recession. The first quarter of 2008-09 saw a slowing in GDP growth to 7.9%. The industrial and, in particular, manufacturing sectors slowed significantly, with growth rates of only 5.8% and 5.6 percent in the last two quarters. Electricity production also dropped dramatically (see Table 1).

Table 1: Rates of Growth of Real GDP (at 1999-2000 prices) at Factor Cost, in per cent

	2000-01 to 2007-08	2005-06	2006-07	2007-08	2007-08				2008-09
					Q1	Q2	Q3	Q4	
Agriculture & allied activities	2.9	5.9	3.8	4.5	4.4	4.7	6.0	2.9	3.0
Industry	7.1	8.0	10.6	8.1	9.6	8.6	8.6	5.8	5.2
Mining & Quarrying	4.9	4.9	5.7	4.7	1.7	5.5	5.7	5.9	4.8
Manufacturing	7.8	9.0	12.0	8.8	10.9	9.2	9.6	5.8	5.6
Electricity, gas & water supply	4.8	4.7	6.0	6.3	7.9	6.9	4.8	5.6	2.6
Services	9.0	11.0	11.2	10.7	10.6	10.7	10.0	11.4	10.2
GDP at factor prices	7.3	9.4	9.6	9.0	9.2	9.3	8.8	8.8	7.9

The growth rates of industrial output indices shown in Table reflect the downturn in the manufacturing and electricity sectors. In April-August 2007-08, the manufacturing index increased by 10.6%, while in April-August 2008-09, it increased by 5.2 percent. The indexes for electricity production and consumption have equivalent growth rates of 8.3 percent and 2.3 percent, respectively.

The slowdown has been most severe in the basic and intermediate products sectors among use-based sectors. Capital goods growth slowed to 9.2 percent in April-August 2008-09, compared to 20.1 percent increase in April-August 2007-08. Consumer goods, on the other hand, grew at a quicker rate from April to August 2008-09 than during the same time in 2007-08. In reality, consumer durables grew at a positive pace in April-August 2008-09, compared to a negative rate in 2007-08.

OVERVIEW OF INDIAN CAPITAL MARKET AND **IMPACT ON IT**

In the last two decades or more, the capital market of India has undergone a great shift in comparison to world's developing economies. To compete with the worldwide leaders, business processes, functionality, monitoring/regulating mechanisms, hardware, software, and so on have all been overhauled. The current state of capital market in India has a long, illustrious history, since the seventeenth century. At that time, East India Company assets were exchanged. Trading was confined to some brokers in the 1850s, which traded beneath a banyan tree in front of Bombay's Town Hall. As the number of brokers increased, the site of trading shifted several times. In 1874, the club relocated to Dalal Street, and in 1875, it was incorporated to be 'The Native Share & Stock Brokers Association.' It purchased a building on Dalal Street in 1895, which was then opened in 1899. As a result, the Bombay Stock Exchange was consolidated. And so India's capital market began to develop in a systematic manner. The Bombay Securities Contracts Control Act of 1925 granted recognition to present day Bombay Stock Exchange in May 1927. On January 26, 1950, India's constitution was ratified. The forward markets and stock exchanges are controlled by the Indian government, according to the constitution. Bombay Stock Exchange, the first stock exchange recognised in India under the Securities Contracts (Regulation) Act, which was passed in the year 1956. In India, the securities market exploded in the 1980s, with millions of investors unexpectedly discovering rich opportunities. For the first time, many investors entered the stock market. This expansion was aided by the government's liberalisation initiative, which began in the mid-1980s. In 1986, BSE created the BSE Sensex, which allows the exchange to track its overall performance.

The 1990s will be remembered to be most pivotal decade for India's capital market. In May 1992, the Capital Issues (Control) Act of 1947 was repealed. Fresh industrial policy, SEBI arising as a capital market regulator, arrival of foreign institutional investors, euroissues, free pricing, new trading practises, new stock exchanges, the entry of new players such as private sector mutual funds and private sector banks,

and the boom and bust of the primary market characterised the decade. The securities fraud of 1991-92 exposed the financial system's flaws and inefficiencies.

The stock market was forced to restructure as a result of the fraud. In terms of technology and market values, the Indian stock market has changed dramatically. The trading mechanism has undergone significant modifications as a result of technological advancements. The National Stock Exchange (NSE), founded during 1994, the Over the Counter Exchange of India (OTCEI), founded during 1992, both competed against Bombay Stock Exchange (BSE) on a national level.

In April 1995 and November 1996, National Securities Clearing Corporation (NSCC) and National Securities Depository Limited (NSDL) were established to improve clearing and settlement as well as dematerialized trading. In 1995-96, the Securities Contracts (Regulation) Act of 1956 was revised to allow for the trading of options. Furthermore, in January 1998, all corporations' dematerialized segments were subjected to rolling settlement. Stock market participation expanded as a result of automation and geographic spread. The NSE created the S&P CNX Nifty, as well as CNX Junior Indices in 1996, which comprise India's top 100 most liquid stocks. The CNX Nifty, a diversified index comprised of 50 equities representing 25 various economic sectors. India Index Services and Products Ltd (IISPL), which comprises of a licencing and consulting relationship with Standard & Poor's, owns and manages the Indices. The National Stock Exchange of India debuted its website in 1998, and in 2000, it was the first exchange in India to begin trading stocks via the Internet. The NSE has also demonstrated its dominance in the Indian financial market by winning numerous honours, including the Computer Society of India's 'Best IT Usage Award' (in 1996 and 1997) and CHIP magazine's CHIP Web Award (1999). BSE's derivatives market was opened in 2000, trading Sensex futures contracts, using the sensitive index, i.e., Sensex. During the years 2001 and 2002, BSE's platform for trading expanded with the commencement of Sensex options and equity derivatives. In 2003, the introduction of a rolling settlement method in all scrips as well as electronic fund transfer lowered the settlement cycle to T+2.

There was a lot of euphoria throughout the bull market (2003-2007). Interest rates were at an all-time low at the time. Credit was readily available, and at a low cost. Furthermore, corporate profits were increasing at a steady pace. The stock market was gaining a lot of ground.

In 2007-08, the Indian capital market had a nicely-developed regulating environment, new infrastructure in market, continuously growing market capitalization and liquidity, improved resource provision and mobility, a fast growing derivatives market, a densely coordinated mutual fund industry, and higher transparency in issuance. The worldwide crisis in 2008, however, disrupted everything. Unsurprisingly, extra liquid market resulted in asset bubbles that eventually deflated. The global financial crisis has wreaked havoc on the Indian capital market. The most widely followed market index, the Sensex, has fallen to levels last seen in December 2005. The S & P CNX Nifty index has likewise experienced a similar drop. The impact of global financial instability was felt most acutely in the equities market during 2007 and 2008, when portfolio flows were very volatile. Withdrawals by foreign institutional investors (FIIs) have had a significant impact on Indian stock prices. Between January 2006 and January 2008, FIIs invested approximately Rs 10,00,000 crore, propelling the Sensex to a high of 20,000. However, FIIs withdrew from the equities market from January 2008 to January 2009, some in order to be secure and others to pay their debts. Sensex fell from more than 20,000 to around 9,000 within a year as a result of these withdrawals. The stock market's liquidity has been severely harmed.

Stock values have plummeted by more than 70% from their high in January 2008, with some losing as much as 90% of their value. This has left investors, both retail and institutional, with no safe haven. The primary market had gone off the rails, and the secondary market was in a deep hole. As a result, market rates fell below issue prices, prompting shareholders to contemplate buying on the open market or postponing new investments. This predicament had inevitably thrown a wrench in business houses' efforts to raise funds in various forms for their large-scale initiatives.

Despite the fact that major capital market indices were downgraded until the first quarter of 2009, Indian stock markets showed considerable reluctance to this worldwide crisis. 2009-10 witnessed an increase in exchange revenue, majorly because of the revival of global financial markets. In 2009-10, the NSE's turnover increased by 50.36 percent over 2008-09, while the BSE's increased by 25.34 percent over the same year. In 2009-10, the NSE's average daily turnover was US \$ 3.5 billion, up from \$2.0 billion USD during 2008-09.

Despite the fact that usual daily revenue on BSE increased to \$1.1 billion USD during 2009-10 from \$0.89 billion USD in the preceding year, it remained less than the 2007-08 average of \$1.6 billion USD. Market capitalization for instruments eligible for trading on equity division of NSE and BSE increased in 2009-10 compared to 2008-09. Following massive rise in 2007-08 compared to 2006-07, market capitalization fell in 2008-09, followed by a rebound in year 2009-10 above 2008-09 levels.

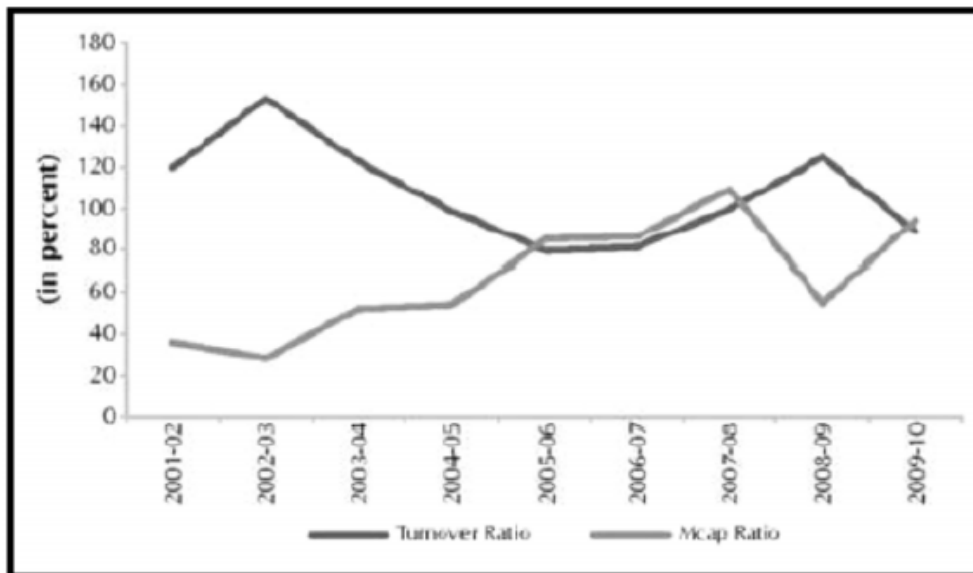
NSE's market capitalization, being INR 48,581,217 million during March 2008 decreased to INR 28,961,940 million by March 2009. The market capitalization of the NSE increased to US \$ 1,549 billion at the end of September 2010 from US \$ 1,255 billion at the end of March 2010. This indicates that the Indian financial markets have a high level of investor trust and risk diversification. The market recovered in 2009, but then consolidated in 2010. Its foundation was solid. Having an average growth rate of 8.9% in the first three quarters of 2010, the economy is well positioned to start 2011 strong. Consumer demand was high at this point, exports were increasing, and investment was increasing. Stock prices rose 25% in 2010, with almost all price rise happening in last half of the year. What was different was the FII investment, which remains quite volatile in market. According to the RBI, a ten percent change in FII investment translates in a 35 percent change in stock values. FII total investment was just Rs. 300 billion during first half of 2010, but it increased to Rs. 1010 billion in the second five months.

As per Bloomberg data, profits in Indian companies' initial public offerings (IPOs) in 2010 exceeded even those seen in 2007. The government made a big splash in the markets, generating a lot of money through a series of IPOs and FPOs. 124 initial public offerings (IPOs) raised a capital of Rs. 51,000 crore through March 2011, averaging close to a billion dollars per month. In the 2010-11 financial year, Indian companies raised more than Rs. 70,000 crore. As a result, it is clear that India's capital market has demonstrated excellent resilience and speed in recovering from the global financial crisis.

Performance of Indian Securities Market during 2000-2010

The market capitalization, traded value and turnover ratios have all increased significantly over the last decade. Over the last decade, the cash market's turnover has nearly doubled, and the market capitalization has grown to eight times what it was in 2000.

Figure 1: All India Market Capitalization Ratio and Turnover Ratio



The Indian derivatives market's turnover has expanded from US \$ 0.086 trillion in 2000-01 to US \$ 3.92 trillion in 2009-10, surpassing the country's cash market turnover. The primary market's resource mobilisation has expanded considerably, increasing sixfold between 2000 and 2010. Similarly, the amount of money raised through euro issues has expanded dramatically over time.

Impact on Stock Market

India's financial markets, including the stock market, money market, forex market, and credit market, were all under pressure from various sources. First, as a result of the global liquidity crunch, Indian corporations' access to foreign finance dried up, forcing them to transfer their credit demand to domestic banks. Corporates also withdrew their investments in domestic money market mutual funds (MFs) in search of alternative financing, putting pressure on non-banking financial corporations (NBFCs) where the MFs had placed a large percentage of their capital.

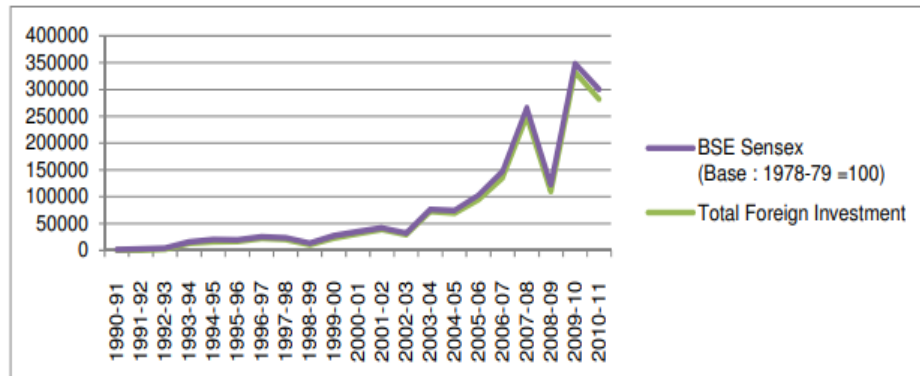
The substitution of domestic funding for international financing put pressure on both money and credit markets. Second, as part of the global deleveraging process, capital flows reversed, putting pressure on the FX market. Corporates were converting monies raised locally into foreign currency to pay their external obligations at the same time. The rupee is under pressure from both of these sources. Third, the Reserve Bank's intervention in the FX market to control rupee volatility contributes to the restriction of liquidity.

Indian stock markets have been impacted by global financial upheaval. In the month of October 2008, the SENSEX, which had reached a high of 21000 in January 2008, had dropped to below 10000. The considerable relationship between foreign investment in the economy and SENSEX variations is shown in Table 3. The SENSEX value also increased to 16568.89 in 2007-08, up from 12277.33 the previous year. Figure 2 shows the BSE SENSEX and net foreign investments are inextricably linked.

Table: 3 SENSEX & Foreign Investments

Year	Direct investment	Portfolio investment	Total Foreign Investment	BSE Sensex (Base : 1978-79 =100)
1990-91	174	11	185	1049.53
1991-92	316	10	326	1879.51
1992-93	965	748	1713	2895.67
1993-94	1838	11188	13026	2898.69
1994-95	4126	12007	16133	3974.91
1995-96	7172	9192	16364	3288.68
1996-97	10015	11758	21773	3469.24
1997-98	13220	6794	20014	3812.86
1998-99	10358	-257	10101	3294.78
1999-00	9338	13112	22450	4658.63
2000-01	18406	12609	31015	4269.69
2001-02	29235	9639	38874	3331.95
2002-03	24367	4738	29105	3206.29
2003-04	19860	52279	72139	4492.19
2004-05	27188	41854	69042	5740.99
2005-06	39674	55307	94981	8278.55
2006-07	103367	31713	135080	12277.33
2007-08	140180	109741	249921	16568.89
2008-09	173741	-63618	110123	12365.55
2009-10	179059	153516	332575	15585.21
2010-11	138462	143435	281897	18605.18

Figure:2 SENSEX & Total Foreign Investment Relation



The reversing of portfolio equity flows, as well as consequences on domestic foreign exchange markets and state of liquidity has had a negative influence on India's equities markets. Despite the 'decoupling theory,' which states that advanced countries with considerable foreign reserves, enhanced framework of policy, sturdy corporate balance sheets, and a stable banking sector will not be hampered from the crisis, the crisis has expanded to India. The worldwide crisis, however, had an impact on all Indian channels.

Financial markets; as a result of the worldwide liquidity crunch, Indian corporates and banks' credit demand was transferred from global financial to domestic banking, putting pressure on the domestic capital and money markets. The process of global deleveraging resulted in reversing capital flows; pressurizing FX markets, lastly, contributing to a decreasing trend in INR. The currency rate depreciated rapidly, and short-term interest rates soared.

If we look at the influence on the stock market apart from the impact on the money market, we may see the following:

Stock Market – Economy and stock market are inextricably linked since the stock market reflects the economy's health. The Indian stock market plummeted from a high of 20000 to a low of roughly 8000 points as a result of the global economic downturn. The Indian stock market has plummeted due to "the substitution effect" of:

- Lack of offshore finance for Indian banks and corporates;
- Difficulties in raising cash in a negative local capital market; and
- A drop in corporate internal accruals.

Money Market – The credit market, debt market, and government securities market make up the money market. Because they are supervised by the Reserve Bank of India, all of these markets are linked to the soundness of the banking system in some way. Our financial system is essentially sound and resilient, according to the report submitted by the Committee for Financial Sector Assessment (CFSA), which was set up jointly by the Government and the RBI, and that systemic stability is by and large robust, with no significant vulnerabilities in the banking system.

Studying the Impact with respect to Stock Market and Forex Market

The impact of global financial instability was felt most acutely in the equities market during 2007 and 2008, when portfolio flows were very volatile. Withdrawals by foreign institutional investors (FIIs) have had a significant impact on Indian stock prices. The stock market's liquidity had been severely harmed. Stock values plummeted by more than 70% from their high in January 2008, with some losing as much as 90% of their value. This left investors, both retail and institutional, with no safe haven. The primary market came to a halt, and the secondary market plunged into the abyss. Many established companies were unable to complete their rights offerings even when fixing offer prices below corresponding market quotations at the time of announcement due to poor equity values. Market rates had since fallen below issue prices, prompting shareholders to consider buying on the open market or postponing new investments. This circumstance had, understandably, thrown a wrench in business attempts to obtain funds in various forms for large-scale projects. 75 In India, there had been a major concern for the economic stroke of large foreign exchange outflows as a result of FIIs' continued selling on the stock exchanges, as well as the withdrawal of funds, which had put more pressure over dollar demand. The difficulty that Indian companies have raising capital abroad had an impact on the availability of dollars. This, in turn, had put extra credit strain on the native financial sector. Though the financial crisis' early impact was limited to the stock and foreign exchange markets, it later expanded to the rest of the financial system, and all of this had an influence on the real economy. Real growth is certain to slow at some point.

The rupee fell to its lowest level in the then recent years as a result of dollar purchases by FIIs and Indian firms to pay their obligations globally. There had also been a flight to safety within the country. Investors had switched away from stocks and mutual funds and toward bank deposits, as well as from private to public banks. Mutual funds with high leverage and non-banking financing companies (NBFCs) had been hit the worst.

Studies done to observe the Impact of Crisis on Indian Stocks

The Indian capital market has been the subject of a vast research in the financial literature. Many of the scholars and experts discuss the Indian capital market in general and stock exchange trading methods in particular. Emerging capital markets, according to Raju and Ghosh (2004), have higher intra-day volatility than developed markets. Because of economic and socio-political fluctuations, it is an indication of an emerging market; volatility in emerging markets is often high. Chakrabarti and Mohanty (2005) explore the evolution of India's capital market during the reform period. According to Bajpai (2006), India's capital market has gone through several stages of liberalisation, resulting in greater investment options, substantial reductions in costs of transaction, transparency, and safety, as well as improved integration with worldwide markets. Time has been made possible by the open of the economy for investment and commerce, administered interest and exchange rate regimes getting dismantled, and the establishment of solid regulatory bodies. The market also has a lot of room for growth in terms of market size, market turnover ratio and liquidity. Evidence was found of weak form inefficiency in the Indian capital market during that time by looking at the efficient market hypothesis of Indian equity market. The impact of the global financial crisis on India was explored and it was found that a quick sell-off by financial institutions combined with the likelihood of an economic downturn has dragged India's stock as well as commodity markets. An in-depth analysis of global financial and economic crises was given and its effects on India were also studied. The impact of the present global financial crisis on the Indian economy was studied and it was discovered that, comparative to sophisticated capitalist nations of the west, India was relatively unaffected.

This literature analysis highlights the thing that the capital market literature lacks statistical studies about Indian capital market performance, particularly after crisis of 2008. As a result, in this paper, an attempt is made to empirically investigate the performance of the Indian capital market in order to add to the knowledge in this area.

Figure 2: Growth in All India Equity Market Turnover and Market Capitalization (USD mn)

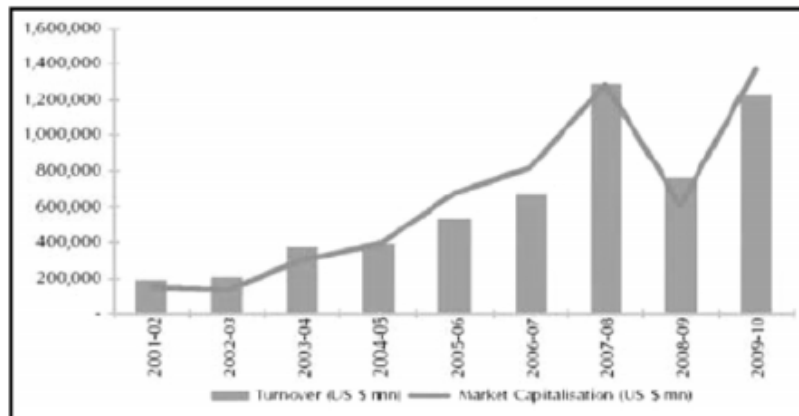


Figure 3: Resource Mobilization in Primary Market (USD mn)

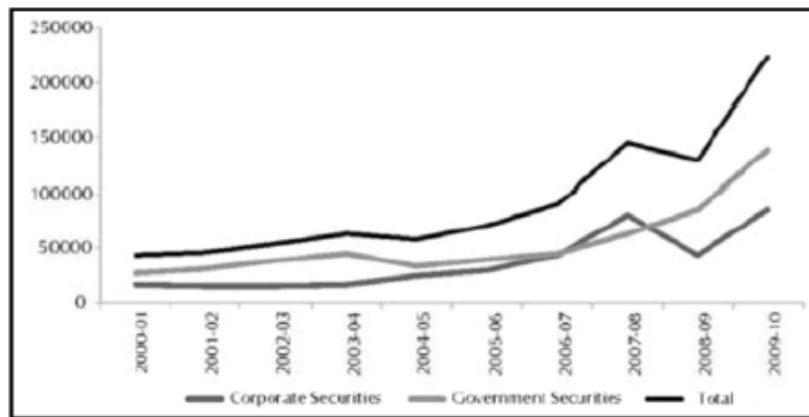


Figure 4: Resource Mobilization through Euro Issues (USD mn)

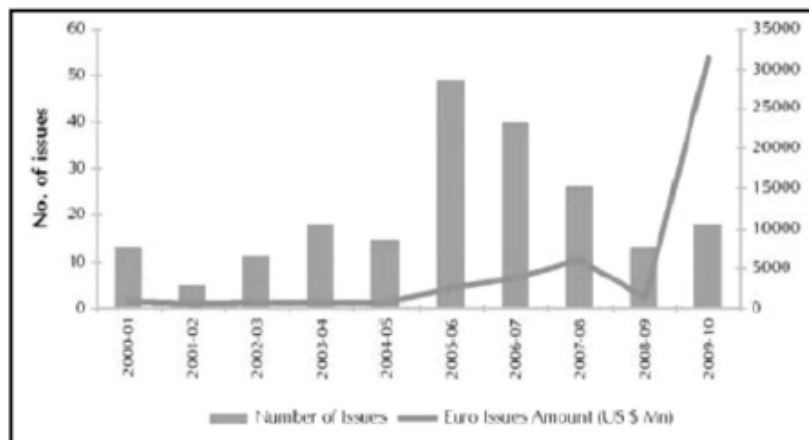


Figure 5: Net Investment by FIIs and Mutual Funds in USD mn)

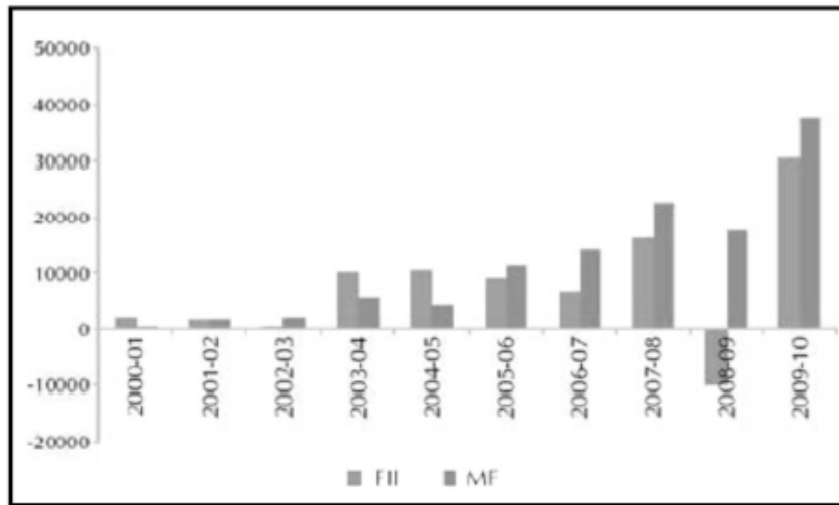
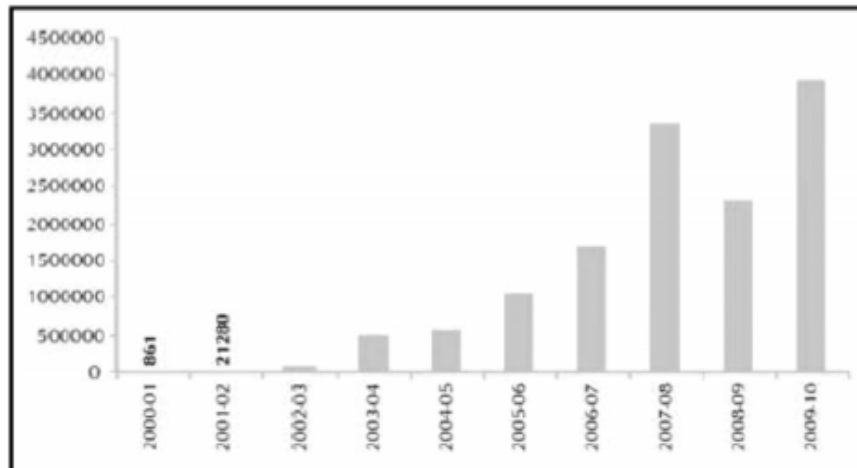


Figure 6: Equity Derivatives Turnover (USD mn)



ANALYSIS OF SPECIFIC STOCKS PRE, DURING AND POST CRISIS

Objectives of the Study

The purpose of this article is to look into the following goals:

- i) Determining the many causes of 2008 crisis, and
- ii) Determining the impact of the crisis on the Indian securities market.

Data Source and Methodology

The investigation is exploratory as well as empirical. The study's exploratory section is based on existing market literature on this topic, which includes books, journal articles, research projects, and websites. The websites of Indian Stock Exchanges, resources provided by SEBI and RBI, the Investment Company Fact Book, and multiple reports and articles published in magazines, newspapers and on websites are all used to compile the data.

Methodology

The measure of S&P BSE 30 businesses representing SENSEX to evaluate equity performance has been chosen for measuring the impact of the 2008 crisis on the securities market of India in accordance with the above objective. Between 2005 January and 2013 February, this study period lasted 8 years and 2 months. The research is broken into three parts:

- (i) Pre-crisis (2005-2007)
- (ii) Crisis (2008-2009)
- (iii) Post crisis (2010 -2013 Feb).

The following are descriptions of numerous empirical tools that have been utilised in analyzing performance:

Return: The regular returns for each company, opening, closing, and weighted average price (WAP), as well as the SENSEX, have been found. The regular return is percentage variation in price of a stock over a given day. The maximum, lowest, and averages of the derived series were used as return estimation measure after calculating the daily return.

Risk: For risk estimation, the standard deviation and coefficient of variation were determined. SD is a metric that measures the price volatility of a stock or scrip. CV is a relative measure of dispersion derived to quantify risk in relative terms, and it represents the dispersion of actual from expected in absolute terms.

Correlation Coefficient (R): It was constructed to determine the extent of correlation between stock price fluctuations of individual companies and the SENSEX movement.

The justification for using daily stock price data for analyzing performance rather than monthly or annual data is to get hold of substantial price movements that may get ignored if monthly or annual data is used.

Assigning the Best, Worst and Moderate Performers for Performance Analysis:

Once the companies were compared, they were granted titles of worst, middling and best performers so as to analyze performance of companies chosen. Criteria used to assign titles to the selected companies are shown ahead.

Steps	Basis of assigning title
Step-1	Maximum/ Highest and Minimum/ Lowest value of the calculated return, risk estimating parameter and the correlation have been taken.
Step-2	Based on that Average has been calculated. Above Average - Assigned as Best Performers Below Average - Assigned as Worst Performers Average - Assigned as Moderate Performers
Step-3	Range has been calculated. Based on the range value dividing it by the number of class intervals as mentioned width of the class interval has been found out.

Empirical Findings

By examining the performance of the S&P BSE 30 businesses that make up the SENSEX, the impact of 2008 crisis on the Indian securities market has been explored. Stock is referred to as equity in the trading industry. The stock market's performance is referred to as equity market performance. Return, risk of the scripts, and correlation of individual company's stock price variation with Sensex are calculated using particular empirical methods, as specified in methodology for the purpose of empirical analysis.

Even after the fact that crisis began in the United States during 2007, the reason behind using 2008 onwards as the crisis period here is that because the research is only in the Indian context, it was seen that the effect on India's economy was evident from 2008, so the crisis period was chosen from 2008 for this study. Companies that make up the S&P BSE SENSEX, as well as their respective sectors, are listed below for empirical examination.

Table - 1: List Of Companies

Sl. No.	Name of the Companies	Scrip Code	Respective Industries/S&P BSE Sectors
1	Bajaj Auto Ltd	532977	Automotive
2	Bharat Heavy Electricals Ltd(BHEL)	500103	PSU
3	Bharti Airtel Ltd	532454	Teck
4	Cipla Ltd	500087	Healthcare
5	Coal India Ltd	533278	Metal & Mining
6	Dr. Reddy's Laboratories Ltd	500124	Healthcare
7	GAIL (India)Ltd	532155	Oil & Gas
8	HDFC Bank Ltd	500180	Bankex
9	Hero MotoCorp Ltd	500182	Automotive
10	Hindalco Industries Ltd	500440	Metal & Mining
11	Hindustan Unilever Ltd	500696	FMCG
12	Housing Development Finance Corporation Ltd(HDFC)	500010	Consumer Finance
13	ICICI Bank Ltd	532174	Bankex
14	Infosys Ltd	500209	IT
15	ITC Ltd	500875	FMCG
No.			BSE Sectors
16	Jindal Steel &Power Ltd	532286	Steel & Power
17	Larsen & Toubro Ltd	500510	Capital Goods
18	Mahindra & Mahindra Ltd	500520	Automotive
19	Maruti Suzuki India Ltd	532500	Automotive
20	NTPC Ltd	532555	Power
21	Oil & Natural Gas Corporation Ltd(ONGC)	500312	Oil& Gas
22	Reliance Industries Ltd	500325	Oil & Gas
23	State Bank Of India(SBI)	500112	Bankex
24	Sesa Goa(Sterlite Industries(India) Ltd*)	500900	Metal
25	Sun Pharmaceutical Industries Ltd	524715	Healthcare
26	Tata Consultancy Service Ltd(TCS)	532540	IT
27	Tata Motors Ltd	500570	Automotive
28	Tata Power Co.Ltd	500400	Power
29	Tata Steel Ltd	500470	Steel
30	Wipro Ltd	507685	IT

The following are the important discoveries from the pre-crisis period:

To begin, Jindal Steel & Power was the best performer during this period, which represents the S&P BSE Steel and Power industry. When it comes to return estimation parameters on individual firms, starting, closing, and weighted average share prices, Jindal Steel & Power is the greatest performer. Following BHEL and GAIL in terms of opening pricing, Tata Power along with Dr. Reddy's Laboratory

in terms of closing stock prices, and Tata Power, as well as other firms mentioned above, in terms of average prices. When it comes to opening, closing, and mean prices, L&T, Sesa Goa and RIL are considered mediocre performers. In terms of return on opening, closing, and average price, Cipla, Hero Motocorp, Infosys, Sun Pharma, ICICI Bank, HUL, and Maruti Suzuki are poorest performers.

Second, when all three variables were examined: opening, closing, and weighted average share price, it was determined that ICICI Bank, Sun Pharma, and HDFC Bank outperformed competition. After them are Hindustan Unilever Limited, Jindal Steel and Power, and Hero Motocorp. According to these three factors, Mahindra & Mahindra, Wipro, and Hindalco Industries are moderate performers, while BHEL, Cipla, ITC, and Sesa Goa are the worst performers.

Third, using SD as an indicator of risk, HUL and Sun Pharma have the best opening, closing, and average equity performance, followed by Hero Moto Corp, ICICI, NTPC, and RIL. Shares which performed moderately are BHEL, Jindal Steel, Cipla, and Sterlite Industries (Sesa Goa) performed the worst, which has the highest standard deviation, and next are ITC Ltd and Hindalco Industries.

Fourth, analysing the CV for relative measure of risk, result reached shows Jindal Steel & Power is the best performance among all, followed by HDFC Ltd, RIL, HUL, and Bharti Airtel as the middling performer. Hindalco Industries, ITC Ltd, TCS, and Wipro are the lowest performers. Finally, evaluation shows that the Correlation Coefficient of ITC Ltd. with the Sensex is less throughout the time period considered. As a result, ITC has earned the title of best performance; next best performers are Dr. Reddy's Laboratory and Cipla; middling performers being BHEL, GAIL, Sesa Goa; and worst performers come to be State Bank of India, ICICI Bank, Infosys, and Airtel, based on three variables.

Finally, based on the key findings, Jindal Steel and Power & Hindalco Industries, which represent the S&P BSE Steel & Power along with Metal & Mining industries, respectively, were best and worst performing shares during pre-crisis period, after analyzing the average return of scrips as the return estimating parameter, during the pre-crisis period.

HUL, Sun Pharma, and Hero Moto Corp belong to FMCG, Healthcare & Automotive sectors, and Sterlite Industries (Sesa Goa) belonging to Metal and Mining industry, came out to be best and worst performers, respectively, when using SD as a evaluator of each company's share risk.

The steel and power sectors, as seen in above comparison, performed good prior to the 2008 crisis, however, when looking at the risk estimating parameter, FMCG, Healthcare, and Auto sector companies have lower standard deviation, showing lower risk than others. Now, it's worth considering if these firms' performance was constant both throughout the crisis and thereafter.

Comparison of particular company's pre-crisis performance with the during crisis and post-crisis era performances can provide an answer to this question. The return of Jindal Steel & Power Company has continued to fall and is now negative during the crisis and post-crisis periods. As a result, it appears that Jindal Steel & Power, which represents the steel and power industry, was unable to maintain equity performance in line with scrip's return. Risk component of scrip was lesser in the pre-crisis period; however it surged during the crisis time, suggesting excessive volatility, which then decreased to some level during the post-crisis period.

The following are the most important conclusions from the crisis period;

To begin, using the highest return as a estimating parameter on individual firms over opening and closing prices, we can conclude that Larsen & Toubro Ltd., representing the S&P BSE Capital Goods industry, and Sterlite Industries (Sesa Goa), representing the weighted average stock prices, performed the best during this period. Following that, next best performers were Bajaj Auto Ltd., Mahindra & Mahindra, Maruti Suzuki, BHEL; RIL, Tata Motors; the average performers were HDFC bank Ltd, Hero Motocorp, ONGC, NTPC Ltd.; the least performing stocks were Sun Pharma, Infosys, and ITC Ltd.

Second, when the least return is used as a performance evaluator, Cipla Ltd., Hero Motocorp, and HUL emerge to perform the best across all three variables. Sun Pharma, ITC, Infosys, ICICI Bank, and Hindalco are the then best performers. The weakest performer has been recognised as Jindal Steel and Power. L&T and Airtel are the moderate performers.

Third, when looking at the mean return of BSE 30 businesses, it gets clear that Bajaj Auto Ltd. is top performer, followed by Maruti Suzuki, Dr. Reddy's Laboratory, Cipla, Maruti, Hero Moto Corp, and Jindal Steel & Power, following which are Airtel and RIL. Middling performers are HDFC Ltd, Tata Motors, and Wipro.

Fourth, using Standard Deviation (SD) as a risk metric, HUL's equity performance is the best as compared to rest; following bests are Cipla, Hero Moto Corp, ITC Ltd, Dr. Reddy's Laboratory. Least performing are Jindal Steel & Power, Sesa Goa, and TCS. The ICICI Bank is labelled as a middle performer.

Fifth, when evaluating the CV to measure risk relatively, result reached is that Hero Moto Corp is the best performer, followed by Bajaj Auto Ltd, Cipla Ltd, and Jindal Steel & Power. Airtel is a middle-of-the-pack performer. Finally, the Correlation of Coefficient for Sun Pharma Ltd. In comparison to Sensex is low for this period, showing less price variation, and thus it is said as the best performer; the following best performers are Dr. Reddy's Laboratory, Bajaj Auto, Hero Moto Corp, HUL. Least performing is ICICI Bank; middle performing are Maruti, ITC, and GAIL Ltd.

All in all, based on major findings, we can conclude that performance of Bajaj Auto Ltd and Jindal Steel & Power, both of which represent S&P BSE Auto and Steel & Power industry, performed best and least during the crisis, respectively. Using SD to evaluate individual stock risk/volatility, we can show that HUL and Jindal Steel & Power representing FMCG and steel and power sectors, performed the most and the least, respectively.

Table 4 illustrates the best, middling, and worst performing corporations from 2010 to February 2013, i.e., the post-crisis period.

**TABLE - 4 : OVERVIEW OF PERFORMANCE
Post Crisis Period (2010-2013 Feb)**

Parameters/ Prices	Opening price			Closing price			Average price		
	Best Performers (Top 3 to 5)	Moderate Performers (1 to 2)	Worst Performers (Bottom 3 to 5)	Best Performers (Top 3 to 5)	Moderate Performers (1 to 2)	Worst Performers (Bottom 3 to 5)	Best Performers (Top 3 to 5)	Moderate Performers (1 to 2)	Worst Performers (Bottom 3 to 5)
Max Return	Hero Moto Corp Tata Steel, ONGC Ltd, Coal India Ltd	Larsen & Toubro Ltd	Dr. Reddy's Laboratory, RIL, Sunpharma.	HeroMoto Corp Infosys TCS	Coal India Ltd	HDFC BankLtd RIL, Sunpharma	HeroMoto Corp, Infosys, Tata Motors	Coal India Ltd	Wipro, RIL, Sunpharma
Min Return	NTPC Ltd Coal India Ltd ICICI Bank	ITC Ltd	Tata Power, BHEL, Sesa Goa	NTPC Ltd, Coal India Ltd, Hindalco Industries.	Mahindra& Mahindra	Tata Power, BHEL, Sesa Goa.	NTPC Ltd, Coal India Ltd, SBI.	GAIL (India) Ltd	Tata Power, BHEL, Sesa Goa.
Average Return	State Bank of India(SBI), Dr. Reddy's Laboratory, Bajaj Auto Ltd	TCS	BHEL, Sesa Goa, Tata Power.	State Bank of India(SBI), Dr. Reddy's Laboratory, Bajaj Auto Ltd.	TCS	BHEL, Sesa Goa, Tata Power	State Bank of India(SBI), Dr.Reddy's Laboratory Bajaj Auto Ltd	TCS	BHEL, Sesa Goa, Tata Power
SD	SBI,NTPC Ltd Hindustan Unilever Ltd Dr. Reddy's Laboratory	Maruti Suzuki	Tata Motors, Tata Power, Sesa Goa	SBI, Dr. Reddy's Laboratory NTPC Ltd Hindustan Unilever Ltd	Bharti Airtel	Tata Motors, Tata Power, Sesa Goa	SBI,NTPC Ltd, Dr. Reddy's Laboratory Hindustan Unilever Ltd	Tata Steel	Tata Motors, Tata Power, Sesa Goa
CV	Tata Consultancy Services(TCS) Hindustan Unilever Ltd Dr. Reddy's Laboratory	Mahindra& Mahindra	HDFC Bank, RIL, GAIL	Tata Consultancy Services(TCS) Hindustan Unilever Ltd Dr. Reddy's Laboratory	Mahindra& Mahindra	Maruti Suzuki RIL, GAIL	Tata Consultancy Services(TCS), Hindustan Unilever Ltd, Dr. Reddy's Laboratory	Mahindra& Mahindra	HDFC Bank RIL, GAIL
R	Sun Pharma, ONGC Ltd, Hero Moto Corp	TCS	ICICI, RIL, SBI.	Sun Pharma, Tata Power, ONGC Ltd, Hindustan Unilever Ltd, Dr.Reddy's Laboratory	TCS	ICICI Bank, RIL, SBI	Sun Pharma, ITC, Tata Power.	TCS	ICICI Bank, RIL, SBI

The following are the most important conclusions from the post-crisis period.

To begin, using the highest return as a return estimate measure for each company opening, closing, and weighted average stock prices, we can infer that Hero Moto Corp, which represents the S&P BSE Auto sector, was the greatest performer throughout this period. In terms of return on opening, closing, and average price, the top performing stocks are Tata Steel, Coal India, TCS, Tata Motors, and Infosys Ltd, while least performing are Sun Pharma, Dr. Reddy's Laboratory, HDFC Ltd., and Wipro. Moderate performers include L&T and Coal India.

Second, when the minimal return is used to measure performance, we get that NTPC Ltd. outperforms others in all three categories. Coal India Limited, ICICI Bank, Hindalco, SBI, and Tata Power Company are the next top performers. Tata Power Company is the worst performer. ITC, Mahindra & Mahindra, and GAIL (India) Ltd are among the moderate performers.

Third, when the mean return of BSE 30 firms is calculated, we observe that SBI performed the most, followed by Dr. Reddy's Laboratory, TCS, and Bajaj Auto Ltd., and finally BHEL, Sesa Goa, and Tata Power. TCS has been labelled as a fair performer.

Fourth, using SD to evaluate risk, we infer that SBI's performance on opening, closing, and average is the best; following best performers are HUL, NTPC Ltd, Dr. Reddy's Laboratory. Finally, the worst performers are Tata Motors, Tata Power, and Sesa Goa. Maruti Suzuki, Airtel, and Tata Steel have been labelled as middling performers.

Fifth, based on the Coefficient of Variation (CV) as a risk metric, Tata Consultancy Services (TCS) is the best performer, followed by HUL, Dr. Reddy's Laboratory, and HDFC Bank, then RIL, GAIL, and Maruti Suzuki. Mahindra & Mahindra is a middling performer. Finally, the Correlation Coefficient of Sun Pharma in comparison to Sensex was less for this period, indicating that this is the best performer; the following best performers are ONGC, ITC Ltd., Tata Power, Hero Moto Corp. The least performing is ICICI Bank, and then come SBI, RIL, showing high correlation with Sensex variation. TCS is labelled as a fairly performing stock.

Lastly, based on primary observations, we conclude that SBI and HDFC Bank, which represent the S&P BSE banking industry, had highest and least equity performance in the period post-crisis, respectively. SBI, NTPC Ltd., and Tata Motors representing the power and automotive sectors arise to be the most and least performing, respectively, when using SD to evaluate stock risk.

WHY DID THIS GLOBAL FINANCIAL CRISIS OCCUR?

The reasons of the Global Financial Crisis have been cited as follows:

1. **Sub-Prime Lending:** Subprime financing fueled a surge in housing demand, which in turn fueled home prices and consumer expenditure. Some homeowners have even taken out second mortgages to use the proceeds for consumer expenditure after refinancing their homes with cheaper interest rates. This housing bubble resulted in an excess inventory of homes and, as a result, house costs saw a decrease during 2006 first half. These had depreciated, making refinancing harder. Owners of houses faced risk of default and closure due to an excess supply of homes.
2. **Financial engineering- Derivatives**
3. **Securitization Practices:** Assets, receivables, and financial instruments are mixed and used for collateral in case of third parties (Investment Banks). Popularity of securitization, or mortgage-backed securities, grew rapidly during 90s, with net value of MBS more than tripling between 1996 and 2007. Mortgages gained a secondary market as a result of securitization, and lenders were no more compelled to hold mortgages until they mature. The financial crisis is not just attributable to subprime mortgages, but also to the securitizing these mortgages, that produced a notional substantially in excess of the actual worth of the underlying available assets. Credit risk in sub-prime mortgages was forwarded to other investors via securitizing technique; also, the credit crisis had a worldwide impact due to the large number of investors involved.
4. **Inaccurate Credit Ratings:** Investors poured money into mortgage-backed securities because of their high credit ratings, which helped fuel the housing boom in 2008. Complex financial instruments were not given proper ratings (Gregorio 2008).
5. **Regulations that are less stringent:** In market segments, a fast process of

financial innovation was poorly regulated. The failure of financial institutions can be traced back to lax internal controls along with insufficient regulation in the case of non-transparent assets. Rather of being transparent, the activities of derivatives markets were influenced.

6. Significant global imbalances
7. The overly accommodative monetary policy in the United States and other advanced economies has been highlighted as the root cause (2002-2004)

Lessons to learn-

- capital flow volatility should be managed
- Always try to find symptoms of over-leveraging
- High volatility in monetary policy should be a red flag
- Rightful monetary policy reaction to asset prices
- Avoid excessive volatility in monetary policy Capital buffers and dynamic provisioning are examples of dynamic financial regulation.

WHY HAS INDIA BEEN HIT BY THE CRISIS?

Many people were shocked by the violence with which India was hammered by the global crisis. And this dissatisfaction arises from two strands of analysis.

The initial analysis is as follows: There has been no direct exposure of the Indian banking sector to subprime mortgage assets or insolvent institutions. Activities not going in the balance sheet and securitized assets are fairly limited. Indian Banks, on the other hand, are still sound and thriving. So, how did India become embroiled during the crisis when it has little connections with the problems that are at the root?

Next cause of concern is that India's recent economic growth is mostly due to local consumption and investment. Outside demand, measured by merchandise exports, represents lower than 15% of our GDP. Now question becomes: When India's reliance on external demand is so modest, why should it suffer if there is a global slowdown?

Globalization is a response to both of these sources of dissatisfaction. Allow me to elaborate. First, throughout the previous decade, India's integration into the global economy was particularly rapid. Global integration encompasses more than just exports. India's two-way trade (merchandise exports + imports) hiked from 21.2% of GDP during 1997-98, year of the Asian crisis, to 34.7% of GDP during 2007-08.

Next, our nation's financial linkage with rest of the globe is on par with, if not greater than, its trade globalisation. If we look at an enlarged measure of globalisation, the ratio of total external transactions (gross current 5 account flows plus gross capital flows) to GDP, we can see that it has more than doubled from 1997-98, rising from 46.8% to 117.4% in 2007-08.

Importantly, in the previous five years, the Indian corporate sector's reach to external capital has significantly gone up. A few numbers will help to clarify the situation. Between 2003 and 2008, the contribution of corporate investment in India's GDP increased by 9% points. Corporate savings accounted for somewhat greater than half of the total, although external sources accounted for a

considerable share of the remaining funds.

While money was accessible on the domestic market, it was anticipated that capital from abroad would be less expensive. Foreign investors and lenders, on the other hand, were eager to take risks and finance investment in India in a global market awash with cash, based on the promise of India's economic potential. For example, India received almost 9% of GDP in capital inflows last year (2007/08), despite a current account deficit of only 1.5 percent of GDP in the balance of payments. The importance of external funding to corporations and the depth of India's financial integration are demonstrated by these capital flows, which exceed the current account deficit.

Even after the mitigating factors, India's fast and rising linkage with the worldwide economy is undoubtedly the reason it has been impacted by the crisis.

What did not occur in India?

1. Absence of subprime mortgages
2. Absence of toxic derivatives
3. Absence of bank losses that have put capital at risk.
4. There is no shortage of bank capital.
5. There is no distrust between banks.

What India had in its foundation?

- A strong sector in finance
- Flexibility in monetary policy and presence of sufficient instruments
- A corporate sector that is not overly indebted
- Abundant FDI
- Improving agriculture

Apart from the aforementioned fundamentals, three major aspects of India's economic performance were seen as warranting the effect of the worldwide crisis. The first is country's leading GDP performance in comparison to other developed countries. Higher growth has been related to alternative pressures such as potentially huge domestic markets and 'favourable' policy environments, in addition to the stimulation linked to global integration.

The second point to consider is; India is a vast country considering both population and terrain. Despite the fact that these countries' per capita income is significantly below that of many developing countries, their expansion will give rise to demand for many worldwide nations, adding up to their growth.

Last is the nation's ability to resist global financial volatility by adopting capital restrictions and restricting currency convertibility in capital account transactions.

How long did the Impact of Crisis last?

Another important concern is till when the pandemic will endure. "We are at the mercy of vaccine and cure discoveries for this pandemic." It may take days, months, or a year for this to happen. The thing we know is that once a way ahead is found, Indian markets will return to their usual form. Given that the crisis is not economic, Indian markets will resurge.

The history, on the other hand, is a solid signal of the expected recovery period, as the most severe crashes in the history were followed by a strong rebound in two to three years. History shows that the market has a habit of quickly returning. A lack of liquidity in the system is always at the root of a crisis. When asset prices fall, money is moved to safer havens like gold, the dollar, and the yen. When the government issues a rescue, either through the printing of money or the provision of fiscal advantages, smart money returns to pursue the asset. As a result, recuperation will occur, however the extent of it is unknown. The graph below depicts the Sensex's comeback from the crisis.

US Subprime Crisis (2008)	
Jan 8, 2008	20,873.33
Mar 9, 2009	8,160.4
Fall	60.91%
Nov 5, 2010	21,004.96
Recovery period from bottom	606 days
Recovery period from peak	1,032 days

Different Shades of Recovery

Not every investor has been harmed in same way. The size of the loss and, as a result, the time it takes to recover is determined by the moment of entry and manner of investment (lump sum or systematic) (SIP). "Investors who have been in the market for more than five years may have averaged out their investments," says Findoc Financial Services Group Managing Director Hemant Sood. This implies that they would have purchased at reduced prices over the time period. Those that entered the market one or two years before will face a loss.

As a result, the recovery period for these two groups of investors will be different. " Let me use an index fund as an example. As of 1st April 2020, trailing returns on the Nifty Fund reflect a roughly 24.7 percent drop for a one-year period, while the returns for three and five years are -0.9 percent and 1.28 percent. As a result, ten-year and five-year investments will recover faster than one-year investments "TBNG Capital Advisors' Birani said.

This indicates that the longer your investment time is, the less you will lose and the faster you will recover. You might, however, need to hold a little more to achieve your required return. The annualised return is calculated as a function of the number of years you've been invested. According to StockEdge's Bajaj, "a longer duration suggests a longer period of recovery will be necessary to satisfy the estimated annualised return expectations."

HOW DID INDIAN SECURITIES MARKET AND REGULATORS RESPOND TO THE CRISIS?

When Wall Street was breached, India's stock exchanges were hit by a tsunami. Panicked institutional and individual investors rushed to withdraw funds from the share market and mutual funds. Due to which, the equity market experienced an unprecedented liquidity crisis. Some may argue that it's too little, too late, but SEBI is now looking into measures to reduce the effect on institutions and businesses, hence benefiting investors. Below are some of the factors that will affect your stock market investments.

MUTUAL FUNDS: SEBI restricted early exits from closed-ended schemes in an effort to relieve the massive pressure that mutual funds faced since October. Mutual funds were then required to list all of their closed-ended funds on stock exchanges, along with fixed maturity plans. Only method for investors to get out of these schemes early now is to sell the units on the stock exchanges. Previously, they may withdraw their funds from a programme after paying an exit charge.

The underlying assets for these schemes must not have a maturity date that is later than the scheme's expiration date, according to SEBI. "This will help the fund manage the interest rate risk on the debt portfolio by matching the term of its debt securities with that of the fund," agrees Sukumar Rajah, CIO, equity, Franklin Templeton Investments. It would also assist the fund stay fully invested for the duration of its investment, lowering the cash drain on earnings."

This judgement would also benefit investors because mutual funds will no longer be required to tap into their reserves or sell assets (typically at low prices in a sinking market) to pay off participants who want to exit a scheme.

IPOs AND RIGHTS ISSUES: The Securities and Exchange Commission decided to prolong the validity of the permission letters it issues for public and human rights issues. It had been increased from three months to a year. This meant that if a firm discovers that the market isn't interested in IPOs, it can wait a year before launching

a public offering. The action will instantly benefit 18 companies that had planned to raise roughly Rs 9,000 crore in total.

Due to a lack of investor interest, roughly 40 firms that planned to raise INR 29,000 crore had to let SEBI's permission lapse last year.

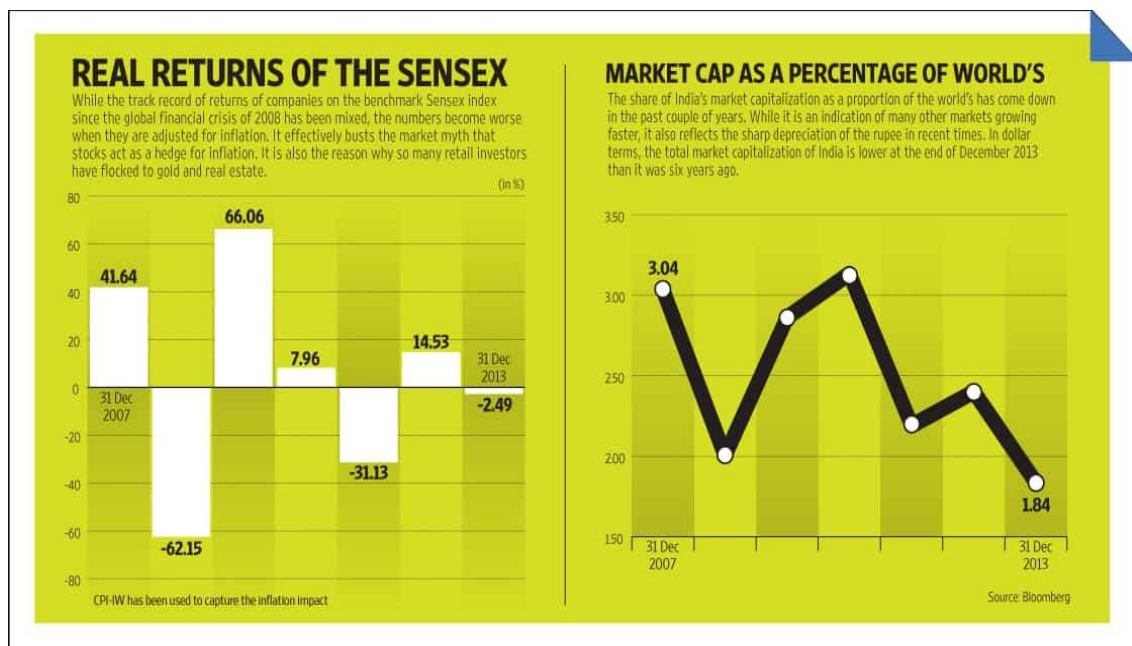
A proposal to allow electronic trading of 'rights entitlement' in stock markets was also approved by the board. Demat account holders could now obtain their rights shares in a digital format. Only after completion of allotment would the issuer have access to the proceeds of the issue.

Sebi also contemplated how to collect payout amounts from firms that have committed market irregularities, as well as strategies to compensate investors. Other topics examined by the board consist of the separation of corporate and individual schemes. SEBI invited the Association of Mutual Funds in India (AMFI) to publish an industry study on this topic. "This crisis has thrown up some concerns, which are, in a way, welcome," says A.P. Kurian, chairman of Amfi. The purpose of the article is to promote mutual funds to ordinary investors."

There has been some tightening in some circumstances. Exotic foreign exchange futures, for example, resulted in substantial losses for several corporations as the crisis progressed. Some of these businesses sued banks in court, prompting the central bank to issue new restrictions. As a result, the over-the-counter market has significantly diminished.

In the other hand, activity on exchange-traded markets has increased dramatically. Despite a clampdown by the central bank in mid-2012, the Securities and Exchange Board of India (Sebi) and the Reserve Bank of India jointly approved currency futures trading in 2008. It has since flourished, with average daily transactions of over \$2 billion.

Furthermore, in 2008, the market regulator Sebi enabled direct market access and algorithmic trading in equities markets, which helped derivatives volumes grow quickly and added liquidity to the options market.



Other products, such as securities lending and interest rate futures, were approved with a slew of restrictions, resulting in a complete failure. The good news is that authorities have taken market feedback into account and made the required adjustments. Investment management was the area that experienced the most restriction, with SEBI slamming the mutual fund distribution system, which was later followed by the insurance regulator for unit-linked insurance plans.

Of course, this has little to do with the crisis, despite the fact that it has had the greatest impact in the last seven years.

SEBI took the following actions;

- Not allowing early withdrawals from closed-ended mutual funds.
- All closed-ended investment programmes must be listed on stock exchanges.
- The underlying assets of these schemes must not have a date to mature that is longer than the scheme's expiration date.
- The validity period for initial public offerings and rights issues has been increased from three months to one year.
- Companies will be able to access rights only after the allocation has been completed, and rights entitlement will be provided in demat form.

IS INDIA BETTER EQUIPPED TO CRISES AS COMPARED TO 2008?

Investors are caught in a bind. The majority of portfolios are in the red, and investors are unsure what to do next as fears of a recession, fueled by an expanding trade war between the United States and China, grow by the day. According to anecdotal evidence, the 2008 global financial crisis, which began in the United States, wiped off over half of the Sensex and Nifty's worth in a month. However, it is not all doom and gloom.

To begin with, comparing the 2008 financial catastrophe to what we are witnessing in 2019 is incorrect. Any drop caused by external reasons, on the other hand, could lead to a significant comeback once the economy begins to recover. The government's recent actions are minor steps in the right way for boosting consumer and investor confidence and reviving an economy that is showing symptoms of weakening. According to anecdotal evidence, the Sensex has nearly tripled since the 2008 financial crisis, and many individual stocks have generated wealth for investors over the last decade. Markets frequently reach a bottom before the economy. Because India is still one of the world's fastest-growing economies, markets will swiftly recover.

It has been seen in the past that global markets, including India, have taken a knock during recessions. Even though India's economy weakened in 2008, it performed far better than other major economies. Despite the brief downturn in India, we believe the Indian economy is on track for solid growth, fueled by higher government investment, cheap lending rates, and a resurgence in private capex.

Year	Open	High	Low	Close
2008	20,325.27	21,206.77	7,697.39	9,647.31
2009	9,720.55	17,530.94	8,047.17	17,464.81
2010	17,473.45	21,108.64	15,651.99	20,509.09
2011	20,621.61	20,664.80	15,135.86	15,454.92
2012	15,534.67	19,612.18	15,358.02	19,426.71
2013	19,513.45	21,483.74	17,448.71	21,170.68
2014	21,222.19	28,822.37	19,963.12	27,499.42
2015	27,485.77	30,024.74	24,833.54	26,117.54
2016	26,101.50	29,077.28	22,494.61	26,626.46
2017	26,711.15	34,137.97	26,447.06	34,056.83
2018	34,059.99	38,989.65	32,483.84	36,068.33
2019	36,161.80	40,312.07	35,287.16	37,451.84

Source: BSEIndia.com

This isn't the first time the equities markets have struck a snag, nor will it be the last.

India would not be immune to a global slowdown if it occurs. India's growth estimate has already been reduced or downgraded by the majority of foreign rating agencies, owing to a downturn in consumer demand and an irregular monsoon. On August 28, the Fitch Group predicted that GDP growth in 2019-20 would fall to a six-year low of 6.7 percent, down from a previous projection of 7.3 percent. The US spread between the widely observed 10-year and two-year sovereign bond yield flipped briefly, while the spread between the three-year bill rate and the 10-year has been inverted since May, indicating a risk of recession.

In a \$56 trillion bond market, the market value of negative-yielding bonds has risen to \$16.5 trillion. Almost half of all sovereign bonds currently have yields below zero percent. A worldwide recession would have an influence on India. India is currently trading at a greater value than its average, and mean reversion is unavoidable over time.

When markets are not favourable, investors should remain investors rather than

traders. The equities in your portfolio should be held if they are fundamentally sound and investors have faith in them. If the stocks are purchased without first understanding the fundamentals, it is preferable to be safe and sell rather than regret a larger loss.

Experts believe that while India will not be immune to the effects of a global downturn, it will be resilient because it is more of a domestic consumer economy. Some industries in India, such as textiles and chemicals, may benefit from the trade war. While the global recession has had an impact on growth, India, unlike the majority of the developed world and several significant EMs (emerging economies), is a local and inward-looking growth story. Volatility, we feel, fundamentally creates an opportunity to establish a strong long-term portfolio. Indeed, a time like this should be used to accumulate such stocks via SIP in order to develop a long-term equity portfolio for wealth creation.

TAKEAWAYS FROM THIS RESEARCH ON CRISIS

Despite the danger of appearing clichéd, I can't stop myself from reminding you that every cloud has a silver lining, and every crisis teaches you something. The global financial crisis of 2007 and the current national debt crisis both have numerous lessons to teach, and analysts are hard at work decoding one every day. While many regulatory and policy lessons have emerged and are in various phases of implementation, I'd want to highlight a few that are particularly pertinent for you as you prepare to enter the professional world, which is currently troubled by crises.

Takeaway 1: It's never a good idea to have too much of anything. You've probably heard your grandma say this before, and it's still true today, if not more so now, in the aftermath of the financial crisis. Too much leverage, too much liquidity, too much complexity, and too much greed are all factors that contributed to the catastrophe. Too much finance, it is increasingly being suggested, is also not conducive to growth. According to recent studies⁸, while a larger financial system leads to higher production at low levels, more banking and credit leads to negative growth after a certain point. Furthermore, it is claimed that a rapidly developing financial sector might be harmful to overall productivity growth. As a result, moderation in approach is a crucial lesson.

Takeaway 2: Models aren't always accurate. In the run-up to the crisis, there was an over-reliance on models and a near-blind faith in their ability to express absolute facts. This notion has been the foundation of entire risk management systems. Following the crisis, participants have realised that models do not fully reflect the realities of life, and that relying too heavily on quantitative models is dangerous. Exact disciplines, such as physics, are governed by unchangeable natural rules that produce definite and predictable outcomes. Finance, on the other hand, is ruled by unpredictable human behaviour and biases that are difficult to model. "You are worse off relying on incorrect information than not having any information at all," Nassim Taleb argued in response to the argument that models

with all their flaws are better than having none at all.

If you give a pilot an altimeter that is occasionally malfunctioning, the plane will crash. If you don't give him anything, he'll stare out the window." It is consequently critical to understand the models' flaws in order to make the best use of them.

Takeaway 3: Finance should assist the real sector, not the other way around. While it is widely acknowledged that the financial system promotes economic development by facilitating the efficient allocation of capital and risk, the ultimate goal of finance, which is to promote economic development, should not be overlooked. Prior to the crisis, financial activity had grown to the point where the umbilical link between the financial and real sectors had been severed, and finance had begun to exist for its own sake. The perils of such a scenario have been eloquently outlined by the Crisis.

FUTURE OF INDIAN STOCK MARKET

A stock exchange shows the cumulative success of the companies listed on the market, giving the investor a sense of the region's financial growth. Stock market movements are influenced by microeconomic and macroeconomic factors, as well as the business environment, legal framework, and tax laws in each economy.

The Sensex was established in 1979, and it has remained around 40000 levels ever then. Nifty was founded in 1996 and is currently trading at 11000 levels, thus anyone who invested in nifty or Sensex at a lower level would have made tremendous returns by now. However, the equity market has roughly two crore investors out of a population of 1.3 billion. The good news is that the number of Demat accounts, which are an important aspect of investment, has surpassed four crores. The total number of active CDSL Demat accounts has surpassed 2.5 crores. Central Depository Services Ltd (CDSL) has added 1.5 crore Demat accounts since 2015. The lack of understanding and awareness of financial goods and markets is the primary reason for people's lack of participation in the economy. Female engagement in the financial market is at an all-time low, which is a severe problem.

Fear and nervousness are present in the short term due to the weak economic engine and the COVID scenario, but in the long run, it is likely to skyrocket. Government initiatives and reforms will determine how quickly the economy recovers after the lockdown. More reforms by the government are anticipated to benefit the stock market. Demand generation is more crucial, and the stimulus package was a welcome relief for many sectors, including small and medium-sized businesses.

It is critical for retail investors to examine the market from a new perspective, to understand their risk appetite and investment objectives, and to adopt a disciplined strategy. Value investment is the magic mantra. You should wait 10-12 years after planting a mango tree to receive the benefits. Similarly, asset allocation, diversification, and frequent investment are all crucial things to consider before making an investment.

SEBI has taken the required steps to safeguard investors' interests and to encourage financial literacy. Many efforts have been adopted by regulatory agencies like as SEBI, governments, and the RBI to meet market demand and transparency. Many businesses are considering relocating to India as a result of global events, such as the trade war between China and the United States. The globe today appears to be borderless, with many trade obstacles abolished, and people have more faith in the ideology of capitalism, which allows for the maximising of wealth.

Investors from around the world, as well as from India, are eager to invest in the Indian market. The market is always looking ahead. Economic fundamentals are what drive the market in the long run. As a result, the Indian stock market is expected to do well in the near future.

The following are some crucial facts to consider while the stock market develops:

- From 2001 to now, the literacy rate has increased from 47% to 74%, indicating that people are increasingly knowledgeable of the market.
- Scientific and technological advancements have lowered the barrier, allowing anyone to manage their account from anywhere.
- India is one of the most demanding markets, and foreign players' active participation has fueled demand.
- Because the developed market is saturated and the rate of return is low, investors are looking for new markets that are developing.
- A stable administration and fair and transparent policies are crucial variables in determining the stock market's fate.

ADVICE FOR INVESTORS

It might be a good idea to hold on for some time in case you lost money and hope to earn a fast return by investing in current market conditions. "Markets can take anywhere from 18 to 48 months to recover in case they are entered at their peak, as per history. Rather of letting a single price point to affect your results, it would be preferable to construct a portfolio in a continuous manner (regardless of market conditions) "Fintrust's Joshi agrees.

The majority of seasoned equity investors consider volatility to be a friend because they understand that each correction provides a chance to buy at a reduced price. Should you, on the other hand, time the market and invest at the present level, or should you do it in stages? "SIP obligations should be increased on a monthly basis. This will ensure that they average appropriately in the event of any further downturn. For lump sum investments, we propose investing only 30% at current prices, 40% at 10% lower levels, and the remaining 30% only if there is a 20% correction from here. As a result, the recovery will be significantly faster, possibly in half the time" Capital Quotient's Chakrabarty agrees. Even if you are a high-risk investor who wants to invest in the present market, do this only if your goals are for long term.

It's fairly unusual for investors to place bets on the incorrect equities that may fail to give return even when the markets recover. Hence, conduct extensive research or seek expert advice. "It is critical to examine present holdings, their reasoning, and if they still are relevant in current environment. Each collapse, we've witnessed investors averaging and holding the same companies, industries, and fund managers, only to be disappointed when they never recovered. It's a good idea to get professional help "Fintrust's Joshi agrees.

The majority of the times, firms leading in market recovery are not same as those who led in the previous cycle, and only experts can spot these chances. "Markets always have a rebound cycle after such dramatic meltdowns. However, the components that have led prior upcycles' recovery (sectors, equities) have not always been the same "Fintrust's Joshi agrees. Sticking to mutual funds and letting specialists manage your money is a better option for you.

CONCLUSION

The World Economy has seen two major crises in recent years: the Global Financial Crisis, which began with the US sub-prime mortgage crisis in 2008, and the Euro Zone crisis, which began with Greece's debt crisis in 2011. The backbone of the global economy has been shaken by these crises, which have resulted in a drop in gross domestic product, an increase in unemployment rates, an adverse exchange rate scenario, and a drop in the rate of capital formation. Despite the fact that the epicentre of the crises was in the west, many rich and poor countries have been affected. And India is no different. The problems mostly reached India via financial and commercial networks. Because India is more integrated with global financial markets, particularly international capital markets, the crisis resulted in an increase in market volatility, a drop in trading volume, and a loss of investor confidence very quickly. As a result of significant withdrawals by both domestic and foreign investors, India's capital market plummeted. Despite this, the Indian economy has shown remarkable resilience in terms of quick macroeconomic indicator regeneration. India has been the least affected by the Eurozone crisis. With this in mind, this article aimed to conduct an empirical analysis of the Indian capital market's performance in terms of important market metrics such as size ratio, liquidity ratio, turnover ratio, market volatility, and market efficiency. The research shows that market size, liquidity, volatility, and weak form inefficiency are all increasing. In this context, it may be suggested that planners, policymakers, and regulators strengthen the national economy by creating prudential rules and international best and fair practises through market reforms. At the very least, it is understood that "slow and steady wins the race," but not the "Rabbit Run."

For a variety of factors, India has largely avoided global financial contagion as a result of the subprime crisis. India's recent development is majorly driven by domestic demand, with its dependency on foreign savings remaining at 1.5 percent. It also has a relatively low level of foreign exchange reserves. The credit derivatives market is still in its infancy in India. India's financial stability is attained by sticking to prudential policies that prevent firms from taking much high risks and financial markets from getting very unpredictable and tumultuous.

Finally, the Indian economy has been impacted by the financial crisis, which in this case is referring to the Indian securities market. During different periods of time, the selected companies' performances differed. The equity performance of major firms studied during this research study fell when the crisis happened, however they are now restoring their previous levels of performance. While some companies' pre-crisis performance is better than their post-crisis performance, others' post-crisis performance is worse.

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