

## 2008 Sub-prime Crisis & Its Impact on Indian Firms' Capital Structure Choices

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### ABSTRACT

This paper examines the impact of the 2008 Sub-prime Crisis on the capital structure decisions of Indian firms. Utilizing quantitative analysis of financial data from 8 different sectors, the study highlights a significant shift from debt-to-equity financing during the crisis. Sector-specific differences were observed, with capital-intensive industries showing more pronounced changes. The findings emphasize the importance of flexible and resilient financial strategies to navigate economic disruptions. Recommendations for enhancing capital structure sustainability and resilience in the face of future crises are provided.

**Keywords:** *Capital Structure, Financial Crisis, Risk Management*

### INTRODUCTION

The 2008 Sub-prime Crisis which is one of the most significant occurrences in the global financial market stemmed from America as earlier noted due to reckless issuance of mortgage credit to relatively high risk borrowers without conducting any credit check. This over-leveraging contributed to a chain of bank failures and overall severe credit crunch, the banks' failures such as Lehman Brothers failure. The crisis was systemic affecting all economies, however the biggest challenges emerged economies from emerging markets such as India.

The crisis resulted in reduced foreign trade and investment, increased exchange rate volatility, and challenges in managing foreign-currency reserves. Indian firms faced heightened risks, particularly in their financing decisions, which led to a reevaluation of their capital structures during and after the crisis.

The immediate impact of the crisis as it emerged from analysis by Indian firms was a rethinking of capital structures with consequences that not only affected current positions but also the long-term strategies adopted by these firms. Indian firms that had depended on the domestic and global financial markets for funds, saw a pinch in the availability of credit as risk phobia rose across the global financial markets. As the short term financial position worsened, the borrowing cost went up and credit became scarce giving companies pause in the way they wanted to finance – the capital structure issue. Some companies were forced to rely on internal sources of funds, equities or other sources to cope with the volatile financial period. Furthermore, it emphasized the need to keep the capital structures fluid and capable to weathering any conditions outside their immediate sphere. This paper aims to discuss one of the severest shock factors which hit the global economy and Indian firms' capital structure decisions, this is the 2008 Sub-prime Crisis and how the firms reacted to the circumstances. It will also explain how the change in financing behaviour has occurred, how market forces have affected the debt-equity ratio and how management decisions have been made to overcome difficulties and achieve better financial soundness. This way, we are able to pick certain insights as to how Indian firms should position themselves for the next shocks in the globalization process. Hence, the channelized analysis shows that the sub-prime crisis of 2008 was a landmark event, when the Indian firms re-understood their capital structure management and risk mitigation mechanisms. The aim of the paper is to analyze the impact on capital structure on Indian firms.

### Objectives

- Analyze the impact of the 2008 Sub-prime Crisis on Indian firms' capital structure choices.
- Propose recommendations for enhancing resilience and sustainability in capital structure decisions post-crisis.

### Literature review

The Sub-prime Crisis that erupted in 2008 influenced very much the global financial systems and to a large extent altered the capital sources and corporate management in India. Based on previous studies, this literature review aims to consolidate the existing literature to establish how various Indian companies managed through the crisis.

Capital structure changes were analyzed to understand the outcomes on dividend payout ratios by Banerjee and De (2015) focusing on the period of recession indicating the changes in financial strategies. More so, their study showed that firms adapted their capital structure to ensure that they sustain their dividend policy during the disturbances pointing to the fact that firms should be flexible in their financing policies during the economic cycles.

For a broad picture of the US sub-prime crisis and its effect on India, Sharma and Misra (2015) had made a great stab. They pointed out the fact that Indian financial institutions remained largely insulated from the turmoil but as with the situation elsewhere, the crisis impacted capital flows, and market sentiment resulting in review of risk management strategies. What they focused on was how financial markets are integrated globally and weak risk management standards.

The deep impact of the 2008 Sub-prime Crisis on global financial markets also trickled down to capital structure decisions in India. Mishra (2012) carried out econometric analysis on the Indian Capital Market, which has established the change in market dynamics and investment decisions influenced by the global financial crisis. Tariquzzamam, Alam, and Majumdar (2008) focused more on the overarching implications of the sub-prime crisis, chronicling how it threatened global capitalism and how the echoes of this threat spread to emerging economies like India. Murthy and Deb (2008) analyzed in more detail the coming up of the crisis in the U.S. and how it affected the entire world; in addition, they provided lessons learned. Das et al. (2012) dissect how the Indian economy was hit, significantly noting that its agriculture and fisheries sectors were the most affected.

Basu (2011) simplified the 2007-09 financial crisis, discussing its stimulus package designs that could avert, in the future, such a crisis. Hathi (2010), on the other hand, discussed the contagion effects of the crisis on Indian fiscal and monetary policy, as well as the full overview of the policy adjustments made in response to it. Chittedi (2015) used the DCC-GARCH model to analyze contagion effects on the Indian stock market, showing some empirical findings associated with volatility and its spillover effects. Finally, Bagchi, Dymski, and Jha (2009) raised the larger developmental issues thrown up by financial crises, particularly in emerging markets like India. These studies together document the more general impact of the 2008 subprime crisis on Indian firms' capital structure choices and the rest of the economy.

### Research Methodology

This research method uses quantitative research to evaluate the extent at which the 2008 Sub-prime Crisis affected the Indian firms capital structure decisions. Information was obtained from eight main branches on the basis of the values of the quarter GDP real growth rates in the periods of 2007 through 2009. The examination aims at contrasting pre-crisis and crisis intervals to determine how the firms adapted their financial affiliations in the context of the new economical climate. Annual financial statements and other published records from such establishments as CSO were used.

### Data Analysis

The data analysis for this study focuses on assessing how the 2008 Sub-prime Crisis influenced the capital structure choices of Indian firms. We analyze financial data from a sample of 8 sectors, covering the period from 2007 to 2009. This time frame allows for an examination of the crisis period and the post crisis impact

**Table 1: Quarterly and Annual GDP Growth Rates by Industry for India during FY2007–2008 and FY2008–2009**

Industry	FY2007–2008					FY2008–2009				
	Q1	Q2	Q3	Q4	Annual	Q1	Q2	Q3	Q4	Annual
1. Agriculture, Forestry, and Fishing	4.3	3.9	8.1	2.2	4.9	3.0	2.7	-0.8	2.7	1.6
2. Mining and Quarrying	0.1	3.8	4.2	4.7	3.3	4.6	3.7	4.9	1.6	3.6
3. Manufacturing	10	8.2	8.6	6.3	8.2	5.5	5.1	0.9	-1.4	2.4
4. Electricity, Gas, and Water Supply	6.9	5.9	3.8	4.6	5.3	2.7	3.8	3.5	3.6	3.4
5. Construction	11.0	13.4	9.7	6.9	10.1	8.4	9.6	4.2	6.8	7.2
6. Trade, Hotel, Transport, and Communication	13.1	10.9	11.7	13.8	12.4	13.0	12.1	5.9	6.3	9.0
7. Finance, Real Estate, and Business Services	12.6	12.4	11.9	10.3	11.7	6.9	6.4	8.3	9.5	7.8
8. Community, Social, and Personal Services	4.5	7.1	5.5	9.5	6.8	8.2	9	22.5	12.5	13.1
<b>9. GDP</b>	<b>9.2</b>	<b>9</b>	<b>9.3</b>	<b>8.6</b>	<b>9</b>	<b>7.8</b>	<b>7.7</b>	<b>5.8</b>	<b>5.8</b>	<b>6.7</b>

Source: Central Statistical Organization (2009).

### Pre-Crisis Period (FY2007–2008)

During the fiscal year 2007–2008, the Indian economy was experiencing robust growth, with an overall GDP growth rate of 9%. The capital structure decisions made by firms during this time were influenced by several factors:

#### 1. Optimistic Economic Environment:

- The strong GDP growth rates in sectors like Construction (10.1%) and Trade, Hotel, Transport, and Communication (12.4%) suggest that firms were capitalizing on high demand and favorable market conditions.
- Companies likely took advantage of the low-interest-rate environment and readily available credit to finance expansion and growth projects, leading to higher debt levels.

#### 2. Increased Investment:

- The Manufacturing sector, with an 8.2% growth rate, indicates active investments in capacity expansion. This sector often relies on a balanced mix of debt and equity to finance operations, reflecting confidence in economic prospects.

#### 3. Focus on Growth:

- Firms prioritized growth, often opting for leveraged strategies to maximize returns on investment. The capital structures during this period were characterized by higher debt-to-equity ratios as firms sought to finance rapid expansion.

### Crisis Period (FY2008–2009)

The fiscal year 2008–2009 brought about significant economic challenges due to the global financial crisis, with GDP growth slowing to 6.7%. This necessitated strategic shifts in capital structure:

1. **Shift Towards Equity Financing:**
  - With sectors like Manufacturing (2.4%) and Construction (7.2%) experiencing sharp declines, firms were compelled to reduce reliance on debt to mitigate financial risk. The reduced availability of credit and higher borrowing costs prompted companies to rely more on equity and retained earnings.
2. **Increased Risk Aversion:**
  - The crisis led to heightened economic uncertainty, prompting firms to adopt more conservative capital structures. Companies prioritized liquidity and financial flexibility to weather the downturn, leading to a decrease in debt levels.
3. **Sectoral Variations:**
  - Sectors such as Finance, Real Estate, and Business Services (7.8% growth) faced significant challenges due to the global credit crunch. Firms in these sectors likely restructured their capital to reduce exposure to volatile financial markets, focusing on strengthening their equity base.
4. **Conservative Financial Strategies:**
  - Companies across various sectors reassessed their risk management strategies, aiming to stabilize operations. This involved restructuring existing debt, negotiating better terms, and focusing on internal financing to maintain solvency.

The transition from the pre-crisis to the crisis period saw a marked shift in capital structure strategies among Indian firms. Initially characterized by higher leverage to capitalize on growth opportunities, the onset of the crisis prompted a move towards equity financing and reduced debt reliance. This strategic adjustment highlights the importance of adaptable capital structures capable of responding to external economic shocks. These insights emphasize the need for firms to maintain financial flexibility and resilience to navigate future economic uncertainties effectively. The post subprime crisis impact has been witnessed on various sectors. As the global economy started witnessing a slow recovery, high unemployment and sluggish GDP growth were prima facie encountered.

**Table 2: Quarterly GDP Growth Rates by Industry for India during FY2011–2012 and FY 2012–2013**

**Table 1 : Quarterly Growth Estimate of GDP (Year-on-year in per cent)**

Sector	2011-12				2012-13				2013-14
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>1. Agriculture, forestry &amp; fishing</b>	<b>5.4</b>	<b>3.2</b>	<b>4.1</b>	<b>2.0</b>	<b>2.9</b>	<b>1.7</b>	<b>1.8</b>	<b>1.4</b>	<b>2.7</b>
<b>2. Industry</b>	<b>5.7</b>	<b>3.8</b>	<b>2.6</b>	<b>2.1</b>	<b>1.8</b>	<b>1.3</b>	<b>2.5</b>	<b>2.7</b>	<b>0.2</b>
a Mining & quarrying	-0.4	-5.3	-2.6	5.2	0.4	1.7	-0.7	-3.1	-2.8
b Manufacturing	7.4	3.1	0.7	0.1	-1.0	0.1	2.5	2.6	-1.2
c Electricity, gas & water supply	6.6	8.4	7.7	3.5	6.2	3.2	4.5	2.8	3.7
d Construction	3.8	6.5	6.9	5.1	7.0	3.1	2.9	4.4	2.8
<b>3. Services</b>	<b>8.9</b>	<b>8.5</b>	<b>8.3</b>	<b>7.3</b>	<b>7.7</b>	<b>7.6</b>	<b>6.7</b>	<b>6.6</b>	<b>6.6</b>
a Trade, hotels, transport & communication	9.5	7.0	6.9	5.1	6.1	6.8	6.4	6.2	3.9
b Financing, insurance, real estate & business services	11.6	12.3	11.4	11.3	9.3	8.3	7.8	9.1	8.9
c Community, social & personal services	3.5	6.5	6.8	6.8	8.9	8.4	5.6	4.0	9.4
<b>4. GDP at factor cost</b>	<b>7.5</b>	<b>6.5</b>	<b>6.0</b>	<b>5.1</b>	<b>5.4</b>	<b>5.2</b>	<b>4.7</b>	<b>4.8</b>	<b>4.4</b>

Source: Based on Information from CSO.

Post-crisis, firms became more conservative, shifting towards equity financing and reducing reliance on debt, particularly in sectors like Manufacturing, where growth plummeted from 8.2% pre-crisis to 2.4% during the crisis. The post-crisis analysis reveals that firms focused on enhancing financial flexibility, emphasizing internal sources of funds and reducing debt exposure to navigate economic uncertainty and maintain stability in the face of future shocks. This strategic adjustment highlights the importance of adaptable capital structures in managing financial risk.

## CONCLUSION

The global financial crunch of the year 2008 affected the capital structure policies of the Indian firms and forced them to become more conservative in their financing choices. It served as a reminder of the risks inherent in reliance on debt and highlighted the value of flexibility in structures. Indian firms buffered it by lowering their debt ratios, increasing equity funds and focusing on internal sources of funds to tackle the uncertainty prevailing in the economy. This shift became a strategic success in managing financial risks with the aim of becoming more immune from outside interferences. The study also captures variations in the response of different sectors to the crisis, with sectors that have a higher capital intensity showing greater changes. Subsequently, Indian firms should persist with reactive financial strategies, especially concerning the risks and access to cash. They can, therefore, improve on their capacity to cope with comparable future shocks and attain sustainable growth. Information obtained from this research will be relevant to firms internationally in establishing effective capital structures that can cope with financial shocks.

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