
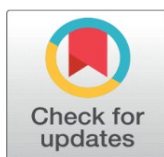


# IMPACT OF THE COVID-19 PANDEMIC ON BANK LENDING: AN ANALYSIS OF RISK PERCEPTION AMONG BANK MANAGERS IN INDIA

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## ABSTRACT

With the onset of Covid 19 pandemic, the world experienced unprecedented disruptions in all aspects of life. It not only affected physical health but also affected economies of the world. In addition to impacts on physical health, it has also caused dramatic changes in the financial markets and institutions. A healthy banking system is crucial for the liquidity of the economy and the smooth flow of credit in the system. Amidst all this, the major interest of the policymakers lies in the alteration of the lending practices of the banks when faced with increased uncertainty and risk.

This paper aims to present new evidence regarding the lending decisions made by the banks during Covid pandemic across multiple countries. It is a unique opportunity to study these effects in different countries of the globe. In response to the pandemic, the Central banks introduced monetary stimulus measures to address the concerns of the business with regards to solvency and liquidity. Also, many countries launched extraordinary credit guarantee programs to support businesses during this challenging time.

These loan guarantees, sometimes paired with government purchases of corporate bonds, have been essential tools for infusing liquidity to the struggling businesses. This paper calculates the shock of Covid 19 on bank lending in India and how risk perceptions of bank managers changed during this challenging period.

**Keywords:** Credit Allocation, Monetary Stimulus, Loan Guarantees, Corporate Liquidity, Central Bank Policies

## 1. INTRODUCTION

At the start of the coronavirus pandemic, the influx of funds from liquidity injection programs and depositors, together with high levels of bank capital before the shock, enabled banks to cope with the surge in liquidity demand. In contrast, during the global financial crisis, new loans to large borrowers declined significantly. However, surveys indicate that banks around the world are tightening lending standards, citing an uncertain economic outlook, worsening industry-specific problems, reduced risk tolerance and other concerns. Most banks have not taken advantage of the stimulus lending program, although banks and other non-bank financial companies underperform in their domestic markets. Thus, it remains an open empirical question how bank loans developed during the pandemic. The weakening of bank

credit could be the result of a reduction in the supply of credit or a decrease in the demand for credit. To limit the spread of the disease, governments adopt lockdown measures that inadvertently push firms and consumers into solvency and liquidity crises. In this way, the pandemic caused a sudden and exogenous increase in the credit risk of borrowers worldwide. We show that banks are more hesitant to lend in this setting, resulting in a negative shock to credit growth, and the decline persists even after accounting for demand conditions through monetary and fiscal stimulus controls. Authors obtain similar results using monthly data on total credit and its components (corporate and consumer credit) for a subset of countries. It therefore can be concluded that the pandemic is leading to a reduction in credit growth, despite unprecedented government stimulus and cash injection measures aimed at preventing disruptions to credit supply (Colak and Oztekin, 2021).

## 2. LITERATURE REVIEW

While this unexpected shock is likely to affect banks, little is yet known about how it might affect the resilience and performance of the banking system as a whole (Goodell, 2020; Duan et al., 2021). This is because a bank generally faces a wider range of risks compared to other financial institutions and is more closely connected to the daily activities of economic entities (Barua and Barua, 2020). Banks traditionally deal with a wide range of risks. The pandemic is set to exacerbate these with a lack of liquidity, reduced credit, declining investment returns, and an increase in non-performing loans and default rates (Barua and Barua, 2020; Goodell, 2020). This may be worse in countries where banks support millions of individuals and firms with relatively low financial and economic capacity in a weak political environment and high market competition (Barua and Barua, 2020). The coronavirus can affect banks in different ways. For example, banks around the world hold large loans denominated in US dollars to finance international trade and financial investment (Aldasoro and Ehlers, 2018). Financial crises tighten money markets that lend dollars, posing risks to the global banking system. However, as a first response to the pandemic, central banks stretched current swap lines and created new lines to reduce the cost of dollar funding (Bahaj and Reis, 2020; Demir and Danisman, 2021). Prudential bank regulatory measures, such as easing the treatment of non-performing loans and reducing capital buffers, are mitigating the adverse impact of COVID-19 on the stability of the financial system (Demir and Danisman, 2021; Bitar and Tarazi, 2022). Danisman et al. (2021) reported that stock markets in countries with stricter regulatory capital and liquidity requirements are more resilient to COVID-19. However, given the Basel III capital and liquidity reform since 2008, banks are well placed to engage in the extreme effects of COVID-19. At the same time, facilitating the behavior of non-performing loans and capital buffers during a pandemic can threaten the solvency of banks. The possibility of an increase in non-performing loans and substantial withdrawals of deposits by firms and households will adversely affect bank performance (Danisman et al., 2021; Goodell, 2020). In addition, COVID-19 could adversely affect the efficiency of firms across all businesses and could spill over to banks, increasing their exposure to credit risk. This would threaten their stability and create some barriers to future intermediation with some potential spillovers into the real economy (Demir and Danisman, 2021).

## 3. METHODOLOGY

To draw meaningful inferences and conclusions, a minimum sample size of 100 is recommended (Alreck and Settle, 2003). Accordingly, 120 Bank Managers from Pune were surveyed through a questionnaire containing agreement accorded to the 10 risk perception statements given below:

- 1) Due to COVID-19 overall business risk has increased
- 2) As a result of the pandemic credit risk has increased
- 3) More loans are getting classified as NPAs
- 4) There have been large number of requests for deferment of EMIs
- 5) Agricultural loans are experiencing repayment problems
- 6) Housing loan EMIs are getting delayed
- 7) Other business loans have become more riskier
- 8) Provisioning for NPAs has significantly increased

9) Gross NPAs have increased

10) Net NPA have also increased

Likert scales were used for response options. The response options were - 0 - Can't Say, 1 - Somewhat agree, 2 - Completely agree, 3 - Somewhat Disagree, 4 - Completely Disagree.

Responses were received from 120 Bank Managers. The questionnaire was tested for reliability and it returned a Cronbach Alpha score of 0.75 and hence was considered reliable. Following hypotheses were formulated:

Ho: The risk perception towards advances has not changed

Ha: The risk perception towards advances has changed (increased)

The hypothesis was tested based on the average agreement/disagreement responses to the ten statements of the questionnaire. The average agreement/disagreement response of the 100 respondents for all the ten statements was taken as the sample mean and it was compared with a hypothesized population mean of 50% agreement/disagreement connoting an event by chance and not due to any statistical significance. A t-test was applied at 95% confidence level and based on the p-value the null hypothesis was tested for rejection or non-rejection.

#### 4. DATA ANALYSIS AND INTERPRETATION

40 respondents were from the Northern region of Pune, 30 were from the Eastern region, 25 were from the Western region, and 25 were from the Southern region. 51 respondents were from the age-group of <30 years, 32 were from the age-group 30-40 years, and 37 were from the age-group of >40 years.

Table 1 gives the ten risk statements items and their agreement ratings by the 120 respondents:

**Table 1: Average ratings for the ten statements**

Sr. No.	Item	Agreement %
1	Due to COVID-19 overall business risk has increased	79%
2	As a result of the pandemic credit risk has increased	81%
3	More loans are getting classified as NPAs	82%
4	There have been large number of requests for deferment of EMIs	78%
5	Agricultural loans are experiencing repayment problems	87%
6	Housing loan EMIs are getting delayed	84%
7	Other business loans have become more riskier	82%
8	Provisioning for NPAs has significantly increased	81%
9	Gross NPAs have increased	86%
10	Net NPA have also increased	89%
	Average	83%

The average agreement for the ten statements was 83% and this was compared with the hypothesized population mean of 50%. Results were as under:

**Table 2: Summary statistics**

Parameter	Value
Sample mean	83%
SD of sample	0.99624
Hypothesized population mean	50%
n	120
t-value	3.62861

p-value	0.00021
alpha	0.050

As the computed p-value is lower than the significance level  $\alpha=0.05$ , one should reject the null hypothesis  $H_0$ , and accept the alternative hypothesis,  $H_a$ .

Thus, the null hypothesis that the risk perception towards advances has not changed was rejected in favor of the alternate the risk perception towards advances has changed (increased).

## 5. CONCLUSION

COVID-19 turned out to be the “black swan” of the century for the global financial system, with disastrous consequences for India. The exponentially negative spread of COVID-19 contributed to a huge decline in the leading indicators of the financial system in India, while having little effect on the health of the banking system. In 2019–2020 Indian banking system as a whole and scheduled commercial banks in particular have shown resilience and asset quality, capital position and profitability have improved. Official statistics released by the Reserve Bank of India (RBI) confirm this, showing that the ratio of gross NPAs to gross advances was 8.20% in 2019-2020, slightly lower than the figure of 11.20% in 2017-2018. However, commercial banks' gross non-performing asset (GNPA) figures continue to show a tense and alarming situation for policymakers and the Reserve Bank of India. The Indian banking system is likely to suffer increased asset deterioration due to the escalating scenario of the COVID-19 pandemic and may see more NPAs in the coming years.

## CONFLICT OF INTERESTS

None.

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