DOCTOR OF PHILOSOPHY IN MANAGEMENT

ESSAYS ON LOAN DEFAULTS

By PADMA NARAYANAN



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$\mathbf{B}\mathbf{y}$

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This thesis is dedicated to my parents and husband, for their
unwavering faith, support, and encouragement

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ACRONYMS

AR Auto Regressive

ARMA Auto Regressive Moving Average

ARIMA Auto Regressive Integrated Moving Average

BHCs Bank Holding Companies

BSE Bombay Stock Exchange

CBI Central Bureau of Investigation

CDF Cumulative Distribution Function

CEO Chief Executive Officer

CIBIL Credit Information Bureau (India) Limited

CMD Chairman and Managing Director

CRILC Central Repository of Information on Large Credits

CRISIL Credit Rating Information Services of India Limited

CVC Central Vigilance Commission

DGM Deputy General Manager

EBITDA Earnings Before Interest, Taxes, Depreciation and Amortization

FIs Financial Institutions

FPE Final Prediction Error

GM General Manager

HQ Hannan Quinn

IBC Insolvency and Bankruptcy Code

IPC Indian Penal Code

IPO Initial Public Offering

LIC Life Insurance Corporation of India

MD Managing Director

MGNREGA Mahatma Gandhi National Rural Employment Guarantee Act

NBFCs Non Banking Financial Companies

NPA Non Performing Asset

NPL Non Performing Loan

NSE National Stock Exchange

PSB Public Sector Bank

RBI Reserve Bank of India

RPTs Related Party Transactions

SARFAESI Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest

SC Schwarz Criterion

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SEBI Securities and Exchange Board of India

SMEs Small and Medium Enterprises

VAR Vector Auto-Regression

VC Venture Capital

Abstract

A banking system that is strong and stable is crucial for the growth and development of an economy. One of the characteristics of banking system stability is the quality of bank loans. The increasing trend of Non-Performing Loans (NPLs), or Non-Performing Assets (NPAs), is a serious concern to banks, policymakers, academia, and the public. An increase in bad loans affects the safety of deposits, the profitability of banks, and the country's financial stability. A specific dimension of NPA is wilful default. As per the Indian regulator, Reserve Bank of India (RBI), wilful defaulters are borrowers who have defaulted on their loan payments, even when they can honour their obligation; diverted or siphoned off the funds and did not utilise them for which they took the loan or disposed off the movable fixed assets or immovable property given to secure the loan without the knowledge of the bank/lender. All wilful defaults are NPAs, but not all NPAs are wilful defaults. An NPA can result from various factors, such as economic slowdown, industryspecific factors, natural calamities and so on. However, wilful default is the deliberate act of defaulting on a loan by intentional defaulters, who exploit the current lax governance and legal systems to default on their loan payments. Wilful default is often associated with fraudulent practices. Though this type of default may exist in all countries, in India, specifically, the regulator has asked banks to categorize such defaults and report wilful defaults of Rs. 25 lacs and above. This presents a unique playground to analyse wilful defaults, in a developing economy - India.

The literature on loan defaults can be broadly classified into studies which explain the factors responsible for loan defaults, studies which predict defaults (including models for default prediction), and studies which analyse the impact of loan defaults. The factors accountable for loan defaults can be categorized into macroeconomic, institutional (legal, governance, and political), firm-specific, geographical, cultural, and behavioural factors. A bibliometric review of the literature on loan default shows that most research focuses on developed economies and listed firms. There is less evidence on emerging markets. The literature does not explicitly focus on the wilful defaults of business firms, although limited evidence is available on strategic defaults in the US which pertain to personal loans.

This thesis analyses the phenomenon of wilful defaults in India from 2002 to 2021. Analysis shows that most wilful defaulters in India are public limited companies and unlisted firms. An examination of advances, gross NPA, and wilful default indicates that the distribution of wilful default is distinct from advances and gross NPA. While advances and gross NPA are affected by previous lags of advances and gross NPA, wilful default is not influenced by earlier lags of advances and gross NPA. Moreover, wilful default is characterised by a right-skewed and leptokurtic distribution. Wilful default depicts a unique trend demonstrated by Power Law distribution. A few wilful defaulters account

for a significant proportion of wilful defaults. These findings suggest that wilful default follows a different distribution than advances and gross NPA and that a different set of factors are responsible for NPAs and wilful defaults, warranting further investigation.

NPA results from defaulting on a loan due to various factors including those beyond the borrower's control. In contrast, wilful default is a deliberate act of defaulting on a loan by the borrower. This suggests looking inside the firm-specific governance characteristics to differentiate wilful defaults from NPAs. Analysis shows that firm-specific corporate governance factors, apart from financial variables, distinguish wilful defaults from NPAs. An increase in promoter shareholdings pledged, frequent change of auditors, banking with multiple banks, suspension of shares by stock trading agencies, and more directors sitting on boards of other firms increase the odds of a firm being a wilful defaulter compared to NPAs.

To sum up, wilful default follows a different distribution compared to NPAs. Wilful default follows Power Law distribution. Very few defaulters contribute to substantial default amounts. A loan becomes NPA if not paid for 90 days, regardless of the bank/financial institution classifying it. However, the classification of NPA as a wilful default is bank-specific. Different banks take different times to classify the borrower as a wilful defaulter, even though RBI provides comprehensive guidelines for categorizing NPA as wilful default. A different set of factors influence NPAs in contrast to wilful defaults. Apart from financial variables, firm-specific corporate governance variables differentiate wilful defaults from NPAs. Banks and financial institutions may consider these governance variables as part of their early warning systems for quickly identifying wilful defaults.

Keywords: Wilful Default; Non-Performing Assets; Non-Performing Loans; Loan Defaults;