

DOCTOR OF PHILOSOPHY IN MANAGEMENT

ESSAYS IN CREDITOR RIGHTS

By

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*To my **F**amily
for **I**nspiration, **S**upport & **L**ove.*

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List of Acronyms

AA	Adjudicating Authority
ABS	Asset Backed Security
BIFR	Board for Industrial and Financial Reconstruction
CC	Credit Crunch
CoC	Committee of Creditors
DIC	Down-and-In Call
DIP	Debtor-in-Possession
DOC	Down-and-Out Call
FCB	Foreign Commercial Borrowings
FL	Financial Leverage
FP	Fair Pricing
IBBI	Insolvency and Bankruptcy Board of India
IBC	Indian Bankruptcy Code, 2016
IBL	Implied Barrier Level
ICR	Interest Coverage Ratio
IM	Information Memorandum
IPA	Insolvency Professional Agencies
IU	Information Utilities
LC	Liquidity Crunch
NAV	Net Asset Value
NCLAT	National Company Law Appellate Tribunal
NCLT	National Company Law Tribunals
NFB	Narrow Funding Bank
NPV	Net Present Value
OCL	Operational Creditor Leverage

OTC	Over the Counter
PD	Price Discrimination
RDDBI	The Recovery of Debts due to Banks and Financial Institutions Act, 1993
RP	Resolution Professional
SARFAESI	Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002
SICA	Sick Industries Company Act

Abstract

I examine the impact of creditor rights on financial intermediation in two different settings across the three essays in the dissertation.

In the first essay, I develop a novel method using structural models to estimate the level of creditor rights in the economy. Developing on the work of [Brockman and Turtle \[2003\]](#), I show that the implied barrier levels estimated by modeling equity of a firm as a down-and-out barrier option can be used to analyze the level of creditor rights in the economy. Using this model, I assess whether the implementation of the Indian Bankruptcy Code, 2016 (IBC) did indeed have an effect on de-facto creditor rights in the India. I find strong evidence of a significant increase in de-facto creditor rights of both financial and operational creditors post the IBC implementation. Further, I find that the increase in creditor rights of financial creditors is driven primarily by long-term creditors and secured creditors.

In the second essay, I evaluate the impact of this increase in creditor rights due to the implementation of the IBC on leverage levels in the corporate sector. I find that aggregate corporate leverage has reduced post IBC implementation lending support to the demand-side view that posits that firms reduce their demand for debt in response to an increase in creditor rights ([Vig \[2013\]](#), [Cho, El Ghouli, Guedhami, and Suh \[2014\]](#)). However, this reduction is primarily driven by long-term debt. Usage of short-term debt has in fact increased post IBC implementation. Further, I also show that firms have substituted away from secured debt to unsecured debt post IBC. Interestingly, the reduction in leverage levels is seen only in case of firms with a high likelihood of financial distress. Firms with limited risk of financial distress have increased their leverage levels indicative of them taking advantage of an increased willingness to lend among creditors in a stronger creditor rights environment ([Djankov, McLiesh, and Shleifer \[2007\]](#), [Qian and Strahan \[2007\]](#)). I also observe that the reduction in leverage is stronger for firms affiliated with business groups, in line with the results of [Thapa, Rao, Farag, and Koirala \[2020\]](#) in the case of an earlier creditor rights regulation in India.

In the third essay, I analyze the impact of creditor rights on the desirability of safe-harbor exemption (bankruptcy exemption) for repo contracts. Developing on the model of [Acharya et al. \[2023\]](#) which examines the optimal level of safe-harbor exemption when the bargaining power rests solely with the borrower, I study how incorporation of creditor rights affects this optimal choice of safe-harbor exemption and the leverage levels in the economy. First, I consider an exogenous specification of creditor rights wherein all creditors are assumed to have the same level of rights. Under this specification, I find that the level of safe-harbor exemption that maximizes social surplus is decreasing in the level of creditor rights. Further, creditor rights enhance the sensitivity of the optimal bankruptcy exemption parameter to other environmental factors like asset quality, severity of an adverse shock and the size of the real asset market. Next, I consider an endogenous specification of creditor rights wherein the rights of a creditor are increasing in the level of leverage they extend. Under this specification, I find that leverage levels in the economy are decreasing in the level of safe-harbor exemption, unlike the case in

exogenous creditor rights model and the [Acharya et al. \[2023\]](#) model. Consequently, under the endogenous creditor rights construct, I find that it is always optimal to not extend any safe-harbor exemption to repo contracts. However, when the underlying collateral is the highest quality or the severity of an adverse shock is mild, social welfare is invariant in the level of safe-harbor exemption, and therefore, there are no adverse consequences of providing such exemption in these cases.

Keywords: Creditor Rights; Leverage; Bankruptcy; IBC; Structural Models; Barrier Options; Financial Creditors; Operational Creditors; Secured Debt; Repo Contracts; Safe-Harbor Exemption; Fire Sales