

Creditor Rights, Threat of Liquidation, and Labor-Capital Choice of Firms

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1. Brief Introduction

In 2002, a legal reform introduced in India allowed secured creditors to bypass lengthy court proceedings in order to seize and liquidate the defaulter's assets. Presumably, the intention behind the reform was to improve loan recovery and consequently increase the supply of credit. We study how firms' respond in their production input choices (i.e. capital and labor) in response to this law. We find that firms increased investment in employment, decreased their capital investment, and substituted secured credit with unsecured credit. These results are consistent with an increased threat of liquidation for firms. We find support for our main results across regions with different pre-policy court-efficiency and across industries with different elasticities of substitution between capital and labor. Specifically, we find that treated firms in those regions where turn-around time for court cases were higher and firms in industries with higher elasticity of substitution between capital and labor increased investment in employment, decreased capital investment and moved towards unsecured credit following the passage of SARFAESI.

2. Context

India has historically been a pro-debtor economy and creditors had limited rights in recovering their money. This was largely attributed to the inefficiency of the judicial procedures in the Indian civil court system. To increase the judicial efficiency, Indian government legislated two reforms:

- 1) The Debt Recovery Tribunal Act of 1993 (DRT hereon after) and
- 2) Securitization and Reconstruction of Financial Assets and Enforcement of Security Interests Act of 2002 (SARFAESI hereon after).

Though DRT was passed in 1993, there were large delays for the creditors to get back their money in the case of a default. With DRT law, creditors still could not seize the assets without court/

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tribunal order. Due to large number of payment defaults and excess demand of court orders, DRT still resulted in significant time delays for the creditors to recover their money. Thus, to avoid these significant delays, SARFAESI was passed in 2002 to circumvent court orders. This law resulted in giving creditors immense powers of seizing assets by posting a 60-day demand notice and bypassing the court proceedings in the process.

3. Is collateral law related to firm's decisions?

Creditor rights are legal provisions provided to the lenders in order to help them recover their capital. These are fundamental to the functioning of credit markets and govern the allocation of assets and control rights in situations such as bankruptcy, liquidation proceedings, restructuring, etc. The evidence regarding the impact of creditor rights on firm level outcomes is mixed. On the one hand, strengthening creditor rights can increase the supply of credit and lower the cost of debt (Visaria (2009), Haselmann et al. (2010)). This in turn can enhance the ability of firms to borrow long-term, increase leverage, and consequently the level, quality, and horizon of capital investments (Benmelech and Bergman (2011), and Gopalan et al. (2016)). Further, La Porta et al (1998) provide evidence showing that stronger creditor rights are associated with more developed financial credit markets as it raises the expected loan recovery rates for lenders, thereby reducing the build of non-performing assets and increasing their willingness to supply credit.

On the other hand, stronger creditor rights can also decrease the supply of credit to small borrowers (Lilienfeld et al. (2012)) and increase the threat of liquidation for firms (Acharya et al.(2011)). As a consequence, this can have an adverse impact on the demand for debt, asset growth, risk-taking, and reduce both the amount and quality of innovation pursued by firms (Acharya and Subramanian (2009), Acharya et al. (2011), and Vig (2013)). The seemingly contrasting findings stem from the differences in the kind of creditor rights protection offered by legal changes. Specifically, creditor protection offered to lenders spans the rights afforded to them in bankruptcy, collateral laws, efficiency of judicial debt recovery, and extra-judicial rights to seize and liquidate collateral.

Thus, changes in creditor rights can engender very different real outcomes depending on which aspect of the creditor protection the law affects. For instance, improvement in the efficiency of bankruptcy process, expansion in the set of collateralizable assets, or judicial efficiency may enhance

both the supply and demand for credit. In contrast, theory suggests that an increase in the rights of banks to directly seize and liquidate collateral may result in sub-optimally “excessive” liquidations (Acharya et al. (2011)) of firms with positive continuation value. This increased threat of liquidation in turn imposes deadweight costs on firms and can adversely impact their demand for credit and distort their investment decisions. In this study, we examine whether and how do firms alter their input choices of production i.e. capital and labor allocation in response to the increased threat of liquidation brought about by SARFAESI in particular and stronger creditor rights more broadly.

4. Our study

This study’s main focus is to examine the ex-ante effects of the strengthening of creditor rights following the passage of SARFAESI on firm’s hiring and capital investment decisions. Further, we intend to understand the mechanism underlying the effects on firm’s decisions. In particular, as discussed above, increased creditor protection can have contrasting effects on employment and investments of firms depending on which aspect the law might affect. To gain a better understanding, we conducted a series of tests to examine if SARFAESI indeed resulted in increased threat of liquidation for firms. For this purpose, we examined the impact of the law on the likelihood of firm closures and find that the analysis does support increased threat of liquidation.

Our main results are that as a result of SARFAESI, firms with higher fraction of collateralizable assets (treated firms) differentially increase the total number of employees (by 7.9%-9.1%), and reduce their investment in fixed capital (by 25%), and plant & machinery as compared to firms with low collateral assets (control firms). Further, we also find that firms with high collateral assets differentially increase their expenditure on rented plant and machinery. Since tangible assets such as plant & machinery can be easily seized and liquidated in the event of default, firms ex-ante prefer to move away from investing in capital and move towards hiring more workers and using rented capital. This evidence is consistent with a higher threat of liquidation after SARFAESI.

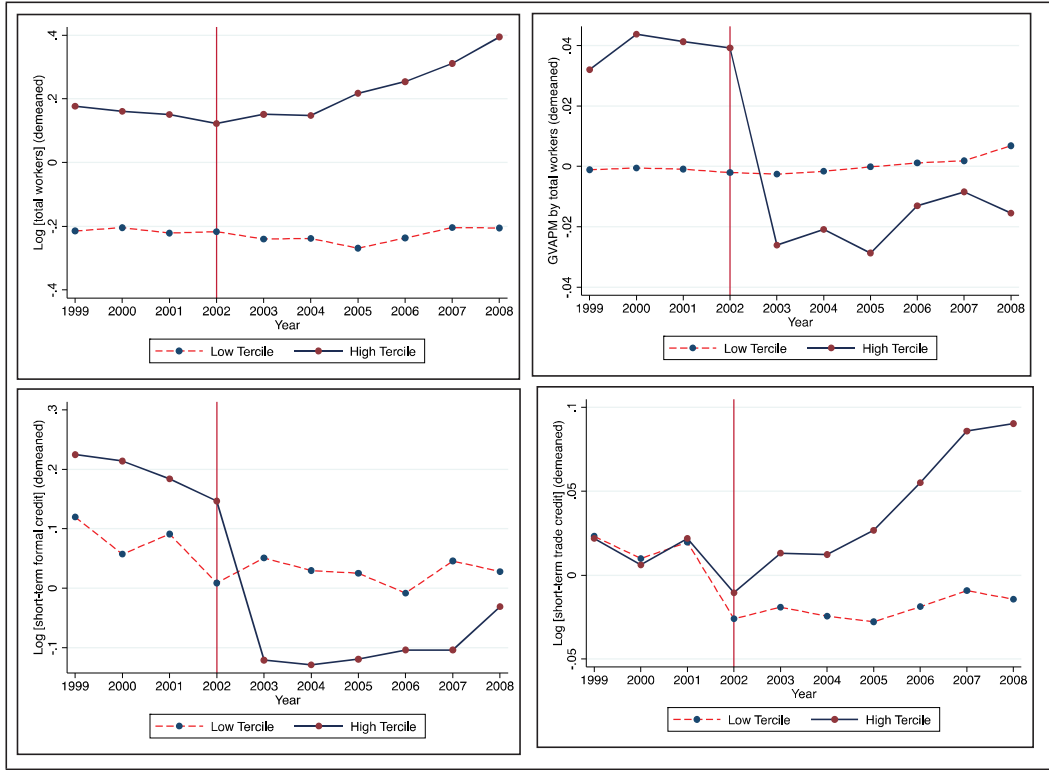


Figure 1: Dynamic plot representing the pre- and post-SARFAESI measures of total workers, gross value of additions to plant and machinery (GVAPM), Short-Term Formal Credit and Trade Credit across treatment (High Tercile) and control (Low Tercile) firms.

To further understand the mechanism underlying our results, we examine the heterogeneous effects of the strengthened creditor rights across states with varying levels of pre-SARFAESI judicial efficiency. Judicial efficiency measure used in this paper is based on Amirapu (2015), constructed as fraction of trials that are disposed of in less than one year in the District/Sessions court. We find that firms with more collateralizable assets differentially hire more workers and invest less in capital in states that had a lower pre-SARFAESI judicial efficiency, presumably because secured creditors have greater incentives to avoid the lengthy judicial process and thus more likely to invoke SARFAESI in order to directly liquidate assets of firms in states that had more inefficient courts. Further, we find that the differential effects of hiring more workers and investing less in capital is particularly stronger for firms in industries with a higher elasticity of substitution between capital and labor.

In addition, we analyzed the effects of creditor rights in states with different labor regimes. We find that firms with more collateralizable assets do not exhibit any differential capital investment responses across different labor regulations. That is given the increased threat of liquidation, firms in both pro-labor and pro-employer states find it optimal substitute capital with labor. The difference is in the kind of labor firms in different labor regulation regimes hire. We find that firms in pro-labor states substitute capital with contract workers while those in pro-employee states hire permanent workers.

Next we look at the effects of SARFAESI on short-term debt. We find that as a result of SARFAESI, firms with more collateralizable assets differentially reduce the amount of secured short-term formal loans as compared to control firms. Specifically, we document a novel result with regards to other sources of firm financing. We find that treated firms differentially increase their reliance on trade credit post-SARFAESI compared to control firms. In essence, post-SARFAESI, treated firms substitute away from secured credit towards trade credit (unsecured credit) as compared to control firms.

5. Conclusion and Policy Implications

Our study establishes theoretically and empirically that there exists a critical threshold limit of the strength of creditor rights that balance both creditor's need of maximizing expected recovery value and firm's needs of maximizing expected firm value. From the firm's perspective, investing in tangible capital that can be used as collateral allows them to borrow more and scale up their production process. On the other hand, a higher tangible capital pledged as collateral in a legal regime with stronger creditor rights would also increase the bank's return from the liquidation proceedings. This higher return, in turn increases the likelihood of the firm being liquidated. This tradeoff between greater borrowing capacity and increased threat of liquidation creates the tension in the choice of capital for the firm.

Empirically, we find that excessive strengthening of creditor rights in a setting without an alternative efficient bankruptcy procedure can lead to an increased threat of liquidation for the firms and can result in ex-post inefficiencies. First, though the policy was intended to expand access to credit, the increased threat of liquidation faced by firms led to a reduction in demand for credit leading to unanticipated changes in their labor-capital allocation. Second, since SARFAESI had the unanticipated effect of moving firms towards more labor-intensive production process, it can hurt firm productivity in the long run.

Summarizing, our paper provides novel evidence on a new channel through which creditor rights affect real economic activity. In our setting, we find that the strengthening of creditor rights led to an increased liquidation bias for firms that subsequently hired more workers, and invested less in fixed capital including plant and machinery, i.e. SARFAESI, had the unanticipated effect of moving firms towards more labor-intensive production process. Our findings have broader policy implications as developing countries all over the world seek to improve their credit markets through changes in debt enforcement. To the extent that such policy changes can affect firms' labor hiring and investment decisions, it has implications for firm value, and economic growth. While the primary objectives of policies that aim to strengthen creditor rights is to increase the supply of cheaper credit and consequently boost investment activity, our study indicates that policymakers should bear in mind the unintended effects such piecemeal policies can have on the economy.