

# The Distributive Impact of Reforms in Credit Enforcement: Evidence from Indian Debt Recovery, Supplementary material: Database and data description for data used in empirical analysis. Tribunals

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## Abstract

This file provides a description of the five databases we use in the paper: DRT establishment data, Prowess data, private bank data, RBI data, and Legal Suits data. The databases are discussed in the order they appear in the paper. We describe how one gets access to the data. We also provide a detailed descriptions of the variables used in the paper and of the do files needed to replicate our results.

## 1 DRT Establishment Data

**Getting Access to the Data** These data were collected from various sources: dates of DRT establishment were taken from the Government of India (1993), state-level bank credit data were taken from the Reserve Bank of India’s “Basic Statistical Returns of Scheduled Commercial Banks in India” (various years). Data on firm assets and firm profits were computed by averaging across the firm assets and profits of firms reported in Prowess as operating in that state in that year. State-level GDP data were taken from the “State Series” made available by the Government of India’s Central Statistical Organisation. Data on political parties in power were collected from the results of state-level elections available through the Election Commission of India’s website, as well as newspaper articles describing the balance of power at the state government. Data on pending cases were collected from the Government of India’s “Annual Report of Ministry of Law and Justice”. The numbers of sitting high court judges were taken from various years of “Judges of the Supreme Court and the High Courts” published by the Department of Justice, Ministry of Law and Justice, Government of India. The data set we use is in the file *predictdata\_drtge.dta* uploaded to *Econometrica*’s supplementary materials webpage.

**Do files needed to replicate** The do file *predictdrt.do* will replicate Table II.

## 2 Prowess data

**Downloading data** Prowess is a commercially available database and can be purchased from CMIE (<http://www.cmie.com/database/?service=database-products/firm-level-data-services/prowess-corporate-database.htm>). The following gives a short description on how to extract the data from the Prowess database.

1. Select all non-finance and non-government companies. (Click on select by name, then on “S” and then on “non-financial”. Under “Query by basic information” and “O” you can exclude government companies.) For the estimation of bank profits, select all banks.

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2. For this set of companies, select all available information in the basic information tab which includes headquarter location and industry codes. Save this basic information in a file called "companyinfo.txt".
3. For this set of companies, click on query by "finance/stocks" and then "Advanced Query".
4. Apply the user templates *assets.tpu*, *income.tpu*, *liability.tpu* and *infos.tpu*.
5. For each user set, download the data for each year separately. You have to click on Query on Year and type in the year for which you want to get the result.
6. Click on File, Save, Save as text file and use the pipe delimited format. For each of the templates *assets.tpu*, *income.tpu*, *liability.tpu* and *info.tpu*, save the data as pipe delimited using the file name *assets1990.txt* for the asset information in 1990, and so on. This file structure will then be used in the STATA do file *gendatadirectfromprowess.do*.
7. For the bank profit data, use template bank profits provided by Prowess directly.

#### Do files needed to replicate

In order to replicate the results, two do files need to be run. First, you will need to run the do file *gendatadirectfromprowess.do* to load the data directly from the Prowess raw data. Then, the do file *tablesprowess.do* generates the tables.

#### Variables used

Our *DRT* indicator is constructed using headquarter location of firms as reported in the *registeredofficeaddress*. *Tangible assets* are *total assets* net of *intangible assets*. We follow the Prowess definition for *short term borrowing* as the sum of *short term bank borrowing* plus *commercial papers*. *Long term borrowing* is *total borrowing* minus *short term borrowing*. The variable *interest rate* is defined as *interest expenses* over *total borrowing*. To avoid reliance on outliers, we truncate observations above 500%. (Winsorizing at various thresholds leads to the same results.) *New long term borrowing* is calculated using *cash flow from borrowing* if available or by taking the difference between *inherited long term borrowing*<sup>1</sup> and the *stock of long term borrowing*. Taking information from both, cash flow statement and inherited long term borrowing allows us to reduce the number of missing observations. For the *cash flow information*, we take either *cash flow from long term borrowing* if that is directly observable or *cash flow from total borrowing* net of *short term borrowing*. Throughout, we take zero as a lower bound for new long term borrowing and the stock of long term borrowing as an upper bound for new long term borrowing, i.e. we replace new long term borrowing by the upper/lower bound if the calculated value lies outside that range. We drop observations with reported cash flow or currentpor of zero because Prowess reports missing cash flow information to be zero for active firms. *Plants and machinery* is the data item *plantmachinerycomputerselectrica*. *Profits* are the data item *pbdt*. The *wage bill* is the data item *compensationtoemployees*. *Industry dummies* are formed at the two digit NIC classification.

**Do files needed to replicate** You need to run the do files *gendatadirectfromprowess.do*, *tablesprowess.do*, *bankprofits.do*, *intratedynamicsprowess.do*, *quartiledynamics.do* to replicate the results.

## 3 Private bank data

**Getting Access to the Data** The data are from the private database of ICICI Bank Ltd. They are stored in the SYMBOLS database, which is housed at the Lower Parel office of the bank, in Mumbai. ICICI Bank now handles all research-related requests for data through the Institute for Financial Management and Research (IFMR), Chennai. To make a request, please contact Mr. R. Chandrasekar at the address below, with a written request explaining your research project and how the data will be used.

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<sup>1</sup>The data item "current portion of long term borrowing" (currentpor) allows us to infer which part of long term borrowing will no longer be long term borrowing in the next period. Then, the amount of inherited long term borrowing is the difference between the past stock of long term borrowing and the past current portion of long term borrowing.

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**Variables used** For the interest rate regressions in Tables XI and XV, we use a data set organized at the loan level. Each observation is a loan with maturity period of 8 years 9.5 months or above. The variable *intrate* is the interest rate (measured in percentage terms) fixed at the time of disbursement. The variable *DRT* takes value 0 or 1 depending on whether a DRT existed in the state of the borrower’s head quarters at the time the loan was disbursed. Dates of DRT establishment are the official dates announced by the Government of India, available through Government of India (1993), and listed in Table I of the article. *loan size* is the size of the disbursement. *loan duration* is measured in days and is the maturity date minus the disbursement date. *Assets* is the sum of land, machinery, buildings and other assets recorded by the bank in their database on borrowers’ financial information. *QuartDummy* is a dummy variable for the quarter in which the loan was disbursed.

For the repayment behavior regressions in Table XVII, we use a data set organized at the firm-year level. Each observation represents the repayment that the borrower owes to the bank in this year. The regression specification closely follows that used in Visaria, S. (2009). The dependent variable takes value 1 if all invoices sent by the bank to the firm in this year are repaid on time, and 0 otherwise. *DRT* takes value 0 or 1 depending on whether a DRT existed in the state of the borrower’s head quarters in this year and the loan was originated before the DRT was established. *Overdues* is the sum of all invoices from this bank to this borrower that remained unpaid 1 year before the DRT law was passed. *Assets* is defined as above.

**Do files needed to replicate** Two do-files will be needed to replicate the results. First, you will need to run the do file *genbankdata.do* to create the data sets. Then, the do file *tablesbank.do* generates the tables.

## 4 RBI data

**Downloading data** The data from the Reserve bank of India (RBI) have either been downloaded from the RBI’s data warehouse webpage (<http://dbie.rbi.org.in>) or hand-collected from the publication “Banking Statistics 1972 - 2002” available for download as a pdf file on the RBI webpage. The RBI data we use is uploaded to the *Econometrica* supplementary materials webpage.

Data on the supply of bank credit is drawn from the “Database on the Indian Economy” published by the Reserve Bank of India (RBI). A data series called “Quarterly Statistics on Deposits & Credit of Scheduled Commercial Banks” provides information on outstanding credit and the number of branches of all banks at various regional levels (state-level and urban v. rural levels). The data are reported on a quarterly basis.

### Variables used

*State-log lend* includes control for the level of credit (in logs) of agriculture, artisan & village industry, small scale industry, and total credit given by the State Bank of India, nationalized banks, and all scheduled commercial banks which totals to 12 variables which vary by year and within each year by state. These variables have been hand-collected from the Banking Statistics. The variable *DRT exposure* is calculated using the RBI publication *Directory of Bank Offices*. This directory reports all active branches. We use all branches that were opened before 1992 in our definition of DRT exposure. The *bank profits* using RBI data comes from the data series “Earnings and Expenses of SCBs” and can be downloaded on the RBI’s data warehouse. *Bank profits* are ‘Total Earnings of the Bank’ minus ‘Interest Expenses’, ‘Operating Expenses’ and ‘Provisions and Contingencies’.

## 5 Legal Suits data

**Getting Access to the Data** These data were purchased from the law firm Manilal Kher Ambalal & Company that represents ICICI Bank in its law suits against defaulting firms. Each observation is a randomly

drawn law suit that MKA & Co. represented ICICI Bank in, in the civil courts in Maharashtra or the debt recovery tribunals.

**Do file needed to replicate** If one has the same data set, the do file legalsuits.do will replicate the results in Table XVIII.

## References

- GOVERNMENT OF INDIA, (1993). The Debt Recovery Tribunal (Procedure) Rules, 1993. *Gazette of India, Extraordinary*. Part II, Section 3(i). As reprinted in LP's Bare Acts 2003.
- VISARIA, S., (2009). Legal Reform and Loan Repayment: The Microeconomic Impact of Debt Recovery Tribunals in India. *American Economic Journal: Applied Economics*. 59-81.