Bankruptcy law, bank liquidations and the case of Brazil

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Description of the talk

- A. Corporate bankruptcy law reform in Brazil
- How bad is Chapter 11?
- C. Bankruptcy law for banks
A. Corporate bankruptcy law reform in Brazil
Creditors’ Recovery Rate in case of bankruptcy

Recovery Rate

Brazil  SSA  Sas  LAC  MENA  EAP  ECA  OECD

Set of Countries
Figure: Average length of insolvency procedures (2004)
Main changes brought by the Bankruptcy Reform (1)

1. Secured creditors are now given priority over tax credits;

2. Labor claims are limited to 150 times the minimum wage;

3. The insolvent firm can be sold (preferably as a whole) before the creditors’ list is formed;
Main changes brought by the Bankruptcy Reform (2)

- Automatic stay period;

- 5. Only creditors holding claims higher than 40 minimum monthly wages can start a bankruptcy procedure;

- 6. Tax, labor and other liabilities are no longer transferred to the buyer of a liquidated asset (succession problem)
Main changes brought by the Bankruptcy Reform (3)

7. Any new credit extended to the firm during reorganization is given first priority in case of liquidation.

8. Creditors now play a more important role in reorganization, different from the *concordata*

9. Pre-package provision
Private Credit to Firms to GDP ratio
Private Credit to Firms to GDP ratio

Pre-Reform

Post-Reform

Jan-01  Apr-02  Jul-03  Oct-04  Jan-06  Apr-07  Jul-08  Oct-09  Dec-10

Brazil  Argentina  Chile  Mexico
Other consequences of the bankruptcy reform

- Average time to resolve insolvency drop from 10 to 4 years;
- Increase in the total debt (also found in micro data);
- Decrease in the cost of debt;
- Increase in the average maturity of credit;
- More credit to riskier firms;
Other Financial Reforms

- Consumer credit (payroll loans)

- Mortgage (new type of leasing)
Reasons for Chapter 11

- In Brazil we introduce Chapter 11 also for political reasons. Congress wanted to save firms. Otherwise the law would be difficult to pass.

- Credit reform that were too pro creditor did not work in Latin America.
Reasons for Chapter 11

- Mexico judiciary rejected a law that was too pro-creditor, and a bureaucratic law that included the visitadores and conciliadores was created.

- Argentina during the 2002 crisis, banks were taking over too many firms. Congress changed the law that had provisions of passing the firms in distress automatically to banks.
Reasons for Chapter 11

Lesson: Congress and Judiciary think there are residual property rights of owner of the firm in case of distress.

Chapter 11 provides an organized way of taking care of it.
B. How bad is Chapter 11?
The usefulness of Chapter 11 depends on the characteristics of the economy such as:

- Structure of the productive sector:
  - physical capital vs. variable inputs (like materials)
- Cost of liquidation (Chapter 7) vs. cost of reorganization (Chapter 11)
Cost of Bankruptcy

- Chapter 11: higher recovery rates and better preservations of the firm’s value;

- Pre-packaged reorganizations: lower costs;

- Bris et al (2006): Chapter 7 takes almost as long to resolve, requires similar fees and provides creditors with lower recovery rates (often zero) than a comparable Chapter 11 procedure.
General Equilibrium model with incomplete markets and bankruptcy.

Three agents:
- Managers;
- Secured creditors finance the fixed inputs;
- Unsecured creditors sell the variable input.

Two states of nature (solvency and insolvency);
Two periods;
One good;
Two assets.
Pro-Reorganization Bankruptcy Law

- Automatic stay.

- Managers have the right to choose between liquidation and reorganization.

- Empirical Evidence:
  - UK: only 20% of bankrupted firms do not go to liquidation (no automatic stay);
  - Germany: less than 1% (no automatic stay);
  - US: more than 85% goes to reorganization (automatic stay).
Simulation Results

- For sectors intensive in physical capital the best procedure is **pro-liquidation**, since it permits secured creditors to recover their claims immediately, making the cost of capital lower;

- For sectors intensive in variable input the best procedure is **pro-reorganization**, since it gives trade creditors another chance to recover their credit, making the cost lower;

- For extremely high levels of liquidation costs the best procedure is **pro-reorganization**, independent of the physical capital proportion.
The Optimal Bankruptcy Law (to 44 countries)

Empirical hypotheses:

1. we use the estimated value of the bankruptcy cost for the U.S. (Bris et al. (2006): (cost of reorganization, cost of liquidation)= (0, 0.58)

2. we use the U.S. sectorial spent share of materials and physical capital to calibrate the proportion of physical capital and variable input. (source: NBER-CES Manufacturing Industry Database)

Using data from U.S. industry sector (that we interpret as industry representative) we hope to identify the technical component - common to the industry in every country - of industry physical capital intensity.
To analyze the optimal bankruptcy law for each country we use the following method:

- first, we calculate the value added share of each industry sector for each country (to infer the size of each sector),
- then we sum the share of each sector that should have a pro-liquidation (or pro-reorganization) procedure.
- If the share of the pro-liquidation sectors is bigger than 50%, then the best for the country is a pro-liquidation bankruptcy law, otherwise the best is a pro-reorganization bankruptcy law.
Main Results:

• 27 in a sample of 44 countries (or approximately 61%) apply a procedure aligned with our suggestions.

• Approximately 80% of the countries (35 out of 44) should apply a pro-reorganization bankruptcy law.

• Managers always put a higher proportion of their capital when reorganization is available.
The result depends on our hypothesis of bankruptcy costs, which we assume to be equal to the U.S.

For countries with lower bankruptcy-liquidation costs (as Sweden) the result should move toward the pro-liquidation procedure.

For countries with higher costs of liquidation (like Brazil and other developing countries) the result should move toward the pro-reorganization procedure.
Chapter 7

Chapter 11

(Relative) Depreciation in liquidation
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<th>Proposed Changes</th>
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How bad is Chapter 11?

- La Porta et al (1997, 1998) creditors rights index:
  1. There is no automatic stay on assets;
  2. Managers are removed in case of reorganization;
  3. Reorganization petitions are restricted;
  4. Secured creditors come first in case of liquidation;

- Three of these four features are related to reorganizations;

- Using this index in empirical works confounds the effects of these individual features. Also, the index treats all features as equally important.
Data set

- **Loan Pricing Corporation’s Dealscan:** database on syndicated loan contracts (loan size, spread, maturity, security and number of lenders);
- **Compustat Global:** database on firm’s financial indicators (total assets, total liabilities, PP&E, equity, net income, etc.)
- **Standard & Poors:** firm-level long term credit rating;
- **World Bank:** country-level economic indicators (GDP per capita, interest rate spread, risk premium, domestic credit to private sector and share of domestic credit supplied by banks);
- **La Porta et al (JPE 1997):** country-level information on legal features of bankruptcy laws. (restrictions on reorganization procedures; automatic stay on assets; share of secured creditors required to approve reorganization plan; legal origin; etc.).
removing managers

- punishment for incompetent managers and higher probability of a successful reorganization;
- However: manager might be more prepared and experienced than a creditor-appointed one.
restricting reorganizations

• If any firm under distress may file for reorganization it may lead to moral hazard and expropriation of creditors.

• If, however, the restrictions on reorganization are too severe, they might make it too hard for firms to file for reorganization and lead to inefficient liquidations.
allowing for an automatic stay on assets

• How does having automatic stay in the firm’s country of origin affect loan contractual variables?

• **Automatic Stay without creditor protection leads to Moral Hazard, lowering credit supply;**

• **Creditor protection without Automatic Stay may lead to inefficient liquidations due to lack of coordination, “firm run”**

• The net result should point to which effect is more important: the moral hazard or the bad state of nature;
Some preliminary results (1)

- Removing managers leads to:
  - lower volume of credit;
  - lower loan maturity;
  - lower number of creditors on syndicated loans.

- Restricting reorganization petitions:
  - higher volume of credit
  - higher number of creditors on syndicated loans;
  - higher loan maturity (weaker result);
Some preliminary results (2)

• Demanding unanimity for reorganization approval: lower
  • lower volume of credit;
  • lower loan maturity;
  • lower number of creditors on syndicated loans.
  • higher loan spread (weaker result);

• Automatic stay on assets (weaker results):
  ▪ lower volume of credit and maturity;
  ▪ higher loan spread;
Banks

- Institutions whose current operations consist in granting loans and receiving deposits from the public.
- Banks provide unique services (liquidity and means of payment) to the general public.
- Banks finance a significant fraction of their loans through the deposits of the public.
- This is the main explanation for the fragility of the banking sector and the justification for banking regulation.
Why are banks different?

1. **Systemic risk**: externalities on other economic agents

2. **Liquidity provision**

3. **Coordination problems** (bank runs)
Is there a separate bank insolvency law/framework?

Source: World Bank
Bank fragility

- Diamond and Dybvig (1983)
- Banks pool deposits to provide insurance against idiosyncratic shocks.
- Shocks not perfectly correlated: fraction of deposits can finance profitable illiquid investments.
- If many depositors decide to withdraw for reasons unrelated to liquidity needs: run on banks.
Deposit insurance

- Provides partial solution to bank runs.
- How large?
- May be compulsory or voluntary; public (more common) or private.
- Drawback: reduced incentives for bank monitoring by depositors (see Calomires and Kahn (1991)).
- Moral hazard: excessive risk by managers.
Is there an explicit deposit insurance protection system?

Source: World Bank
Moral Hazard

- Bank owners and Government
- Bank creditors and Government
- CEO/Managers and Shareholders
Moral Hazard: Bank Owners vs. Government

- In the absence of institutional framework for orderly closure of banks, Central Banks usually prefers bailouts rather than risking contagion.
- Goodhart and Shoemaker (1995): out of 104 failing banks around the world, 73 were rescued; 31 were liquidated.
- Large banks are “too big to fail”
- **Moral Hazard**: Certainty of rescue leads to risky behavior.
Moral Hazard: Bank Owners vs. Government

Possible solutions:
- debt to equity conversion (capital dilution),
- stockholders should lose their entire capital;
- come last in priority order.
- Restricting operations of large banks
Moral Hazard: Bank creditors vs. Government

- **Moral hazard**: creditors will be more lenient in providing credit to unworthy banks if they believe in rescue.

- Possible solutions:
  - increased haircut,
  - “COCO bonds” issues.
  - forced equity conversion
Which authority has the powers to supersede shareholders' rights?

Source: World Bank
Moral Hazard: CEO vs. Bank owners

- High bonuses increase managers’ expected payoff in taking too much risk.
- Golden parachutes reduces managers’ punishment following bad outcomes.
- Unlimited gains, limited losses.
- Yet, eliminating performance incentives altogether is a bad idea.
Which authority has the powers to remove and replace bank senior management and directors?

- Bank supervisor: 91%
- Court: 6%
- Deposit insurance agency: 1%
- Bank restructuring or Asset Management Agency: 2%

Source: World Bank
Chapter 11 for banks?

- The role of the Judiciary vs. the role of the regulators;
- Bank regulators are more proficient and are faster, but are afraid of potential lawsuits leading to moral hazard
- Judiciary: no legal suits, but slower
OLA: Orderly Liquidation Authority (Dodd-Frank)
- liquidation of insolvent systemically important financial institutions (“SIFIs”)
- Good Bank / Bad Bank

Chapter 11F (Jackson)
- FDIC, SEC, or other agency would have the authority to file an involuntary bankruptcy, participate in the proceedings, and power to lend debtor-in-possession financing.
- a special set of judges be designated as expert masters
- automatic stay: derivatives 3 days only, covering net agreement,
  non-cash repos would be included
Have your country introduced significant changes to the bank resolution framework as a result of the global financial crisis?

Source: World Bank
What kind of changes?

- Introduce a separate bank insolvency framework
- Implement coordination arrangements among domestic authorities
- Other

Source: World Bank