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PUBLIC POLICY FOR THE **PRIVATE SECTOR**

Saving Viable Businesses

The Effect of Insolvency Reform

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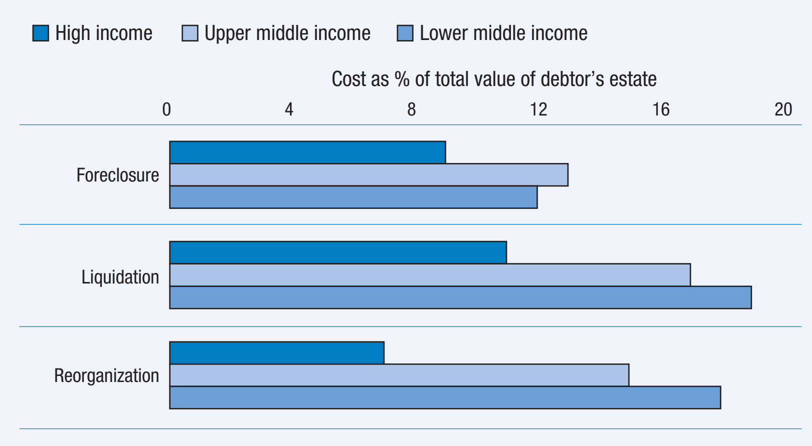
The 2008 financial crisis and consequent rise in corporate insolvencies highlight the clear need for efficient bankruptcy systems to liquidate unviable firms and reorganize viable ones—and to do so in a way that maximizes the proceeds for creditors, shareholders, employees, and other stakeholders. This Note summarizes the empirical literature on the effect of insolvency reforms on economic and financial activity. Overall, research suggests that effective reforms increase timely repayments, reduce the cost of credit, and lower the rate of liquidation among distressed firms.

Two important goals of a bankruptcy system are to weed out the bad (unviable) businesses from the good (viable) ones and to keep viable businesses in operation. Unsuccessful companies ideally should be taken over by more capable owners or liquidated through asset sales, so that only the most efficient users of economic resources continue to operate as active companies. In most cases, however, keeping the business alive is the most efficient outcome: creditors get a chance to recover a larger part of their credit, more employees keep their jobs, and the network of suppliers and customers is preserved. Saving viable businesses becomes especially important in times of recession. Indeed, crises have been used as an opportunity to improve insolvency laws.[1]

Many bankruptcy regimes around the world perform poorly. But there is evidence that reforming bankruptcy systems can improve economic activity. Three key findings emerge from existing research. First, reforms that improve insolvency regimes have a real effect on credit. Second, new mechanisms to encourage debt restructuring or reorganization decrease the duration and cost of bankruptcy proceedings and reduce the failure rate of insolvent firms. Finally, evidence from high-income countries suggests that reforms to individual bankruptcy laws can increase household credit, which may also benefit entrepreneurs.

Worldwide, debt enforcement mechanisms vary enormously in efficiency (figure 1). Bankruptcy procedures are in general extremely time consuming, costly, and inefficient. In 2010 the cost of bankruptcy proceedings averaged more than 30 percent of the value of the estate in Cameroon, the Dominican Republic, Liberia, the Philippines, and Thailand—but approximately 1 percent in Colombia, Kuwait, Norway, and Singapore (World Bank 2010a). A cross-country study shows that higher bankruptcy costs hamper

Figure 1 **Estimated average cost to resolve insolvency by country income group and type of proceeding, 2006**



Source: Djankov and others 2008.

entry by new firms, especially in industries that naturally should have high entry rates (Klapper, Laeven, and Rajan 2006).

The recent financial crisis highlighted the importance of effective insolvency frameworks. In 2009 Japan had 13,306 corporate bankruptcies (up 5 percent from 2008), the United Kingdom 94,135 (up 6 percent), Germany 32,687 (up 11 percent), and the United States 60,837 (up 40 percent).[2] At the same time, the quality of banks' loan portfolios worsened: the average ratio of nonperforming loans to total gross loans for commercial banks in these four countries rose from 1.6 percent in 2007 to 2.2 percent in 2008 and 3.5 percent in 2009 (World Bank 2010b).

This Note summarizes empirical studies on the effect of reforms in insolvency and restructuring on economic activity. Overall, research suggests that effective reforms improve economic activity.

More timely repayments, cheaper credit

Studies on the effect of reforms that improve insolvency regimes, particularly efforts to speed up the resolution of debt recovery claims, find that they increase the probability of timely repayments, reduce the cost of debt and interest rates, and increase the aggregate level of credit (table 1). Common to these reforms is an assurance that creditors will recover a larger part of a troubled loan. This results in savings that are passed on to borrowers in the form of cheaper credit.

One study uses a loan-level data set to analyze the effect of new debt recovery tribunals in India that speeded up the resolution of debt recovery claims and allowed lenders to seize greater values of collateral on defaulting loans (Visaria 2009). The study exploits the random rollout of debt recovery tribunals in different states at different times between 1994 and 1999. The author finds that the reform increased the probability of timely repayments by 28 percent (for loans with overdue amounts averaging US$5,000) and significantly lowered interest rates on large loans (those of around US$200,000).

In Brazil a broad 2005 bankruptcy reform that established greater creditor protection led to a 22 percent reduction in the cost of debt and a 39 percent increase in the aggregate level of credit (Funchal 2008).[3] A necessary caveat is that the study measures the effect as simply the change between the pre- and postreform periods, although firm borrowing patterns might have been affected by other, unobservable factors. An ongoing randomized evaluation of the effect of new restructuring guidelines in Romania aims to use improved methodology to isolate the effect of the reform on borrower behavior.

Lower failure rates, shorter proceedings

Studies on the effect of introducing new mechanisms to encourage debt restructuring or reorganization (and to lower liquidation rates) find that such reforms also reduce rates of failure among small and medium-size enterprises, particularly the liquidation of stronger firms (table 2).

Table 1 **Effect of insolvency reforms on aspects of credit**

Country	Study	Reform	Effect on repayment rates	Effect on cost of credit	Effect on aggregate credit
India	Visaria 2009	Introduction of debt recovery tribunals	28 percent increase in timely repayments	1.36 percentage point smaller increase in interest rates	
Brazil	Funchal 2008	Introduction of creditor-friendly rules[a]		22 percent decrease in cost of debt	39 percent increase

a. 2005 Bankruptcy Law.

Table 2 Effect of insolvency reforms on failure rates and duration of proceedings

Country	Study	Reform	Effect on liquidations	Effect on reorganizations	Other effects
Belgium	Dewaelheyns and Van Hulle 2006	Introduction of new restructuring mechanisms[a]	8.4 percent reduction in number of liquidations		
Colombia	Giné and Love 2008	Introduction of a new reorganization code[b]	Decrease in duration from 49 months to 33	Decrease in duration from 34 months to 12	
Thailand	Foley 1999	Introduction of a legal framework for workouts[c]			Decrease in nonperforming loans Decrease in expected costs of financial distress

a. 1997 bankruptcy reform.
b. Law 222 (1995) and Law 550 (1999).
c. 1998 bankruptcy reform.

A 1997 bankruptcy reform in Belgium introduced mechanisms to encourage corporate rehabilitation as an alternative to liquidation. The reform increased protection from creditors for companies that are granted reorganization protection. One study finds that this reduced liquidation-type bankruptcies among small and medium-size enterprises by 8.4 percent (Dewaelheyns and Van Hulle 2006).

In Colombia a new reorganization code, Law 550 (1999), streamlined the reorganization process by tightening statutory deadlines for reorganization plans and reducing opportunities for appeal by debtors. This reform improved the selection of viable firms into reorganization and shortened the duration of reorganization from 34 months to 12 (Giné and Love 2008).

In Thailand the introduction of a legal framework for rehabilitation led to a decline in the level of nonperforming loans as well as in the costs of insolvency. But the pace of restructuring remained slow: nonperforming loans still amounted to more than 20 percent of total bank loans more than 18 months after the reform (Foley 1999).

Greater household credit

Evidence from high-income countries suggests that reforms to individual bankruptcy laws can increase household credit, which might also benefit entrepreneurs and non-limited-liability firms (table 3). In the United States, for example, the creditor-friendly 2005 personal bankruptcy reform may have contributed to the subsequent increase in the supply of credit and in credit card debt. In the year following the reform, revolving debt per household rose by a five-year high of 5.3 percent in nominal terms (White 2007).

An important caveat is that while entrepreneurs might benefit from an increase in the supply of credit and start-up capital, the comparatively anti-debtor bankruptcy laws may also discourage self-employment and personal risk-taking (White 2009). This effect will ultimately depend on the quality and credibility of judicial enforcement, however. For example, in environments where registering a limited liability firm is costly or difficult (because of, say, high minimum capital requirements), the threat of stronger personal bankruptcy laws might reduce the total number of new firms. But the quality of firms should improve—because only high-quality entrepreneurs would be willing to take on personal liability.

Conclusion

Strong insolvency laws that provide an efficient resolution of financial distress are associated with a more dynamic private sector. Evidence from empirical studies shows that reforms to improve the bankruptcy system can strengthen economic activity—by increasing the probability of timely

Table 3 Effect of reforms to individual bankruptcy laws

Country	Study	Reform	Effect on filing costs	Effect on credit supply
United States	White 2007, 2009	Introduction of creditor-friendly mechanisms[a]	50 percent increase in cost of individual bankruptcy filings	5.3 percent nominal increase in revolving debt per household

a. Bankruptcy Abuse Prevention and Consumer Protection Act (BAPCP).

repayments, reducing the cost of debt, increasing the level of credit, lowering failure rates, and shortening the time to resolve bankruptcies. But these studies are limited to specific reforms in a few countries. Additional evidence is needed, particularly from well-designed randomized evaluations to identify the effects of insolvency reforms on credit decisions and firm survival.

Notes

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1. For a longer discussion on insolvency reform during financial crises, see Cirmizi, Klapper, and Uttamchandani (forthcoming).
2. The data for Japan are from Teikoku Databank (2010); for the United Kingdom, from U.K. Ministry of Justice (2010); for Germany, Statistisches Bundesamt Deutschland (2009); and for the United States, American Bankruptcy Institute (2010).
3. The new law increased creditors' rights through two channels: it increased creditors' priority in bankruptcy, and it allowed them to actively participate in bankruptcy procedures. The cost of debt for each firm is measured as total annual interest expense divided by the firm's mean debt over the current and lagged period. Total credit is measured as the sum of short- and long-term debt plus accounts payable.

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