

**DIW Roundup**  
Politik im Fokus

Deutsches Institut für Wirtschaftsforschung

2019

# Insolvency Regimes and Economic Outcomes

Tatsiana Kliatskova and Loïc Baptiste Savatier

# Insolvency regimes and economic outcomes

Tatsiana Kliatskova | [tkliatskova@diw.de](mailto:tkliatskova@diw.de) | Department of Macroeconomics at DIW Berlin  
Loïc Baptiste Savatier | [l.savatier@mpp.hertie-school.org](mailto:l.savatier@mpp.hertie-school.org) | Hertie School of Governance

August 12, 2019

When in distress, a firm may need restructuring or liquidation; in either case, legal uncertainty compounds the difficulty. Sound and efficient insolvency regimes are important as these not just positively affect investment, innovation, and economic growth, but also the supply and cost of credit. The design of appropriate insolvency frameworks in Europe is, however, still controversial. The debate is especially relevant as the European Commission just set a new legal framework for insolvency proceedings. This article both summarizes the recent Directive of the European Commission on minimum standards for national insolvency regimes and provides a review of the literature on how insolvency regimes affect real and financial sectors.

## The current Directive by the European Commission

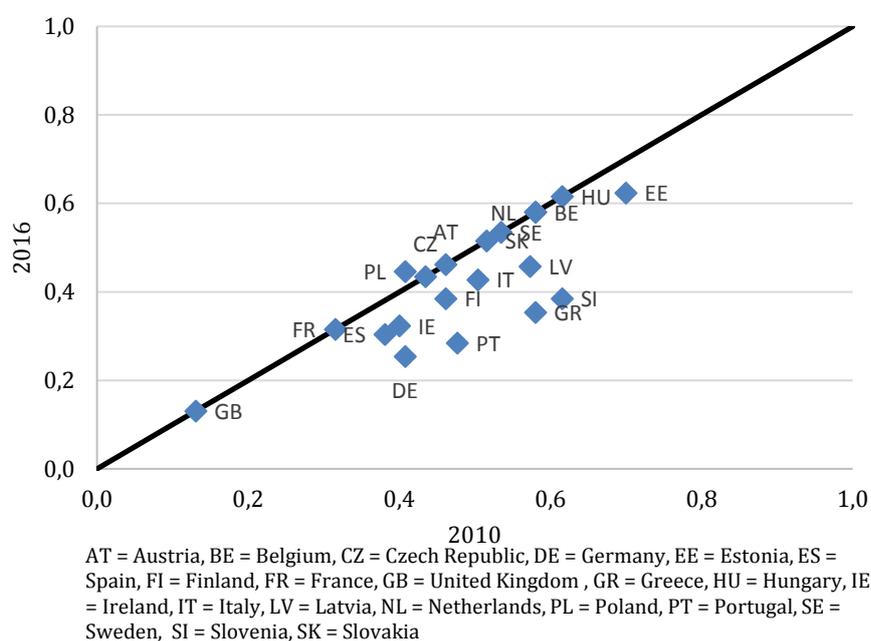
Based on the [McGowan and Andrews \(2018\)](#) study on cross-country difference in the resolution of personal and corporate insolvency proceedings, the design of insolvency regimes in Europe varies significantly across countries and over time (see [Figure 1](#)). While some countries have efficient frameworks to prevent and resolve insolvencies, such as France and the United Kingdom, others lag behind. Comparing 2010 and 2016 regimes shows that the efficiency of insolvency rules has improved or remained the same in all countries, except Poland, due to the recently conducted reforms.

Given that insolvency frameworks affect the efficient allocation of resources in an economy ([McGowan et al., 2017](#), among others), the European Commission proposed a “[Recommendation on a New Approach to Business Failure and Insolvency](#)” (March 2014) as a step on the way to the [Capital Markets Union. EC \(2014\)](#) both recommends minimum standards for national insolvency regimes and encourages coherence between national insolvency frameworks. In November 2016, a proposal for a new directive on insolvency procedures ([COM\(2016\)723](#)) was made. In June 2017, the European Central Bank (ECB) welcomed the proposal, noting it provides the necessary first steps. However, according to the ECB, the proposal fails to move forward the process of harmonizing insolvency laws across the EU, for example because there is no common definition of insolvency as well as of triggers for the opening of reorganization that is necessary for a well-functioning capital markets union ([CON/2017/22](#)).

On June 20, 2019, the European Parliament and Council signed the new [Directive 2019/1023](#) on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency, and the discharge of debt that relies on the previously made proposal. The Directive does not set a goal of fully harmonizing insolvency procedures across countries. At the same time, by establishing minimum standards for preventive restructuring procedures, it aims at giving enterprises that face financial difficulties access to national insolvency frameworks that enable early restructuring. Early restructuring should prevent bankruptcies of viable businesses and maximize value of the enterprises in question as well as protect banks from building-up non-performing loans. In addition, honest insolvent entrepreneurs should get a second chance to start

a new business. Apart from that, the Directive introduces some targeted measures to improve the efficiency of insolvency, restructuring, and discharge procedures, especially in shortening their lengths and, therefore, increasing recovery rates. Overall, the Directive aims to achieve an appropriate balance between the interests of debtors and creditors. In terms of economic outcomes, the literature shows that (changes in) insolvency procedures affect both the financial sector and the real economy.

**Figure 1: Efficiency of insolvency rules in selected EU economies**  
 OECD index (low values = high efficiency), development between 2010 and 2016 (below the diagonal = improvement, on the diagonal = remained the same)



Sources: McGowan and Andrews (2018), authors' own depiction.

### Insolvency laws and financial sector

Different empirical studies suggest that insolvency frameworks have a strong effect on the amount, structure, and riskiness of *bank lending*. [Haselmann et al. \(2009\)](#), investigating the effect of insolvency reforms on bank lending in 12 transition economies, show that banks increase the supply of credit subsequent to legal change that strengthens creditor rights and/or improves collateral law. Importantly, the study shows that changes in collateral law matter more for bank lending than do changes in bankruptcy law, stressing that the difference stems from the former being a prerequisite for the effectiveness of the latter. While collateral law enhances the likelihood that individual creditors can realize their claims against a debtor, bankruptcy law ensures an orderly process for resolving multiple, often conflicting claims after a debtor has become insolvent. With regards to collateral law, [Calomiris et al. \(2017\)](#) show that the creditor's ability to use movable assets as collateral when borrowing from banks increases supply of loans, while weak collateral law creates bias toward immovable assets and, therefore, decreases lending. Concerning the effects of collateral law on the provision of different types of credit, [Haselmann and Wachtel \(2010\)](#) argue that the legal environment affects the composition of banks' loan portfolios. Banks that are operating in a well-functioning legal environment – as

reflected by sound laws with regard to the collateral – lend relatively more to small and medium-sized enterprises (SMEs) and provide more mortgages. In turn, banks lend more to large enterprises and to the government if the legal system is less sound. Apart from that, [Fang et al. \(2014\)](#) show that legal, banking, and corporate governance reforms enhance financial stability, i.e. lower risk-taking by banks, for the sample of transition economies. However, the effectiveness of creditor rights and corporate governance reforms crucially depends on the progress of banking reforms. Therefore, a well-developed banking sector is a prerequisite for the other reforms. Regarding the effects of insolvency regulations on cross-border debt and equity markets, [Bremus and Kliatskova \(2019\)](#) find that countries with more efficient insolvency regulations receive higher levels of cross-border investment, with pre-insolvency regimes – i.e. measures that take effect before bankruptcy – being especially important.

A number of studies look at particular countries to provide an in-depth analysis of insolvency law reforms on the costs, amount, and composition of *firm financing*. [Rodano et al. \(2016\)](#) study Italian bankruptcy law reforms of 2005-2006, where a 2005 reform introduced reorganization procedures facilitating loan renegotiation and a 2006 reform strengthened creditor rights in liquidation. The authors find that the introduction of reorganization procedures increases interest rates on loans and reduces investment, while improved creditor rights reduce loan rates and spur investment. For the case of the Brazilian bankruptcy law reform of 2005, [Araujo et al. \(2012\)](#) show that the new legislation that increased creditor protection and improved efficiency of the bankruptcy system caused an increase in the amount of the long-term debt as well as a reduction in the cost of debt. Further, [Vig \(2013\)](#) analyses a securitization reform in India that strengthened creditor rights, with secured lenders allowed to bypass lengthy judicial processes when accessing the collateral of the defaulting firm. In contrast to the existing literature, the author shows that the reform lead to a reduction in firms' secured debt, total debt, debt maturity, and asset growth, as well as to an increase in liquidity hoarding by firms. These findings suggest that higher creditor protection imposes an extra cost on borrowers and, therefore, reduces the willingness of firms to obtain secured debt.

From the policy perspective, the debate on the design of insolvency regimes is ongoing. [Djankov et al. \(2007\)](#) claim that common law countries (relying on case law) have higher creditor rights scores, but civil law countries (relying on codified statutes) have higher incidence of public credit registries. The authors show that strong creditor rights protection and higher incidences of public registries are associated with higher levels and growth of private credit, with the former being especially important for rich countries and the latter for low-income countries. Further, [Deakin et al. \(2016\)](#) show the design of insolvency frameworks has implications for depth of the banking sector. Civil law countries (France and Germany) developed a high level of protection for creditors in the form of controls over the management of debtor firms. This framework has a long-term positive effect on the expansion of private credit. At the same time, common law countries (UK and USA) have a high degree of protection in relation to secured creditors' contractual rights over firms' assets, which, however, negatively affects private credit growth. Turning to defaults of small firms in France, Germany, and the UK, [Davydenko and Franks \(2008\)](#) find that recovery rates in formal bankruptcy are higher in countries with strong creditor rights, while recovery rates in workouts are similar. In addition, French and British interest rate spreads are similar, but French banks demand higher levels of collateral per dollar of debt as well as a more liquid collateral. Finally, [Qian and Strahan \(2007\)](#) provide evidence that stronger creditor protection is associated with loans that have more concentrated ownership, longer maturities, and lower interest rates. In weak protection regimes, maturity substitutes for interest rate and controls borrower risk.

In summary, the majority of the above-discussed studies provide evidence that more efficient insolvency and collateral laws can promote credit supply and firms' access to finance. Moreover, the literature suggests that the relative importance of creditor and debtor rights matters for the implications of changes in insolvency rules on financing conditions.

### Insolvency laws and real economy

In addition to the influence of insolvency laws on financial structures and financing conditions, the literature suggests that the design of insolvency regimes also matters for *productivity growth*. More specifically, bankruptcy laws that are not entrepreneurial-friendly, i.e. that excessively penalize business failure, not only significantly increase barriers to exit of failing firms ([McGowan et al., 2017](#), among others) but also raise entry barriers for new firms ([Peng et al., 2010](#), among others). Higher barriers to entry prevent new innovative firms from entering the market and, therefore, may hinder aggregate productivity growth. For example, [Armour and Cumming \(2008\)](#) claim that “forgiving” personal bankruptcy law has a statistically and economically significant effect on self-employment rates. [Fan and White \(2003\)](#), in their analysis of bankruptcy systems across US states, show that the probability of households owning a business increases if they live in the states where assets of the entrepreneur are sheltered from creditors in the event of a firm's failure. Further, [Fossen \(2014\)](#), using German data, shows that a more forgiving personal bankruptcy law encourages less wealthy individuals to enter into entrepreneurship, even though creditors may want to charge higher interest rates for increased individual risk.

With regard to exit barriers, [Bartelsman et al. \(2008\)](#) claim that high exit costs negatively affect firms that pursue riskier business strategies. Therefore, firms in countries with high costs of business failure have lower incentives to innovate. Further, [McGowan et al. \(2017\)](#) show, in a firm-level analysis, that removal of barriers to corporate restructuring as well as reducing personal costs of entrepreneurial failure would lower the amount of capital retained in zombie firms. The reallocation of capital to firms that are more productive leads to aggregate productivity growth. In addition, [Acharya and Subramanian \(2009\)](#) argue that countries with a creditor-friendly bankruptcy code face excessive liquidations when compared to countries with a debtor-friendly bankruptcy code. As a result, leveraged firms in countries with a creditor-friendly bankruptcy code are less prone to innovate, which, in turn, negatively affects economic growth.

### Conclusion

All in all, the literature converges towards the need for strong and well-defined insolvency laws that facilitate restructuring procedures and exit of non-viable firms. Uncertainty in times of firm distress, leading to restructuring or liquidation of the firm, is detrimental for both the lending and the indebted parties. Legal certainty and efficient settlement of claims support economic growth and improve financial stability. However, when it comes to the design of insolvency regimes, the literature holds different views, especially with regard to the creditor- versus debtor-friendliness of regulations. While the former increases the propensity to lend, the latter seems to spur innovation and resilience. On its way towards a Capital Markets Union, the European Union must set its own position, trying to find an appropriate balance between the interests of creditors and debtors. The ultimate goal is to reduce barriers to capital market integration and to spur economic growth in the member states.

## References

- (2014) Commission Recommendation of 12 March 2014 on a new approach to business failure and insolvency Text with EEA relevance, 2014/135/EU. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014H0135>
- (2016) Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on preventive restructuring frameworks, second chance and measures to increase the efficiency of restructuring, insolvency and discharge procedures and amending Directive 2012/30/EU. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:0723:FIN>
- (2017) OPINION OF THE EUROPEAN CENTRAL BANK of 7 June 2017 on a proposal for a directive of the European Parliament and of the Council on preventive restructuring frameworks, second chance and measures to increase the efficiency of restructuring, insolvency and discharge procedures and amending Directive 2012/30/EU (CON/2017/22). [https://www.ecb.europa.eu/ecb/legal/pdf/con\\_2017\\_22\\_signed\\_with\\_twd.pdf](https://www.ecb.europa.eu/ecb/legal/pdf/con_2017_22_signed_with_twd.pdf)
- Aikman, D., Haldane, A. G., and Nelson, B. D. (2015). Curbing the credit cycle. *The Economic Journal*, 125(585):1072-1109. <http://onlinelibrary.wiley.com/doi/10.1111/ecoj.12113/full>
- Araujo A., Ferreira R., and Funchal B. (2012). The Brazilian bankruptcy law experience. *Journal of Corporate Finance*, 18(4): 994-1004. <https://doi.org/10.1016/j.jcorpfin.2012.03.001>
- Acharya, V. V., and Subramanian, K. V. (2009). Bankruptcy codes and innovation, *Review of Financial Studies*, 22(12): 4949-4988. <https://doi.org/10.1093/rfs/hhp019>
- Armour, J., and Cumming, D. (2008). Bankruptcy Law and Entrepreneurship. *American Law and Economics Review*, 10(2):303-350. <https://doi.org/10.1093/aler/ahn008>
- Bartelsman, E. J., Perotti, E., and Scarpetta, S. (2008). Barriers to Exit, Experimentation and Comparative Advantage, mimeo. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.537.1579&rep=rep1&type=pdf>
- Bremus et al. (2019). A Stable and Social Europe: Fiscal Rules, a Stabilization Fund, Insolvency Rules, Gender Quota, Gender Pension Gaps, and Education: Reports. DIW Weekly Report 16/17/18/2019: 148-159. [https://www.diw.de/sixcms/detail.php?id=diw\\_01.c.620447.de](https://www.diw.de/sixcms/detail.php?id=diw_01.c.620447.de)
- Calomiris R. W., Larrain M., Liberti J. M., and Sturgess J. (2017). How collateral laws shape lending and sectoral activity. *Journal of Financial Economics*, vol. 123(1): 163-188. <https://doi.org/10.1016/j.jfineco.2016.09.005>
- Davydenko, S. A., and Franks, J. R., (2008). Do Bankruptcy Codes Matter? A Study of Defaults in France, Germany and the U.K. *Journal of Finance*, vol. 63(2): 565-608. <https://doi.org/10.1111/j.1540-6261.2008.01325.x>
- Deakin, S., Mollica, V., and Sarkar, P. (2016). Varieties of creditor protection: insolvency law reform and credit expansion in developed market economies, *Socio-Economic Review*, 15(2):359-384. <https://doi.org/10.1093/ser/mww005>
- Djankov, S., McLiesh, C., and Shleifer, A. (2007). Private Credit in 129 countries, *Journal of Financial Economics*, 84:299-329. <https://doi.org/10.1016/j.jfineco.2006.03.004>
- Fan, W., and White, M. J. (2003). Personal Bankruptcy and the level of entrepreneurial activity. *Journal of Law and Economics*, 46(2): 543-567. <https://doi.org/10.1086/382602>
- Fang, Y., Hasan, I., and Marton, K., (2014). Institutional development and bank stability: Evidence from transition countries. *Journal of Banking & Finance*, 39(C):160-176. <https://doi.org/10.1016/j.jbankfin.2013.11.003>
- Fossen, F. M. (2014). Personal Bankruptcy Law, Wealth, and Entrepreneurship: Evidence from the Introduction of a 'Fresh Start' Policy. *American Law and Economics Review* 16:269-312. <https://doi.org/10.1093/aler/aht015>
- Haselmann R., Pistor K., and Vig V. (2009). How law affects lending, *The Review of Financial Studies*, 23(2): 549-580. <https://doi.org/10.1093/rfs/hhp073>
- Haselmann R., and Wachtel P. (2010). Institutions and Bank Behavior: Legal Environment, Legal Perception, and the Composition of Bank Lending. *Journal of Money, Credit and Banking*, 42(5):965-984. <https://doi.org/10.1111/j.1538-4616.2010.00316.x>
- McGowan, M. A., Andrews, D., and Millot, V. (2017). The Walking Dead? Zombie Firms and Productivity Performance in OECD Countries, OECD Working Paper ECO/WKP(2017)4. <https://doi.org/10.1787/180d80ad-en>.
- McGowan, M. A. and Andrews, D. (2018). Design of Insolvency Regimes across Countries, OECD Economics Department Working Paper No. 1504. <http://dx.doi.org/10.1787/d44dc56f-en> Peng, M.W., Yamakawa, Y., and Lee, S.-H. (2010). Bankruptcy laws and entrepreneur-friendliness. *Entrepreneurship Theory and Practice*, 34 (3):517-530. <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1540-6520.2009.00350.x>
- Peng, M. W., Yamakawa, Y., and Lee, S.-H. (2010). Bankruptcy Laws and Entrepreneur-friendliness. *Entrepreneurship Theory and Practice*, vol. 34(3): 517-530. <https://doi.org/10.1111/j.1540-6520.2009.00350.x>

Qian, J., and Strahan, P. E. (2007). How Laws and institutions shape financial contracts: the case of bank loans. *Journal of Finance*, 62(6):2803-2834. <https://doi.org/10.1111/j.1540-6261.2007.01293.x>

Rodano G., Serrano-Velarde N., and Tarantino E. (2016). Bankruptcy law and bank financing. *Journal of Financial Economics*, 120: 363-382. <https://doi.org/10.1016/j.jfineco.2016.01.016>

Vig, V. (2013). Access to Collateral and Corporate Debt Structure: Evidence from a Natural Experiment, *Journal of Finance*, 68(3):881-928. <https://doi.org/10.1111/jofi.12020>

## **Imprint**

DIW Berlin – Deutsches Institut  
für Wirtschaftsforschung  
Mohrenstraße 58, 10117 Berlin

Tel. +49 (30) 897 89-0  
Fax +49 (30) 897 89-200  
<http://www.diw.de>

ISSN 2198-3925

All rights reserved.  
© 2019 DIW Berlin

Reprint and further distribution  
–including extracts–  
with complete reference and  
consignment of a specimen  
copy to DIW Berlin's  
Communications Department  
([kundenservice@diw.berlin](mailto:kundenservice@diw.berlin)) only.