Distressed Acquisitions
-Evidence from European Emerging Markets-

Ichiro Iwasaki, Evžen Kočenda, and Yoshisada Shida

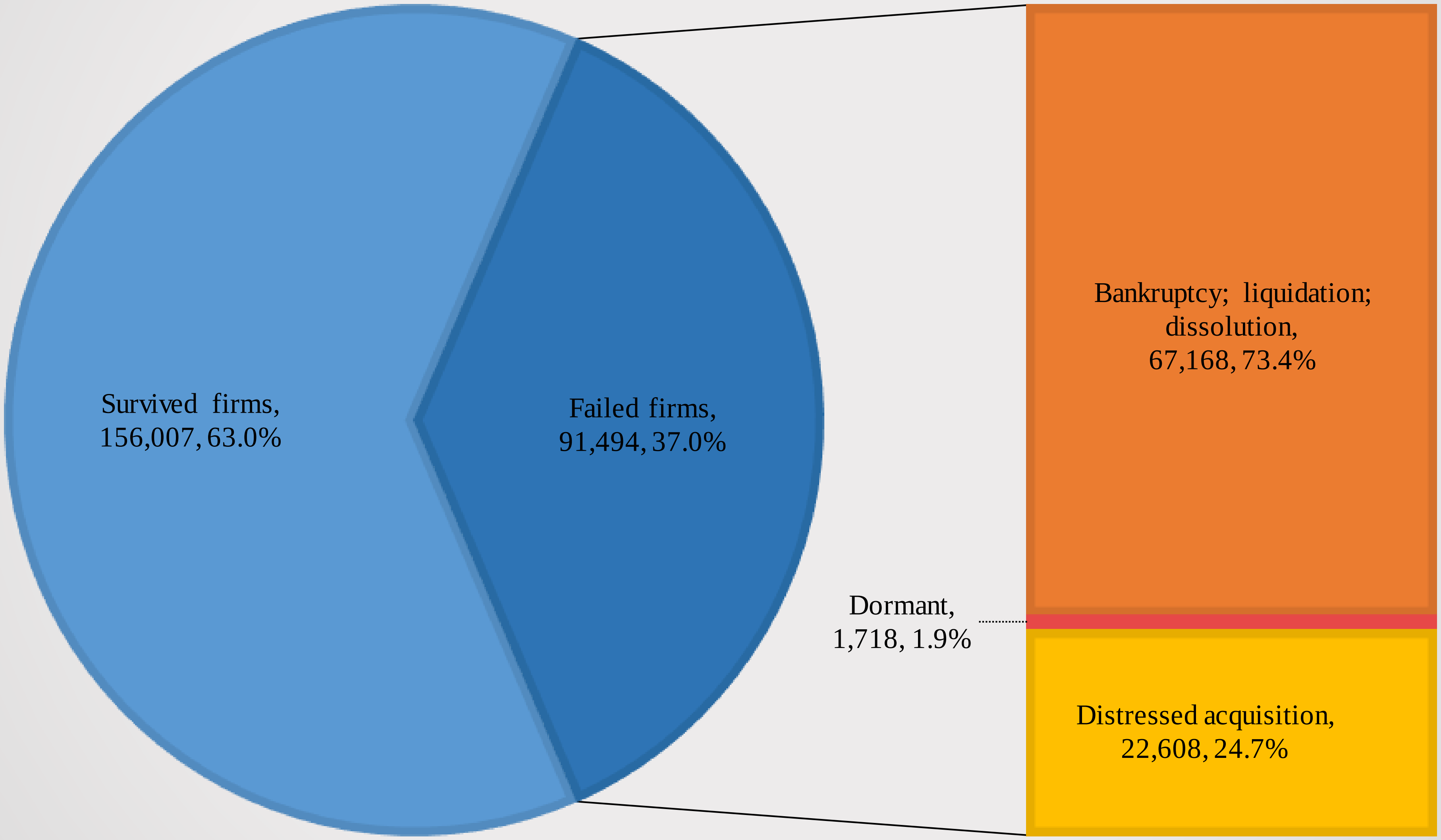
Motivation

- Some companies that have gone bankrupt are not liquidated via legal process, but are acquired by another company. That is "distressed acquisition“ (DA).
- What are the factors that push a bankrupt company into liquidation or DA? This is a major issue in the corporate finance literature, but the previous research that tackled this issue is very limited.
- In Europe, since the early 1990s, multinational corporations in developed countries have actively acquired companies in Central and Eastern Europe, triggered by the large-scale privatization of companies in the post-communist world.
- In recent years, there have been many DAs of Central and Eastern European companies that went bankrupt under the influence of the 2008 global financial crisis.
- However, the knowledge about the actual situation and the background factors of DAs is very limited.
- This study aims to eliminate the above gap through empirical analysis using large-scale data from companies in 17 European emerging markets.

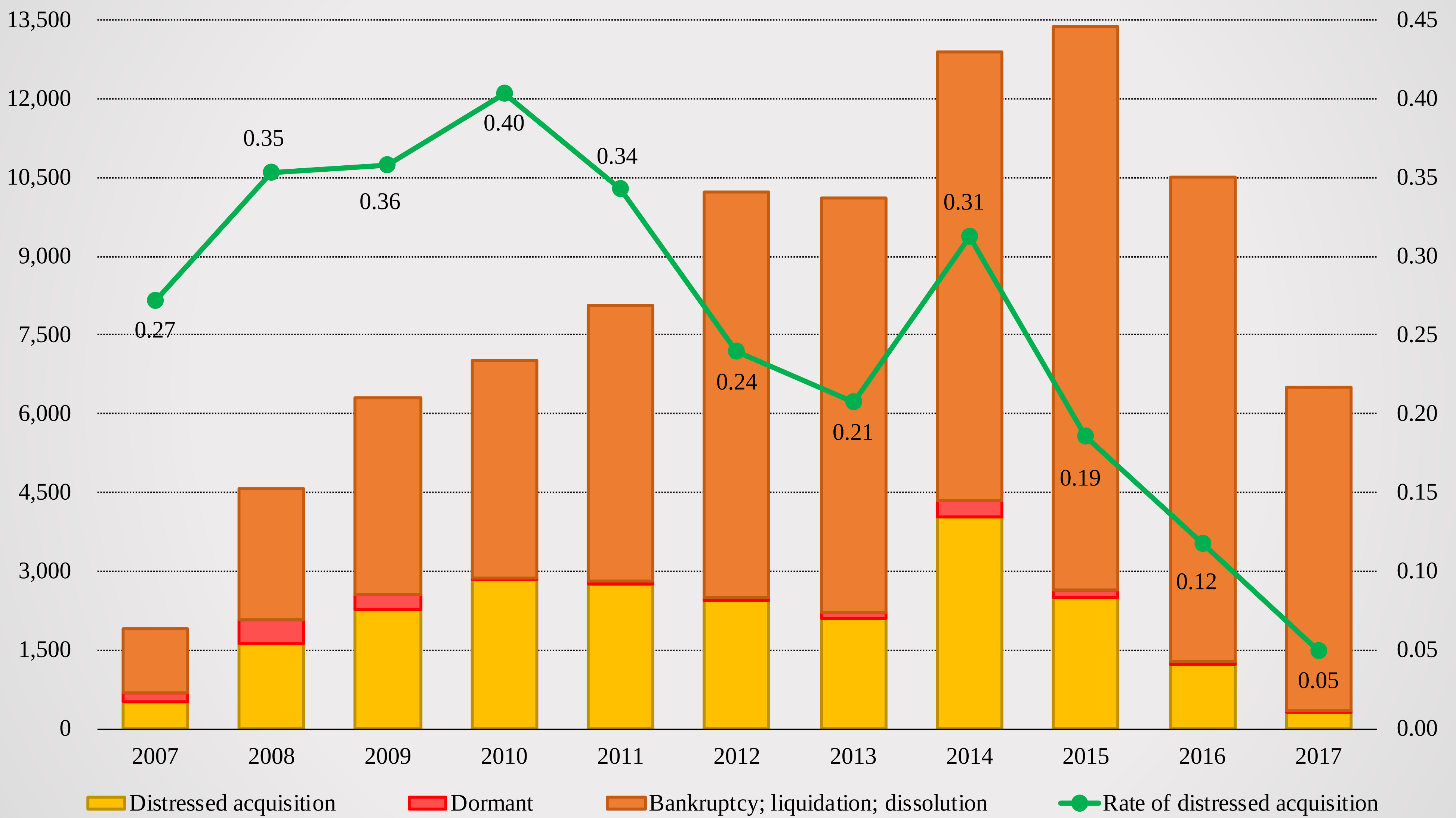
Data

- The 2006/2018 archive data of the Orbis corporate database operated by Bureau van Dike (BvD) is adopted.
- Referring to the 2006 archive data, we listed 247,501 companies in 17 emerging market countries in Europe (4 Central Europe, 7 Eastern Europe, 3 Baltic states, Moldova, Ukraine, Russia) whose "survival” is confirmed as of the end of 2006.
- Using the 2018 data, we tracked the survival status of the above 247,501 companies by the end of 2017.
- We classified companies that continued their management activities from the beginning of 2007 to the end of 2017 (survivors), companies that fell into a dormant state after bankruptcy, liquidated companies, and companies rescued by DAs.
- Other company-level data is also obtained from the Orbis database.
- Country-level data is available from the ERBD and Freedom House.

Survival status of 247,501 firms in 17 European emerging economies at the end of 2017

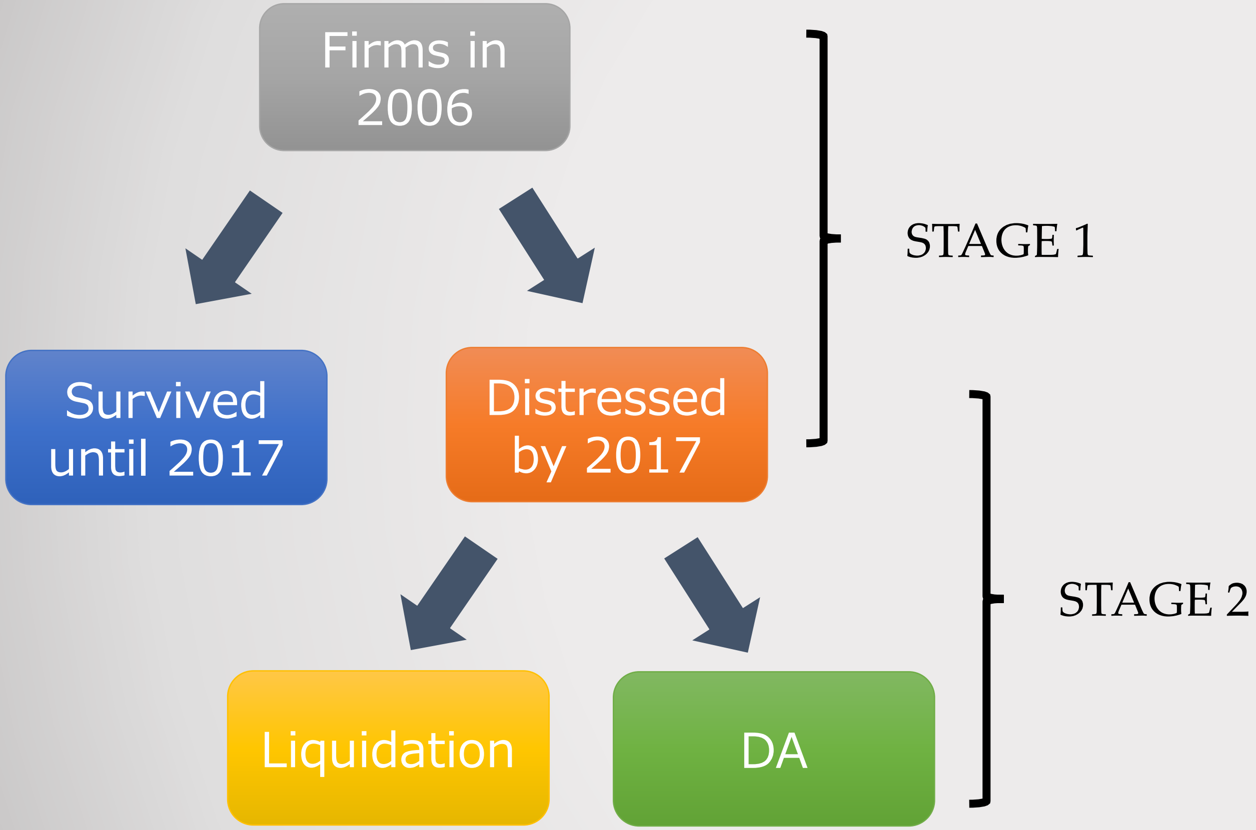


Dynamics of firm failure and distressed acquisitions in 17 European emerging economies during the period from 2007 to 2017



Note : The left axis is number of failed firms, while the right axis is the rate of distressed acquisitions (i.e., the share of distressed acquisitions in failed firms).

Empirical Strategy



- Firms operating at the end of 2006 are divided into surviving companies and distressed ones by the end of 2017 (STAGE 1)
- Firms under distress are divided into liquidated ones and those saved via distressed acquisitions DAs (STAGE 2).
- If two-stage process is ignored and only STAGE 2 is modeled, the impact of the independent variable may be overestimated or, conversely, underestimated by the so-called sample selection bias.

Empirical Strategy

- The selection model with the distress probability (D_i) of the *i*-th company as the dependent variable is estimated in the first stage, and the outcome model with the acquisition probability (A_i) as the dependent variable is estimated in the second stage.

  Distress model: $Pr(D_i = 1|Z_{ij}) = \mu + \alpha Z_{ij} + \varepsilon_i \quad (1)$

  Acquisition model: $Pr(A_i = 1|W_{ij}) = \eta + \beta W_{ij} + \lambda_i + \epsilon_i \ (2)$

- Z_{ij} and W_{ij} are the vectors of variables that can affect the failure probability and acquisition probability of the *i* company in country j, respectively, λ_i is the selection bias correction term obtained from the estimation of the first stage, and α and β are the parameters, μ and η, are constant terms, and ε_i and ϵ_i are error terms assuming that the following conditions are met:

$$\begin{pmatrix} \varepsilon_i \\ \epsilon_i \end{pmatrix} \sim i.i.d.\left(\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} \sigma_\varepsilon^2 & \rho_{\varepsilon\epsilon} \\ \rho_{\epsilon\varepsilon} & \sigma_\epsilon^2 \end{pmatrix}\right) \quad (3)$$

- The presence or absence of selection bias is verified by LR test of the null hypothesis that ρ in Eq. (3) is zero.

Research Summary

- We analyze factors behind 22,608 distress acquisitions in European emerging markets during 2007–2017.
- Besides of the impact of financial ratios, legal form, ownership structure, firm size and age, we emphasize the role of institutions and channels of their propagation.
- We show that the quality and enforcement of insolvency law are linked to lower probability of distressed acquisitions, followed by the corruption control and progress in banking reforms.
- The impact of institutions is larger in less-advanced countries when compared to economically stronger ones.
- The effect of institutions increased after the financial crisis but declined as the economic situation improved.

Institutions matter

- The results of this study strongly suggested that the country-level institutional quality also greatly influences the probability of DA.
- In other words, the more efficiently the bankruptcy law is operated, corruption is effectively suppressed, and the degree of development of the banking system is high, the more the bankrupt company is liquidated according to the legal procedure, not by the DA.
- The results of this study show that the DA of distressed companies in European emerging markets works as a mean to complement the deficiencies of the institutions in order to effectively redistribute the tangible and intangible assets of bankrupt companies with relatively high potential.

Thank you for your attention!