IMPROVING BARGAINING POWER OR PUTTING SAFETY FIRST? OWNERSHIP STRUCTURE AND THE EFFECT OF LABOR MARKET REGULATION ON LEVERAGE

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Abstract

Exploiting intertemporal variation in employment regulation, we study the role of ownership structure in the relationship between labor market rigidity and firms' financial leverage. Arguing that employment protection increases operating leverage and that corresponding risk considerations are particularly important for (undiversified) blockholders, we hypothesize that firms with concentrated ownership will react with (relatively) more conservative capital structure choice. Examining listed firms in 29 OECD counties over a twenty-year period provides supporting evidence. Higher ownership concentration is associated with more conservative capital structure responses. These results hold in panel and cross-sectional settings, and are not driven by pre-treatment differences between treated and control firms. Also, our findings remain robust under applications of alternative definitions of key empirical measures.

Keywords: Financial leverage, ownership structure, labor regulation, financial flexibility, bargaining power

JEL Classification: G32, G33, J31, K31

I. Introduction

Does labor market regulation affect firms' capital structure decision and if so, how and why? While these questions have received considerable attention in empirical corporate finance literature over the last years (e.g. Matsa (2010), Simintzi et al. (2015), Serfling (2016), Ellul and Pagano (2017), Qui (2018)), results of the extant research are mixed. Prior work offers two competing views to explain the role of labor market frictions for firms' financing choices. Proponents of the *bargaining power* view argue theoretically that firms respond to an increase in labor market rigidity by using debt as a strategic device to improve their bargaining position vis-à-vis employees (Bronars and Deere (1991), Perotti and Spier (1993), Dasgupta and Sengupta (1993)) and find empirically that stronger labor protection is associated with higher financial leverage (Matsa (2010), Benmelech et al. (2012), Myers and Saretto (2016), Ellul and Pagano (2017)). In contrast, advocates of the *financial flexibility* view reason that stricter labor market regulation increases operating leverage, which in turn crowds out financial leverage, and present supporting empirical findings (Kahl et al. (2014), Simintzi et al. (2015), Serfling (2016), Kuzmina (2018)). As the underlying mechanisms and causes at work are not yet fully understood, the discussion on this matter is still open.

Arguably, both views might be not mutually exclusive but rather complementary. Mixed empirical evidence might result due to omitted factors that moderate the effect of labor market regulation on firms' financial leverage (Schmalz (2018), Qiu (2018)). Specifically, we suggest that heterogeneity in ownership structures and associated differences in risk preferences of influential shareholders might explain the puzzle. We argue that with increasing employment protection firms face a trade-off between the benefit of additional leverage (bargaining power) versus its cost (higher financial risks). Thereby, the latter is a function of the degree of diversification of influential shareholders. Thus, we hypothesize a moderating effect of ownership structure in the labor-leverage nexus. Theoretically, we link this moderating effect to the size of the investment and the ownership type. In particular, we argue that inside owners and strategic blockholders are relatively less diversified when compared to non-blockholders and institutional investors and thus assign higher costs to financial risks.

In this paper, we employ triple difference-in-difference (DID) method to examine how firms' ownership structure moderates leverage adjustments in response to the exogenous intertemporal variation in country-level employment protection legislation. In a closely related study, Simintzi, Vig, and Volpin (2015) analyze how labor market reforms affect financial leverage of firms listed in OECD countries. Our analysis aims to complement and simultaneously extend this study in at least three dimensions. First, we explicitly focus on the moderating factor "ownership structure". Second, we employ triple DID in the panel and cross-sectional settings. Third, we benefit from the improved data availability and examine some 200.000 firm-year observations of non-financial listed firms from 29 OECD countries over the 1994-2014 period.

Our empirical analysis proceeds in three steps. *First,* we replicate the analysis by Simintzi et al. (2015) to verify that our results are not data-driven. *Second*, we examine the role of ownership structure in the labor-leverage relationship by switching from DID to triple DID in the panel framework. We find that leverage of firms with (poorly diversified) blockholders reacts more negative to changes in labor market protection. These findings remain robust, even after controlling for country-specific year trends. *Third*, we explicitly focus on significant changes in labor market protection and employ triple DID in the cross-sectional framework. Again, we find that, following an increase in employment protection, firms with more diversified investors increase leverage, while firms with blockholders respond with more conservative financial policies. Thereby, the magnitude of the response increases gradually over the next two years after the change indicating the persistency of the effect and moreover, firms' asymmetric adjustment behavior, probably due to adjustment costs of reducing leverage. To mitigate concerns that these results are driven by pre-treatment differences in characteristics of treated and control firms, we employ a range of matching techniques, with a special focus on propensity-score matching. In a series of robustness tests, we validate our findings under application of alternative definitions of ownership concentration, leverage, and employment protection measures.

Overall, our paper documents that firms' ownership structure moderates the labor protection-leverage nexus. Moreover, consistent with our economic intuition

crowding out of financial leverage is only observed in firms with presumably imperfectly diversified influential shareholders. In this paper, we aim to contribute to the literature by showing the importance of ownership heterogeneity. Our findings imply that the degree of shareholders' diversification affects the credibility of firms' financial distress and, therefore, ownership structure determines the appropriateness of the bargaining power or financial flexibility view in explaining the relationship between labor and leverage.

The remainder of this paper is structured as follows: Section II reviews the literature used to derive our hypothesis. Section III introduces the data and discusses empirical measures and method. Section IV presents our main findings. Section V reports the results of robustness checks and Section VI concludes.

II. Related Studies and Hypothesis Development

During the decade of the nineties, research that relates firms' financial policy to characteristics of their products or inputs, has appeared (Franck and Huyghebaert (2004)). This new line of literature lies at the intersection of corporate finance, industrial economics, and strategic management and examines the role of market structure and factor-product markets in firms' financial decisions. The latter adopt the concept of Jensen and Meckling (1976) considering firms as a nexus of contracts with their employees, suppliers and customers.[1] Thus, firms should take into account not only investors as claimants to their cash flow, but also firms' non-financial stakeholders. In particular, labor as a critical input factor of production may impose high costs on firms and extract rents, whose extent is assumed to be related to the bargaining situation inside the firm. Thereby, leverage may affect the bargaining position of each party. Yet, the existing theoretical and empirical literature does not deliver univocal prediction on the labor-leverage nexus.

A. Strategic Bargaining View vs. Financial Flexibility View

Two competing views shape the debate on the interplay between labor market frictions and firms' financing choices. The intuition behind *strategic bargaining*

[1] For comprehensive surveys of theoretical and empirical works on different theories on capital structure see e.g. Harris and Raviv (1991) and Istaitieh and Rodriguez-Fernandez (2006).

view is that financial policy can be used by firms to improve their bargaining power vis-à-vis employees. Just as leverage can be used to absorb excess liquidity from unprofitable spending by managers (Jensen (1986)), debt commitments can also serve as a strategic tool in preventing the expropriation of future cash flows by labor (Bronars and Deere (1991), Perotti and Spier (1993)).

Proponents of strategic bargaining view provide supporting empirical evidence. Hanka (1998) reports a significant negative association between wages, pension funding, (full time) employment and debt ratio. Myers and Saretto (2016) find that unions are more likely to "win" strikes if firm leverage has decreased in the preceding years. In a similar vein, Matsa (2010) shows that firms with greater exposure to unionization use more debt. In context of the airline industry, Benmelech et al. (2012) document wage concessions and pension underfunding for firms in financial distress. Finally, Ellul and Pagano (2017) find that firms response with increasing debt to increasing workers' seniority rights in bankruptcy.

An alternative explanation for the labor-leverage nexus is *financial flexibility view*. The strategic bargaining proposition has been initially challenged by Simintzi et al. (2010, 2015) arguing that rigid labor market amplifies firms' fundamental operating risk and leads to an increased need for financial flexibility. Exploiting intertemporal variation in employment protection legislation in 21 OECD-countries, the authors find negative association between labor market rigidity and firms' financial leverage. They interpret these results as crowding out effect of operating leverage on financial leverage.[2] Follow-up empirical studies find similar results (Kahl et al. (2014), Schmalz (2018), Serfling (2016), Kuzmina (2018)).

B. The Role of Ownership Structure in the Labor-Leverage Nexus

While the bargaining view and the financial flexibility view are conceptually different, this dichotomy is probably not so clear-cut if firms' response to changes in labor market rigidity depends on firm's settings and characteristics.[3] Yet, consistent with the contracting theory "the firm is not an individual" but "a nexus of

[2] Earlier works demonstrate the importance of operating costs for the firm and show that fixed labor costs may be an important source of operating leverage (Rubinstein (1973), Lev (1974), Danthine and Donaldson (2002)). Yet, labor regulation might make labor costs more fixed in nature and thus, increase operating costs which a firm has to pay independently of its performance.

[3] For a similar argumentation, see Chino (2016), Qiu (2018), Schmalz (2018).

contracts" (Jensen and Meckling (1976)). Thus, the explanatory power of the bargaining or financial flexibility motive might depend on the characteristics of contracting parties, i.e. shareholders and other stakeholders, in particular employees.

As stated by financial literature, shareholders' roles and objectives condition on their ownership type and the size of their investment (Demsetz and Lehn (1988), Holderness and Sheehan (1988)). Accordingly, major corporate decisions – like financial policy – may differ in firms with controlling blockholder compared to widely-held firms (Holderness (2003)). In this paper, we suggest that ownership structure plays the moderating role in the labor-leverage relationship, namely firms with blockholders response to increasing labor market rigidity with (more) conservative financial policy than widely-held firms.

In terms of trade-off theory, with increasing employment protection firms face a trade-off between the benefit of additional leverage (bargaining power) versus its cost (higher financial risks). The question arising is whether the strengthening of bargaining position or financial flexibility motives predominate in firms with different owner types. First, we use the lens of blockholders considering these competing views. The four main determinates of bargaining power, proposed by negotiation and bargaining power literature (Marburger (1994), Pfeffer (1981), Porter (1980)) are i) capability to act in a unified manner, ii) access to information, iii) replacement cost to the firm, and iv) exit costs. Influential blockholder do not need a union to act in a unified manner, since the line of authority is clear. They do not suffer from a lack of information and expertise (Shleifer and Vishny (1986)). Owning enough stocks to affect the price, they cannot be substituted easily by other investors. Hence, controlling shareholders typically have significant power over the firm (La Porta et al. (1999)) so that higher priority of enhancing shareholders' interests over employees is given by the nature of blockholding.

From the perspective of the financial flexibility issue, concentrated ownership, however, implies potential drawbacks. Having large holdings of individual stocks results in failure to diversify and thus, being a subject to idiosyncratic firm-level shocks (Fama and Jensen (1983), Campbell et al. (2001)). Increasing employment protection raises firm's fundamental risk through increasing operating leverage and, as a result, costs of financial distress. Thereby, the latter is a function of the

degree of diversification of the shareholder. As influential blockholders are non-diversified, they will assign higher costs to financial risks and strive for more financial flexibility. While increasing leverage will amplify the effect on idiosyncratic firm risk, blockholders will prefer to reduce the amount of debt financing.

In contrast to large influential blockholders, small shareholders are not concerned about the financial flexibility aspects, partly due to significantly lower bankruptcy costs. Non-blockholders are typically well diversified and care mainly about the market risk and short-term returns. While the holding in one particular firm represents only a small proportion of their stock portfolio and thus, of their wealth, the bankruptcy of a firm does not imply the same drastic consequence compared to blockholders.

The previous literature has long recognized that small shareholders, however, are at a disadvantage regarding their bargaining power vis-à-vis other stakeholders (Berle and Means (1932), Jensen and Meckling (1976), Coff (1999), Pagano and Volpin (2005), Atanassov and Kim (2009)). Having difficulties to coordinate their actions and being subject to the free-rider problematics, small investors are less able to act in a unified manner. In contrast to large shareholders, they also do not have either the incentive to alleviate agency problems, nor the power to do so (Shleifer and Vishny, 1997). Due to small stock holdings, diffuse shareholders can be theoretically easily replaced as well. Thus, they have to care about increasing bargaining power of employees to extract rents and, in turn, to lower the portion of current cash flow available for payout. While too much financial flexibility might even hurt the already limited bargaining power of diffuse shareholders, raising debt can be used to protect them from increasing labor power and costs.[4]

Therefore, our main hypothesis is:

H1: Ceteris paribus, with increasing labor market regulation, leverage (a) decreases in firms with blockholders and (b) increases in widely-held firms.

[4] Ex ante, it is difficult to argue whether shareholders or managers make decisions in widely-held firms. Yet, previous literature suggests that labor negotiation outcome can be affected by the firm through raising debt, reducing cash or curbing executive compensation. Thus, managers may also have the incentive to dampen labor bargaining power by increasing leverage. For a comprehensive discussion see Huang et al (2017).

III. Data and Methodology

To test our hypothesis, we collect data on (a) country-level labor market regulation, (b) firm-level variables and (c) other country-level variables. A detailed overview of all variables' definitions and sources is given in Table 1 in Appendix.

A. Labor Market Regulation: Measure and Source of Variation

Recent studies use adoption of laws or changes in labor legislation to analyse shifts in the bargaining situation inside the firm (Matsa (2010), Serfling (2016), Kuzmina (2018)). They argue that employment protection legislation imposes implicit and explicit costs on employers, in other words, affects firm's financial flexibility by granting labor a great deal of bargaining power (Tirole (2006)). This can happen in at least two ways. First, employment protection constrains firm's ability to adjust its workforce and second, causes the rigidity of wages, severance payments and other labor-related costs. For instance, it leads to wages, which are greater than what is needed to prevent employees from quitting (Milgrom and Roberts (1992)), and marginal labor costs higher than the corresponding marginal labor output.[5]

Therefore, we operationalize labor market rigidity by changes in Employment Protection Legislation (EPL) index from OECD Database. EPL index refers to 18 items of labor regulation aggregated into three broad dimensions (OECD Outlook (2013)): 1) strictness of regulation for employees with regular contracts, 2) strictness of regulation on the use of fixed-term and temporary work agency contracts, 3) additional provisions applying to collective dismissals. Accordingly, EPL focuses on employment contracts reflecting the strictness of hiring and firing practices and labor turnover costs.

Since EPL index is largely time-invariant (within standard deviation is 25%), the primary source of variation in our data originates from the cross-sectional differences on the country level (between standard deviation is 90%). Thereby,

[5] The ability to quickly respond to changing market conditions and efficiently adjust labor resources is vital for firms' profitability, growth and survival in the long run. Specifically, impeding firing of employees in low cash flow years makes the marginal costs of an employee higher than her marginal output and, consequently, dampens firm profitability.

changes in country policies in general and labor laws in particular represent an exogenous shock that is expected to be orthogonal to firm characteristics (Meyer (1995), Angrist and Krueger (1999), Rosenbaum (2010)). The latter determines the advantage of EPL over the unionization or bargaining coverage rate as commonly used measures in the empirical literature (Bronars and Deere (1991), Klasa et al. (2009), Matsa (2010), Chen et al. (2011)). The partial dependency of union and coverage rate on other leverage determinants, like size, may cause self-selection and endogeneity issues.

EPL index is a continuous variable that can take any value between 0 and 6, where higher score indicates stronger labor protection. Because data on provisions applying to collective dismissals have been added only in 1998, in the baseline analysis, we construct EPL index as an average of indicators for regular and temporary contracts.[6] In robustness checks, we define EPL as a weighted average of three dimensions, i.e. include additional provisions on collective dismissals.

B. Firm-Level Data

We supplement EPL data with firms' financial and ownership data obtained from Thomson Reuters Datastream. Our initial sample consists of all active and inactive listed firms identified in Thomson Reuters constituent lists in the period from 1994 to 2014 in twenty-nine OECD countries[7], for which EPL index is available. We start in 1994 because of poor quality of both financial data and data on employment protection in the years before, and we stop in 2013 because the data on employment protection are not available for further years.

To avoid sample inconsistency and survivorship bias, we restrict the sample first, to stocks of type "equity", second, to companies and securities located and listed in the domestic country, third, to the primary listing securities. Fourth, we exclude securities with foreign ISIN. Firms from financial and utility sectors (SIC 6000-6999 and 4900-4999, respectively) are removed from the sample due to

[6] Averaging of indicators for regular and temporary contracts follows the aggregation procedure used by OECD (OECD Outlook, 2013).

[7] They are: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

different accounting standards and practices, and since their leverage decisions are primarily driven by other considerations (Rajan and Zingales (1995)). Next, we require that all firm-years have non-missing, non-negative and non-zero total assets and total equity figures. Finally, we apply two consecutive years' restriction as the model uses lagged variables. This restriction implicates that our sample involves year 2014 for dependent variables.

The final sample, we use in our main analysis, is an unbalanced panel that consists of 233,057 firm-year observations corresponding to 28.253 firms in 29 countries during the period 1994-2014.

The outcome variable for our analysis is firms' leverage ratio. In the baseline specification, we consider two measures of financial leverage. As primary proxy, we use the ratio of total debt over the book value of total assets. According to Graham and Harvey (2002), managers focus on the book leverage rather than market leverage when they make capital structure decisions. Welch (2004) shows that a large portion of the variation in market leverage relates to the variation in market values rather than those in the debt policy.[8] More important in the context of our analysis is that there is also evidence that pro-labor regulation is treated as negative news by the capital market and has negative association with firms' market value (Hirsch (1991), Besley and Burgess (2004), Lee and Mas (2009)). Thus, because both numerator and denominator may move, it would be difficult to relate the effect only to one of them. As an alternative definition of leverage we use the ratio of long-term debt over book value of assets. Following Lemmon et al. (2008), leverage ratios – both total and long-term leverage – are restricted to be between 0 and 1 as the closed unit interval.

In the baseline specification, we proxy for firm's ownership structure by the well-established measure of ownership concentration *Closely Held Shares (CHS)* provided by Thomson Reuters Worldscope (Thomsen et al. (2006), Firk et al. (2016)). Worldscope Database defines CHS as a percentage of shares held by insiders and includes but is not restricted to: a) shares held by officers, directors and their immediate families; b) shares held in trust; c) shares of the company

[4] For further arguments in support of book leverage measure see e. g., Myers (1977), Fama and French (2002).

held by any other corporation (except shares held in a fiduciary capacity by banks or other financial institutions); d) shares held by pension/benefit plans; and e) shares held by individuals who hold 5% or more of the outstanding shares (Thomson Financial, 2007, Worldscope Database-Datatype Definitions Guide). We divide CHS by 100 to bring it on the same scale with the outcome variable and drop any observation with the ownership stake(s) above 100 percent.

Firm-level control variables include a common set of explanatory variables for leverage, identified in the literature on the capital structure (see, e.g., Harris and Raviv (1991), Rajan and Zingales (1995), Frank and Goyal (2008), Lemmon et al. (2008)). They are: size as indicator of firms' diversification level or an inverse proxy for the probability of bankruptcy; tangibility as a proxy for the amount of collateral that firms can pledge to diminish the agency costs borne by investors; profitability as a proxy for the availability of internal funds; and the market-to-book-ratio (Tobin's Q) as a proxy for growth opportunities. In Table 2 we report summary statistics for all variables used in the main analysis. The average firm in the sample has total book leverage of 19,7% and CHS of 38%. Firm size is on average 11.9. Tangibility is 29,5% for the average firm and profitability is 2,2%. The average firm in the sample trades at a market-to-book ratio of 2.1.

C. Other Country-Level Variables

To control for macroeconomic conditions across countries, we include country-level control variables. The expected inflation rate controls for the real value of tax deduction (Frank and Goyal (2009)). GDP growth controls for macroeconomic down- and upturns. GDP per capita proxies for a country's economic development (Demirgüc -Kunt and Maksimovic (2002)). Table 2 provides summary statistics for the country-level variables.

D. Difference-in-Differences Design

Our baseline empirical method is difference-in-differences (DID) in multiple treatment groups, multiple time periods setting, and with treatment variable of different intensity as employed by Bertrand et al. (2004), Angrist und Pischke (2008), Imbens and Wooldridge (2009). To empirically test our hypothesis, we exploit exogenous variation resulting from intertemporal changes in the EPL index

(considered as a treatment). The staggered character of changes in the EPL allows firms from a particular country to be in both treatment and control groups at different points in time. In the regression framework, it means that all firms incorporated in countries not passing a law at time *t* are implicitly taken as the control group, even if they have already passed a law or will pass one later. This helps to alleviate concerns about large difference between treatment and control firms.

Our empirical strategy consists of three steps. First, we replicate the approach used by Simintzi, Vig, and Volpin (2015) – hereinafter referred to as SVV – and adopt DID model of the form:

$$y_{it} = \lambda_i + \delta\, EPL_{k,t-1} + \beta\, X_{it-1} + \alpha_j . \gamma_t + \varepsilon_{it} \qquad (1)$$

where *i, t, k* are subscripts for a firm, year and country, respectively. y_{it} denotes leverage; $EPL_{k,t-1}$ is the EPL index, lagged by one year to capture the gap between the legislative enactment and implementation; X_{it-1} is a vector of firm-level and country-level control variables, lagged by one year to account for the persistence effect; $\alpha_j . \gamma_t$ is 12 Fama-French industry-year fixed effects which account for unobserved time-varying industry shocks; λ_i denotes firm fixed effects to control for time-invariant omitted firms' characteristics; ε_{it} is an unobserved error term. All regressions are performed using heteroskedasticity-robust standard errors clustered at the country level due to the country-level variation in EPL. This clustering method alleviates concerns of potential time-varying correlations in unobserved factors that affect different firms within a given country, and also corrects for within-firm error term correlations over the time (Bertrand et al. (2004)).

Second, to examine the role of ownership structure in the labor-leverage relationship, we switch from DID to triple DID by interacting CHS with EPL as follows:

$$y_{it} = \lambda_i + \delta_1\, EPL_{k,t-1} + \delta_2\, (EPL_{k,t-1} \times CHS_{it}) + \beta\, X_{it-1} + \alpha_j \times \gamma_t + \varepsilon_{it} \qquad (2)$$

All variables, except the interaction, are defined as before. The interaction term $(EPL_{k,t-1} \times CHS_{it})$ allows measuring the differential effect of a change in labor protection that varies across firms with different ownership concentration.

Yet, the empirical identification in the DID approach comes from the assumption of counterfactual outcomes, whose violation would cause endogeneity (Angrist

und Pischke (2008)). In particular, we assume that (i) treatment induces the deviation of leverage from common trends and (ii) there are no other state-level policies that might be responsible for leverage adjustments. Accordingly, we extend Model (2) by country specific year trend as follows:

$$y_{it} = \lambda_i + \delta_1 EPL_{k,t-1} + \delta_2 (EPL_{k,t-1} \times CHS_{it}) + \beta X_{it-1} + \alpha_j \times \gamma_t + \tau_{kt} + \varepsilon_{it} \quad (3)$$

τ_{kt} denotes the country specific year trend and all other variables are defined as before. Effectively, including a parametric trend allows for identification of the EPL effect, which is different from the pre-existing country specific trends (Besley and Burgess (2004)). Therefore, Model (3) is our main specification.

IV. Results

A. Replication of the Analysis by Simintzi, Vig, and Volpin (2015)

As a precursor to our main results, this section starts with the replication of main findings of Simintzi et al. (2015), whose academic study firstly provide empirical evidence for the financial flexibility view. This step aims to verify whether our results are data-driven.

We undertake a "differentiated" replication, rather than a "closed" one (in the sense of Lindsay and Ehrenberg (1993)) by using OECD EPL index as a measure of employment protection.[9] In Panel A of Table 3 we apply the model of SVV, and then, to get closer to the sample of SVV, in Panel B, we analyse the same country set, and in Panel C, we additionally stop in the year 2007. In all specifications the coefficient estimates are negative and statistically significant at 1% or 5% level for both outcome variables. Overall, our replication results are comparable with findings of SVV. The comparability of results suggests that findings in the next sections are not driven by the single set of data.

B. EPL, Ownership Structure, and Leverage: Panel Analysis

Table 4 presents the results of the panel data analysis examining the role of ownership structure in the labor-leverage nexus controlling for firm and country

[9] While SVV follow the construction principles used by OECD and dimensions captured in the EPL index, the authors create their own indicator considering the major labor reforms across countries.

leverage determinants. Leverage is defined as total debt over the book value of total assets in Columns 1 and 3, and as long-term debt over the book value of total assets in Columns 2 and 4. All columns include firm fixed effects and industry-year fixed effects. In Columns 1 and 2, the coefficient estimate on the interaction term is negative and statistically significant at the 5% level. One-unit increase in EPL is related to 100 basis points larger decrease in both total and long-term leverage for firms with blockholders compared to widely-held firms. These results are consistent with our prediction that firms with influential shareholders respond to increasing labor protection with more conservative financial policy.

In Columns 3 and 4, we extend our analysis by country specific year trends. The coefficients on main effect of EPL, for both total and long-term leverage, turn to be positive but remain statistically insignificant, while the coefficients on interaction terms remain negative and become significant at the 1% level. For firms with CHS equal 0%, the interaction term drops out, so that the coefficient on the stand-alone EPL index reflects an increase in total leverage by 100 basis points due to an increase in labor protection. While the coefficient on interaction term in Column 3 doubles in magnitude, the net effect of an EPL increase is a reduction in total leverage by 100 basis points in firms with 100% blockholding. The net effect on long-term leverage is slightly lower. Observing an increase in both the magnitude and statistical significance of interaction terms after including country specific year trends, we gain significance in our assumption about the importance of controlling for country common trends. Thus, Model (3) is used throughout the rest of the paper.

To assess the economic significance of the moderating role of ownership structure for the effect of EPL on leverage, we use the summary statistics from Table 2. For conciseness, we consider only the total leverage. In Column 3, one standard deviation increase in EPL index leads to an increase in leverage by ca. 4.7% of its mean in firms with CHS equal 0%, but to a decrease in leverage by ca. 4.7% of its mean in firms with CHS equal 100%. These figures imply that concentrated ownership structure (100%) attenuates the positive effect of EPL on leverage completely. For a firm with CHS equal to one standard deviation above the

sample mean (0.63=0.38+0.25)[10], a one standard deviation increase in EPL index is associated with *0.2 percentage points* (0.93x(0.01+(-0.02))x0.63) *decrease* in total leverage. For comparison, a firm with CHS equal to the U.S. sample mean (0.29), a one standard deviation increase in EPL index is associated with *0.4 percentage points increase* in total leverage. Given that U.S. firms have relatively low ownership concentration compared to European firms, these findings may explain the puzzle why U.S.-based studies typically provide evidence for the bargaining power view and European-based studies – for the financial flexibility view.

Taking into account differences in the level of labor protection across countries, we evaluate the partial derivative of leverage moving through the distribution of EPL. An increase in EPL index from the first to the third quartile by 1.47 leads to an increase in total leverage by 147 basis points in firms with CHS equal 100%, but to a reduction in total leverage by 38.2 basis points in firms with CHS equal 63% (constituting a difference of 185 basis points). The results show that the role of ownership concentration in the relationship of labor protection and firms' financial leverage is economically significant.

The coefficients on all firm-level controls are statistically and economically significant, and have signs predicted by financial literature, suggesting that the effect of changes in EPL index on leverage is not driven by its correlation with other firm characteristics. Inflation rate is positive and mostly statistically significant. GDP growth has the expected negative sign and is mostly statistically significant. This is consistent with the prediction that firms increase debt in macroeconomic downturns. GDP per capita is positive and significant indicating that leverage and economic development are positively related.

C. Cross-Sectional DID

In this section, we employ an alternative empirical strategy, cross-sectional triple DID, aiming to ensure that the estimated treatment effect comes from the differential effect of EPL and is not driven by changes in CHS. Simultaneously, we analyse whether the treatment effect grows or fades as time passes and whether

[10] Firms with CHS above 63% are located in e.g. Luxembourg, Mexico, Portugal, and Turkey. CHS is at least 57% for 75% of firms in our sample.

there are some trends in leverage before the change in EPL.[11] Specifically, we consider the episodes that allow for four years around the change in EPL index (τ-*2, …, τ, …, τ+2*)[12] and restrict the sample to firms experiencing EPL changes in their home country at τ=*0* (treated firms) and firms in countries that are not subject to an EPL change (control firms) in the five-year time window. That is, the control group for each country *c* experiencing an EPL change in year τ are all countries that do not experience a change in EPL in the corresponding five-year window. We remain with 21 episodes of EPL changes in 16 countries. The detailed overview is given in Table 5.

We run a regression of the form:

$$\begin{aligned} y_{i\tau} = \lambda_i + \delta_1 \Delta EPL_{k,\tau-1} + \delta_2 \Delta EPL_{k,\tau=0} + \delta_3 \Delta EPL_{k,\tau+1} + \delta_4 \Delta EPL_{k,\tau+2} \\ + \delta_5 (\Delta EPL_{k,\tau-1} x \, \emptyset CHS_{i,\tau-1}) + \delta_6 (\Delta EPL_{k,\tau} x \, \emptyset CHS_{i,\tau}) \\ + \delta_7 (\Delta EPL_{k,\tau+1} x \, \emptyset CHS_{i,\tau+1}) + \delta_8 (\Delta EPL_{k,\tau+2} x \, \emptyset CHS_{i,\tau+2}) \\ + \beta X_{i\tau} + \alpha_j \times \gamma_t + \tau_{kt} + \varepsilon_{it} \end{aligned} \quad (4)$$

where *i* denotes a firm and τ indicates the year of the EPL change. $y_{i\tau}$ is the measure of leverage in each time period τ. ΔEPL is the magnitude of EPL change that is constant for all τ. ØCHS is the average of CHS over two years prior to EPL change, which is used to measure CHS in all τ to ensure that leverage adjustment comes from the change in EPL rather than ownership structure.[13] $X_{i\tau}$ is a vector of contemporary firm-level control variables. The country specific year trends, τ_{kt}, control for macroeconomic factors.

Table 6 presents results on the cross-sectional triple DID where we pool together firms from treated countries with firms from corresponding control countries. One year prior to the EPL change and in the year of change, the estimated coefficients on the main effect of EPL as well as on interaction terms are statistically insignificant and fairly small in magnitude. In year τ+*1*, we observe sizeable and significant coefficient estimates on the main effect of EPL as well as the interaction

[11] While examining the dynamics of the EPL change effect in the panel setting may distort results because some countries experience gradual changes, e.g., in year t_1 and t_2 or t_1 and t_3, shortening the time window, on the opposite, allows us to analyse the effect of leads and lags of the EPL.

[12] The choice of five-year window follows recent studies showing that firms adjust leverage also in the second year after change in labor protection, see e.g. Simintzi et al. (2015), Serfling (2016).

[13] Time invariance of Δ EPL and CHS measures over the whole time window allows us to analyse cross-sectional differences in financing policies of widely- and closely-held firms. Therefore, we denote this empirical approach *cross-sectional* triple DID and use this notation throughout the paper.

terms for both definitions of leverage. The estimates in $\tau+1$ are quantitatively similar to those in Table 4, but, as expected, are larger in magnitude. The results reflect a substantial lasting effect in firms with influential blockholder(s), probably due to adjustment costs of reducing leverage. That is, whereas widely-held firms *uniformly increase* their leverage over two years, firms with concentrated ownership *gradually decrease* leverage. Overall, these findings have two important implications. On the one hand, they point out that the observed differences in trends between treated and control firms can be attributed to changes in EPL. On the other hand, the absence of significant lead effects means that treated firms do not anticipate future adaptions in EPL, i.e. do not adjust leverage before they have to bear the cost of more rigid labor markets, perhaps due to the extra tax shield related to more debt and adjustment costs.

Further, to address concerns that country-level economic conditions are potential confounding controls, we account for geographical differences between treated and control firms. By these means, we control that treated and control firms not only start off on parallel trends, but also would have continued on parallel trends without EPL change. Neighbouring countries may have common macroeconomic trends and be generally similar in many aspects. Assume, some unobserved changes in local conditions simultaneously drive changes in employment protection and changes in leverage and thus, it is these changes that firms in reality respond to. Since economic conditions have a tendency to spill across neighbouring countries borders, firms in treated countries and firms in neighbouring control countries will spuriously appear to react to EPL changes. Our baseline tests would obscure this by including control firms from far-away countries that are not subject to the local economic shocks and do not adjust their leverage. To this purpose, we match treated and control firms according to their geographic location. Specifically, we define control country as one (two) nearest geographical neighbour(s) identified by the geographical distance (in km) from capital of treated country to the capital of control country. Panel A and Panel B of Table 7 show that narrowing the sample of control firms to those sharing arguably similar local economic conditions do not considerably change the magnitude and the significance of interaction term.

To alleviate the concern related to the pre-treatment differences in the characteristics of treated and control firms, we employ propensity score (PS) matching

procedure (Rosenbaum and Rubin, 1983) using logistic regression to estimate the probability of being a treated firm. Treated firms and their peers are matched in year τ-*1* (without replacement) using the closest propensity score, which is estimated as a function of 12 Fama-French industries and CHS. Matching based on firms' ownership characteristics also address the concern that differences in ownership structure are responsible for the treatment effect of EPL on leverage. The results in Table 8 yield qualitatively similar parameter estimates as in our previous findings. The estimated coefficients on interaction terms are significant at the 1% level for both leverage definitions. Thus, we conclude that differences in ownership structure and industry affiliation are unlikely to distort our findings.

So far, we have lumped all changes in EPL— substantial and small — together. Now, following Faccio and Xu (2015) we consider the intensity of changes in EPL and focus on the significant EPL changes to investigate whether firms respond stronger to larger EPL changes. If so, our results may be underestimated by considering many small EPL changes. In particular, we retain only firms subject to changes in EPL index by at least 5 percentage points.[14] Coefficient estimates on interaction terms in Table 9 are slightly larger as those in Table 6 for total leverage und almost the same for long-term leverage. They remain statistically significant and further confirm the validity of our findings.

Overall, the presented results are in line with our hypothesis and support the view that firms with blockholders respond to increasing labor market rigidity with more conservative financial policy compared to widely-held firms.

V. Robustness Tests

So far, our main results support the hypothesis that increase in labor protection affects leverage in different ways depending on firms' ownership structure: widely-held firms increase leverage, while firms with blockholders response with more conservative financial policies. Next, we test the robustness of these findings to alternative definitions of (a) ownership structure, (b) leverage and (c) EPL.

[14] The average EPL change in our sample is 5 percentage points.

A. Alternative Ownership Definition

A large body of literature documents that not only shareholders of different ownership size but also of different type may pursue divergent objectives (Holderness and Sheehan (1988)). For instance, strategic investors, like insiders, have relatively large ownership stake and thus, are less diversified when compared to institutional investors. Furthermore, while *institutional investors* often are bent on short-term returns, *strategic investors* have long-term strategic incentives in the firm, they invest (Gompers and Metrick (2001), Ferreira and Matos (2008)).

To challenge the definition of ownership concentration and control for the ownership type, we distinguish between institutional and strategic investors. To this end, we collect ownership data from Thomson One Banker that provide information on different types of investor. In the first line, we are interested in the role of strategic investors as they are comparable to the insiders regarding the diversification and thus, the assessment of firm's risk. We define the variable *"Strategic"* as aggregated stakes held by strategic entities above the 10% threshold[15]. Specifically, this group comprises corporations, holding companies, individual investors, government agencies[16] and other insider investors. In Columns 2 and 6 of Table 10, we find that interactions of EPL and Strategic remain negative and statistically significant throughout almost all specifications. In Columns 2 and 6 of Table 11, we employ propensity score matching to investigate the moderate role of strategic investors. The coefficients remain negative and become significant at 1% and 5% level that is consistent with our economic intuition.

Following prior literature (Almazan et al. (2005), Chen et al. (2007), Ferreira and Matos (2008)), we further classify institutional investors into *grey* and *independent*. Grey institutions tend to invest with long-term orientation and hence, to have similar objectives as insiders and strategic investors. In contrast, independent institutions more interest in short-term returns. As the literature does not clearly differentiate between independent and grey institutions (Almazan et al.

[15] The threshold of 10% is used because some countries in our sample mandate disclosure of ownership stakes of 10 % and more. Compare La Porta et al. (1999) for a similar approach.

[16] Politically connected investors (i.e. government agency and sovereign wealth funds) are often defined as a separate ownership type (Shleifer and Vishny (1997), La Porta et al. (1999)). However, while they are supposed to be strategic aligned, we classify they as strategic investors.

(2005), Sojli et al. (2010), Jara-Bertin (2012)), we take a less conservative approach and measure grey as cumulated shares of banks and trusts, insurance companies, pension and endowment funds, foundations and sovereign wealth funds, again with the stake above the 10%. Next, we group strategic and grey together to test the robustness of our results. The coefficients of interest retain their signs and remain significant on 5% and 10% level in Columns 4 and 8 of Table 10 and on 1% and 5% in Columns 4 and 8 of Table 11.

B. Alternative Leverage Definition

To address concerns that our findings are affected by the choice of dependent variable, we employ four alternative definitions of leverage: (i) book net leverage (net-of-cash book value of total debt over total assets), (ii) total market leverage (book value of total debt over market value of total assets, where book value of equity is substituted by its market value), (iii) debt-to-equity ratio (book value of total debt over book value of total shareholders' equity) and (iv) the natural logarithm of total debt.

Consistent with the approach chosen in Section A[17], we substitute our main leverage measures by alternative definitions and apply cross-sectional triple DID framework to estimate the effect of EPL change on leverage. Table 12 and Table 13 report regression estimates obtained using the full cross-sectional sample and the propensity score matched sample, respectively.

Columns 1 and 2 of Table 12 and Table 13 report regression estimates of the model, where the dependent variable is book net-of-cash debt. Following Klasa et al. (2009) and Schmalz (2018), an increase in labor protection might strengthen bargaining position of workers regarding wages and other labor-related payments, which in turn results in overall higher labor demands on firm's cash flow and, simultaneously, might force firms to reduce available cash. To account for the concern that reduction in cash holdings and not reduction in debt drives our results, we subtract cash from both debt measure and total assets. The results in Columns I

[17] As our main method for robustness tests, we choose the cross-sectional triple DID, which allows us to explicitly focus on the years around the EPL change. For the sake of brevity, we report results estimated on the full cross-sectional sample and the propensity score matched sample, in which we account for the differences in basic characteristics of treated and control firms. Our results are robust to alternative sample definitions and are available from the authors upon request.

and II substantiate our previous findings. Consistent with our main results, we document that EPL effect is greater in the second year after the EPL change and is more pronounced for firms with blockholders.

In Columns 3 and 4 of Table 12 and Table 13, our outcome variable is total market leverage. By using this measure, we follow the literature that employs market value of assets (equity) to measure firm size (Rajan and Zingales (1995), Yermack (1996), Hill et al. (2010)). However, we also note that results using the market-based measure might be weaker since an increase in labor rights in form of e.g. greater union coverage or introduction of mandatory employee representation on corporate boards are found to be associated with decreasing stock market performance (Hirsch (1991), Schmid and Seger (1998), Gorton and Schmid (2004), Lee and Mas (2012)). Despite of these concerns, results displayed in Columns III and IV are qualitatively and quantitatively with our previous findings.

In Columns 5 and 6 of Table 12 and Table 13, we employ debt-to-equity ratio to measure the role of an increase in EPL for the relative capital structure. Albeit the results estimated on the full sample are slightly weaker, all coefficients have the expected signs (Table 12). Moreover, once we control for differences in basic characteristics of treated and control firms, our results become significant at 1% and 5% level and estimates increase in magnitude (Column 6 of Table 13).

Finally, in Columns 7 and 8 of Table 12 and Table 13, we use the logarithm of debt to address concerns of using the debt *ratio*, whose change might be driven by changes in denominator rather than nominator. The results displayed in Columns VII and VIII further substantiate our previous findings, being stronger for the propensity score matched sample.

C. Alternative EPL Definition

Even though our EPL measure aggregates a broad range of labor laws and activities, one may argue that the definition of EPL determines our results. To mitigate these concerns, in the next step, we employ two alternative EPL definitions: (i) the measure constructed by Allard (2005) and also used in SVV (2015)

and (ii) the extended EPL index.[18] We start with the index of Allard (2005). Since the measure of Allard (2005) allows us to identify only 7 change cases – instead of 29 cases for the EPL index – we analyse the relationship of interest in the panel framework. Columns 1-4 of Table 14 report corresponding regression estimates that are comparable to our previous findings.

In the following, we employ the extended EPL index constructed based on two individual OECD indices, which measure the strictness of regulation applying to full-time and part-time employees. Specifically, our extended EPL index is the average of: (i) the (weighted) indicator aggregating items concerning the regulations for individual and collective dismissals of full-time workers and (ii) the indicator aggregating items concerning the regulations on the use of fixed-term and temporary work agency contracts. Technically, according to OECD construction principle, EPL is a weighted sum of indicators for regular contracts (weight 5/12), temporary contracts (weight 5/12) and collective dismissals (weight 2/12) (OECD Outlook, 2013).

Accordingly, we substitute our baseline EPL index by the extended EPL index and report regression estimates in Columns 5-8 of Table 14. Consistent with our previous findings, we document a strong (negative) moderating effect of ownership structure, which is significant at the 5% and 10% level. Since the extended EPL index allows for a relatively large number of change cases, we also consider results under the application of the cross-sectional triple DID framework. The corresponding regression estimates are reported in Table 15 and Table 16. Similar to our previous findings, the estimates of the EPL effect and the moderating effect of ownership structure are stronger in the propensity score matched sample and for the measure of long-term leverage. Consistent with the view regarding the adjustment costs of leverage, we find that the magnitudes of estimated coefficients are higher in the second year after the EPL change.

[18] Since our empirical method implies the presence of (significant) intertemporal exogenous variation for identification of the causal effect, we are limited in the choice of alternative labor protection proxies. In particular, this restriction excludes the use of labor protection indices, which (slightly) vary every year (e.g. labor freedom indicator by the Heritage Foundation or indices provided by the IMD Database) and time invariant indices (e.g. Botero et al. (2004)).

VI. Conclusion

In this paper, we study the moderating role of firms' ownership structure in the relationship between labor market frictions and firms' financing decisions. To this purpose, we examine the sample of listed firms from 29 OECD countries over 1994-2014 and exploit variation of exogenous changes in employment protection legislation. By using EPL index provided by OECD, we specifically focus on changes in regulation for employees with regular and temporary contracts measuring the strictness of hiring and firing practices and, thus, labor turnover costs. Employing triple DID research design in the panel and cross-sectional setting, we allow for differential effects of changes in EPL on firms' leverage conditional on the size of investment and owner type.

We find that, following an increase in employment protection, firms' leverage decreases in closely-held firms and increases in firms with diffuse shareholders. These results remain consistent in the panel and cross-sectional framework as well as after controlling for unobserved regional economic conditions and pre-treatment differences in basic characteristics of treated and control firms. Results of robustness tests, in which we apply alternative definitions of ownership, leverage and labor protection, support our baseline findings and are in line with our economic intuition.

Overall, our empirical evidence demonstrates that two competing views on the labor-leverage nexus – bargaining power and financial flexibility view – are not mutually exclusive. Our findings imply that diversified shareholders are not concerned with higher firm-specific risk associated with an increase in labor costs. Consistent with the bargaining power view, they rather consider raising debt as a strategic device to counteract greater bargaining power of employees caused by an increase in EPL. Supportive of the financial flexibility view, we show that poorly diversified investors with the already high bargaining power pay more attention to financial flexibility issues and may want to decrease leverage to hedge against bankruptcy and other financial distress-related costs. Thus, we argue that that the degree of investors' diversification explains the puzzle why the bargaining power or financial flexibility view turns out to be more appropriate in explaining the relationship between labor and leverage in different contexts.

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Tables

Table 1. Key variables description

Variable	Description	Source
	Firm-level variables	
Dependent variables		
Total Debt (book)	Book value of total debt over the book value of total assets	Thomson Reuters
Long-term Debt (book)	Book value of long-term debt over the book value of total assets	Thomson Reuters
Ownership characteristics		
Closely held shares (CHS)	(Fraction of) Shares held by officers, directors and their immediate families, individuals who hold 5% or more of the outstanding shares, trusts, the company held by any other corporation (…), and by pension/benefit plans.	Thomson One Banker
Firm-level control variables		
Size	Natural logarithm of the book value of total assets	Thomson Reuters
Tangibility	Value of property plant and equipment over the book value of total assets	Thomson Reuters
Profitability	Earnings before interests and taxes (EBIT) over the book value of total assets	Thomson Reuters
Growth	Market value of equity plus book value of debt over the book value of debt plus book value of total shareholder equity	Thomson Reuters
	Country-level variables	
Measure of employment protection		
EPL	Index of employment protection legislation	OECD
Country-level control variables		
Inflation Rate	Annual expected inflation rate	World Bank
GDP Growth	The real annual growth rate in gross domestic product	World Bank
log(GDP per capita)	The natural logarithm of gross domestic product in constant 2010 U.S. Dollars divided by total population	World Bank

Notes: This table reports definitions and sources of used variables. Firm-level data are obtained from Thomson Reuters and Thomson One Banker. Country-level data were collected from OECD and World Bank and combined with firm-level data. All accounting variables are winsorized at their 1th and 99th percentiles.

Table 2. Summary statistics

Variable	N	Mean	p25	Median	p75	SD
Firm-level variables						
Book leverage	243,057	0.197	0.018	0.162	0.321	0.185
Long-term book leverage	242,785	0.119	0.000	0.065	0.194	0.143
Closely held shares (CHS)	178,023	0.381	0.167	0.363	0.570	0.253
Size	243,057	11.871	10.444	11.887	13.313	2.227
Tangibility	243,057	0.295	0.095	0.243	0.435	0.240
Profitability	243,057	-0.022	-0.023	0.046	0.100	0.345
Growth	243,057	2.142	0.140	1.110	2.134	23.029
Country-level variables						
EPL	538	1.98	1.29	1.90	2.76	0.93
Inflation rate	666	3.84	1.12	2.14	3.34	9.34
GDP growth	666	2.52	1.29	2.56	3.99	2.82
log(GDP)	666	10.38	10.02	10.56	10.78	0.65

Notes: This table summarizes all dependent and independent variables for firms in the sample. The analysed sample is unbalanced panel covering 28.253 firm-year observations in 29 countries during the period from 1994 to 2014. The number of observations, mean, standard deviation, values at the 25th percentile, median, and values at 75th percentile are shown for each variable. All firm-level variables are winsorized at their 1th and 99th percentiles. All variables are defined in Table 2

Table 3. Replication of SVV results

Panel A: Data from 29 countries over 1994-2014		
Dependent variable	**Total book leverage**	**Long-term book leverage**
Method(SEs)	**OLS with FE (SE clustering at the Country-Level)**	
Sample	**Full Sample**	
	(1)	**(2)**
EPL$_{(t-1)}$	**-0.03****	**-0.02****
	(-2.21)	(-2.44)
Size$_{(t-1)}$	0.03***	0.02***
	(6.47)	(7.66)
Tangibility$_{(t-1)}$	0.08***	0.06***
	(3.92)	(3.10)
Profitability$_{(t-1)}$	-0.03***	-0.02***
	(-4.45)	(-5.57)
Growth$_{(t-1)}$	-0.00*	-0.00***
	(-1.97)	(-3.56)
Inflation Rate$_{(t-1)}$	0.00	0.00
	(1.56)	(0.96)
GDP growth$_{(t-1)}$	-0.00***	-0.00**
	(-3.83)	(-2.71)
log (GDP p.c.)$_{(t-1)}$	0.22***	0.11***
	(4.43)	(2.80)
Firm FE	Yes	Yes
Industry#Year FE	Yes	Yes
Observations	243,057	242,785
R-within	0.07	0.04

Panel B: Data from 21 countries over 1994-2014		
Dependent variable	**Total book leverage**	**Long-term book leverage**
Method(SEs)	**OLS with FE (SE clustering at the Country-Level)**	
Sample	**Full Sample**	
	(1)	**(2)**
EPL$_{(t-1)}$	**-0.03*****	**-0.03****
	(-2.88)	(-2.84)
Size$_{(t-1)}$	0.03***	0.02***
	(6.43)	(7.43)
Tangibility$_{(t-1)}$	0.08***	0.06***
	(3.77)	(2.96)
Profitability$_{(t-1)}$	-0.03***	-0.02***
	(-4.36)	(-5.42)
Growth$_{(t-1)}$	-0.00*	-0.00***
	(-1.97)	(-3.61)
Inflation Rate$_{(t-1)}$	-0.00	-0.00
	(-1.51)	(-1.07)
GDP growth$_{(t-1)}$	-0.00***	-0.00***
	(-4.18)	(-3.08)
log (GDP p.c.)$_{(t-1)}$	0.27***	0.15**
	(4.61)	(2.83)
Firm FE	Yes	Yes
Industry#Year FE	Yes	Yes
Observations	232,666	232,421
R-within	0.07	0.04

Panel C: Data from 21 countries over 1994-2007		
Dependent variable	**Total book leverage**	**Long-term book leverage**
Method(SEs)	**OLS with FE (SE clustering at the Country-Level)**	
Sample	**Full Sample**	
	(1)	**(2)**
EPL$_{(t-1)}$	**-0.03*****	**-0.02****
	(-3.30)	(-2.66)
Size$_{(t-1)}$	0.04***	0.03***
	(10.77)	(15.10)
Tangibility$_{(t-1)}$	0.11***	0.08***
	(6.95)	(5.95)
Profitability$_{(t-1)}$	-0.03***	-0.02***
	(-3.62)	(-4.23)
Growth$_{(t-1)}$	-0.00**	-0.00***
	(-2.57)	(-4.40)
Inflation Rate$_{(t-1)}$	-0.00*	-0.00*
	(-1.80)	(-1.80)
GDP growth$_{(t-1)}$	-0.00	-0.00
	(-1.59)	(-0.43)
log (GDP p.c.)$_{(t-1)}$	0.33***	0.20***
	(7.41)	(4.69)
Firm FE	Yes	Yes
Industry#Year FE	Yes	Yes
Observations	144,108	144,042
R-within	0.08	0.05

Notes: This table reports results from regressions replicating the study of Simintzi, Vig, and Volpin (2015). The dependent variable in Panel A, B, and C is leverage defined as total book debt over total assets, and in columns 2 and 4 as long-term debt over total assets. All regressions control for standard leverage firm-level controls (size, tangibility, profitability, and growth) as well as annual expected inflation rate, GDP growth, and natural logarithm of GDP per capita. All controls are lagged by one year. The intercept, firm-fixed effects and 12 Fama-French industry-year fixed effects are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 4. EPL, ownership structure, and leverage: Baseline panel results

Dependent variable	**Total book leverage**	**Long-term book leverage**	**Total book leverage**	**Long-term book leverage**
Method(SEs)	**OLS with FE (SE clustering at the Country-Level)**			
Sample	**Full Sample**		**Full Sample**	
	(1)	**(2)**	**(3)**	**(4)**
EPL(t-1)	**-0.01**	**-0.01**	**0.01**	**0.01**
	(-0.59)	**(-0.75)**	**(0.72)**	**(0.70)**
EPL(t-1)#CHS	**-0.01****	**-0.01****	**-0.02*****	**-0.01*****
	(-2.39)	**(-2.62)**	**(-3.26)**	**(-2.88)**
CHS	0.04***	0.03***	0.04***	0.03***
	(7.06)	(3.61)	(6.34)	(3.07)
Size(t-1)	0.04***	0.03***	0.03***	0.03***
	(9.12)	(11.37)	(10.88)	(11.67)
Tangibility(t-1)	0.10***	0.07***	0.10***	0.07***
	(5.13)	(4.74)	(5.38)	(4.99)
Profitability(t-1)	-0.04***	-0.02***	-0.04***	-0.02***
	(-5.97)	(-9.20)	(-6.25)	(-9.86)
Growth(t-1)	-0.00*	-0.00***	-0.00*	-0.00***
	(-1.97)	(-3.07)	(-1.77)	(-3.34)
Inflation Rate(t-1)	0.00***	0.00*	0.00**	0.00
	(3.46)	(1.79)	(2.66)	(0.38)
GDP growth(t-1)	-0.00***	-0.00*	-0.00	0.00
	(-3.58)	(-2.03)	(-0.91)	(0.00)
log (GDP p.c.)(t-1)	0.19***	0.09**	0.12**	0.10*
	(3.66)	(2.12)	(2.44)	(1.98)
Firm FE	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes
Country year trends	**No**	**No**	**Yes**	**Yes**
Observations	178,023	177,848	178,023	177,848
R-within	0.07	0.05	0.08	0.05

Notes: This table reports results from regressions of leverage on the EPL index and the interaction term of EPL index with CHS. In columns 1 and 3, leverage is defined as total book debt over total assets, and in columns 2 and 4 as long-term debt over total assets. All regressions control for CHS, standard leverage firm-level controls (size, tangibility, profitability, and growth) as well as annual expected inflation rate, GDP growth, and natural logarithm of GDP per capita. All controls are lagged by one year. The intercept, firm-fixed effects and 12 Fama-French industry-year fixed effects are included in every model. Columns 3 and 4 also control for country specific year trends. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 5. EPL changes in the sample time period

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
AUSTRALIA	1.02	1.02	1.02	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.02	1.02	1.02	1.27	1.27	1.27	1.27
AUSTRIA	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
BELGIUM	3.24	3.24	3.24	3.24	2.11	2.11	2.11	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.23	2.23	2.13	2.13
CANADA	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
CHILE															2.81	2.81	2.81	2.81	2.81	2.81
CZECH REPUBLIC		1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	2.22	2.22	2.09	2.09	2.09	2.18	2.18	2.18	2.18
DENMARK	1.78	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.79	1.79	1.79
FINLAND	1.85	1.85	1.85	1.78	1.94	1.94	1.94	1.94	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86
FRANCE	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	3.05	3.05	3.05	3.05	3.05	3.05	3.00	3.00	3.00	3.00	3.00
GERMANY	2.96	2.90	2.90	2.59	2.34	2.34	2.34	2.34	2.34	2.09	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.90
GREECE	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.33	2.21	2.18
HUNGARY	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.63	1.42
IRELAND	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	1.03	1.03	0.95	0.95	0.95	0.95	0.95	0.95	1.01	1.01
ISRAEL															1.46	1.46	1.46	1.46	1.46	1.46
ITALY	3.76	3.76	3.76	3.76	3.19	3.19	3.01	3.01	2.57	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.34
JAPAN	1.69	1.69	1.69	1.60	1.60	1.60	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.12	1.12	1.12	1.12	1.12	1.12	1.12
LUXEMBOURG															3.00	3.00	3.00	3.00	3.00	3.00
MEXICO	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	2.05
NETHERLANDS	2.14	2.11	2.11	2.11	2.11	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.88	1.88	1.88	1.88	1.88
NEW ZEALAND	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.20	1.20
NORWAY	2.73	2.73	2.76	2.76	2.76	2.76	2.67	2.54	2.54	2.54	2.54	2.54	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
POLAND	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.24	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99
PORTUGAL	3.98	3.98	3.98	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.49	3.49	3.49	3.49	3.18	3.18	3.03	3.03	2.75	2.50
SPAIN	3.65	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.68	2.68	2.68	2.68	2.39	2.45	2.31
SWEDEN	2.28	2.28	2.28	2.07	2.07	2.05	2.05	2.05	2.02	2.02	2.02	2.02	2.02	2.02	1.71	1.71	1.71	1.71	1.71	1.71
SWITZERLAND	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
TURKEY	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59
UNITED KINGDOM	0.67	0.67	0.67	0.67	0.67	0.67	0.76	0.76	0.76	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.74
UNITED STATES	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

Notes: This table lists changes in EPL in sample countries during the whole time period of analysis. Changes in the cross-sectional analysis and the time window around the change are indicated by green frame. These are 21 changes in 16 countries.

Legend: indicates all episodes of EPL change.
indicates episodes of EPL changes and the corresponding time window taken in the cross-sectional DID analysis.
indicates examples for episodes in EPL changes that have been not gone in the cross-sectional DID analysis because they do not meet the condition of time window described in section IV.C (e.g. Finland, EPL change in 2002: the two-years prior to change in 2002 overlap the two-years after the change in 1998. Given the graduate adjustment of leverage over two years, such overlapping may bias results.

Table 6. Cross-sectional DID

Dependent variable	**Total book leverage**		**Long-term book leverage**	
Method(SEs)	**OLS (SE clustering at the country-level)**			
Sample	**Cross-sectional sample with ΔEPL and average of CHS taken two-years prior to EPL change**			
	(1)	**(2)**	**(3)**	**(4)**
ΔEPL(τ = -1)	**0.02**	**0.04**	**0.01**	**0.03**
	(0.88)	(0.82)	(0.71)	(0.74)
ΔEPL(τ = 0)	**0.03**	**0.05**	**0.03**	**0.05**
	(0.75)	(0.84)	(1.07)	(0.88)
ΔEPL(τ = +1)	**0.05**	**0.14****	**0.06**	**0.12****
	(1.28)	(2.76)	(1.42)	(2.65)
ΔEPL(τ= +2)	**0.05**	**0.14****	**0.05**	**0.13****
	(0.84)	(2.66)	(0.89)	(2.29)
ΔEPL(τ = -1)#CHS(Ø(τ = -2),(τ = -1))		**-0.04**		**-0.03**
		(-0.62)		(-0.54)
ΔEPL(τ = 0)#CHS(Ø(τ = -2),(τ = -1))		**-0.06**		**-0.04**
		(-0.67)		(-0.54)
ΔEPL(τ = +1)#CHS(Ø(τ = -2),(τ = -1))		**-0.17****		**-0.14*****
		(-2.49)		(-3.08)
ΔEPL(τ = +2)#CHS(Ø(τ = -2),(τ = -1))		**-0.20*****		**-0.16*****
		(-2.90)		(-3.16)
Firm controls	Yes	Yes	Yes	Yes
Country controls	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes
Observations	58,141	58,141	58,116	58,116
R-within	0.08	0.08	0.06	0.06

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS. In columns 1 and 3, leverage is defined as total book debt over total assets, and in columns 2 and 4 as long-term debt over total assets. ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 7. Cross-sectional DID: Matching with nearest geographical neighbors

Panel A: Cross-sectional DID with nearest geographical neighbour				
Dependent variable	**Total book leverage**		**Long-term book leverage**	
Method(SEs)	**OLS (SE clustering at the country-level)**			
Sample	**Cross-sectional sample with ΔEPL and average of CHS taken two-years prior to EPL change**			
	(1)	**(2)**	**(3)**	**(4)**
ΔEPL(τ = -1)	**0.01**	**0.02**	**0.01**	**0.02**
	(0.66)	(0.41)	(0.68)	(0.54)
ΔEPL(τ = 0)	**0.03**	**0.04**	**0.04**	**0.05**
	(0.63)	(0.55)	(1.20)	(0.82)
ΔEPL(τ = +1)	**0.06**	**0.13****	**0.07**	**0.13****
	(1.24)	(2.39)	(1.67)	(2.76)
ΔEPL(τ= +2)	**0.06**	**0.14****	**0.07**	**0.14****
	(0.90)	(2.22)	(1.23)	(2.43)
ΔEPL(τ = -1)#CHS(Ø(τ = -2),(τ = -1))		**-0.02**		**-0.02**
		(-0.24)		(-0.34)
ΔEPL(τ = 0)#CHS(Ø(τ = -2),(τ = -1))		**-0.04**		**-0.03**
		(-0.44)		(-0.36)
ΔEPL(τ = +1)#CHS(Ø(τ = -2),(τ = -1))		**-0.17****		**-0.14****
		(-2.25)		(-2.77)
ΔEPL(τ = +2)#CHS(Ø(τ = -2),(τ = -1))		**-0.19****		**-0.16*****
		(-2.84)		(-3.15)
Firm controls	Yes	Yes	Yes	Yes
Country controls	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes
Observations	49,020	49,020	49,003	49,003
R-within	0.08	0.08	0.06	0.06

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS, where control firms comes from the nearest geographical neighbor-countries. In columns 1 and 3, leverage is defined as total book debt over total assets, and in columns 2 and 4 as long-term debt over total assets. ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 7. Cross-sectional DID: Matching with nearest geographical neighbors (continued)

Panel B: Cross-sectional DID with two nearest geographical neighbour

Dependent variable	**Total book leverage**		**Long-term book leverage**	
Method(SEs)	**OLS (SE clustering at the country-level)**			
Sample	**Cross-sectional sample with ΔEPL and average of CHS taken two-years prior to EPL change**			
	(1)	**(2)**	**(3)**	**(4)**
ΔEPL(τ = -1)	**0.02**	**0.03**	**0.02**	**0.03**
	(0.98)	(0.73)	(1.09)	(0.81)
ΔEPL(τ = 0)	**0.03**	**0.05**	**0.05**	**0.05**
	(0.86)	(0.72)	(1.43)	(0.92)
ΔEPL(τ = +1)	**0.06**	**0.13****	**0.08***	**0.13****
	(1.42)	(2.54)	(1.83)	(2.80)
ΔEPL(τ= +2)	**0.06**	**0.14****	**0.08**	**0.13****
	(1.02)	(2.39)	(1.30)	(2.42)
ΔEPL(τ = -1)#CHS(Ø(τ = -2),(τ = -1))		**-0.03**		**-0.02**
		(-0.51)		(-0.41)
ΔEPL(τ = 0)#CHS(Ø(τ = -2),(τ = -1))		**-0.05**		**-0.02**
		(-0.51)		(-0.27)
ΔEPL(τ = +1)#CHS(Ø(τ = -2),(τ = -1))		**-0.16****		**-0.12****
		(-2.24)		(-2.59)
ΔEPL(τ = +2)#CHS(Ø(τ = -2),(τ = -1))		**-0.19*****		**-0.14*****
		(-2.90)		(-3.05)
Firm controls	Yes	Yes	Yes	Yes
Country controls	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes
Observations	51,003	51,003	50,978	50,978
R-within	0.07	0.07	0.06	0.06

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS, where control firms comes from two nearest geographical neighbor-countries. In columns 1 and 3, leverage is defined as total book debt over total assets, and in columns 2 and 4 as long-term debt over total assets. ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 8. Cross-sectional DID: Propensity score matching

Dependent variable	**Total book leverage**		**Long-term book leverage**	
Method(SEs)	**OLS (SE clustering at the country-level)**			
Sample	**Cross-sectional sample with ΔEPL and average of CHS taken two-years prior to EPL change**			
	(1)	**(2)**	**(3)**	**(4)**
ΔEPL(τ = -1)	**0.02**	**0.05**	**0.02**	**0.03**
	(1.25)	(1.21)	(1.15)	(1.06)
ΔEPL(τ = 0)	**0.03**	**0.06**	**0.04**	**0.05**
	(0.84)	(1.03)	(1.30)	(0.96)
ΔEPL(τ = +1)	**0.07**	**0.16*** **	**0.07**	**0.14*** **
	(1.31)	(2.87)	(1.65)	(2.81)
ΔEPL(τ= +2)	**0.06**	**0.16** **	**0.07**	**0.15** **
	(0.91)	(2.40)	(1.24)	(2.54)
ΔEPL(τ = -1)#CHS(Ø(τ = -2),(τ = -1))		**-0.05**		**-0.03**
		(-0.92)		(-0.66)
ΔEPL(τ = 0)#CHS(Ø(τ = -2),(τ = -1))		**-0.07**		**-0.03**
		(-0.89)		(-0.39)
ΔEPL(τ = +1)#CHS(Ø(τ = -2),(τ = -1))		**-0.20*** **		**-0.14*** **
		(-3.11)		(-3.04)
ΔEPL(τ = +2)#CHS(Ø(τ = -2),(τ = -1))		**-0.21*** **		**-0.16*** **
		(-2.90)		(-3.05)
Firm controls	Yes	Yes	Yes	Yes
Country controls	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes
Observations	40,135	40,135	40,119	40,119
R-within	0.09	0.09	0.07	0.07

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS, where treated and control firms are matched by industry and CHS. In columns 1 and 3, leverage is defined as total book debt over total assets, and in columns 2 and 4 as long-term debt over total assets. ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 9. Cross-sectional DID: Intensity of EPL change

Dependent variable	**Total book leverage**		**Long-term book leverage**	
Method(SEs)	**OLS (SE clustering at the country-level)**			
Sample	**Cross-sectional sample with ΔEPL and average of CHS taken two-years prior to EPL change**			
	(1)	**(2)**	**(3)**	**(4)**
ΔEPL(τ = -1)	**0.01**	**0.04**	**0.02**	**0.03**
	(0.63)	(1.21)	(1.02)	(0.90)
ΔEPL(τ = 0)	**0.02**	**0.06**	**0.04**	**0.07**
	(0.52)	(1.11)	(1.48)	(1.46)
ΔEPL(τ = +1)	**0.04**	**0.13****	**0.07**	**0.14*****
	(0.82)	(2.55)	(1.66)	(3.19)
ΔEPL(τ= +2)	**0.02**	**0.12**	**0.06**	**0.13****
	(0.34)	(1.66)	(0.99)	(2.27)
ΔEPL(τ = -1)#CHS(Ø(τ = -2),(τ = -1))		**-0.06**		**-0.03**
		(-1.27)		(-0.59)
ΔEPL(τ = 0)#CHS(Ø(τ = -2),(τ = -1))		**-0.08**		**-0.05**
		(-1.23)		(-0.93)
ΔEPL(τ = +1)#CHS(Ø(τ = -2),(τ = -1))		**-0.20*****		**-0.15*****
		(-2.99)		(-3.57)
ΔEPL(τ = +2)#CHS(Ø(τ = -2),(τ = -1))		**-0.21****		**-0.16*****
		(-2.59)		(-2.84)
Firm controls	Yes	Yes	Yes	Yes
Country controls	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes
Observations	52,102	52,102	52,079	52,079
R-within	0.08	0.08	0.06	0.06

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS, considering only episodes of "large" EPL changes. In columns 1 and 3, leverage is defined as total book debt over total assets, and in columns 2 and 4 as long-term debt over total assets. ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 10. Robustness test: Alternative definition of ownership structure - Cross-sectional analysis

Dependent variable	**Book leverage**			**Long-term book leverage**		
Independent variable	**EPL**	**Strategic**	**Strategic & Grey**	**EPL**	**Strategic**	**Strategic & Grey**
Method(SEs)	**OLS (SE clustering at the country-level)**					
Sample	**Cross-sectional regression of leverage on the EPL-change and its interaction with the average CHS calculated two years before the EPL-change**					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
ΔEPL(τ = -1)	**0.02**	**0.05**	**0.05**	**-0.01**	**-0.02**	**-0.02**
	(0.54)	(1.49)	(1.37)	(-0.39)	(-0.61)	(-0.65)
ΔEPL(τ = 0)	**0.06**	**0.08**	**0.08**	**-0.00**	**-0.03**	**-0.03**
	(0.85)	(1.16)	(1.14)	(-0.04)	(-0.69)	(-0.58)
ΔEPL(τ = +1)	**0.08**	**0.14**	**0.14**	**0.00**	**0.04**	**0.05**
	(0.82)	(1.64)	(1.65)	(0.02)	(0.68)	(0.71)
ΔEPL(τ= +2)	**0.01**	**0.07**	**0.07**	**-0.05**	**-0.02**	**-0.01**
	(0.05)	(0.55)	(0.61)	(-0.66)	(-0.19)	(-0.14)
ΔEPL(τ = -1)#Strat(Ø(τ = -2), (τ = -1))		**-0.08**			**0.02**	
		(-1.64)			(0.57)	
ΔEPL(τ = 0)#Strat(Ø(τ = -2), (τ = -1))		**-0.07**			**0.07**	
		(-0.90)			(0.92)	
ΔEPL(τ = +1)#Strat(Ø(τ = -2), (τ = -1))		**-0.19***			**-0.11***	
		(-1.99)			(-1.73)	
ΔEPL(τ = +2)#Strat(Ø(τ = -2), (τ = -1))		**-0.19***			**-0.07**	
		(-1.76)			(-0.93)	
ΔEPL(τ = -1)#StratGrey(Ø(τ = -2), (τ = -1))			**-0.07**			**0.03**
			(-1.55)			(0.65)
ΔEPL(τ = 0)#StratGrey(Ø(τ = -2), (τ = -1))			**-0.07**			**0.07**
			(-0.89)			(0.85)
ΔEPL(τ = +1)#StratGrey(Ø(τ = -2), (τ = -1))			**-0.19****			**-0.11***
			(-2.11)			(-1.95)
ΔEPL(τ = +2)#StratGrey(Ø(τ = -2), (τ = -1))			**-0.20***			**-0.08**
			(-1.95)			(-1.11)
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes
Country controls	No	No	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes	Yes	Yes
Observations	33,281	28,059	28,430	33,259	28,038	28,409
R-within	0.06	0.07	0.07	0.04	0.04	0.04

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with Østrategic investor in columns 2 and 5 and Østrategic investors + Øgrey investors in columns 3 and 6. Leverage is defined as total book debt over total assets (columns 1-3) and long-term debt over total assets (columns 3-6). ΔEPL is the magnitude of EPL change. Østrategic (grey) is the average of Strategic (Grey) taken from the two years prior to the change in EPL. All regressions control for standard leverage firm-level controls. Columns 2 (3) and 5 (6) control for Østrategic (grey). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles

Table 11. Robustness test: Alternative definition of ownership structure - Cross-sectional analysis with PS matching

Dependent variable	**Book leverage**				**Long-term book leverage**			
Independent variable	**EPL**	**Strategic**	**EPL**	**Strategic & Grey**	**EPL**	**Strategic**	**EPL**	**Strategic & Grey**
Method(SEs)	**OLS (SE clustering at the country-level)**							
Sample	**Cross-sectional regression of the change in EPL on the leverage and the interaction term of leverage with the average of CHS taken two-years before EPL-change**							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
ΔEPL(τ = -1)	**-0.01**	**0.03**	**-0.03**	**0.01**	**-0.03**	**-0.03**	**-0.04**	**-0.03**
	(-0.34)	(0.51)	(-0.79)	(0.14)	(-1.16)	(-1.08)	(-1.23)	(-1.00)
ΔEPL(τ = 0)	**-0.02**	**0.04**	**-0.06**	**-0.01**	**-0.07**	**-0.07**	**-0.07**	**-0.08**
	(-0.31)	(0.41)	(-0.88)	(-0.10)	(-1.32)	(-1.22)	(-1.36)	(-1.35)
ΔEPL(τ = +1)	**-0.03**	**0.17**	**-0.08**	**0.11**	**-0.09**	**0.02**	**-0.09**	**0.01**
	(-0.25)	(1.42)	(-0.76)	(1.01)	(-1.22)	(0.26)	(-1.17)	(0.13)
ΔEPL(τ= +2)	**-0.11**	**0.06**	**-0.17**	**-0.01**	**-0.15**	**-0.05**	**-0.15**	**-0.07**
	(-0.74)	(0.42)	(-1.42)	(-0.08)	(-1.69)	(-0.49)	(-1.53)	(-0.68)
ΔEPL(τ = -1)#Strat(Ø(τ = -2), (τ = -1))		**-0.09**				**0.02**		
		(-1.03)				(0.36)		
ΔEPL(τ = 0)#Strat(Ø(τ = -2), (τ = -1))		**-0.11**				**0.06**		
		(-0.97)				(0.68)		
ΔEPL(τ = +1)#Strat(Ø(τ = -2), (τ = -1))		**-0.44*** **				**-0.22*** **		
		(-4.51)				(-3.51)		
ΔEPL(τ = +2)#Strat(Ø(τ = -2), (τ = -1))		**-0.30*** **				**-0.17** **		
		(-3.17)				(-2.60)		
ΔEPL(τ = -1)#StratGrey(Ø(τ = -2), (τ = -1))				**-0.08**				**0.01**
				(-0.99)				(0.18)
ΔEPL(τ = 0)#StratGrey(Ø(τ = -2), (τ = -1))				**-0.09**				**0.07**
				(-0.79)				(0.74)
ΔEPL(τ = +1)#StratGrey(Ø(τ = -2), (τ = -1))				**-0.40*** **				**-0.22*** **
				(-4.36)				(-3.64)
ΔEPL(τ = +2)#StratGrey(Ø(τ = -2), (τ = -1))				**-0.28*** **				**-0.13***
				(-3.01)				(-1.91)
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country controls	No	No	No	No	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	13,635	13,635	13,962	13,962	13,628	13,628	13,955	13,955
R-within	0.08	0.09	0.09	0.09	0.06	0.06	0.06	0.06

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with Østrategic investor in columns 2 and 6 and Østrategic investors + Øgrey investors in columns 4 and 8. Leverage is defined as total book debt over total assets (columns 1-4) and long-term debt over total assets (columns 5-8). ΔEPL is the magnitude of EPL change. Østrategic (grey) is the average of Strategic (Grey) taken from the two years prior to the change in EPL. All regressions control for standard leverage firm-level controls. Columns 2 (4) and 6 (8) control for Østrategic (grey). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 12. Robustness test: Alternative definition of debt - Cross-sectional analysis

Dependent variable	**Book net leverage**		**Total market leverage**		**Leverage to total share-holder equity**		**Log(debt)**	
Method(SEs)	**OLS (SE clustering at the country-level)**							
Sample	**Cross-sectional regression of leverage on the EPL-change and its interaction with the average CHS calculated two years before the EPL-change**							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔEPL(τ = -1)	**0.00**	**0.03**	**0.10**	**0.15**	**-0.01**	**-0.01**	**-0.16**	**-0.14**
	(0.03)	(0.42)	(1.59)	(1.35)	(-0.49)	(-0.36)	(-1.23)	(-0.50)
ΔEPL(τ = 0)	**0.01**	**0.05**	**0.05**	**0.02**	**-0.04**	**-0.06**	**-0.24**	**-0.30**
	(0.12)	(0.44)	(0.62)	(0.12)	(-0.99)	(-1.46)	(-1.11)	(-0.79)
ΔEPL(τ = +1)	**0.02**	**0.10**	**0.07**	**0.16***	**-0.00**	**0.02**	**-0.14**	**0.06**
	(0.35)	(1.22)	(1.11)	(1.72)	(-0.08)	(0.27)	(-0.53)	(0.24)
ΔEPL(τ= +2)	**0.02**	**0.16***	**0.10**	**0.24****	**0.01**	**0.04**	**-0.29**	**-0.18**
	(0.29)	(2.04)	(1.18)	(2.18)	(0.08)	(0.64)	(-0.70)	(-0.41)
ΔEPL(τ = -1)#CHS(Ø(τ = -2), (τ = -1))		**-0.06**		**-0.10**		**-0.00**		**-0.08**
		(-0.62)		(-0.78)		(-0.03)		(-0.20)
ΔEPL(τ = 0)#CHS(Ø(τ = -2), (τ = -1))		**-0.10**		**0.04**		**0.04**		**0.07**
		(-0.62)		(0.16)		(0.79)		(0.11)
ΔEPL(τ = +1)#CHS(Ø(τ = -2), (τ = -1))		**-0.20**		**-0.19***		**-0.05**		**-0.52**
		(-1.48)		(-1.91)		(-1.10)		(-1.14)
ΔEPL(τ = +2)#CHS(Ø(τ = -2), (τ = -1))		**-0.31*****		**-0.30****		**-0.09**		**-0.32**
		(-2.97)		(-2.61)		(-1.46)		(-0.68)
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country controls	No	No	No	No	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	58,136	58,136	58,127	58,127	58,141	58,141	49,484	49,484
R-within	0.19	0.19	0.15	0.15	0.07	0.07	0.27	0.27

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS. Leverage is defined as net-of-cash total book debt over total assets (columns 1-2), total book debt over market value of assets (columns 3-4), total book debt over total shareholders' equity (columns 5-6) and the natural logarithm of total book debt (columns 7-8). ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 13. Robustness test: Alternative definition of debt - Cross-sectional analysis with PS matching

Dependent variable	**Book net leverage**		**Total market leverage**		**Leverage to total share-holders' equity**		**Log(debt)**	
Method(SEs)	**OLS (SE clustering at the country-level)**							
Sample	**Cross-sectional sample with ΔEPL and average of CHS taken two-years prior to EPL change**							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔEPL(τ = -1)	**-0.01**	**0.03**	**0.07**	**0.12**	**0.01**	**0.02**	**-0.07**	**0.11**
	(-0.19)	(0.47)	(1.08)	(1.09)	(0.40)	(0.73)	(-0.44)	(0.48)
ΔEPL(τ = 0)	**-0.01**	**0.04**	**-0.03**	**-0.05**	**-0.00**	**0.00**	**-0.13**	**0.11**
	(-0.22)	(0.42)	(-0.31)	(-0.24)	(-0.03)	(0.02)	(-0.45)	(0.29)
ΔEPL(τ = +1)	**-0.01**	**0.10**	**-0.01**	**0.08**	**0.06**	**0.11****	**0.02**	**0.65***
	(-0.14)	(1.10)	(-0.09)	(0.70)	(1.16)	(2.50)	(0.06)	(1.82)
ΔEPL(τ= +2)	**-0.03**	**0.13**	**-0.01**	**0.14**	**0.08**	**0.15****	**-0.12**	**0.43**
	(-0.32)	(1.14)	(-0.09)	(0.94)	(1.34)	(2.37)	(-0.21)	(0.90)
ΔEPL(τ = -1)#CHS(Ø(τ = -2), (τ = -1))		**-0.08**		**-0.10**		**-0.03**		**-0.42**
		(-0.93)		(-0.85)		(-0.58)		(-1.45)
ΔEPL(τ = 0)#CHS(Ø(τ = -2), (τ = -1))		**-0.13**		**0.03**		**-0.01**		**-0.58**
		(-0.85)		(0.13)		(-0.21)		(-1.18)
ΔEPL(τ = +1)#CHS(Ø(τ = -2), (τ = -1))		**-0.25***		**-0.21****		**-0.13*****		**-1.41*****
		(-1.95)		(-2.23)		(-2.96)		(-3.69)
ΔEPL(τ = +2)#CHS(Ø(τ = -2), (τ = -1))		**-0.33****		**-0.31****		**-0.16****		**-1.21*****
		(-2.71)		(-2.70)		(-2.15)		(-3.55)
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country controls	No	No	No	No	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	40,112	40,112	40,113	40,113	40,114	40,114	35,002	35,002
R-within	0.20	0.20	0.18	0.19	0.08	0.09	0.29	0.29

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS, where treated and control firms are matched by industry and CHS. Leverage is defined as net-of-cash total book debt over total assets (columns 1-2), total book debt over market value of assets (columns 3-4), total book debt over total shareholders' equity (columns 5-6) and the natural logarithm of total book debt (columns 7-8). ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 14. Robustness test: Alternative definition of EPL - Panel analysis

Dependent variable	**Book leverage**		**Long-term book leverage**		**Book leverage**		**Long-term book leverage**	
Independent variable	**Index of Allard**		**Index of Allard**		**Extended EPL**		**Extended EPL**	
Method(SEs)	**OLS with FE (SE clustering at the country-level)**							
Sample	**Full Sample**							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
EPL(t-1)	**0.02***	**0.03****	**0.03****	**0.04*****	**-0.01**	**0.01**	**-0.01**	**0.00**
	(1.84)	(2.28)	(2.46)	(3.56)	(-0.73)	(0.82)	(-1.26)	(0.46)
EPL(t-1)#CHS		**-0.02*****		**-0.02*****		**-0.02****		**-0.01***
		(-3.25)		(-3.46)		(-2.50)		(-1.94)
Size(t-1)	0.03***	0.03***	0.02***	0.03***	0.03***	0.03***	0.02***	0.02***
	(6.83)	(10.63)	(7.54)	(11.25)	(5.57)	(8.25)	(6.86)	(11.43)
Tangibility(t-1)	0.09***	0.10***	0.06***	0.07***	0.08***	0.10***	0.05***	0.07***
	(3.86)	(5.24)	(3.04)	(4.79)	(3.82)	(5.19)	(2.98)	(4.72)
Profitability(t-1)	-0.03***	-0.04***	-0.02***	-0.02***	-0.03***	-0.03***	-0.01***	-0.02***
	(-4.41)	(-6.18)	(-5.47)	(-9.88)	(-4.26)	(-6.01)	(-5.36)	(-9.75)
Growth(t-1)	-0.00*	-0.00*	-0.00***	-0.00***	-0.00*	-0.00*	-0.00***	-0.00***
	(-1.81)	(-1.79)	(-3.99)	(-3.50)	(-1.84)	(-1.97)	(-4.29)	(-4.08)
Inflation Rate(t-1)	0.00	-0.00	-0.00	-0.00	0.00***	0.00***	0.00	0.00
	(0.81)	(-0.13)	(-1.02)	(-1.25)	(4.16)	(3.67)	(0.85)	(0.54)
GDP growth(t-1)	-0.00	-0.00	0.00	-0.00	-0.00*	-0.00	-0.00	-0.00
	(-0.67)	(-0.58)	(0.14)	(-0.28)	(-1.86)	(-0.97)	(-0.65)	(-0.67)
log (GDP p.c.)(t-1)	0.08	0.12*	0.10**	0.10	0.09**	0.11*	0.09*	0.06
	(1.50)	(1.75)	(2.21)	(1.55)	(2.27)	(1.98)	(1.93)	(1.09)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	232,666	172,247	232,421	172,085	207,219	145,923	206,954	145,754
R-within	0.08	0.08	0.05	0.05	0.07	0.07	0.04	0.04

Notes: This table reports results from regressions of leverage on the EPL index and the interaction term of EPL index with CHS. In columns 1-2 and 5-6, leverage is defined as total book debt over total assets, and in columns 3-4 and 7-8 as long-term debt over total assets. All regressions control for CHS, standard leverage firm-level controls (size, tangibility, profitability, and growth) as well as annual expected inflation rate, GDP growth, and natural logarithm of GDP per capita. All controls are lagged by one year. The intercept, firm-fixed effects and 12 Fama-French industry-year fixed effects are included in every model. Columns 3 and 4 also control for country specific year trends. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 15. Robustness test: Alternative definition of EPL - Cross-sectional analysis

Dependent variable	**Book leverage**		**Long-term book leverage**	
Independent variable	**Extended EPL**		**Extended EPL**	
Method(SEs)	**OLS (SE clustering at the country-level)**			
Sample	**Cross-sectional sample with ΔEPL and average of CHS taken two-years prior to EPL change**			
	(1)	**(2)**	**(3)**	**(4)**
ΔEPL(τ = -1)	**0.00**	**-0.00**	**-0.02**	**-0.01**
	(0.43)	(-0.09)	(-1.47)	(-0.54)
ΔEPL(τ = 0)	**0.03***	**0.01**	**0.00**	**-0.01**
	(1.95)	(0.24)	(0.11)	(-0.42)
ΔEPL(τ = +1)	**0.08*****	**0.10*****	**0.03***	**0.05*****
	(3.74)	(3.18)	(1.84)	(2.78)
ΔEPL(τ= +2)	**0.08*****	**0.11*****	**0.03**	**0.08*****
	(3.39)	(2.81)	(1.69)	(2.81)
ΔEPL(τ = -1)#CHS(Ø(τ = -2), (τ = -1))		**0.02**		**-0.01**
		(0.39)		(-0.24)
ΔEPL(τ = 0)#CHS(Ø(τ = -2), (τ = -1))		**0.05**		**0.04**
		(0.83)		(0.60)
ΔEPL(τ = +1)#CHS(Ø(τ = -2), (τ = -1))		**-0.06**		**-0.05***
		(-1.09)		(-1.83)
ΔEPL(τ = +2)#CHS(Ø(τ = -2), (τ = -1))		**-0.06**		**-0.10****
		(-0.68)		(-2.16)
Firm controls	Yes	Yes	Yes	Yes
Country controls	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes
Observations	49,724	49,724	49,692	49,692
R-within	0.06	0.06	0.04	0.05

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS. Leverage is defined as total book debt over total assets (columns 1-2) and long-term debt over total assets (columns 3-4). ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.

Table 16. Robustness test: Alternative definition of EPL - Cross-sectional analysis with PS matching

Dependent variable	**Book leverage**		**Long-term book leverage**	
Independent variable	**Extended EPL**		**Extended EPL**	
Method(SEs)	**OLS (SE clustering at the country-level)**			
Sample	**Cross-sectional sample with ΔEPL and average of CHS taken two-years prior to EPL change**			
	(1)	(2)	(3)	(4)
ΔEPL(τ = -1)	**0.01**	**0.01**	**-0.02**	**-0.00**
	(0.70)	(0.61)	(-1.64)	(-0.13)
ΔEPL(τ = 0)	**0.03**	**0.02**	**-0.00**	**-0.01**
	(1.55)	(0.63)	(-0.33)	(-0.34)
ΔEPL(τ = +1)	**0.07****	**0.12*****	**0.02****	**0.05*****
	(2.65)	(4.21)	(2.10)	(3.30)
ΔEPL(τ= +2)	**0.07****	**0.12*****	**0.02****	**0.08*****
	(2.19)	(3.71)	(2.20)	(3.80)
ΔEPL(τ = -1)#CHS(Ø(τ = -2), (τ = -1))		**-0.01**		**-0.03**
		(-0.48)		(-0.75)
ΔEPL(τ = 0)#CHS(Ø(τ = -2), (τ = -1))		**0.01**		**0.01**
		(0.14)		(0.24)
ΔEPL(τ = +1)#CHS(Ø(τ = -2), (τ = -1))		**-0.12*****		**-0.06***
		(-2.98)		(-1.91)
ΔEPL(τ = +2)#CHS(Ø(τ = -2), (τ = -1))		**-0.10**		**-0.11****
		(-1.16)		(-2.58)
Firm controls	Yes	Yes	Yes	Yes
Country controls	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes
Industry#Year FE	Yes	Yes	Yes	Yes
Country specific year trends	Yes	Yes	Yes	Yes
Observations	34,428	34,428	34,408	34,408
R-within	0.07	0.07	0.05	0.05

Notes: This table reports results from cross-sectional DID regressions of leverage on the ΔEPL index and the interaction term of ΔEPL index with ØCHS. Leverage is defined as total book debt over total assets (columns 1-2) and long-term debt over total assets (columns 3-4). ΔEPL is the magnitude of EPL change. ØCHS is the average of CHS taken from the two years prior to the change in EPL. All regressions control for ØCHS, standard leverage firm-level controls (size, tangibility, profitability, and growth). The intercept, firm-fixed effects, 12 Fama-French industry-year fixed effects, and country specific year trends are included in every model. Standard errors are clustered at the country level and reported in parentheses. *, **, and *** indicates significance at the 10%, 5%, and 1% level, respectively. All firm-level variables are winsorized at their 1th and 99th percentiles.