# Capital Structure and Employment Flexibility

Olga Kuzmina, NES Month, Year

This policy brief focuses on the relationship between employment policies and their potential impact on firms choices over capital structure. In particular, the question dealt with here is whether policies aiming to promote job stability could have an impact on a firm's capital structure and its ability, as a consequence, to respond to, and survive, shocks. The policy implications of this relationship are important since policy makers, while aiming to promote job stability, may in fact inadvertently harm employment by leaving firms less able to withstand downturns. Pro-employment policies, by altering a firm's capital structure, could even worsen employment during crises.

### Pro-Worker Regulation and Firm Outcomes

The link between employment policies and firm capital structures is usually not obvious. Labor economics and corporate finance are usually treated as separate fields and have evolved as such. However, both are ultimately related to how firms make their "optimal" decisions and it is reasonable to expect that financial strategies should be related to real policies, and employment ones, in particular. An excellent overview of such possible interactions can be found, for example, in Pagano and Volpin (1998).

Despite the reasonable links between the costs and benefits of employing people and structuring capital in different ways and their impact on the way firms behave and make choices, government labor policies can often focus on the effects policies have on employment (e.g. job stability) rather than performance of firms. This makes it more likely that despite intentions, policies could have adverse outcomes or unintended negative consequences since employment and job stability also depend heavily on the survival

and performance of firms. Since employment policies typically affect firm performance by changing risks, costs and profits among workers and firms, it is important to understand the effects of these policies on both firms and the overall economy.

One particular strand of the literature, for instance, has explored the impact of labor unions on various firms' decisions and outcomes, with the general conclusion being that pro-worker regulation affects firms in a negative way. In particular, firms that face stronger labor unions have lower profitability and market values (Ruback and Zimmerman, 1984, Abowd, 1989, and Hirsch, 1991), and higher cost of equity (Chen, Kacperczyk and Ortiz-Molina, 2009). On the other hand, Acharya, Baghai and Subramanian (2010) find that stringent labor laws may have an ex ante positive effect on innovation by acting as a commitment device towards long-run value maximization.

Moreover, Besley and Burgess (2004) find that pro-worker regulation is associated with lower investment and economic growth, as well as higher urban poverty. This suggests that the attempts to rebalance powers between capital

The Forum for Research on Eastern Europe and Emerging Economies (FREE) is a network of academic experts on economic issues in Eastern Europe and the former Soviet Union at BEROC (Minsk), BICEPS (Riga), CEFIR (Moscow), CenEA (Szczecin), KEI (Kiev) and SITE (Stockholm). The weekly FREE Policy Brief Series provides research-based analyses of economic policy issues relevant to Eastern Europe and emerging markets.

and labor may not only harm firms, but the overall economy as well. Stronger labor market regulation is even sometimes popularly cited to be one of the reasons for the economic underperformance of Europe relative to the United States.

## Firm Financing Decisions and Employment Flexibility

One of the important topics from the corporate finance point of view is capital structure, which studies the composition of different sources of firm financing (e.g. debt vs. equity). A given firm's optimal capital structure (e.g. in the simplest trade-off theory) can depend on a range of factors and there is no presumption whether "high" or "low" value of debt per se is good or bad. However, if government labor policies indirectly affect optimal capital structure and some firms cannot immediately adjust to the new optimum, they may grow slower and be less likely to survive. This potential impact is an important reason to explore whether labor policies can have an influence on capital structure.

In the unionization literature, Perotti and Spier (1993), Matsa (2010), Simintzi, Vig and Volpin (2010) have explored the strategic effect of debt financing, suggesting that a firm may ex ante choose the level of debt in such a way so as to preclude workers from bargaining over their wages ex post (with the direction of the effect depending on whether debt is renegotiable or not). This means that the stringency of labor regulation affects the type of financing a firm chooses. Although the mechanism is usually positioned as the one being related to the employee bargaining over the remaining surplus, there is one more aspect associated with the stringency of employment protection – the difficulty of firing workers.

In Kuzmina (2012), I proposed that flexible employment arrangements that allow firms to fire workers more easily when negative shocks arrive also enables them to choose and support higher levels of debt financing. In particular, when faced with negative demand shocks or business conditions in general, firms do not have to keep workers that are not productive enough under such circumstances.. This means

that profits are higher compared to the case when these workers would have to be retained due to policies that make it more difficult or costly for firms to shed less productive workers in response to worsening economic conditions. High severance payments and other costs associated with dismissal are examples of such labor policies. Higher profits in turn can cover potentially larger fixed expenses (such as interest payments) without going underwater. This means that firms that have more employment flexibility and can dismiss workers more easily could find it optimal to finance more with debt and less with equity.

#### **Empirical Test and Results**

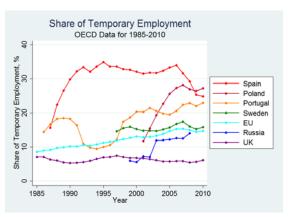
In order to have a clean empirical test of this hypothesis, one needs to have a setup where it would be easy to measure employment flexibility at the firm level and where it would be possible to attribute changes in capital structure solely to changes in this level of employment flexibility. Spain provides an excellent opportunity to examine the effects of employment flexibility on firms' capital structures.

First, the labor market in Spain is a formal dual market, with two main types of contracts characterized by different degrees employment flexibility: permanent employment contracts (open-ended contracts of unlimited duration) and temporary ones (mostly fixed-term, as well as casual, apprenticeship ones and for jobs provided by temporary work agencies). The principal difference among these two types of contracts is a much higher firing cost for the firm in case of a permanent contract which, as a consequence, provides more job security for the worker.

In fact, a labor market consisting of workers characterized by different degrees of job security exists in virtually every country, either informally (e.g. with "under-the-table" payments) or formally (with different legal contract arrangements with employees). These formal arrangements — non-standard labor contracts — are simply easier to measure, and labor force surveys across countries can provide information on the aggregate employment for different contract types.

It is important to note that Spain is not the only country that consistently employs large shares of workers on temporary contracts. Figure 1 is based on OECD data and plots the percentage of temporary employment over time for several European countries. As it can be seen in the figure, temporary employment has been generally rising over time, with several countries (Spain, Portugal and Poland) having levels as high as twice the European Union average.

Figure 1. Temporary Employment



Source: OECD

Second, in order to identify a causal effect of employment flexibility on capital structure, one needs to use exogenous variation for employment flexibility. This helps ensure that the apparent relationship is not driven by omitted factors that affect both variables at the same time (e.g. financial constraints, desire to invest in human capital accumulation, or simply unobserved firm heterogeneity). To do this I employ a quasi-experiment introduced by the Spanish government in the late 1990s. Contemplating the rising levels of temporary employment, Spain introduced subsidies to firms for converting temporary contracts with existing workers into permanent ones and for hiring new workers on permanent contracts. The creation of permanent contracts was subsidized both at the national and regional levels, with the reforms at the regional level showing much more variation due to the different timing of their implementation, distinct worker eligibility criteria (such as gender) and different amounts to be paid to firms in those cases of new permanent contract creation. This variation is plausibly unrelated to omitted firm-specific factors, and is used to identify the effect of interest in a panel framework that can also capture firm heterogeneity.

Finally, the Spanish institutional setup allows one to separate the effect of employment flexibility from bargaining considerations, highlighted in the previous literature, since collective bargaining agreements take place mostly at levels above the firm (industry-provincial or industry-national) and are hence exogenous to them. No worker can be excluded from the provisions of these agreements and they do not allow firms to discriminate between workers based on their contract type, e.g. by paying different wages to workers on different contract types (Jimeno and Toharia, 1994).

The results of the paper show significant economic magnitudes of the causal effect of employment flexibility non-equity on financing. Hypothetically, prohibiting average firm from using temporary employment contracts would suggest that such firm would reduce its debt level by 3.6 percentage points. This is about 6.3% of the average debt level across firms.

The mechanism of the paper implies that if firms have a desired level of overall risk, then they should reduce their use of flexible labor in line with their level of indebtedness. If they are not able to reduce their debt in this case, then they would be less likely to be able to cover extra costs associated with debt during tough economic times since they would also have to cover the costs of permanent labor. This would increase their likelihood of liquidation. Not surprisingly, I find that firms that actually liquidated were less likely to have adjusted their debt levels upon changes in employment structure meaning that firms that could not change their decisions and employ more flexible labor were more likely to fail as a result.

#### Potential Policy Implications

What are the potential policy implications of these results? Going back to Figure 1, temporary employment levels are very different across countries and over time. To a certain degree this variation is driven to an overwhelming extent by government labor reforms related to employment protection

legislation and regulation of temporary work during the last 30 years (see an overview of these reforms in Davidsson, 2011).

It is important to keep in mind that reforms that promote job security among workers do so at the expense of reducing employment flexibility on the part of firms, meaning that firms may not be able to react to shocks as promptly and freely. In particular, since financial and real policies are interrelated through the value maximization objective, firms should find it optimal to reduce debt financing in favor of equity. If however, there are reasons why certain firms cannot do this, they may become over-levered and, as a result, be more prone to bankruptcy and liquidation. Whether the positive effects of such pro-labor reforms dominate overall, remains an open question.

References

Abowd, John M., 1989, The Effect of Wage Bargains on the Stock Market Value of the Firm, American Economic Review 79(4), 774-800.

Acharya, Viral V, Ramin P. Baghai, and Krishnamurthy V. Subramanian, 2010, Labor Laws and Innovation, NBER Working Paper No. 16484.

Besley, Timothy, and Robin Burgess, 2004, Can Labor Regulation Hinder Economic Performance? Evidence from India, Quarterly Journal of Economics 119, 91-134.

Chen, Huafeng, Marcin Kacperczyk and Hernan Ortiz-Molina, 2009, Labor unions, operating flexibility, and the cost of equity, mimeo.

Hirsch, Barry T., 1991, Union Coverage and Profitability among U.S. Firms, Review of Economics and Statistics 73, 69-77.

Jimeno, Juan F., and Luis Toharia, 1994, Unemployment and labour market flexibility: Spain (International Labour Office, Geneva).

Kuzmina, Olga, 2012, Capital Structure and Employment Flexibility, NES Working Paper.

Matsa, David A., 2010, Capital structure as a strategic variable: evidence from collective bargaining, Journal of Finance 65(3), 1197\mathbb{D}1232.

Pagano, Marco, and Paolo Volpin, 2008, Labor and Finance, mimeo.

Perotti, Enrico C., and Kathryn E. Spier, 1993, Capital structure as a bargaining tool: the role of leverage in contract renegotiation, American Economic Review 83(5), 113121141.

Ruback, Richard, and Martin Zimmerman, 1984, Unionization and Profitability: Evidence from the Capital Market, Journal of Political Economy 92, 1134-1157.

Simintzi, Elena, Vikrant Vig, and Paolo Volpin, 2010, Labor and capital: is debt a bargaining tool?, mimeo.

Davidsson, Johan Bo (2011), An Analytical Overview of Labour Market Reforms Across the EU: Making Sense of the Variation, LABOR Working Paper no. 111, Laboratorio Riccardo Revelli, Centre for Employment Studies.

Olga Kuzmina
New Economic School (NES)
OKuzmina@nes.ru
http://www.nes.ru/en



Olga Kuzmina holds a Ph.D in Business (Finance and Economics) from Colombia University, Graduate School of Business. She joined New School of Economics as Assistant Professor in 2011, and holds the position as Promsvyazbank Assistant Professor of Finance since 2012.

Her main research interests are Empirical Corporate Finance, Organizations and Strategy, and Applied Micro-econometrics.