Robbing The Financial Channels of Labor Rigidities: Evidence from Portugal

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Outline of Discussion

- Comment 1: Mechanism and Theory
- Comment 2: Instrument
- Comment 3: Labor Shares
- Other comments

COMMENT 1: MECHANISM AND THEORY

Comment 1: Mechanism and Theory

- The current draft is a bit confusing with respect to the theoretical frictions that lead firms being more labor intensive. There are several reasons for these differences, and different economic reasons lead to different empirical tests. For example:

- Firms in different industries have different labor shares due to different production functions.

- Some managers might have preferences for more labor than capital, despite the suboptimal allocation of inputs.

- Financial constraints might prevent firms from having their optimal capital, hence they might rely more on labor to increase production capacity. (most likely case in Portugal)

- Frictions in labor markets (e.g, thickness, or agglomeration spillovers) might lead some companies to have larger (or smaller) labor shares.

Comment 1: Mechanism and Theory

- The authors introduce in the appendix a highly stylized partial equilibrium model that does not shed much light on underlying economic frictions and mechanism. Also, the fact that wages are exogenous sounds like an oversimplifying assumption.

- I think the paper could gain from having a simple model that could even provide more testable hypotheses. (More on this later)

- Surprisingly, the model of Evans and Jovanovic (1989) fits really well this setting. I am sure there are better frameworks to model the dynamics of the paper but this could be a good start.

- Further, Evans and Jovanovic (1989) would imply that financial constrains lead more productive firms to have a larger labor share.

Comment 1: Mechanism and Theory

Evans and Jovanovic (1989)

- Continuum of individuals with managerial/entrepreneurial skill x. Those with large x become entrepreneurs, while those with low x work for entrepreneurs. Firms pay fixed wage w to workers.

- Everyone receives one unit of capital z. Workers lend their units of capital to firms at rate r.

- Firms are subject to credit constraints $k < \beta * z$ and maximize:

$$\begin{aligned} \max_{\{n,k\}} \ \pi(x,k,n) &= x^{\theta} k^{\alpha} n^{1-\alpha} - nw - r(k-z) \\ s.t. \qquad & k \leq \beta z \end{aligned}$$

- Wages and interest rates are defined by capital and labor market clearing conditions. You can pin down a closed form solution for optimal labor demand ($n(x)$), wages (w), and total firm output ($y(x)$).

Comment 1: Mechanism and Theory

Evans and Jovanovic (1989)

- You can defined labor share (LS) and show the parameter conditions when more productive firms have a higher labor share:

$$\frac{\partial LS}{\partial x} > 0$$

- And then you can show that those with higher productivity experience a larger decline in employment after a credit supply shock (drop in β):

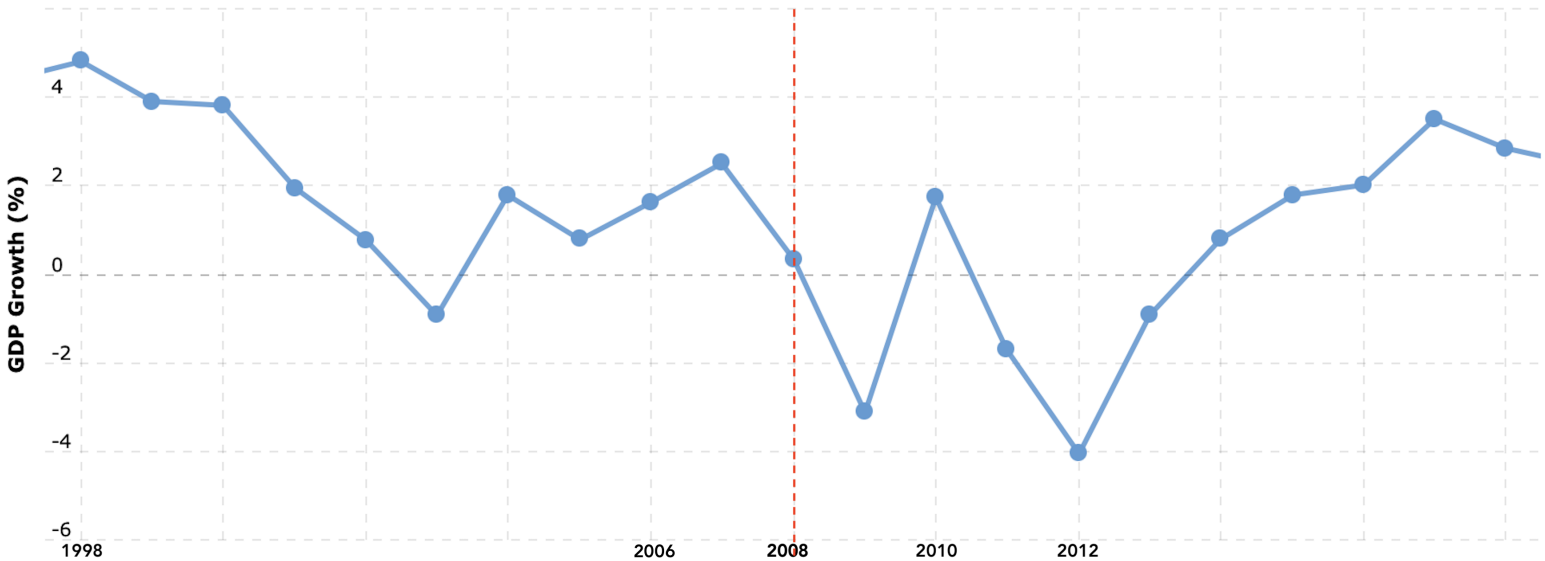
$$\frac{\partial^2 n}{\partial \beta \partial x} < 0$$

- All of this from their classical model without any extensions. You can introduce extensions (i.e., financial intermediation) and have more testable hypothesis. This could be very useful to address later empirical issues.

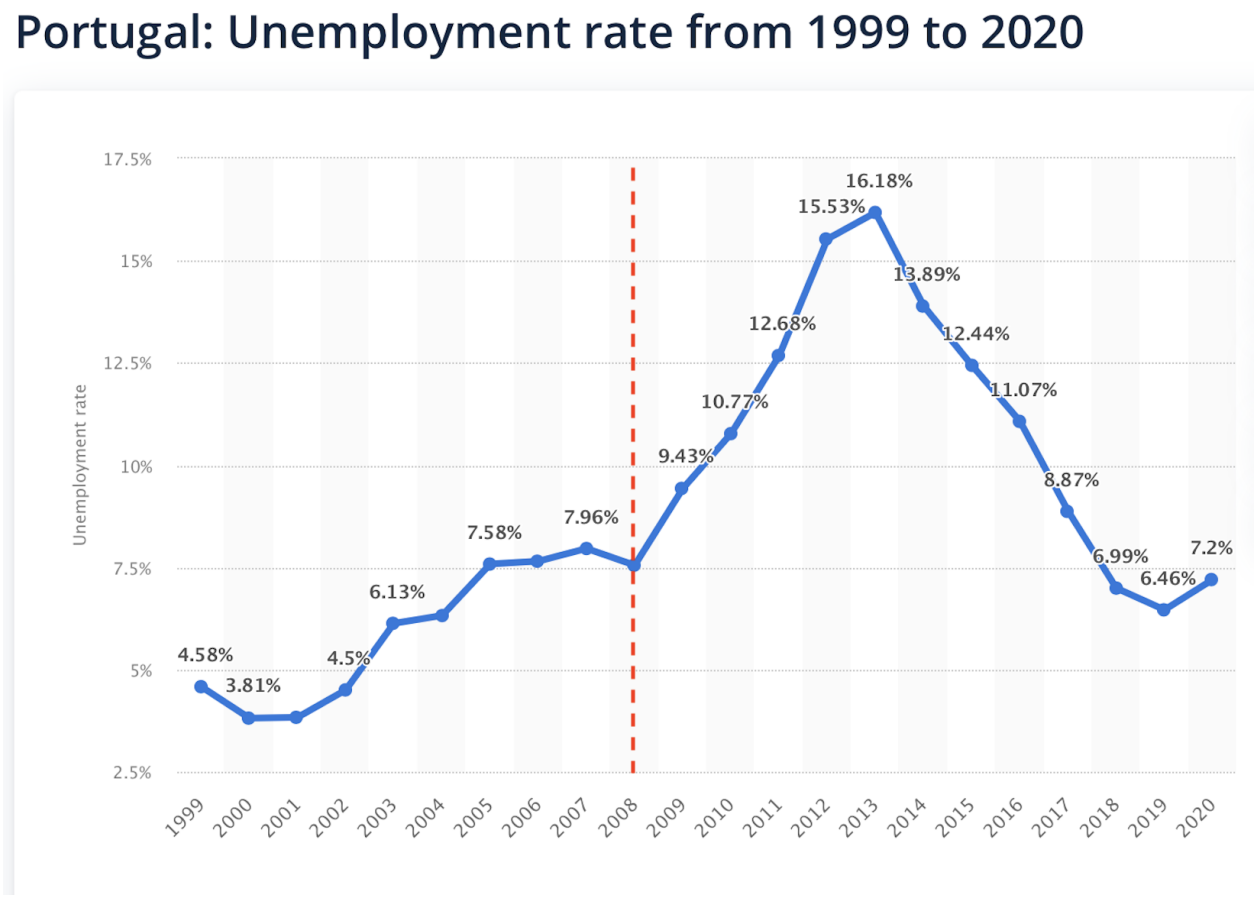
COMMENT 2: INSTRUMENT

Comment 2: Instrument

- Some background first. Portugal was part of the PIGS... The weakest economies in the eurozone during the European debt crisis.
- Portuguese GDP growth drop sharply in 2009.



Comment 2: Instrument

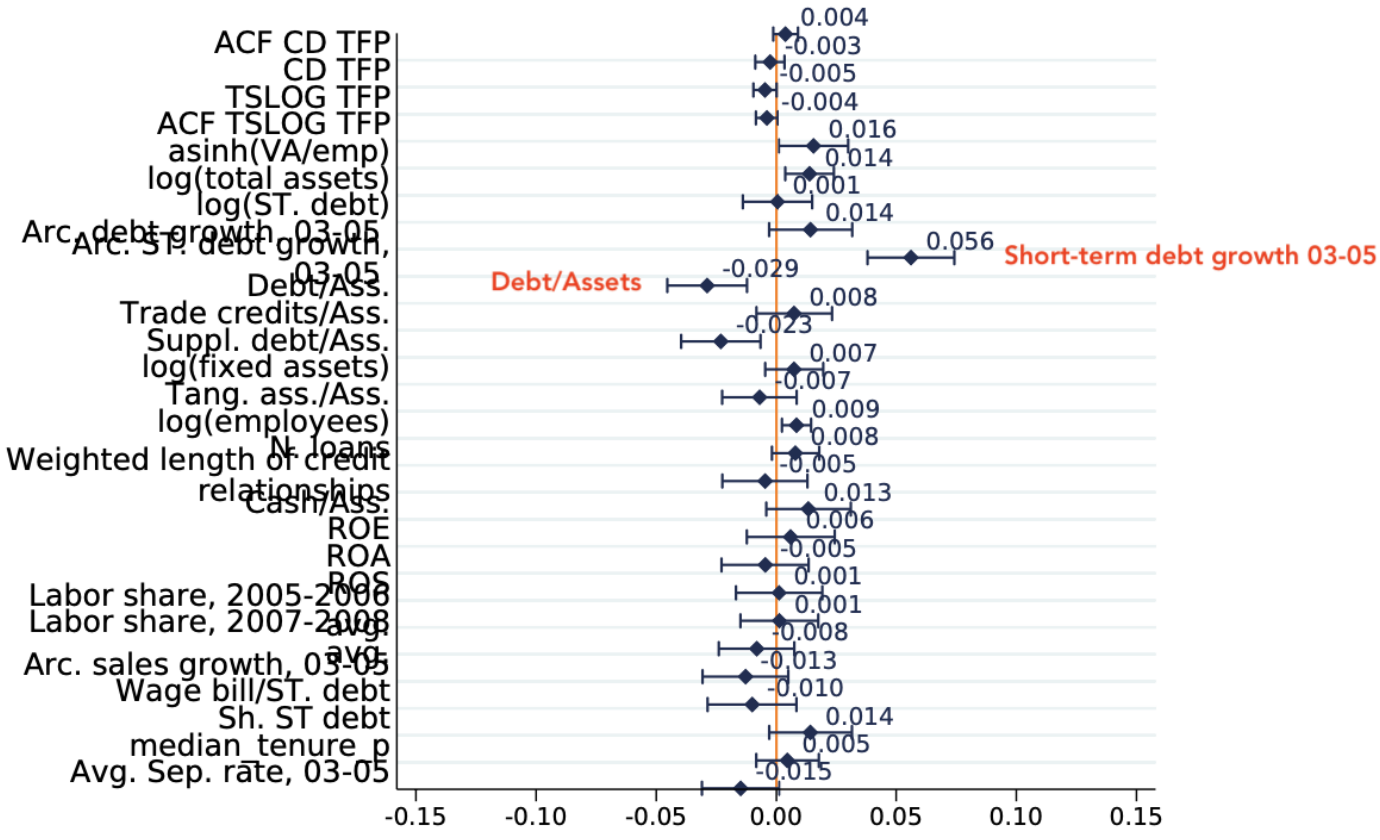


Comment 2: Instrument

- The authors use an identification technique in which they assume that firms working banks with more FD deposits experienced a large credit supply shock.
- They construct an instrument Z that measures the exposure of each firm to these banks. Portugal banking sector (similarly to other countries) has 4 banks (BCP, BPI, BES, CGD) that capture almost all market share.
- Biggest identification problem. Selection of firms to banks.
- Z may correlate with other variables that explain why firms are hit by the recession and global credit crunch more harshly.
- For example, firms that had debt needs right before the recession are more likely to be hit by the recession.

Comment 2: Instrument

Figure F.9: Balance checks



The Figure shows the coefficients (with 95% confidence intervals) of pairwise regressions of the standardized value of each variable in 2005 (unless reported otherwise) on the instrument Z_i. All regressions include the same set of fixed effects of the main specification, which are 3-digit industrial sector, commuting zone, quintiles of firm age and size in 2005, and dummies for: exporter, overdue loans in 2007, loans with banks failing up until 2014, bond issuance, exporter, single loans. Standard errors robust to heteroskedasticity.

Comment 2: Instrument

Solutions:

- First, plot Figure 9 without controls and FE
- Second, you can try to use as robustness the strategy by Blattner, Farinha, and Rebelo (forthcoming AER).
    - They show that the unexpected intervention of the European Banking Authority lead banks with low capital ratios to cut credit supply to firms.
    - This strategy also has the selection problem. But if this instrument is uncorrelated with your current instrument, makes it harder to come up with an alternative.

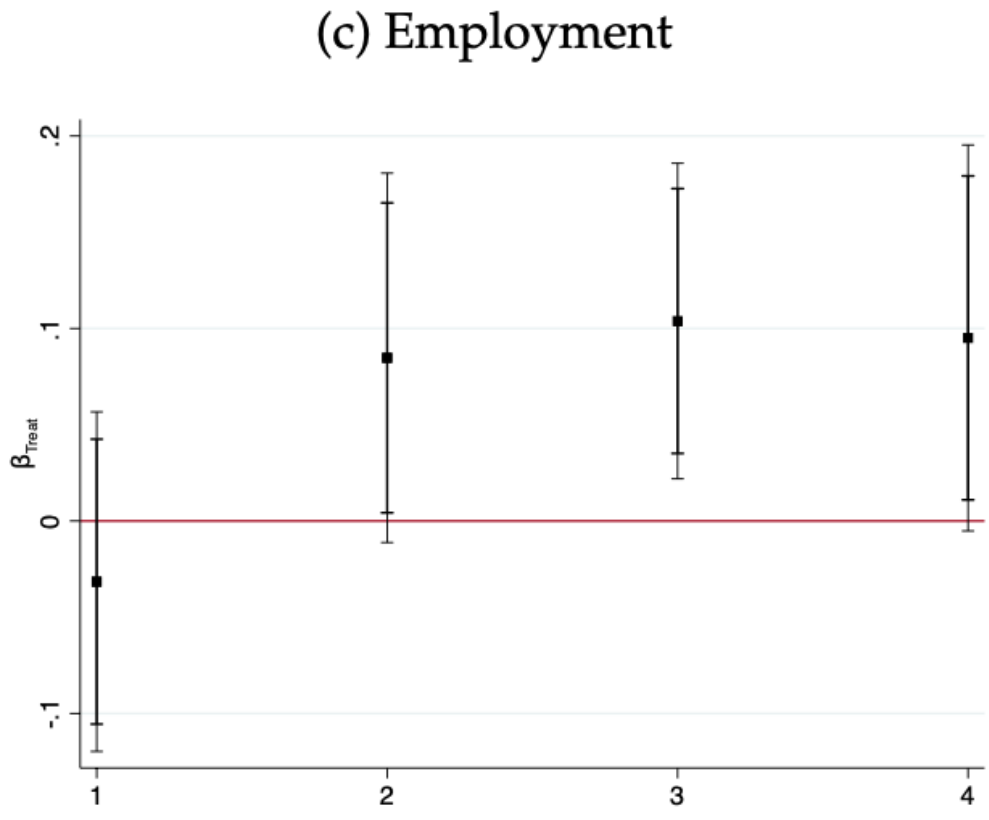
COMMENT 3: LABOR SHARES

Comment 3: Labor Shares

- The most important of the paper is estimated with the following model:

$$log(Y_{i,t}) = \gamma_i + \tau_t + \left(\sum_{k=1}^{n} \beta_k S_i \cdot \mathbb{1}\{LabSh_{bin} = k\} + \mathbf{\Gamma X_{i,pre}} \right) \cdot \mathbb{1}\{t = Post\} + \\ + FE_{i,t} + \varepsilon_{i,t} \quad t \in \{Pre, Post\}, \tag{5}$$

Comment 3: Labor Shares



Comment 3: Labor Shares

- If the main point of the paper is that higher labor shares causes larger credit supply shocks, you need to find exogenous variation to labor shares.
- Right now many things can correlated with labor share. In fact, because the variation only stems from Q1, it is extremely easy to find alternative stores that explain Figure 2 (main result).

Concluding Remarks

- I really like the question of this paper, and the basic intuition behind the results.
- I think the paper could gain a lot from more clarity on some empirics and theory. Either go a bit harder on theory or empirical strategy.
- I think that if some empirical aspects are fixed the paper as the potential to be influential.

Thank you!