

Firm-size dynamics and the role of labour market institutions

 Benedicta Marzinotto
 (European Commission)

 Ladislav Wintr
 (Banque centrale du Luxembourg)

Frankfurt, 25-26th June 2015

Disclaimer: The results in this presentation are preliminary materials circulated to stimulate discussion and critical comments. References in publications should be cleared with the authors. The opinions expressed in this presentation are those of the authors and do not necessarily reflect the views of the Eurosystem, European Commission or the BCL.

Literature review

· Firm characteristics

- Smaller firms tend to produce more jobs (Birch 1979; Lotti et al 2003; Neumark et al 2011) but only after controlling for age (Haltiwanger et al 2013)
- Younger firms tend to produce more jobs (Gomez-Salvador et al 2004; Haltiwanger et al. 2013)
- Evidence that more productive firms produce more jobs (OECD 2009)

Labour market institutions

- Stringent EPL inhibits the emergence of high-risk entrepreneurial firms (Henrekson and Johansson 2010)
- Stringent EPL reduces dismissal probabilities for permanent workers that are concerned by restrictions (Boeri and Jimeno 2005)
- size-contingent EPL makes allocation of labour sub-optimal (Schivardi and Torrini 2008; Garicano, Lelarge and Van Reenen 2013)

Job reallocation rate: cross-country variation

Size-contingent EPL reduces reaction of jobs to market-driven shocks

Job reallocation rate (st. dev.): most constrained versus most dynamic size class; pre-crisis sample (2000-2008)



5

EPL and the 20-employee threshold

Stricter EPL increases the difference in the growth performance between firms not covered by the EPL and those that would become covered (i.e. if exceeding the 20E threshold).

Δe_{cst}^{10E}	$-\Delta e_{cst}^{20E}$	= f(E	EPL_{ct}

c country s sector t year ∆e^{xE} % of firms growing over X employees threshold.

OLS: (∆e ^{10E} -	- ∆ e ²0E)
Real value added growth	-0.03
	(0.029)
EPL ID: Individual dismissals	0.08+
	(0.042)
EPL CD: Collective dismissals	0.01
	(0.022)
Constant	-0.29*
	(0.120)
Country, Sector, Year FEs	Yes
Observations	537
R ²	0.499

Notes: Standard errors in parentheses; ** p<0.01, * p<0.05, + p<0.1

Outline

• Research questions

- Does EPL have an impact on job reallocation?
- What is the role of size-contingent EPL? Does EPL bind more firms of a size close but below the threshold than others?
- How does it behave over the cycle and what was the impact of the crisis? Is it more binding for growing or downsizing firms?

• Data

- CompNet size class dataset: firms changing size class or remaining in the same one during 3-year periods (per country, sector and year)
- Size classes: 1-9 employees, 10-19 employees, 20-49 employees, 50-249 employees, 250 employees and above
- Sample: 8 EU countries (AT, BE, DE, EE, ES, FI, IT, PT), 9 macro-sectors over the period 1998-2012 (about 2,000 observations)
- Institutional variables: EPL distinguishing between rules for individual and collective dismissal (OECD). In most countries applies to firms with 20 and more employees.

Job reallocation rate and EPL

Greater job reallocation in more flexible EPL regimes



urce: own calculations based on CompNet Labour Module and OECD Note: higher EPL numbers indicate more flexible labour markets.

Stricter EPL reduces firm dynamics (threshold 20E)

Logit: growing firms			Logit: do	Logit: downsizin	Logit: downsizing firms	
abor productivity	-0.06	-0.06	0.05	Labor productivity	Labor productivity -0.17**	Labor productivity -0.17** -0.16**
(0	(0.037)	(0.037)	(0.035)		(0.035)	(0.035) (0.035)
(0	0.74**	0.74**	0.74**	Real value added growth	Real value added growth -1.87**	Real value added growth -1.87** -1.83**
	(0.147)	(0.148)	(0.136)		(0.099)	(0.099) (0.097)
EPL ID: Individual dismissals	-1.80**	-1.66**	-1.39**	EPL ID: Individual dismissals	EPL ID: Individual dismissals -1.17**	EPL ID: Individual dismissals -1.17** -2.20**
	(0.416)	(0.452)	(0.407)		(0.218)	(0.218) (0.246)
EPL CD: Collective dismissals	-0.12	-0.05	-0.03	EPL CD: Collective dismissals	EPL CD: Collective dismissals -0.05	
	(0.087)	(0.096)	(0.076)		(0.057)	(0.057) (0.063)
EPL ID * crisis		-0.38**		EPL ID * crisis	EPL ID * crisis	EPL ID * crisis 0.68**
		(0.064)				(0.074)
EPL CD * crisis		-0.02		EPL CD * crisis	EPL CD * crisis	EPL CD * crisis 0.11**
		(0.027)				(0.022)
EPL ID * size class 2			-0.63**	EPL ID * size class 3	EPL ID * size class 3	EPL ID * size class 3
(10-19 employees)			(0.040)	(20-49 employees)		
EPL ID * size class 3			-0.38**	EPL ID * size class 4	EPL ID * size class 4	EPL ID * size class 4
(20-49 employees)			(0.057)	(50-249 employees)		
EPL ID * size class 4			-0.46**	EPL ID * size class 5	EPL ID * size class 5	EPL ID * size class 5
(50-249 employees)			(0.135)	(>250 employees)	(>250 employees)	(>250 employees)
EPL CD * size class 2			-0.34**	EPL CD * size class 3	EPL CD * size class 3	EPL CD * size class 3
(10-19 employees)			(0.026)	(20-49 employees)		
EPL CD * size class 3			-0.31**	EPL CD * size class 4	EPL CD * size class 4	EPL CD * size class 4
(20-49 employees)			(0.038)	(50-249 employees)		
EPL CD * size class 4			-0.41**	EPL CD * size class 5	EPL CD * size class 5	EPL CD * size class 5
(50-249 employees)			(0.080)	(>250 employees)		
Constant	3.91**	3.38**	1.99+	Constant	Constant 0.88	Constant 0.88 3.80**
	(1.053)	(1.197)	(1.024)		(0.571)	
Country, Sector, Year FEs	Yes	Yes	Yes	Country, Sector, Year FEs	Country, Sector, Year FEs Yes	Country, Sector, Year FEs Yes Yes
Observations	1 769	1 769	1 769	Observations	Observations 1 651	Observations 1 651 1 651
R ²	0.715	0.722	0.761	R ²	R ² 0.835	R ² 0.835 0.843

Notes: Base groups: growing firms: size class 1; downsizing firms: size class 2. Standard errors in parentheses ; ** p<0.01, * p<0.05, + p<0.1.

Conclusions Main results

- Stricter EPL (e.g. by imposing positive hiring and firing costs) reduces the likelihood that firms grow or shrink (in terms of employment), as predicted by the literature.
- EPL has a stronger (negative) effect on the growth of firms above the 20
 employee-threshold, which is in line with the institutional setup of most
 countries in the dataset (e.g. concerning restrictions on collective and
 individual dismissals).
- During the financial crisis, the negative effect of EPL on growing firms was aggravated, while the effect on downsizing firms was muted.
- Qualitative results are robust across sectors, country groups, and some additional controls available in the CompNet dataset.

Policy implications

- EPL has a stronger negative impact on firm growth during the financial crisis, acting as a drag on recovery.
- Softening of threshold effects would lead to improved allocation of jobs.