Resource reallocation over the business cycle: a cross-country comparison

Leonardo Indraccolo[†] Laura Lufray[‡]

[†] *European University Institute & CompNet*

[‡] *CompNet*

June 23, 2023

Motivation

- Economic theory predicts recessions can improve resource allocation through ”cleansing effects” (Caballer et al.(1994))
- Pace of resource reallocation in economy is linked to firm responsiveness (Foster et al.(2016))
- But: European cross-country empirical evidence supporting the theory is still in part missing

Questions:

- Are resources better or worse allocated during economic downturns? How does it differ across countries?
- How do country-specific institutional features relate to firm responsiveness ?

This chapter

Use CompNet data to:

- Document evolution of measures of allocative efficiency over the business cycle and across countries
- Show how firm responsiveness changes with the aggregate state of economy

Combine CompNet data with OECD data to:

- Document relationship between country-specific features of labor markets and firm responsiveness

Why care?

- Inform policy makers on the drivers of firm productivity over business cycle
- Crucial to design policy interventions to improve firms' productivity

Data & Measurement

CompNet Data:

- Aggregated data for 19 European countries
- Includes only firms with at least 20 employees
- Time span: 2008-2020
- Define recessions based on average European GDP growth
- Unit of observation (aggregation): 1 digit sector level

OECD data:

- EPL index

Measurement:

- Firm responsiveness: Job creation and destruction rates
- Allocative efficiency: Covariance between firm size and productivity (OP measure)

OP measure over the business cycle

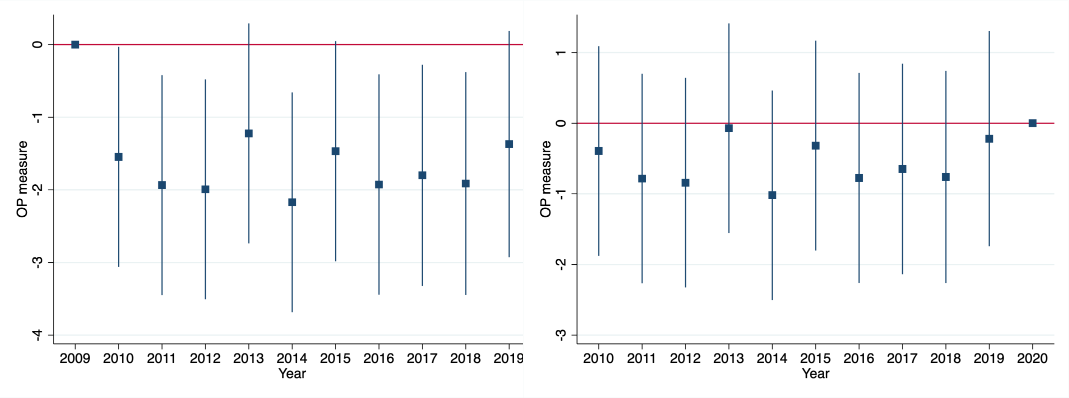
- OP measure is higher during recessionary events across almost all countries
- Suggestive evidence of ”cleansing effects” of recessions

	Expansionary Times	Recessions
	Op measure	*Op measure*
Nordic countries	8.057	12.239
Southern countries	0.149	0.152
Central-East countries	0.699	0.979
Western countries	6.566	8.119

Table 1: Op measure across countries and aggregate states of the economy.

Separating the two recessions

Figure 1: Allocative efficiency over time



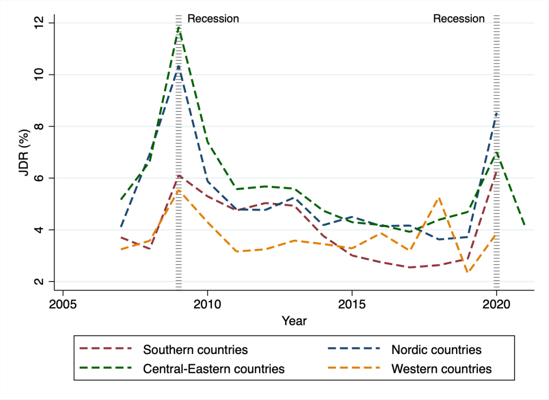
(a) Op measure with reference year 2009.

(b) Op measure with reference year 2020.

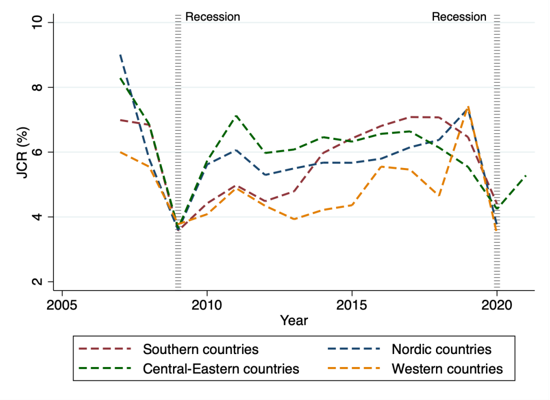
Notes: In panel (a) we plot the OP measure over time with reference year 2009. In panel (b) we plot the same measure with reference year 2020.

Firm responsiveness over the business cycle

Figure 2: JDR and JCR over the business cycle



(a) JDR over the business cycle.



(b) JCR over the business cycle.

Role of Labor Market Rigidity

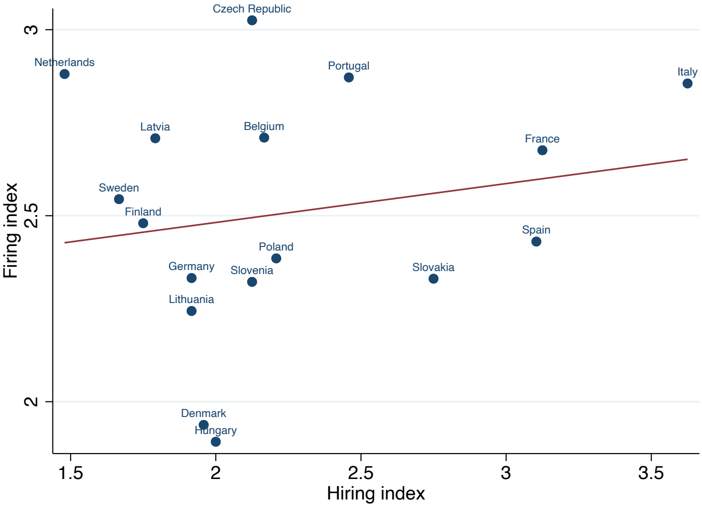
- Firms respond to changes in profitability when benefits exceed costs (ex. bureaucratic and legal costs)
- Firms' inaction regions are increasing in these costs
- Q: How does labor market rigidity relate to measures of job creation and destruction rate?

Measure labor market rigidity with:

- OECD EPL hring index
- OECD EPL firing index

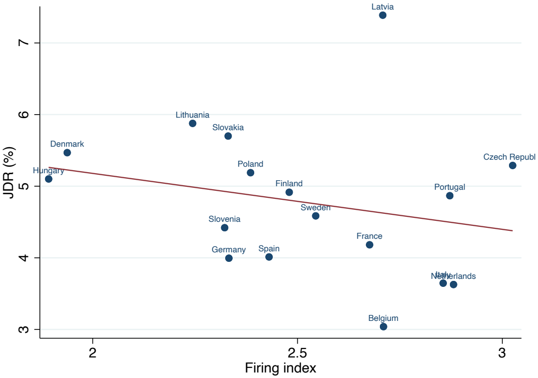
Labor market rigidity measures

Figure 3: Correlation between firing and hiring index

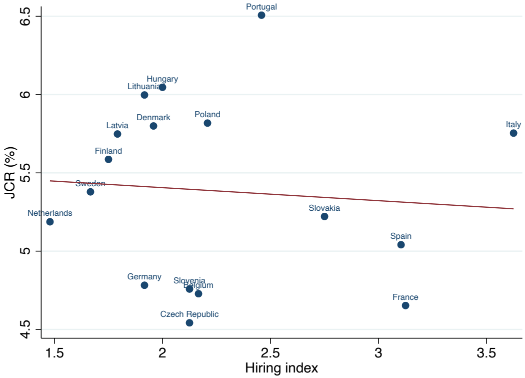


Labor market rigidity and firm responsiveness

Figure 4: JDR and JCR over indexes of labor market rigidity



(a) JDR over firing index of the labor market.



(b) JCR over hiring index of the labor market.

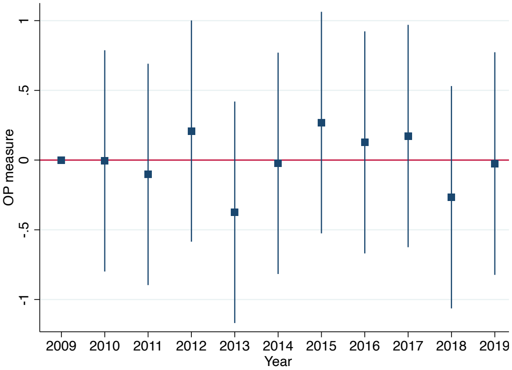
Conclusions

- Suggestive evidence shows that allocative efficiency improves during recessions
- Measures of JC and JD closely track the business cycle in all countries
- Labor market rigidity measures correlate with firm dynamism

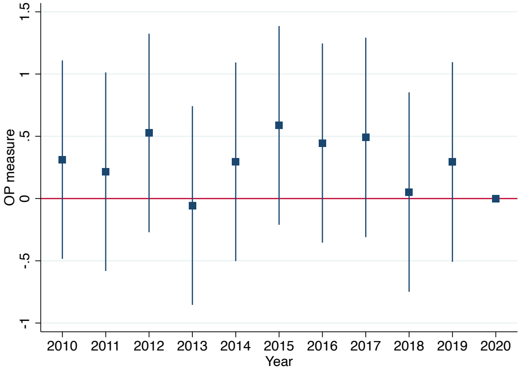
Appendix

Separating the two recessions (all sample)

Figure 5: Allocative efficiency over time (all sample)



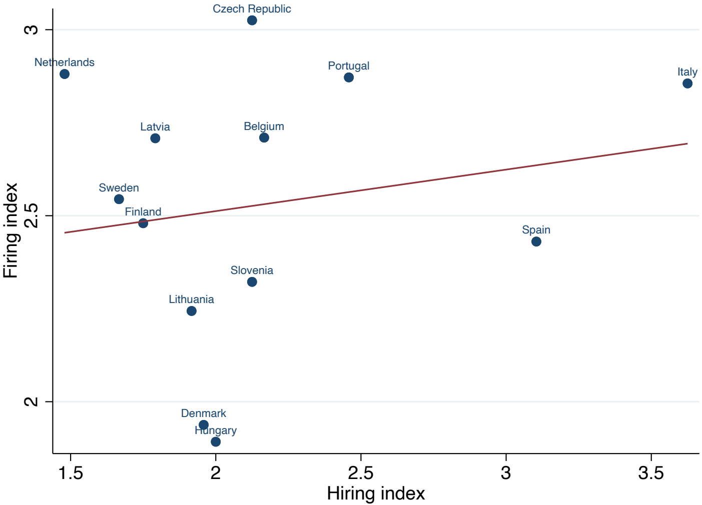
(a) Op measure with reference year 2009.



(b) Op measure with reference year 2020.

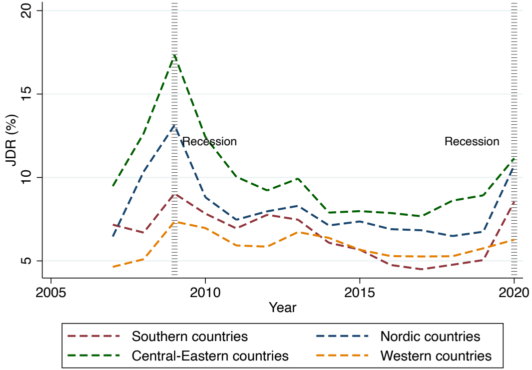
Labor market rigidity measures (all sample)

Figure 6: Correlation between firing and hiring index

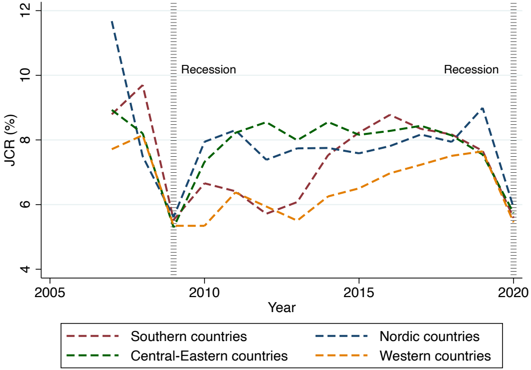


Firm responsiveness over the business cycle (all sample)

Figure 7: JDR and JCR over the business cycle (all sample)



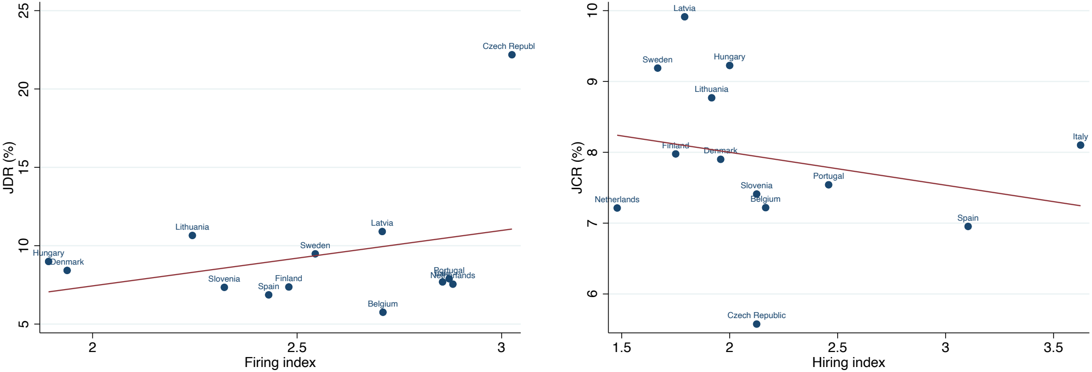
(a) JDR over the business cycle.



(b) JCR over the business cycle.

Labor market rigidity and firm responsiveness (all sample)

Figure 8: JDR and JCR over indexes of labor market rigidity (all sample)



(a) JDR over firing index of the labor market.

(b) JCR over hiring index of the labor market.