

# Eurosclerosis at 40:

## Labor Market Institutions, Dynamism, and European Competitiveness

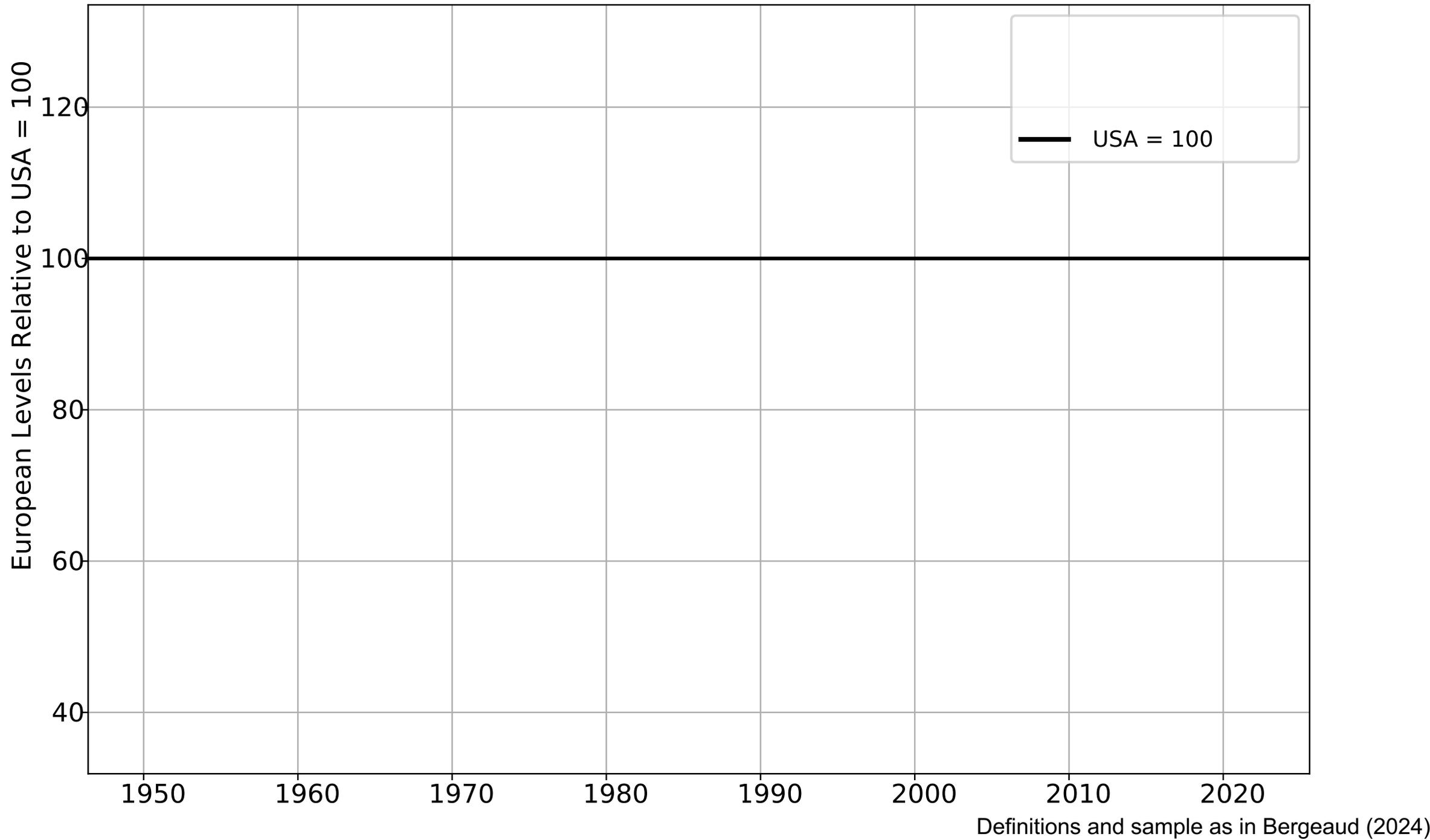
**Benjamin Schoefer**

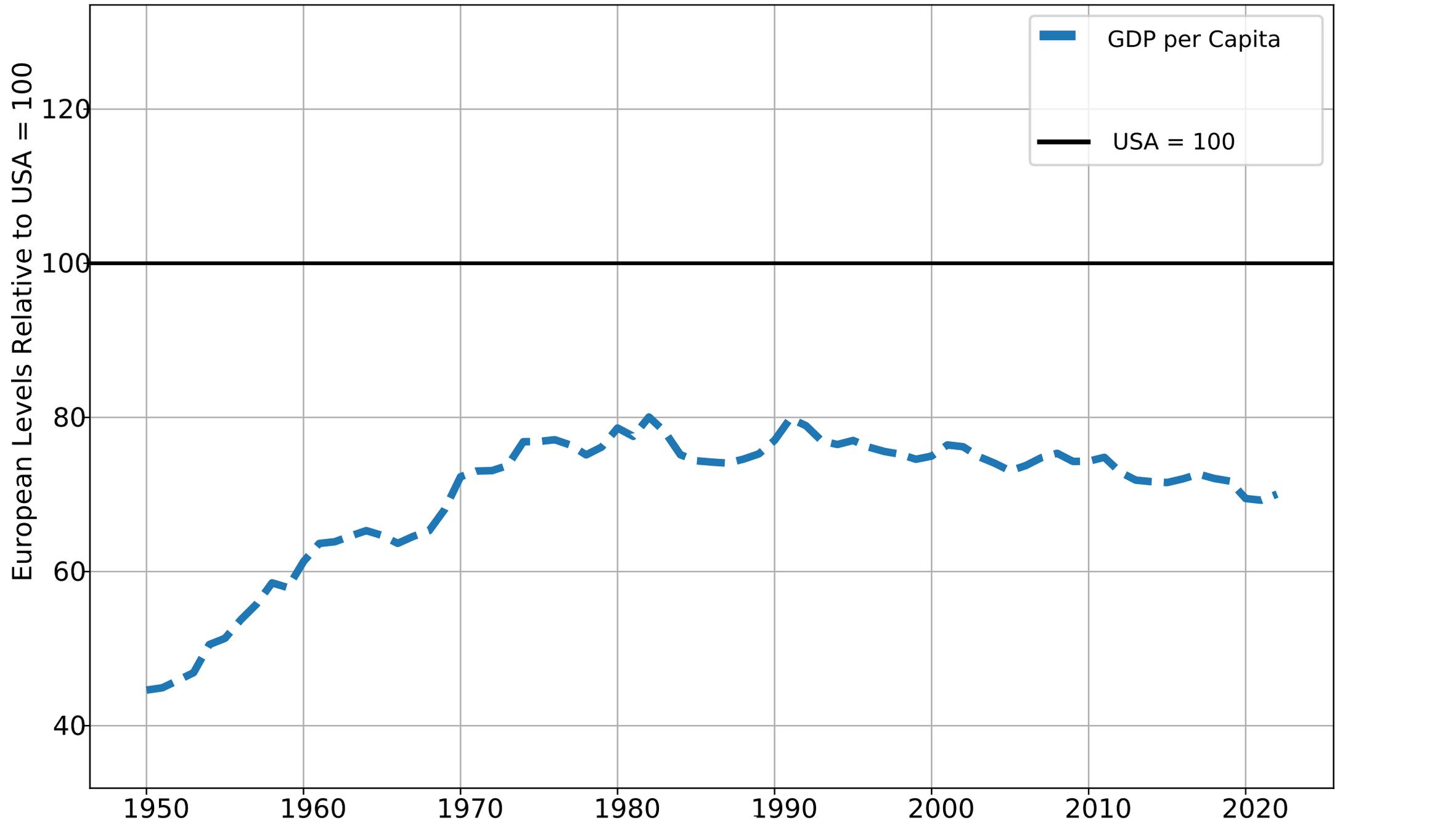
UC Berkeley

NBER, CEPR, CESifo, IZA, Bundesbank, IWH Halle

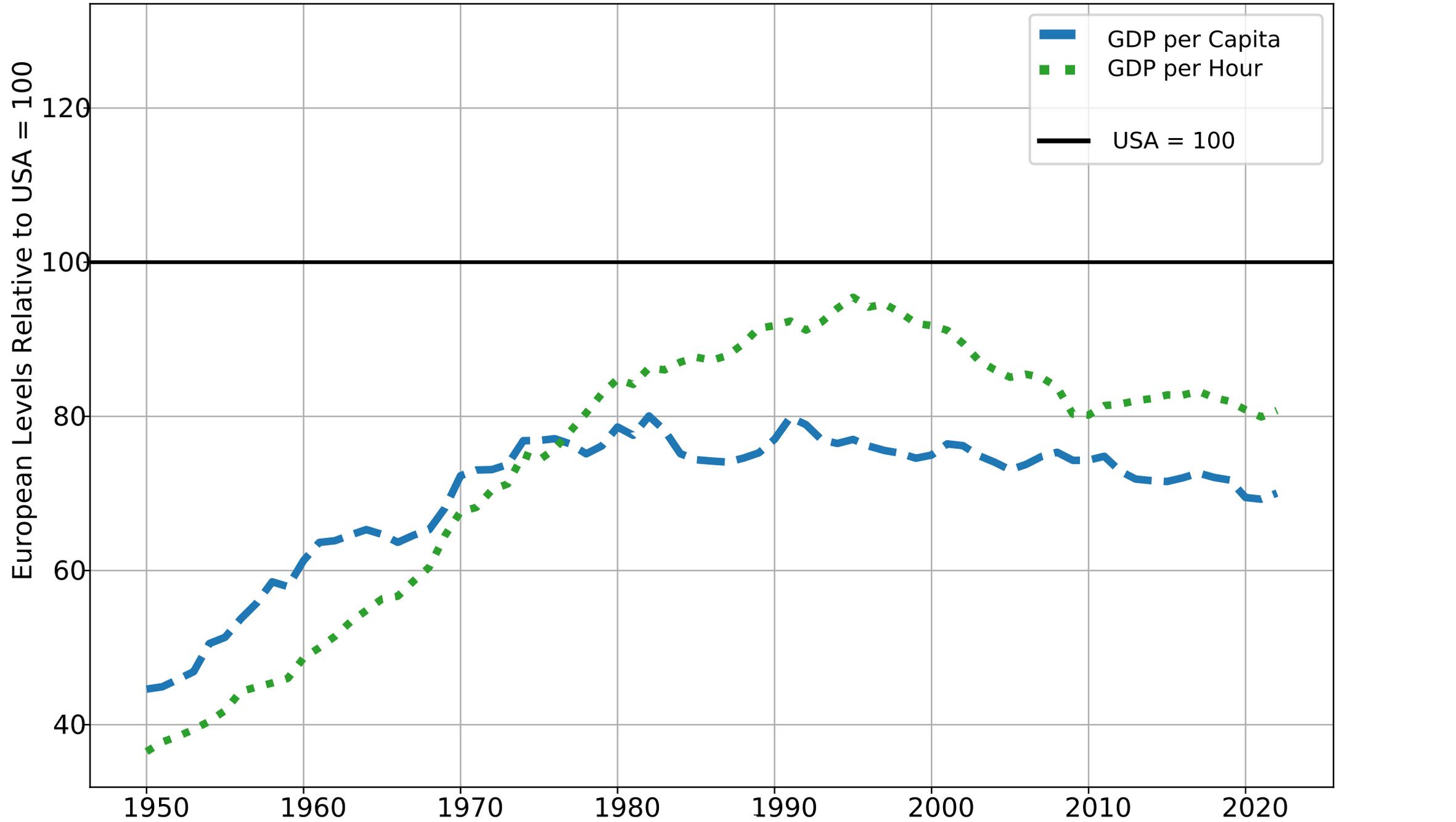
ECB Forum on Central Banking  
Adapting to change: macroeconomic shifts and policy responses

Sintra 2025

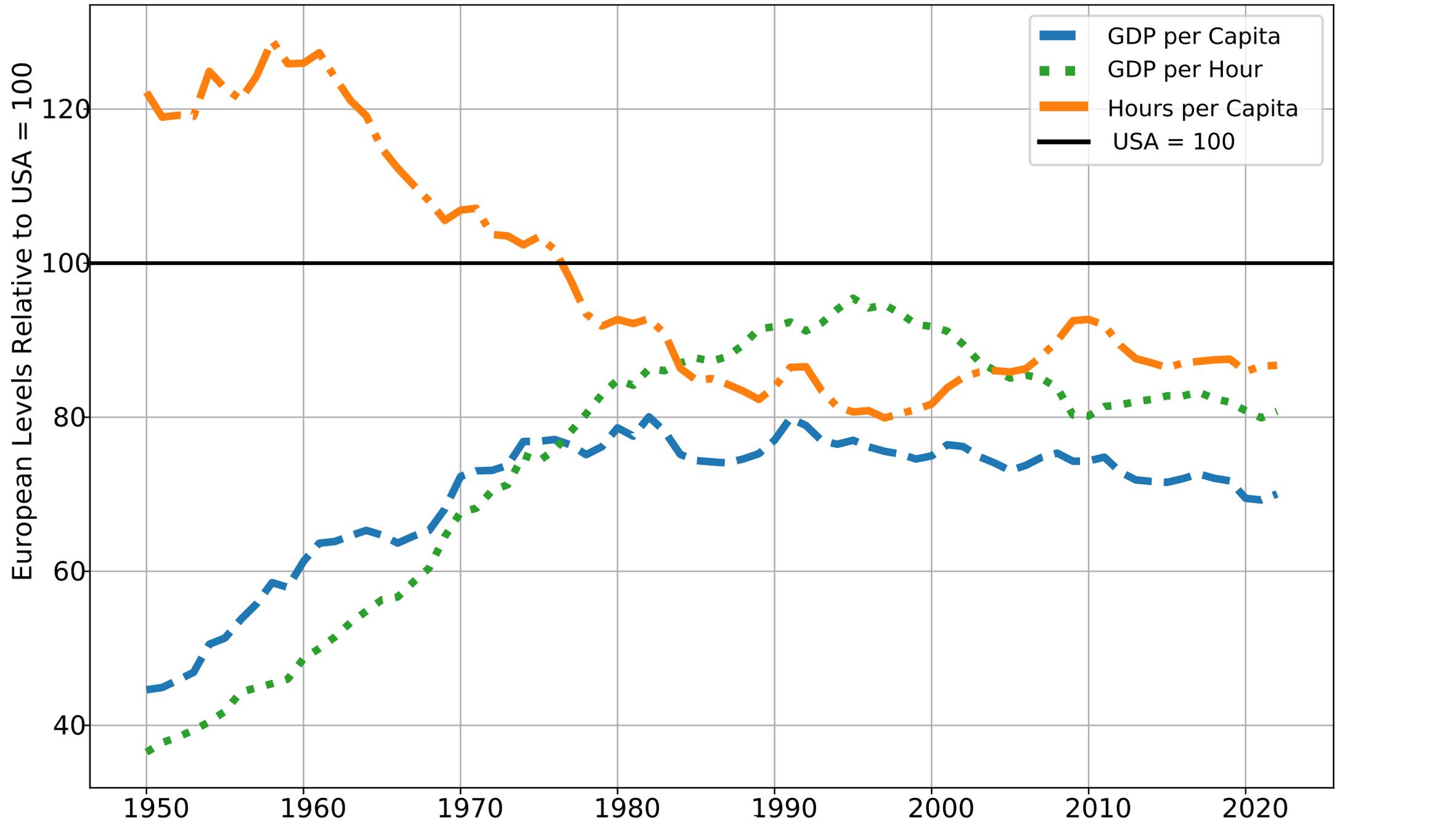




Definitions and sample as in Bergeaud (2024)



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# Draghi Report (2024):

First – and most importantly – Europe must profoundly refocus its collective efforts **on closing the innovation gap with the US and China**, especially in **advanced technologies**. Europe is stuck in a **static industrial structure with few new companies rising up to disrupt** existing industries or develop new growth engines. [...] This **lack of dynamism** is self-fulfilling. [...]

Technological change is accelerating rapidly. Europe largely missed out on the digital revolution led by the internet and the productivity gains it brought: in fact, the productivity gap between the EU and the US is largely explained by the **tech sector**. The **EU is weak in the emerging technologies** that will drive future growth. [...]

If Europe cannot become more productive, we will be forced to choose. We will not be able to become, at once, a leader in new technologies, a beacon of climate responsibility and an independent player on the world stage. We will not be able to finance our social model. We will have to scale back some, if not all, of our ambitions. This is an existential challenge.

# Other Observers:

“Yet, growth has been mediocre, with Europe’s performance deteriorating—both absolutely and in comparison with the United States. [...] Europe has become stuck in a rut. [...] [...] A system built around the **assimilation of existing technologies, [...] an industrial structure dominated by large firms with stable markets** [...]. What is needed now is less vertically integrated firms, greater mobility within and across firms, more retraining, greater flexibility of labour markets, **greater availability of external finance, in particular equity finance, and higher investment in both R&D and higher education.** In other words, what is required is a massive change in economic institutions and organisations, which has not yet occurred on a large scale in Europe. (...)”

“Not surprisingly, it is in the field of **production innovations where Europe has reasons to worry about falling behind the U.S. [...] despite all efforts to raise R&D spending. ... But in the application [...] to new products,** where small- and medium-sized firms have a comparative advantage, **Europe lacks the dynamism which the U.S. economy has shown** in the creation of thousands of new companies.”

# Other Observers:

## 2003 – Sapir Report:

“Yet, **growth has been mediocre, with Europe’s performance deteriorating—both absolutely and in comparison with the United States.** It is as if Europe has become stuck in a rut. [...] It has now become clear that the context in which economic policies have been developed changed fundamentally over the past thirty years. [...] A system built around the assimilation of existing technologies, mass production **generating economies of scale and an industrial structure dominated by large firms with stable markets and long term employment patterns no longer delivers in the world of today [...].** What is needed now is less vertically integrated firms, greater mobility within and across firms, more retraining, greater flexibility of labour markets, **greater availability of external finance, in particular equity finance, and higher investment in both R&D** and higher education. In other words, what is required is a massive change in economic institutions and organisations, which has not yet occurred on a large scale in Europe.”

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## 1985 – Giersch: “Eurosclerosis”:

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# Symptoms and Facets of "Eurosclerosis" over the Years

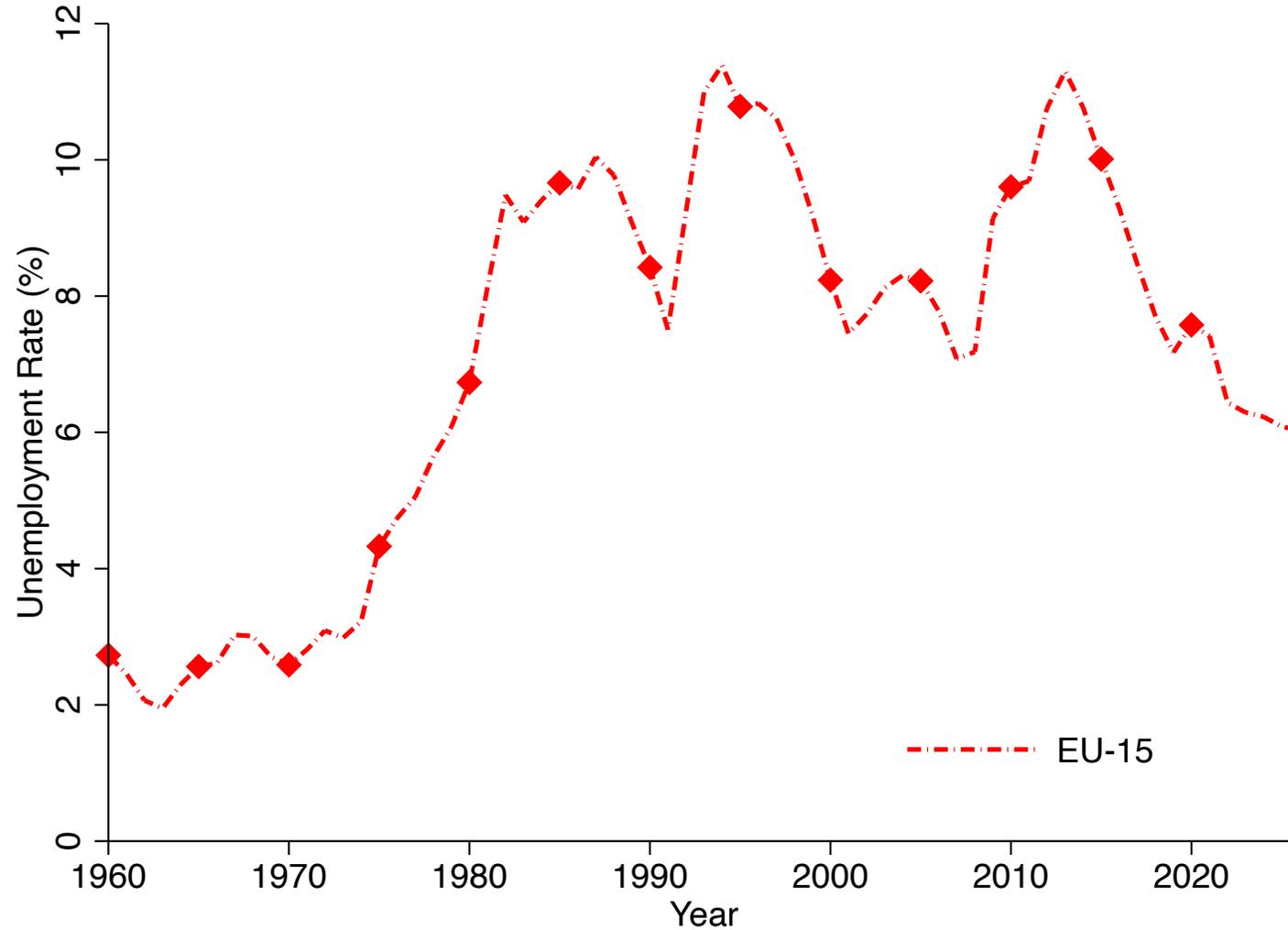
- High unemployment
- Lower business dynamism
- Slower adoption of frontier technologies and management practices
- Lower mobility and slower worker reallocation
- An emphasis on incremental innovation in old and established industries and firms, at the perceived expense of disruptive innovation and growth in and from the ICT sector
- Low labor supply and preference for leisure
- Rigid (often sectoral, national) wage setting institutions that depress labor demand
- Interference with corporate decision making and management through political or union influence (codetermination)
- Barriers to growth for innovative new firms
- ...

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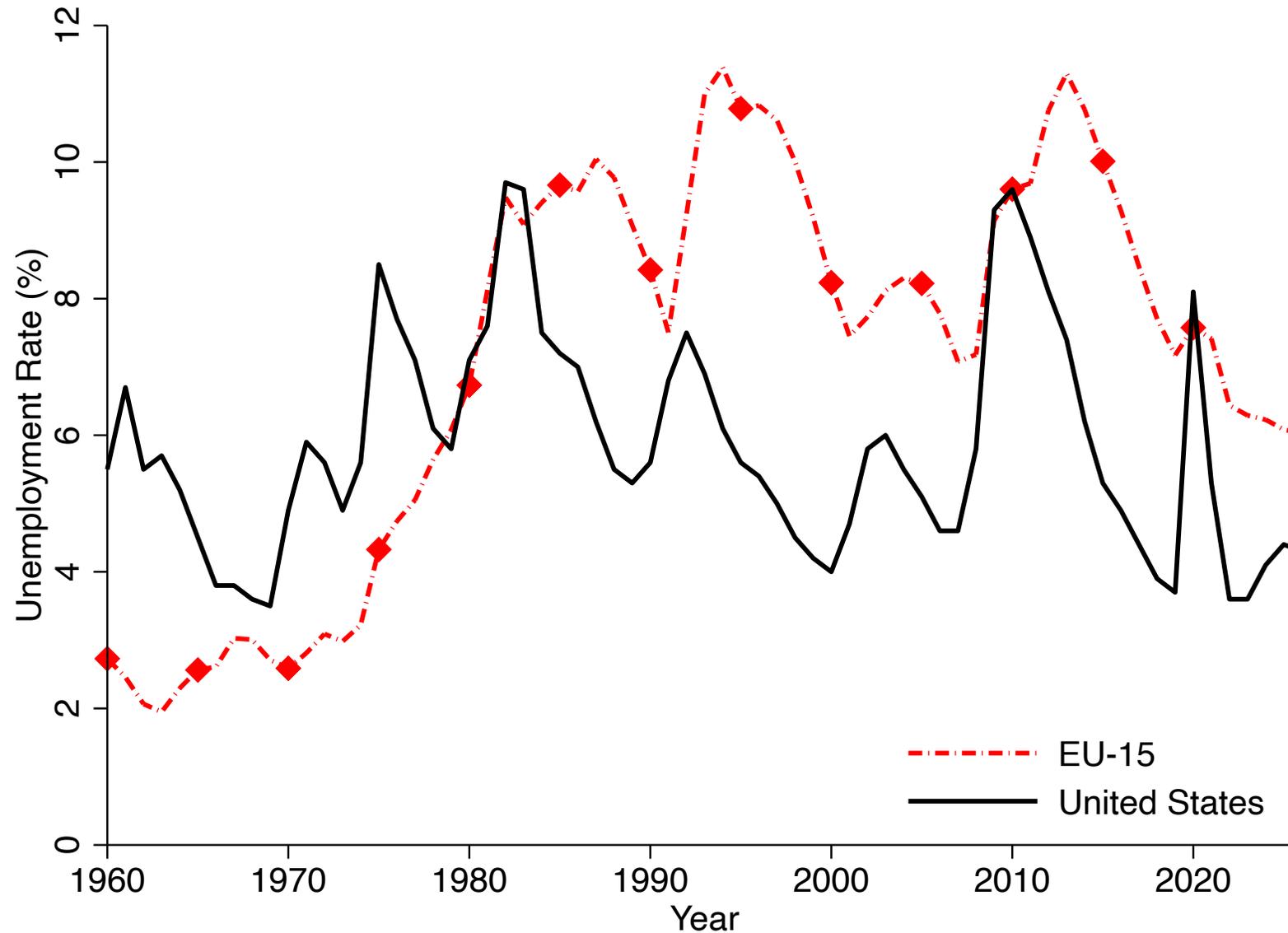
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# Unemployment Rate: Europe



# Unemployment Rate: Europe vs. US



1985

# Eurosclerosis

by Herbert Giersch

## European unemployment

2006

Blanchard,  
Economic PolicySUMMARY

*In the 1970s, European unemployment started increasing. It increased further in the 1980s, to reach a plateau in the 1990s. It is still high today, although the average unemployment rate hides a high degree of heterogeneity across countries.*

# Labor Market Rigidities: At the Root of Unemployment in Europe

1997

Horst Siebert

Journal of Economic Perspectives

**T**he unemployment picture in Europe is bleak. In the European OECD countries, the unemployment rate has moved up from 2.6 percent in 1970 to nearly 11 percent in 1996, ratcheting upward in the 1970s and the early 1980s and again in the mid-1990s. The long-term unemployment rate (relating to those who are unemployed for one year and more) has also risen sharply from 0.9 percent in 1979 to 6.6 percent in 1994. Job growth has been slow. Thus, the first question: how can this development be explained?

This experience differs markedly from that of the United States. As the upper

2009 Boeri and Garibaldi, Economic Policy

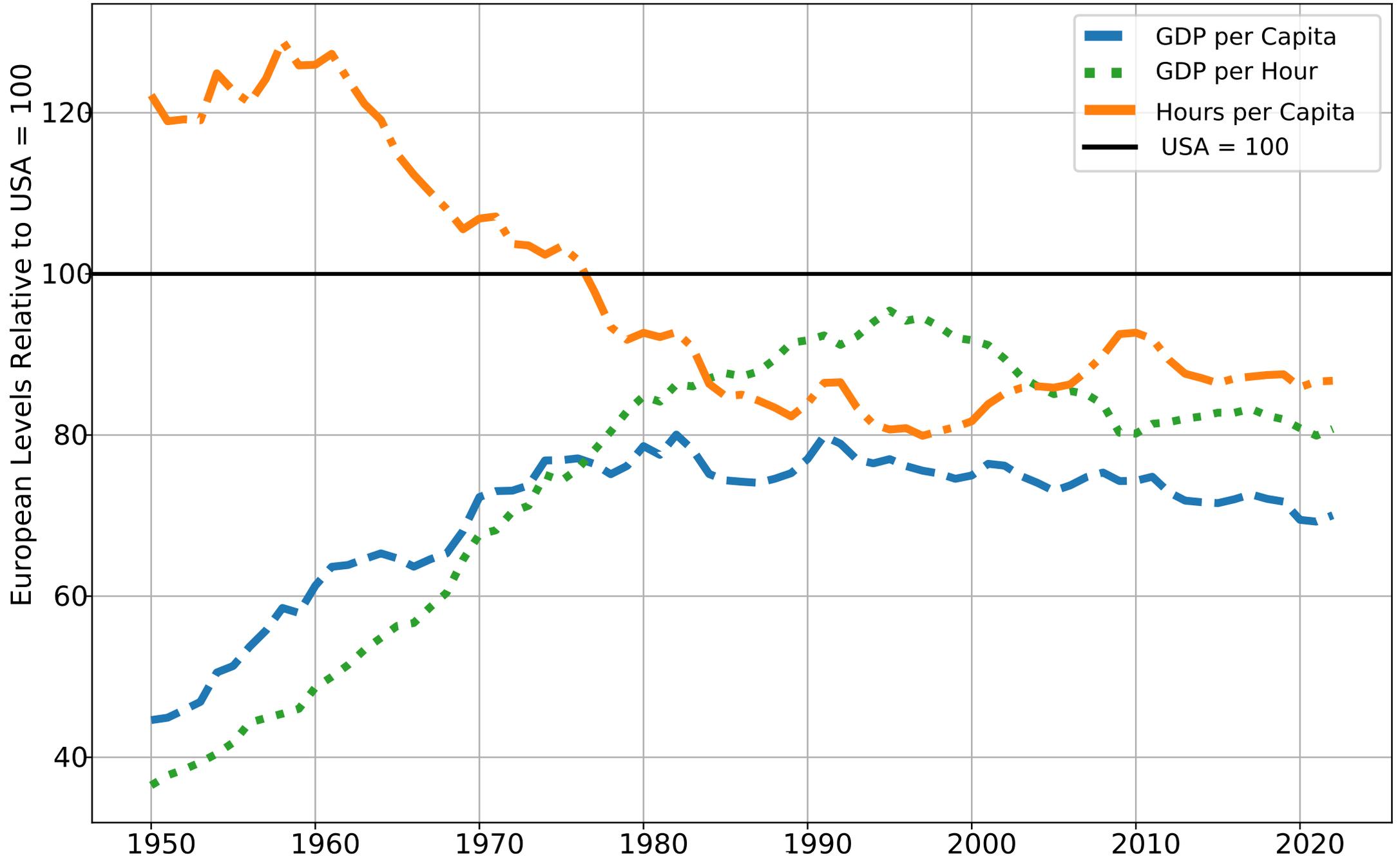
## Beyond Eurosclerosis

SUMMARY

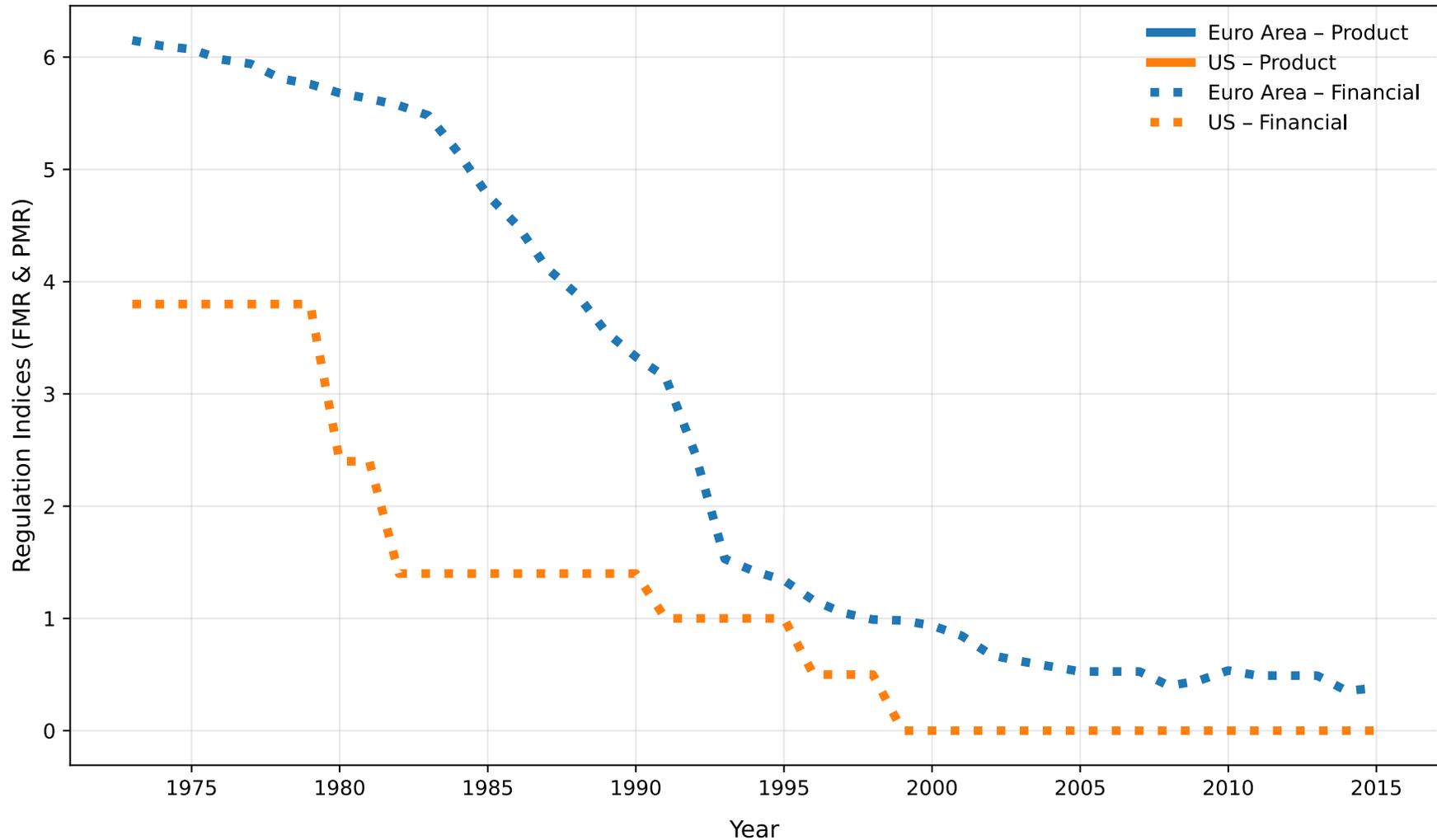
*Europe no longer suffers from Eurosclerosis; unemployment, notably long-term unemployment, had decreased substantially for more than a decade. Mobility across labour market states increased in those countries where unemployment*

# Symptoms of "Eurosclerosis" over the Years

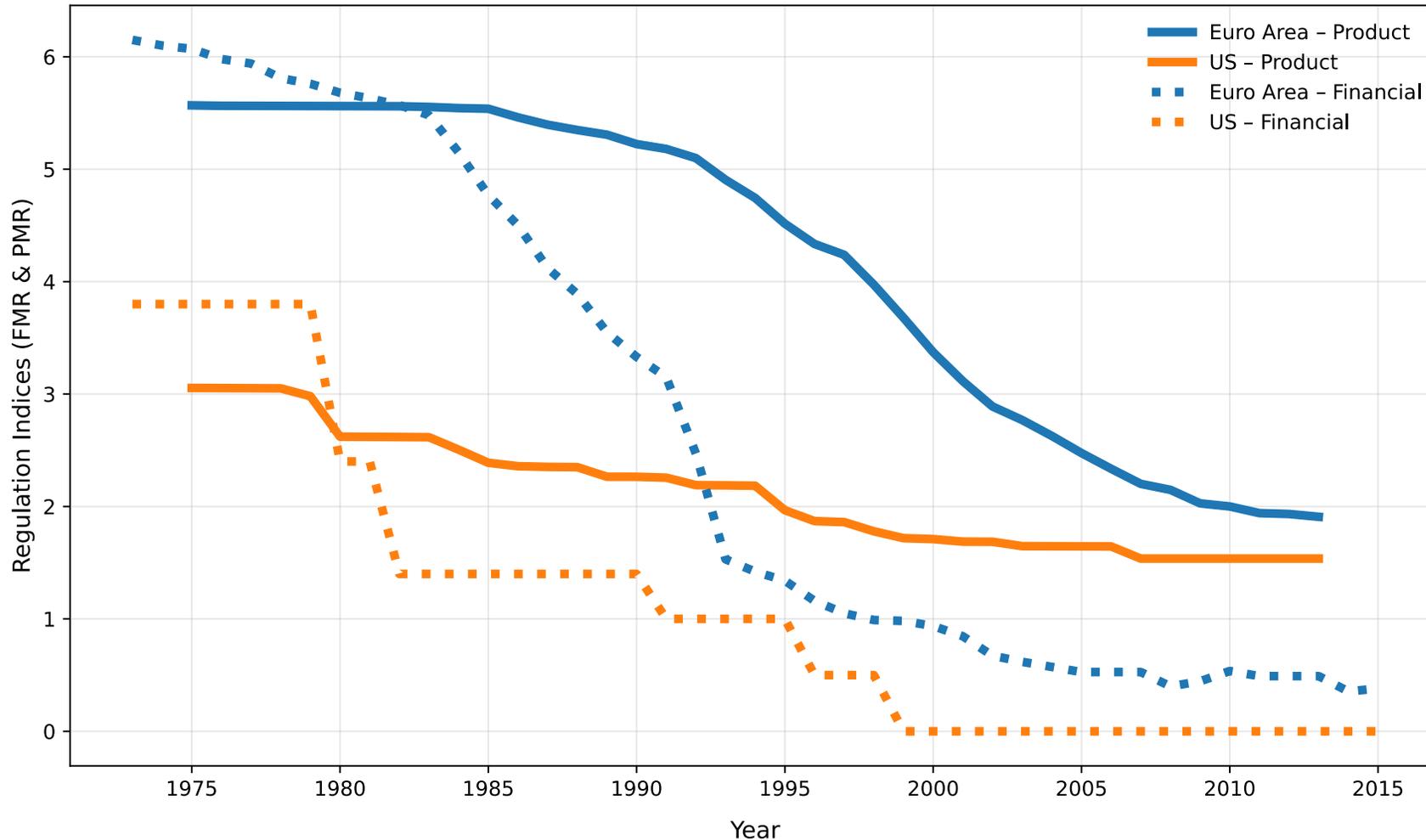
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# Europe vs. US: Financial Market Regulations

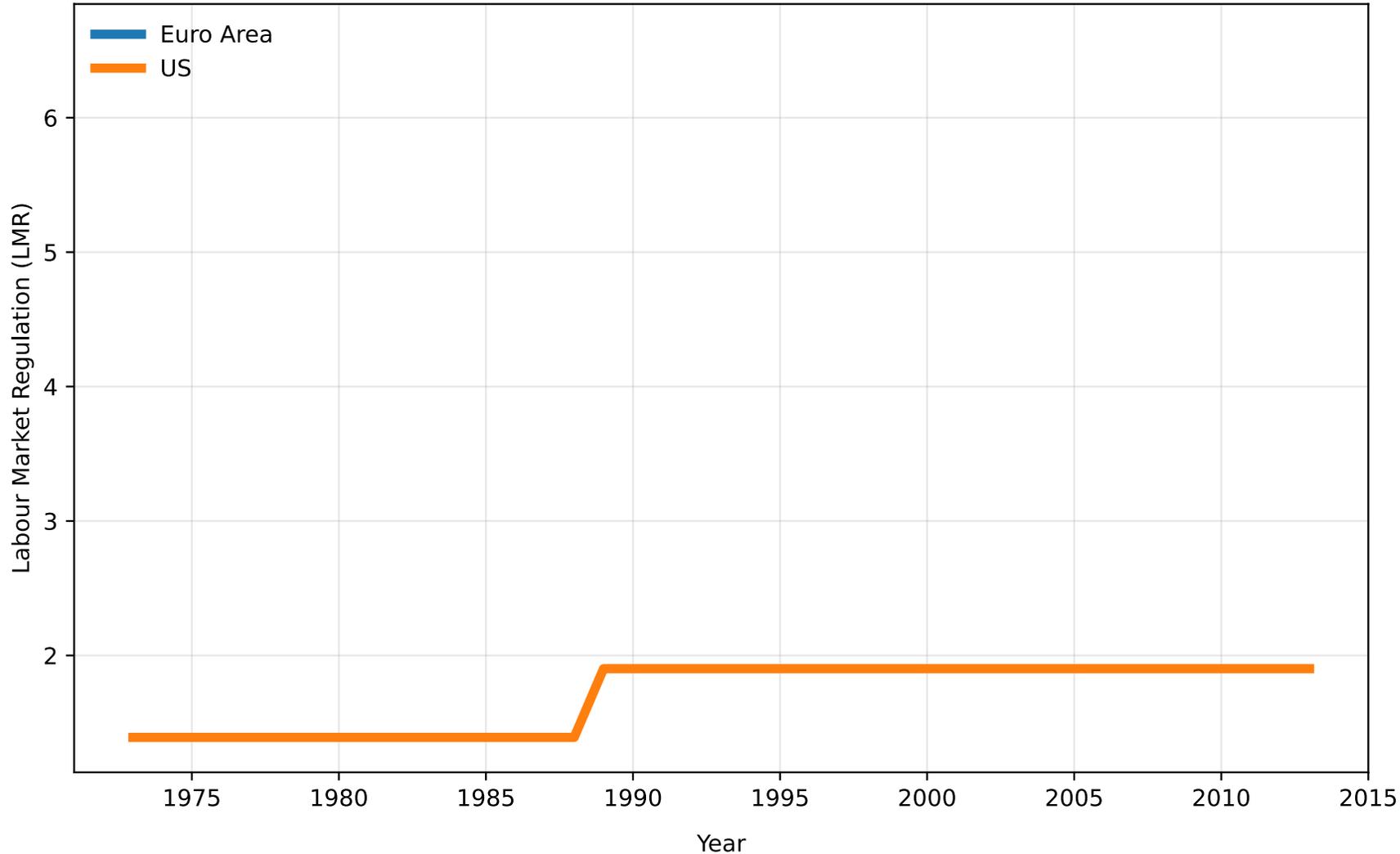


# Europe vs. US: Financial + Product Market Reg.

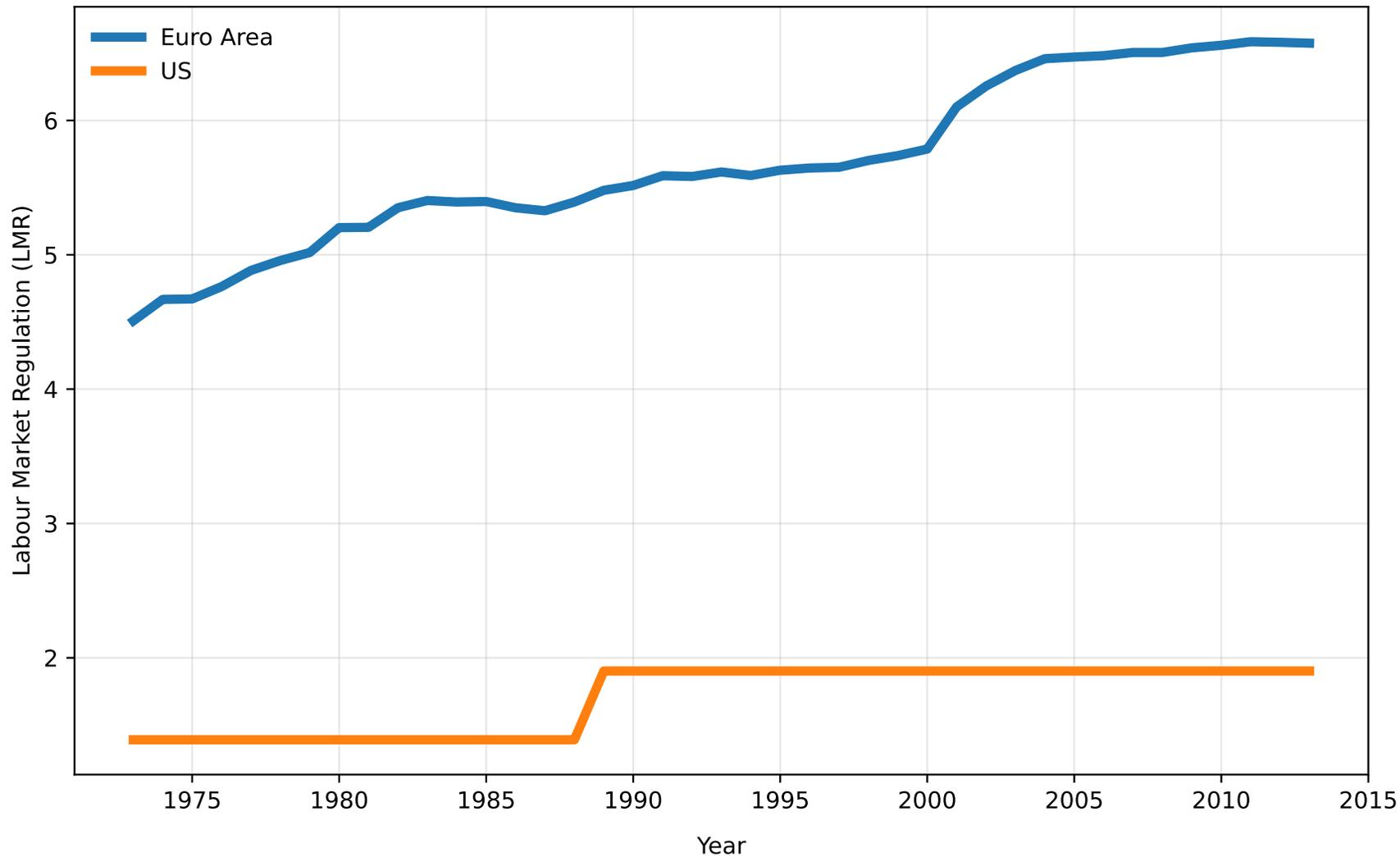


- Convergence
- Caveat: indices imperfect and incomplete
- Size and segmentation differences remain

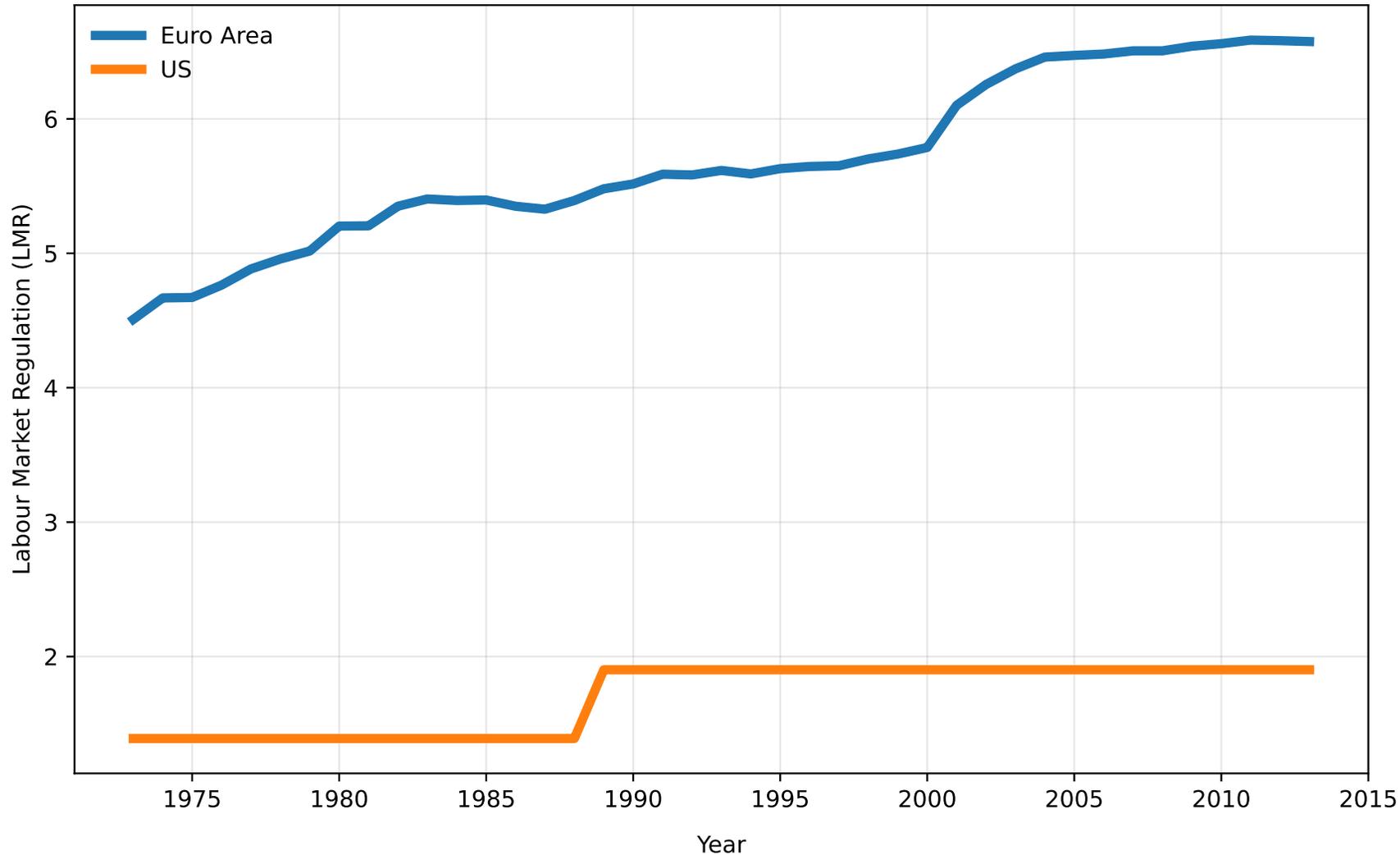
# Europe vs. US: Labor Market Institutions



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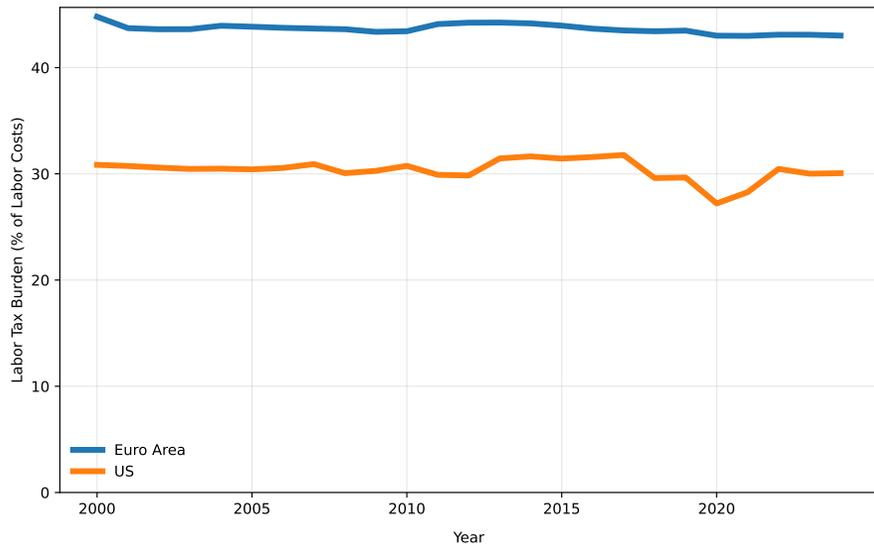


**For example:**

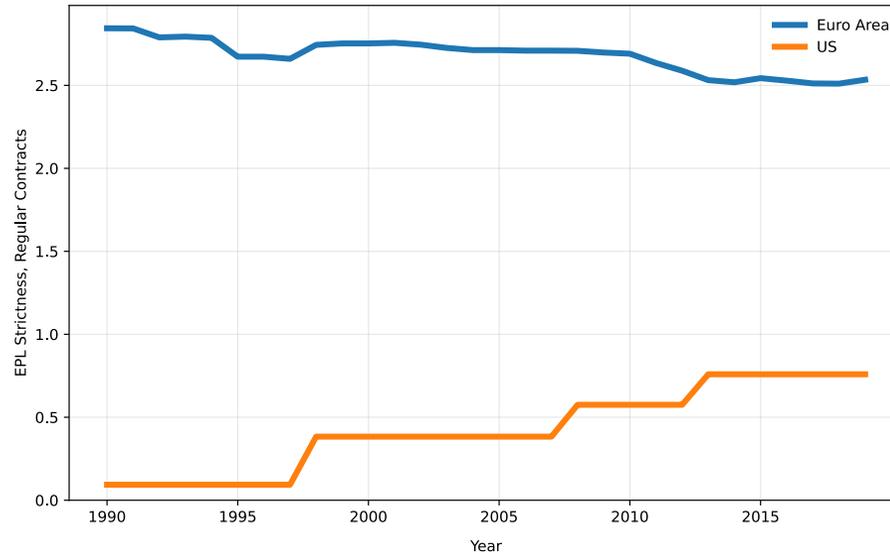
- Labor taxes
- Employment protection
- Codetermination
- Collective bargaining coverage

(see next slide)

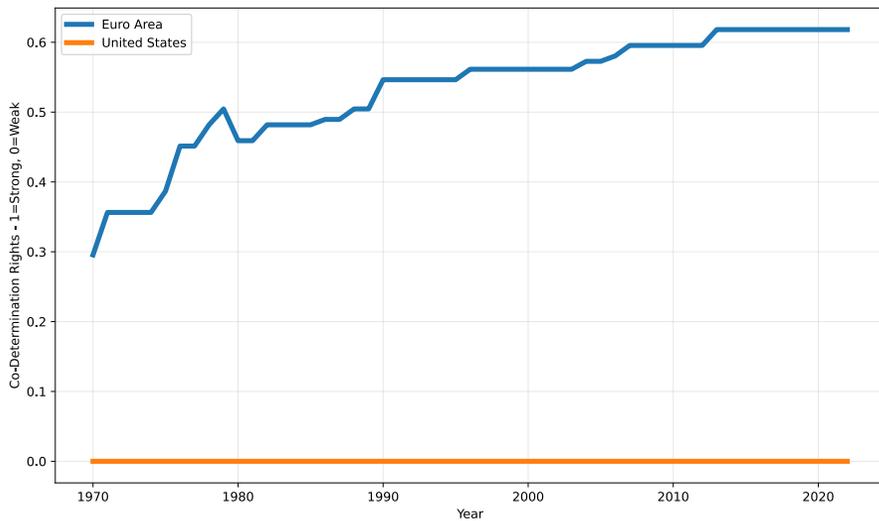
## Labor taxes



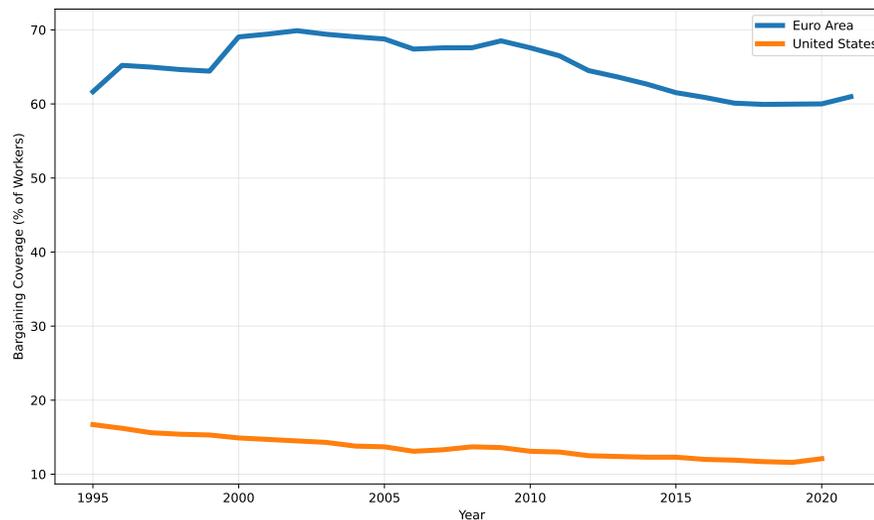
## Employment protection



## Codetermination rules



## Collective bargaining coverage



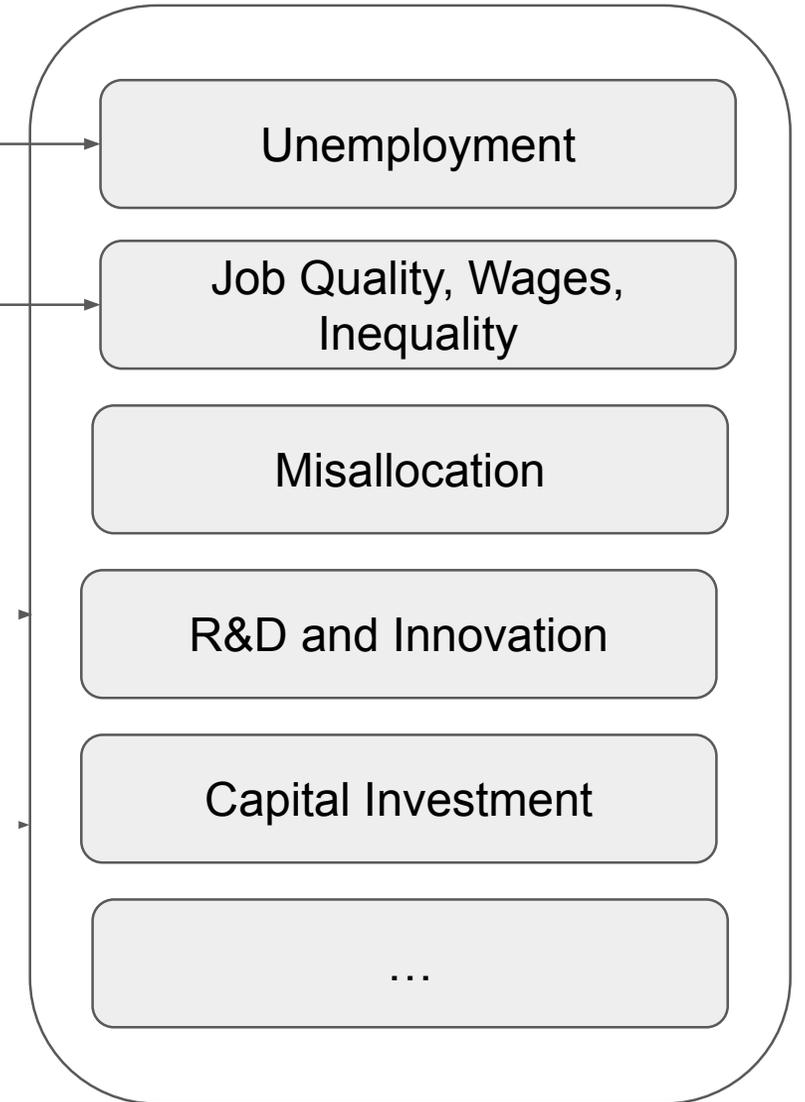
Europe vs.  
US:  
**Labor**  
market  
institutions  
remain  
dramatically  
different

## Labor Market Institutions

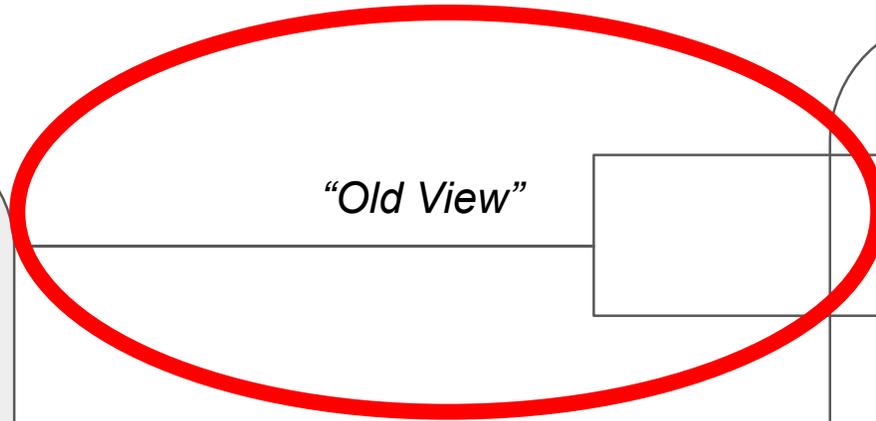


*“Old View”*

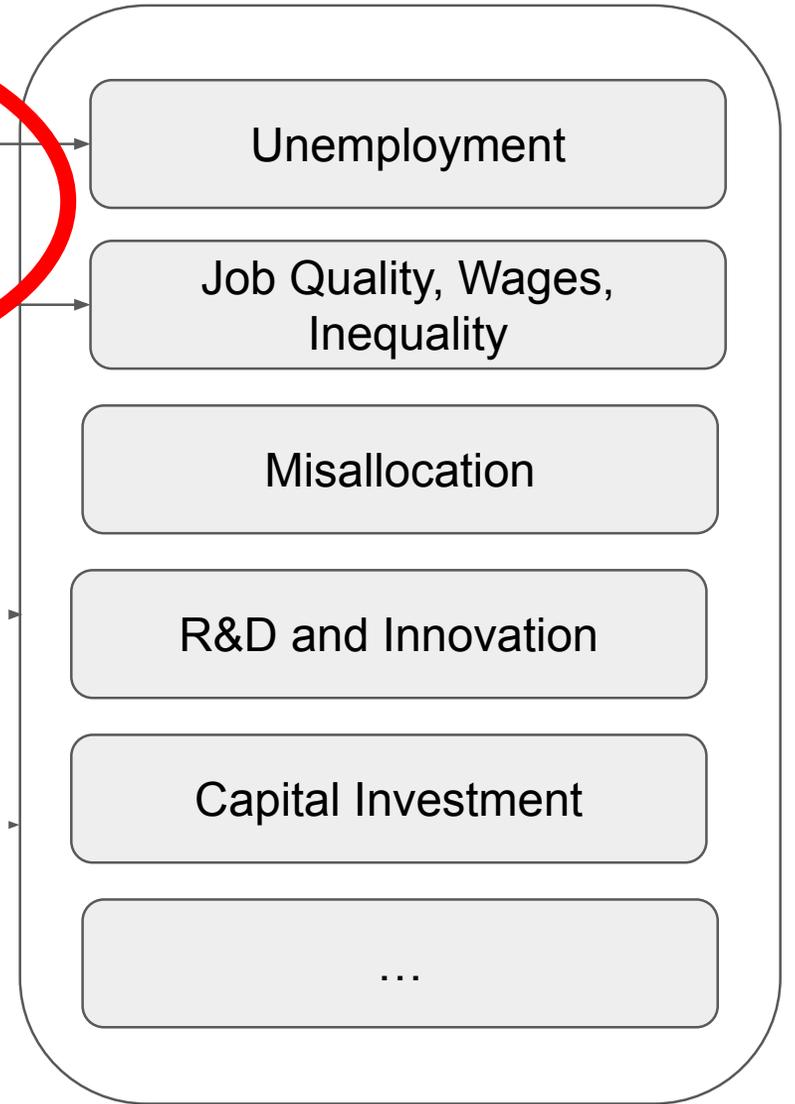
## Macroeconomic Performance



## Labor Market Institutions

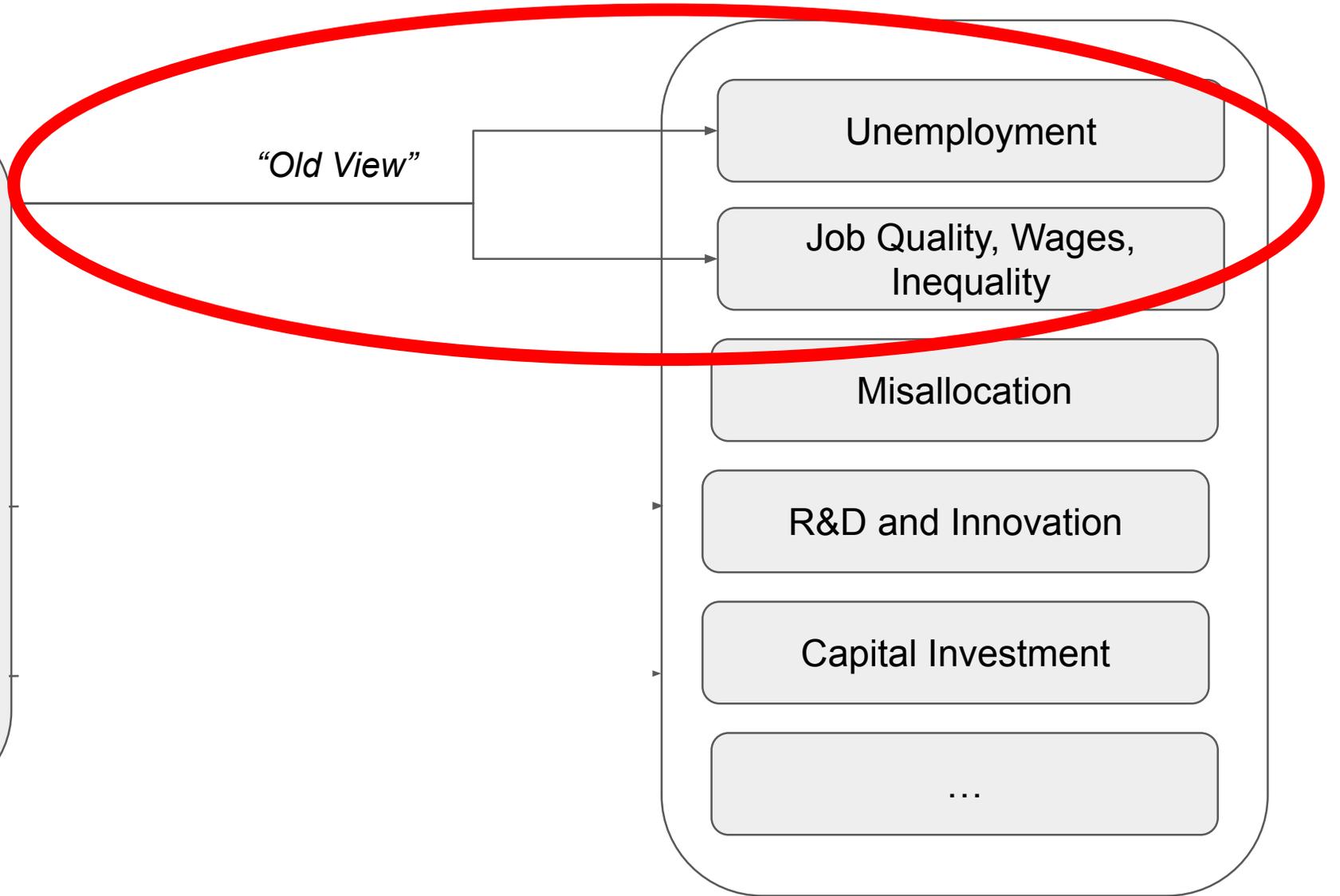


## Macroeconomic Performance



# Macroeconomic Performance

## Labor Market Institutions



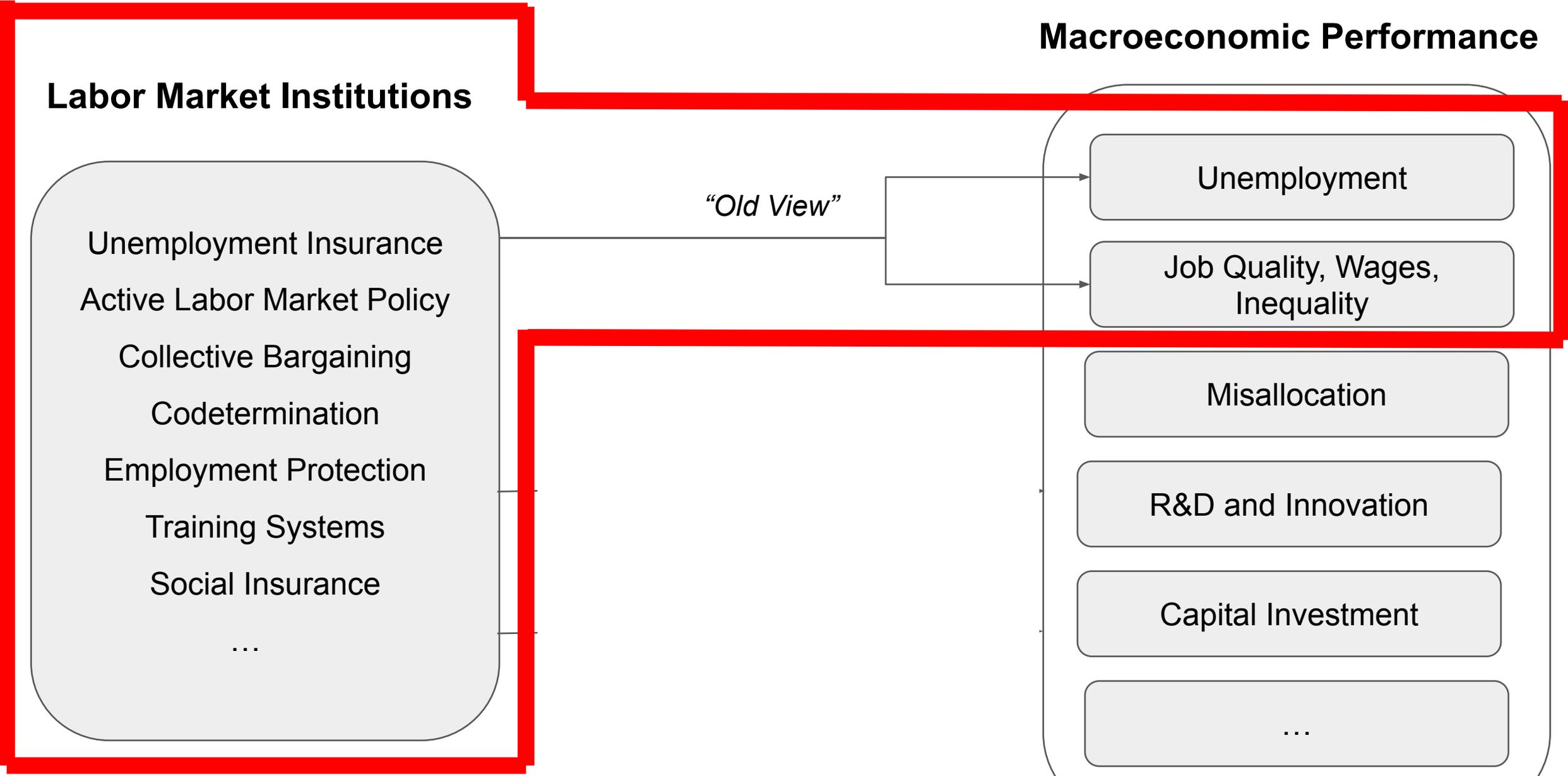
# Macroeconomic Performance

## Labor Market Institutions

- Unemployment Insurance
- Active Labor Market Policy
- Collective Bargaining
- Codetermination
- Employment Protection
- Training Systems
- Social Insurance
- ...

*“Old View”*

- Unemployment
- Job Quality, Wages, Inequality
- Misallocation
- R&D and Innovation
- Capital Investment
- ...



## Labor Market Institutions

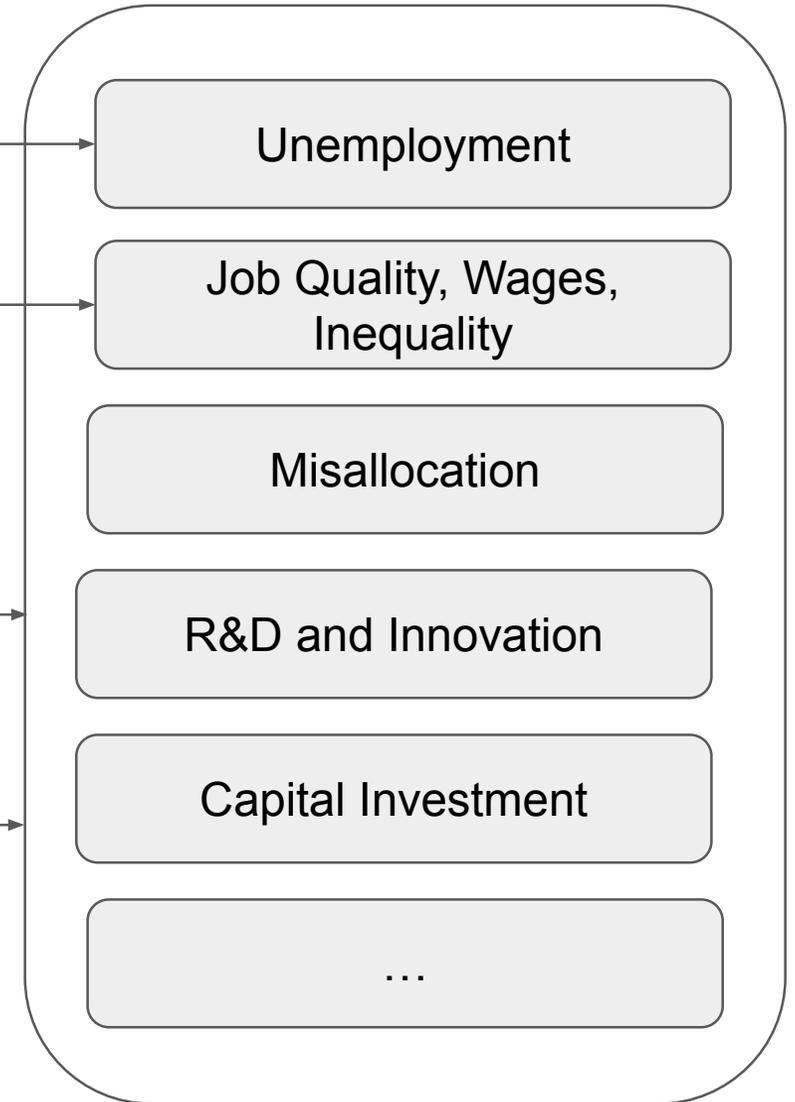


*“Old View”*

*“New View”*

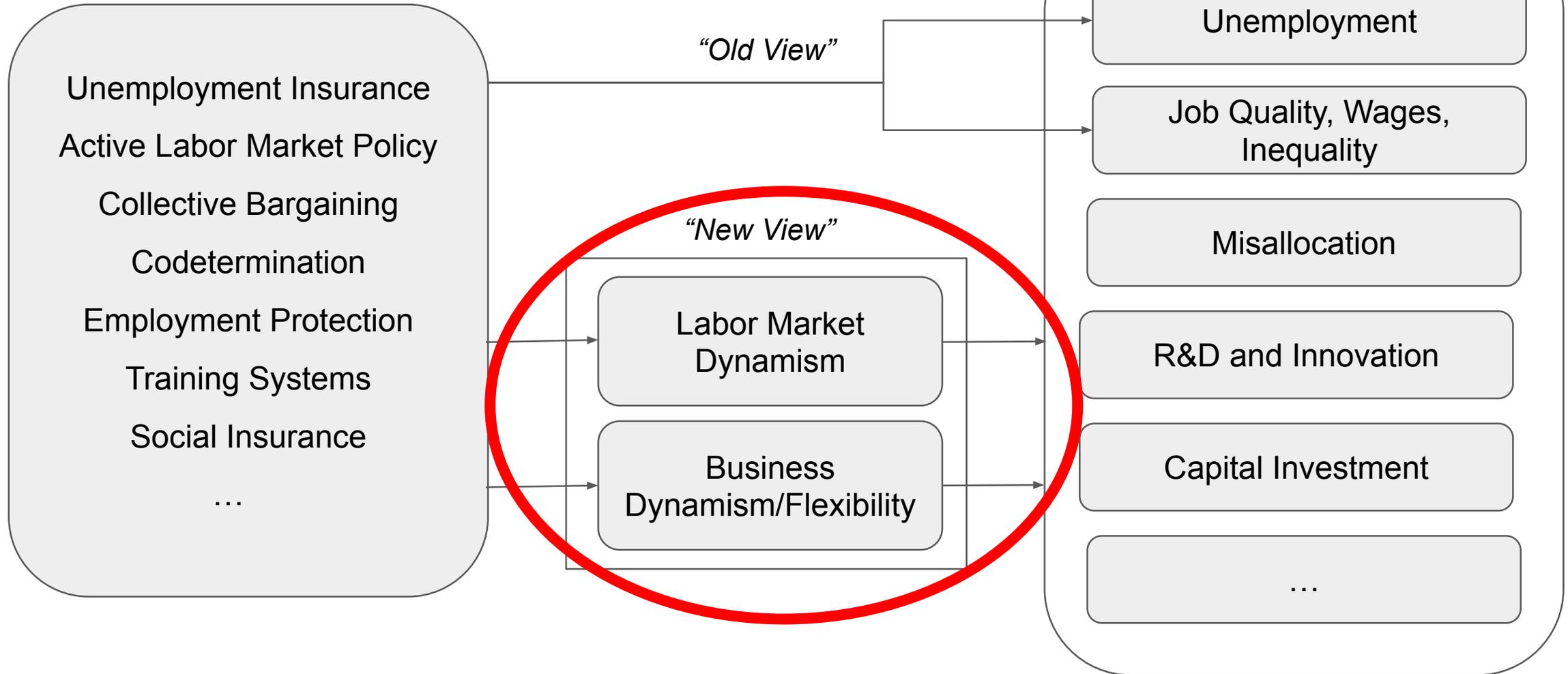


## Macroeconomic Performance



# Macroeconomic Performance

## Labor Market Institutions



## Labor Market Institutions

Unemployment Insurance  
Active Labor Market Policy  
Collective Bargaining  
Cotetermination  
Employment Protection  
Training Systems  
Social Insurance  
...

*“Old View”*

*“New View”*

Labor Market  
Dynamism

Business  
Dynamism/Flexibility

## Macroeconomic Performance

Unemployment

Job Quality, Wages,  
Inequality

Misallocation

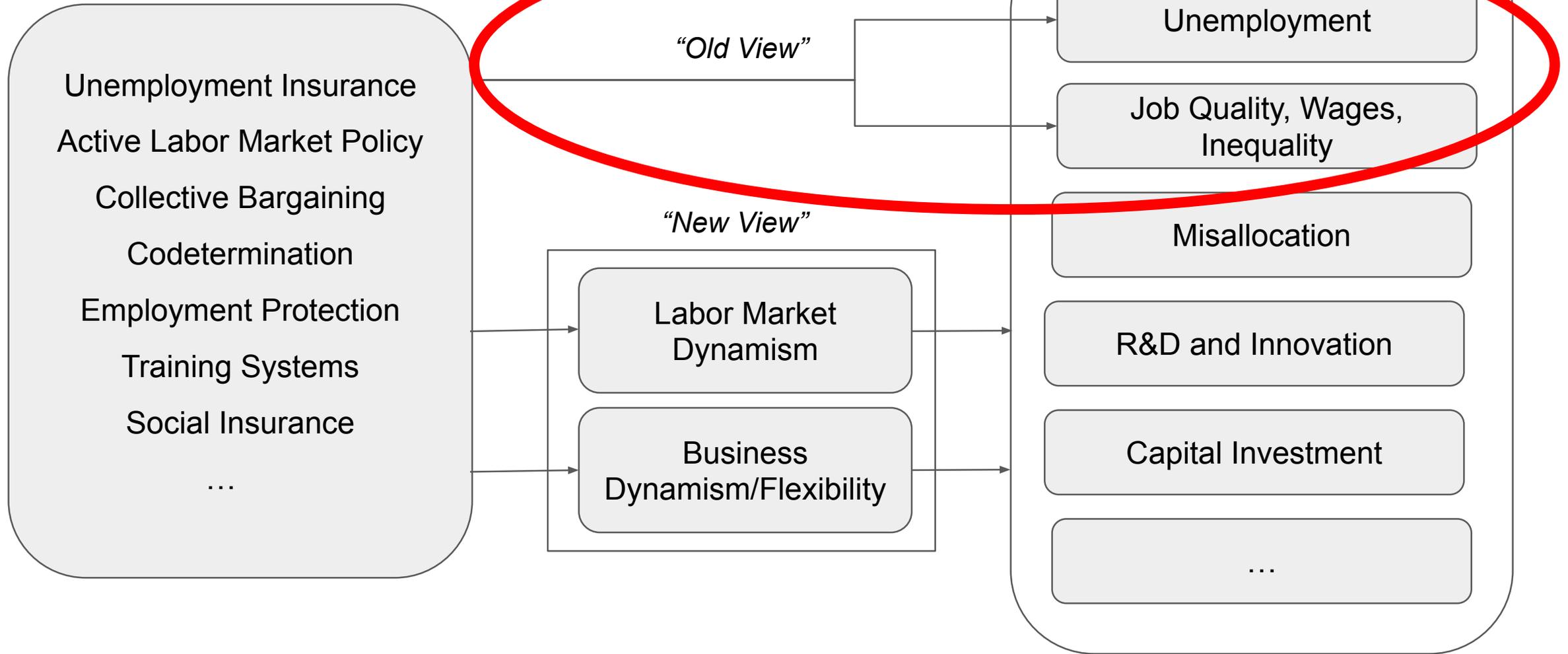
R&D and Innovation

Capital Investment

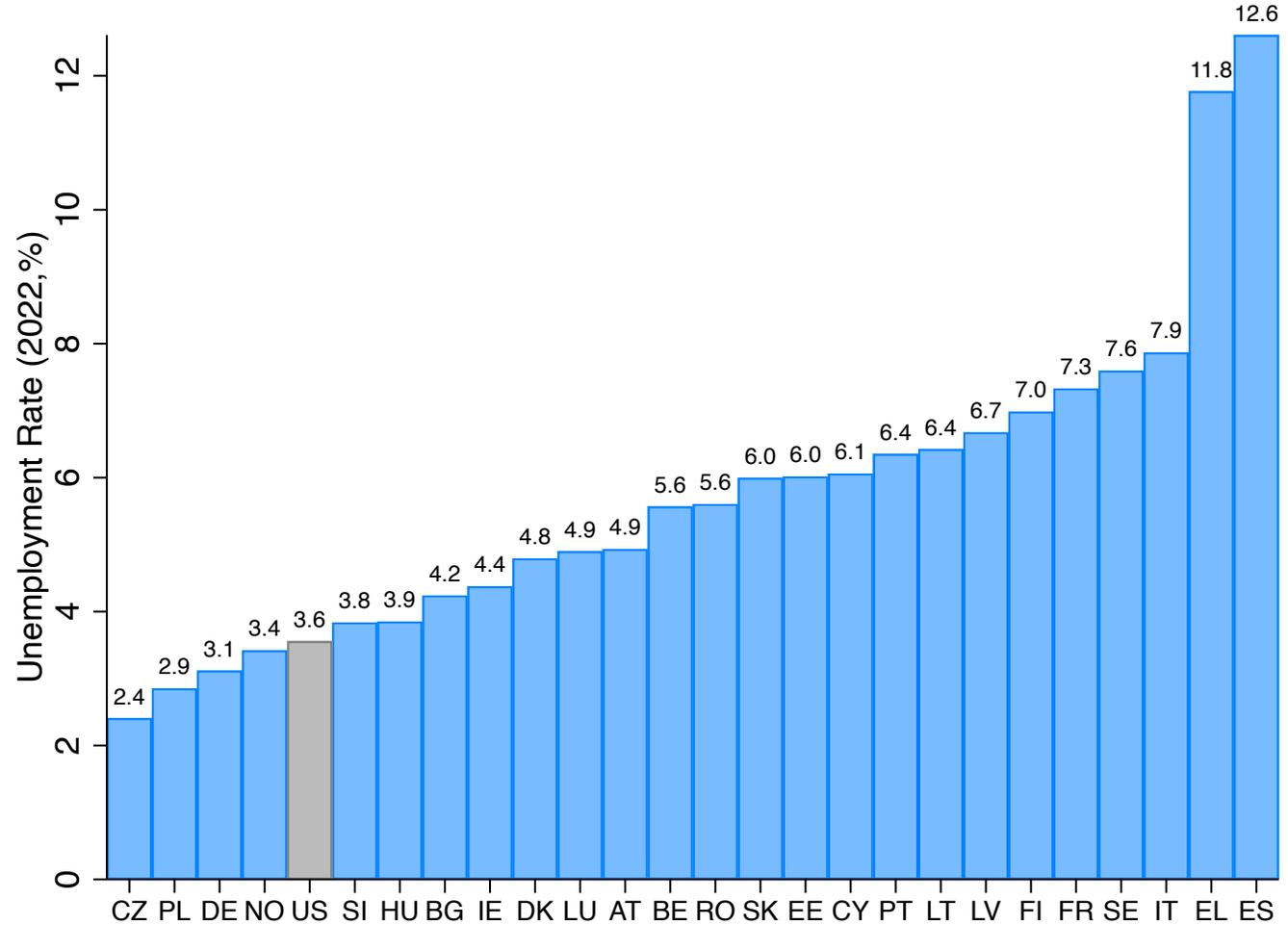
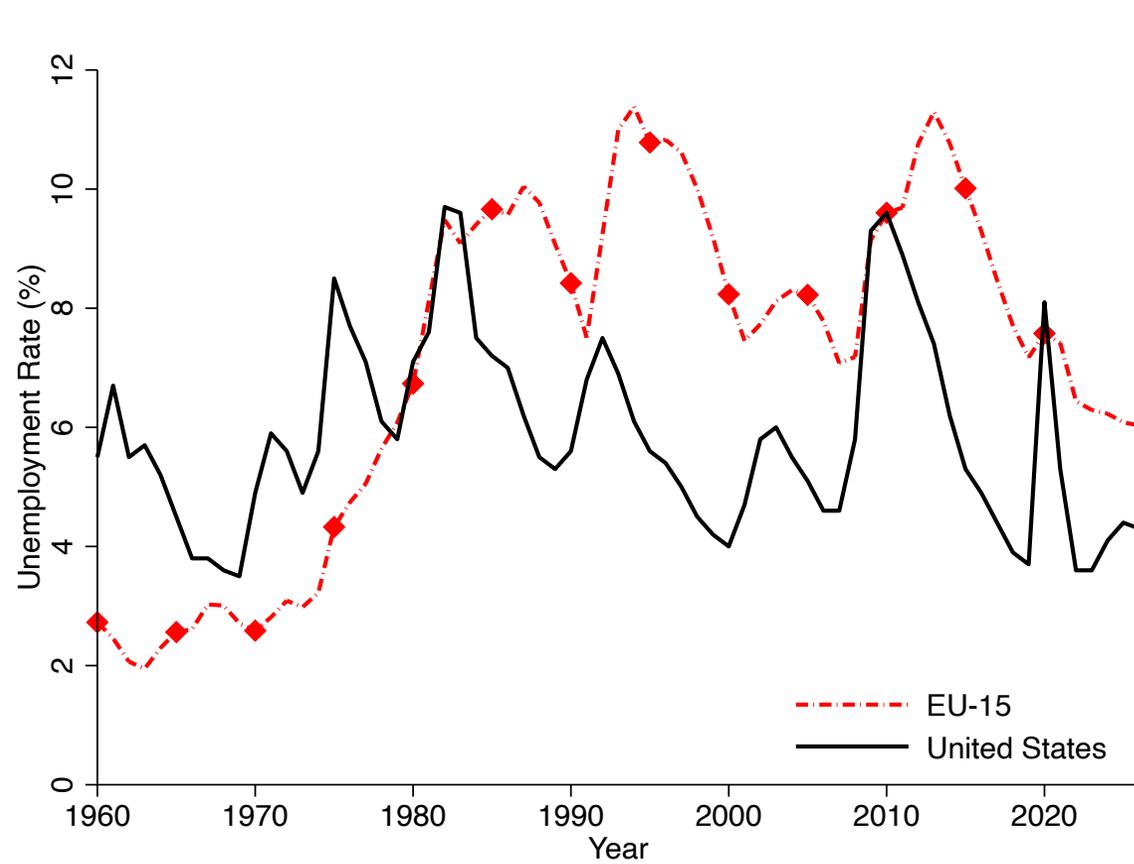
...

# Macroeconomic Performance

## Labor Market Institutions



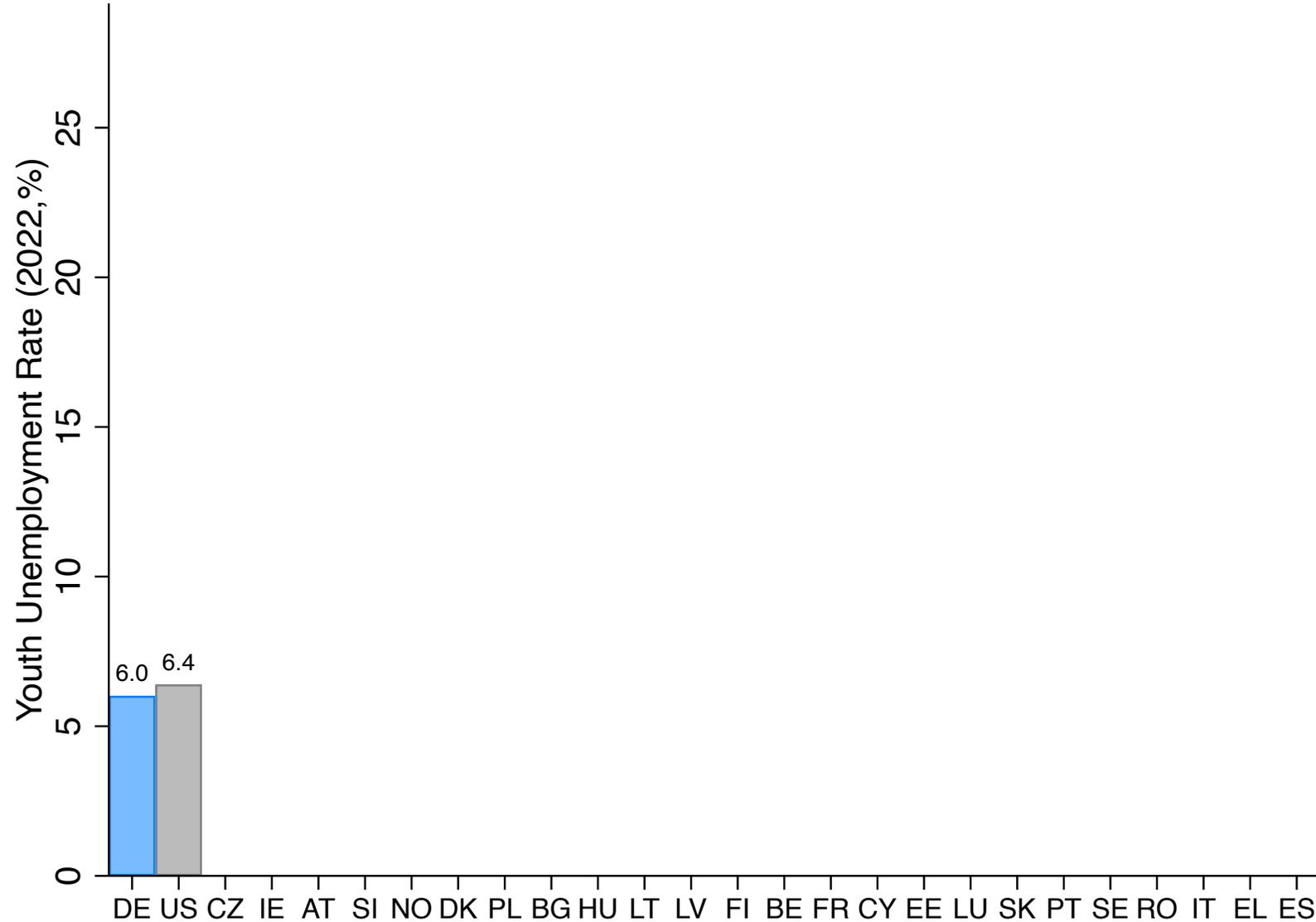
# Unemployment Rate: Europe vs. US



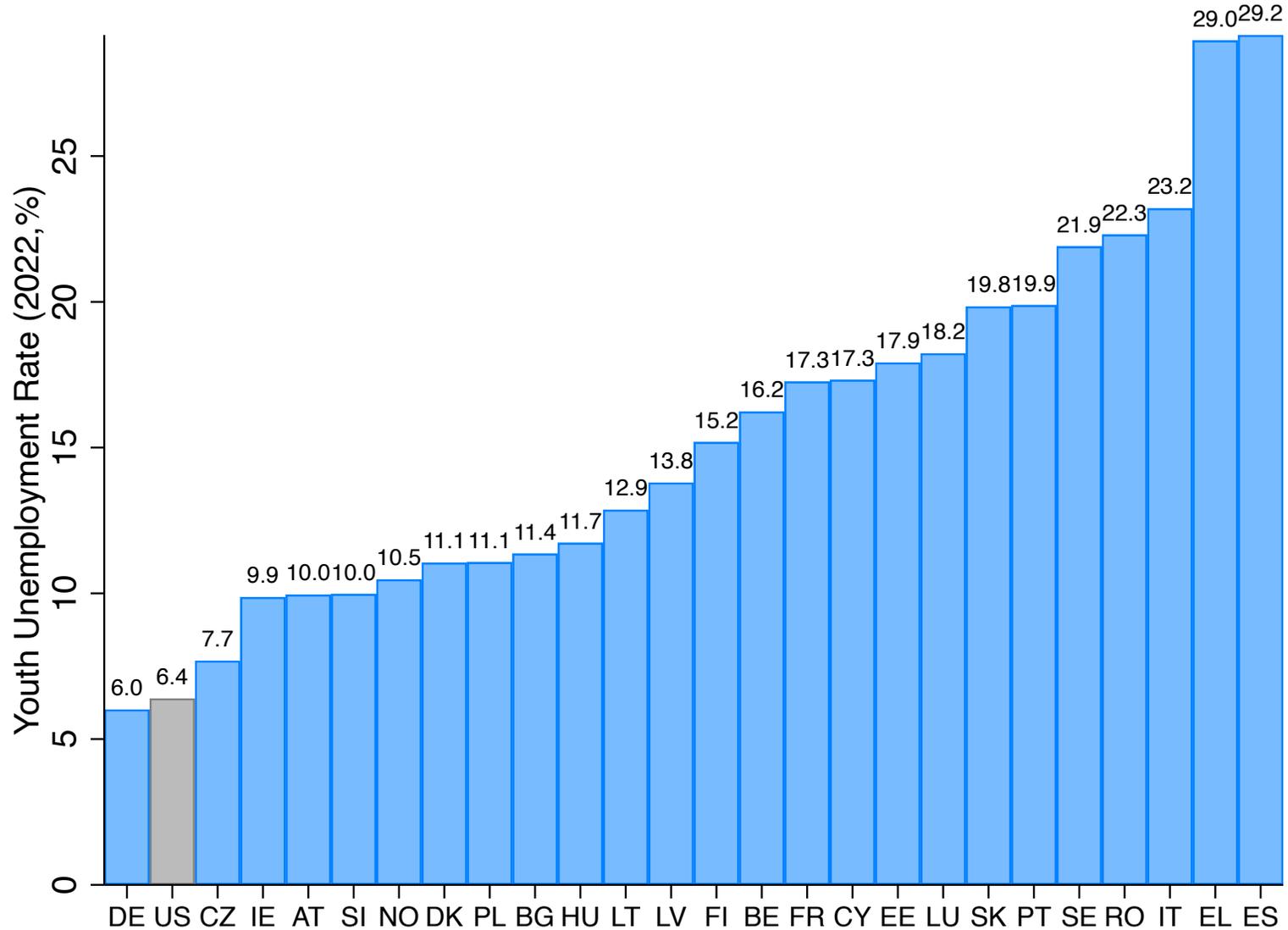
Heterogeneity: Region, Age,...

... more in paper

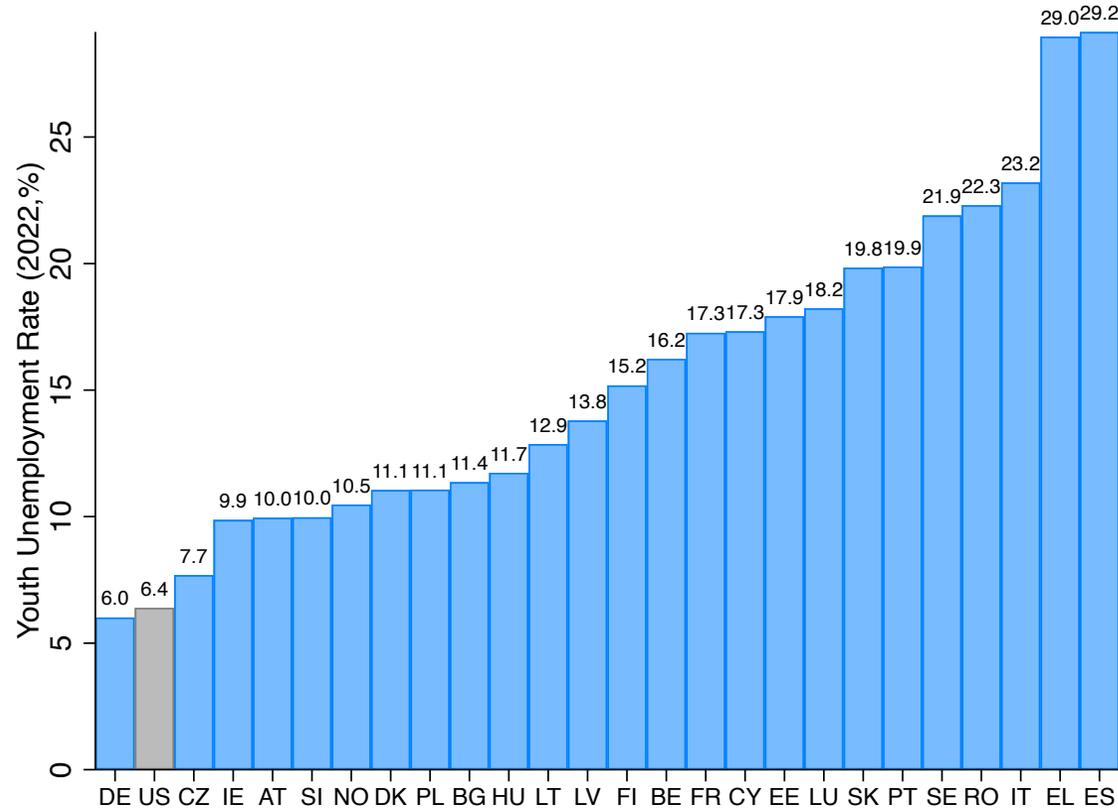
# Youth (15-24) Unemployment Rate: Europe vs. US



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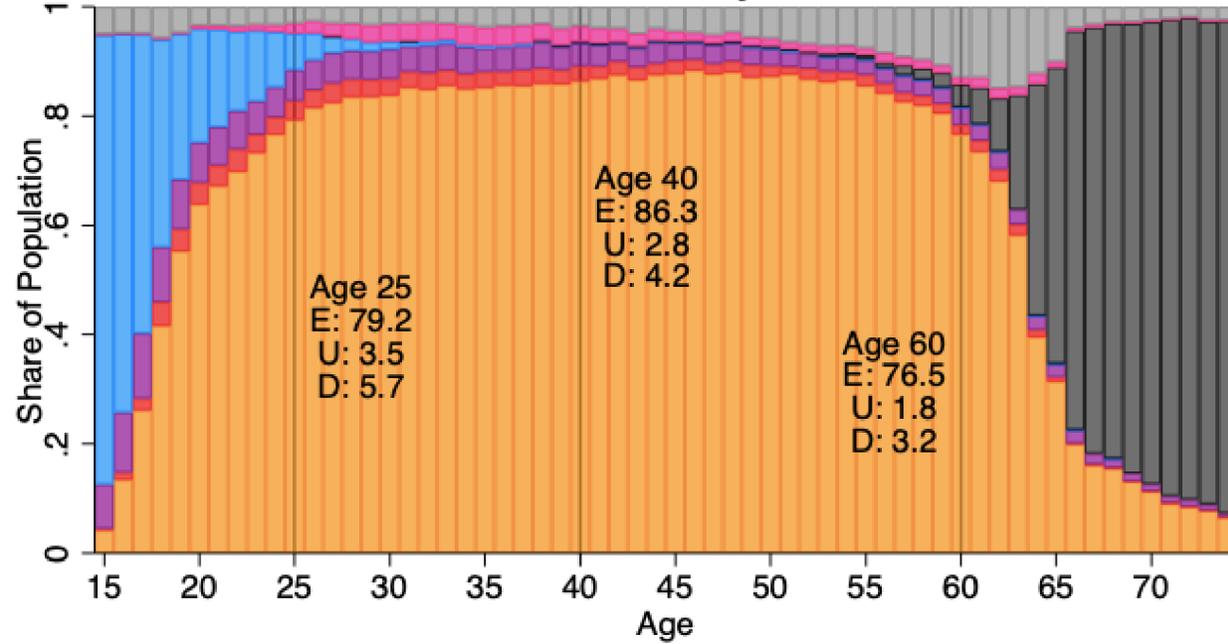
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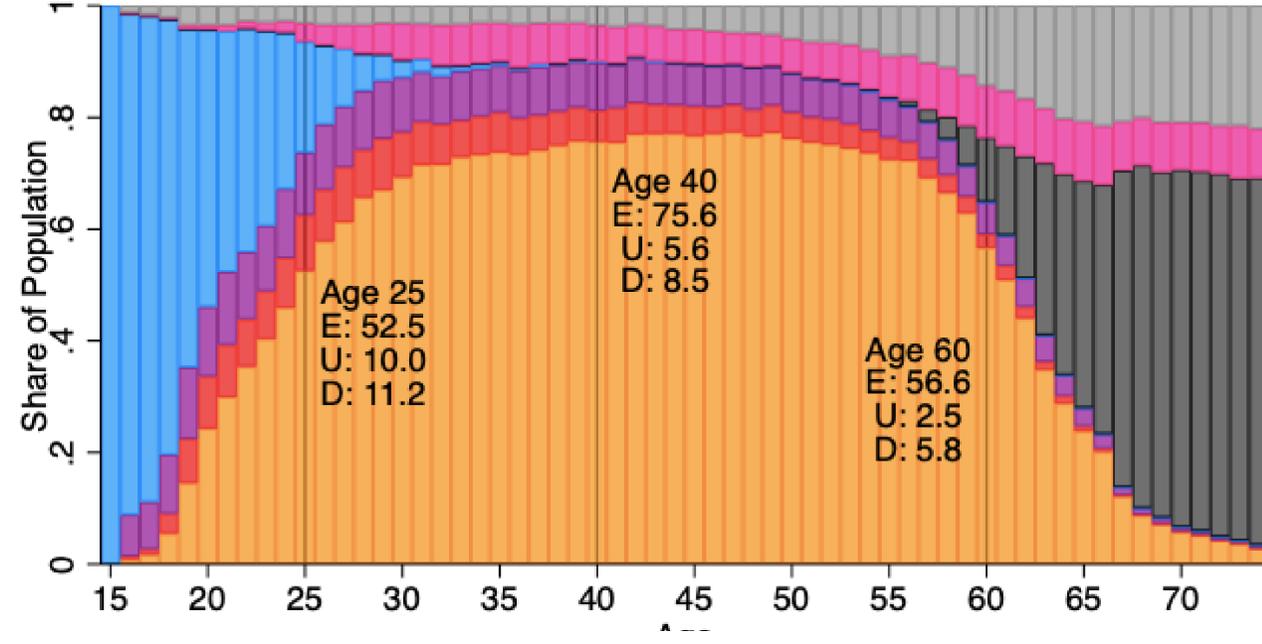
# Heterogeneity: Region, Age,...



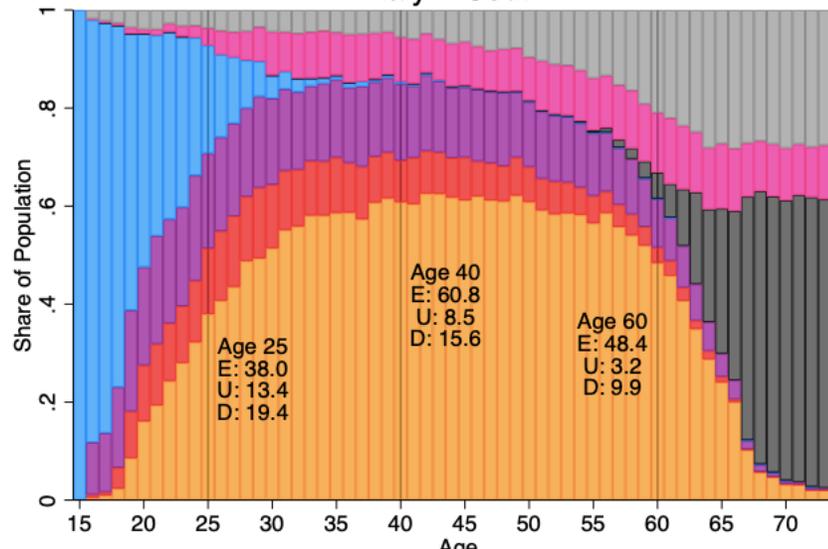
Germany



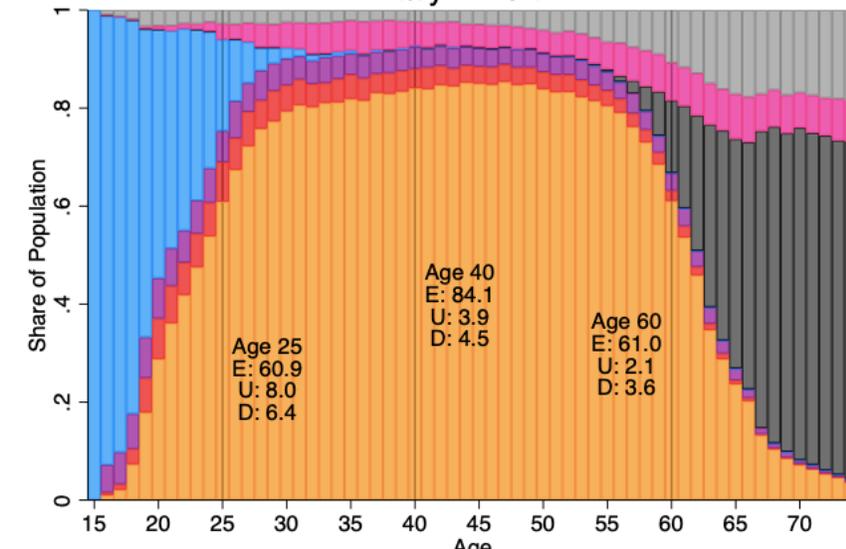
Italy



Italy -- South

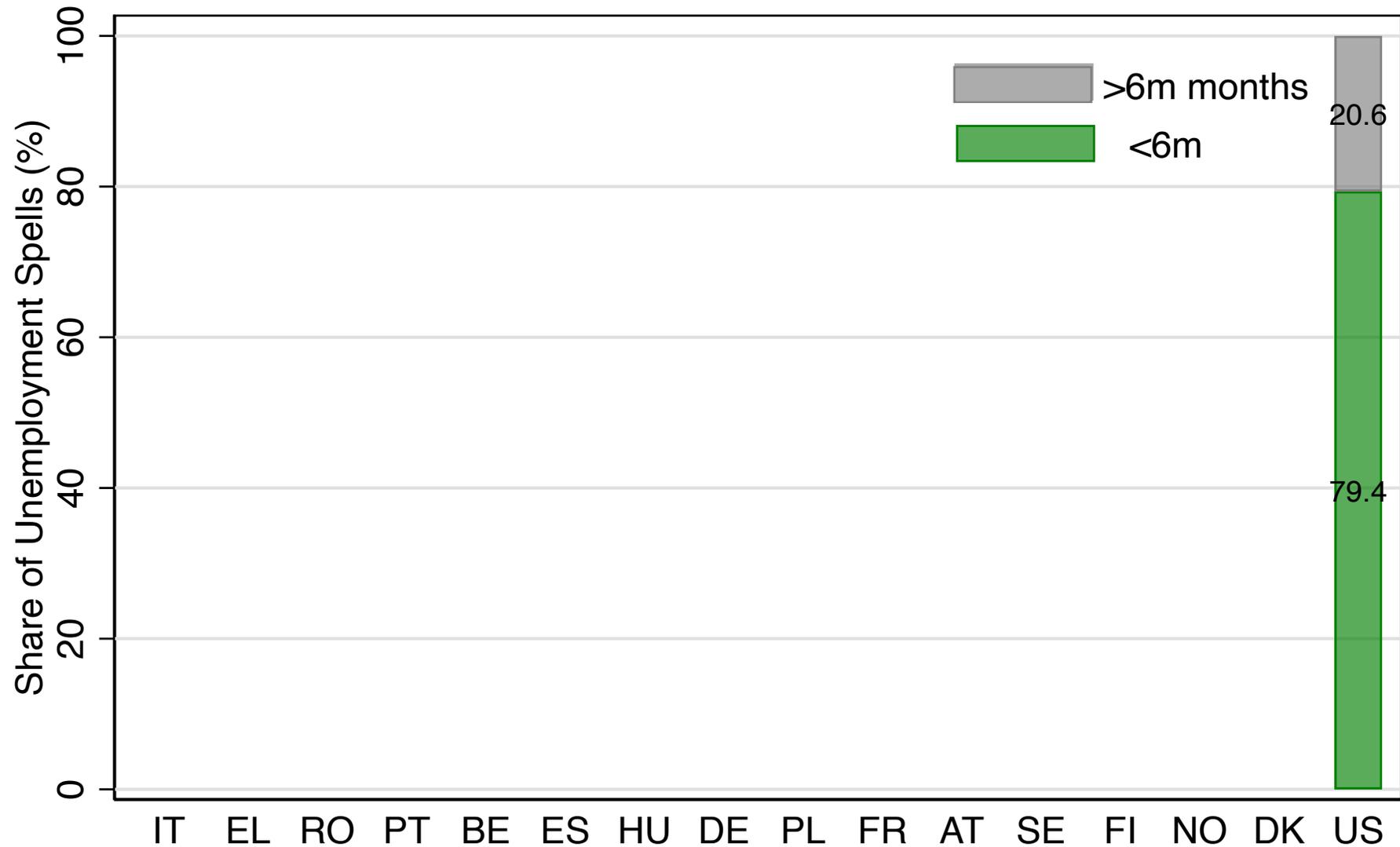


Italy -- North

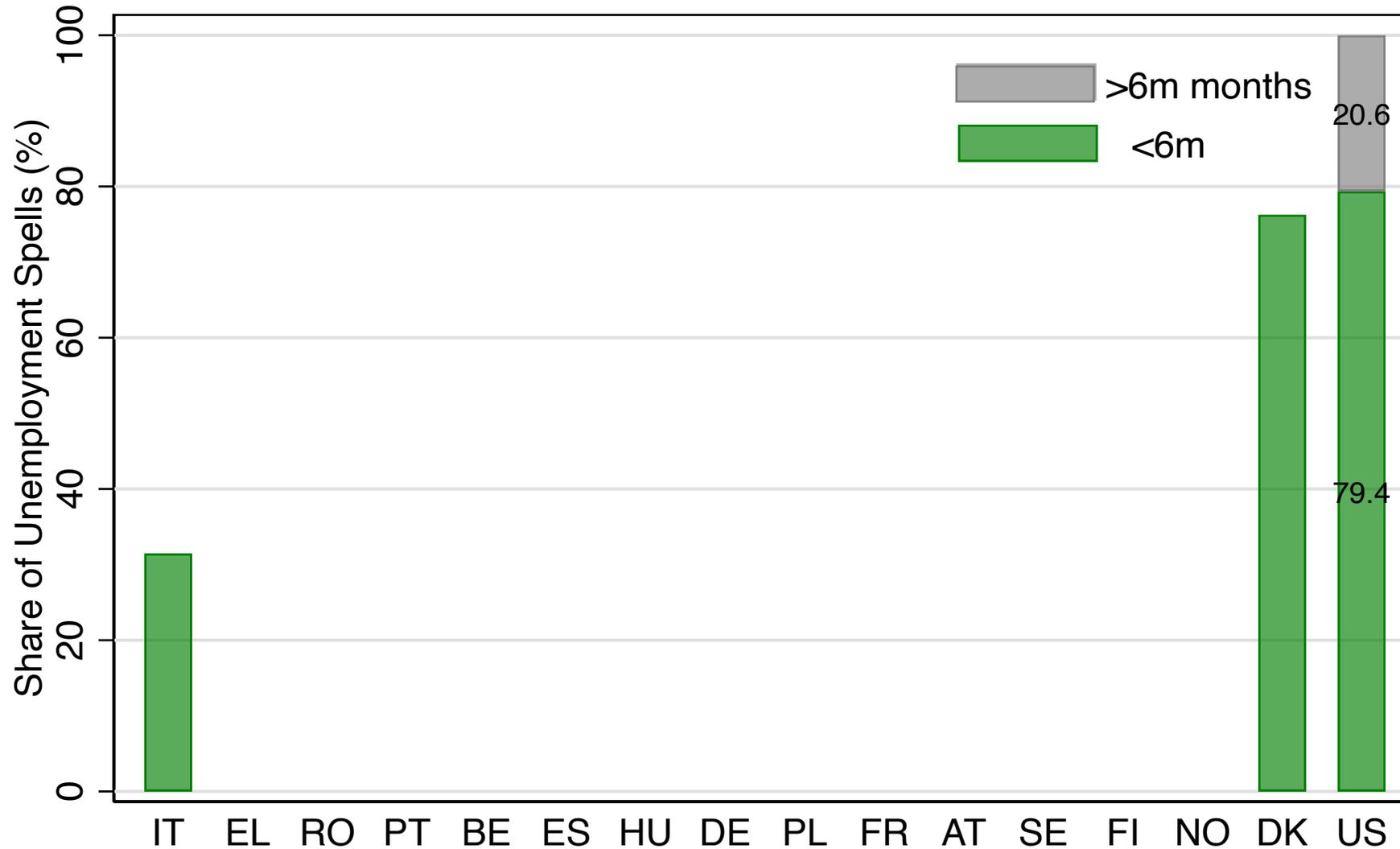


- Dramatic regional disparities remain
- Plausibly due to labor market institutions
- National collective bargaining in Italy: see paper and Boeri, Ichino, Moretti, Posch (2011)

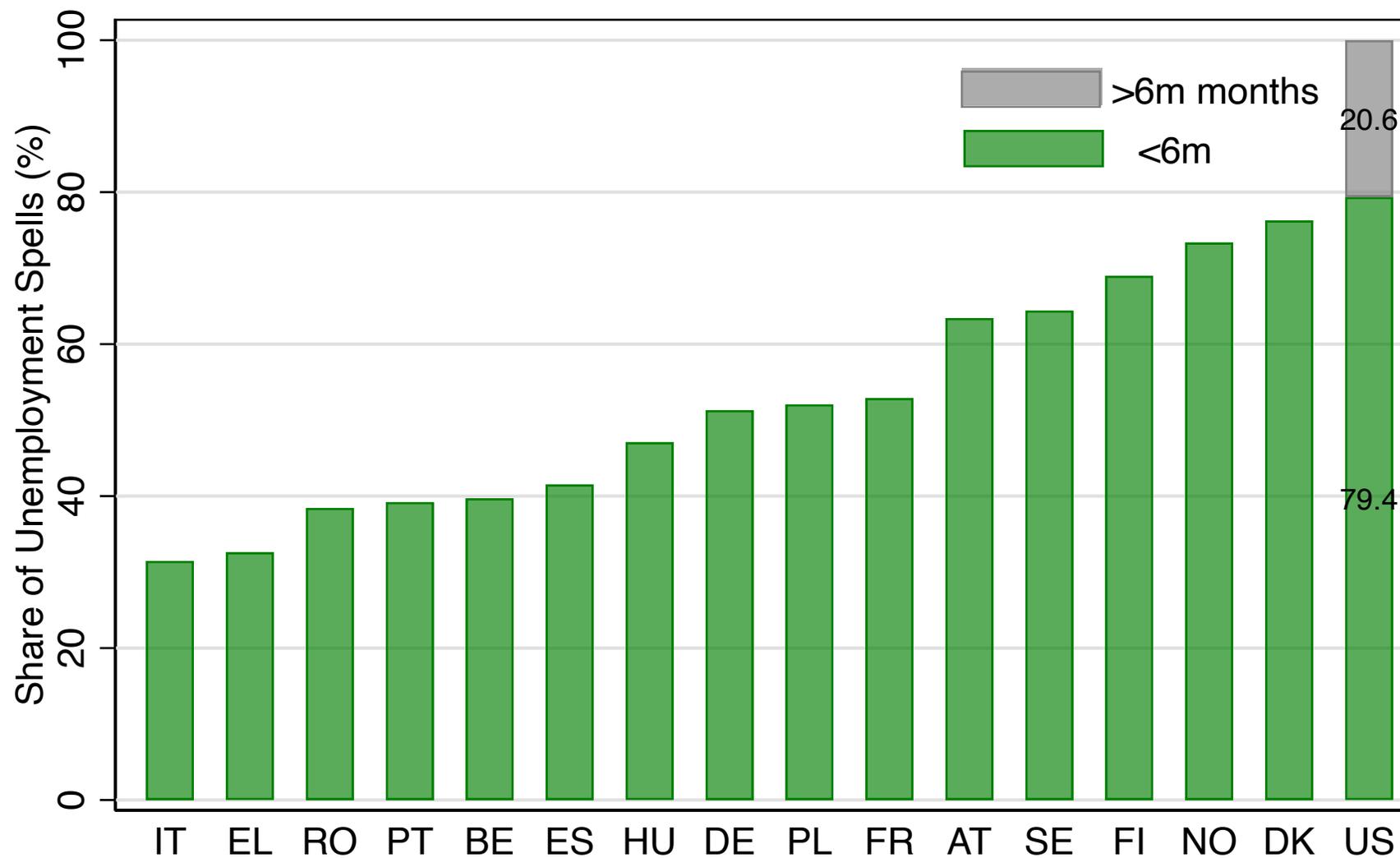
# Long-term (6>Months) Unemployment Rate: Europe vs. US



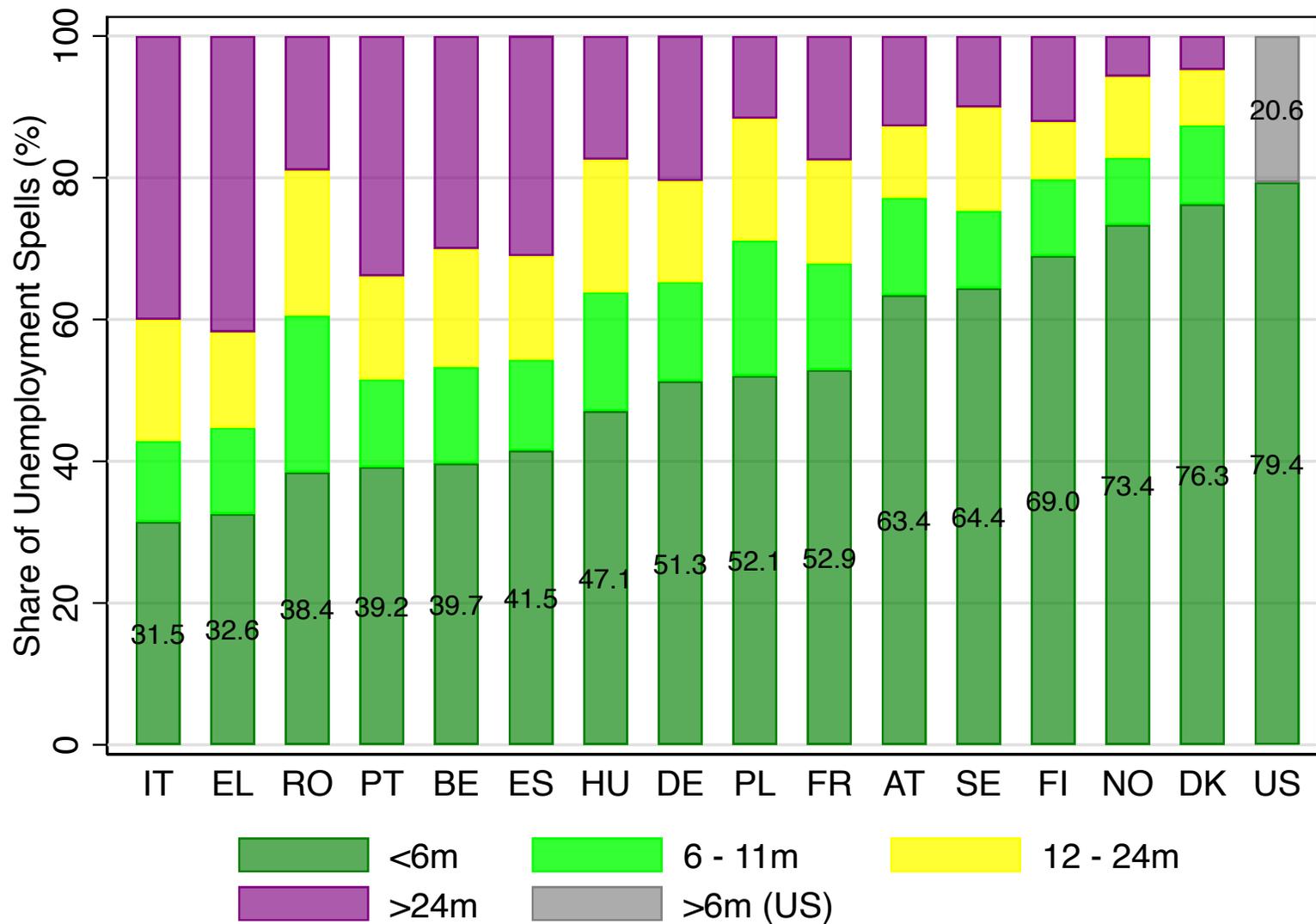
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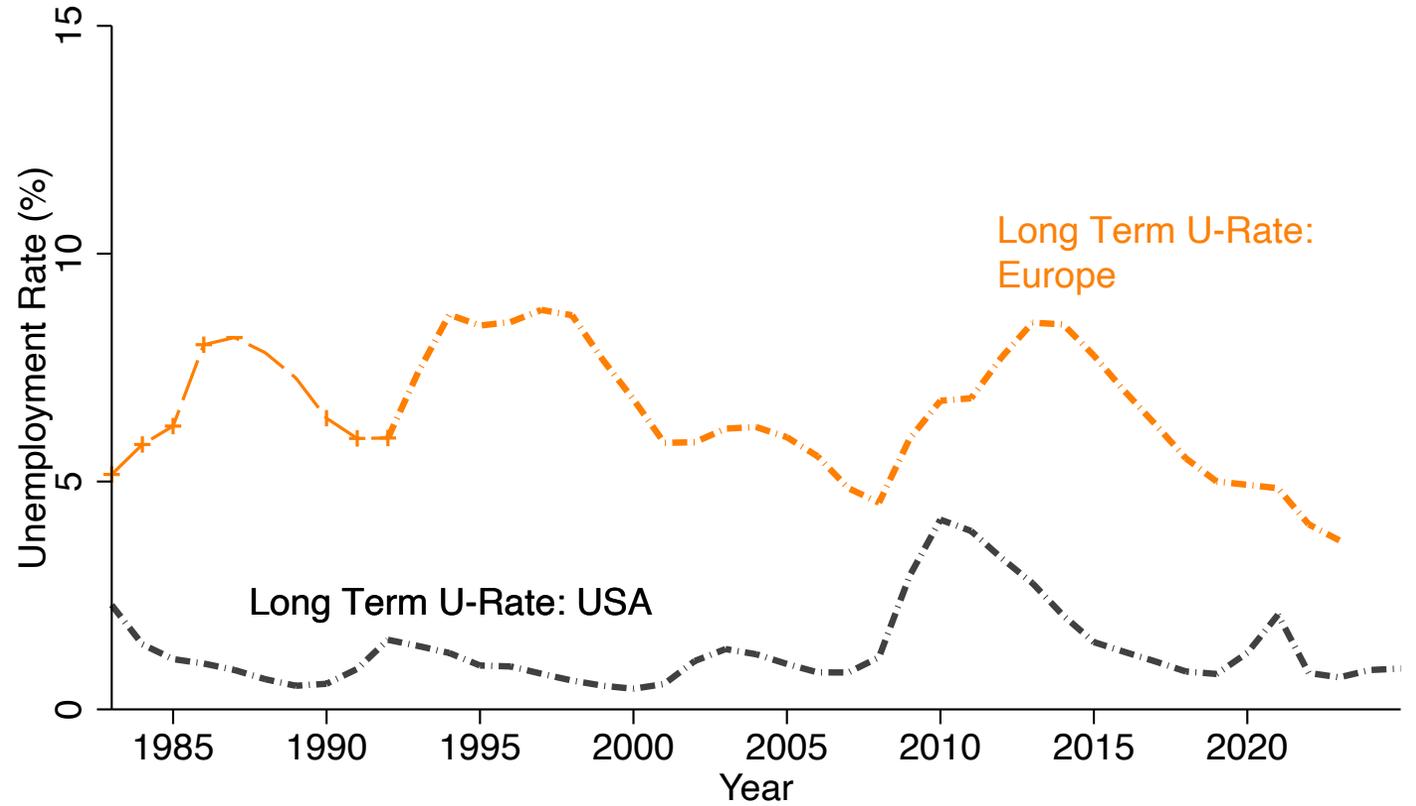
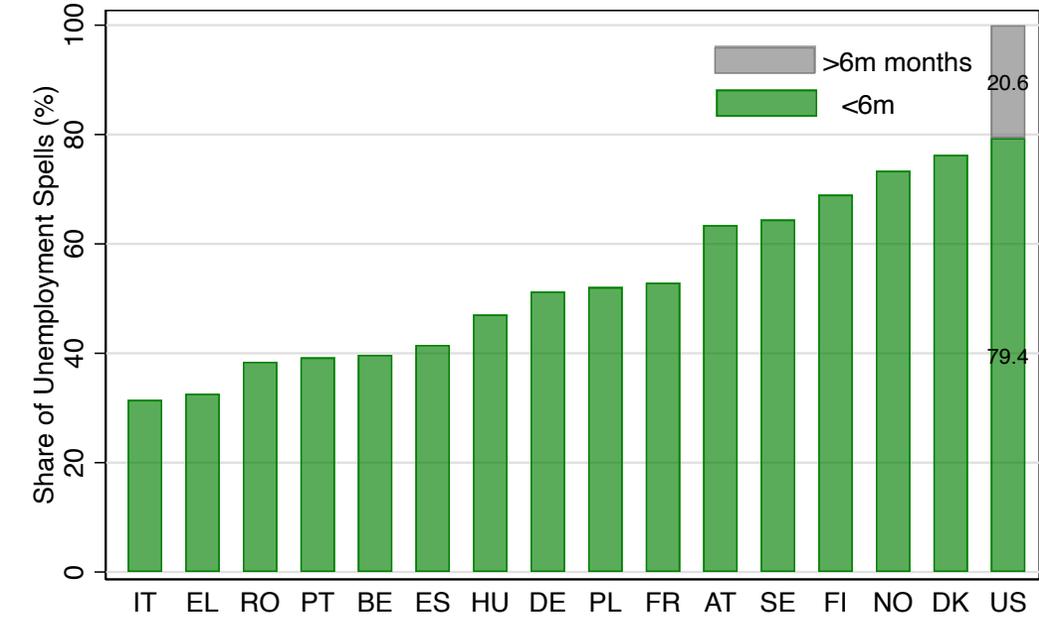
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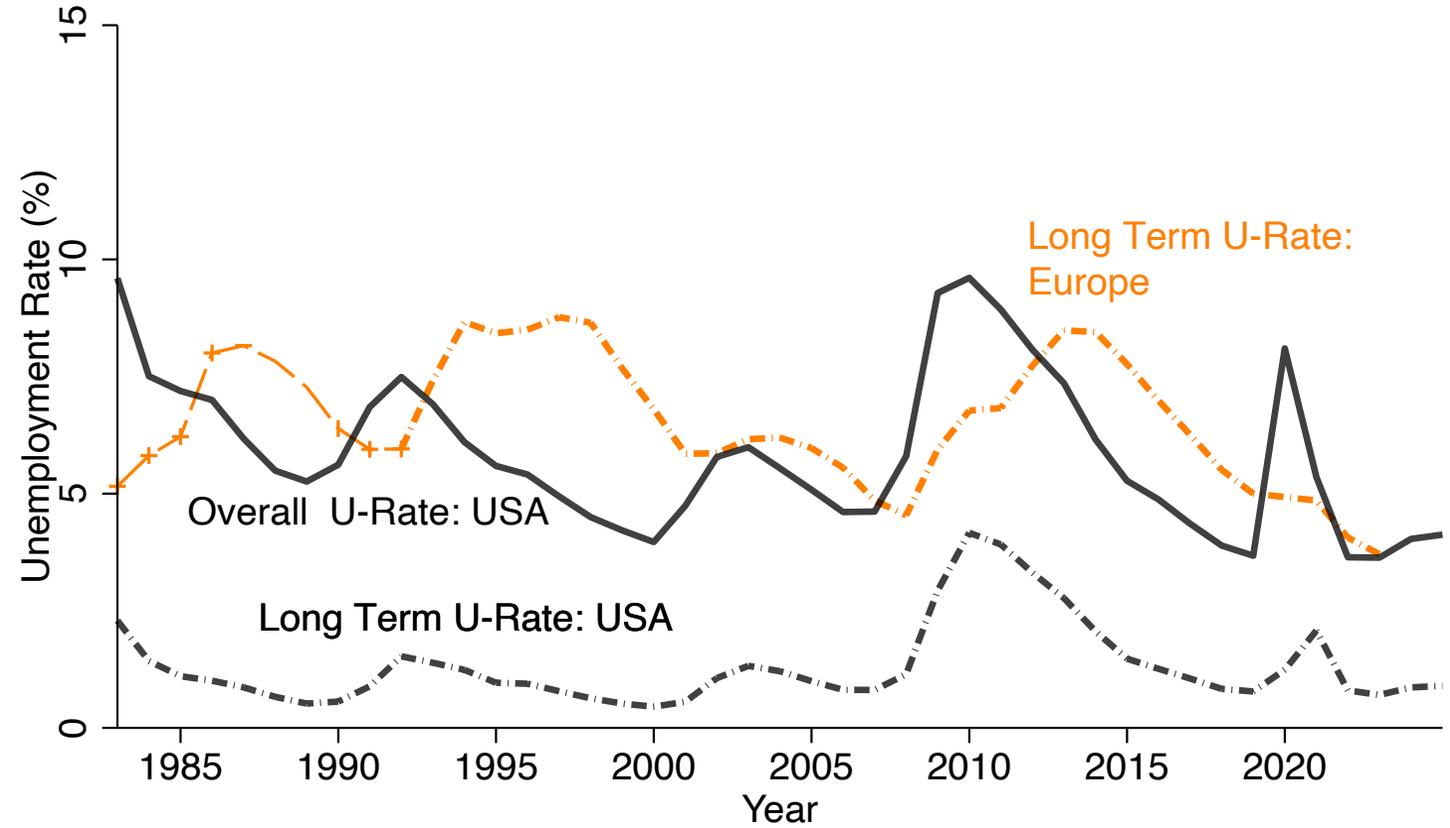
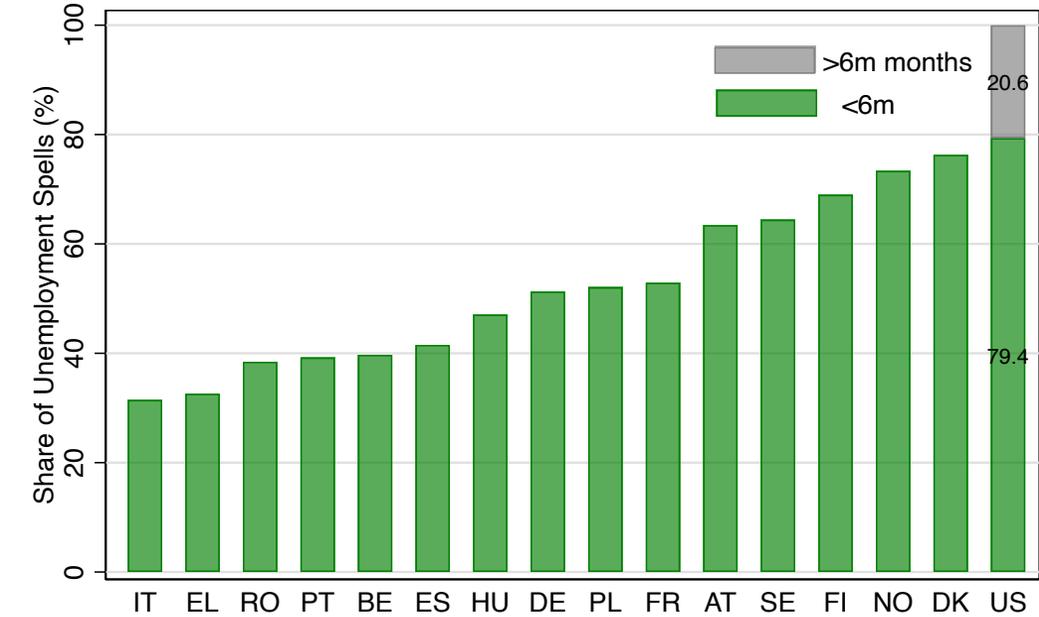
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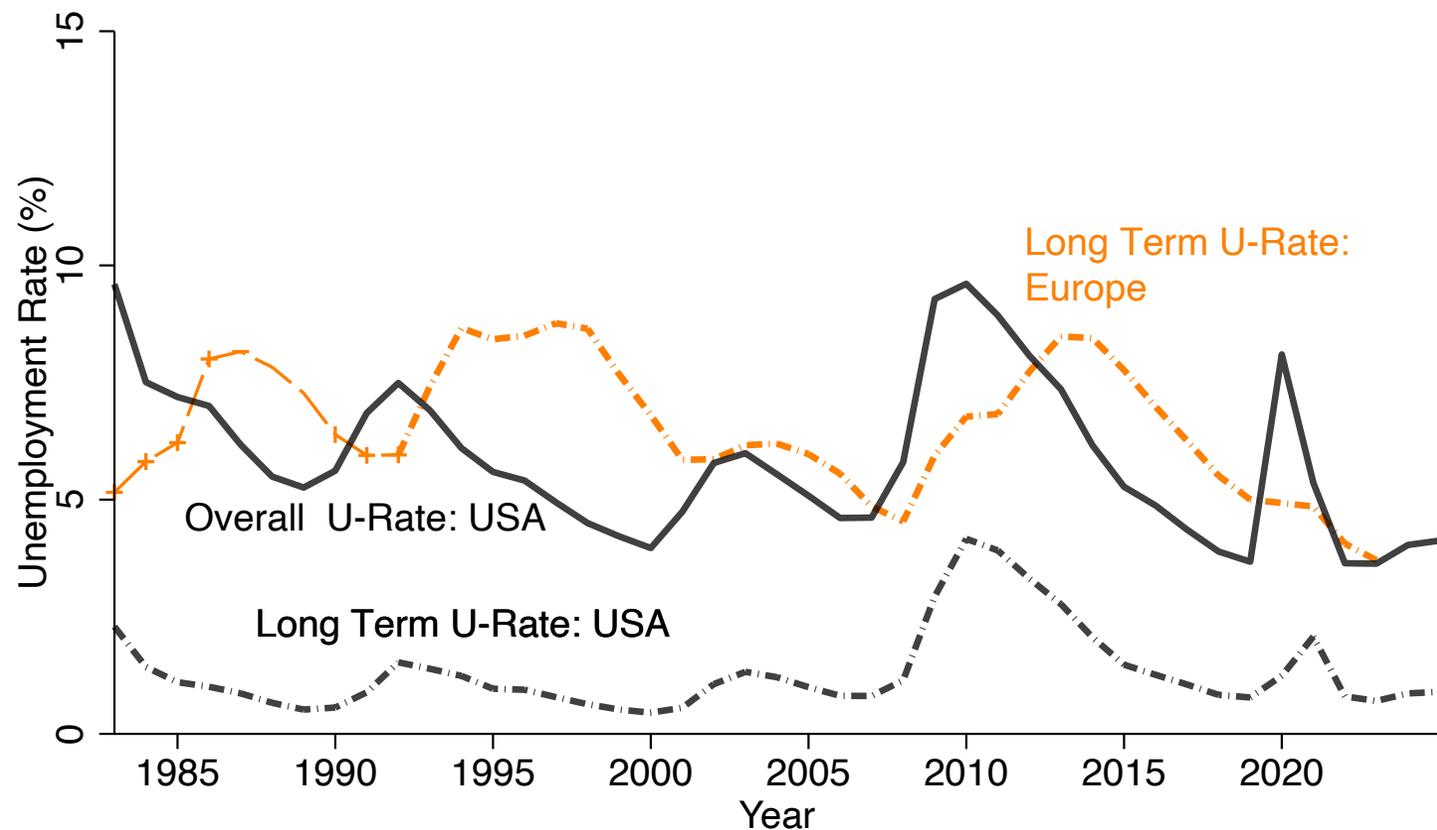
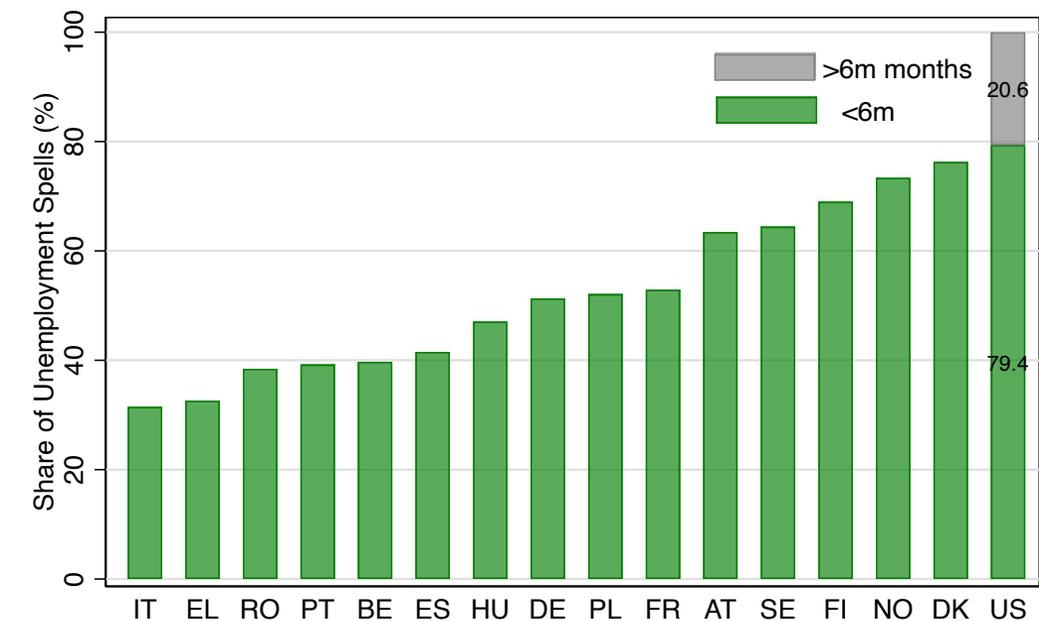
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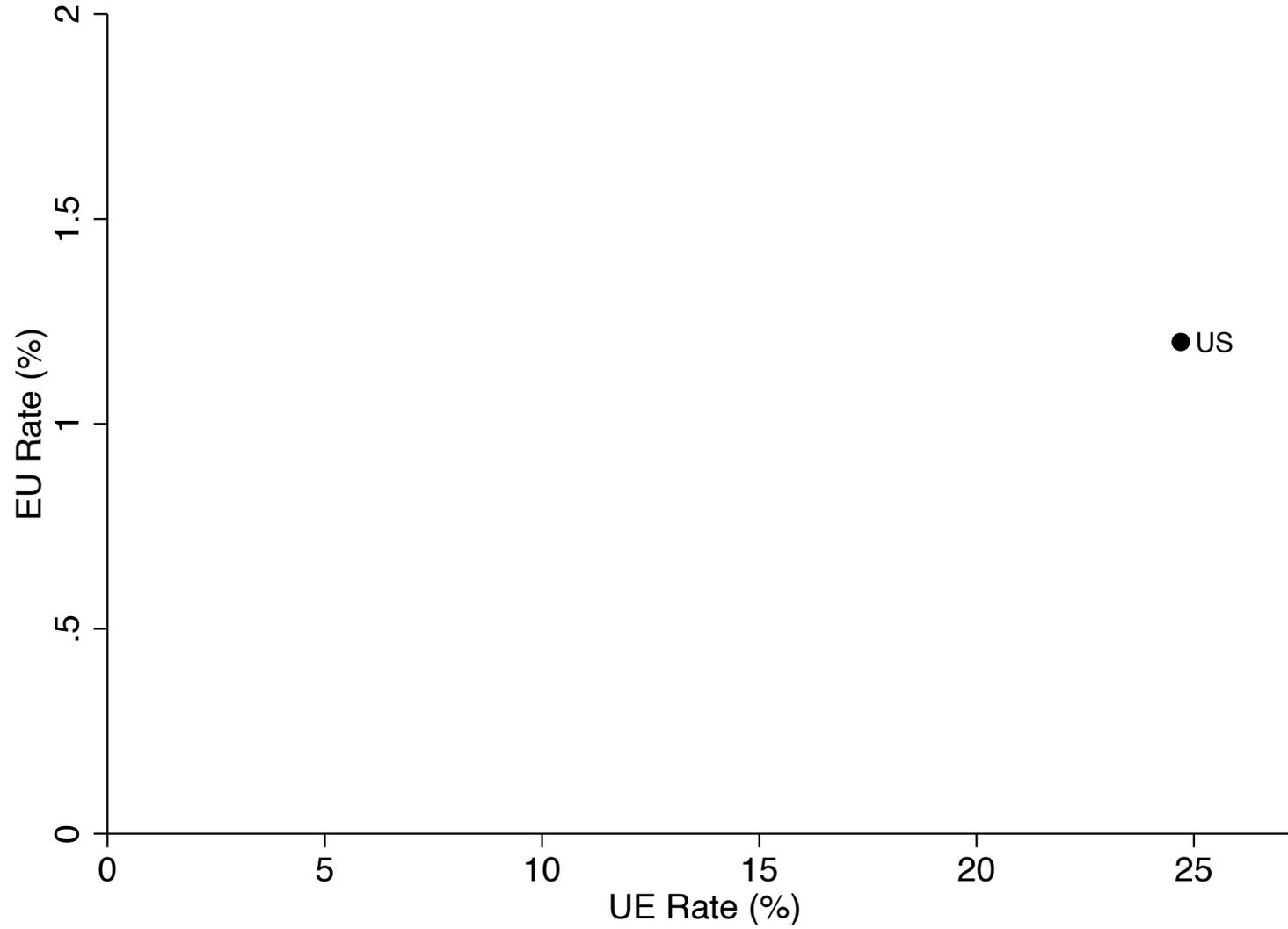


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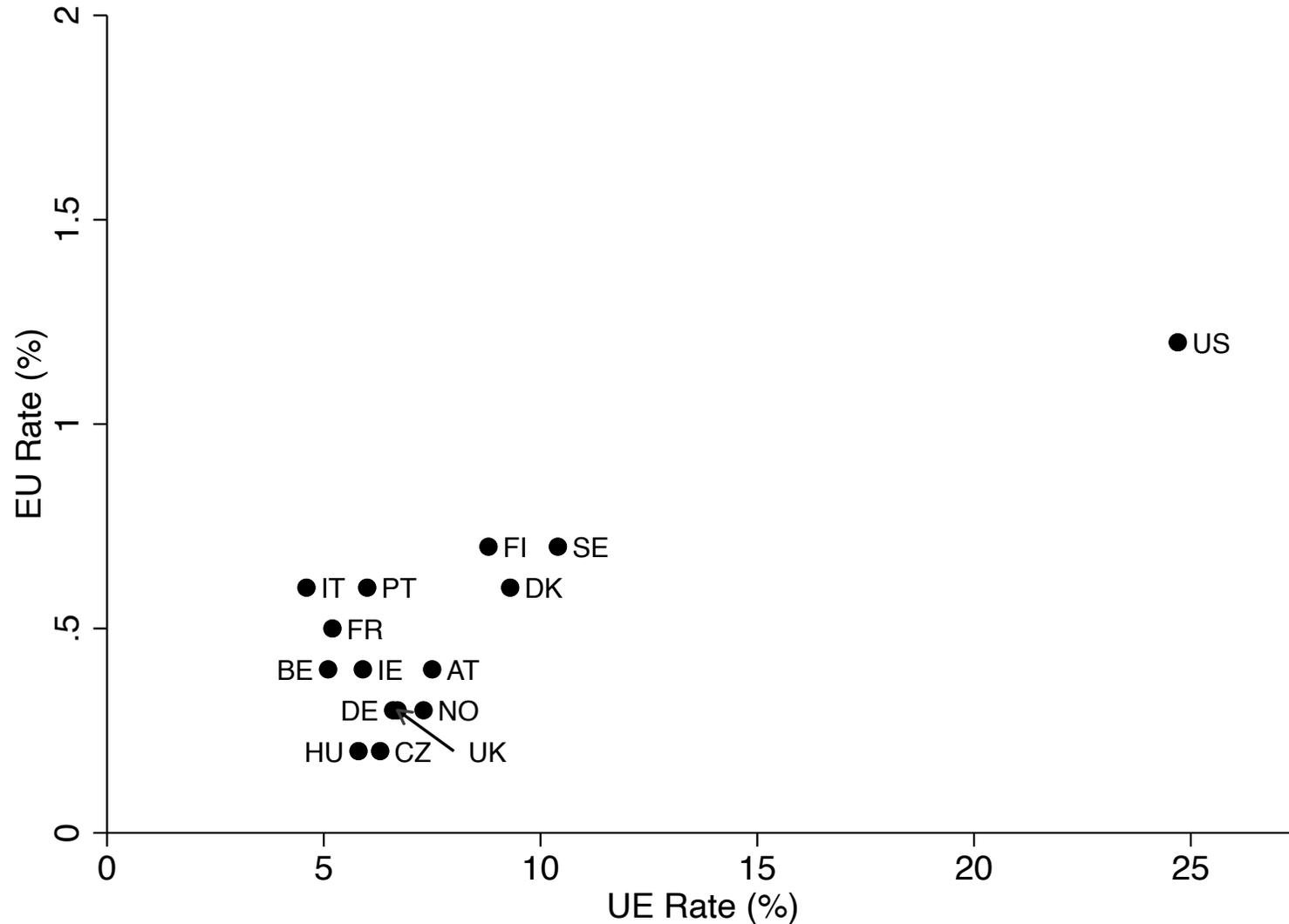
➔ LTU is traditional symptom of low dynamism and low fluidity in European labor markets

# Moving in/out of Unemployment: Probability (month)



Data source:  
Borowczyk-Martins  
(2025); similar results  
with other approaches.

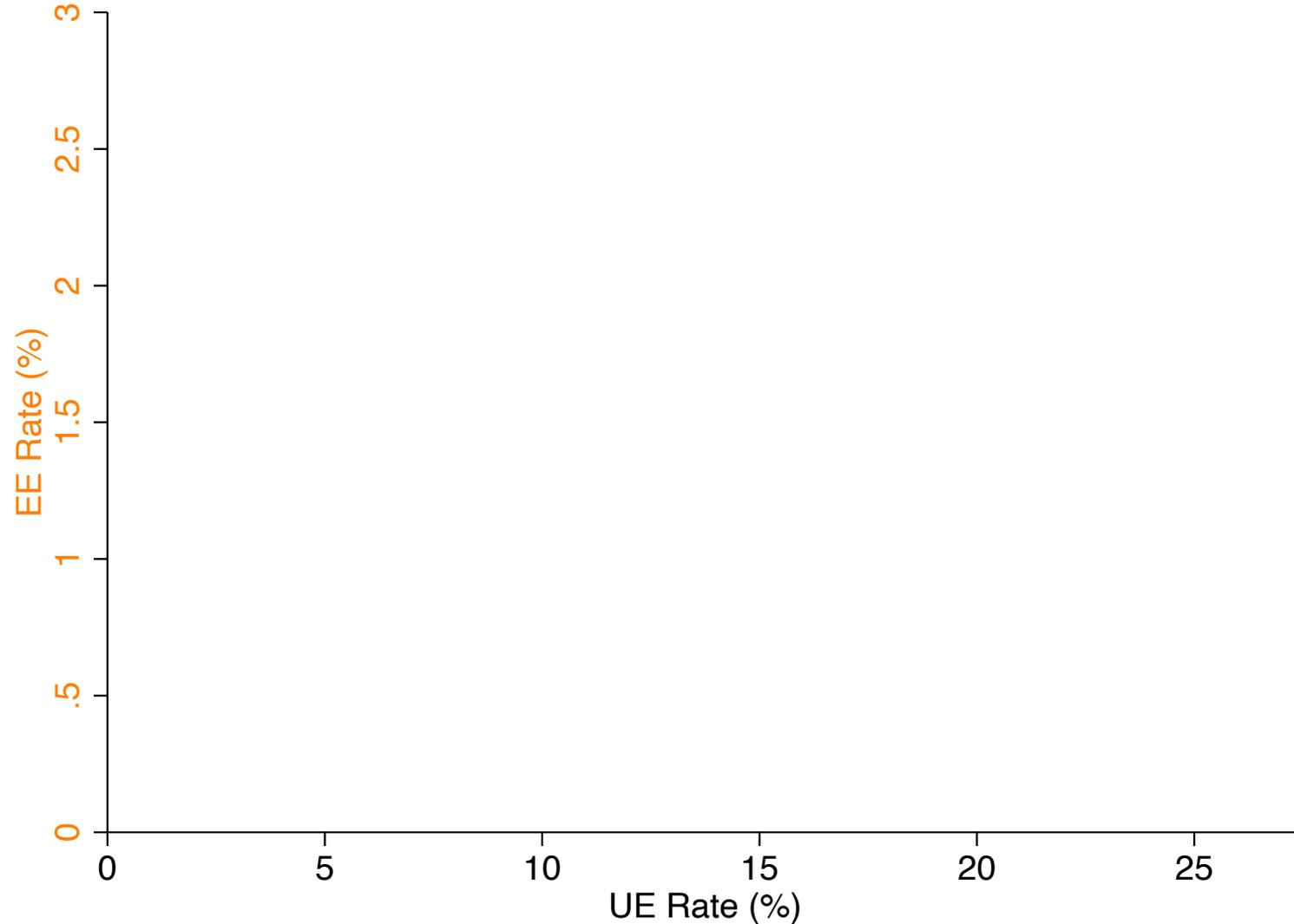
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# New View, New Y-axis: Job Mobility Between Employers

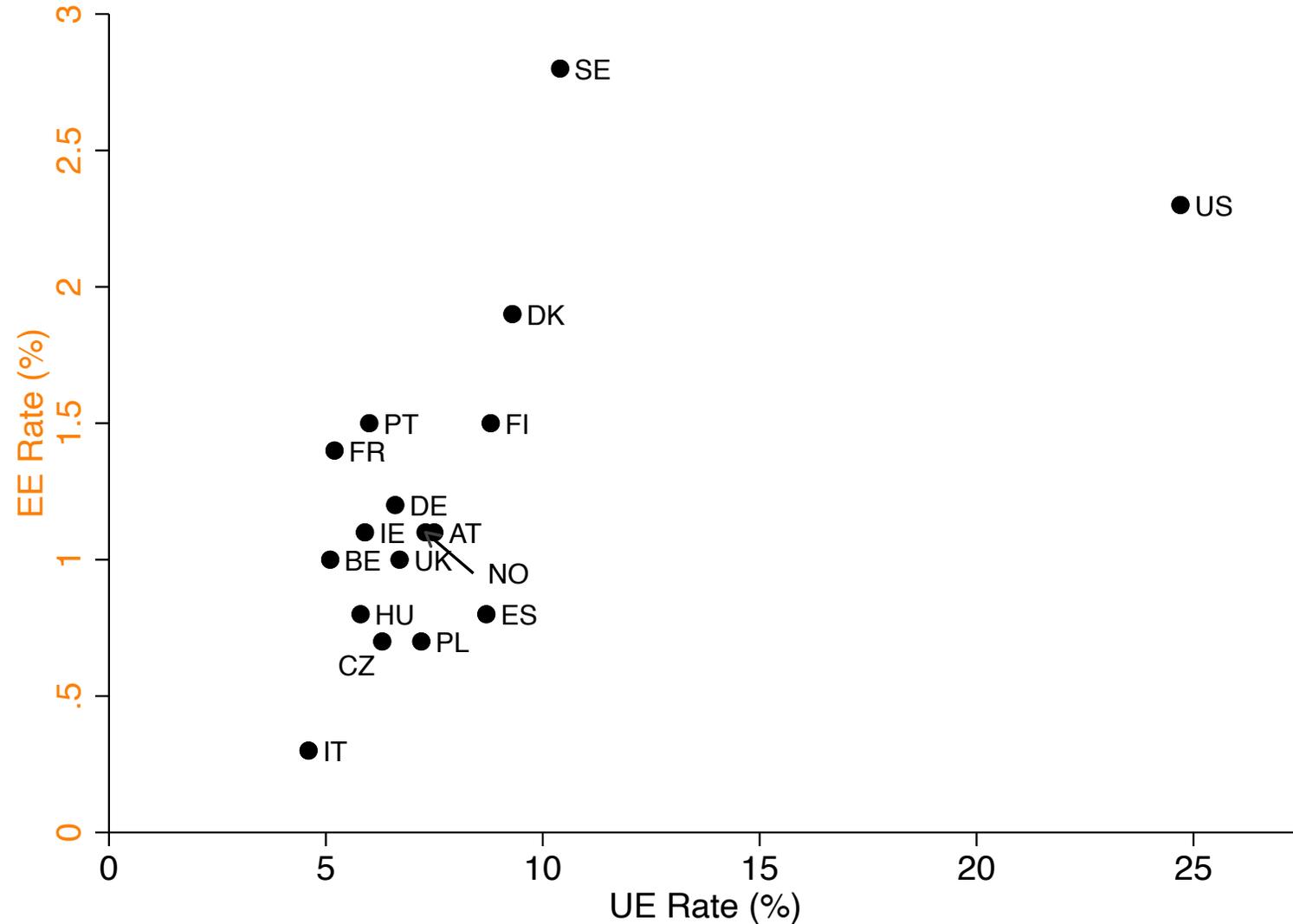
(EE = employment to employment transition)



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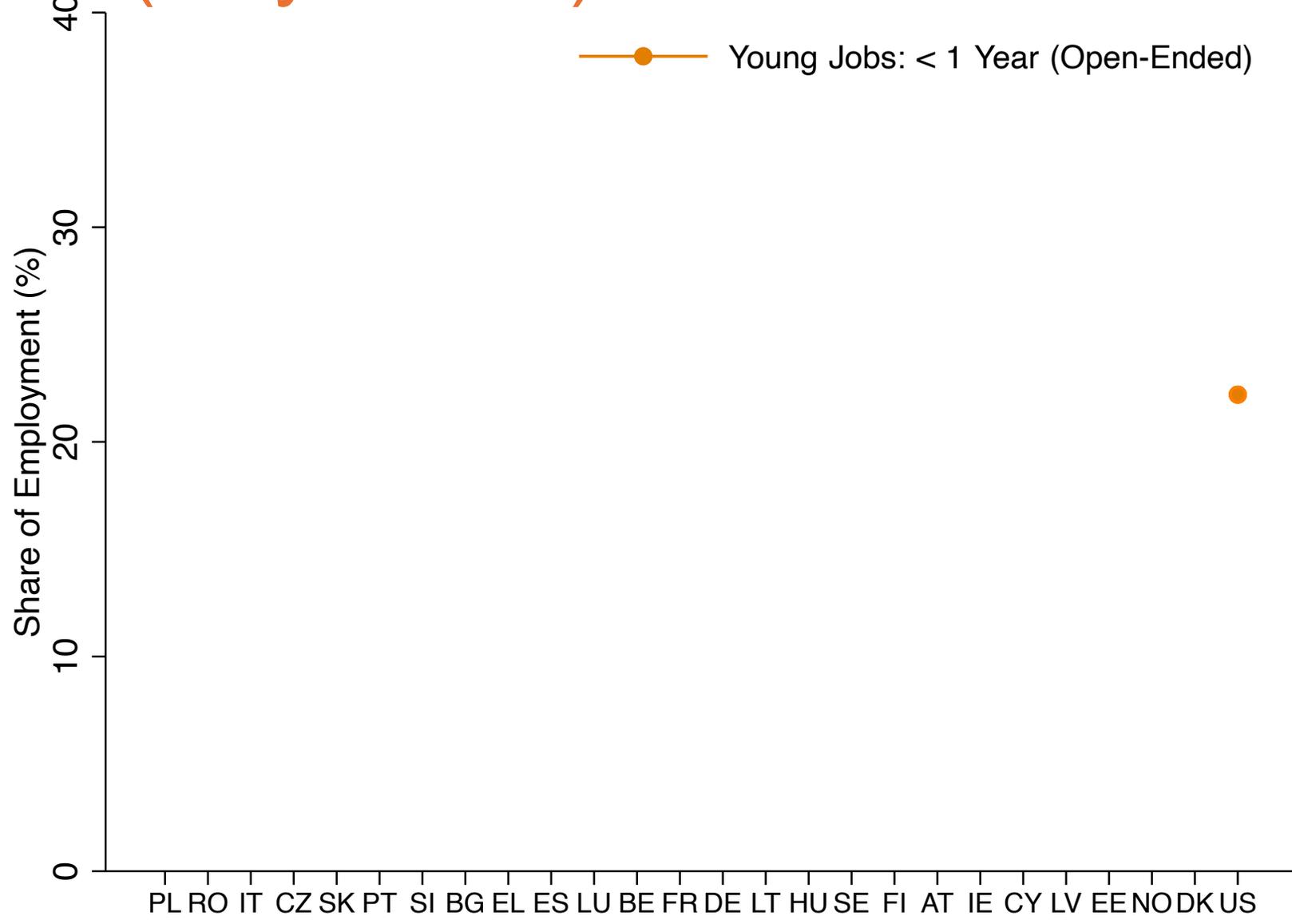
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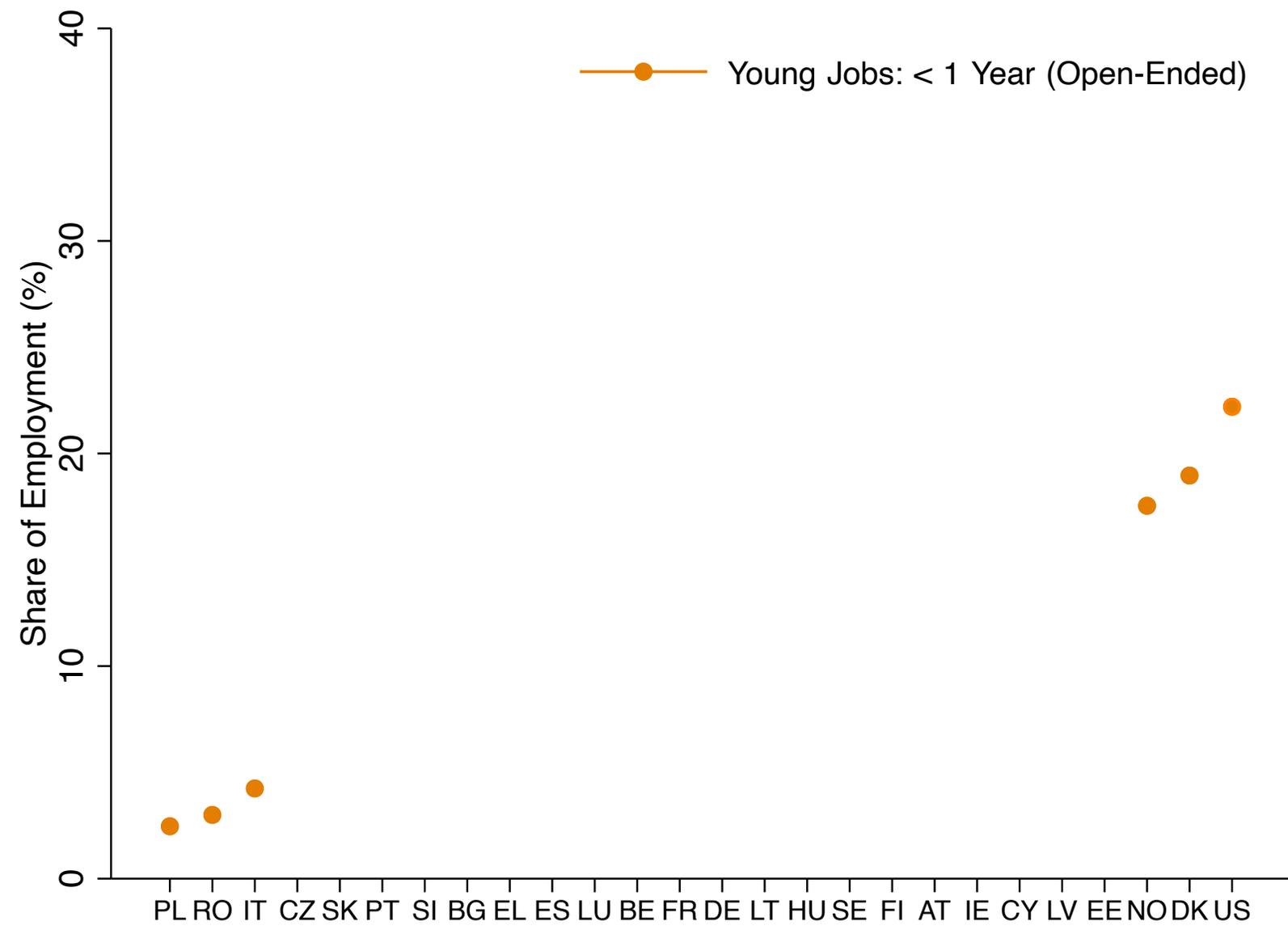


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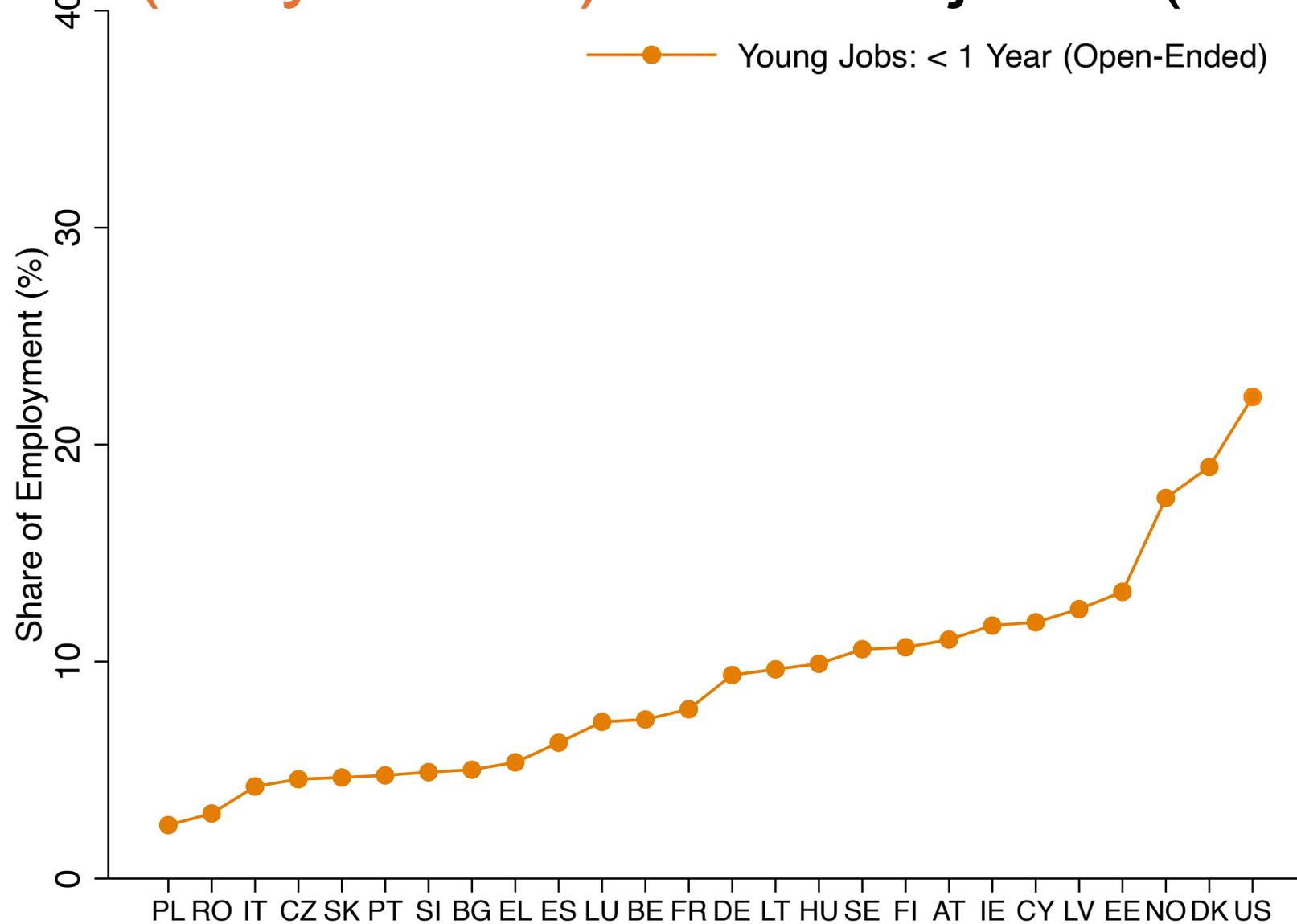
# The Transatlantic Gap in Labor Market Dynamism: "young jobs" (1 < year old)



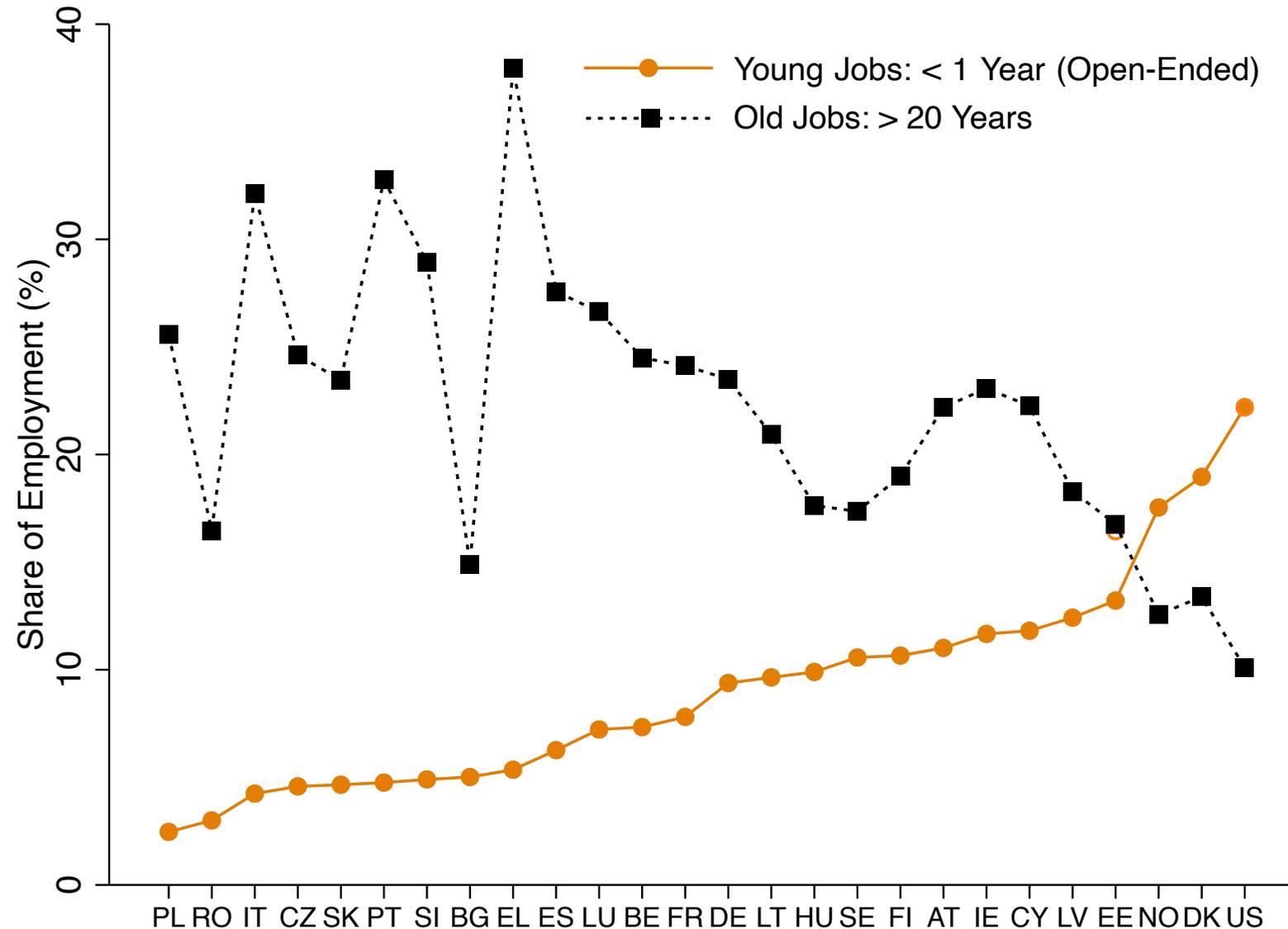
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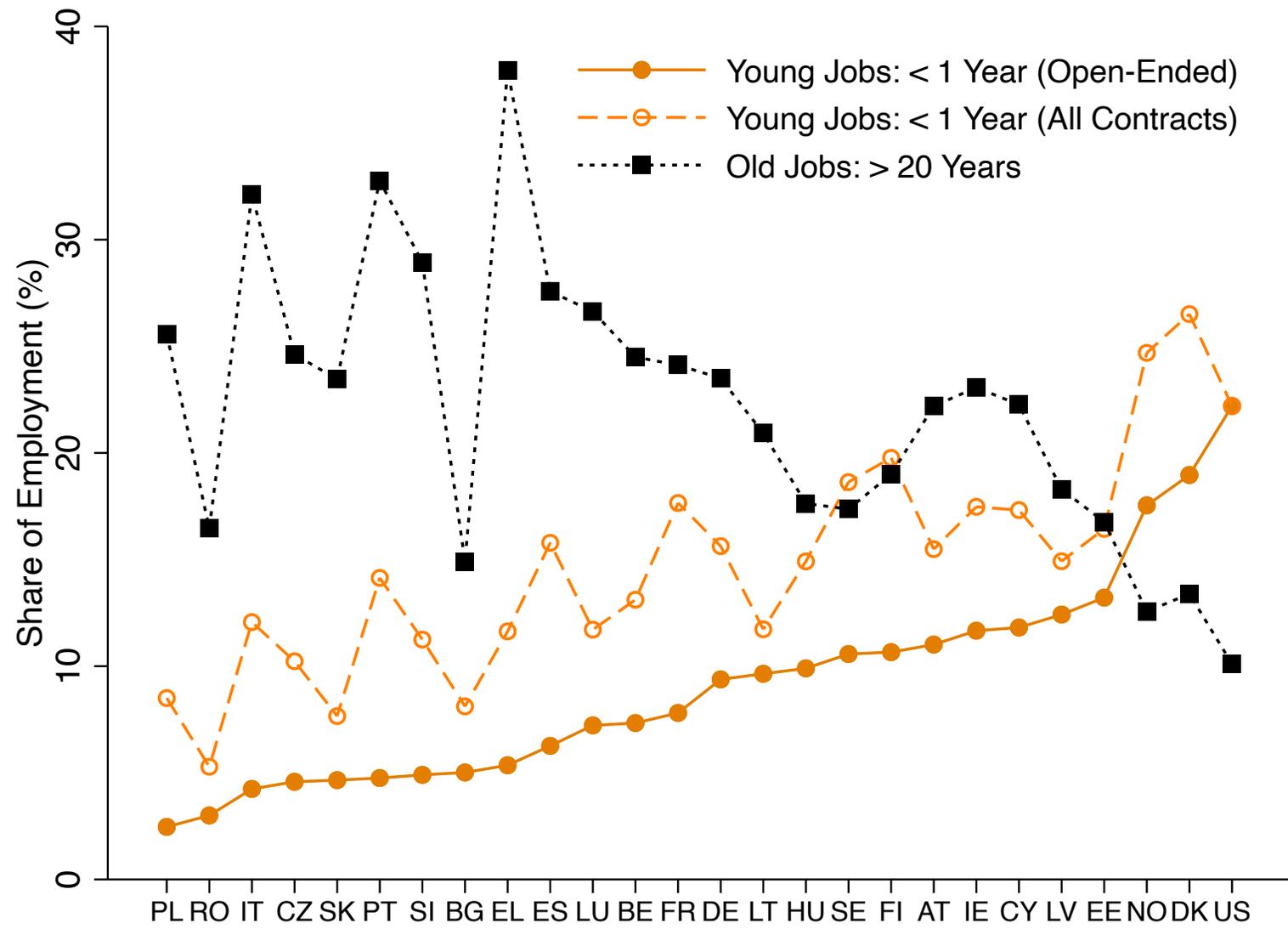
# The Transatlantic Gap in Labor Market Dynamism: "young jobs" (1 < year old) and "old jobs" (>20 years)



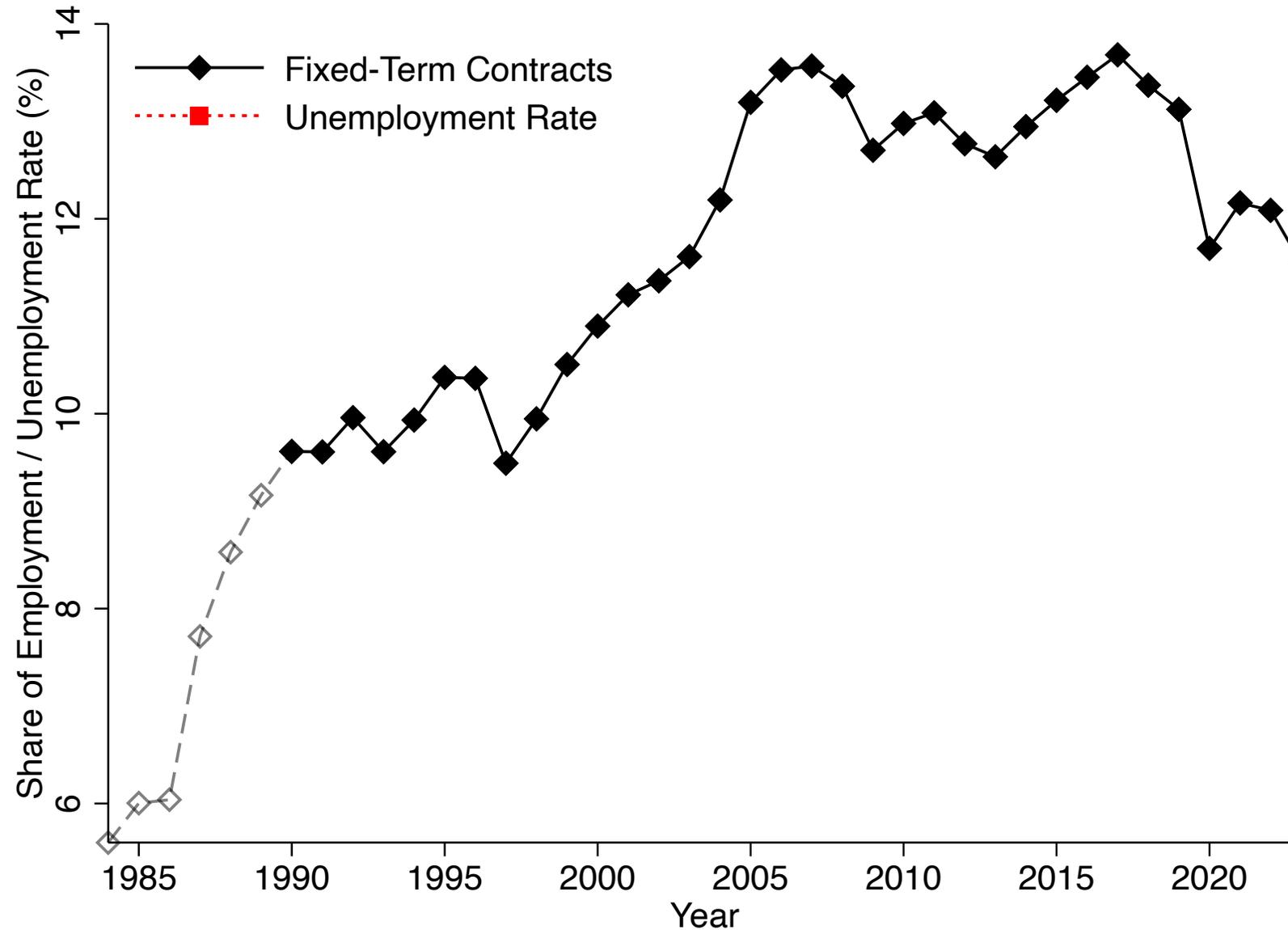
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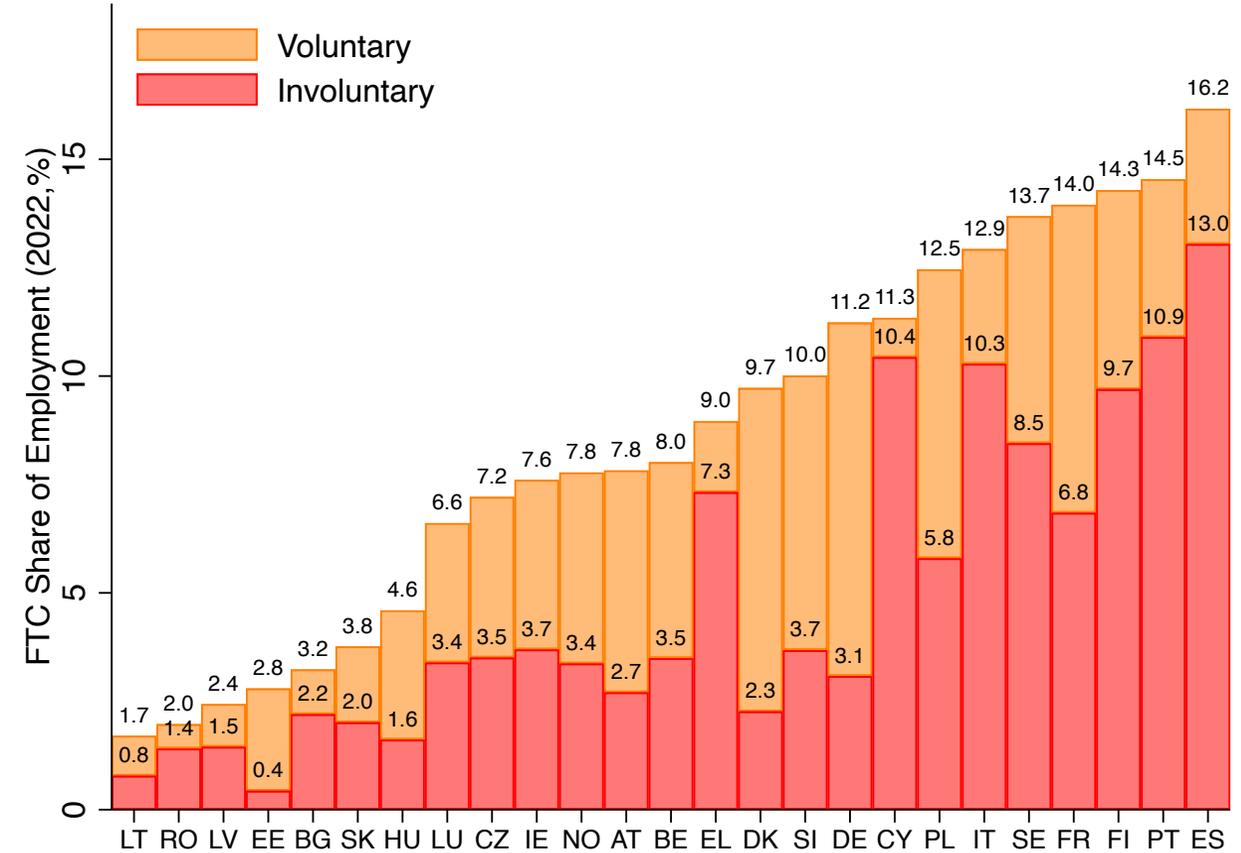
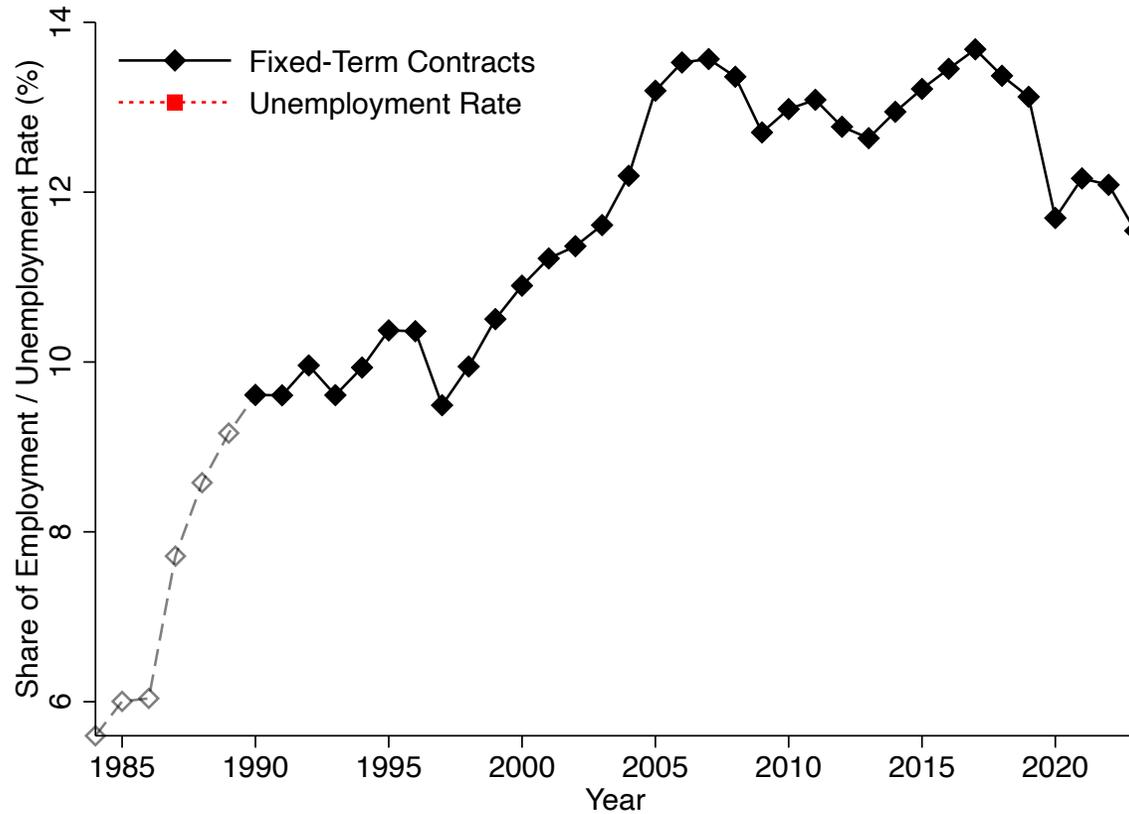
# The Transatlantic Gap in Labor Market Dynamism: "young jobs" ( $1 < \text{yr}$ ), "old jobs" ( $>20 \text{ yr}$ ), and fixed-term jobs



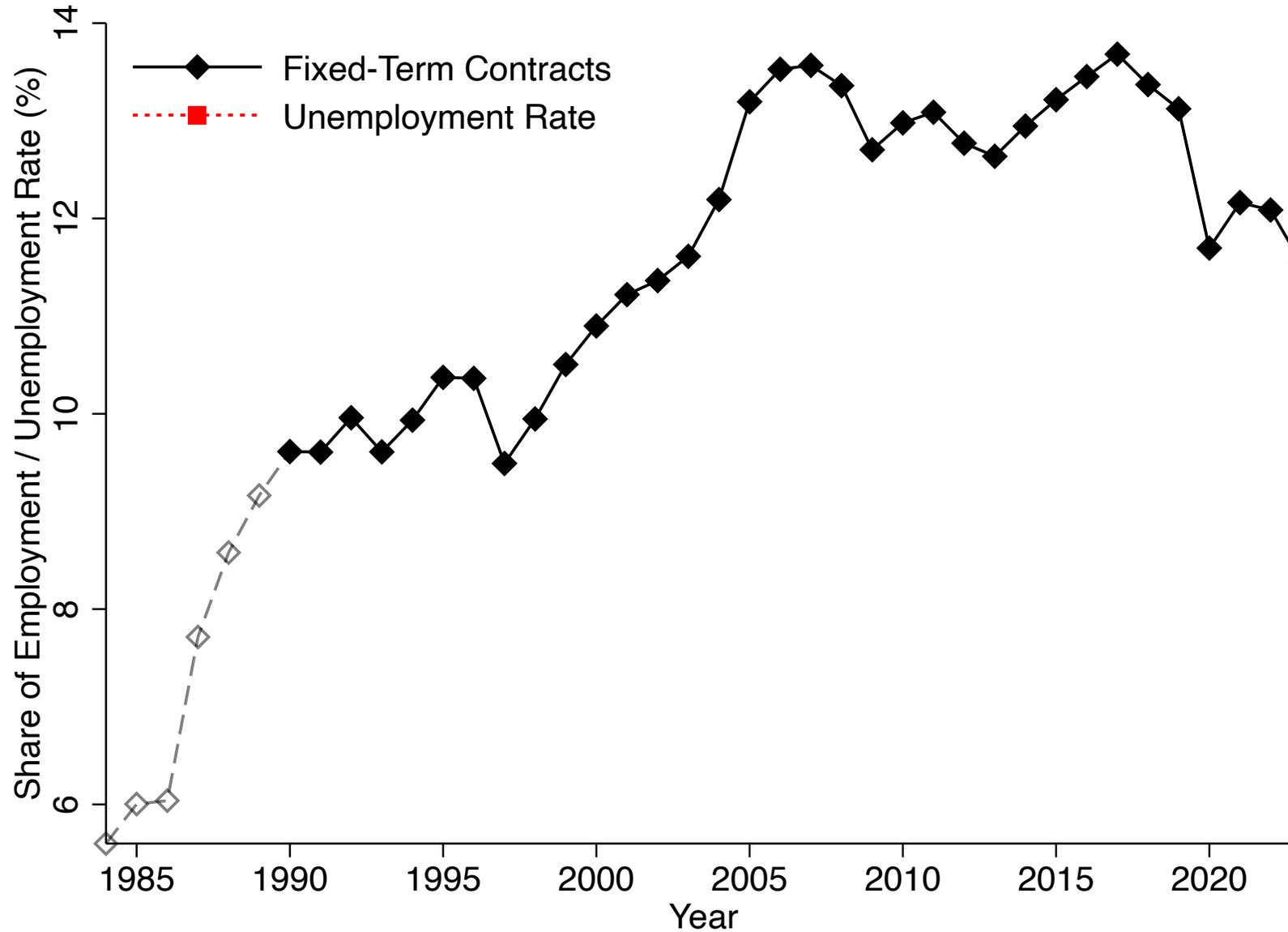
# “Bad” Dynamism and Dualism: The Rise of Fixed Term Jobs



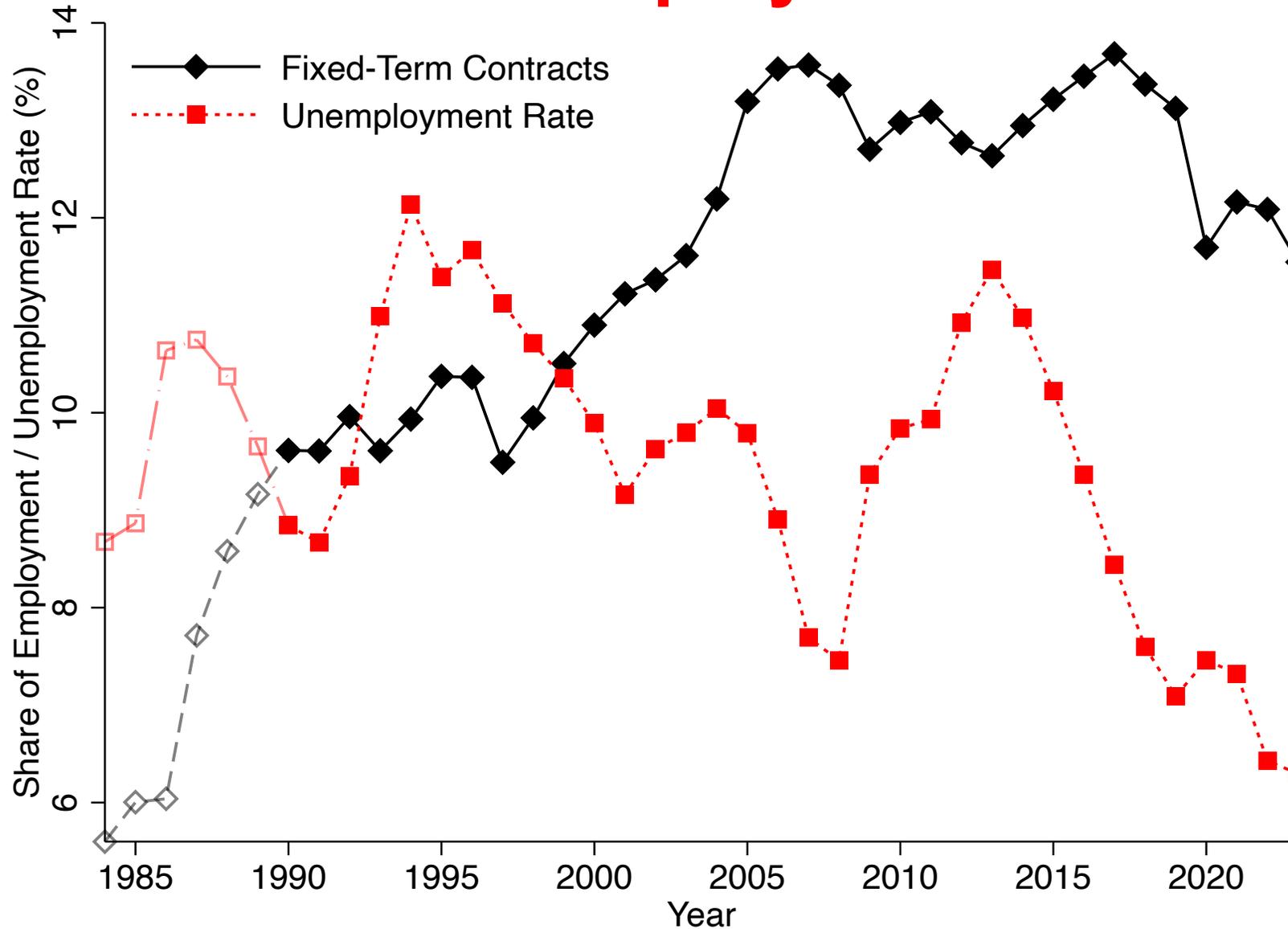
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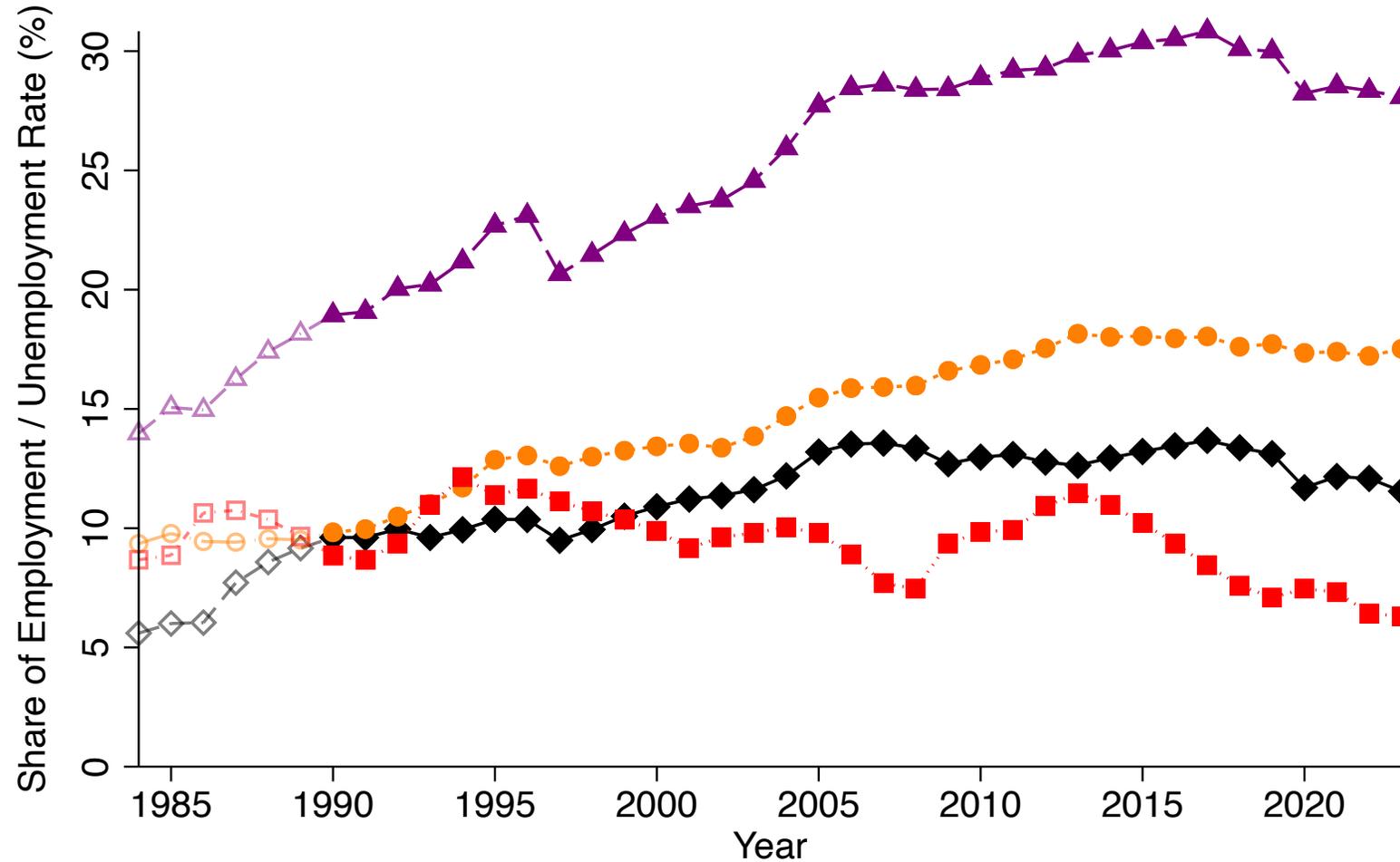
# “Bad” Dynamism and Dualism: The Rise of Fixed Term Jobs



# “Bad” Dynamism and Dualism: Fixed Term Jobs vs. **Unemployment**



# “Bad” Dynamism and Dualism: Part-time Jobs, Fixed Term Jobs, or Either (and Unemployment)



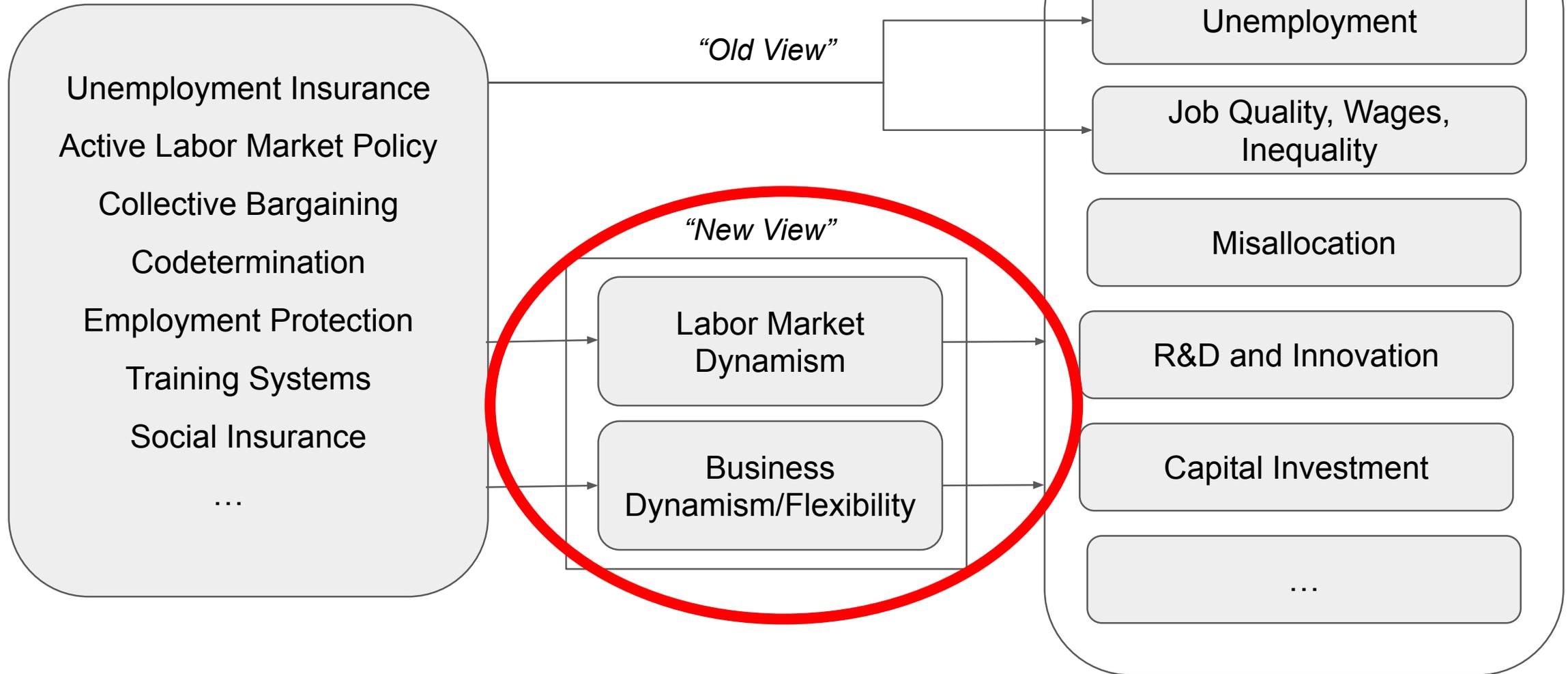
—◆— (1): Fixed-Term Contracts (FTC)    -●- (2): Part-Time Job (PT)  
-▲- (1) + (2): FTC + Open-Ended PT    -■- (3) Unemployment Rate

# “Bad” Labor Market Dynamism: Dualism

- Evasion response to strong LMIs
- Concentrated in unproductive, often dead-end jobs
- Facets of bad dynamism and dualism
  - FTC time series plus bulletin points
  - Fixed term/temporary jobs
  - Part-time jobs (e.g., German “minijobs”)
  - Jobs not covered by collective bargaining
  - Domestic outsourcing
  - Temporary work agencies
  - Platform work (nascent research)
  - ...

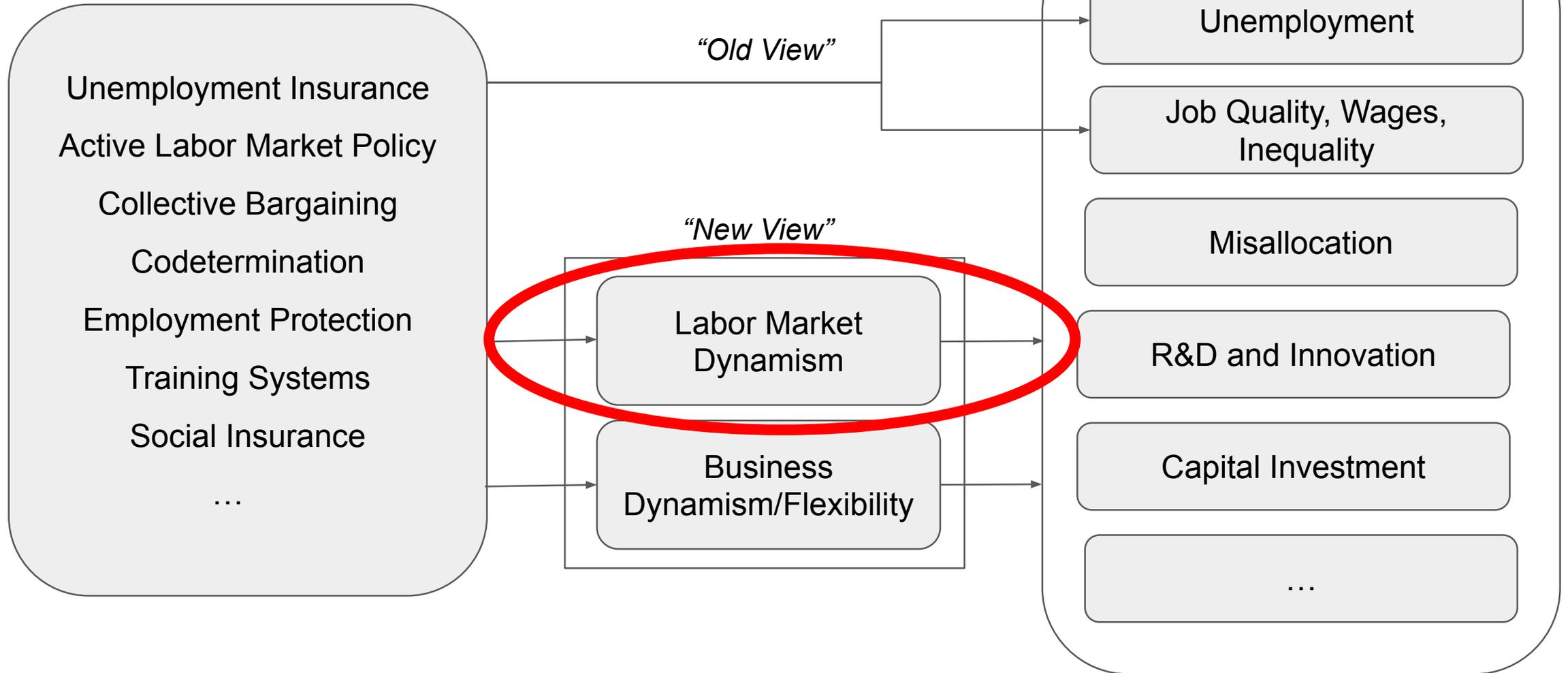
# Macroeconomic Performance

## Labor Market Institutions



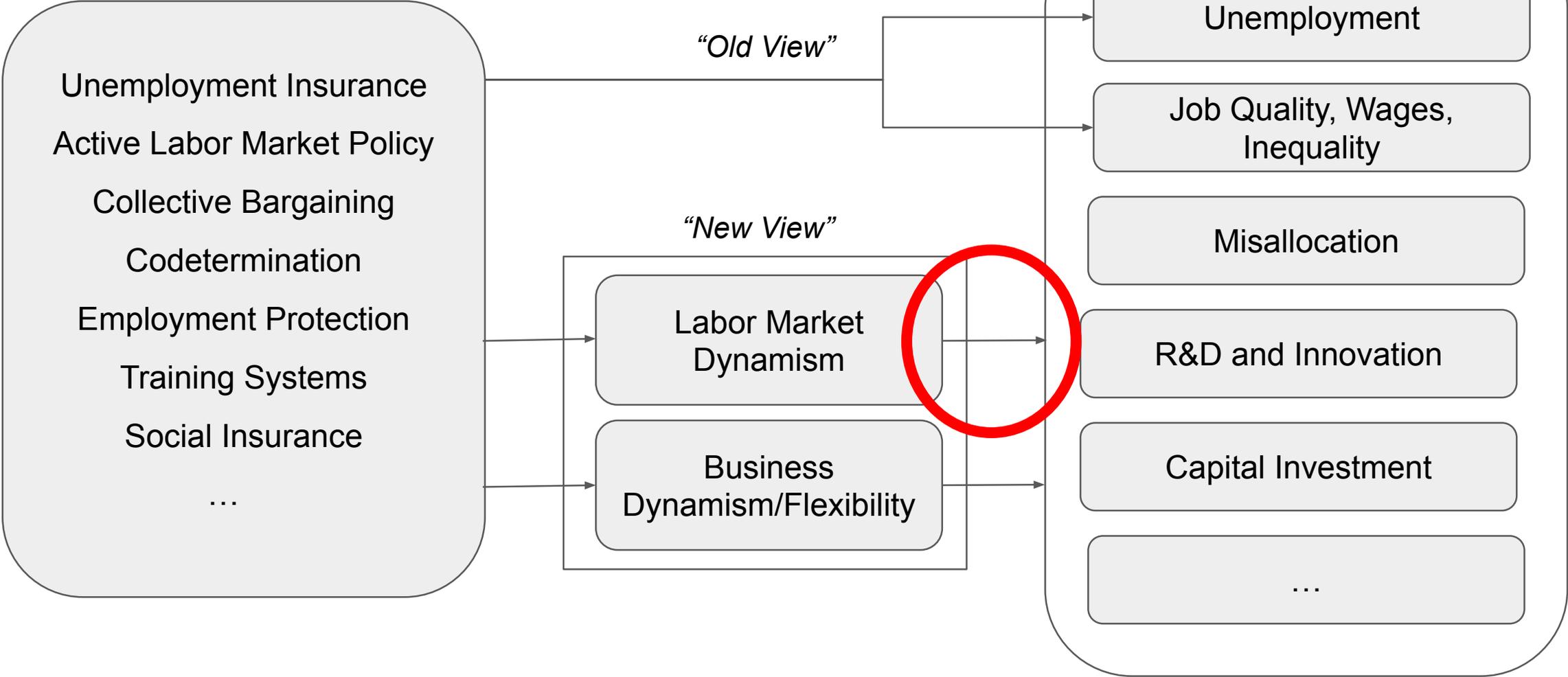
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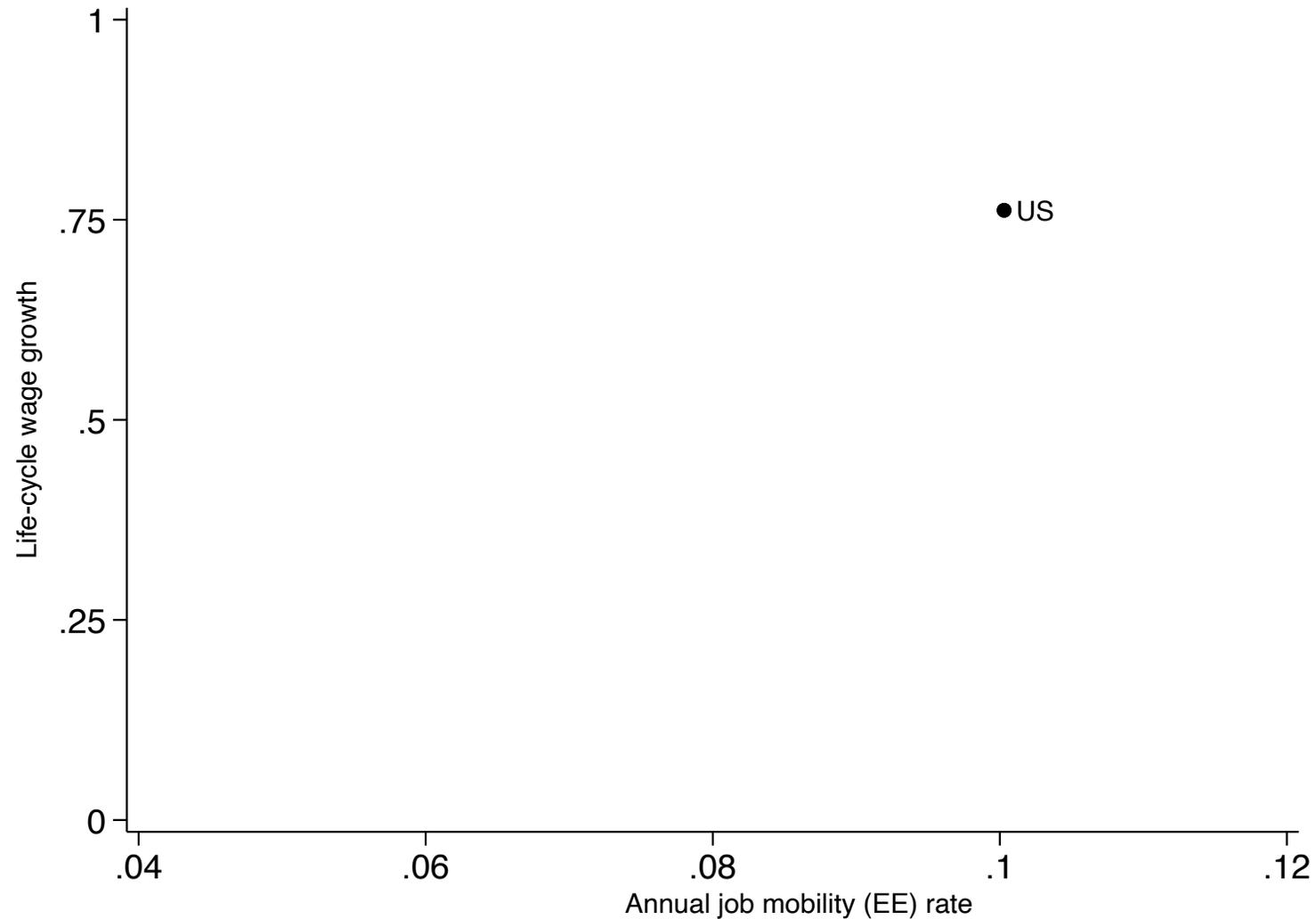


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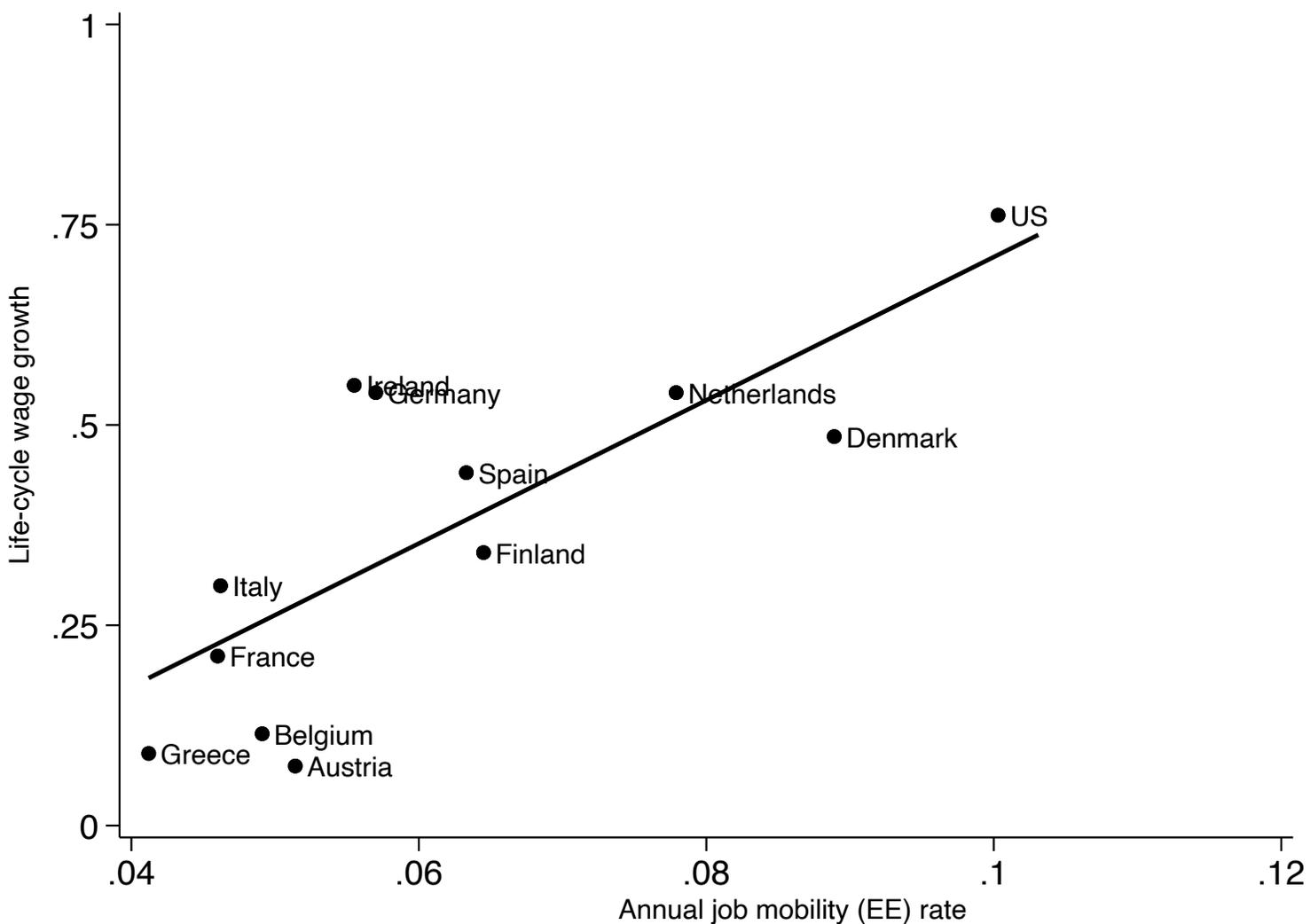


# Labor Market Dynamism and **Micro** Effects: Lifetime Wage Growth vs. Job Mobility Rates



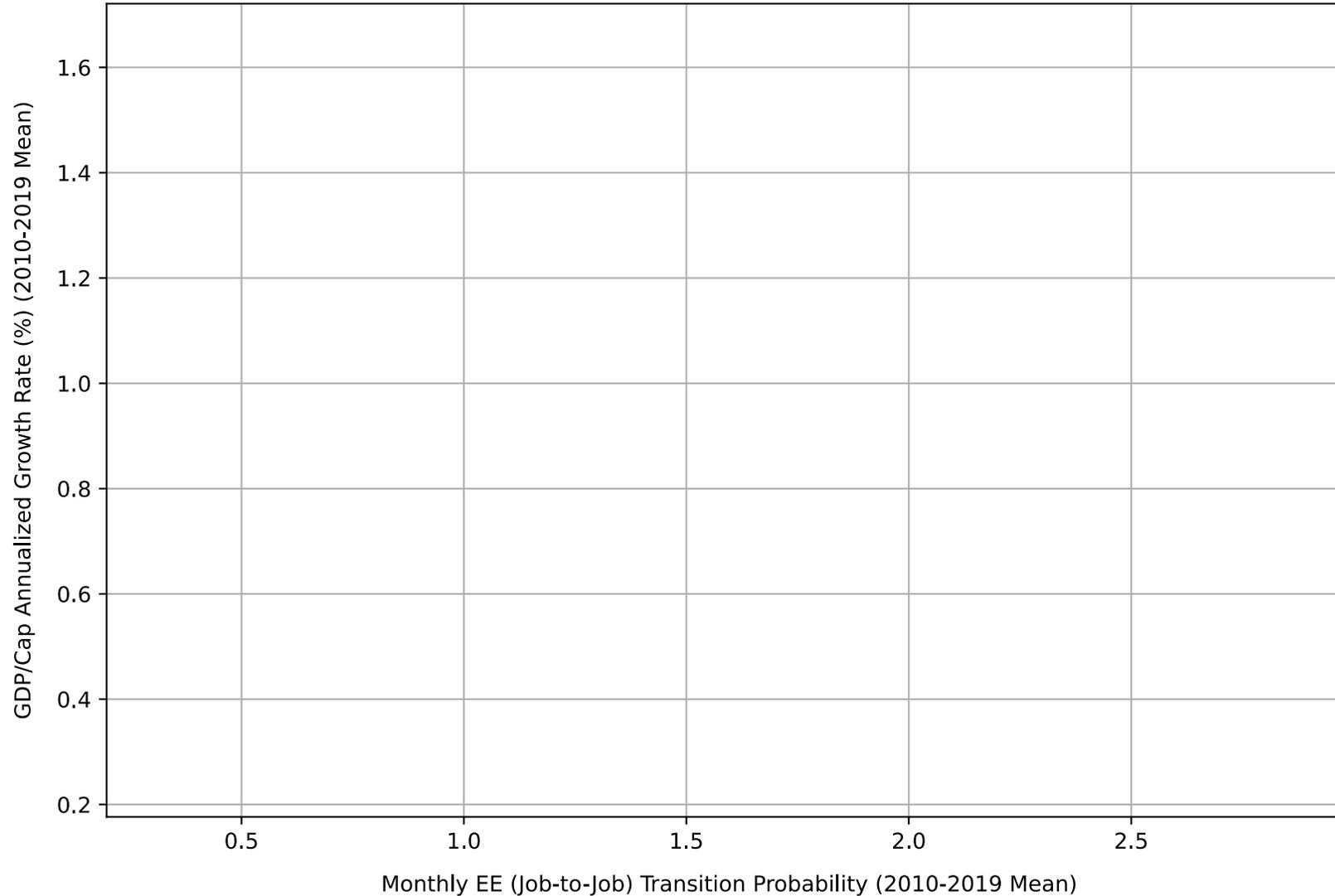
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# Labor Market Dynamism and Micro Effects: Lifetime Wage Growth vs. Job Mobility Rates

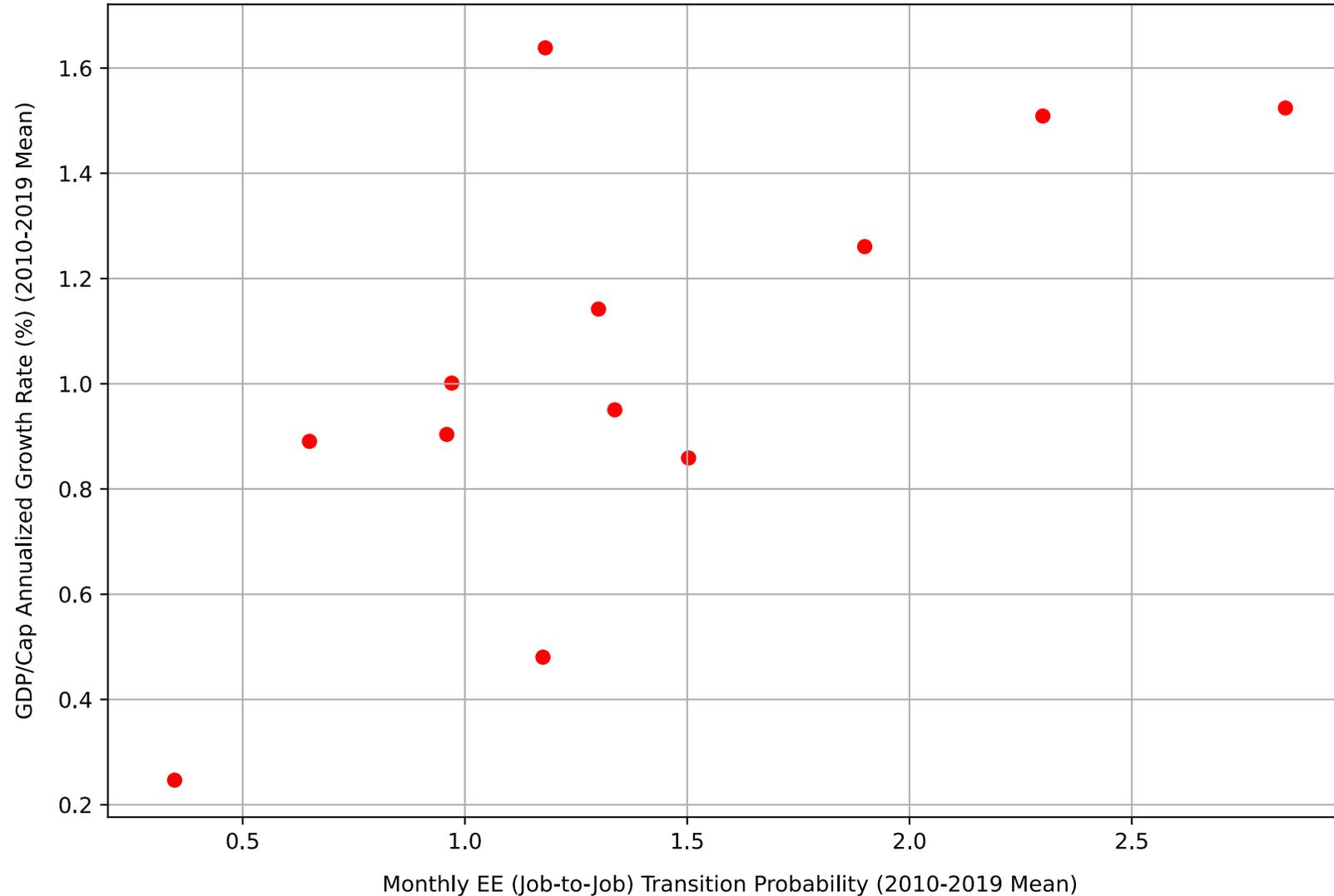


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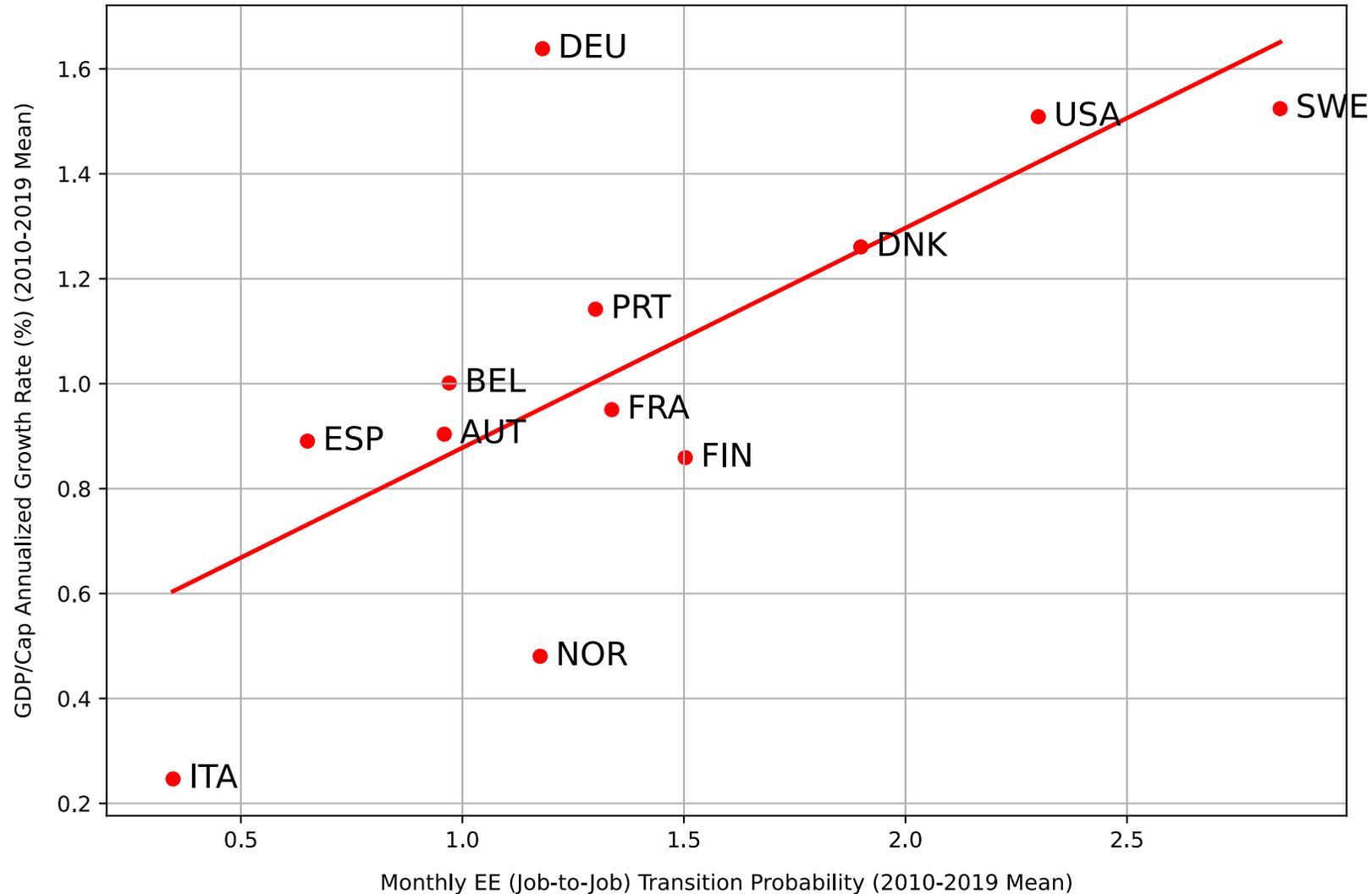
# Labor Market Dynamism and **Macro** Effects (Correlations): GDP pc Growth vs. Job Mobility Rates



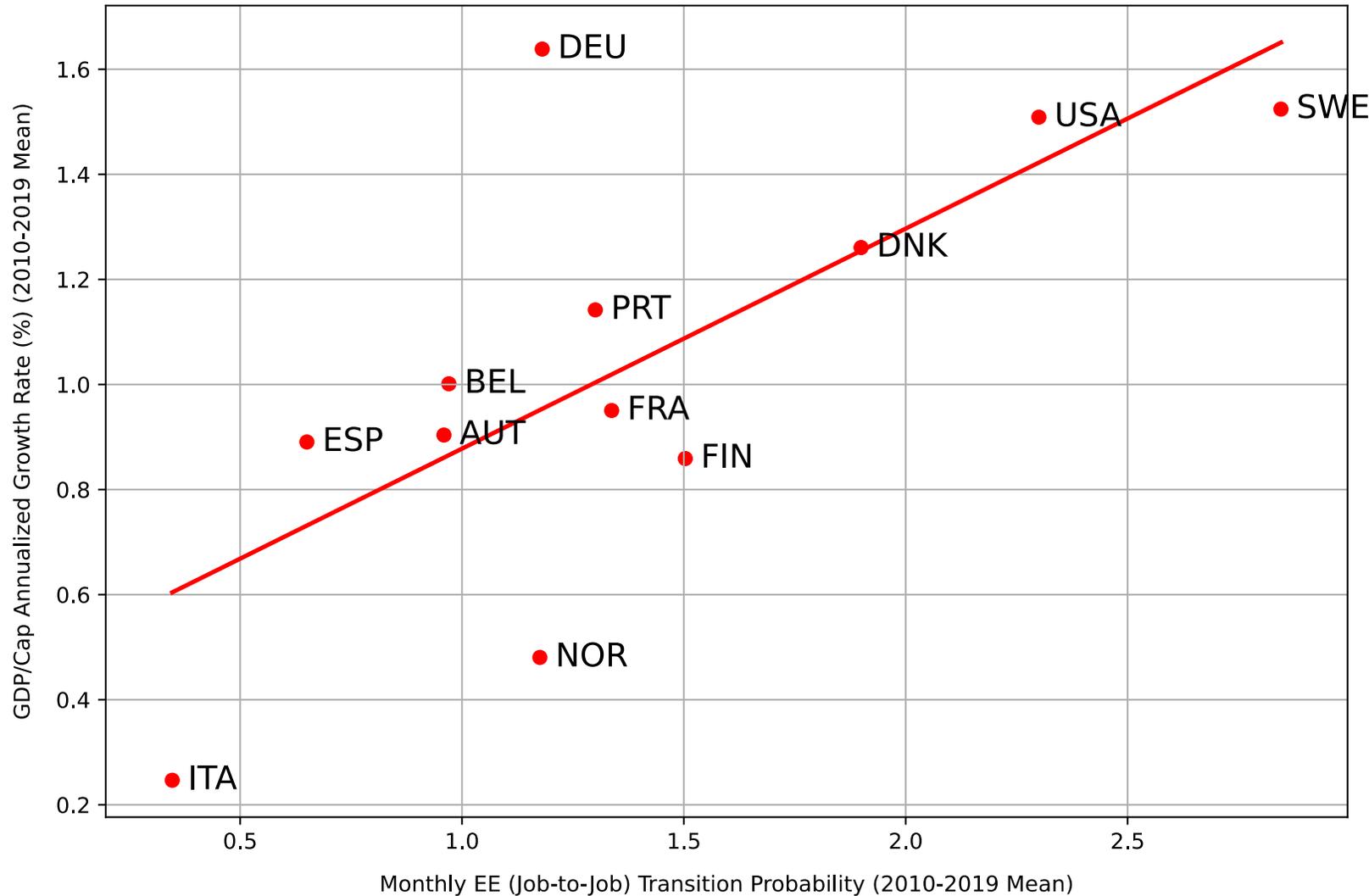
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**More in paper**

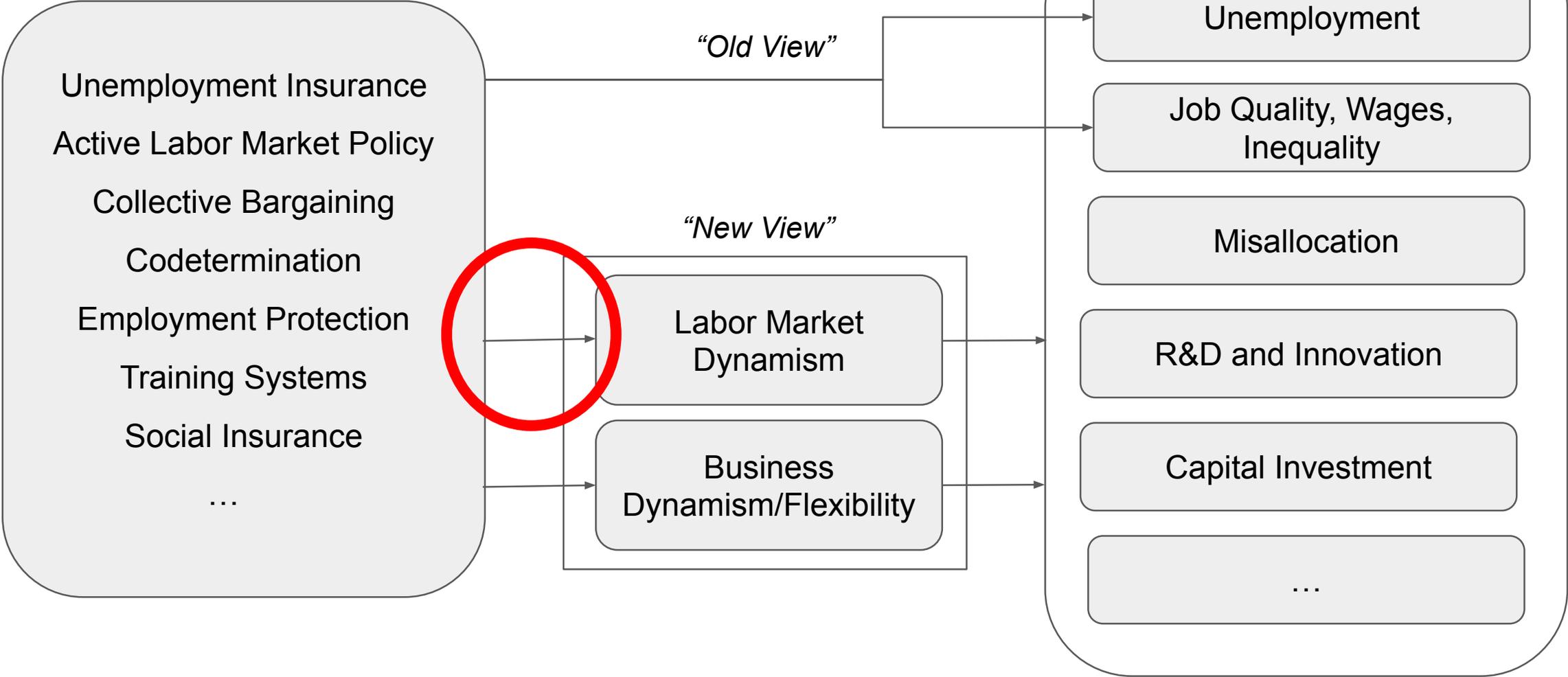
Channels from x to y axis

Recap of existing evidence on LM dynamism-growth link using population aging as “instrument” for LMD)

**Key challenge:**  
“identification” of causal effects from dynamism to macro outcomes.

# Macroeconomic Performance

# Labor Market Institutions



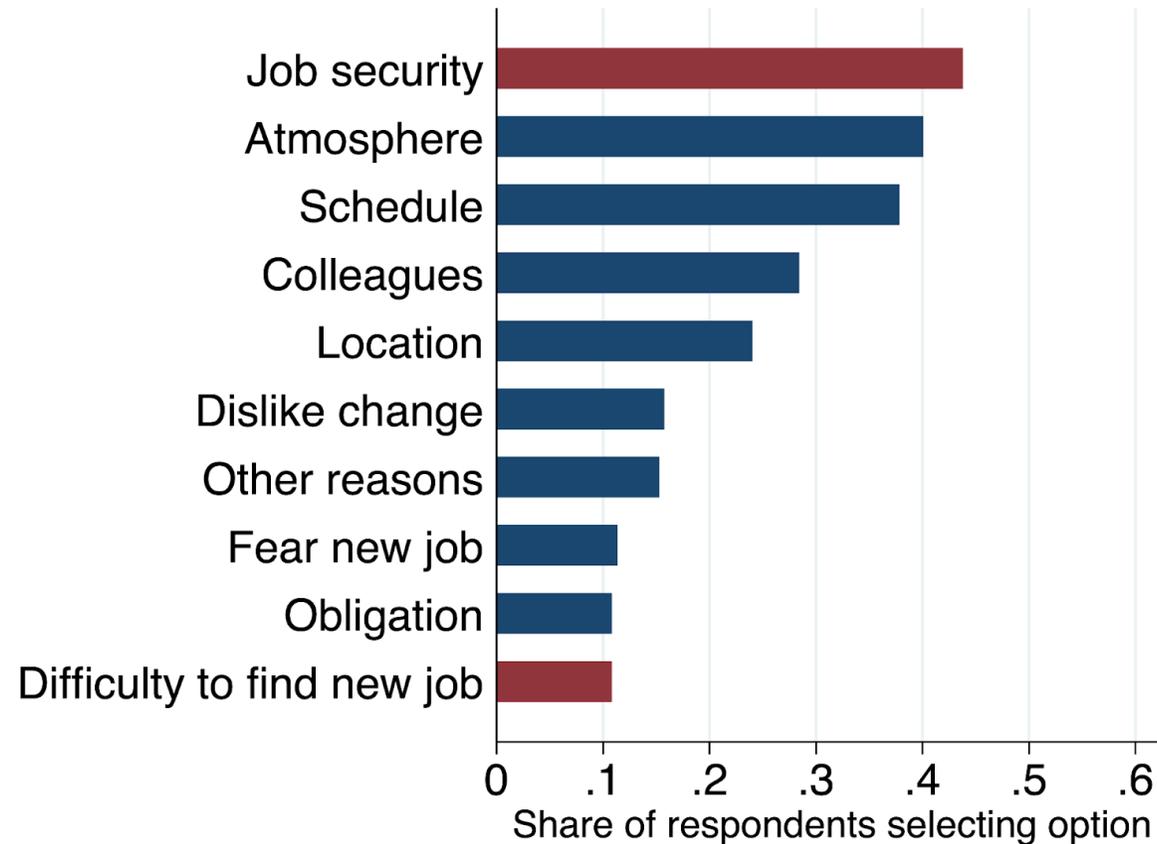
# How and Which LM Institutions Might Stifle Labor Market Dynamism?

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**Why not switch to higher-paying job** at otherwise similar employer in your labor market?

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- Employment protection that increases in seniority
  - Probationary periods
  - “Last in, first out” rules in dismissals
- Severance pay and occupational pensions (that increase in seniority)
  - E.g., 2003 reform in Austria (“severance pay backpack” that remains portable across employers)
  - 1994 pension portability reform in Switzerland (Baselgia , Jäger, Siegenthaler, Schoefer 2024)
- Unemployment insurance: limited eligibility upon quitting
- Wage dispersion compressed (by collective bargaining) => no reason to switch/hard to poach
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- The role of misinformation about gains from job switching in Europe vs. US
  - Jäger, Roth, Roussille and Schoefer (2024) for Germany vs. Guo (2025) for US
- Seniority-based (job tenure!) pay structures
- Non-compete clauses
- Short-term work/labor hoarding subsidies
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Missing debate: “active labor market policies for the employed”?

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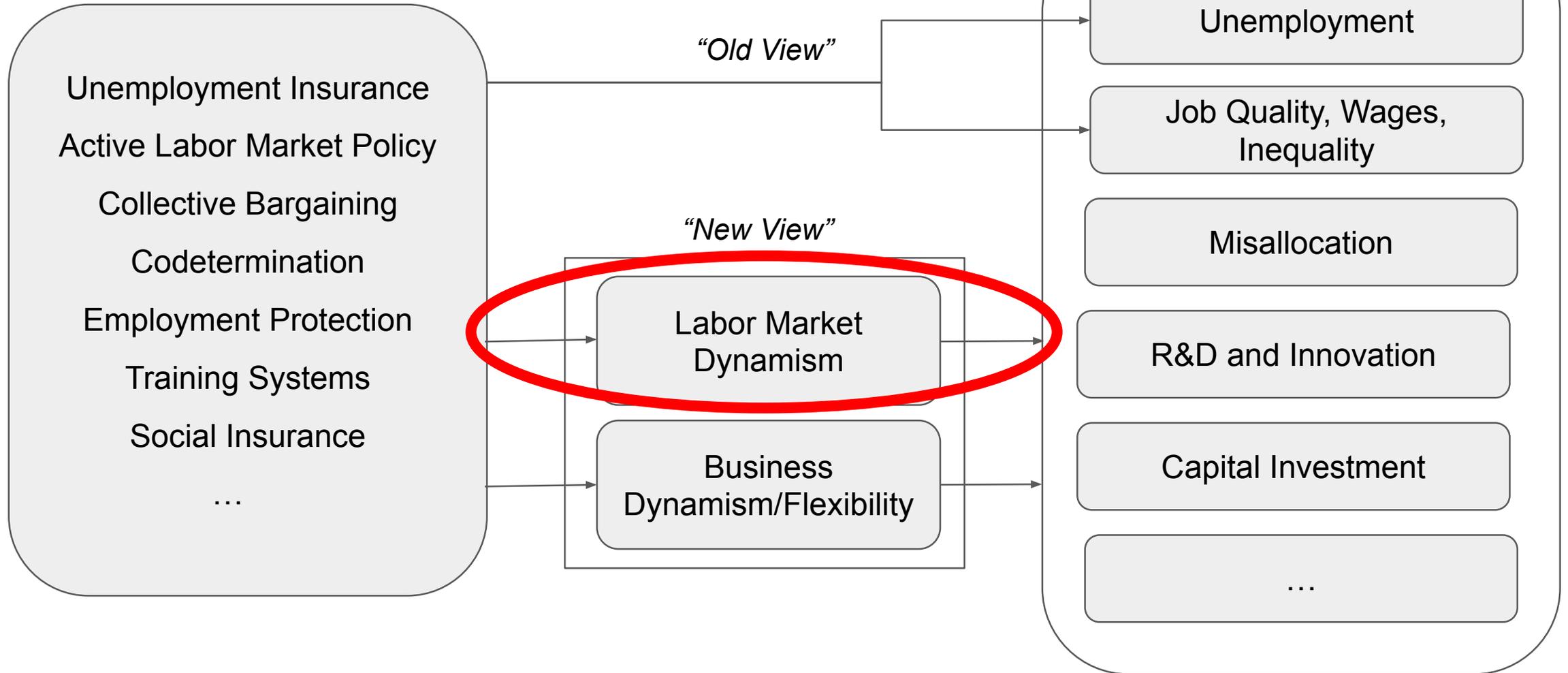
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**Missing debate: “active labor market policies for the employed”?**

Jäger, Roth, Roussille  
and Schoefer (2024)

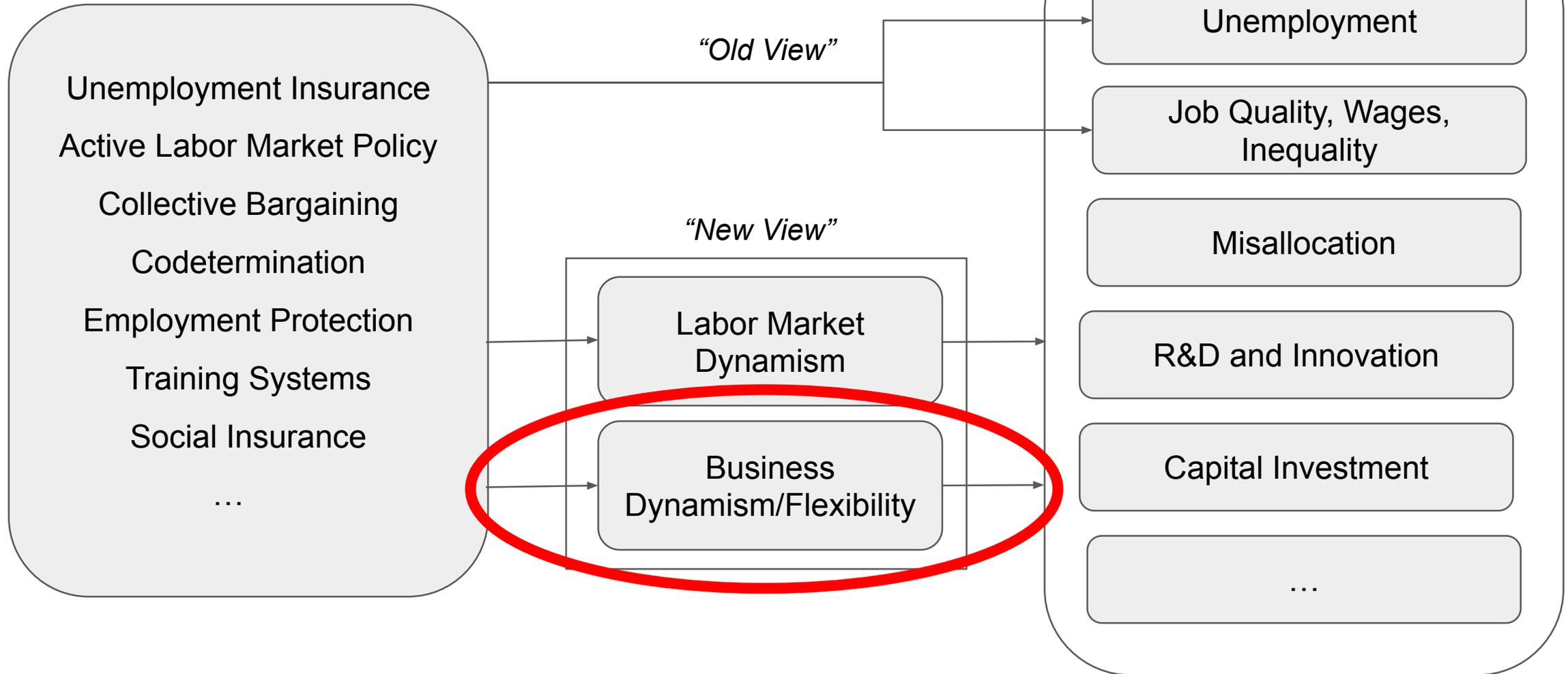
# Macroeconomic Performance

## Labor Market Institutions

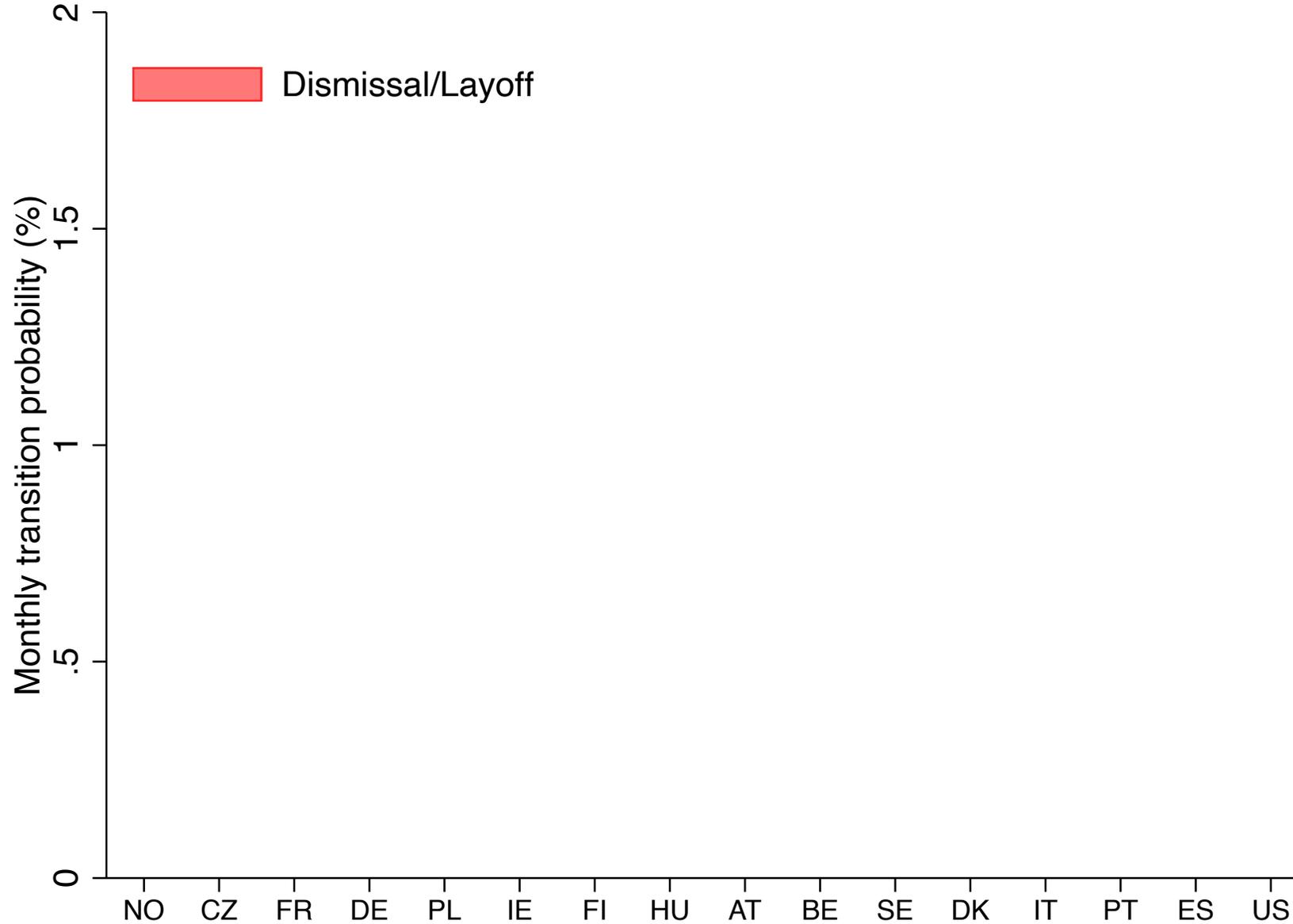


# Macroeconomic Performance

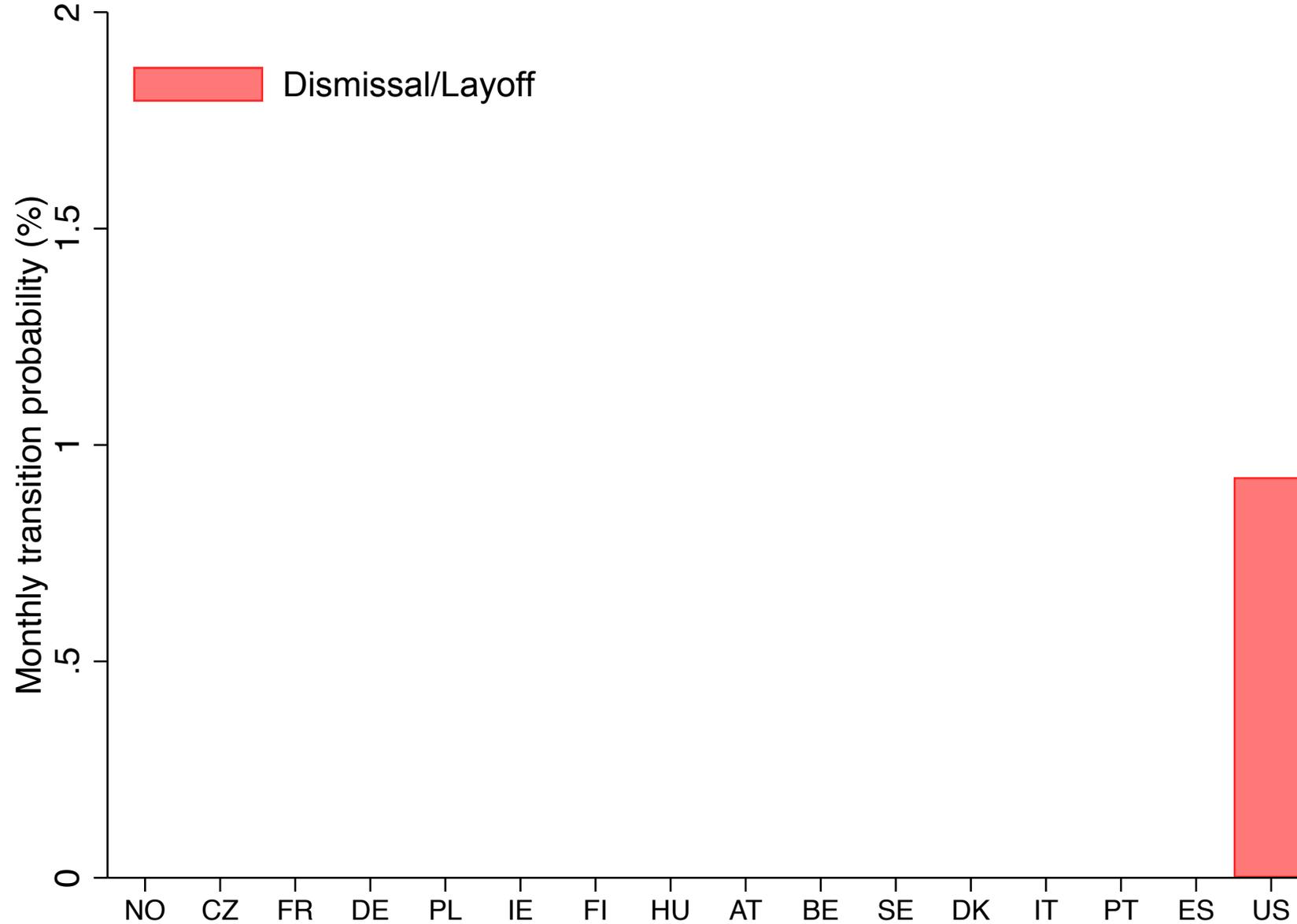
## Labor Market Institutions



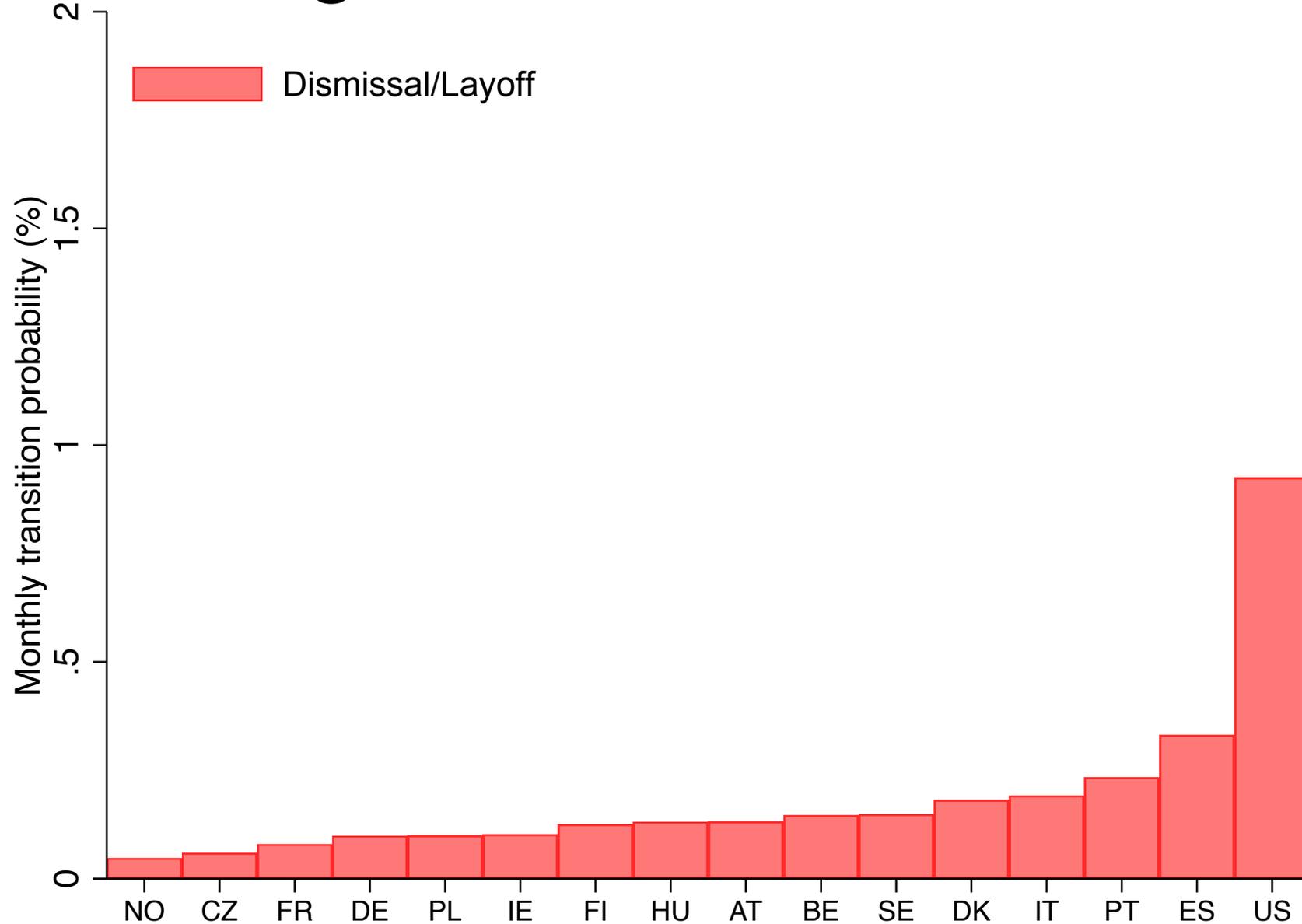
# Restructuring and LMIs: Dismissals



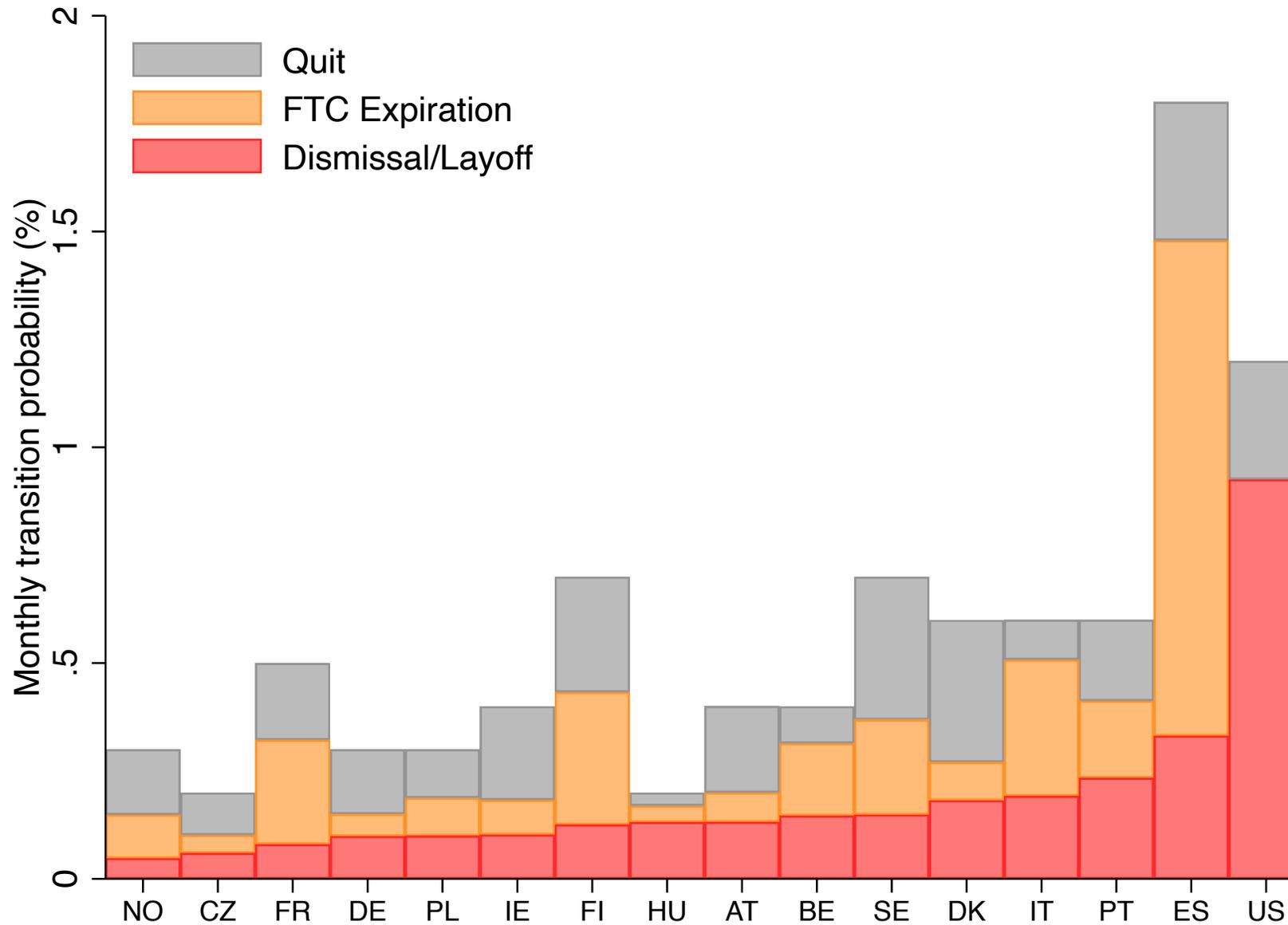
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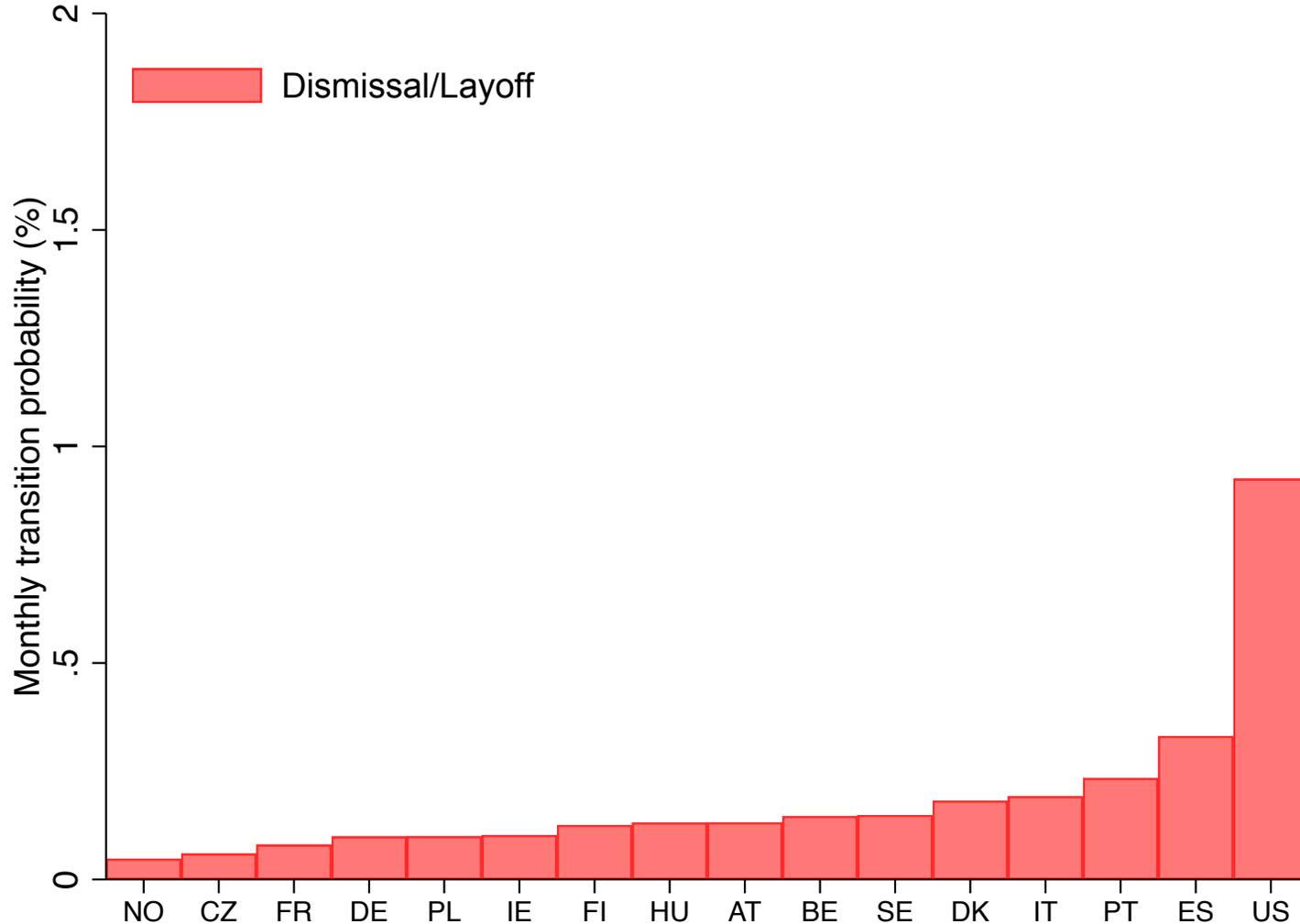
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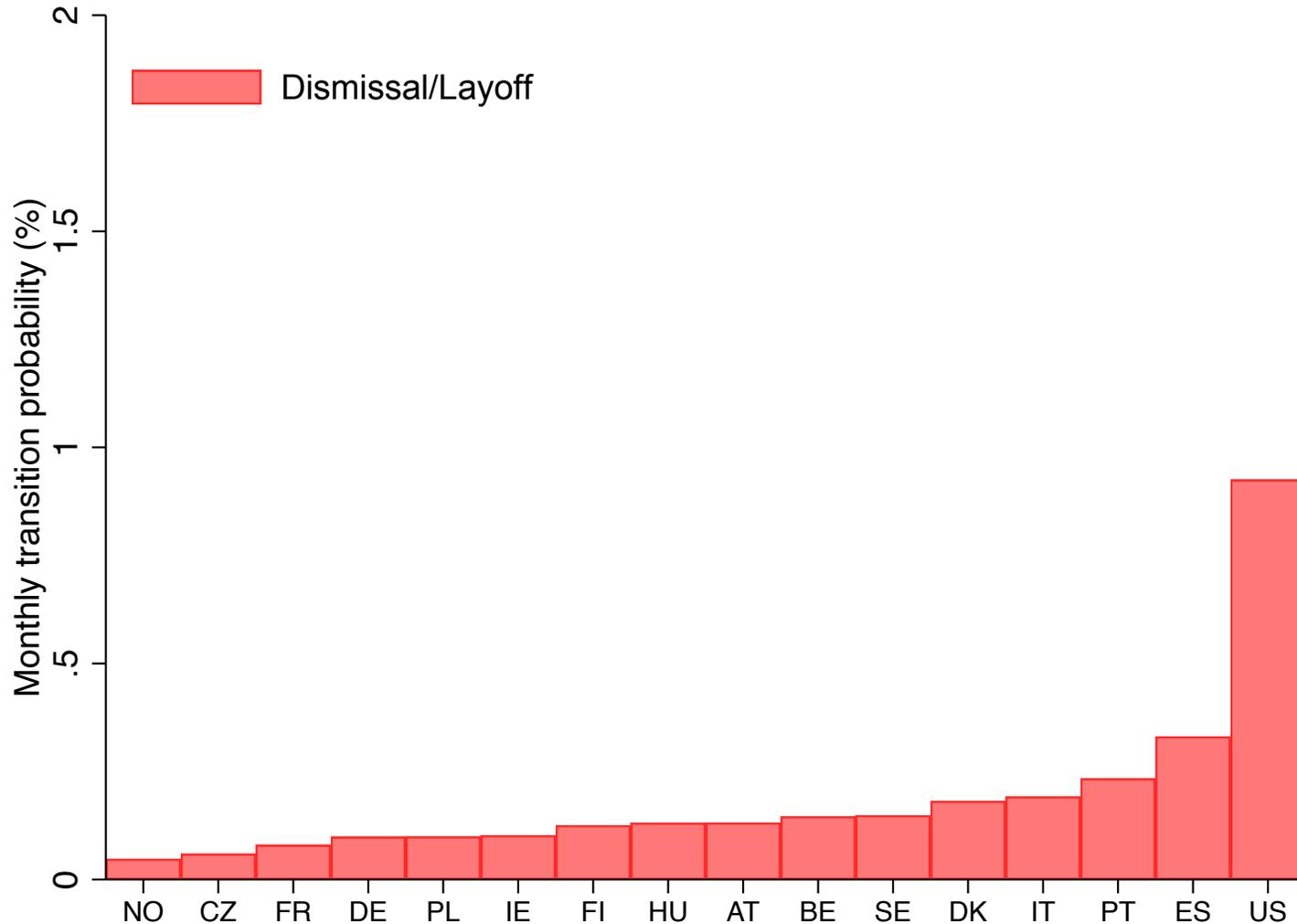


LMIs shape business dynamism along many dimensions, constraining, e.g.:

- Dismissals
- Hiring choices (e.g., works councils in Germany)
- Changes to job titles of incumbent workers and reassignments within the firm

Also, lower “natural attribution” through turnover (previous material)

# Restructuring and LMIs: Dismissals



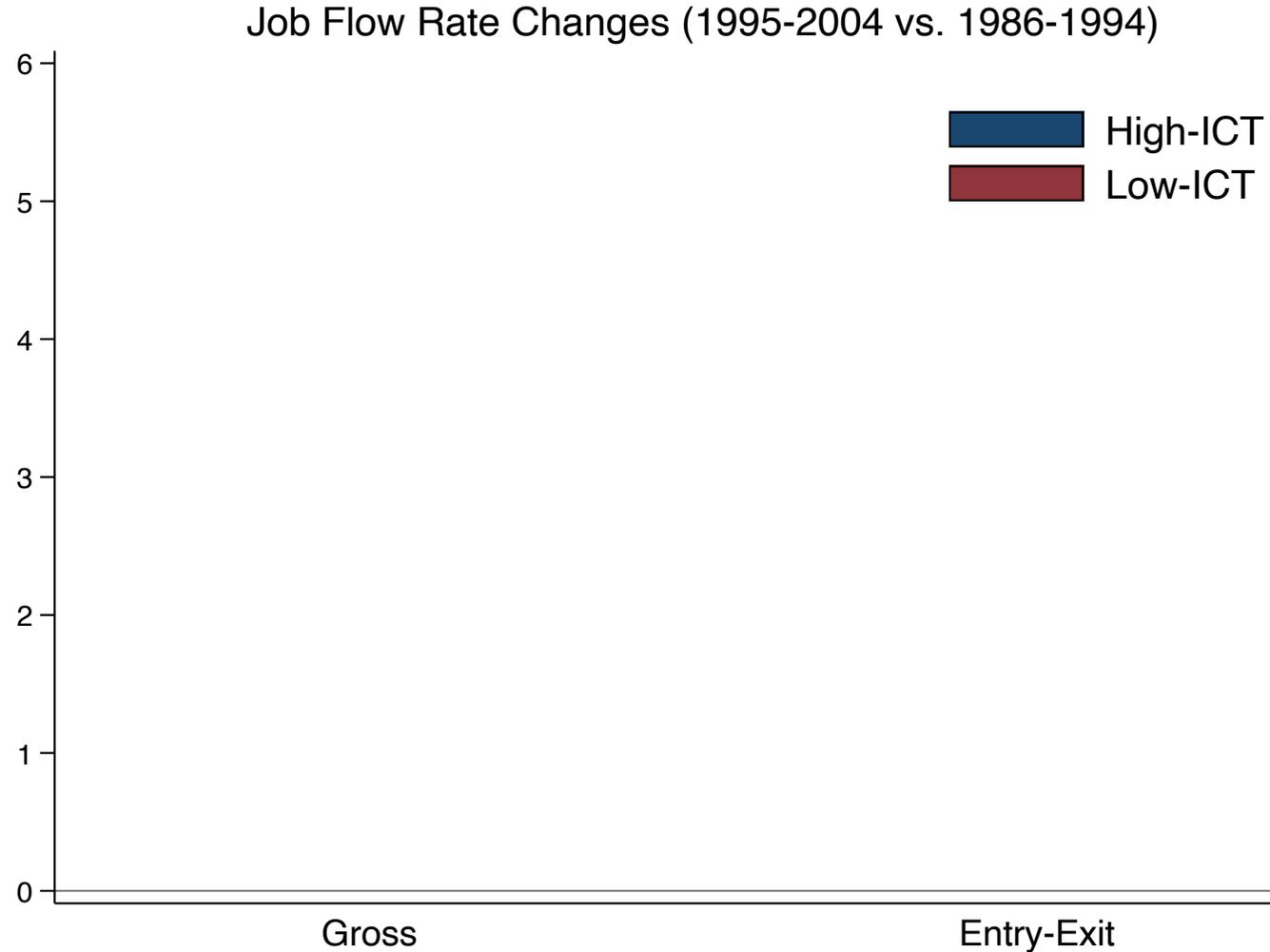
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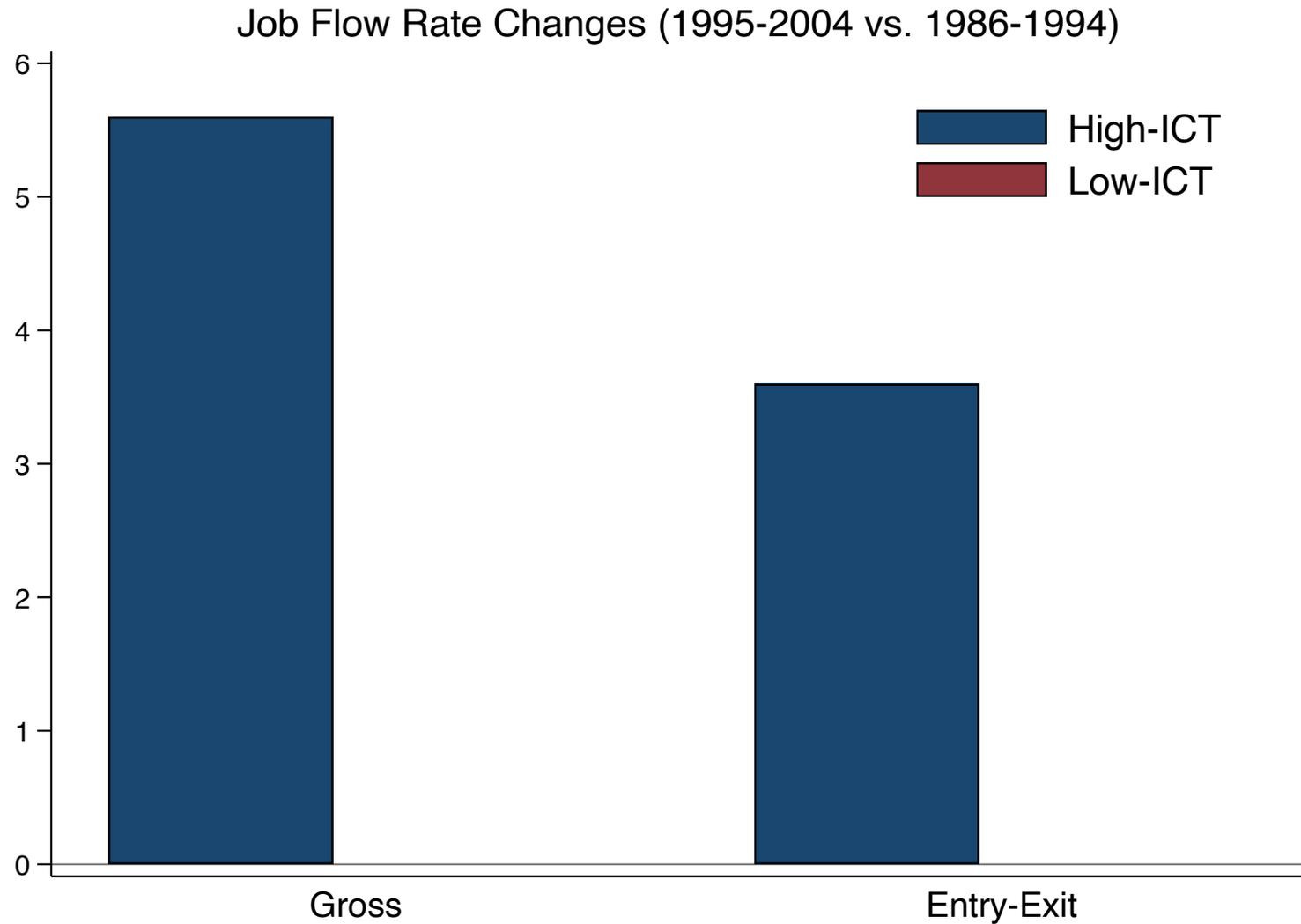
Also, lower “natural attrition” through turnover (previous material)

**=> These constraints are particularly costly for “dynamic” activities and industries.**

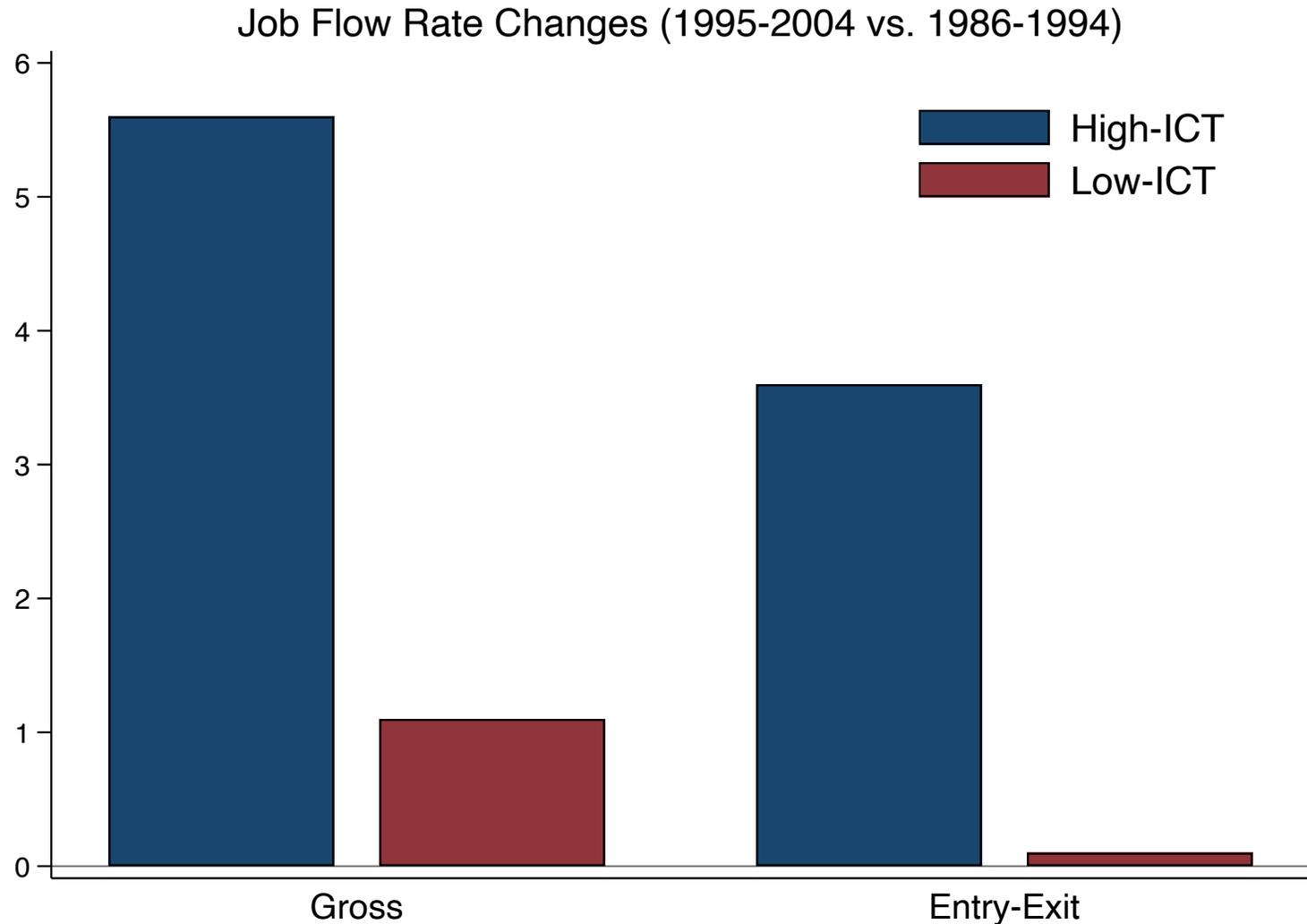
# Prime and Timely Example: ICT and Dynamism



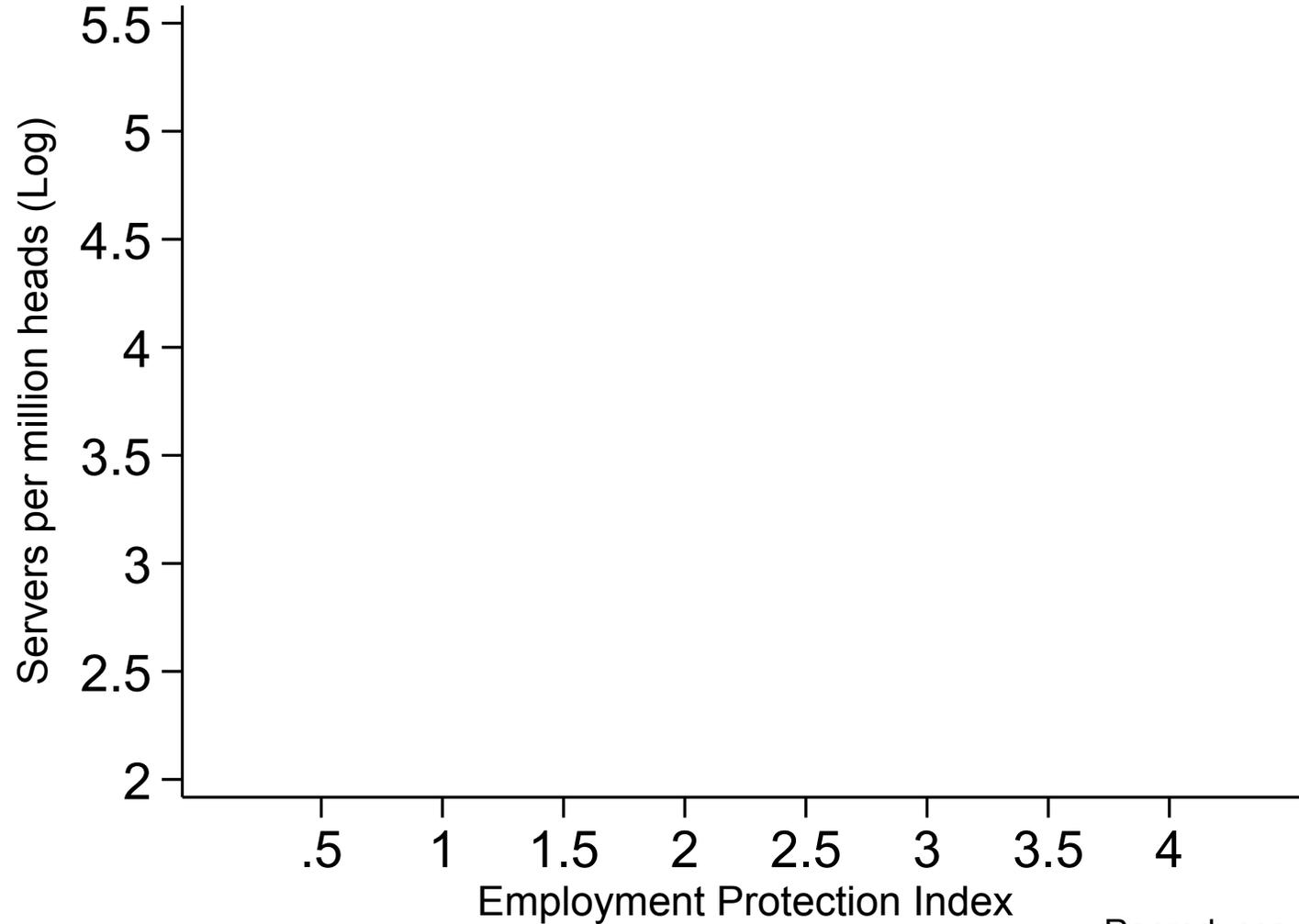
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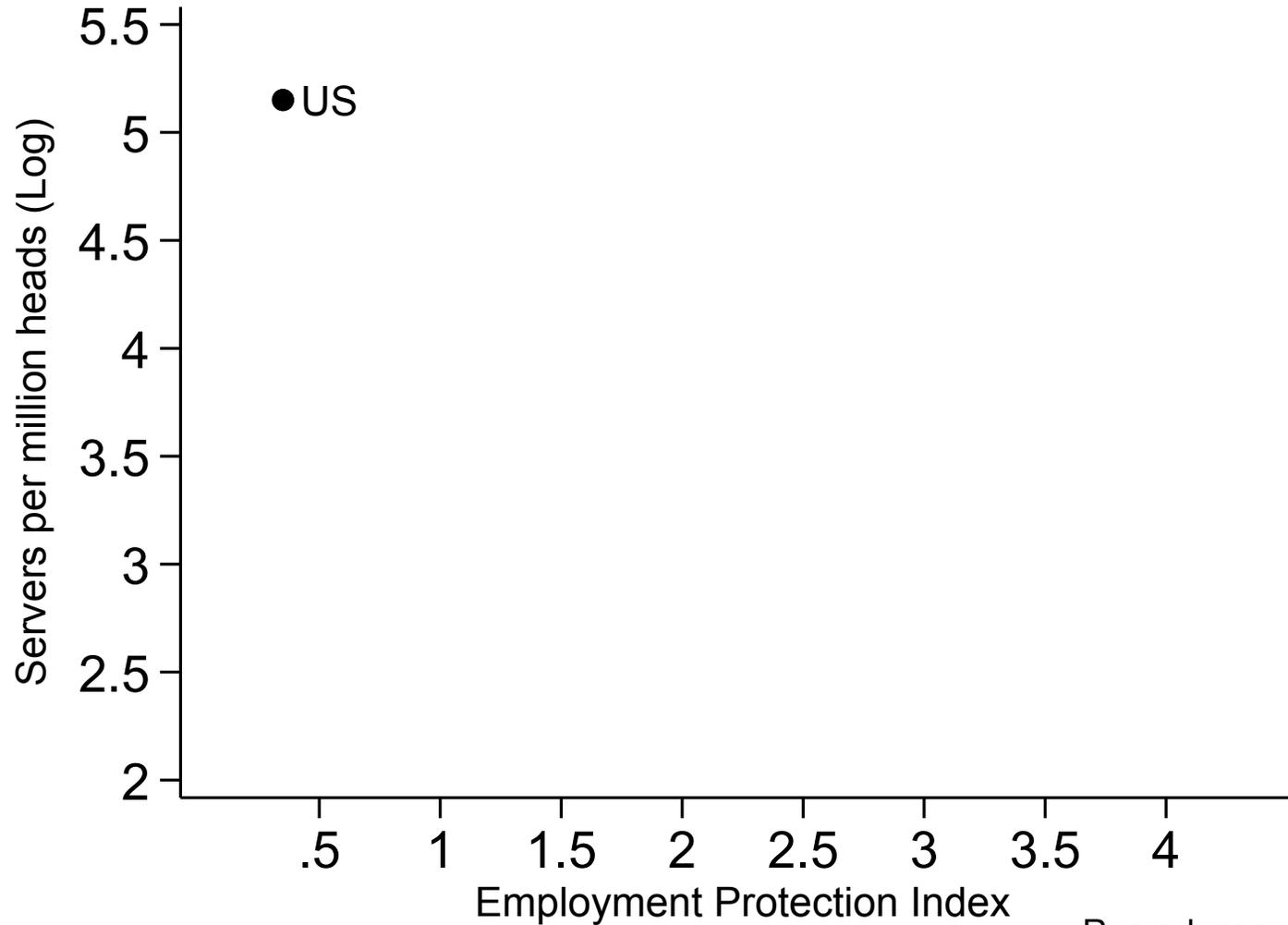


# ICT and LMIs: Employment Protection



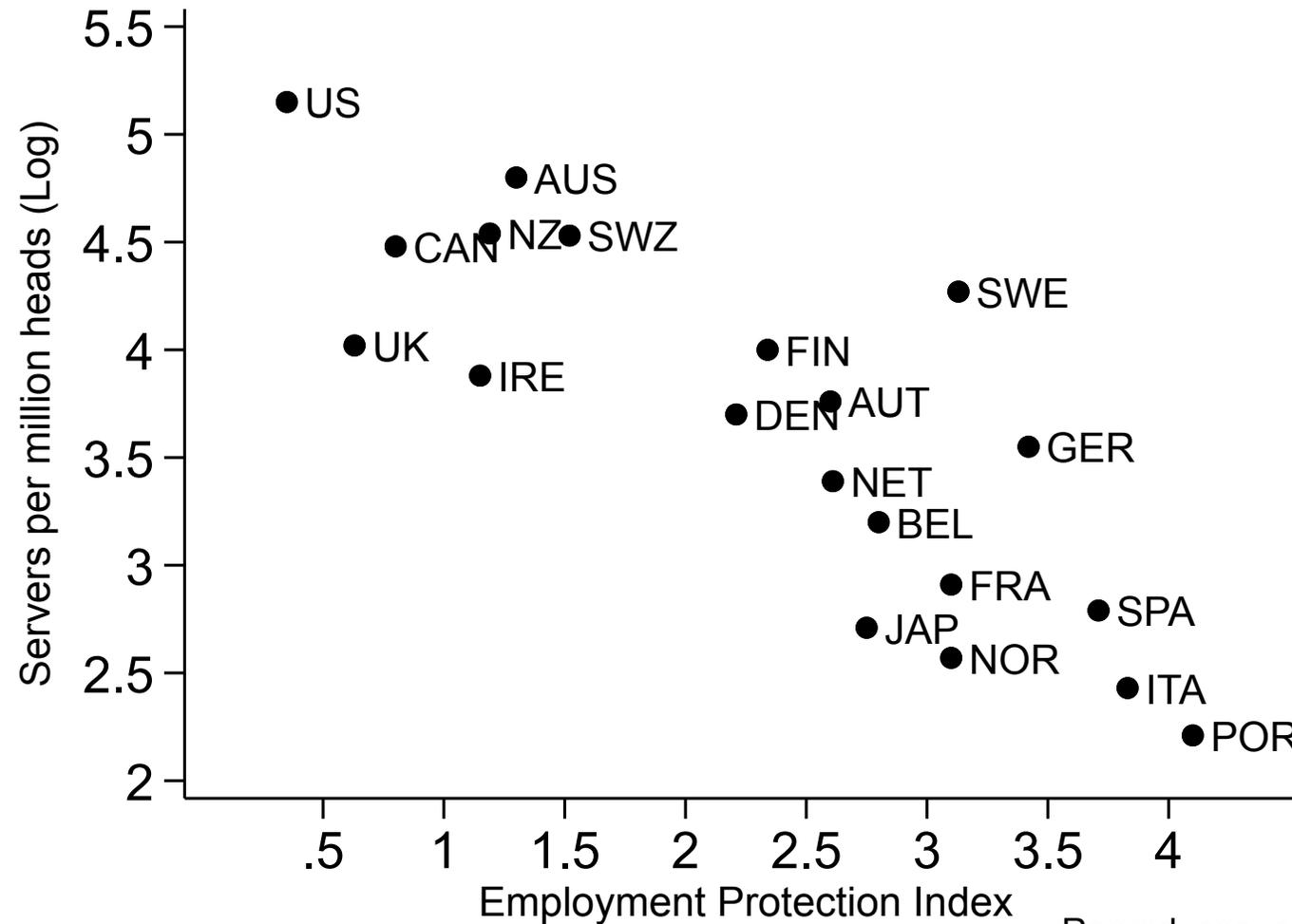
Reproduces results in Samaniego (2006)

# ICT and LMIs: Employment Protection



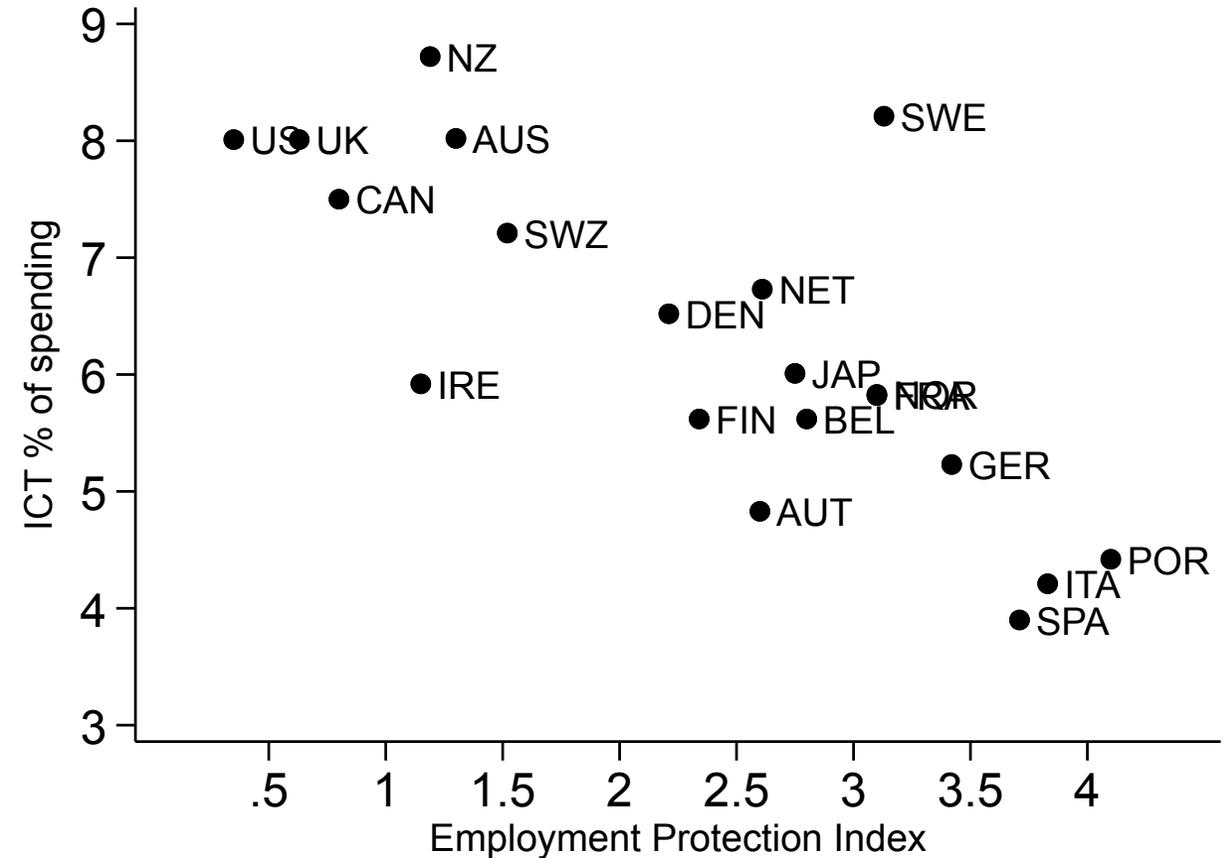
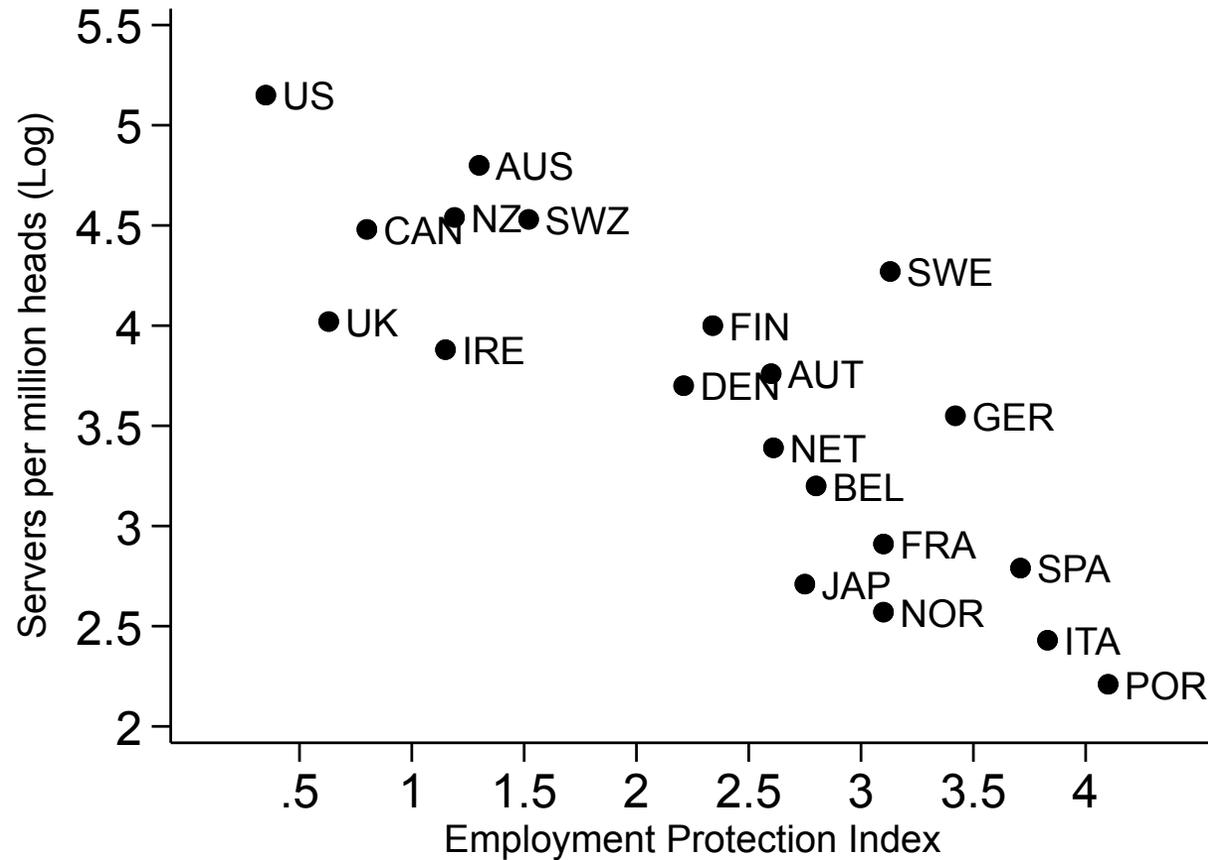
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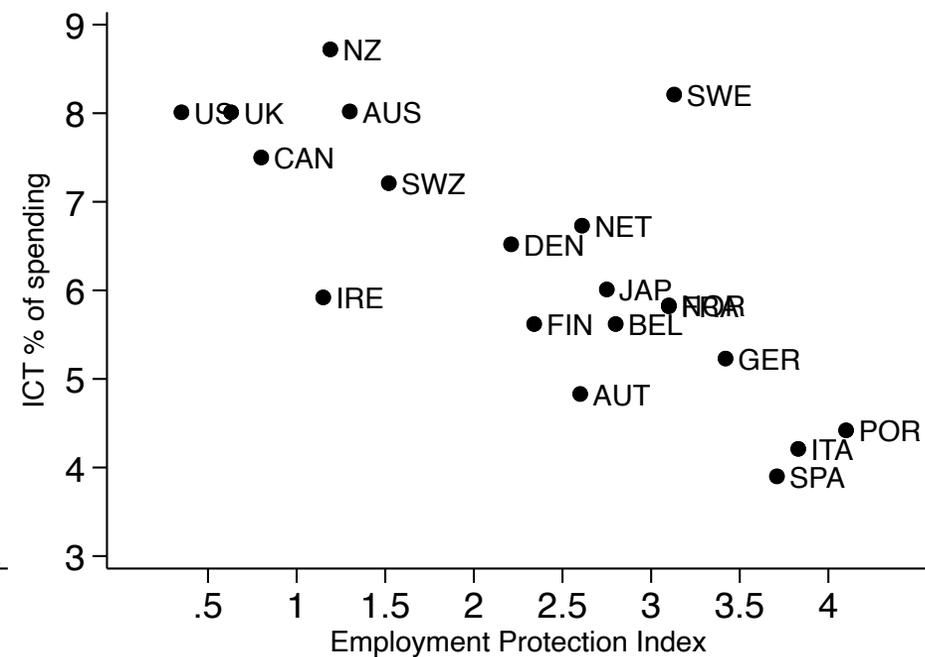
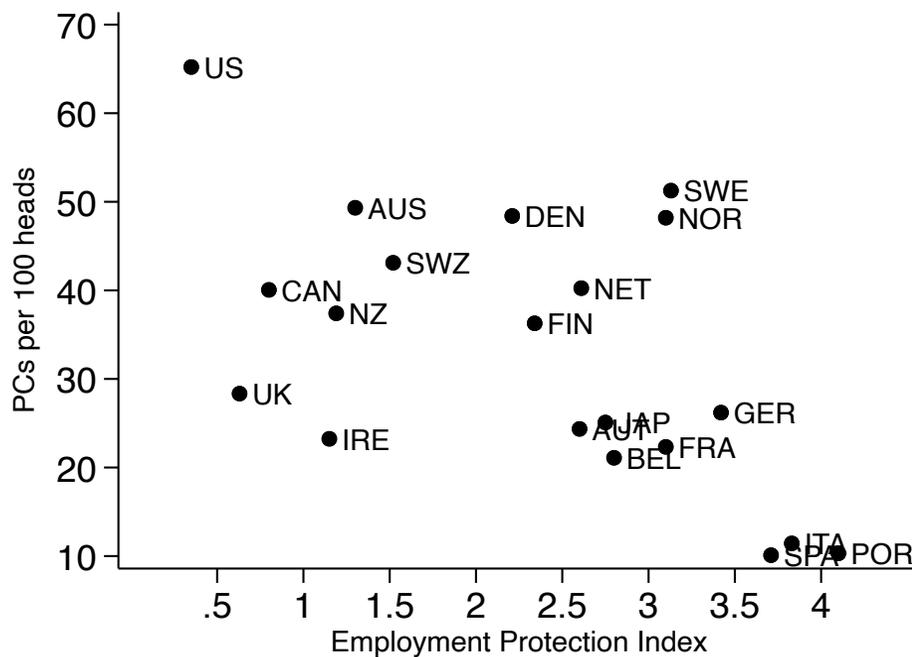
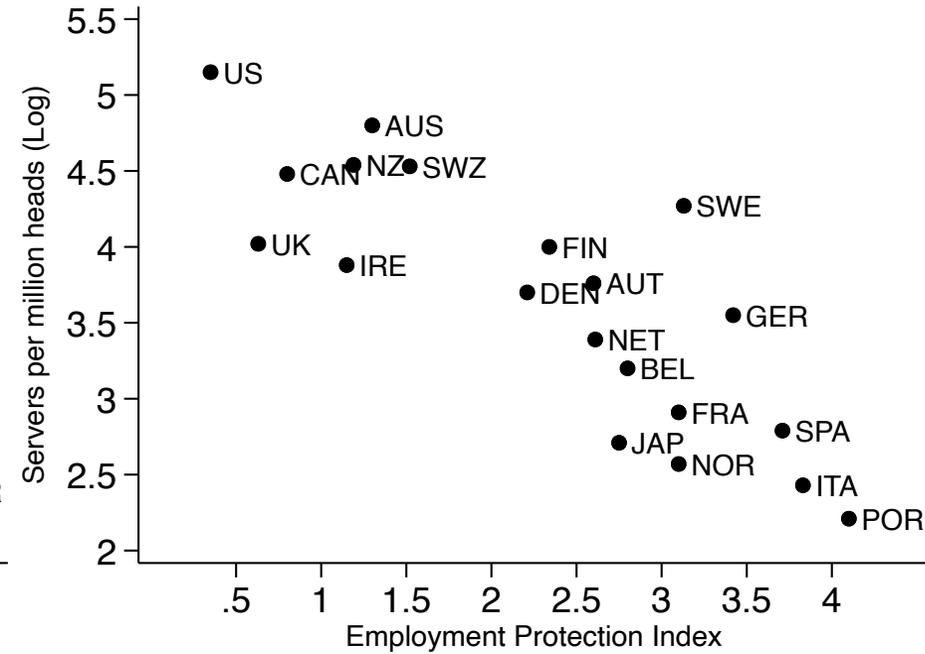
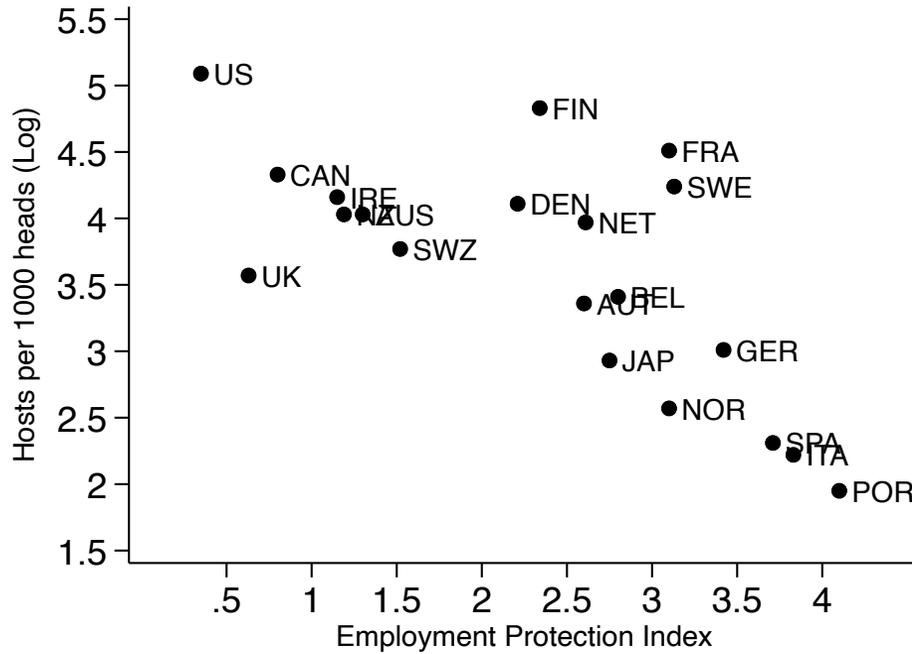


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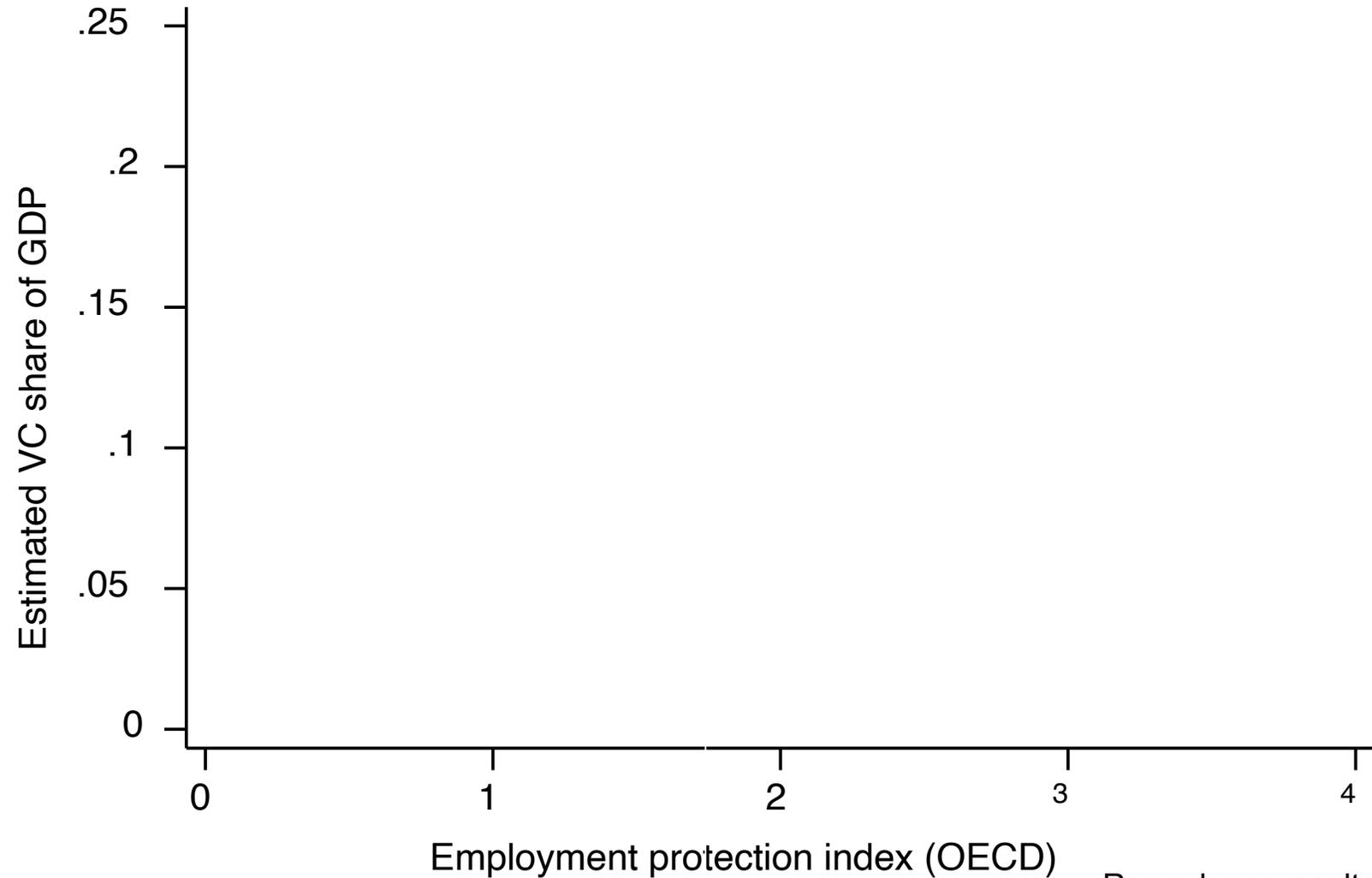


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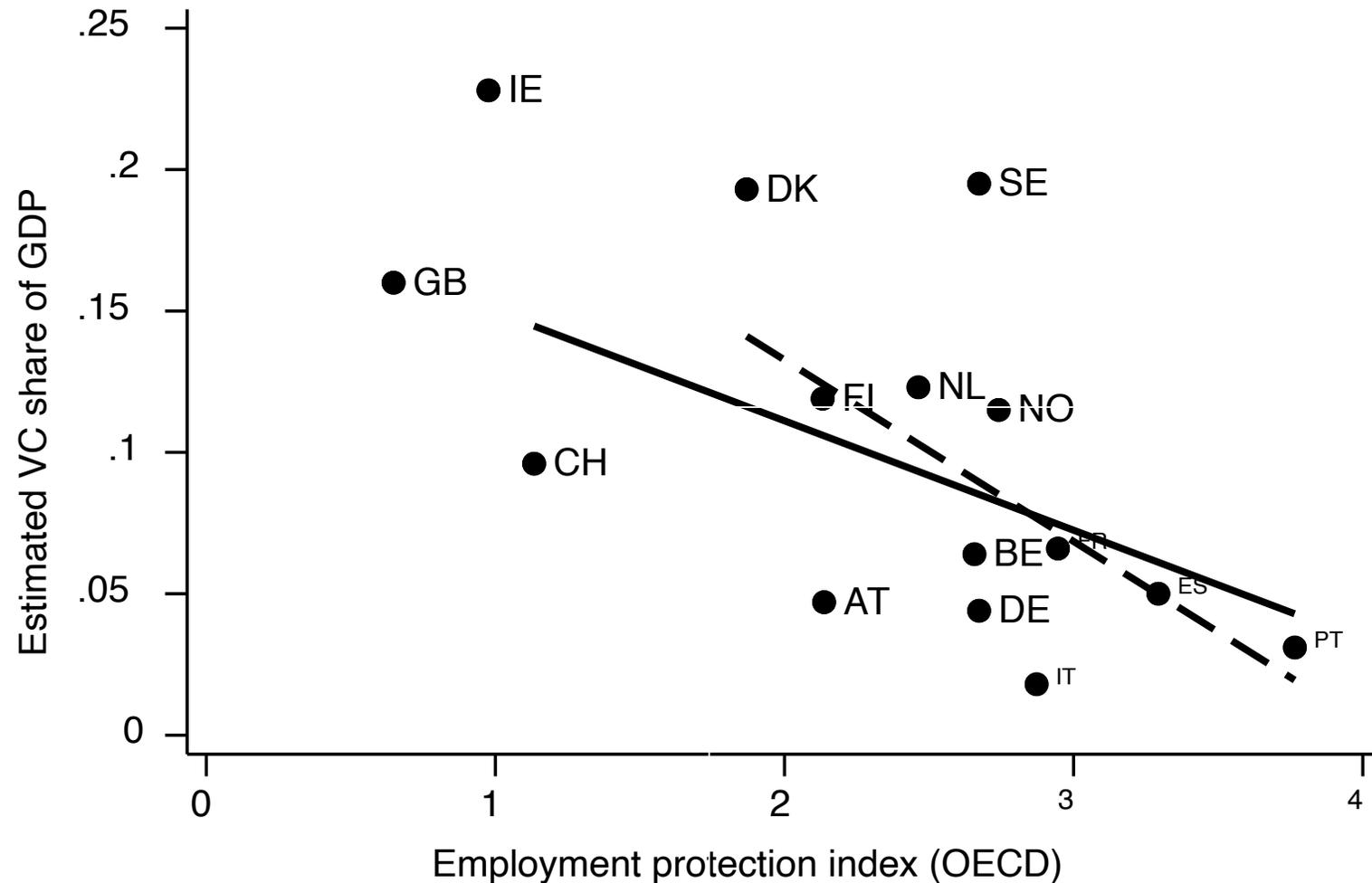
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# Venture Capital and LMIs: Employment Protection



Reproduces results in Bozkaya and Kerr (2014)

# Venture Capital and LMIs: Employment Protection



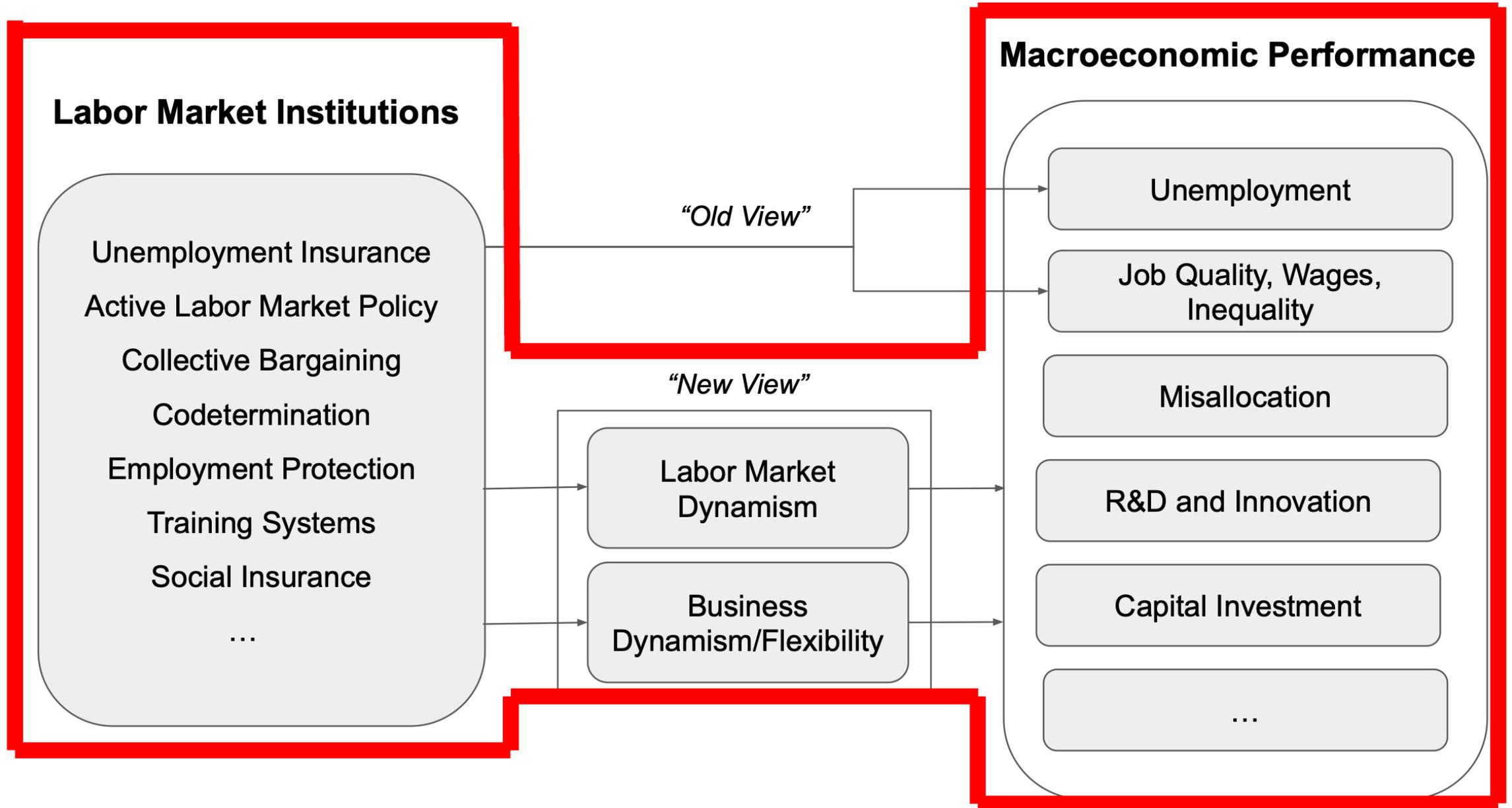
Reproduces results in Bozkaya and Kerr (2014)

# Potential Implications: LMIs & Business Dynamism

- Dynamism view of labor market institutions sheds new light on sources of transatlantic gap as it pertains to ICT, R&D/innovation, ...
  - Complements existing diagnoses (e.g., segmentation and shallowness of capital markets, remaining product market rigidities)
- **Fatalistic view:** “fixed” institutional comparative advantage
  - => Transatlantic gap inevitable in “dynamism-dependent” industries and activities
- **Reform view:** policy levers to carve out room for dynamism within European model?
  - More flexible contract types for certain activities/employees?
  - Not unprecedented: already exempt small firms, certain worker types from EPL and codetermination
  - Entails trade-off between insurance/protection and growth stimulus
- More research needed.

# Conclusion and Summary

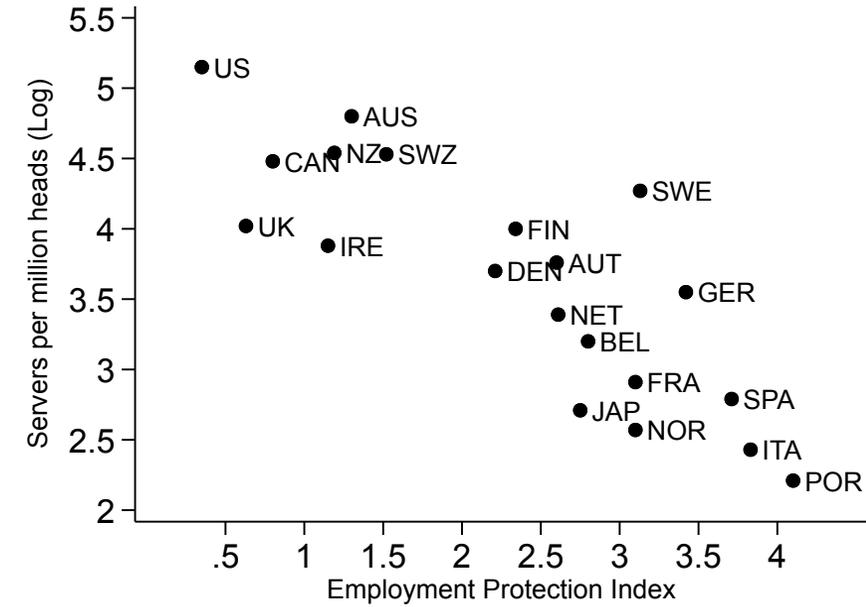
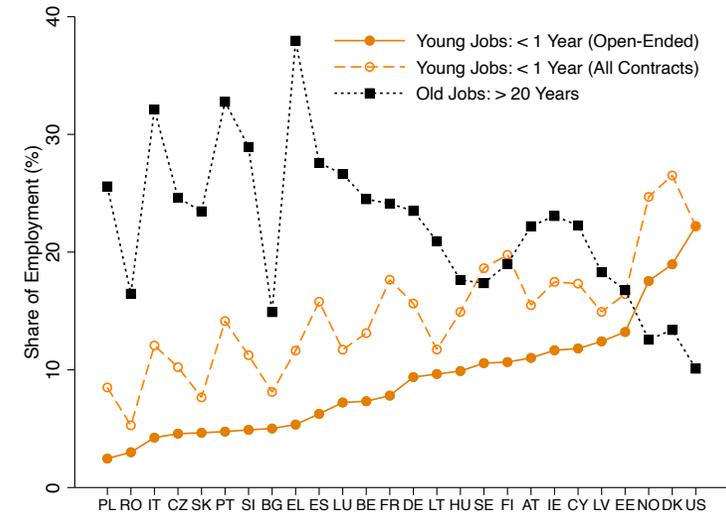
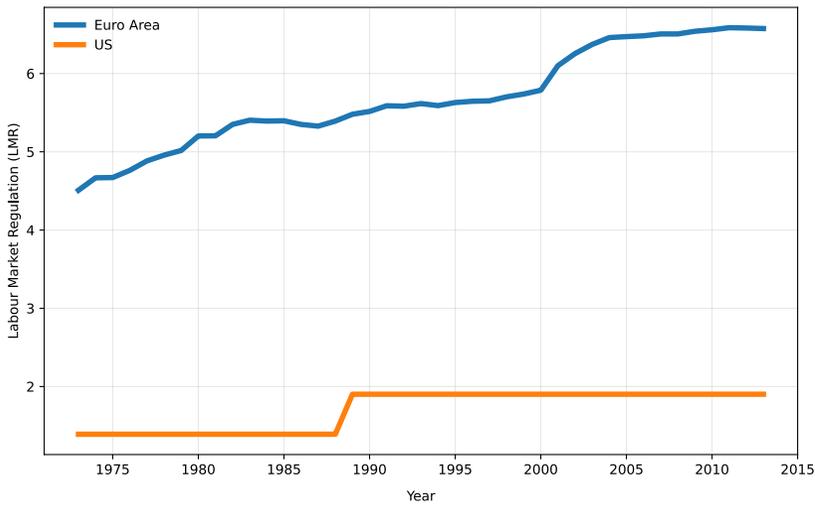
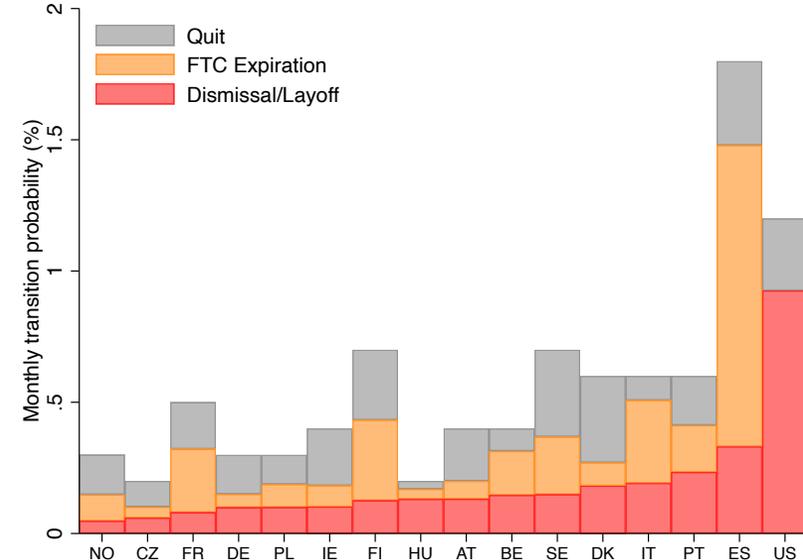
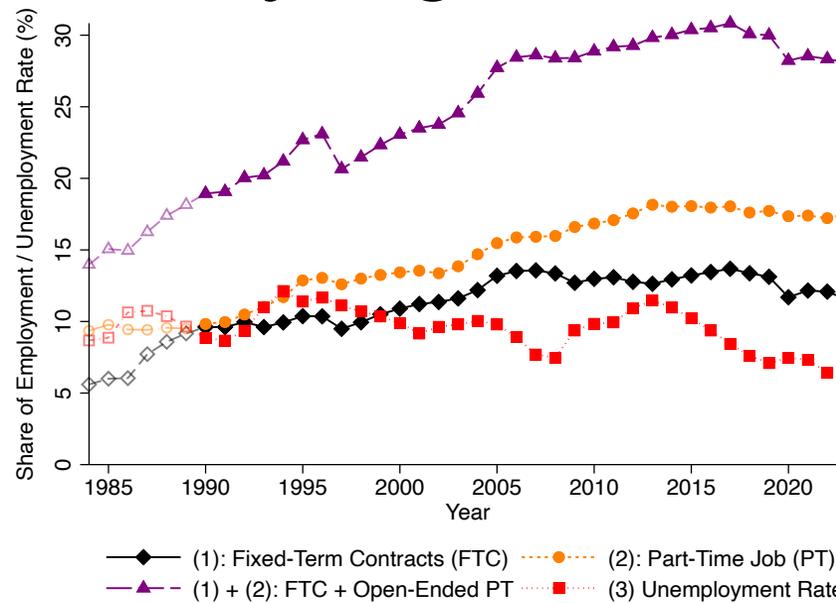
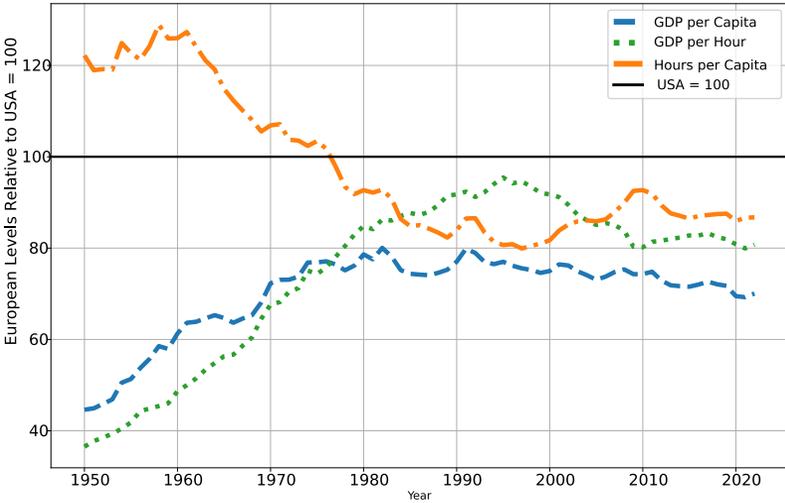
# Conclusion and Summary



# Conclusion and Summary

- What role do labor market institutions (LMIs) play in shaping European macroeconomic performance today?
  - Employment protection, collective bargaining, labor taxes, codetermination,...
- In particular:
  - In comparison to the US
  - In the context of the recent discussion on European competitiveness (Draghi report etc.)
- Update on long-standing (hibernating) debates (“Euroclerosis”, European unemployment,...)
  - Despite progress, many pockets of European labor markets see high unemployment and dualism
  - Bring in new microdata (much more in paper)
- Revisit link b/w LMIs and macroeconomic performance---with modern focus on **dynamism**
  - Labor market dynamism
    - Job mobility, reallocation
  - Business dynamism
    - Restructuring, innovation, ICT adoption and diffusion,...
- Focus largely on competitiveness debate, but obvious implications for shorter-run and other questions (labor shortages, skill mismatch, aging, reallocation needs (AI, etc.),...)

# Graphical Conclusion: Key Figures



# Conclusion by Quote: Giersch (1985)

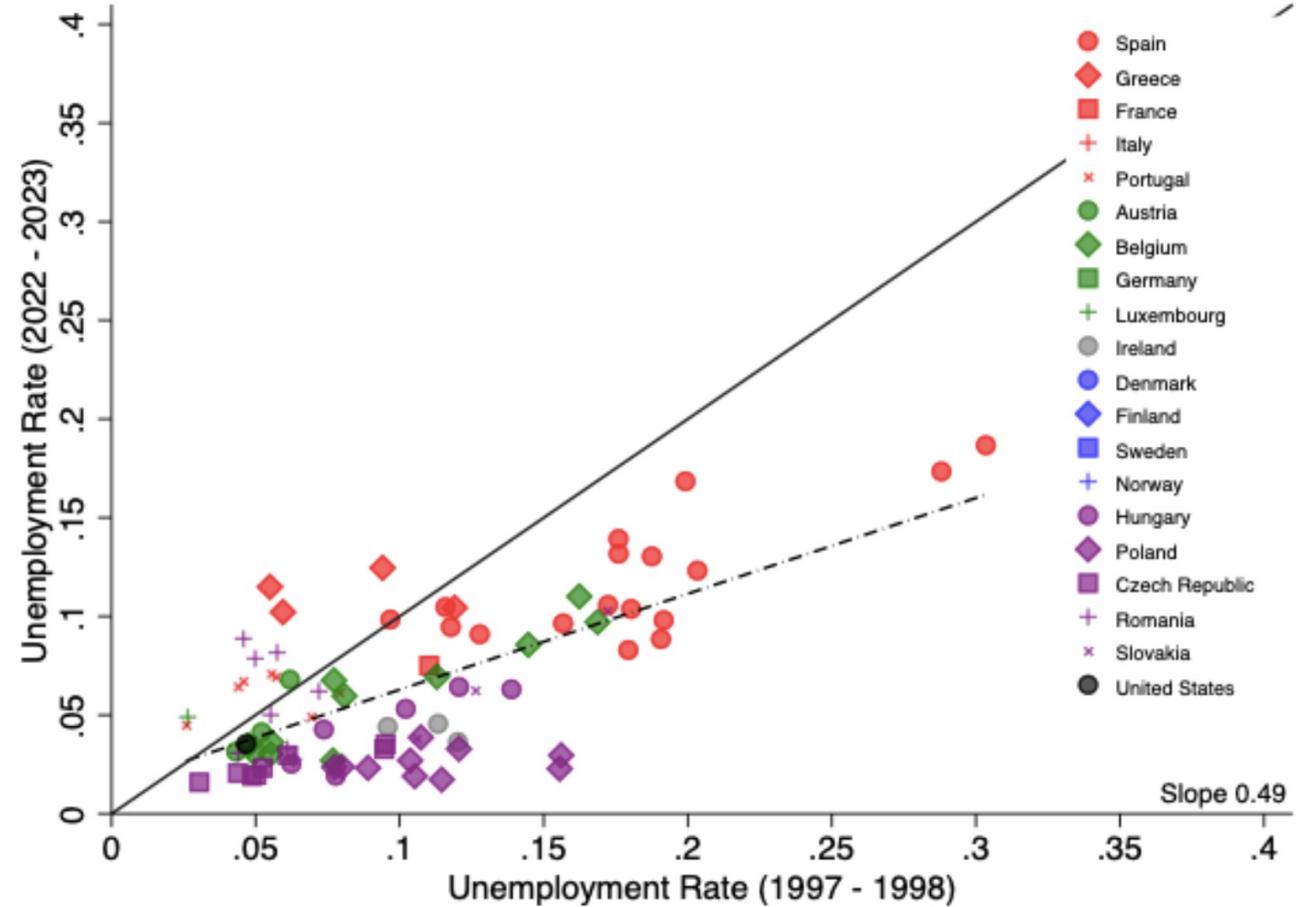
**“Labour market institutions are one factor** behind Euroclerosis....  
The EC Commission [1984] lists: ‘The wage determination system; non-wage costs; taxation; minimum wage levels; unemployment insurance; rules governing recruitment and dismissal, the flexibility of working hours and the organization of work, health hazards and safety; rules governing unions and the right to strike; pension schemes; the housing market; training and education...’ [...] If we consider these rigidities together with Europe’s high marginal tax rates and their likely depressing effect (i) on the mobility of labour, (ii) on the incentive to achieve, (iii) on the enterprising spirit, and (iv) on the whole economic atmosphere, **we recognize that the contrast between Europe on the one hand and the U.S. and the Far East on the other hand is anything but a puzzle.**”

# Appendix: Convergence & Persistence in Unemp. Rates

Country Level



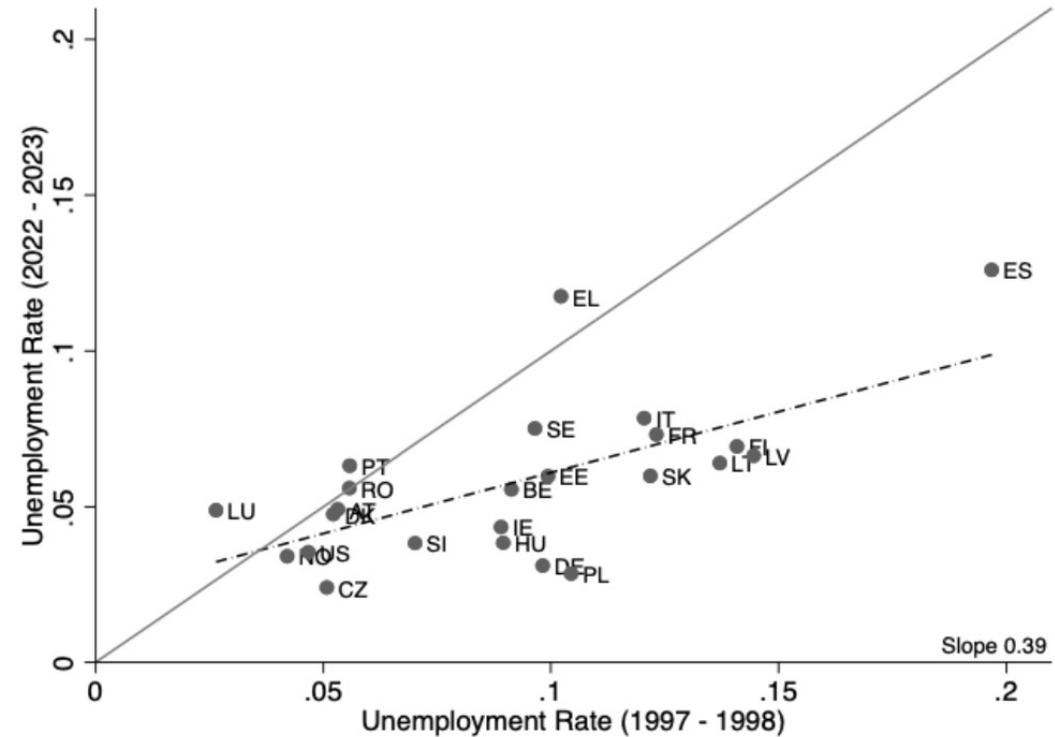
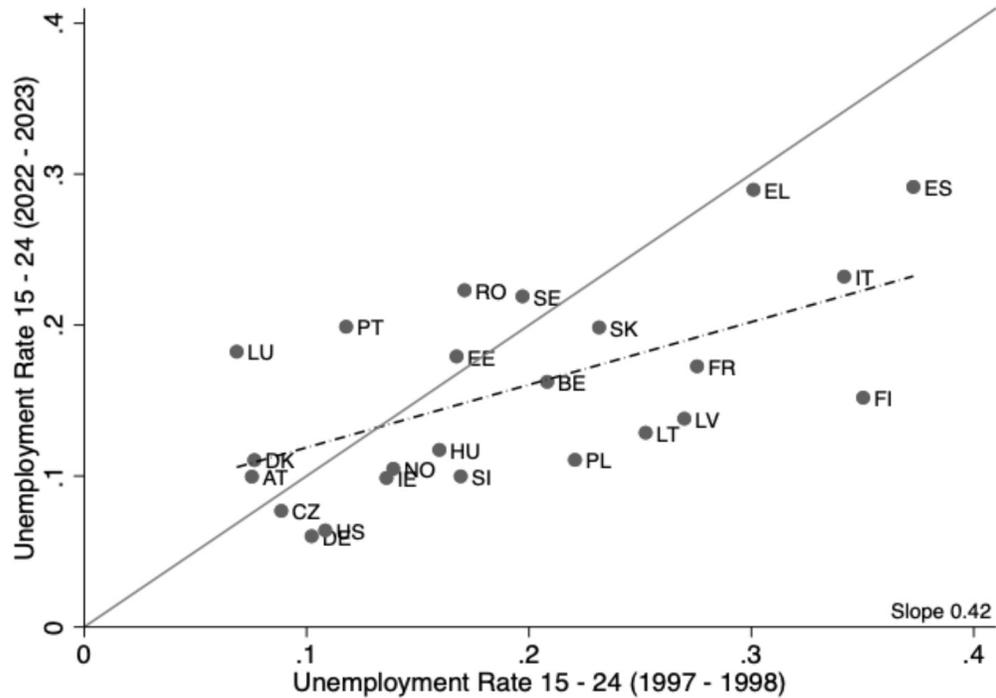
Subnational Level (NUTS-2)



Notes: The figure shows the persistence of unemployment across European economies, both at the country-level and at the sub-national regional level, between 2022 through 2023 and 1997 through 1998. The top panel presents country-level evidence. The bottom panel presents sub-national (NUTS2) regional evidence. Estimates for European economies are based on the EU-LFS. Estimates for the United States are based on the CPS. Calculations use the provided survey weights.

# Appendix: Convergence & Persistence in Unemp. Rates

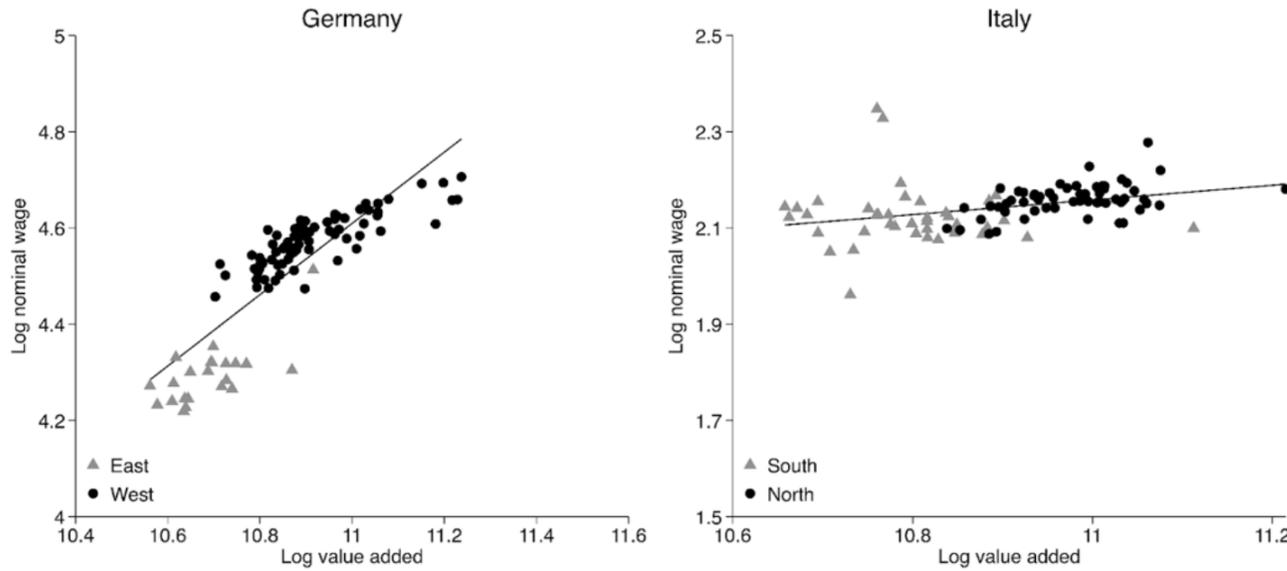
**Chart 12**  
The country-level perspectives on the continued decline in European unemployment 1997-98 vs. 2022-23: youth vs. mid unemployment



Notes: The figure shows the persistence of unemployment across European economies between 2022 through 2023 and 1997 through 1998. The top panel shows the persistence of youth unemployment, defined as the number of unemployed divided by the number of unemployed and employed between ages 15 to 24. The bottom panel shows the persistence of unemployment in the overall working age population between ages 15 to 74. Unemployment rates are estimated from the EU-LFS for European economies and the ASEC for the United States. Calculations use the provided survey weights.

# Appendix: Collective Bargaining and Unemployment: Italy vs. Germany

Regional wages versus productivity



Notes: The left figure is Chart 19 from the paper. It reproduces Figures 4 and 6 from Boeri, Ichino, Moretti and Posch (2021). The panels show 2010 subnational regional scatter plots of log nominal wages (top panels) and log nonemployment rates (bottom panels) against local value added (a productivity indicator), separately for Italian regions (provinces) and German regions, shading in gray vs. black the South vs. the Center-North and East vs. West, respectively.

Regional nonemployment versus productivity

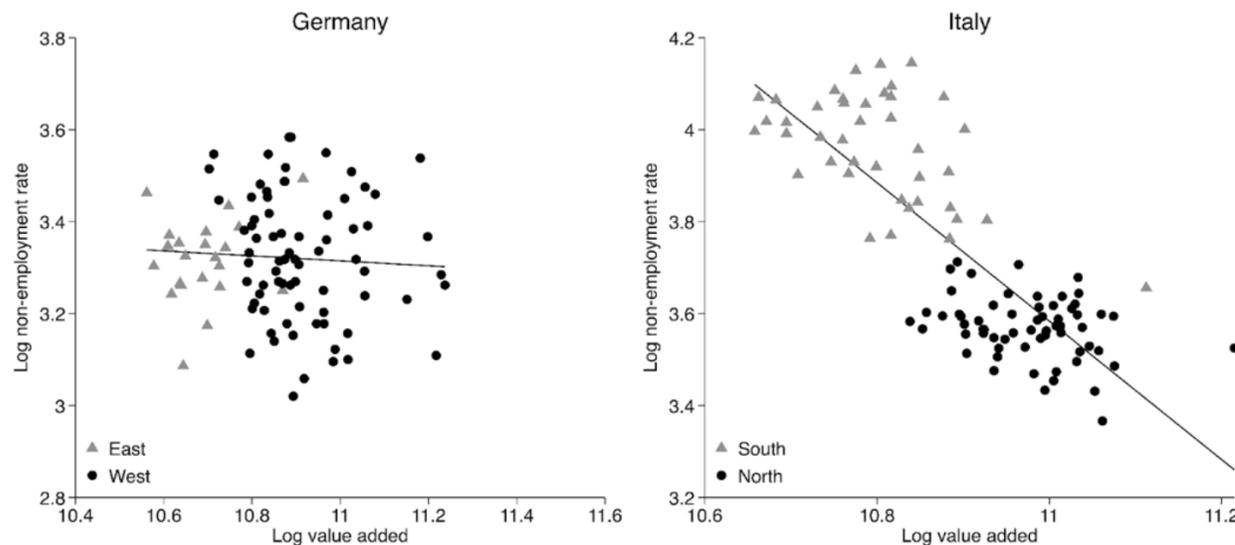
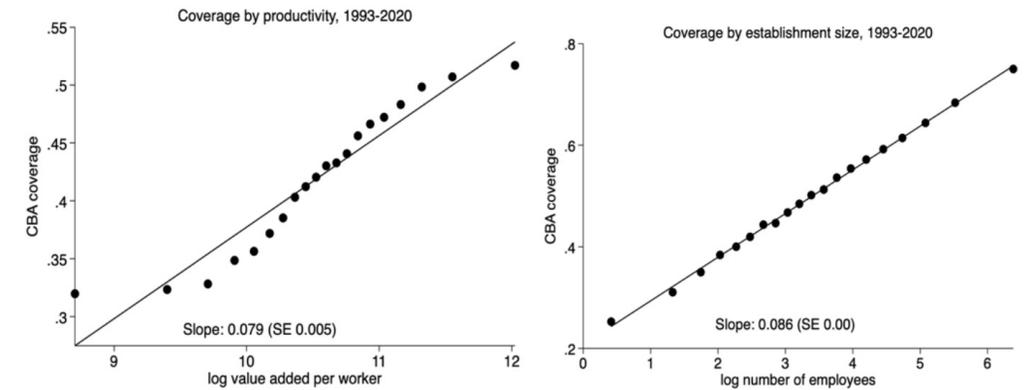


Chart 20  
Employer selection into coverage in Germany

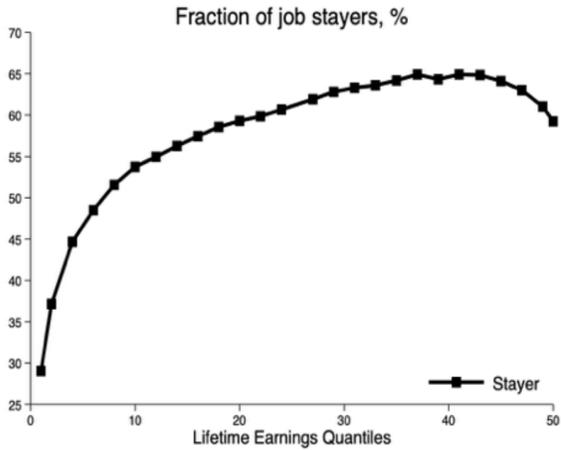
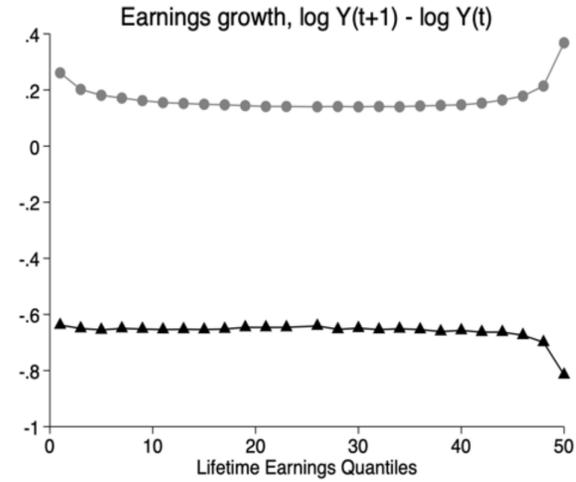
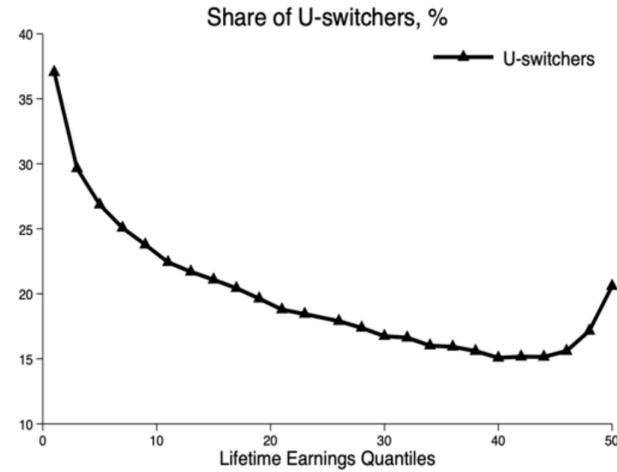
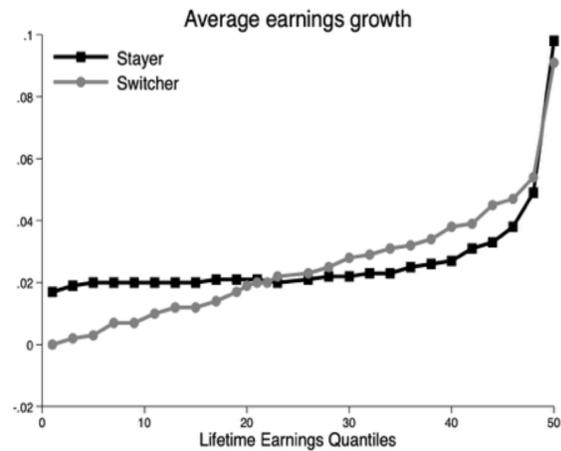
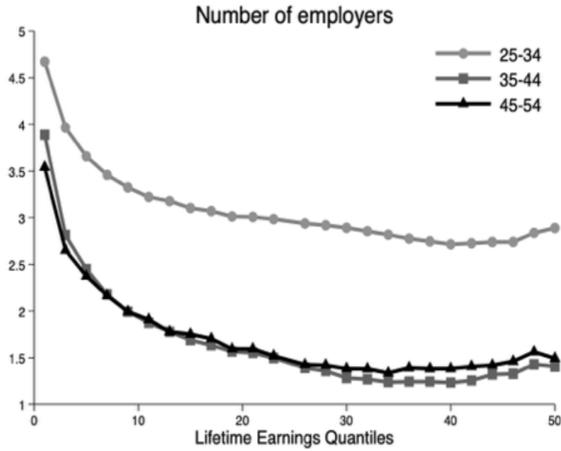


Notes: The figure reproduces Figure 4 in Jäger, Noy and Schoefer (2022), plotting the establishment-level relationship between an indicator for whether an establishment is covered by a collective bargaining agreement and its (log) size (employment) and labor productivity (value added per worker), controlling for basic industry and East/West geography controls in Germany and time (year fixed effects).

# Appendix: Career Wage Growth and Job Mobility

Chart 24

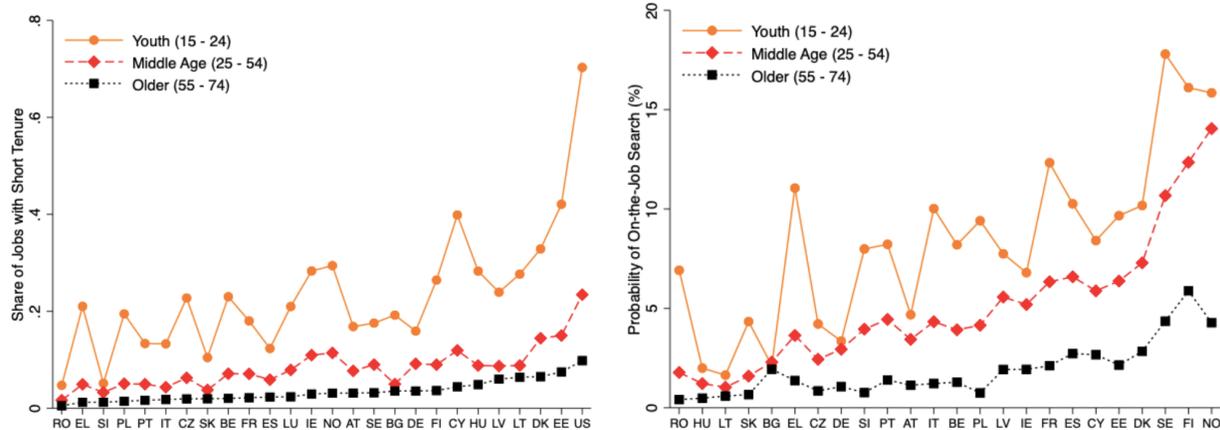
Worker-level job mobility and worker outcomes in the United States (Karahan, Ozkan and Song, 2022)



Notes: The figure reproduces Figures 2 (top panels) and 3 (bottom panels) in Karahan, Ozkan and Song, (2022). The panels sort individuals by lifetime earnings quantities in the US. The top panels plot the numbers of employers an individual has on average, separately by age range, the average earnings growth between two years if switching vs. not switching employers, and the fraction of people who stay in a given year with the same employer. The bottom panels zoom into switchers and plot the share of switchers that include unemployment, and the earnings growth among switchers for transitions involving unemployment vs. a job-to-job (EE) transition without intervening unemployment.

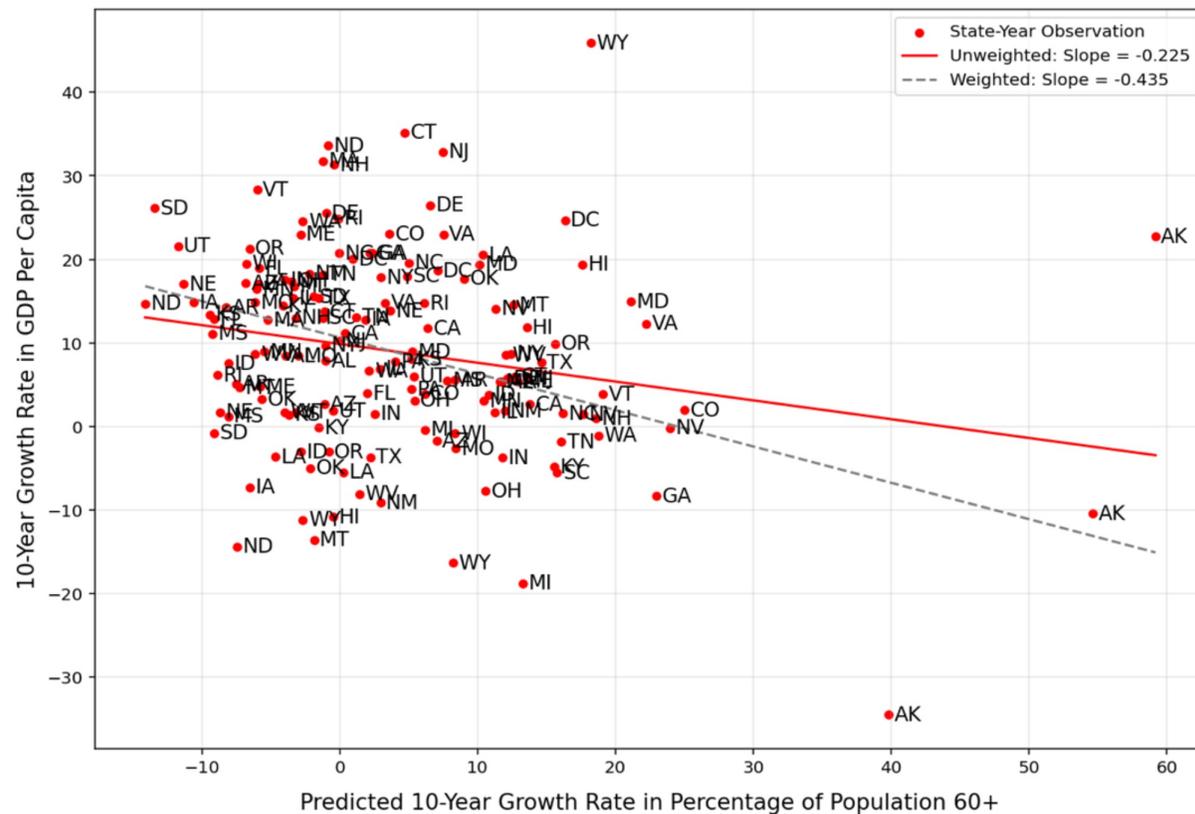
# Appendix: Aging-driven Shifts in Dynamism

**Chart 27**  
Labor market dynamism by age group and country: short-tenure jobs (at most a year, Europe and US) and active on the job search (Europe only)



Notes: The figure documents heterogeneity in the duration of employer-employee matches across European economies and the United States by worker age. The left panel reports the share of all current jobs that have lasted for less than a year and are based on open-ended contracts. In the Appendix I present results pooling all contract types. I report the shares separately by worker age at the time of interview. Data for European economies comes from the EU-LFS. Data for the US is reported by the BLS and refers to January 2024. The right panel reports the share (in percent) of workers employed in open-ended contracts that report actively searching for another employer in the past four weeks, by worker age at the time of interview. The Appendix contains results relaxing the restriction to open-ended contracts. Data is missing for the United States. I omit Luxembourg from the analysis due to the small size of its EU-LFS sample. Calculations use the provided survey weights.

**Chart 28**  
Population aging and population growth, with a plausible channel of labor market dynamism (Maestas, Mullen and Powell 2023)



Notes: This figure replicates Figure 2 in Maestas et al. (2023) based on their state age shares, predicted growth rates, and GDP per capita data, for US states. Each point represents a state-year combination between 1979 and 2009. Predicted growth rates in age 60+ shares are computed using a 10-year lag instrument. Grey lines represent population-weighted regressions.