

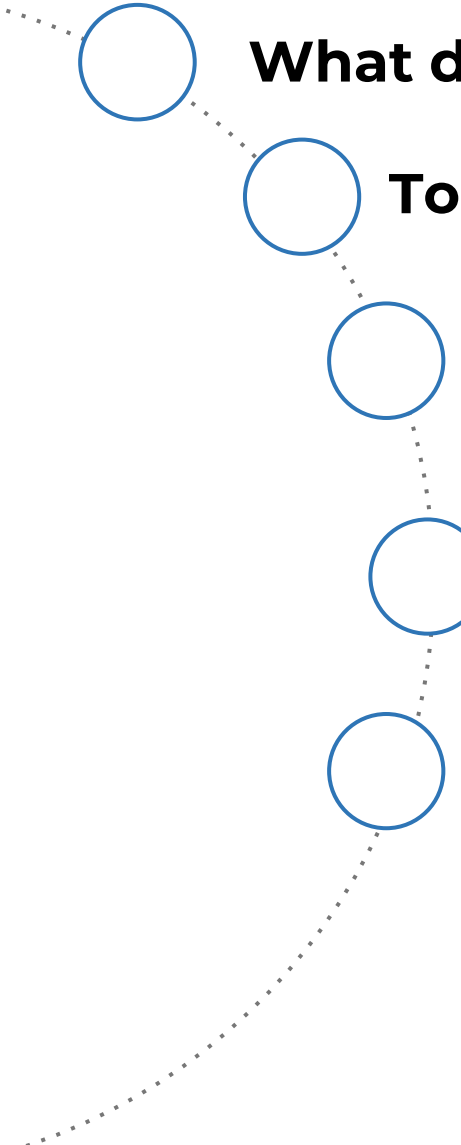
BUSINESS DYNAMISM IN EUROPE AND CENTRAL ASIA

JANUARY 22, 2024

Main findings

- Modest productivity growth with limited role for **innovation/tech adoption** in ECA MICs (*“within firm-growth”*)
- Productivity upgrading limited by investment/machineries and weak **management**
- **Startups and young firms** play a key role...is policy focused on them?
- **Too many small businesses, lack of post-entry growth and declining entrepreneurial activity** slows down job creation
- **Larger firms** do not show superior performance in terms of overall efficiency (in MICs)
- **SOEs** presence and lack of **competition** negatively affects entrepreneurial dynamism

Outline

- 
- What drives productivity growth in ECA?**
 - Too few firms or low business dynamism?**
 - How larger firms contribute to growth in ECA?**
 - What factors affect business dynamism in ECA?**
 - Policy responses for boosting productivity growth and business dynamism**

Outline

What drives productivity growth in ECA?

Too few firms or low business dynamism?

How larger firms contribute to growth in ECA?

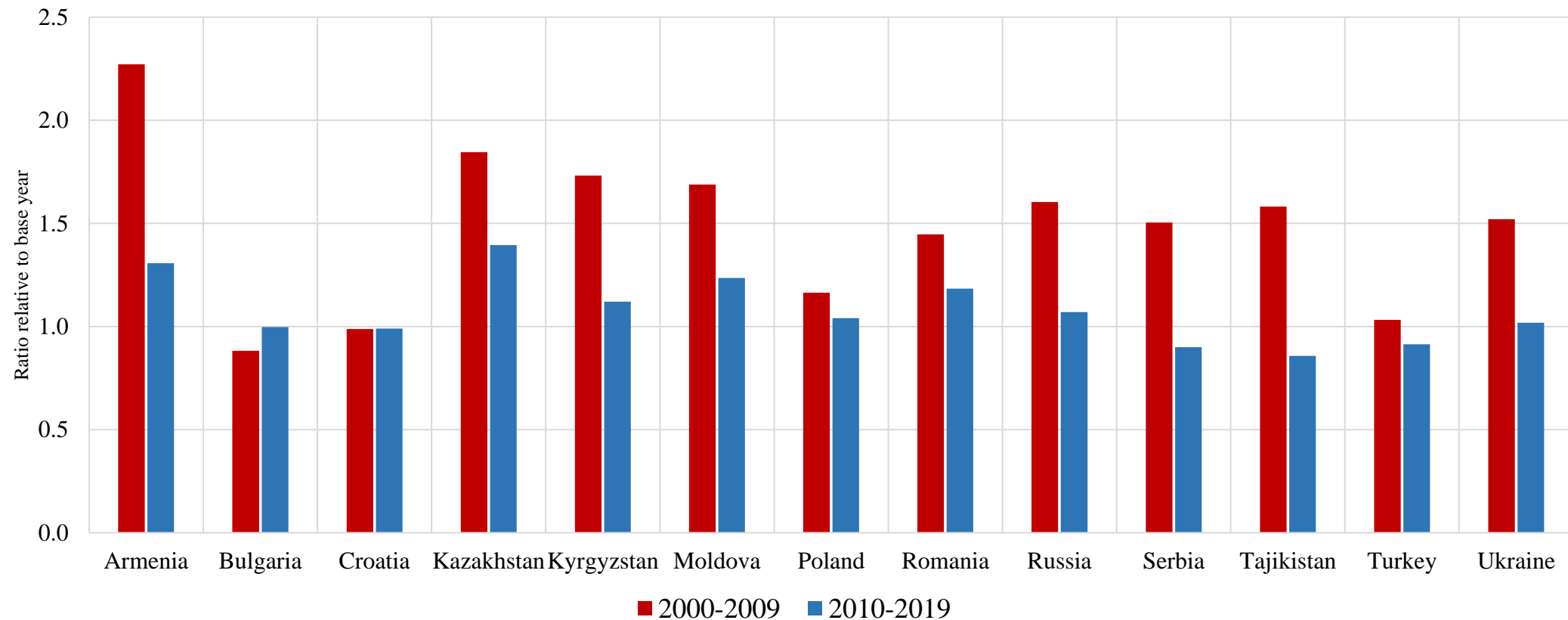
What factors affect business dynamism in ECA?

Policy responses for boosting productivity growth and business dynamism

Relative to 2000-2009 productivity slowdown in most ECA countries during 2010-2019

TFP growth in ECA

Total Factor Productivity relative to USA (current PPP), 2000 and 2010 = 1



Notes: Total Factor Productivity of each country relative to the TFP of the US index (measured at current PPP). Base years are 2000 and 2010.

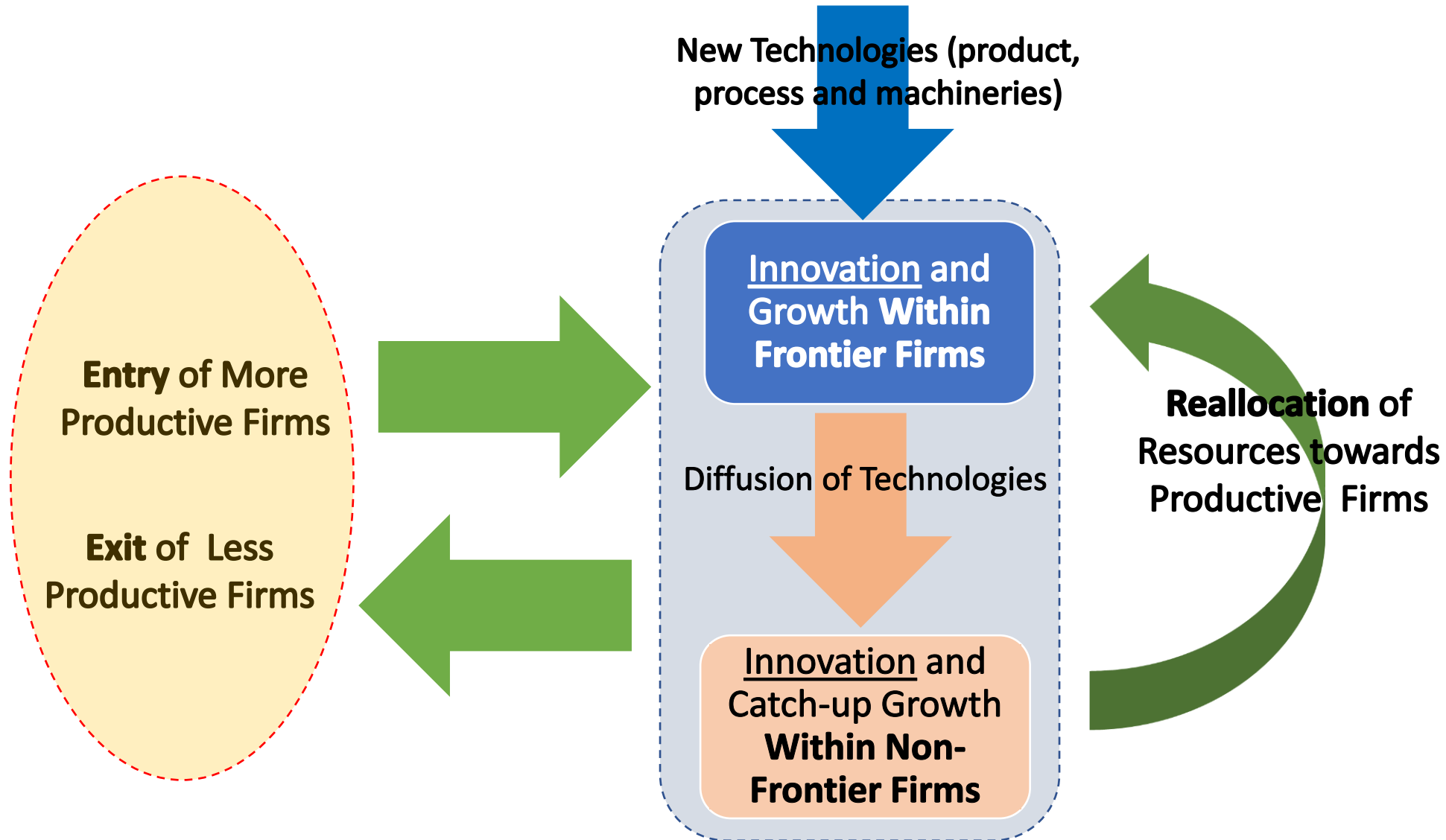
Source: World Bank calculations based on Penn Tables.

Novel panel dataset compiling firm-level data for about 20 million businesses from 11 ECA countries from 2007 to 2021

Information characteristics of the ECA Firms dataset

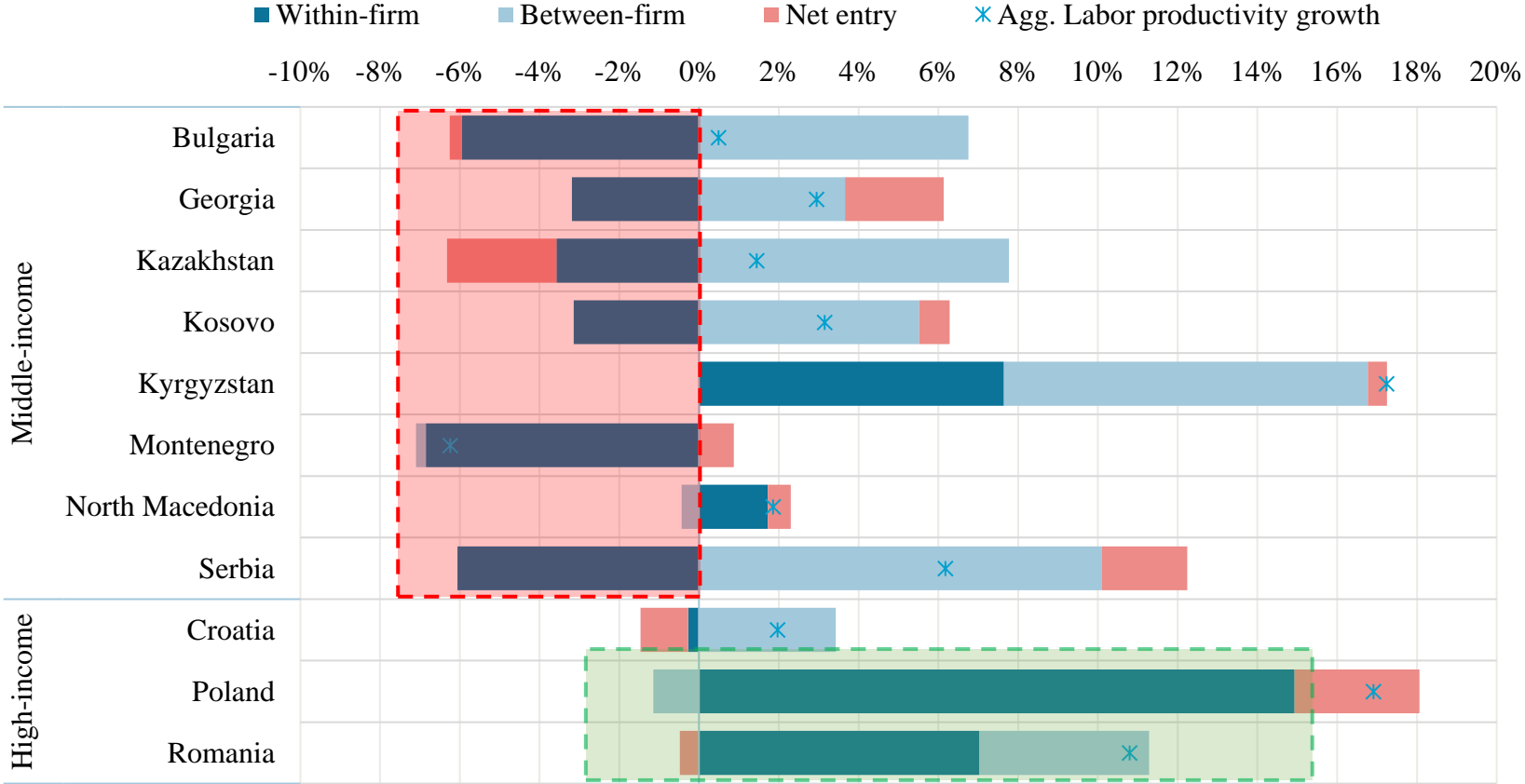
Country	Source	Type	Time span	Unit	Minimum size	Industry coverage	Sample Size (M)
Bulgaria	Orbis	Commercial	2011-2018	Firm	≥1 emp	All NACE Rev. 2	3.403
Croatia	Financial Agency	Census	2008-2020	Firm	≥0 emp	All NACE Rev. 2	1.424
Georgia	GEOSTAT	Census/Survey	2007-2021	Firm	≥1 emp	All NACE Rev. 1	0.129
Kazakhstan	Bureau of National Statistics	Census	2009-2018	Estab.	≥0 emp	All ISIC Rev. 3	0.394
Kosovo	Tax registry	Census	2011-2018	Firm	≥0 emp	All NACE Rev. 2	0.255
Kyrgyzstan	National Statistical Institute	Census	2010-2021	Firms	≥0 emp	All NACE Rev. 2	0.118
Montenegro	Statistical Office of MNE	Census	2011-2019	Firm	≥0 emp	All NACE Rev. 2	0.172
North Macedonia	Statistical Institute of MKD	Census	2011-2020	Firm	≥0 emp	All NACE Rev. 2	0.584
Poland	Orbis	Commercial	2009-2015	Firm	≥5 emp	All NACE Rev. 2	7.640
Romania	Ministry of Public Finance	Census	2011-2020	Firm	≥0 emp	All NACE Rev. 2	4.993
Serbia	Statistical Office of Serbia	Census	2008-2019	Firm	≥0 emp	All NACE Rev. 2	0.953

Decomposing Aggregate Productivity Growth



ECA MICs are struggling to unleash within-firm productivity (e.g., innovate, adopt frontier technology, upgrade management) and rely more on market reallocation improvements

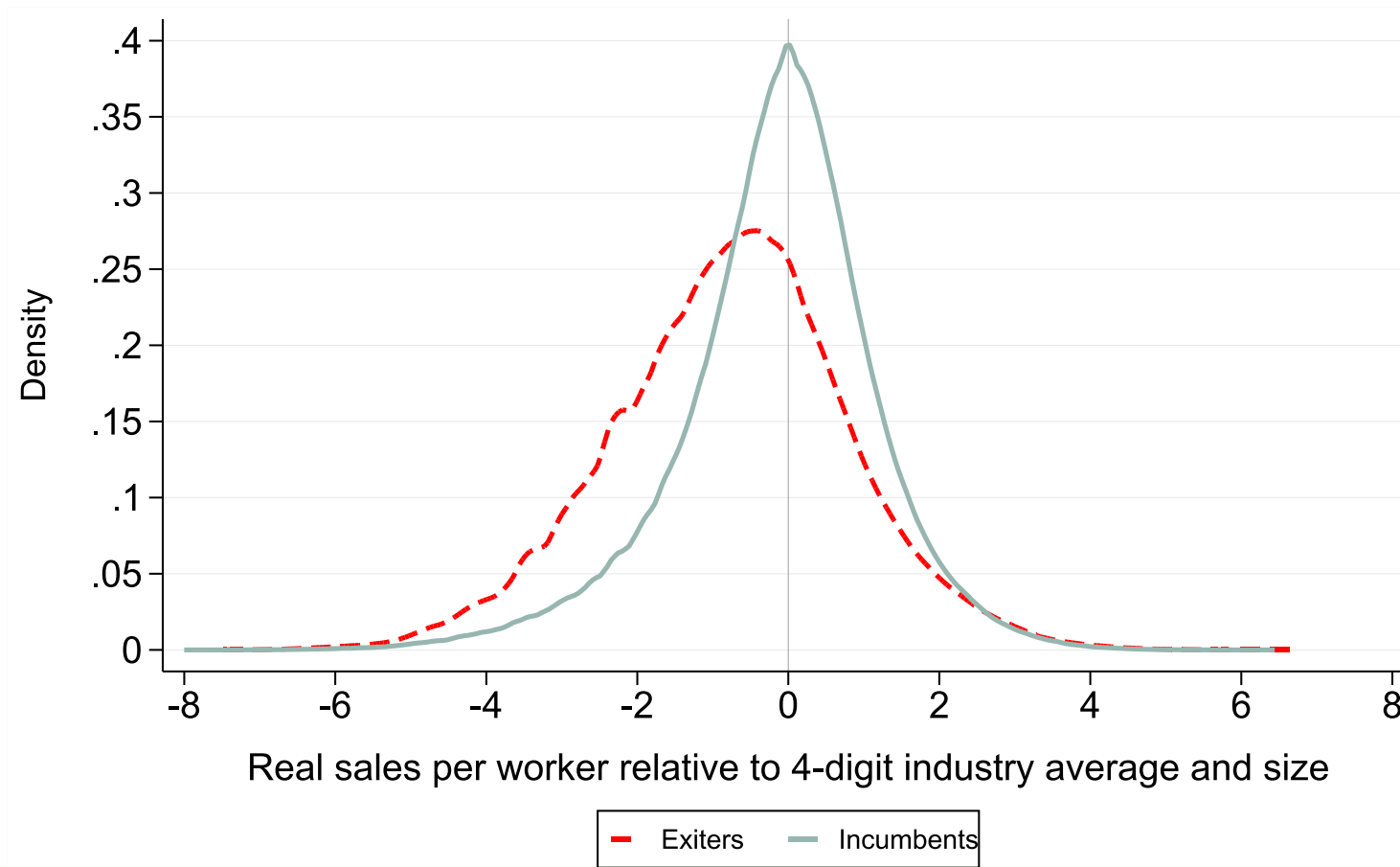
Dynamic Olley-Pakes labor productivity decomposition
2-year average change (employment weights)



Notes: Dynamic Olley-Pakes decomposition performed at the 3-digit industry level (NACE Rev. 2); weights are employment weights. Figures are 2-year average growth rates. Source: World Bank calculations based on country statistical offices and Orbis.

Big overlaps in productivity between exiting and surviving firms

Difference in the productivity distribution of labor productivity between of exiting and surviving firms

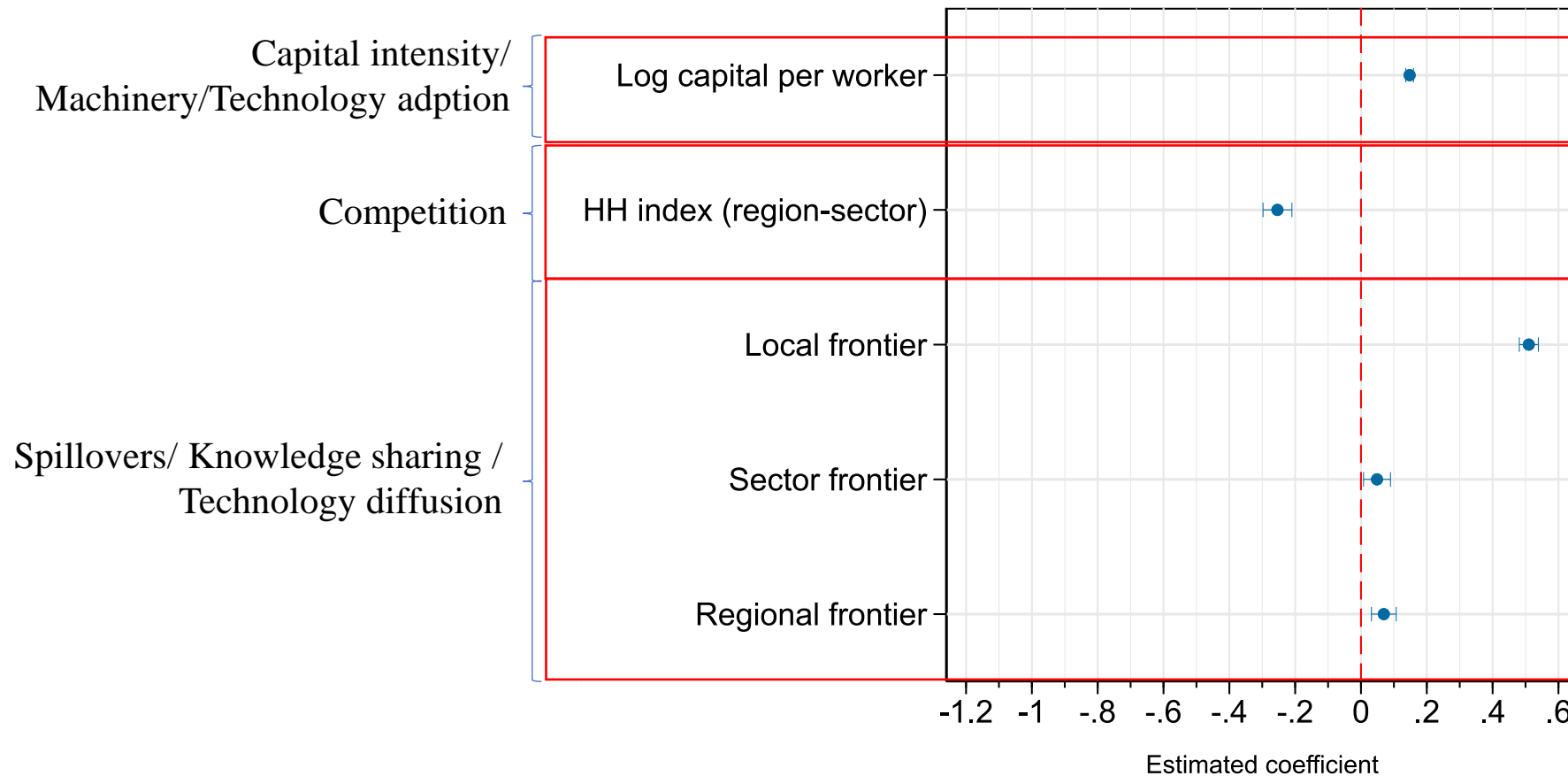


Notes: Incumbents are defined as active firms in t-2 and t. Exiters are active firms observed in t but not in t+2.

Source: World Bank calculations based on country statistical offices and Orbis.

Technology adoption, competition, knowledge and technology diffusion are positively associated with higher sales per worker

Labor productivity correlates *Real sales per worker*

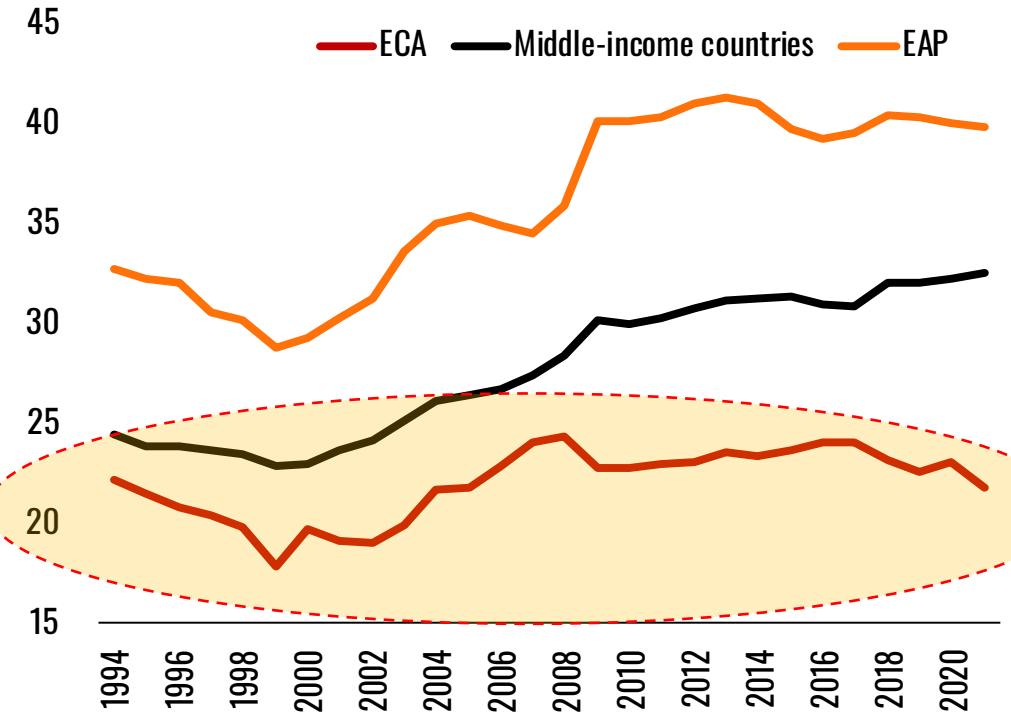


Notes: Outcome variable: log sales per worker (US\$, PPP). Baseline categories: Micro/Small firms (< 49 employees), Domestic private and Startups (aged < 5). All specifications control for 3-digit industry FE, geographic FE, year effects and include age, size and ownership controls.

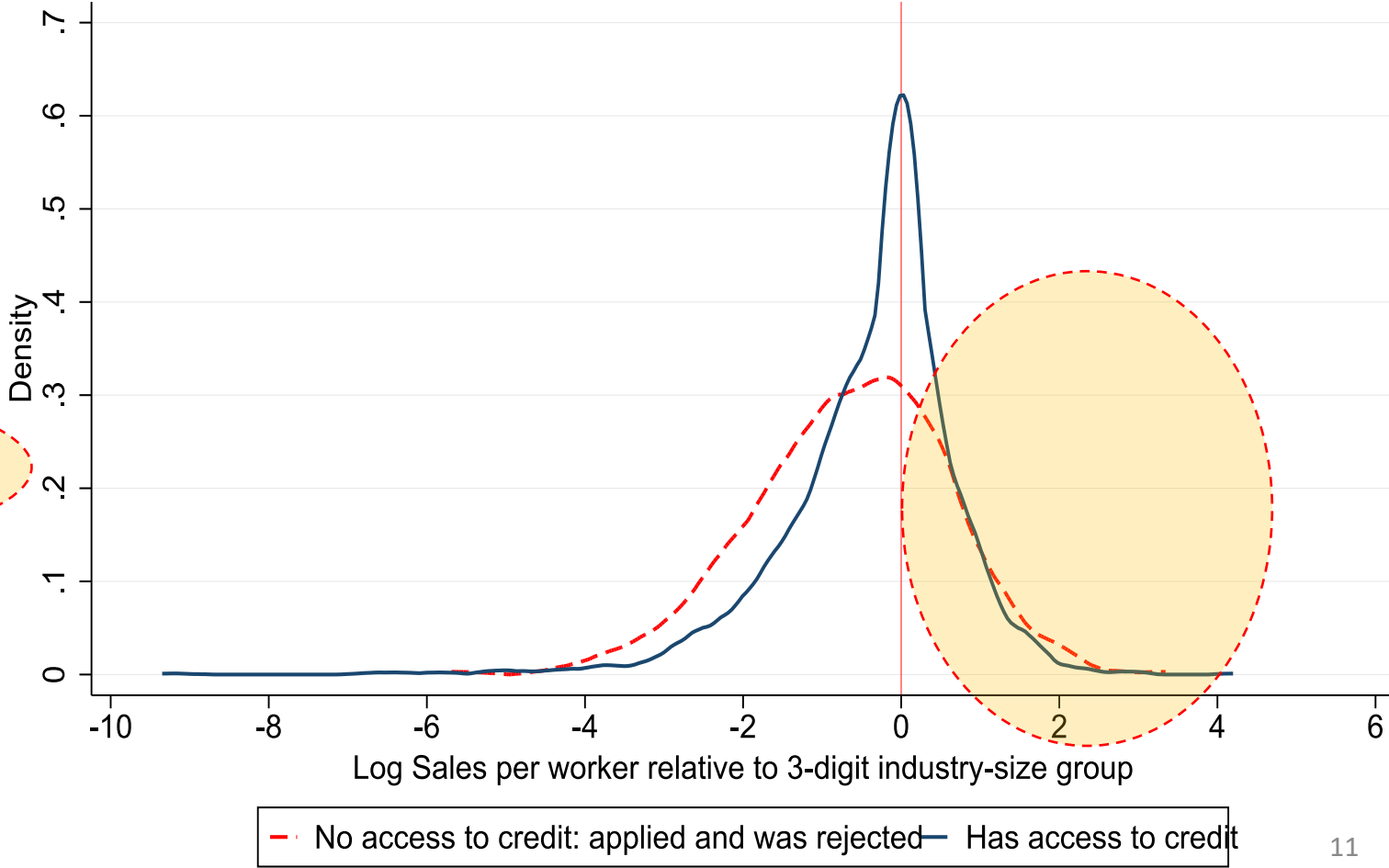
Source: World Bank calculations based on country statistical offices and Orbis.

Low investment relative to other MICs and some evidence of credit misallocation among more productive firms (even when comparing firms in the same industry and of similar scale)

Investment in ECA vs. MICs
% of GDP



Sales per worker distribution of firms by credit access
Labor productivity relative to sector-size group



Source: World Bank elaboration based on World Bank Enterprise Surveys.

ECA MICs on lagging behind in terms of managerial qualities plus larger share of not well managed firms

ECONOMICS OF TRANSITION AND INSTITUTIONAL CHANGE

Full Access

The land that lean manufacturing forgot?

Management practices in transition countries†

Nicholas Bloom, Helena Schweiger, John Van Reenen

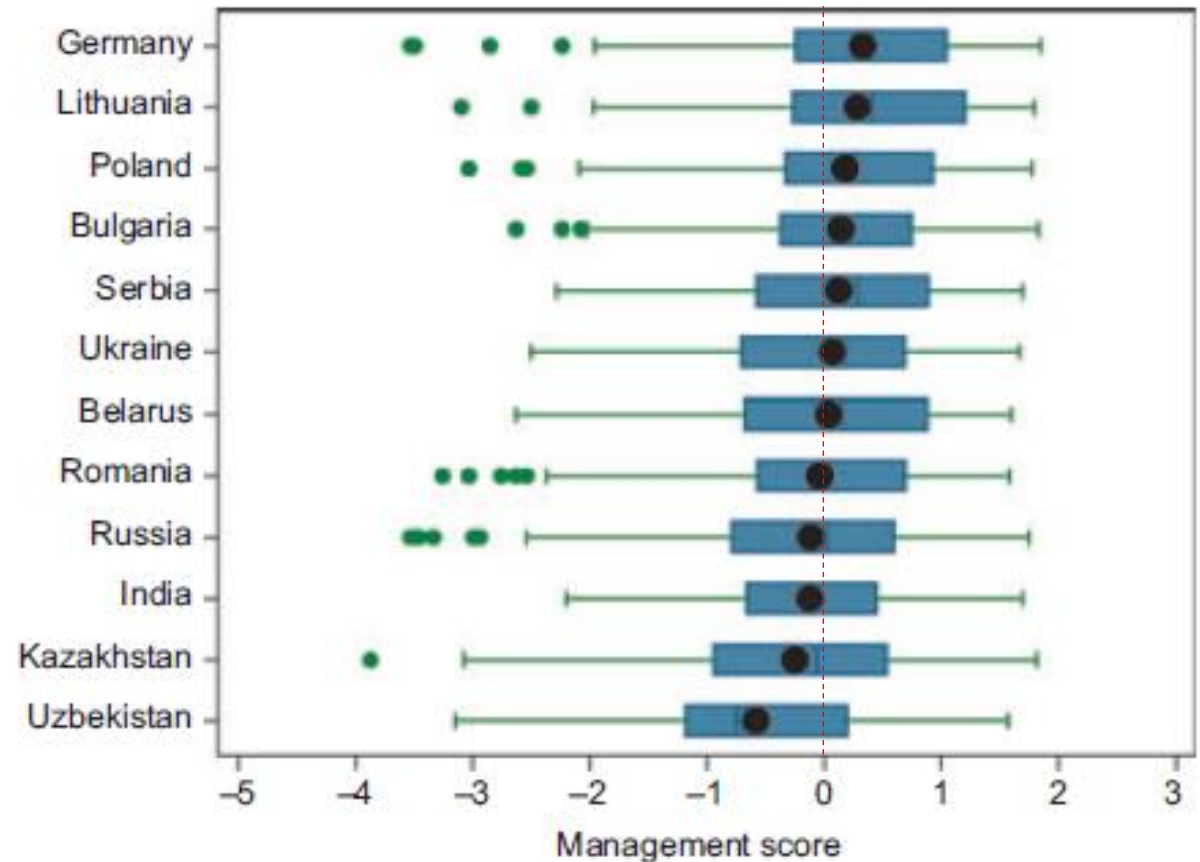
First published: 18 September 2012 | <https://doi.org/10.1111/j.1468-0351.2012.00444.x> | Citations: 40

† We thank Nolan Noble, Stephen Jeffrey and Anupriya Kumar for excellent research assistance. We thank an anonymous referee and the editor, Wendy Carlin, for offering very constructive and helpful suggestions. We are grateful to Erik Berglöf, Simon Commander, Ralph De Haas and Jeromin Zettelmeyer for helpful comments. Funding for the survey came from the World Bank and the European Bank for Reconstruction and Development (EBRD). Bloom and Van Reenen were paid by the EBRD to help run this survey. We also thank the ESRC for support of the Centre for Economic Performance of the LSE.

SECTIONS

PDF TOOLS SHARE

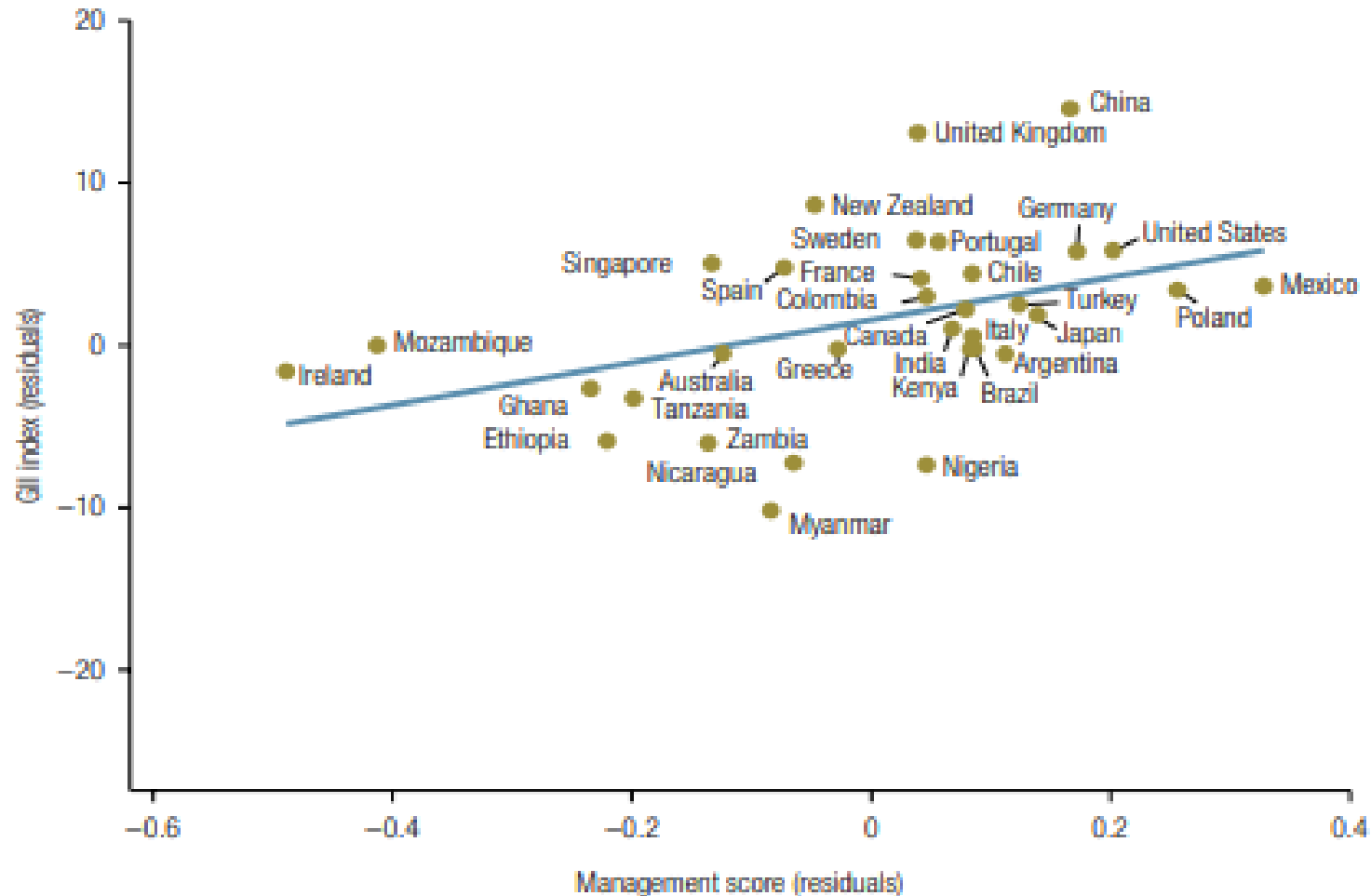
Management scores in ECA MICs and HICs



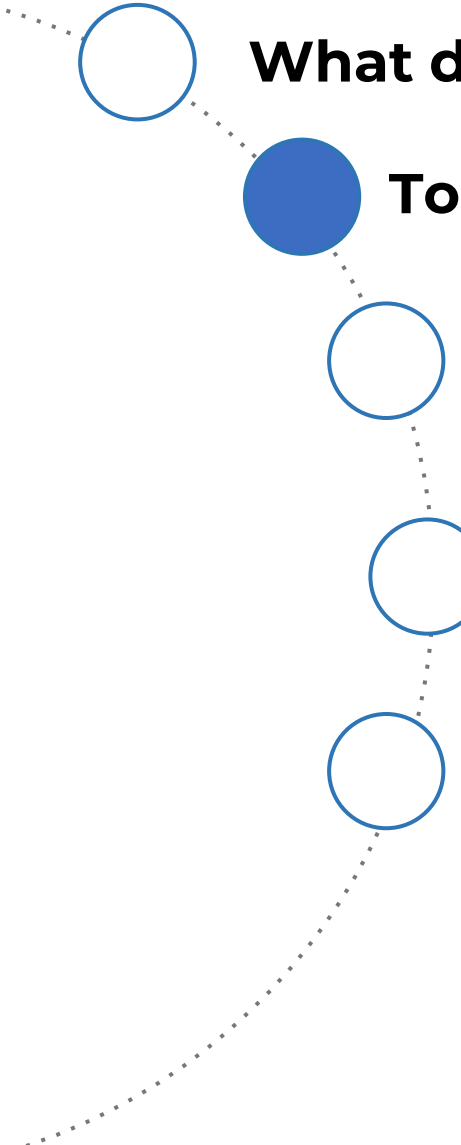
Sources: Bloom, Schweiger & Von Reenen (2012).

And we know management matters for Innovation!

Innovation Outputs Are Associated with Better Management Practices

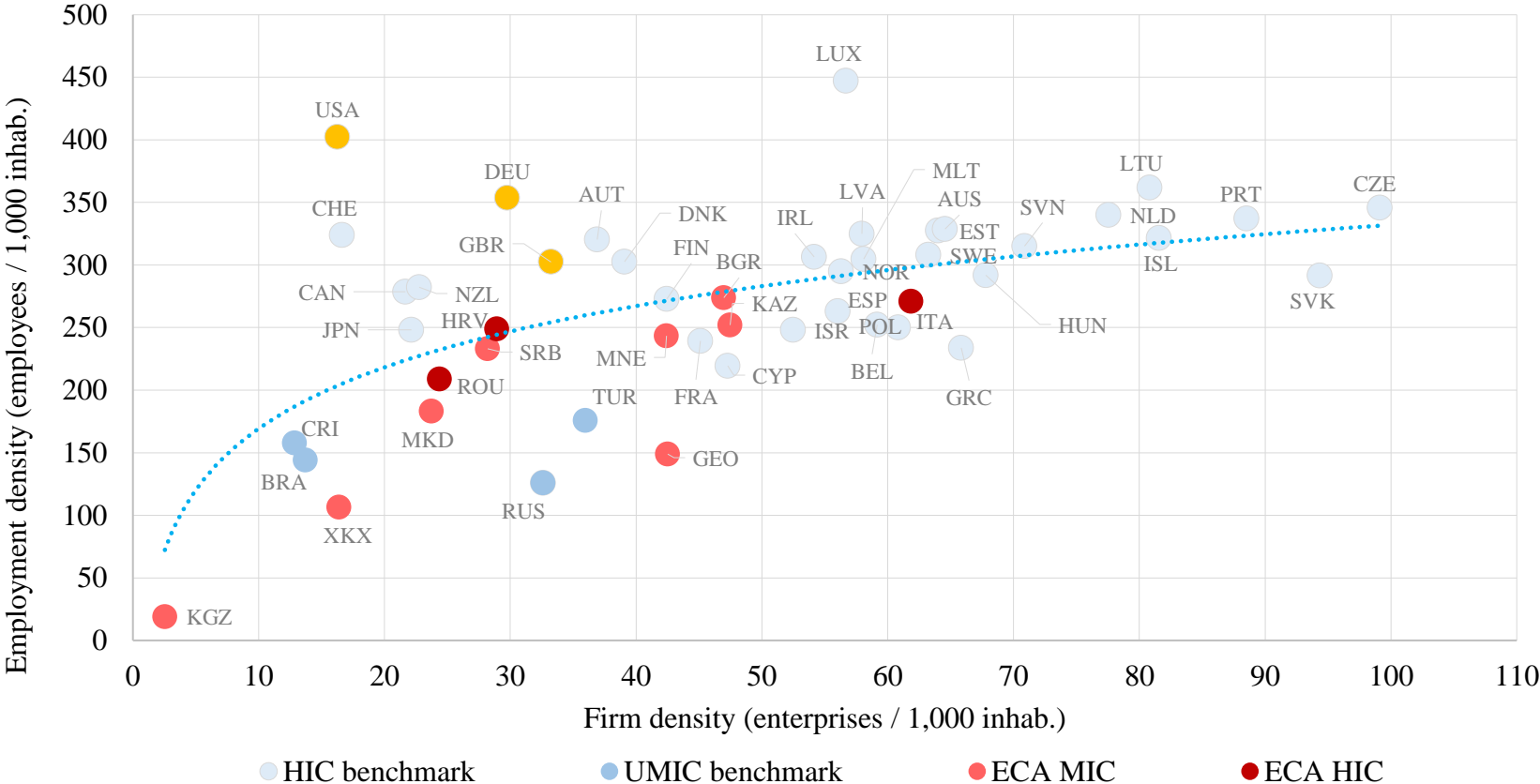


Outline

- 
- **What drives productivity growth in ECA?**
 - **Too few firms or low business dynamism?**
 - **How larger firms contribute to growth in ECA?**
 - **What factors affect business dynamism in ECA?**
 - **Policy responses for boosting productivity growth and business dynamism**

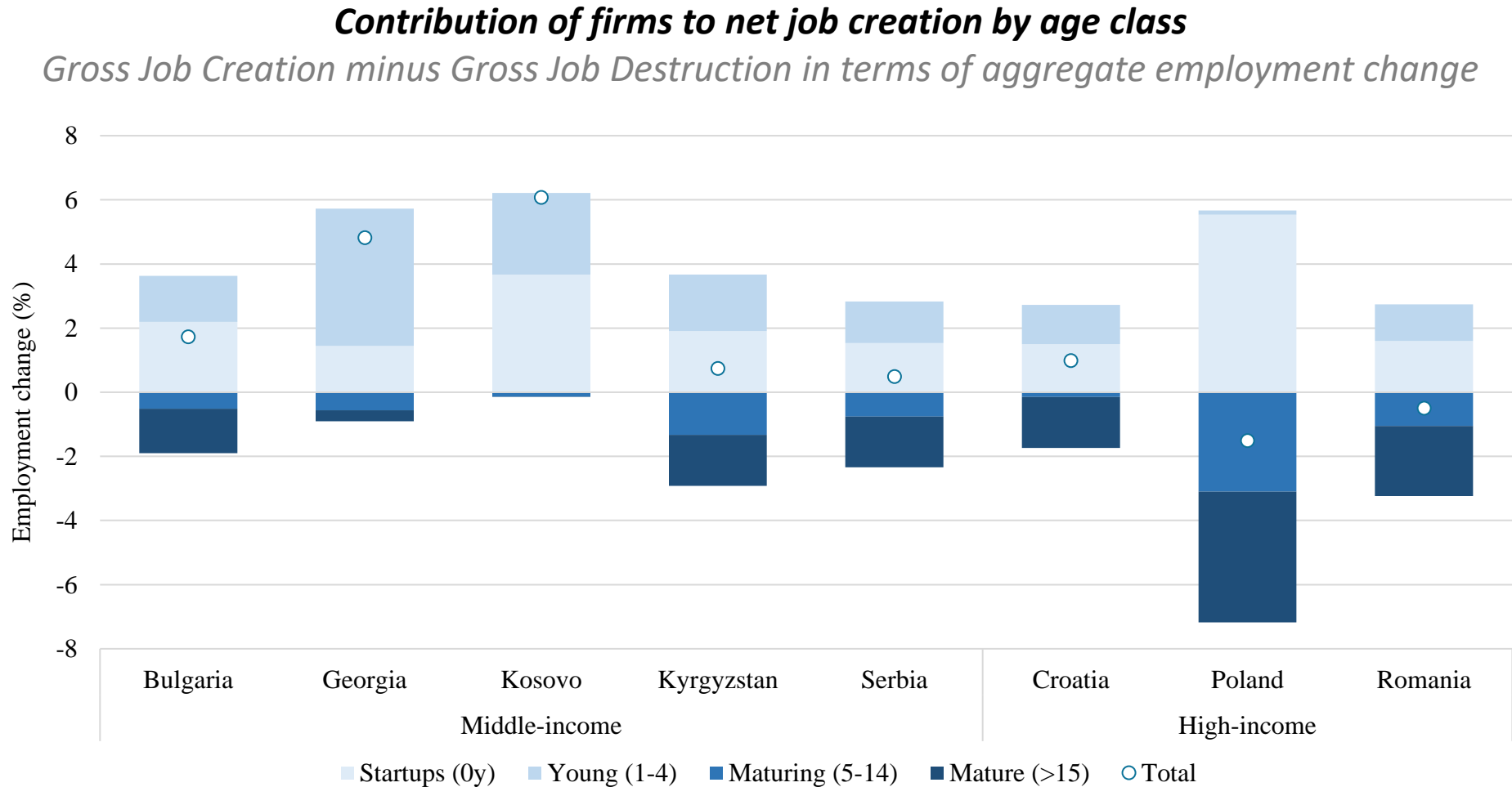
Too many small firms: ECA businesses do not create as many jobs as expected according to the number of firms per 1,000 inhabitants

Firm and business employment density in ECA, benchmark countries and aspirational peers
Business activities (B to N except K of NACE Rev. 2)



Notes: HIC benchmark as a group of selected OECD and EU high-income countries; UMIC are selected upper-middle income countries according to data availability.
 Source: World Bank calculations based on country statistical offices, official country reports, Orbis, US Census Bureau and The World Bank.

Startups and Young firms are the engine of job creation, and most (net) jobs created are due to firm entry rather than the expansion of existing ones

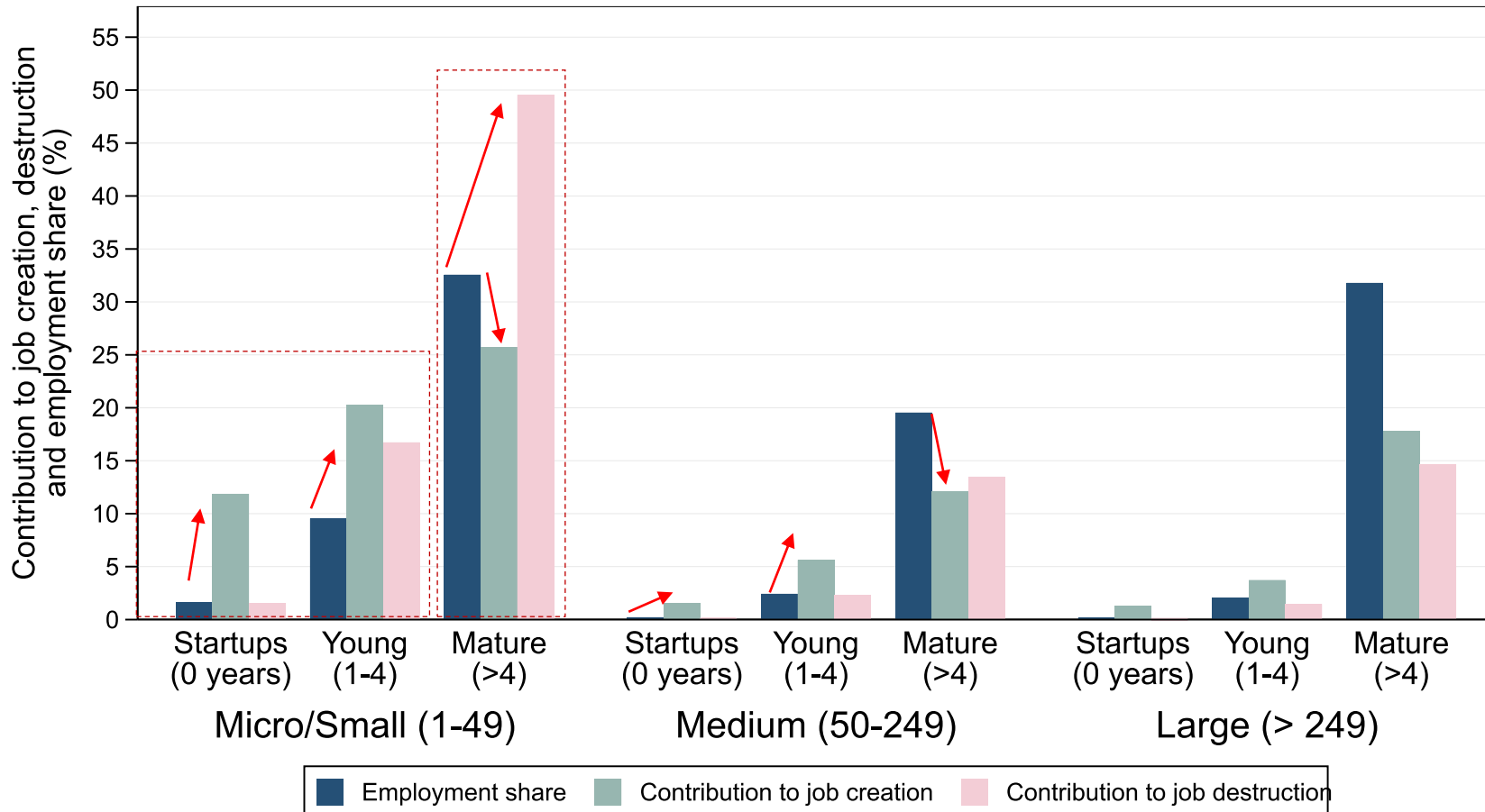


Notes: Gross Job Creation/Gross Job Destruction are defined following standard economic literature. Rates are obtained after dividing GJC and GJD over aggregate employment.
 Source: World Bank calculations based on country statistical offices and Orbis.

The importance of focusing policy on startups and young and startups...not SMEs!

Contribution to gross job creation, destruction and total employment by age and size class

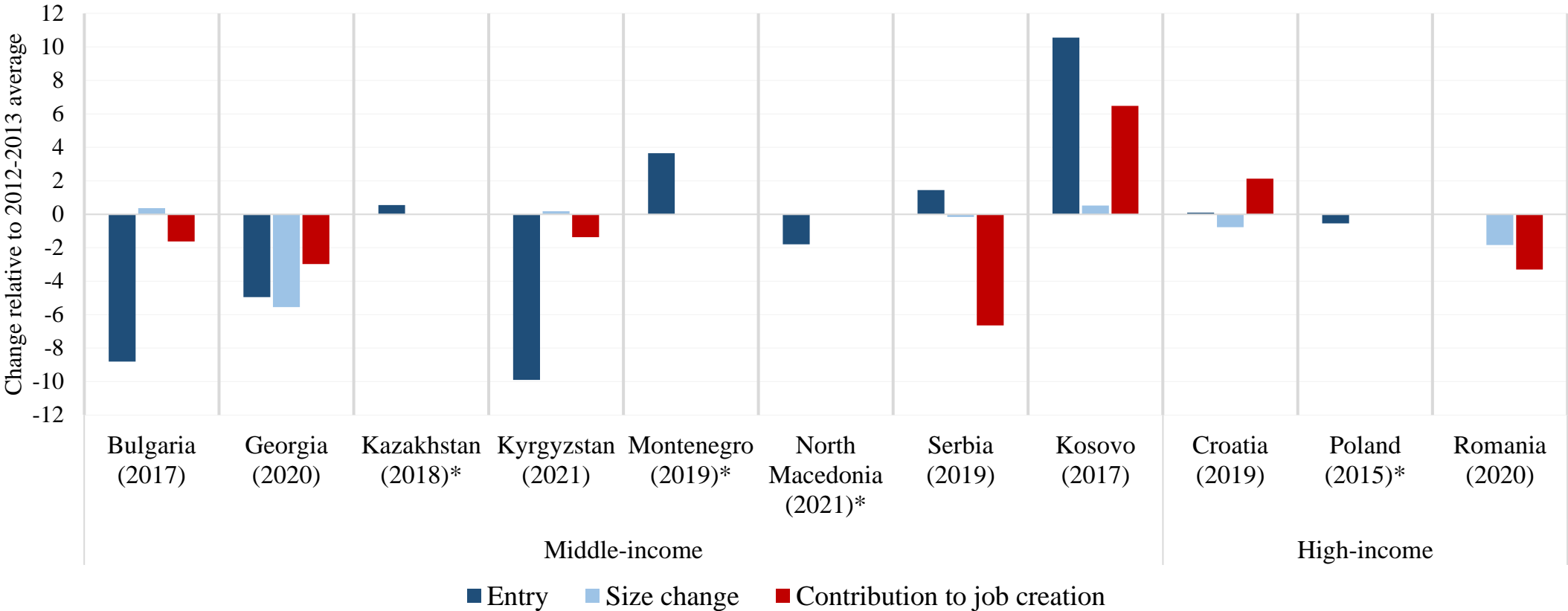
Share of total gross job creation, destruction and employment (%)



- Job creation and destruction patterns in ECA change substantially as SMEs becomes older
- Mature SMEs are large job destructors
- Only Young and startups contribute to job creation more than their weight

The contribution of startups (new firms) to gross job creation is declining in most ECA countries due to lower entry but also to smaller entry size in some countries

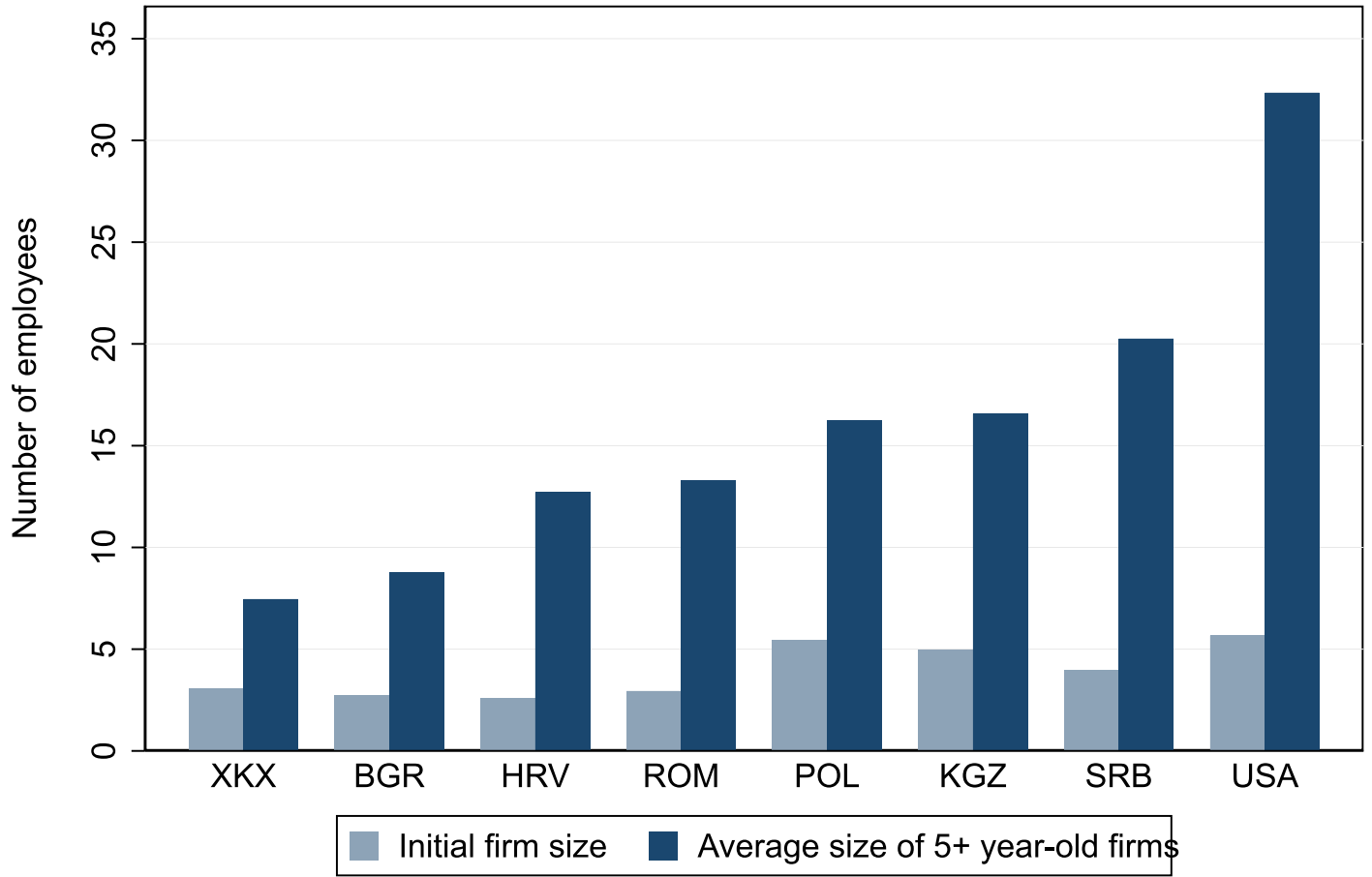
Changes in entry, entry size and in the contribution of startups (0y) to gross job creation, 2013-2019*
Business activities; rate change relative to 2012-2013 (pps)



Notes: *Firm age information not available. Business activities (B to N except K of NACE Rev. 2). Entrants are defined as firms active in t not observed in t-1; exiting firms are defined as those observed in t and not observed in t+1. Year below country name refers to latest available year in the sample. Source: World Bank calculations based on country statistical offices and Orbis.

Stunted Growth (part 1): Upon entry firms don't grow

Initial firm size and size of firms aged at least 5
Average number of employees

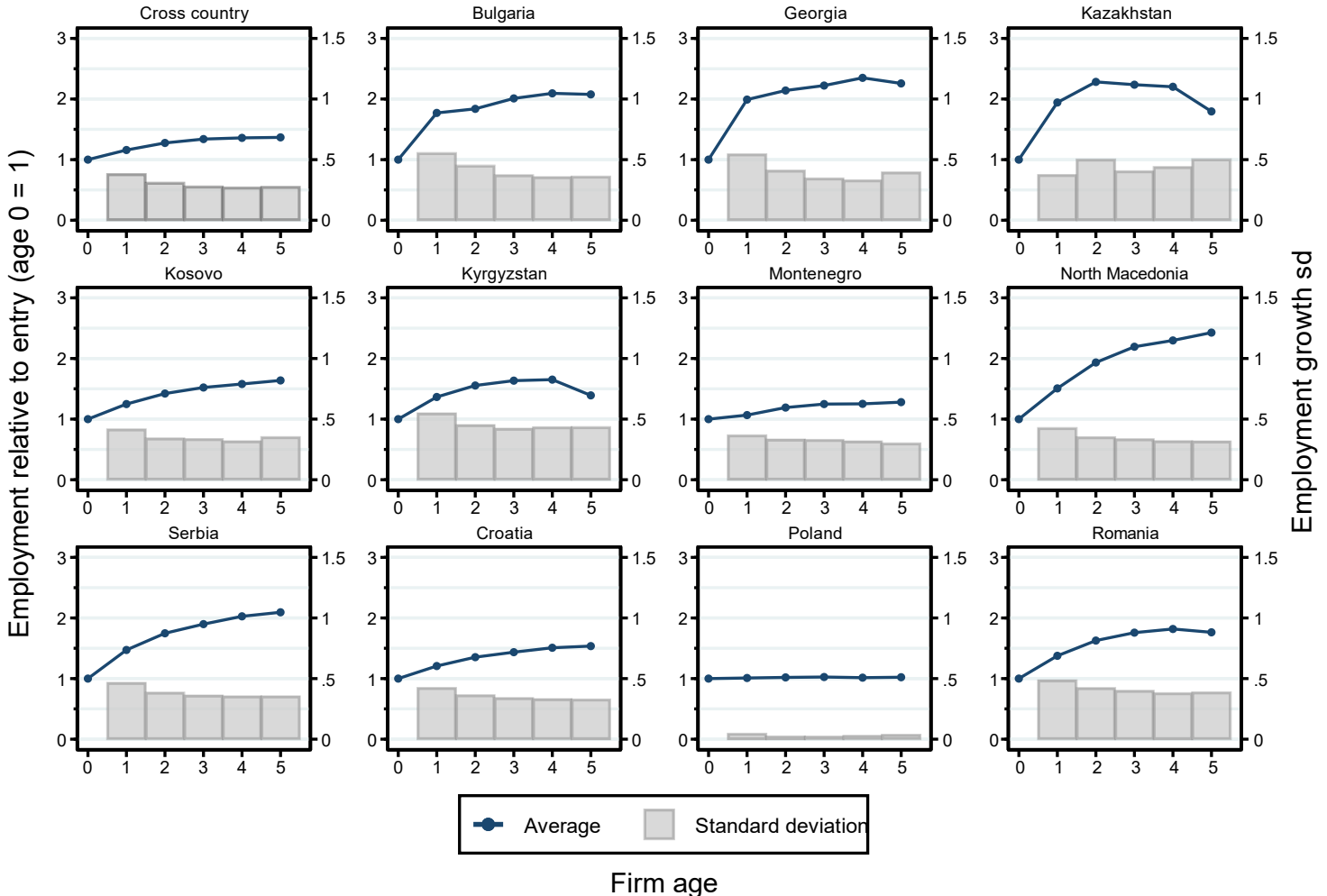


- Differences between size at entry and size of firms aged more than 5 years are remarkable relative to US

Stunted Growth (part 2): Upon entry firms don't grow + weak market selection processes

Post-entry employment growth of surviving entrants

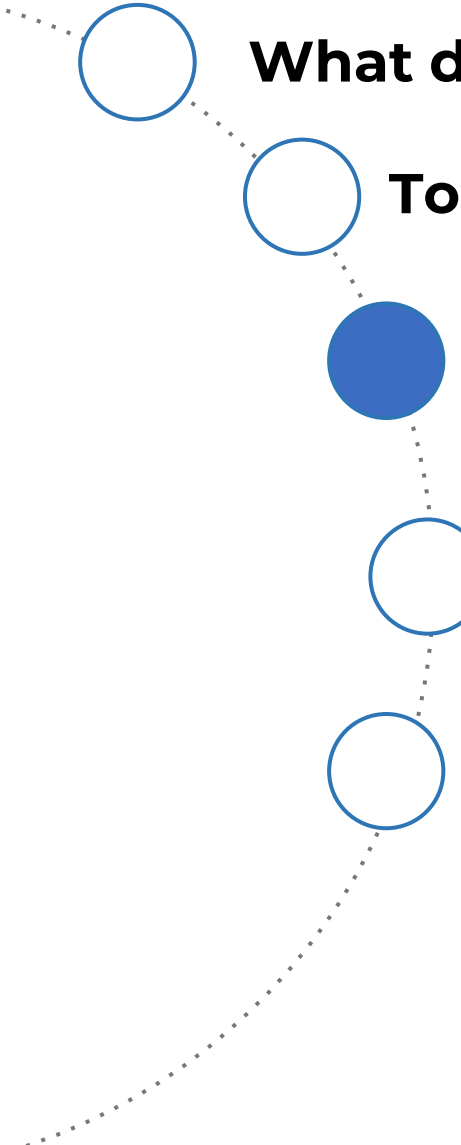
Average employment relative to entry (stayers only)



- Post-entry growth of surviving entrants is stunted
- Growth volatility does not decrease much with time (among older cohorts) suggesting weak market selection mechanisms

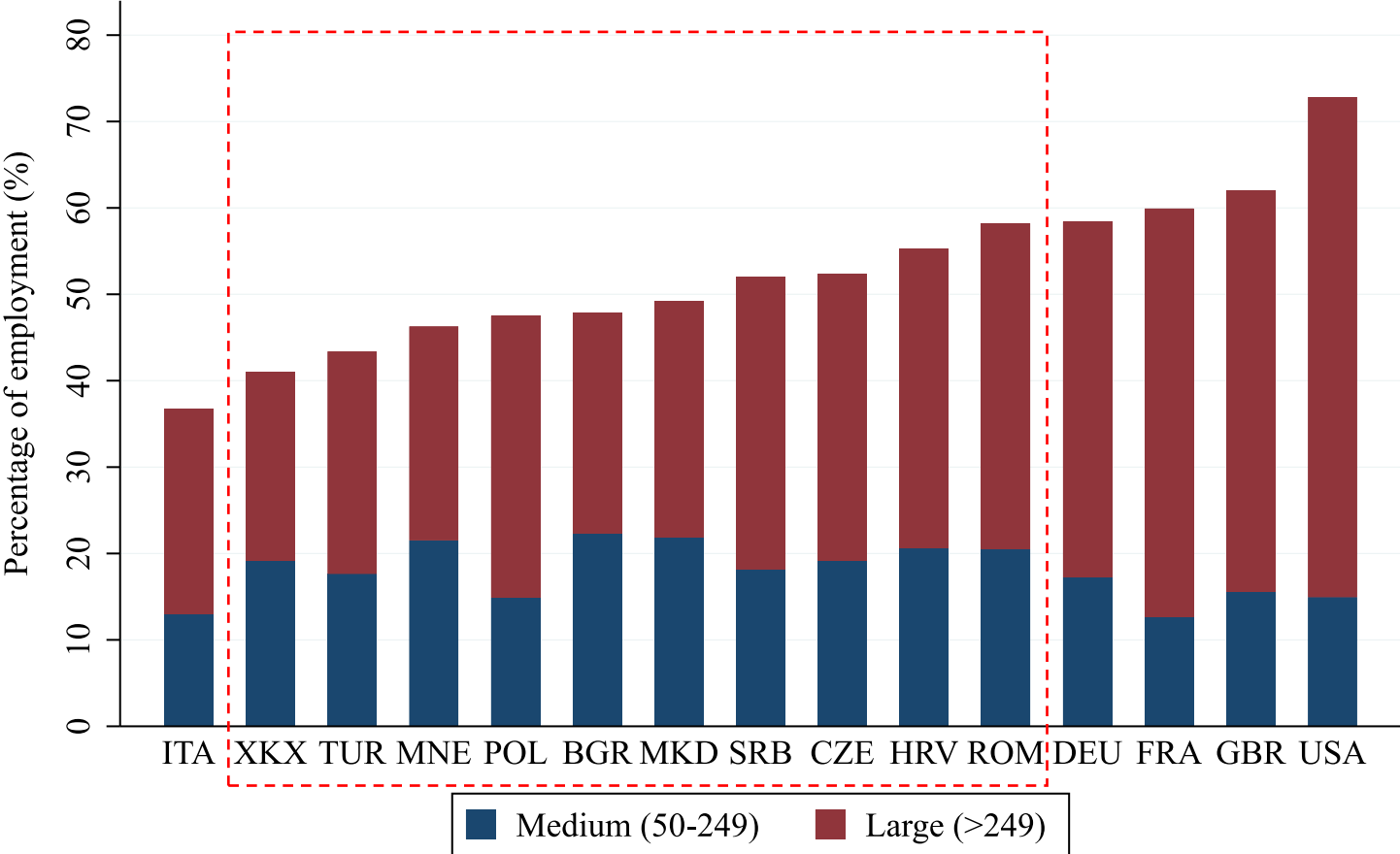
Source: World Bank calculations based on country statistical offices and Orbis.

Outline

- 
- **What drives productivity growth in ECA?**
 - **Too few firms or low business dynamism?**
 - **How larger firms contribute to growth in ECA?**
 - **What factors affect business dynamism in ECA?**
 - **Policy responses for boosting productivity growth and business dynamism**

On the other side of the distribution, medium and large firms do not account for a large share of employment

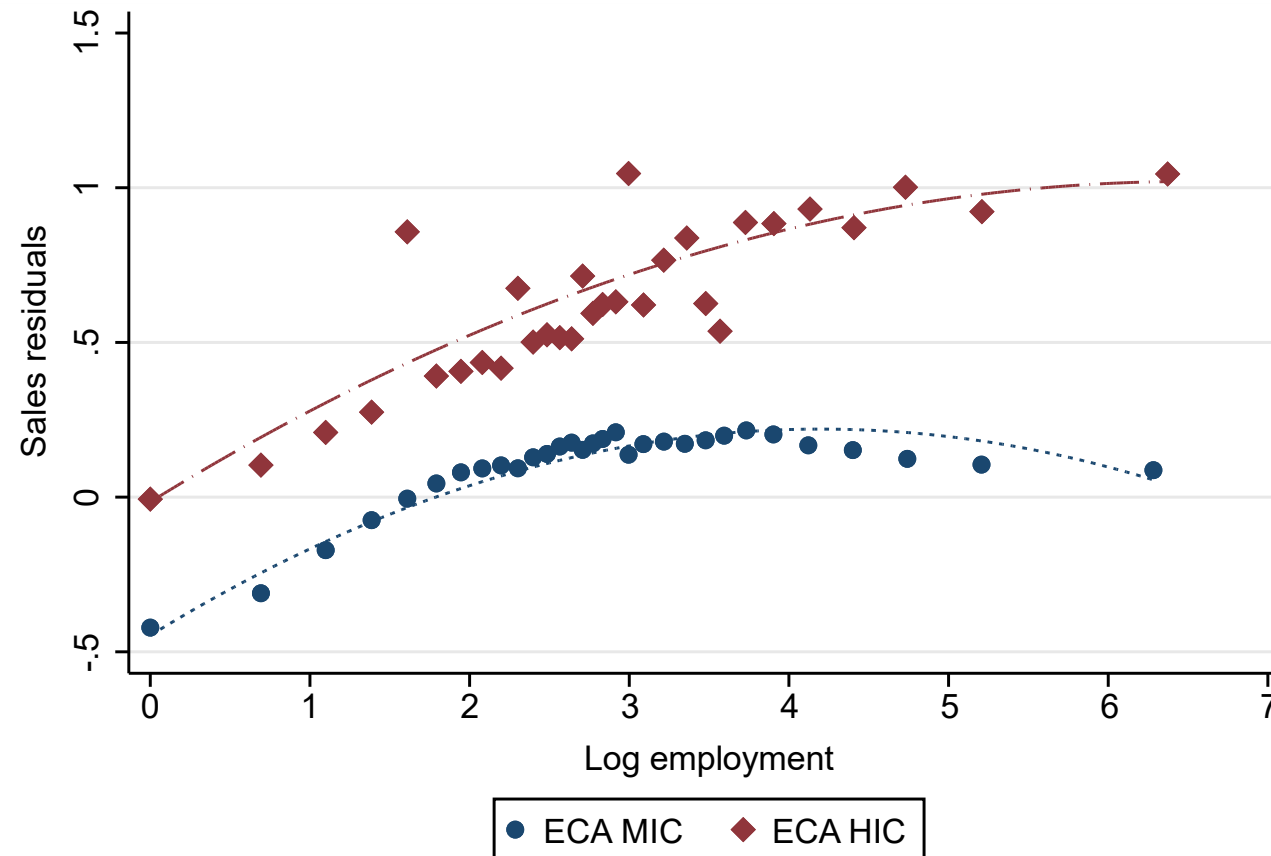
Share of employment in medium and large firms
Business activities (B to N except K of NACE Rev. 2)



Source: World Bank calculations based on country statistical offices, official country reports, Orbis, US Census Bureau and The World Bank.

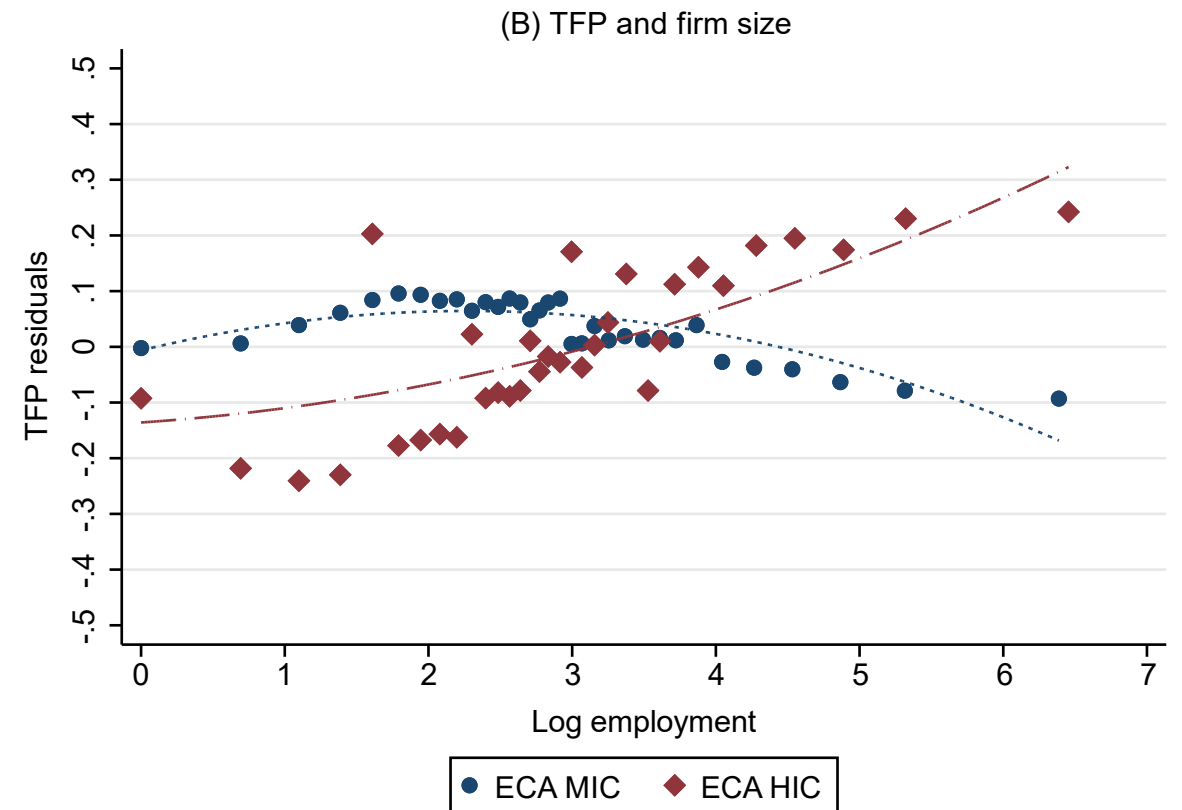
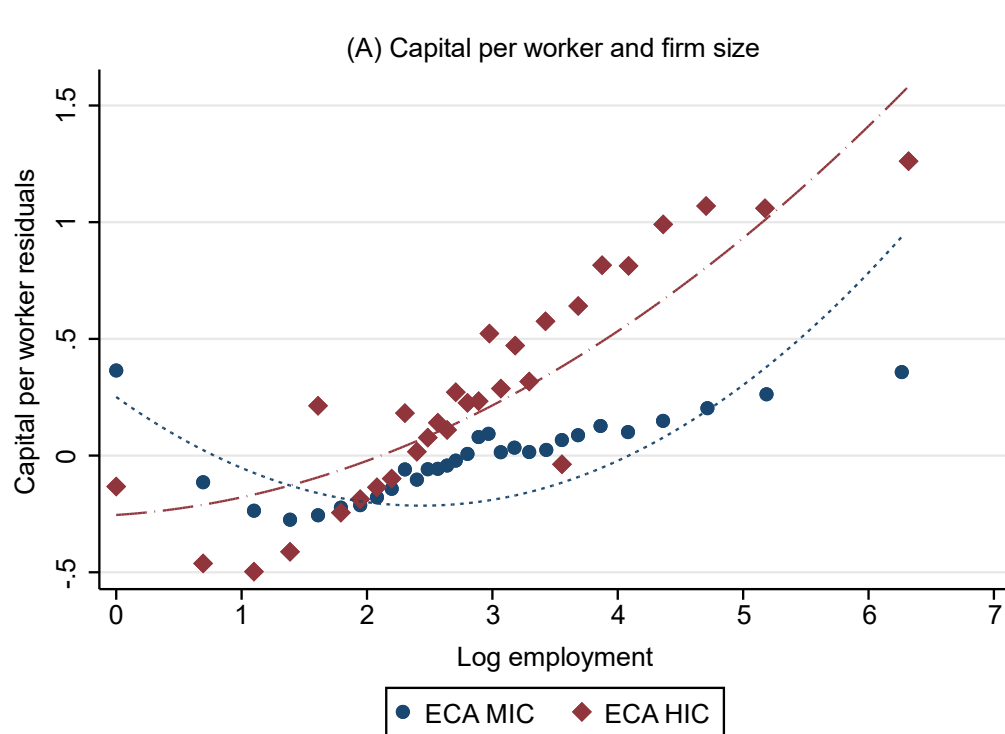
Both in MICs and HICs larger firms have higher sales per worker than smaller ones...

The relationship between Productivity and firm size in ECA
Sales per worker (A) and Total Factor Productivity (B)



...but in MICs this is driven by capital and not by efficiency/TFP

The relationship between Productivity and firm size in ECA Capital per worker (A) and Total Factor Productivity (B)

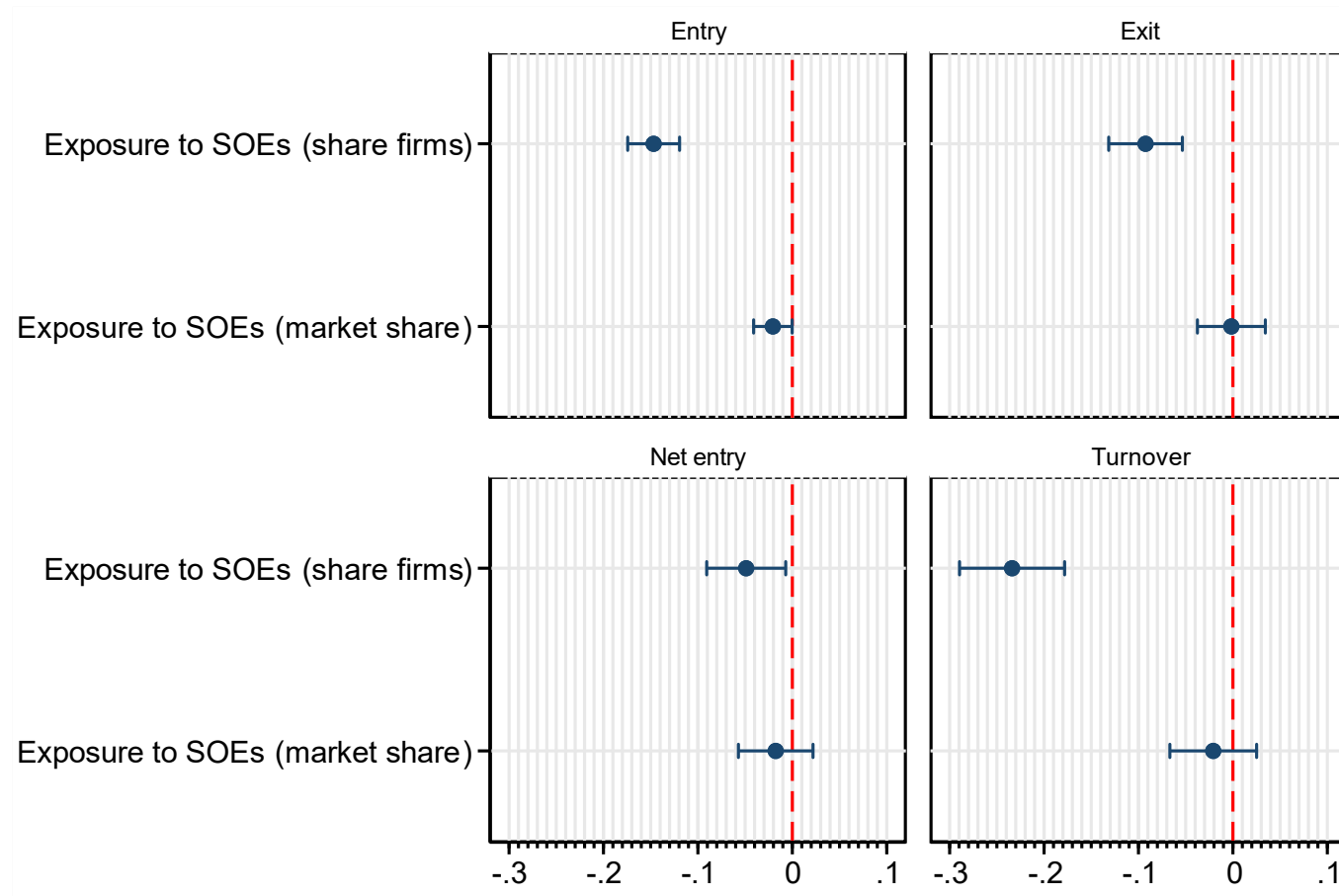


Outline

- **What drives productivity growth in ECA?**
- **Too few firms or low business dynamism?**
- **How larger firms contribute to growth in ECA?**
- **What factors affect business dynamism in ECA?**
- **Policy responses for boosting productivity growth and business dynamism**

The presence of SOEs hinders business dynamism in ECA markets

Exposure to SOEs and market firm dynamics
Firm entry, exit and turnover rates (% of market total firms)

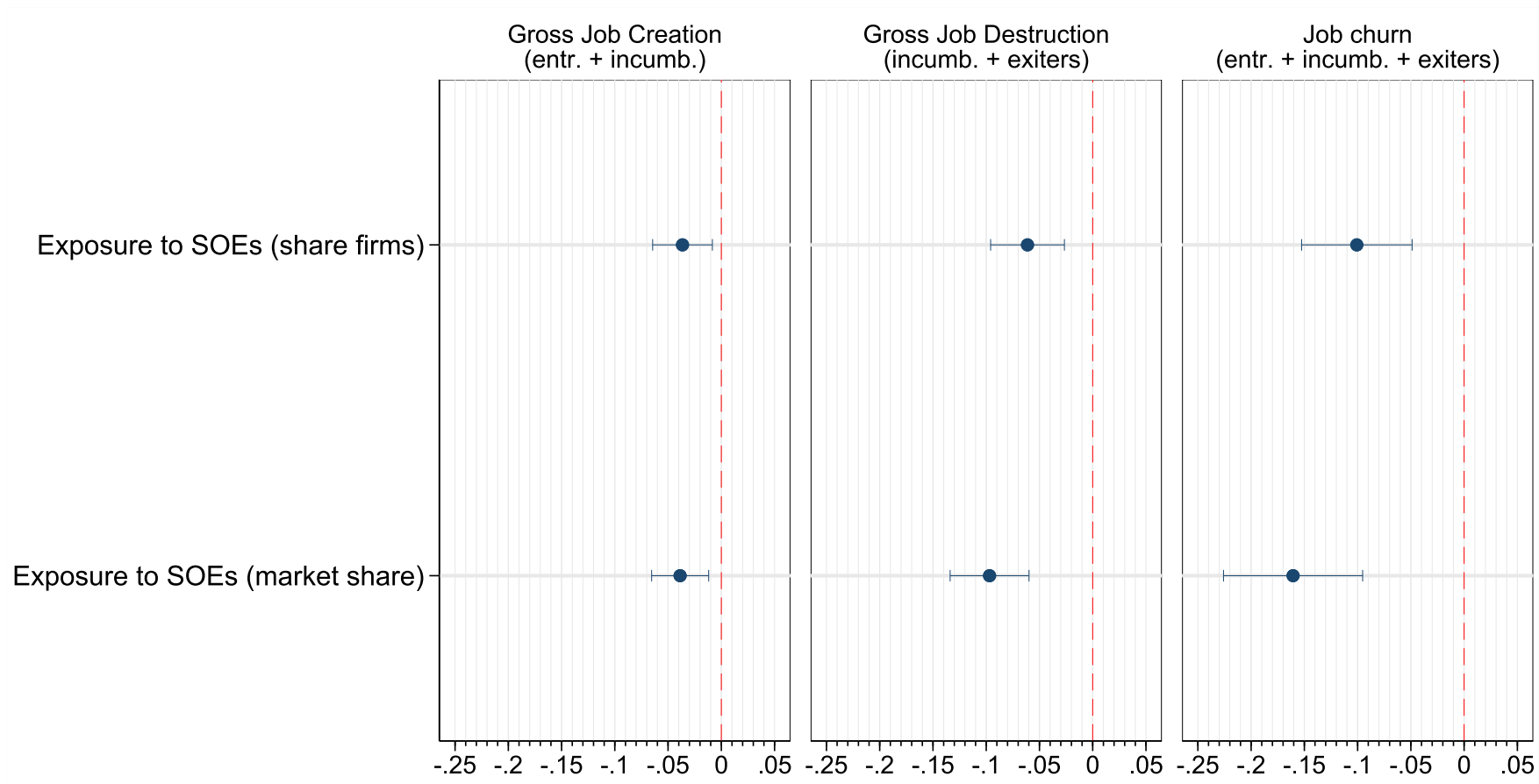


Notes: Markets are defined as sector-NUTS3 unique combinations. The figure plots the estimated coefficients of regressing firm entry, exit, and turnover rates on the share of SOEs / the market share of SOEs in each market. Controls include industry market concentration, the share of foreign firms, and the level of labor productivity and capital per worker, and the change in the market size. All regressions include market FE, country-year effects and 1-digit sector-year effects. Entry and exit follow standard literature definitions. Source: World Bank calculations based on country statistical offices and Orbis.

SOEs also negatively affect job creation and destruction, leading to lower job churn

Exposure to SOEs and market employment dynamics

Gross Job Creation, Destruction and Job Churn rates (% of market employment)

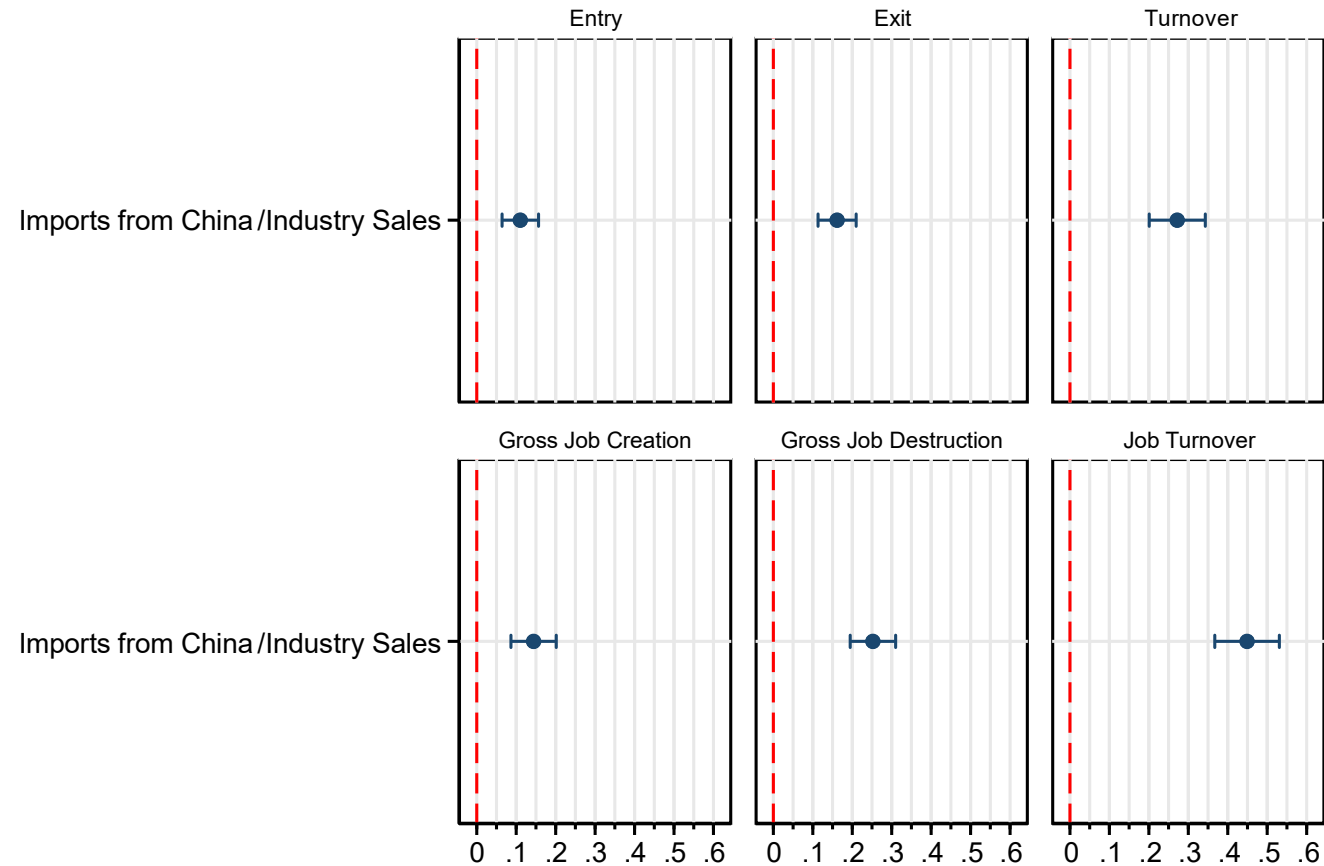


Notes: Markets are defined as industry-NUTS3 unique combinations. The figure plots the estimated coefficients of regressing gross job creation, destruction and job churn rates on the share of SOEs / the market share of SOEs in each market. Controls include industry market concentration, the share of foreign firms, and the level of labor productivity and capital per worker, and the change in the market size. All regressions include market FE, country-year effects and 1-digit sector-year effects. Source: World Bank calculations based on country statistical offices and Orbis.

Trade competition is also positively associated with more firm and job dynamism (entry, turnover, and gross job creation and destruction)

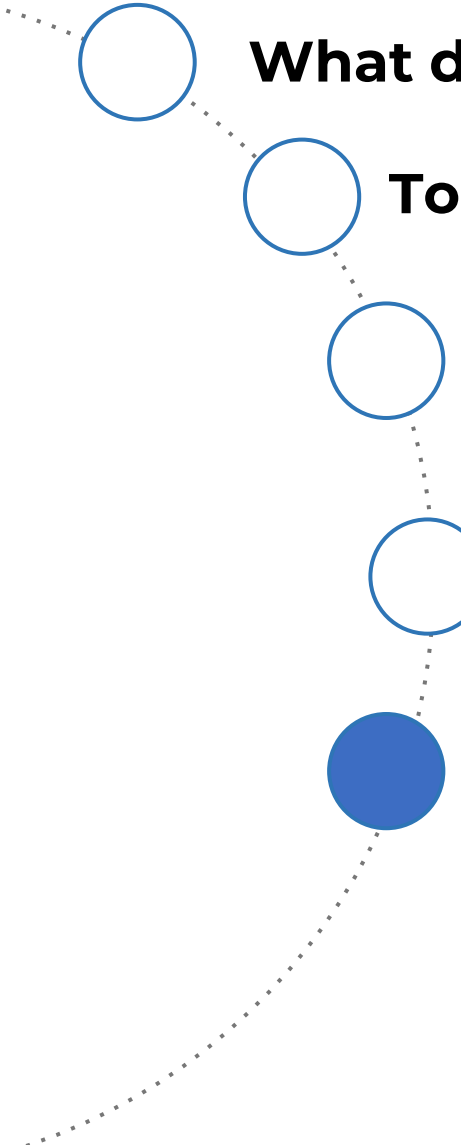
Competition, firm and job dynamism

Entry, Exit, Churn, Gross Job Creation, Destruction and Job Turnover rates



Notes: Each figure plots the estimated coefficient resulting from regressing the variable outcome on the Imports from China / Industry Sales, at the 3-digit industry level of NACE Rev. 2. All specifications control for country FE and 2-digit industry-year effects. Observation are unique combinations of country-year-sector. Source: World Bank calculations based on country statistical offices and Orbis.

Outline

- 
- What drives productivity growth in ECA?**
 - Too few firms or low business dynamism?**
 - How larger firms contribute to growth in ECA?**
 - What factors affect business dynamism in ECA?**
 - Policy responses for boosting productivity growth and business dynamism**

Public policy needs to focus on creating an enabling business environment while targeting firms and help them grow sustainedly

Innovation &
Tech adoption



Key for long-term within-firm productivity and economic growth (e.g., R&D and technological programs, tax and innovation grants, credit support, technology transfer, collaboration links between industry and academia; Cirera & Maloney, 2017)

Firm
capabilities



Critical for firms (especially laggards) to improve management and organization skills, technology adoption and technological capabilities, and workers' abilities (e.g., management training, reskilling labor force, ICT technologies programs, business advice, tailored support)

Access to credit



Financial incentives for firms to invest in upgrading and R&D; credit needs to be allocated towards more productive firms through different instruments (e.g., blended finance, concessional loans)

Competition &
Trade integration



Encourages frontier firms to innovate (escape competition effect) but may discourage innovation of laggards (Aghion2017; Aghion et al., 2005, 2009, 2021; Cusolito et al., 2021)

SOEs



Can slow down firm and job dynamism, deteriorate resource allocation and dampen the creative destruction process (World Bank, 2023*; WDR Enterprise Chapter, forthcoming)

Focus on startups
& young rather
than SMEs



Young firms and startups (and not SMEs) are the main contributors to job creation (Haltiwanger et al, 2017). Policy support needs to be targeted more towards these firms and not SMEs.

Look forward to your questions!

JANUARY 22, 2024

