

Firm ownership, performance and allocative efficiency: brief insights into SOEs in New EU Member States

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Recent firm level research agenda

- Increasing availability of firm (or plant-) level data around the world
 - ORBIS, AMADEUS, Industrial census, Matched Employers-Employees databases, etc
 - Strong research interest: **how firms behave and how they turn inputs into outputs**
 - How resources are reallocated across firms?
 - How individual firm behavior contributes to productivity growth at aggregate level?
- Two stylized facts emerge from empirical analysis of firm level performance*

*See Syverson (2011) for a survey

i) Firm level productivity distribution is highly dispersed and skewed (all countries, all sectors)

- Studies of **developed economies** show a large difference on TFP among firms
 - Seminal studies for US: For instance, Chad Syverson (2004) finds that within four digit SIC industries in the U.S. manufacturing sector difference in TFP between an industry's 90th and 10th percentile plants is almost twofold.
- This evidence in **developing countries** is even more striking
 - China and India: Hsieh and Klenow (2009) find even larger productivity differences in China and India, with average 90–10 TFP ratios over 5:1

ii) High firm churning rate reflecting an intense process of resource reallocation

Recent estimations for selected New EU Members

- **Firm entry:** per year, between 9 and 18 percent of all firms (on average) are new to the market
- **Firm exit:** per year, between 6 and 26 percent of total firms (on average) leave the market
- **Intense process of creative destruction**
 - whereby a significant number of business startup or close their operations
 - Entrepreneurs and high growth young firms play an important role in these dynamics.

Entry and exit rates: selected New EU member state, 2008-2012 (%)

Country	entry		exit	net entry
Bulgaria	14.54		9.62	4.92
Czech Republic	9.18		8.96	0.22
Latvia	16.57		13.27	3.30
Lithuania	18.61		26.82	-8.21
Hungary	9.83		10.92	-1.09
Poland	13.07		10.42	2.65
Romania	10.92		14.19	-3.27
Slovenia	10.89		7.53	3.36
Slovakia	14.86		11.56	3.30
Croatia	5.50 ("start ups")	2.5 ("big entry")	6.50	-1.00

Source: Ilojty et al (2014); elaboration based on FINA data (for Croatia) and Eurostat data.

Note: For all countries except Croatia, values are averages of Eurostat data for 2008-11 period. Eurostat yearly measure of entry rate is defined as: number of enterprise births in the reference period (t) divided by the number of enterprises active in t. Yearly exit rate is defined in Eurostat as number of enterprise deaths in the reference period (t) divided by the number of enterprises active in t. For both entry and exit rates from Eurostat the sector coverage is "Business economy except activities of holding companies."

What does economic theory tell us about these stylized facts?

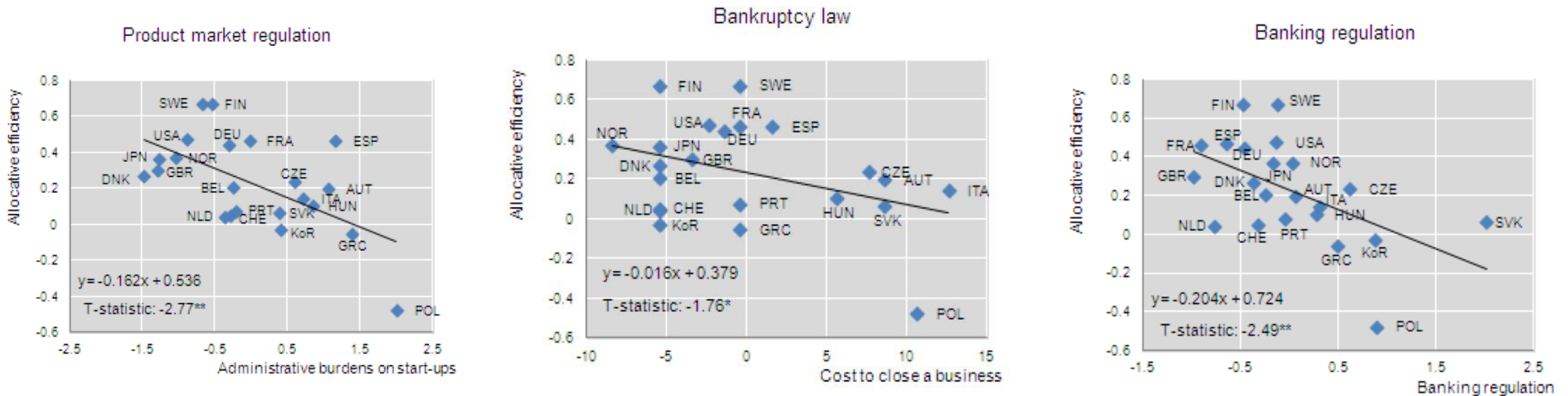
High productivity dispersion and high churning should be related.

- In well-functioning economies it is expected that:
 - economic resources are reassigned from the less productive to the more productive firms (whether new entrants or incumbents) over time
 - aggregate productivity will be higher with most productive firms being also the largest ones
 - More productive firms should be larger /become larger.
 - Less productive firms should be smaller/become smaller.
 - resource allocation is driven not only by already existing firms, but also by firm dynamics, more specifically by **entry of new firms and exit of obsolete ones.**

What can prevent the reallocation of resources towards their most productive use?

- **(Input and output) market rigidities**

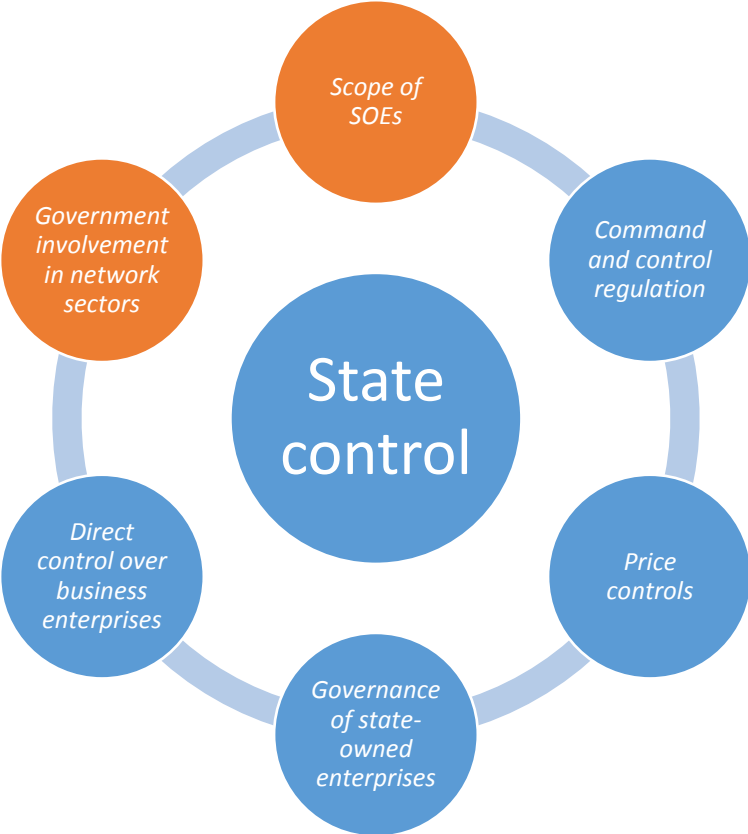
- Some of these rigidities can be directly related to the nature of some economic activities; technology/sector constraints
- **However, most part of these rigidities are frequently induced by inappropriate institutions and policies that shape business environment**



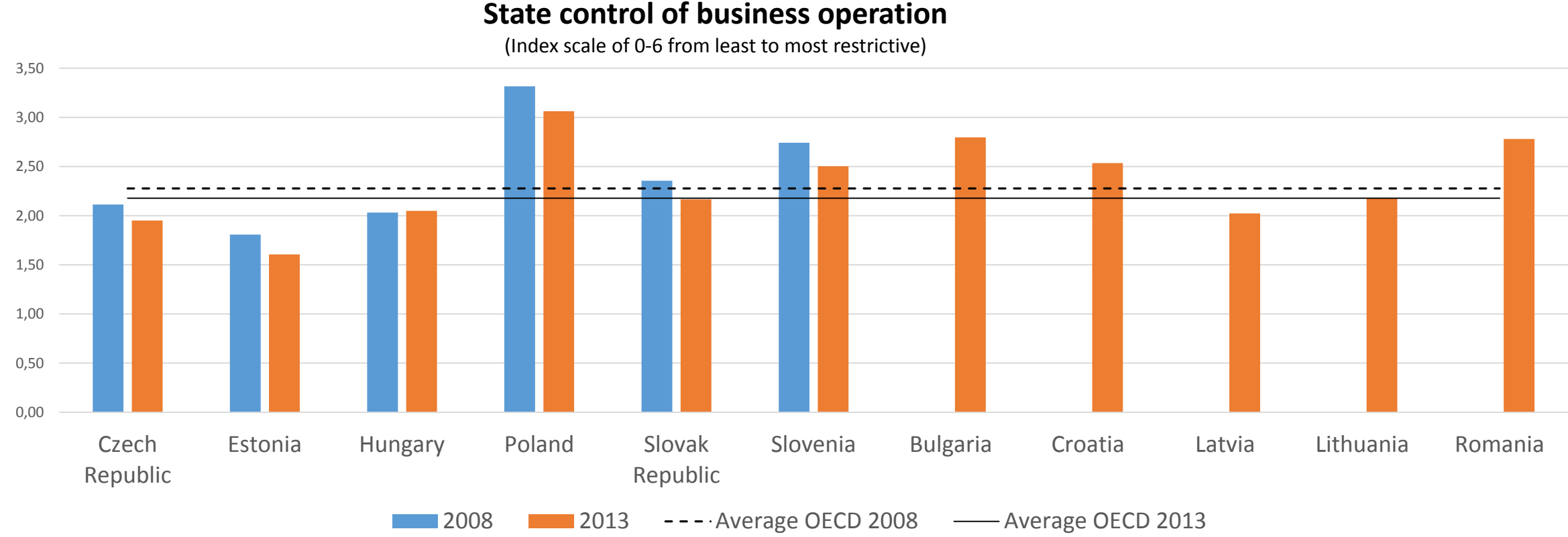
Countries with high barriers to entry, more stringent bankruptcy arrangements and more stringent banking regulation are characterized by lower allocative efficiency (Andrews and Cingano, 2012)

Among regulations that affect competition in the product market, one is particularly important for our discussion: *state control*

Key domains of State Control (as defined by PMR indicator, OECD)



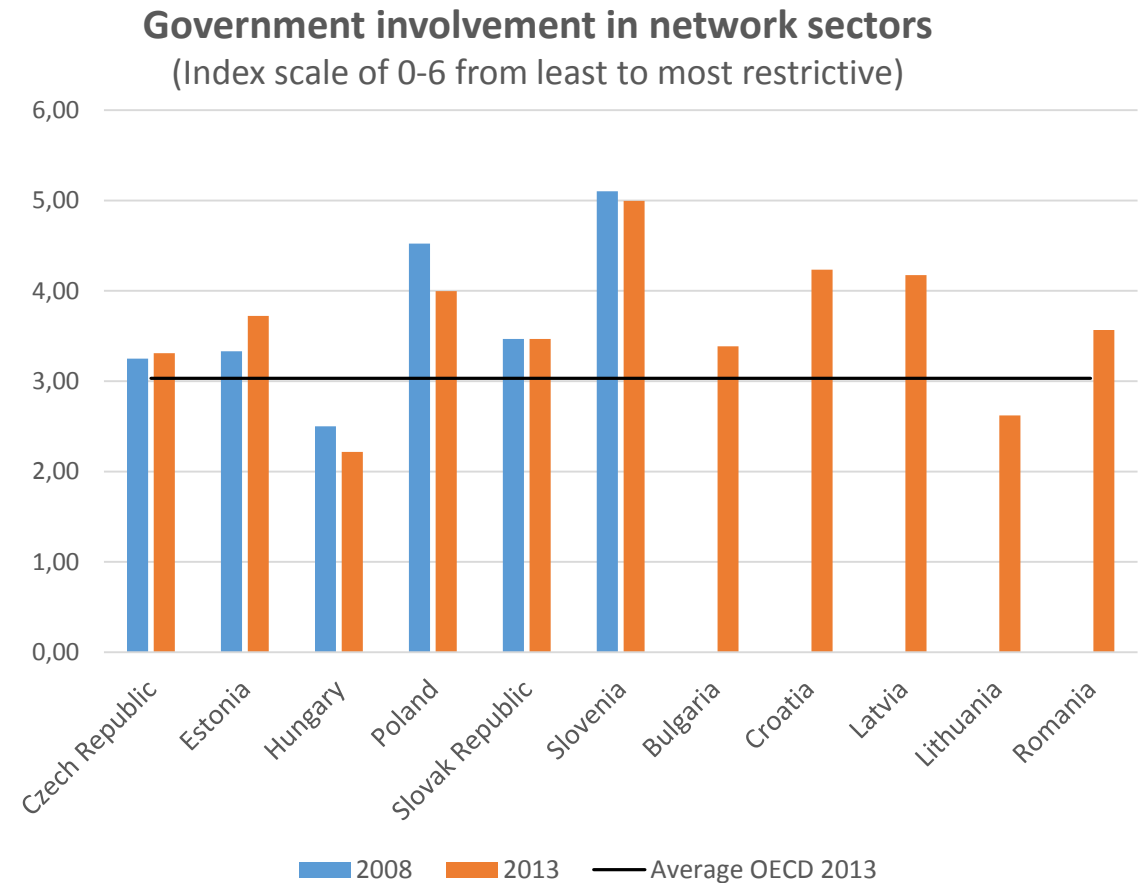
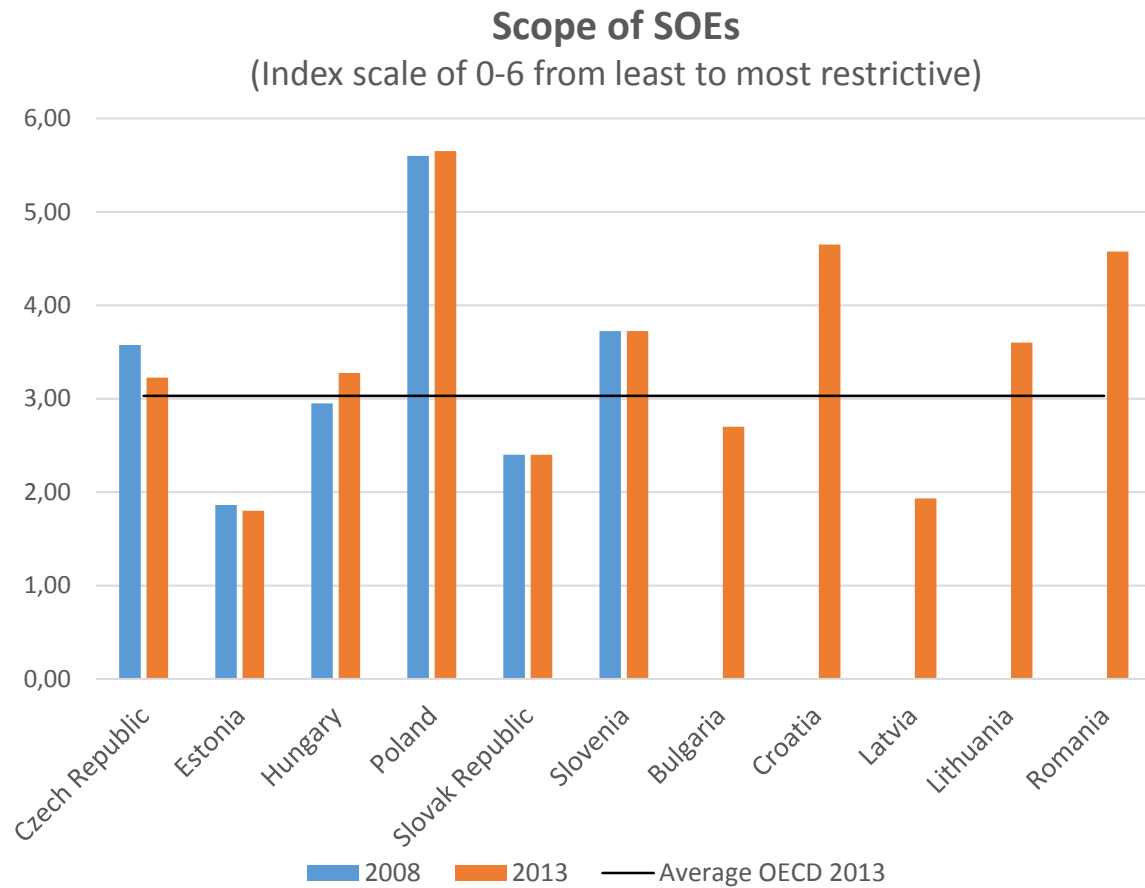
Some New EU member state still have a large government influence in firms' operations.



Source: OECD PMR 2013 database

- Overall, the pervasiveness of state control decreased in the average OECD country. However, some New EU member states still have a large government influence in firms' operations (particularly **Poland, Romania, Bulgaria and Croatia**)

By the same token, SOE scope and government involvement in network sectors is also higher than average OECD country



Source: OECD PMR 2013 database

Scope of state-owned enterprises (SOEs): pervasiveness of state ownership across 30 business sectors measured as the share of sectors in which the state controls at least one firm

Government involvement in network sectors: government stakes in the largest firms in 6 network sectors (electricity, gas, rail transport, air transport, postal services and telecommunication)

In practice, SOEs are likely to have competitive advantages over their private-competitors

- Such advantages are not necessarily based on better performance, superior efficiency, better technology or superior management skills
 - Direct subsidies
 - Concessionary financing and guarantees
 - Other preferential treatment by government (for instance, exemptions from antitrust enforcement, preference in public procurement, etc)
- Can distort competition in the market; impact on competitive neutrality
- **Potential negative impact on allocative efficiency: less productive firms commanding larger shares of output, overall productivity hampered by inefficient allocation of resources**
- **On the other hand, SOEs presence can be justified to address particular market failures.**
 - What is the net effect?

Three questions, two papers

Questions

1. How SOEs performance compare with private owned firms?
2. In which extent the presence of SOEs affect productivity/allocative efficiency?

1. Does ownership affect firm economic performance in network sectors (where, in principle, the presence of SOEs could be justified)?

Papers

Canton and Pontuch (2015) **“Performance of state owned enterprises in EU’s New Member States”**

Brons and Tomasi (2015) **“Firm Ownership structure and financial performance: an empirical assessment in the energy and rail sectors”**

“Performance of state owned enterprises in EU’s New Member States”

- Main conclusions:
 1. Productivity and profitability of SOEs tend to be lower than that of private firms across sectors, specially within manufacturing sectors
 2. This performance gap became smaller during the crisis
 3. Sectors with larger share of workers employed by SOE tend to have lower allocative efficiency

“Performance of state owned enterprises in EU’s New Member States”

- Comments

- 1. Different levels of government stakes might imply different governance structures => (potentially) distinct implications for firm performance**

- Firms are defined as SOEs whenever public sector holds at least 20% of the shares.
- Can we try different dummies for different levels of government stakes (majority/minority SOEs) ?
- Can we test SOE variable as % of government shares instead of dummies (SOEs/non SOEs)?
 - This way we can test whether there is a discontinuity of the negative effect of SOE ownership on firm performance

- 2. Welfare interpretations from results are essentially different depending on the productivity measure used. For instance, how privatization impacts sales per input or output per input are two different questions with different policy implications**

- How productivity (TFP) is measured? In terms of *revenue*-inputs ratio (TFPR) or *output*-inputs ratio (TFPQ)?

“Firm Ownership structure and financial performance: an empirical assessment in the energy and rail sectors”

- Main conclusions
 - No one-to-one relation between ownership structure and financial results
 1. For network sectors: in half of the subsectors in energy and railways markets, majority-owned SOEs perform worse than private companies in terms of profitability and efficiency
 2. Minority-owned SOEs display results essentially equal to private sector competitors
 3. SOE have higher staff costs, higher investment rates and higher equity-to-assets ratio

“Firm Ownership structure and financial performance: an empirical assessment in the energy and rail sectors”

- Comments

1. When assessing performance of SOEs in network industries it is important to analyze also the impacts in terms of **prices, quality and availability of goods/services** that are essential inputs for (private sector) business.
 - Can we test these type of indicators?
2. **Staff costs need to be controlled by (physical) output.**
 - Can we compute unit labor cost? When it is expressed in growth rate, we can decompose unit labor cost into the contributions from wages and productivity
3. It is important to compare firm performance along the entire distribution, not only at average level. **Firm ownership might not make a difference among fast growing companies**
 - Can we estimate quantile regression?

Overall conclusions

- Performance and behavior of SOEs matter for aggregate productivity (economic growth and job creation). Two channels:
 - Affecting competition neutrality: discouraging operation of private firms and diverting the allocation of resources across economic activities
 - SOE low productivity and efficiency can have negative effects on prices, quality and availability of goods and services that are essential inputs
- Analyzing SOE performance is only “one side of the coin”.
 - The “net effect” of SOEs must take into account the quality/prices of services/goods provided
 - **Is it really firm ownership that matters?**
 - Private ownership alone does not generate efficiency gains unless market power conditions are not present
 - **Or is it lack of strong enforcement of competition policy?**

Thank you

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