

Policies for equitable growth: New data and new approaches

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national treasury

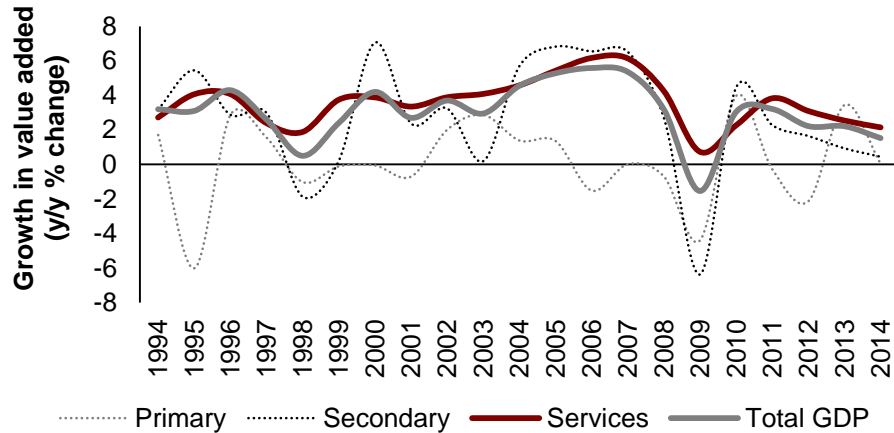
Department:
National Treasury
REPUBLIC OF SOUTH AFRICA

New data permit new approaches

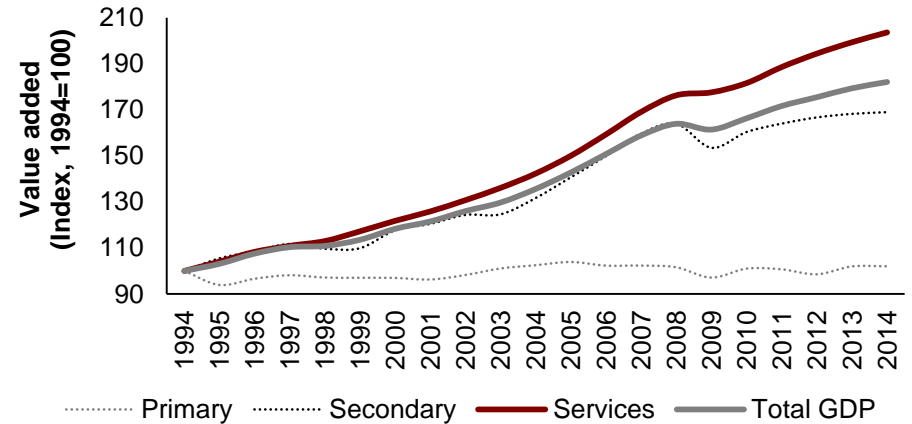
- **New baseline social accounting matrix (SAM) for 2012 and a time series of real and nominal SAMs from 1993-2013**
 - The time series is new in the South African context (and rare internationally)
 - Allows for detailed study of structural change in South Africa and rigorous evaluation of productivity growth rates by sector
- **South African Revenue Service and National Treasury created firm- and worker-level panel datasets from tax administrative records**
 - Permit analysis at the level of the firm, rather than sector
 - Highlights high degree of heterogeneity across firms
- **Post-Apartheid Labour Market Series**
 - Microdata from 54 household surveys conducted by Statistics South Africa between 1994 and 2015 and 1993 Project for Statistics on Living Standards and Development
 - Allows for analysis of evolution in income and inequality over time

South Africa has a revealed comparative advantage in services exports

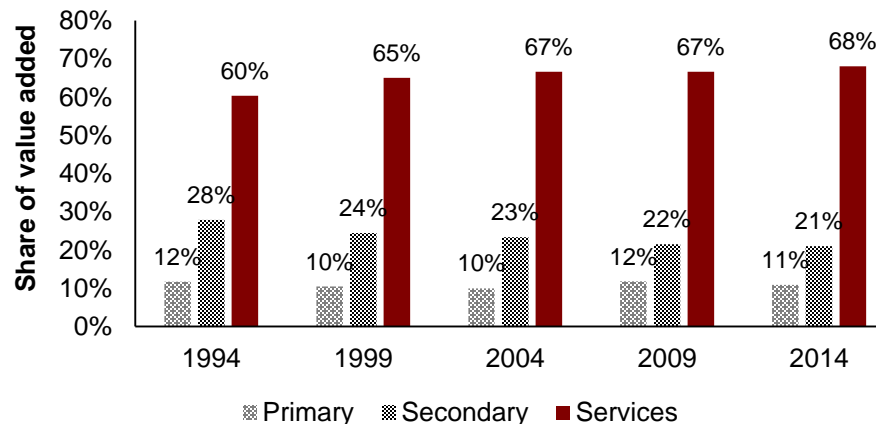
Services sector grows faster than GDP...



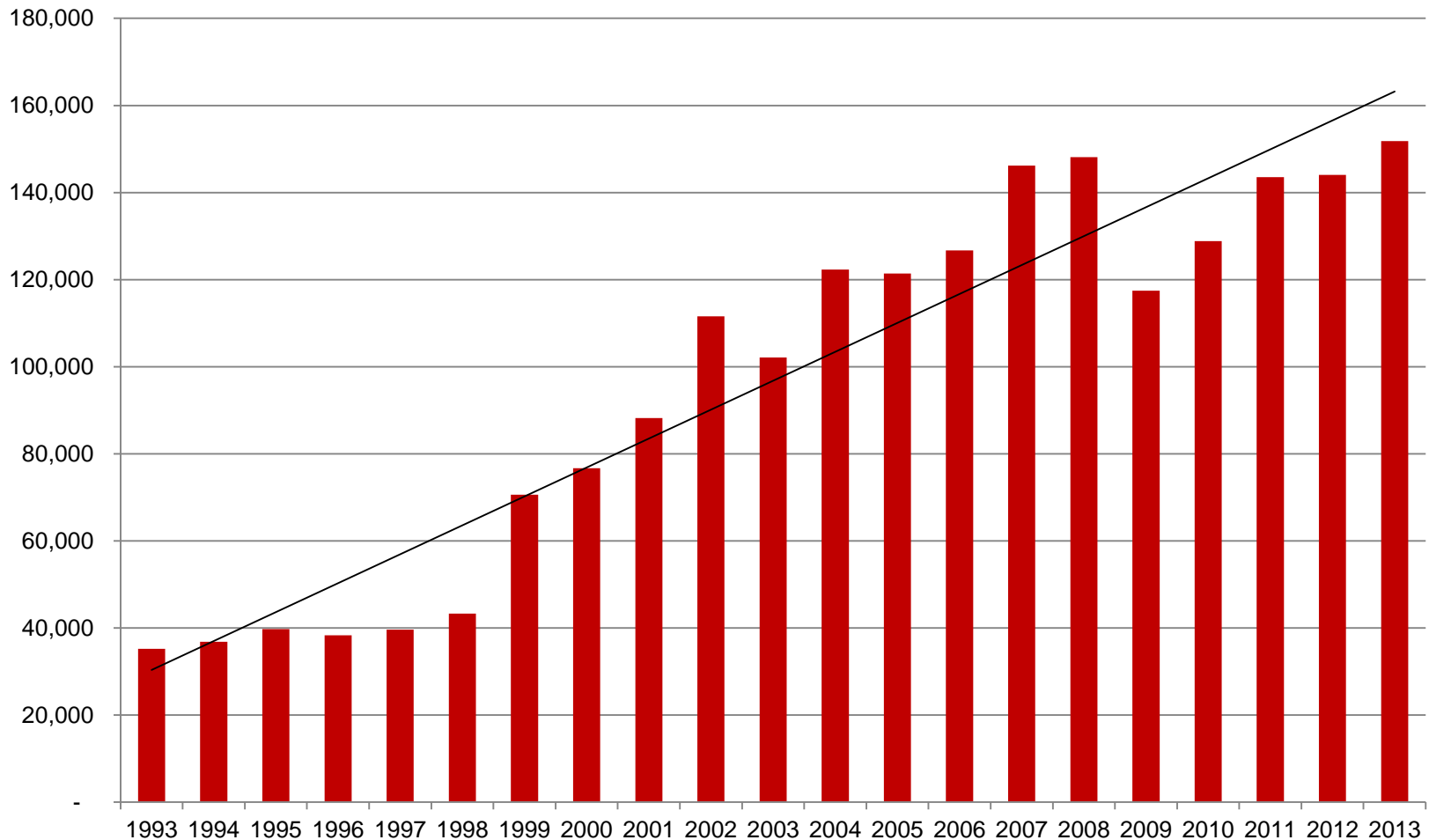
... making it the main driver of output...



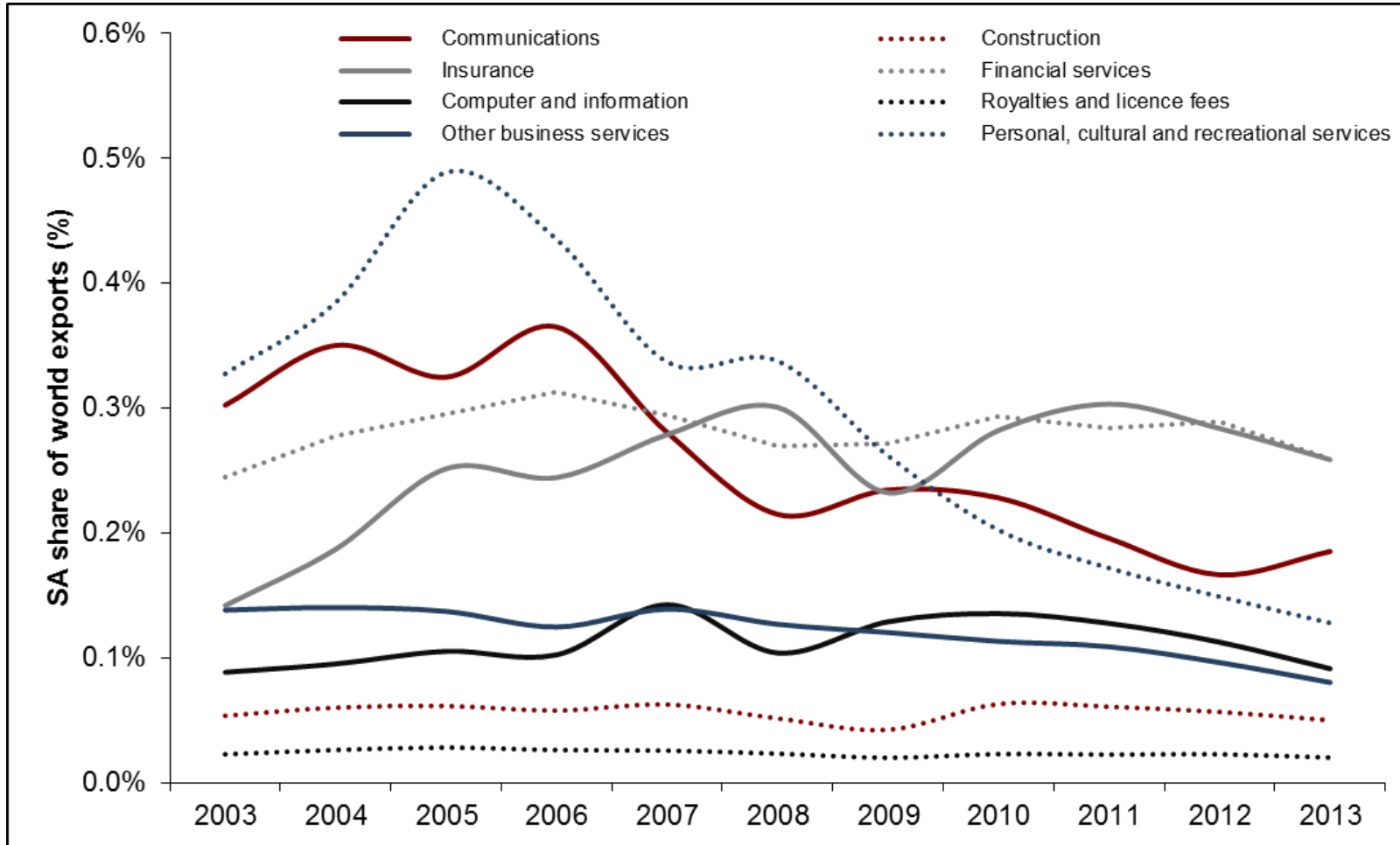
... accounting for 68% of value added



Volume of services exports more than quadrupled from 1993 to 2013



SA share of global service exports generally falling



Source: UNCTAD

Sources of Economy-wide Productivity Growth: Standard Sectoral Approach

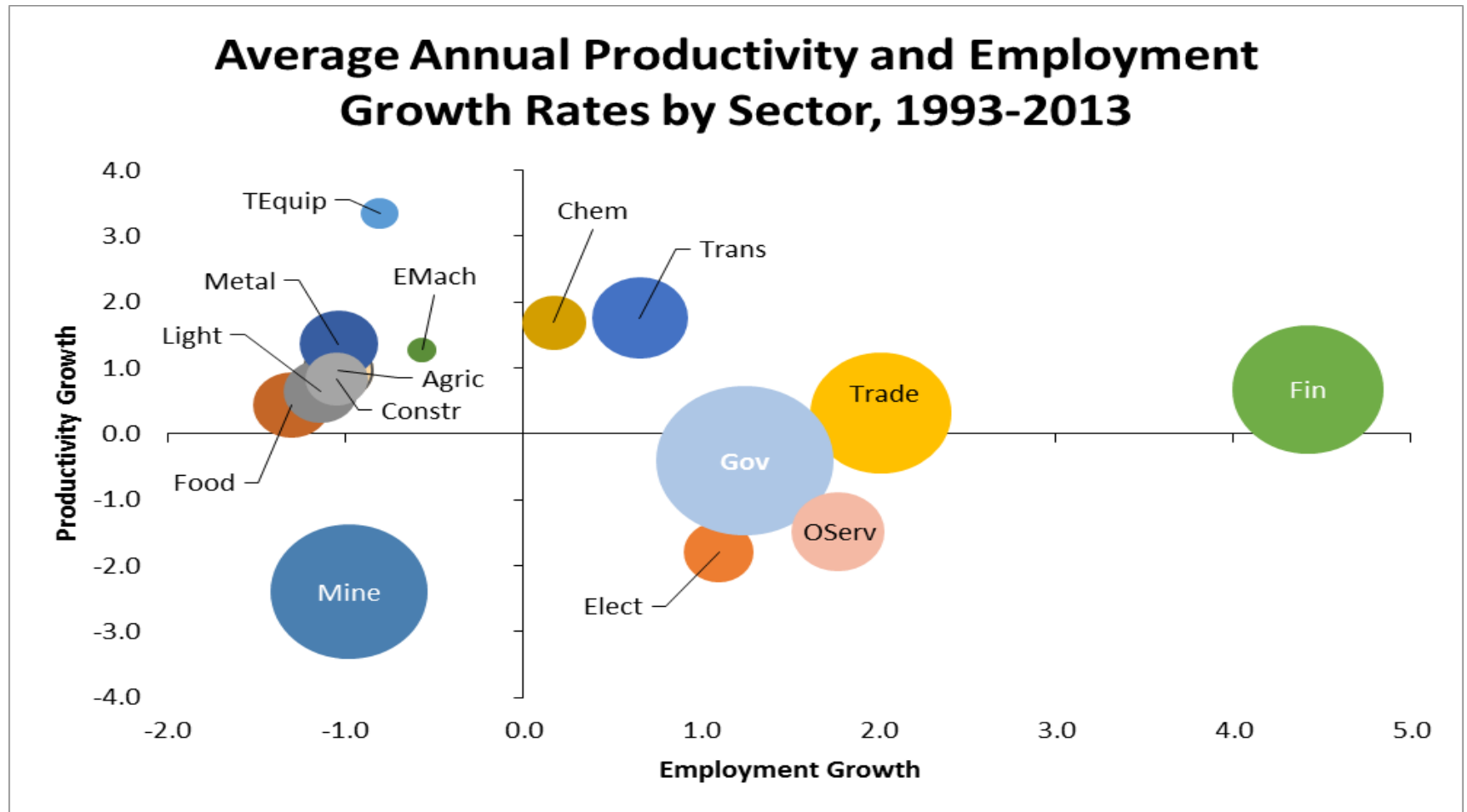
- Economy-wide productivity is the sum of productivity in sectors, weighted by their shares in value added
- Economy-wide productivity rises because
 - Sectors become more productive
 - Resources are reallocated to more productive sectors
- Develop “snapshots” (social accounting matrices) of the economy from 1993-2013 in real and nominal terms

A Growth and Productivity Matrix

- Sectors can be classified by their employment and productivity growth performances

	Employment Growth	
Productivity Growth		
	Low	High
	High	(Low, High)
Low	(Low, Low)	(High, Low)

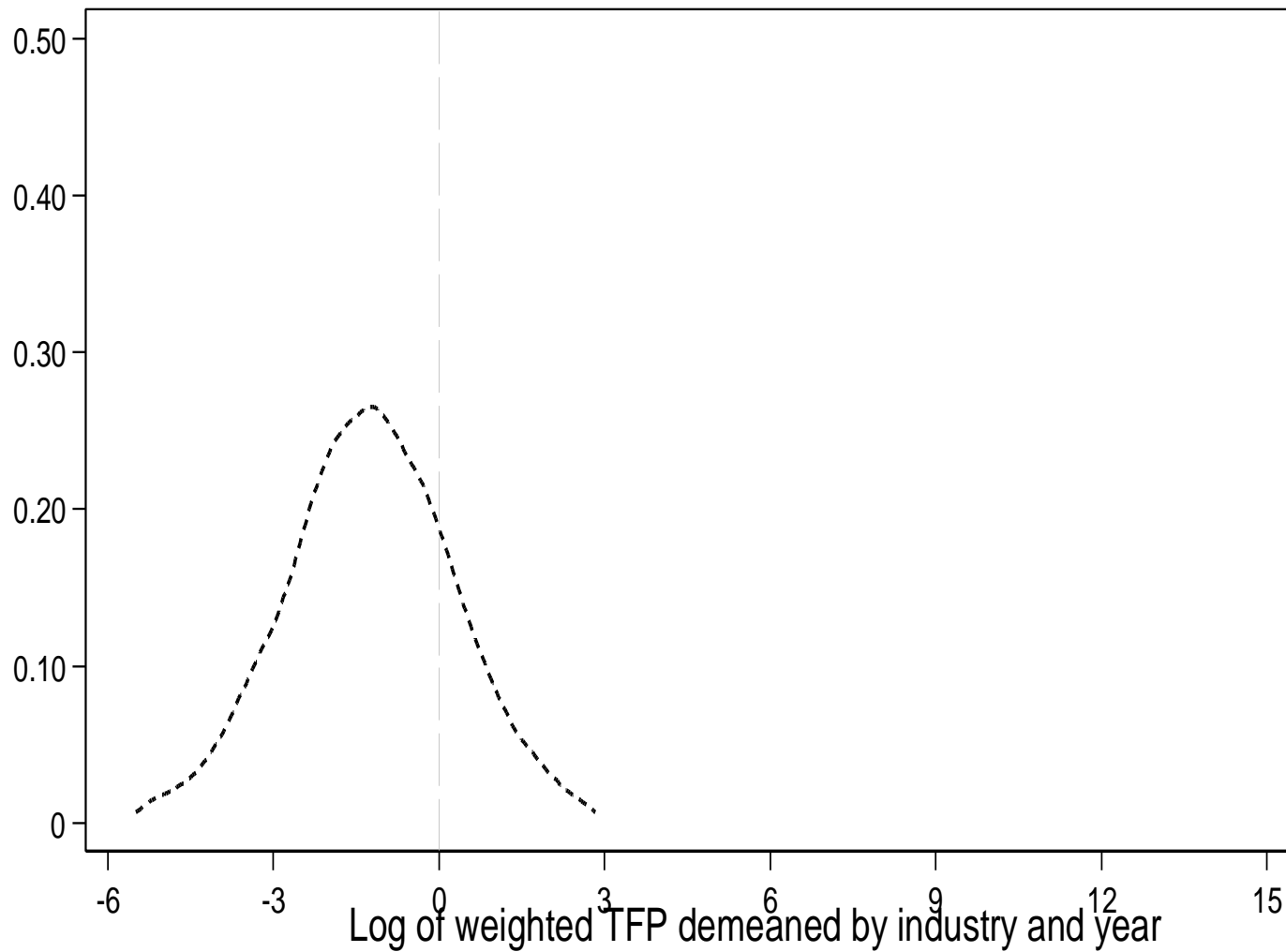
Sectoral employment-productivity performance 1993-2013



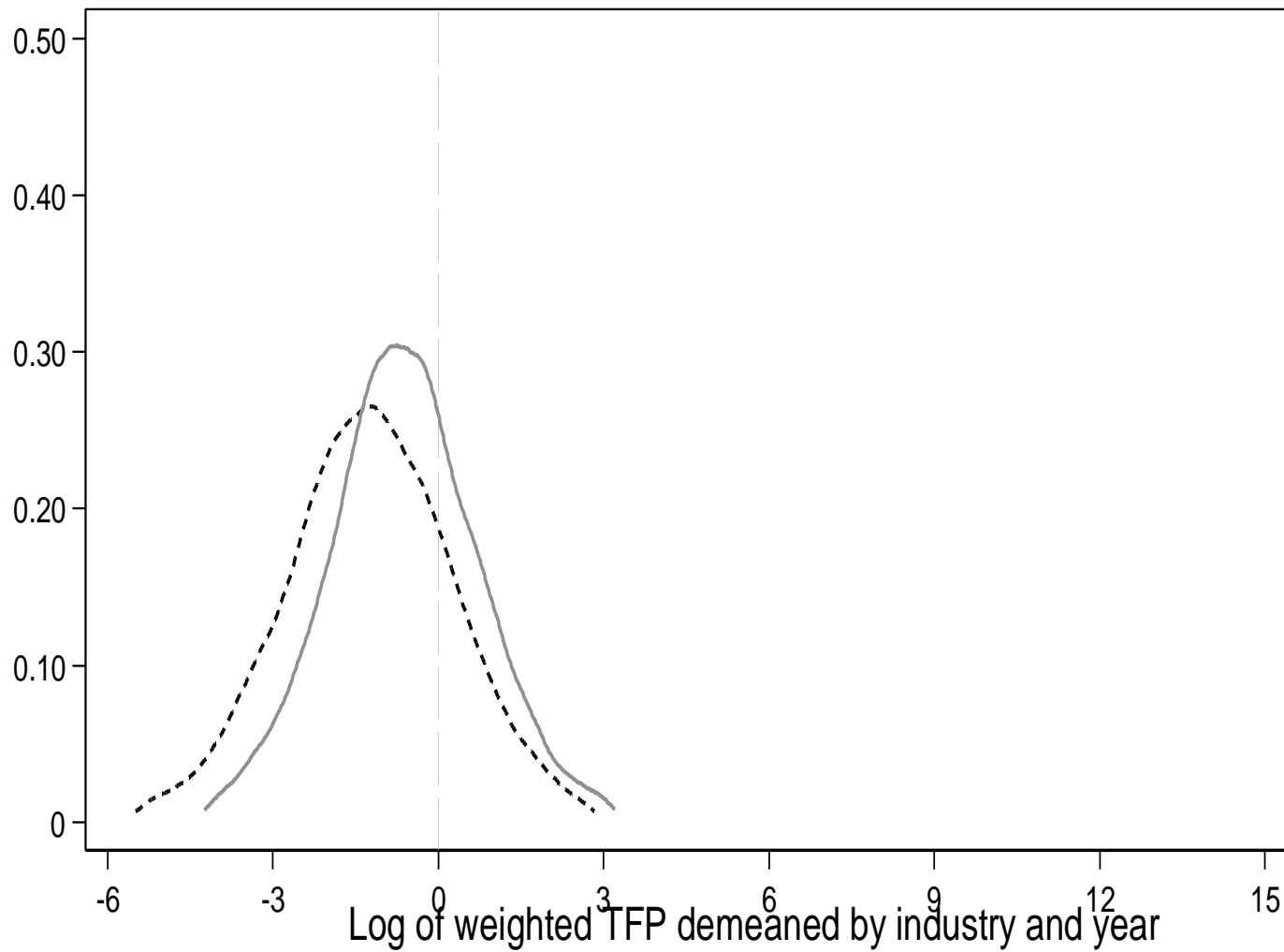
Source: Arndt, Davies, and Gabriel (2016)

Understanding heterogeneity in productivity across firms

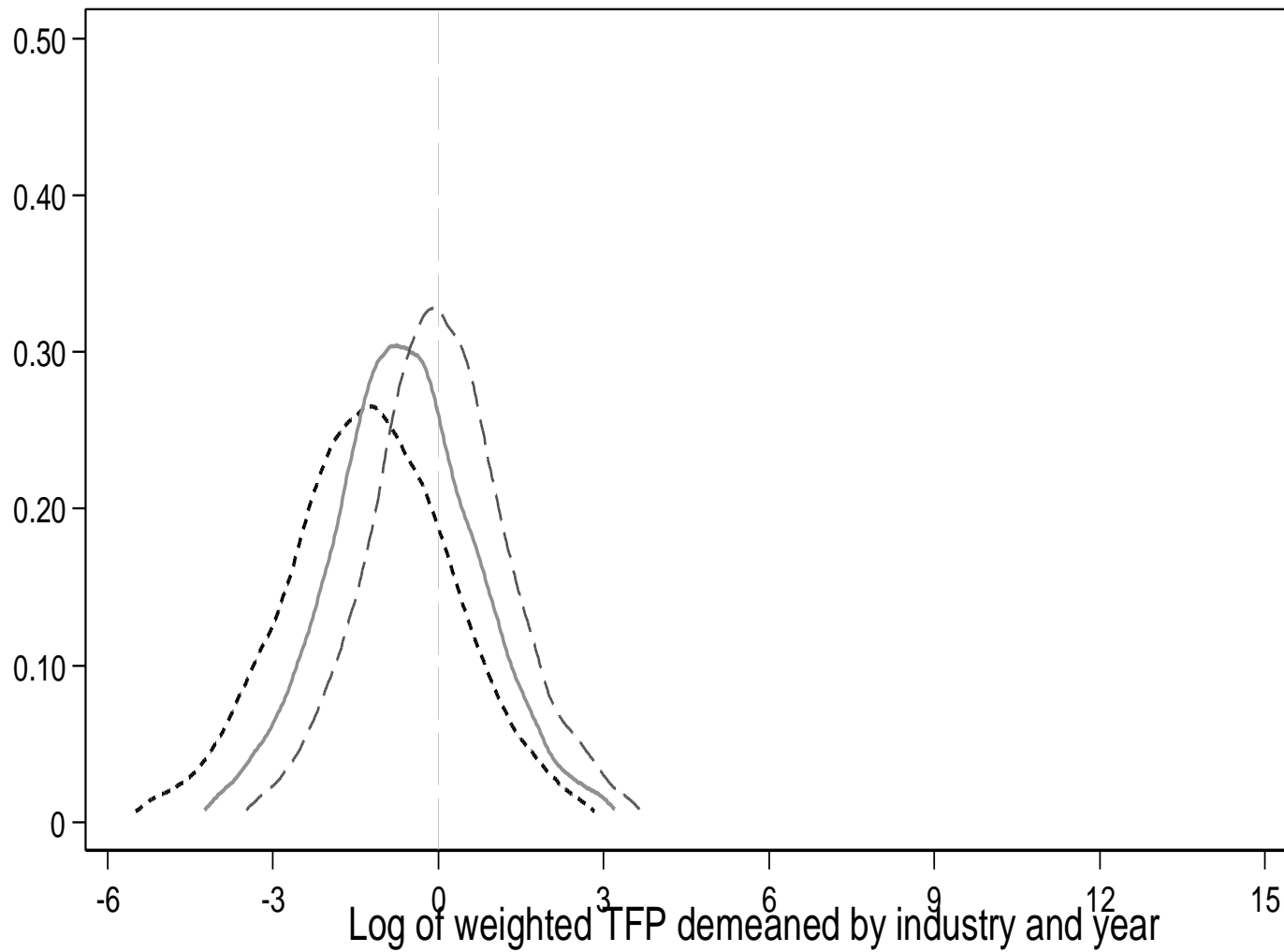
- Total factor productivity (TFP) grows through technology adoption, innovations or business practices that lead to efficiency improvements
- Factors that stifle productivity growth therefore include:
 - those that prevent firms from becoming more efficient
 - frictions that distort the allocation of resources across firms and prevent the flow of resources from the least productive to the most productive firms
- Understanding productivity at the firm level is therefore crucial to identifying the drivers and constraints to productivity growth in an economy – **requires use of firm-level data**



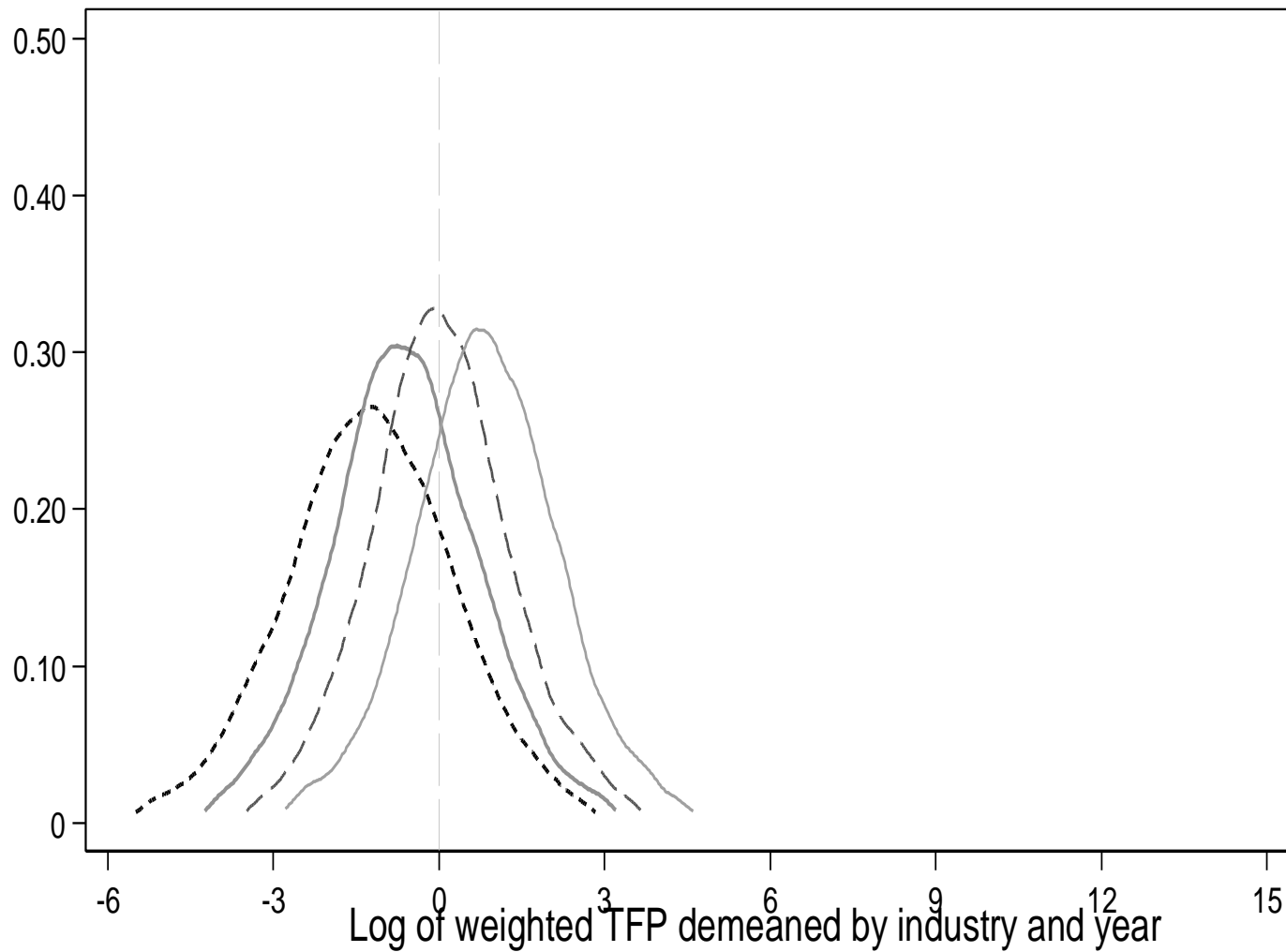
-----	1-4 (16,441)	—————	5-9 (15,415)
- - - - -	10-19 (15,357)	—————	20-49 (14,047)
- - - - -	50-99 (4686)	—————	100-249 (2324)
— · — · —	250-1000 (745)	—————	1000+ (92)



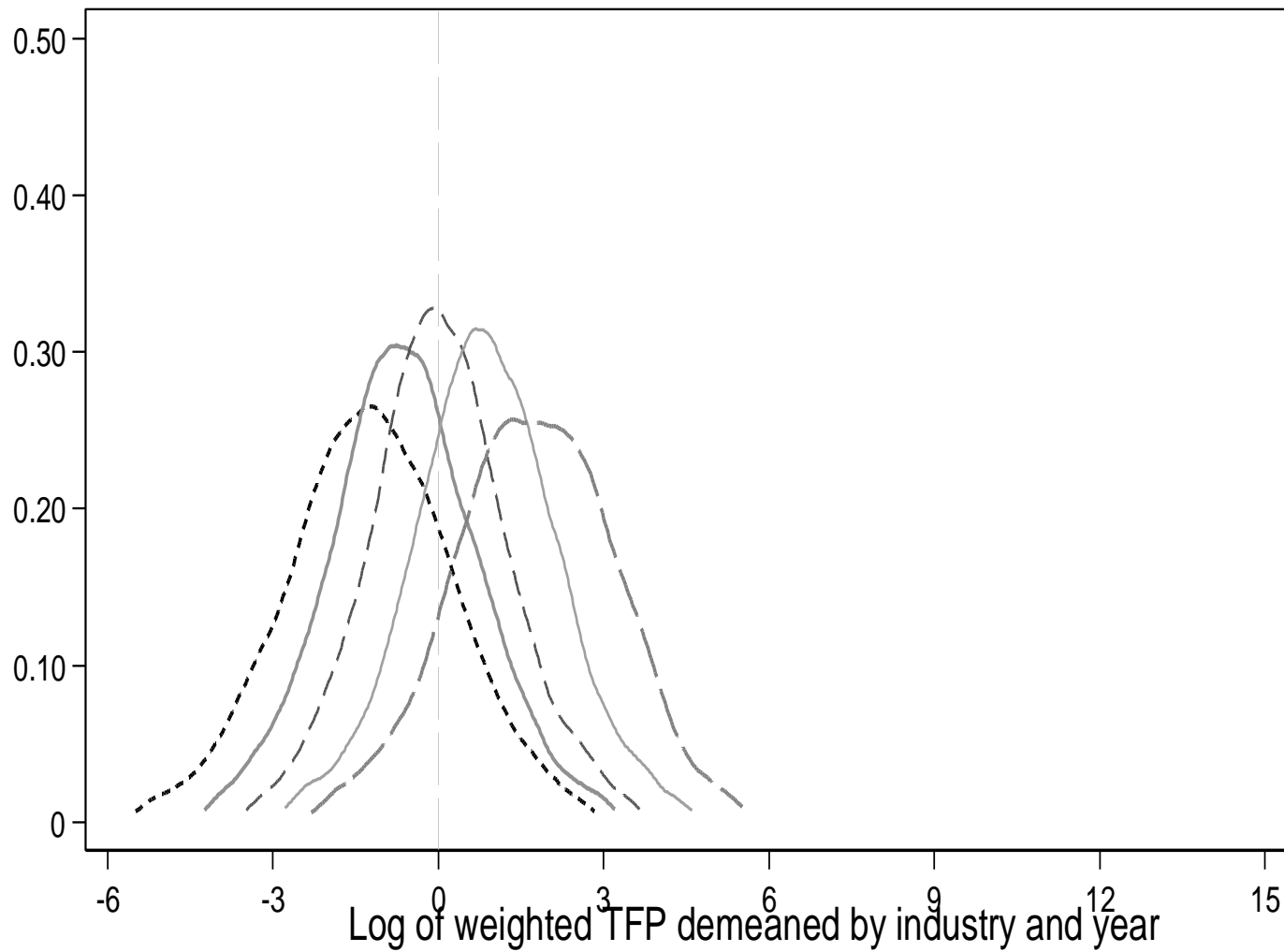
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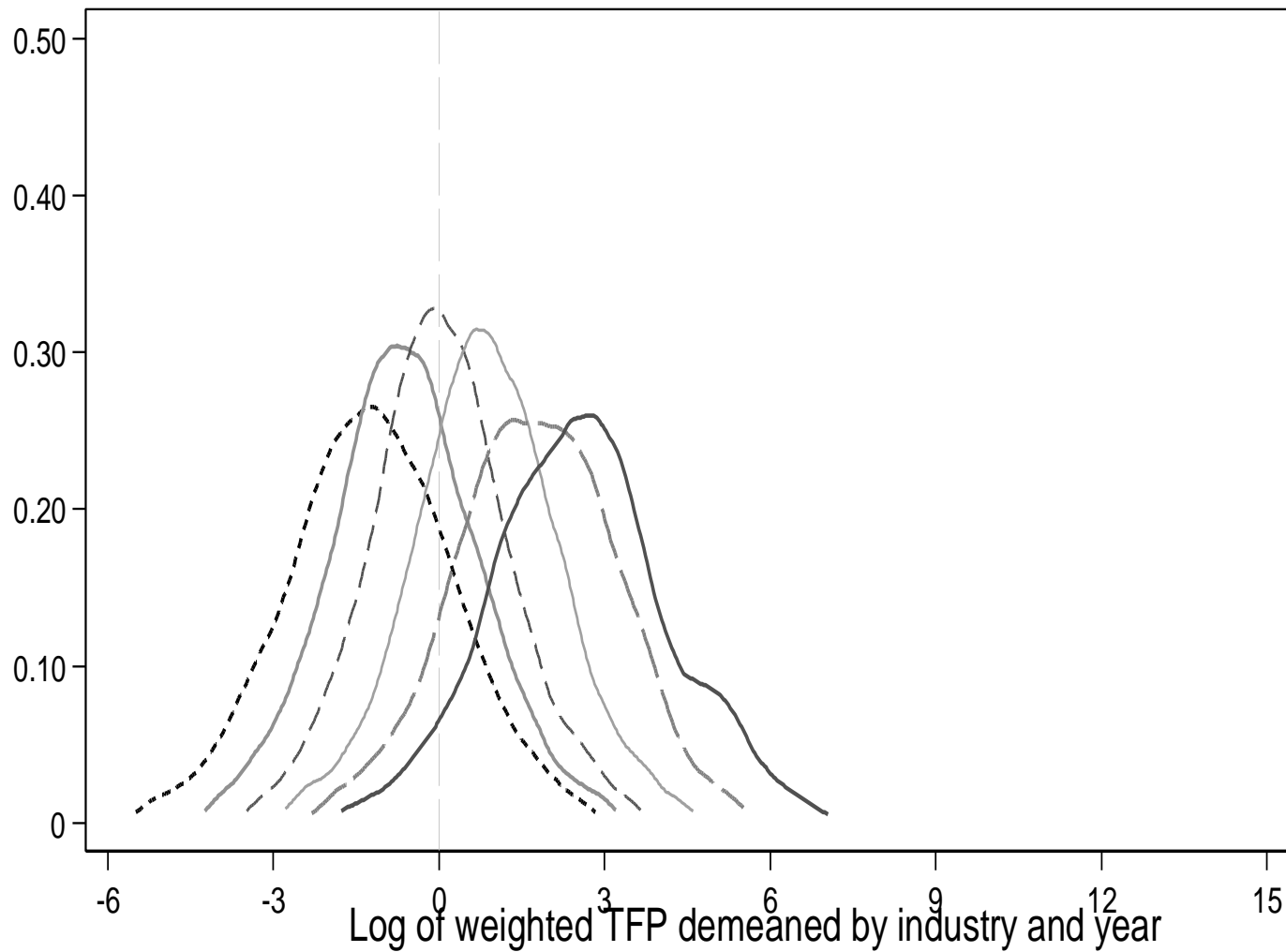
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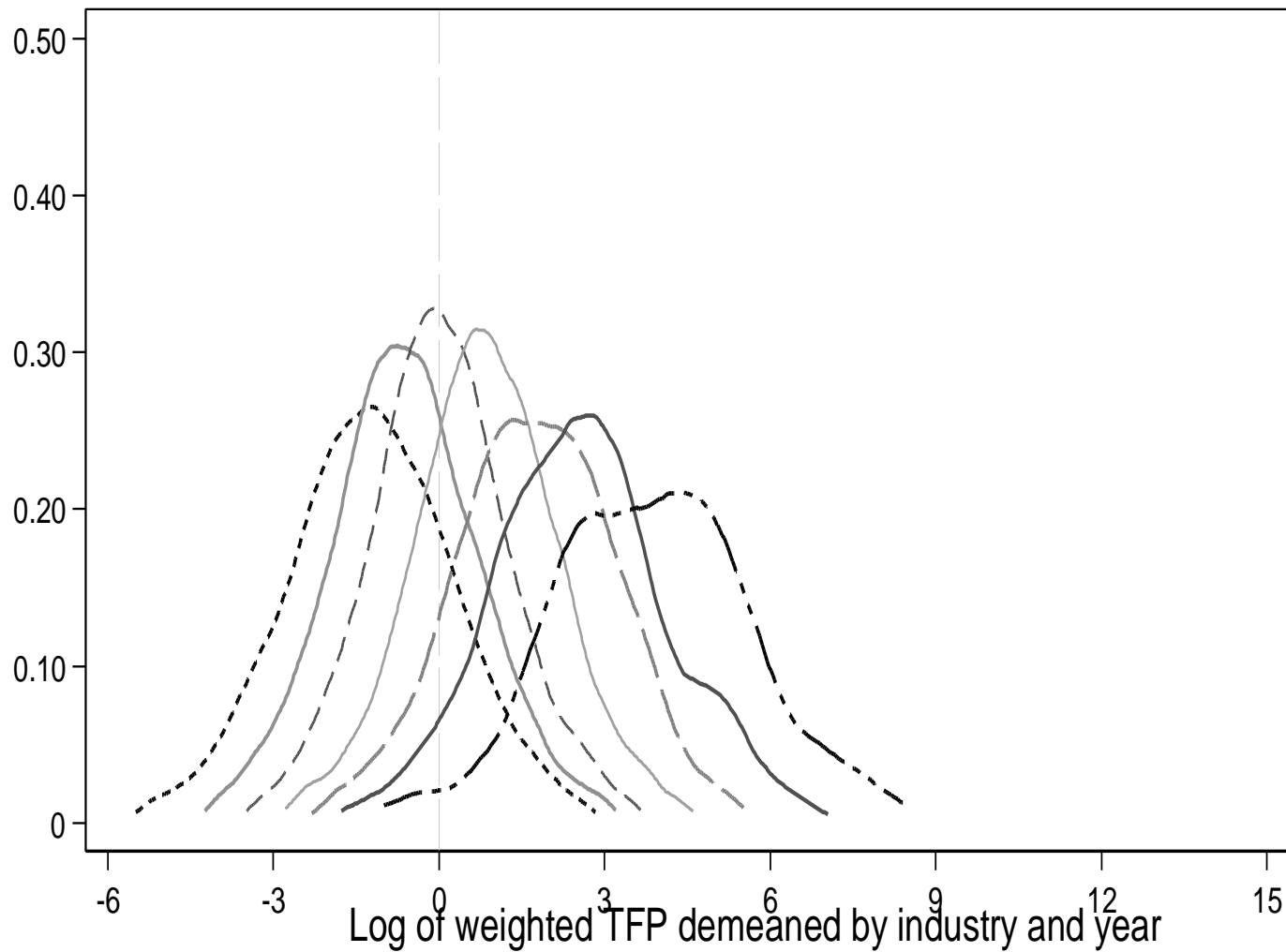
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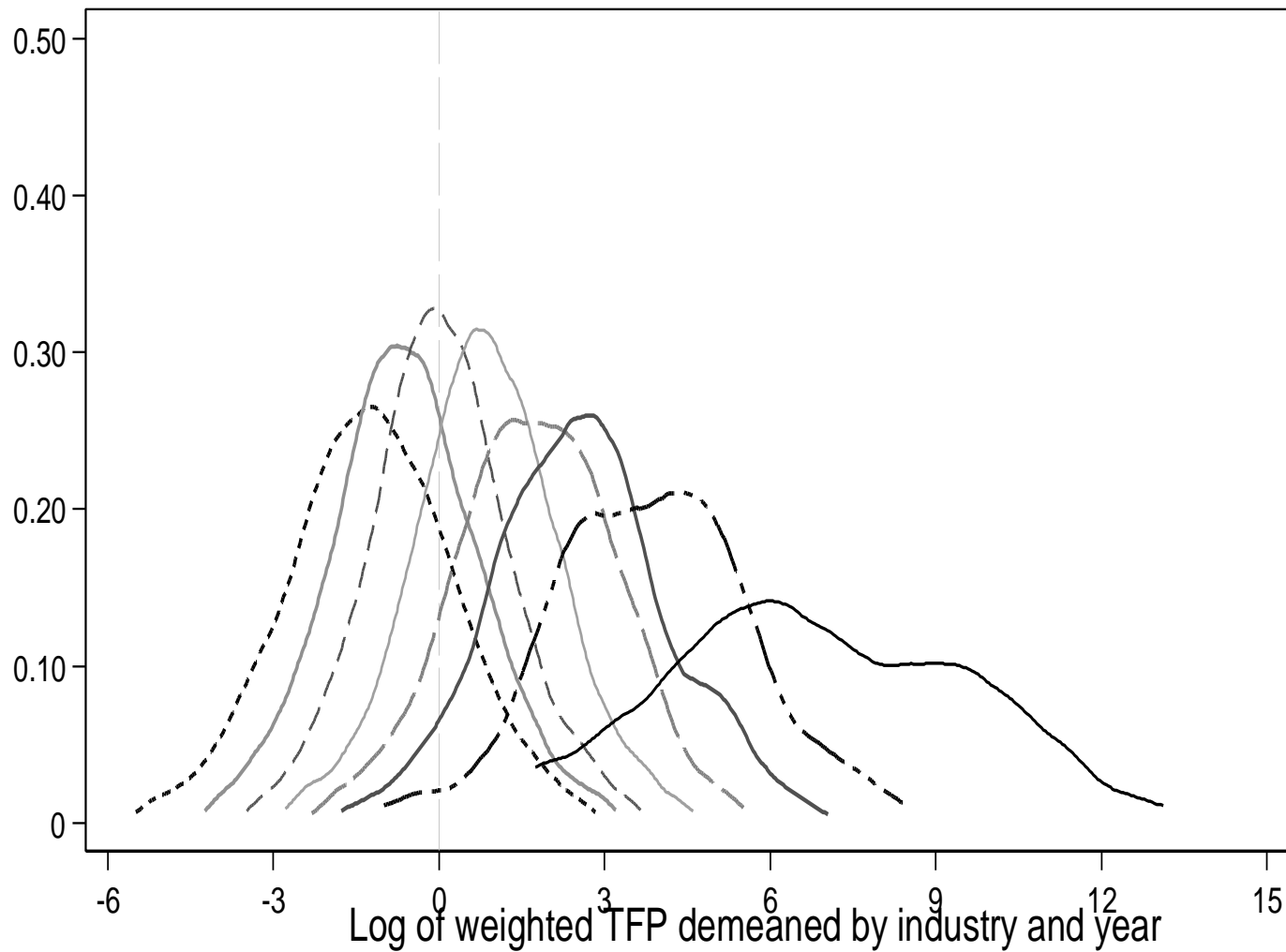
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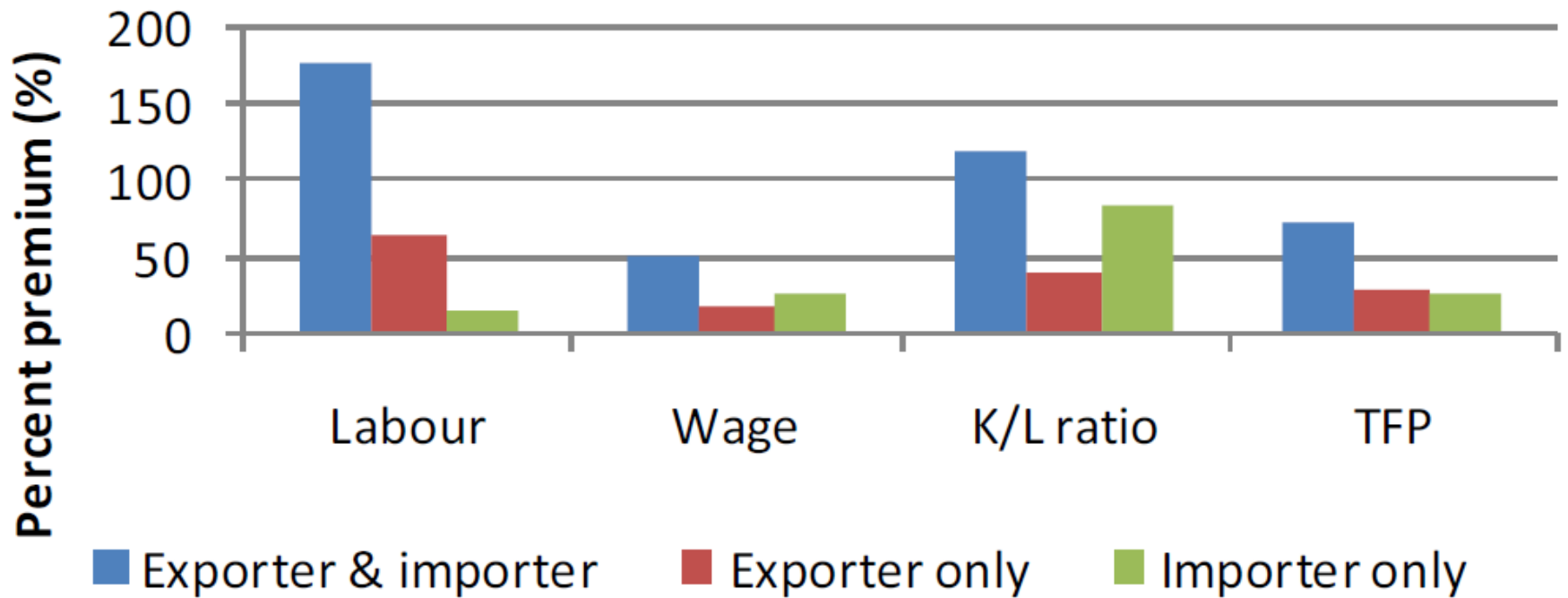


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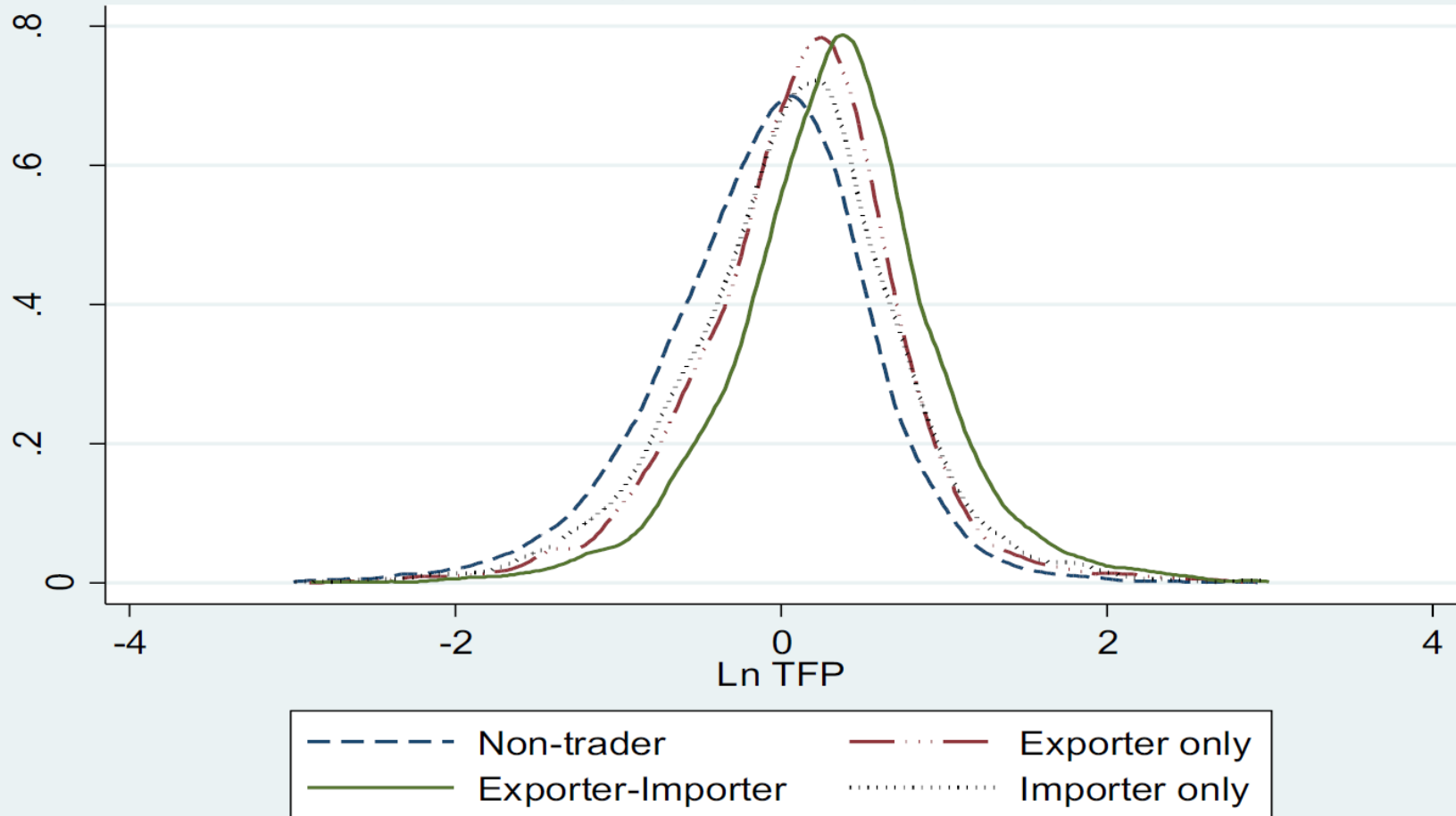
Traders employ more labour, pay higher wages and are more productive



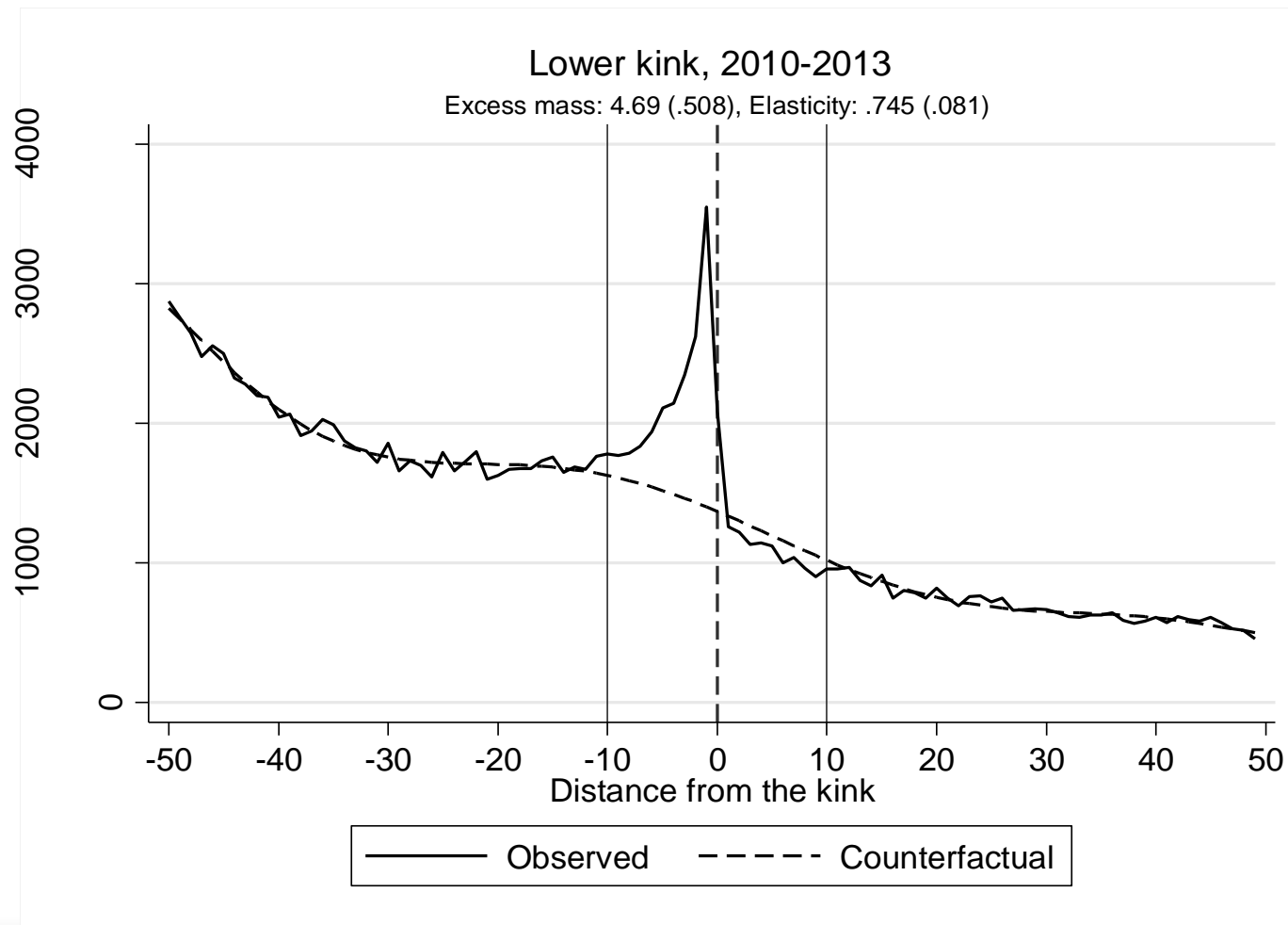
Source: Edwards, Sundaram, and Sanfilippo (2016)

Importers of intermediate inputs are 10% to 46% more productive than other firms

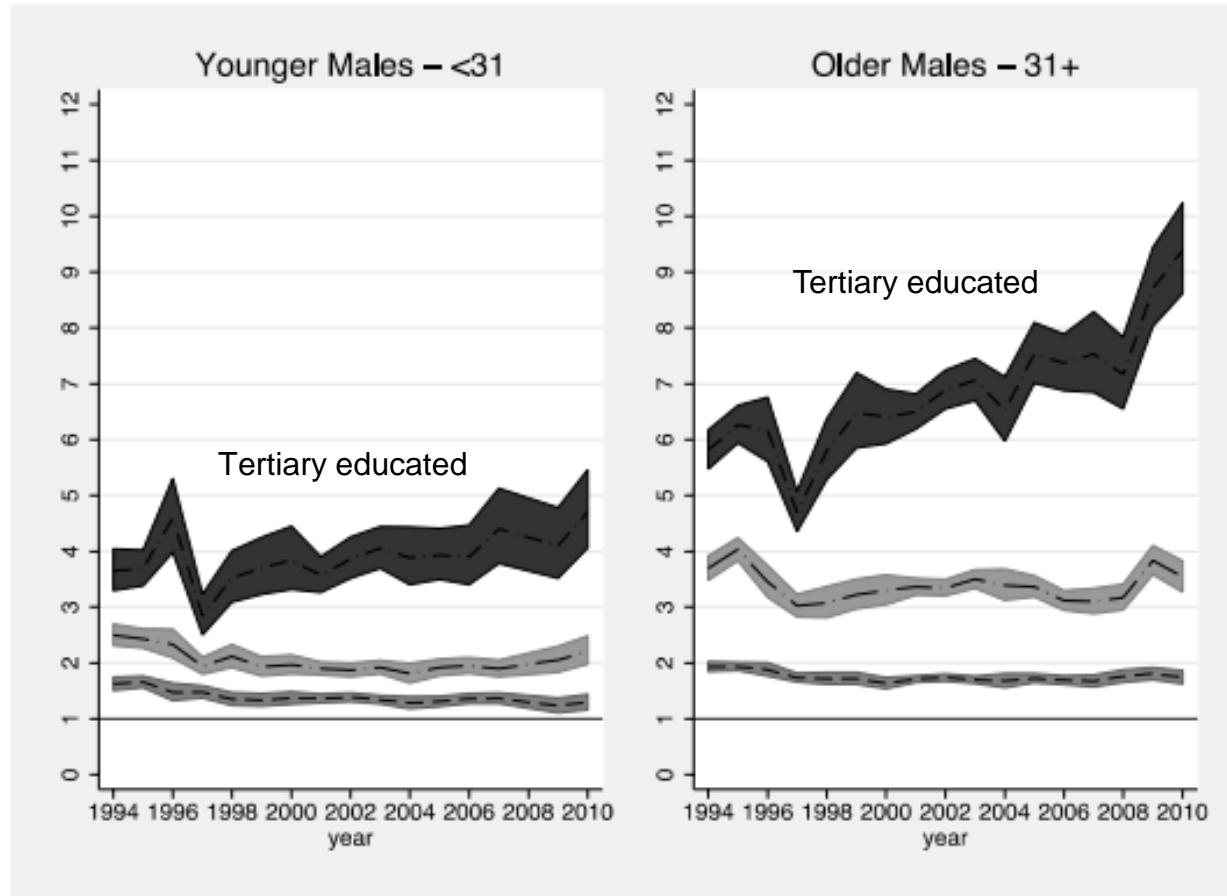
Manufacturing firm TFP by trading status



Firms respond to tax incentives: kinks in the tax schedule

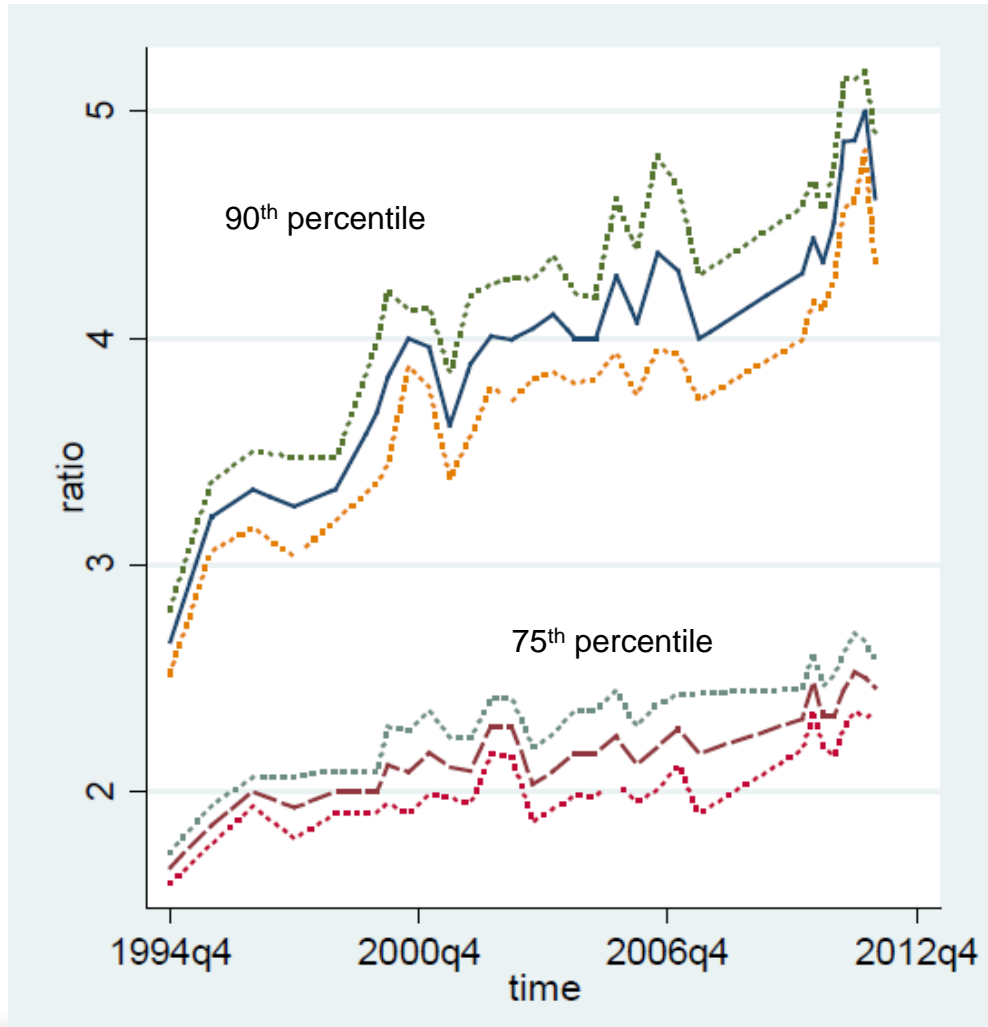


Economic growth appears to be powerfully skills constrained (wage premium by age)



Note: The figure presents the converted wage regression coefficients (and 95% confidence bands) on incomplete secondary (bottom line), matric (middle line) and tertiary (top line) relative to primary or less from a linear regression of log earnings, controlling for a quadratic in age and coloured, Indian and white indicators. Separate regression results presented for young respondents (15-30) and older respondents (31-64). Sample restricted to males. Converted coefficients = $\exp(b)$. All regressions weighted using the cross entropy weights.

Economic growth appears to be powerfully skills constrained (by earnings percentile)



Policy implications

- 1. South Africa has a revealed comparative advantage in services exports**
- 2. Access to high quality imported intermediate inputs is an important component of an export orientation**
- 3. Large, productive firms with existing links to international markets likely have the highest near term growth potential**
- 4. Economic growth in South Africa appears to be powerfully skills constrained**
- 5. Skills constraint is especially harmful to exporters**