

# Growing without changing: a tale of Egypt's weak productivity growth

Hanan Morsy, Lead Economist  
December 2014



**European Bank**  
for Reconstruction and Development

Motivation: Egypt's growth without change

Stylized facts

Decomposing labour productivity growth

Benchmarking Egypt's structural change performance

Counterfactual analysis: what if Egypt looked more like Turkey?

What explains structural change?

Policy recommendations: Igniting structural change in Egypt

Concluding remarks

# Motivation: Egypt's growth without change

- High economic growth in Egypt in the decade preceding the 2011 revolution
- But this growth was not accompanied by wider development:
  - Relatively poor productivity growth
  - Stagnating per capita income
  - Persistently high unemployment
- We aim to investigate:
  - 1) Sectoral pattern of (productivity) growth witnessed in Egypt 2000-10
  - 2) How this compares to successful international experiences of structural growth
  - 3) Determinants of structural change
  - 4) Barriers holding Egypt back from transforming the structure of its economy
- Implications for long-term economic performance and social stability

Motivation

**Stylized facts: Egypt's growth without change**

Decomposing labour productivity growth

Benchmarking Egypt's structural change performance

Counterfactual analysis: what if Egypt looked more like Turkey?

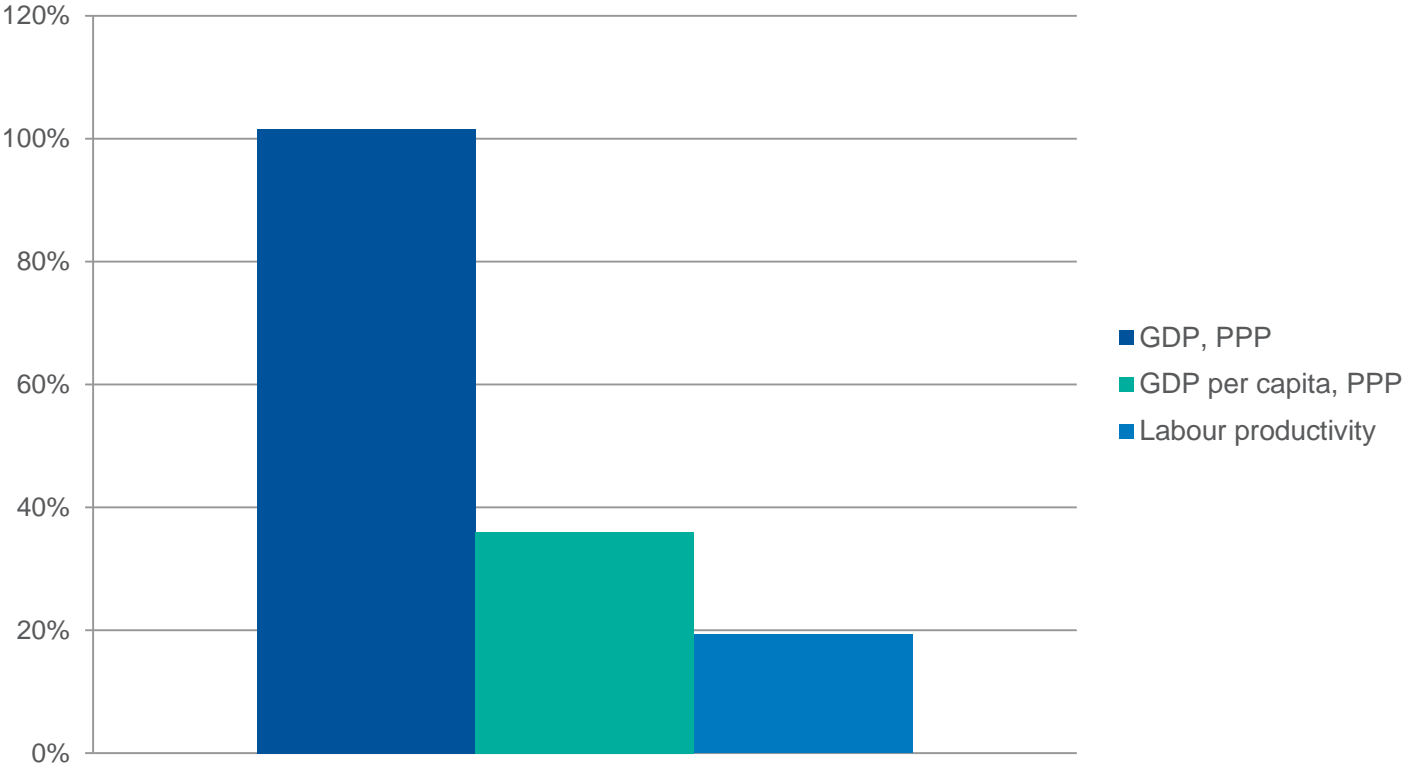
What explains structural change?

Policy recommendations: Igniting structural change in Egypt

Concluding remarks

# Stylized fact 1: High growth not matched by labour productivity...

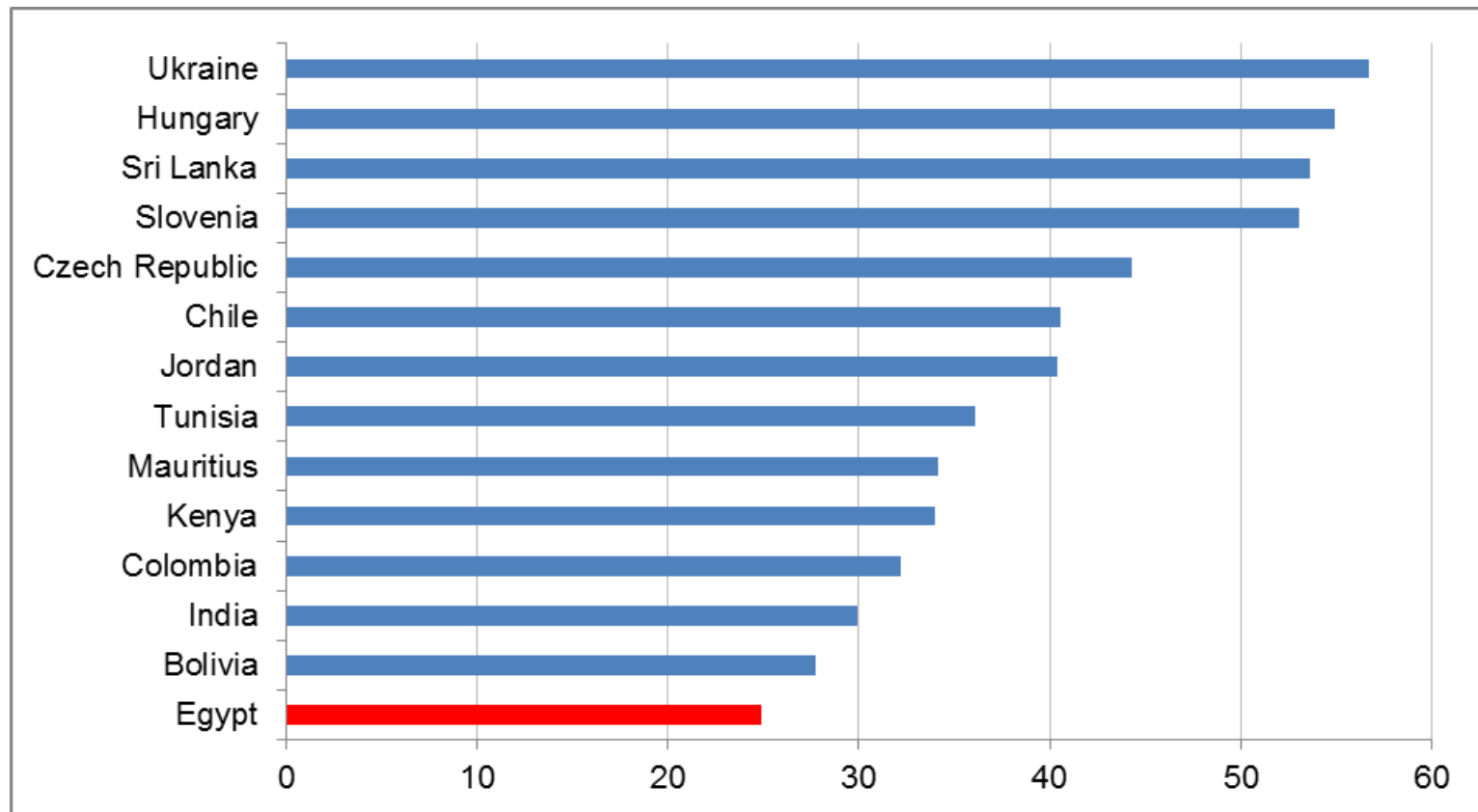
Cumulative growth, 2000-10 (%)



Source: Egypt Ministry of Planning, Egypt Labour Force Survey, CIA Factbook, World Bank

# ... contributing to a strikingly low and declining wage share of output

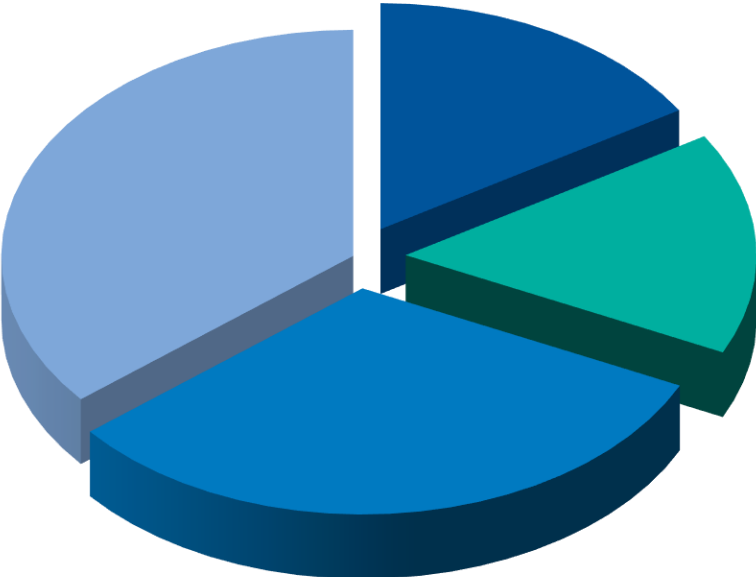
Unadjusted share of wages in GDP in selected countries (%), 2009



Source: International Labour Organization

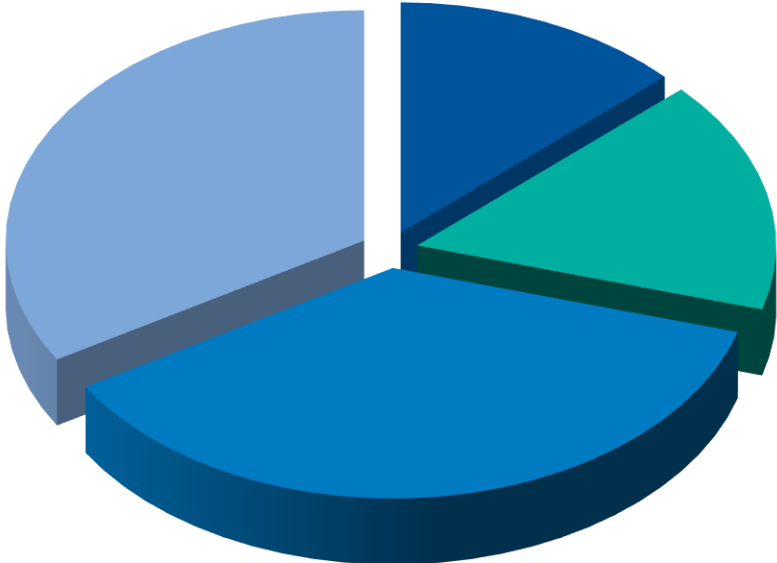
# Stylized fact 2: Output sectoral mix broadly unchanged over the decade

Sectoral distribution of real GDP, 2000



- Agriculture
- Public and Social Services
- Industry

Sectoral distribution of real GDP, 2010



- Agriculture
- Public and Social Services
- Industry

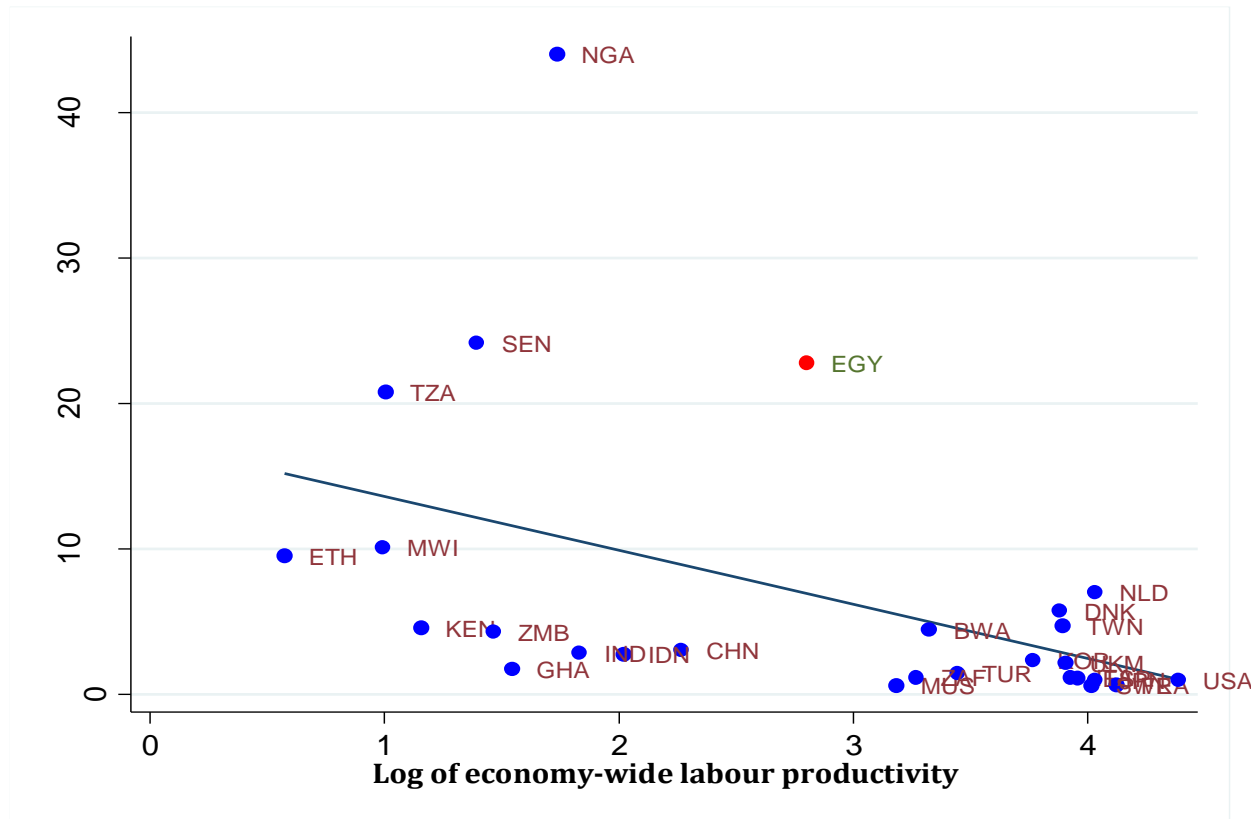
Source: Ministry of Planning and International Cooperation

# Stylized fact 3: Comparatively large variations in productivity across sectors



European Bank  
for Reconstruction and Development

Variation of productivity across sectors and economy-wide productivity



Source: Groningen Growth and Development Centre (GGDC) 10-Sector Database, World Input Output Database Socio-Economic Accounts (WIOD SEA), author's calculations



Motivation

Stylized facts: Egypt's growth without change

**Decomposing labour productivity growth**

Benchmarking Egypt's structural change performance

Counterfactual analysis: what if Egypt looked more like Turkey?

What explains structural change?

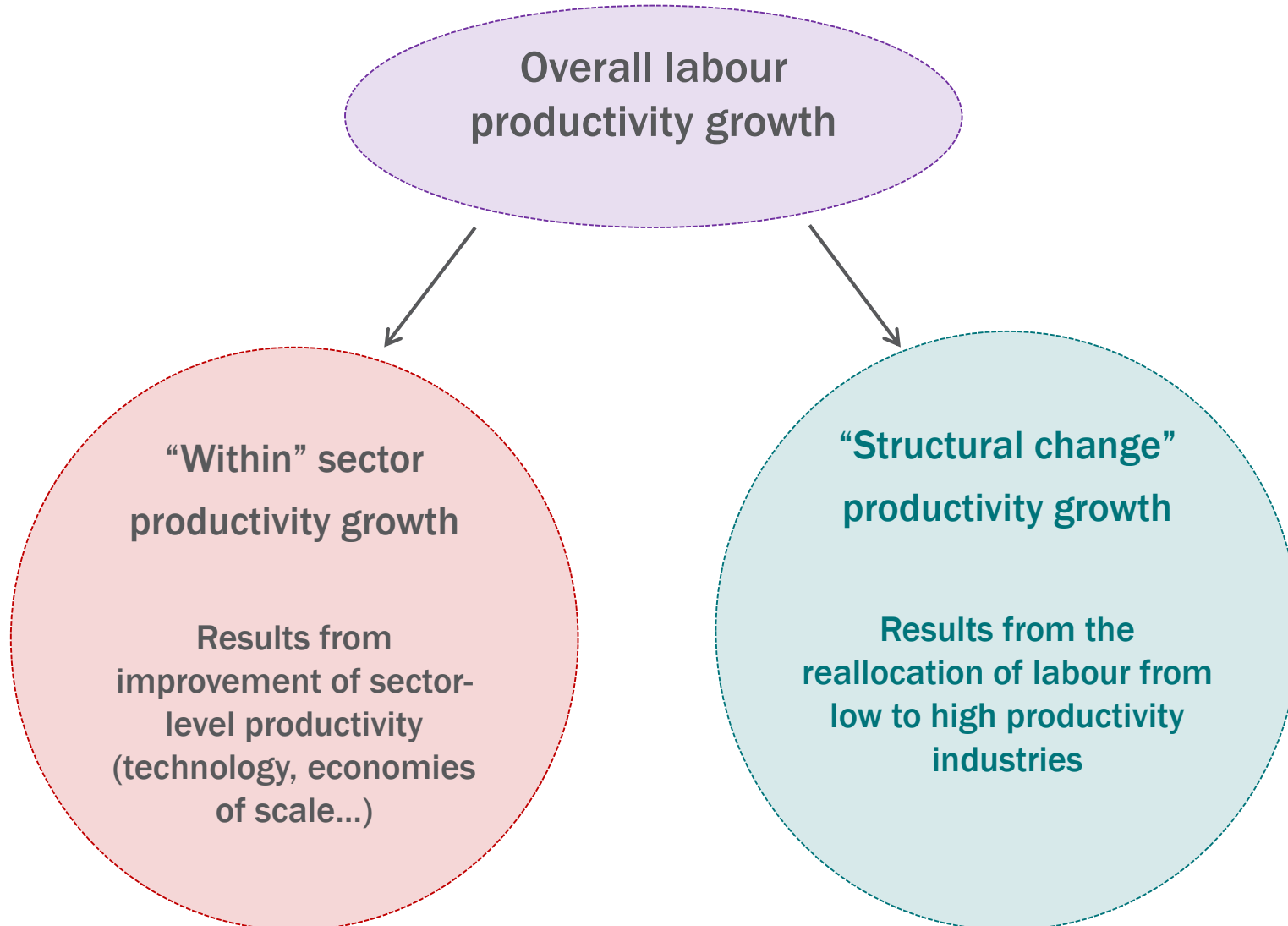
Policy recommendations: Igniting structural change in Egypt

Concluding remarks

# Decomposing labour productivity growth



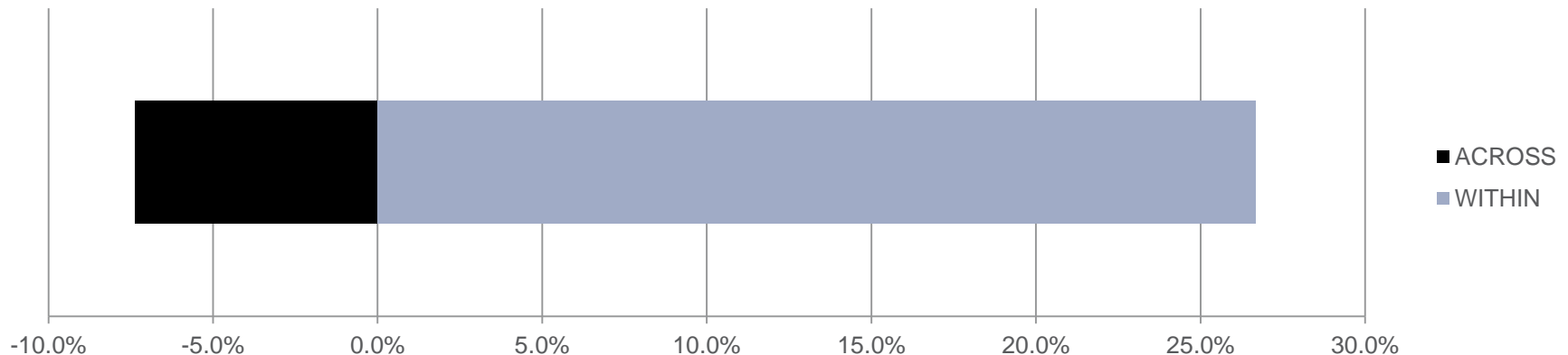
European Bank  
for Reconstruction and Development



# Applying this to Egypt (2000-2010) reveals negative structural change

- “Within” sector productivity growth was positive, thanks to the adoption of more efficient production technologies or forms of organization
- “Across” sector structural change was negative and reduced aggregate labour productivity growth

Decomposition of labour productivity growth in Egypt, 2000-10



Source: Ministry of Planning and International Cooperation, Egypt Labour Force Survey, author's calculations

Motivation

Stylized facts: Egypt's growth without change

Decomposing labour productivity growth

**Benchmarking Egypt's structural change performance**

Counterfactual analysis: what if Egypt looked more like Turkey?

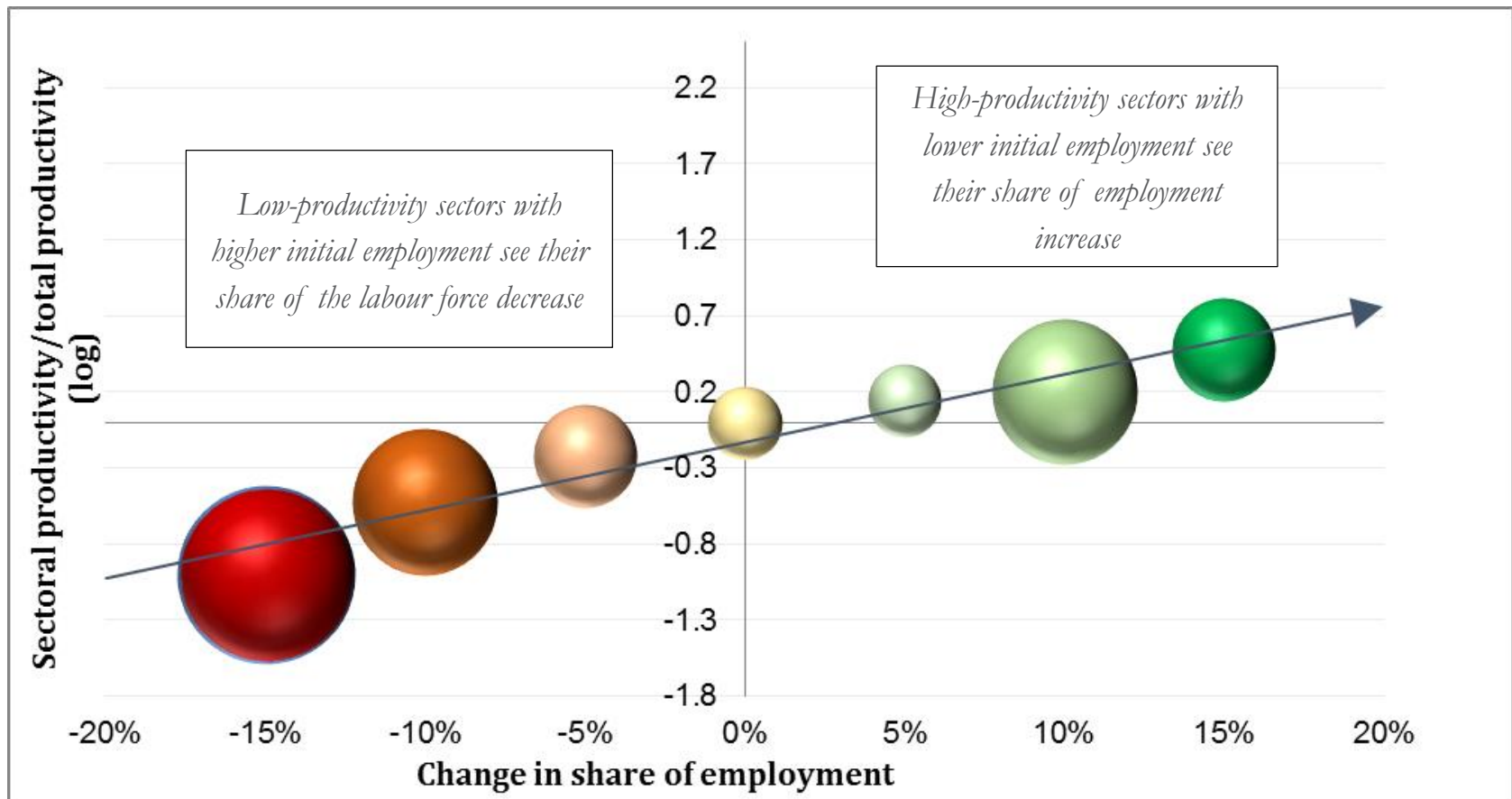
What explains structural change?

Policy recommendations: Igniting structural change in Egypt

Concluding remarks

# Benchmarking Egypt's structural labour productivity growth: the "ideal" picture

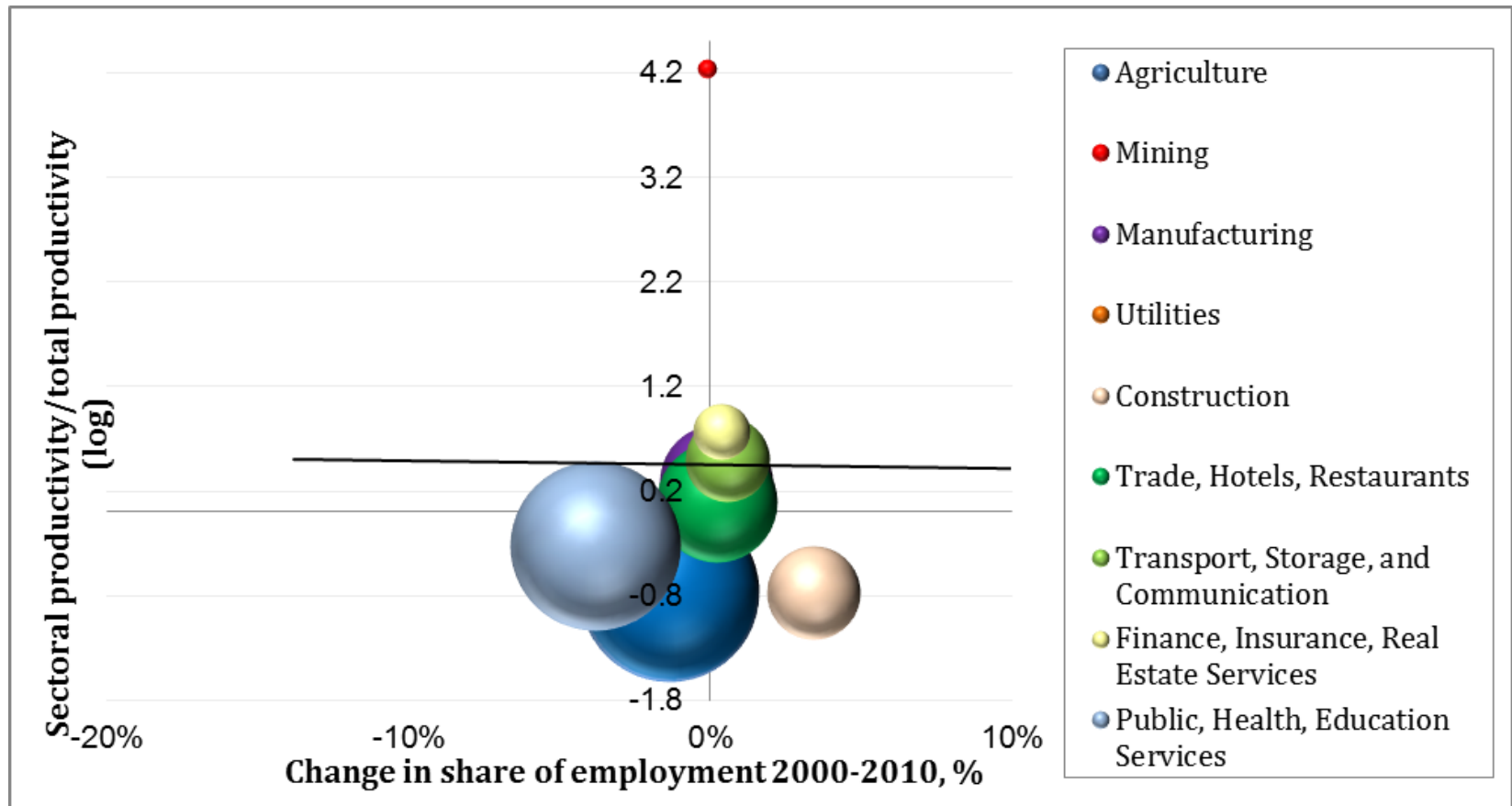
A stylized view of the "ideal" structural change process



Source: Author's illustration

# Benchmarking Egypt's structural labour productivity growth: Egypt's performance

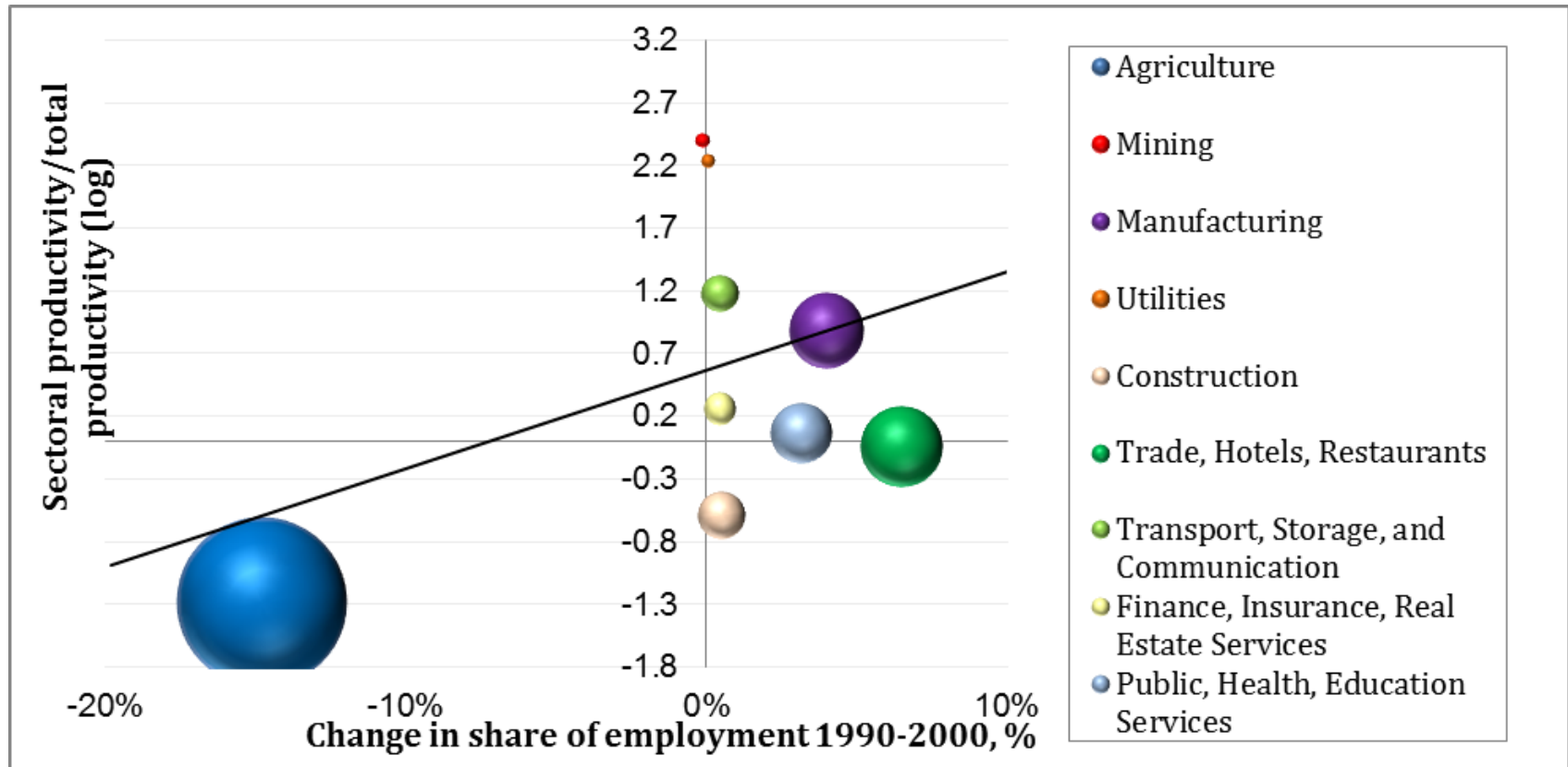
Structural change in Egypt, 2000-10



Source: Ministry of Planning and International Cooperation, Egypt Labour Force Survey, author's calculations

# Benchmarking Egypt's structural labour productivity growth: Thailand's performance

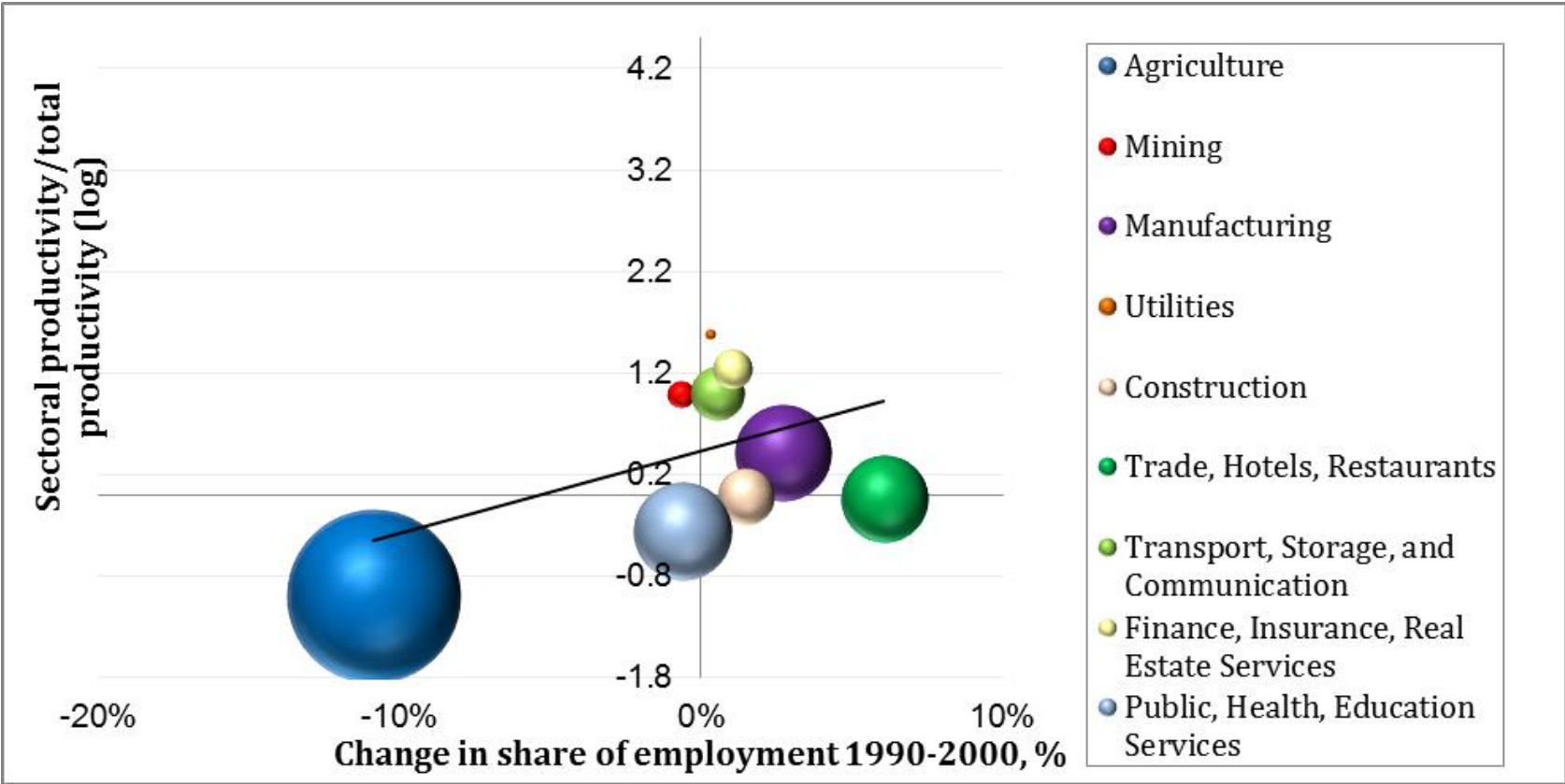
Structural change in Thailand, 1990-2000



Source: Groningen Growth and Development Centre (GGDC) 10-Sector Database, World Input Output Database Socio-Economic Accounts (WIOD SEA), author's calculations

# Benchmarking Egypt's structural labour productivity growth: Turkey's performance

Structural change in Turkey, 1990-2000



Source: Groningen Growth and Development Centre (GGDC) 10-Sector Database, World Input Output Database Socio-Economic Accounts (WIOD SEA), author's calculations



Motivation

Stylized facts: Egypt's growth without change

Decomposing labour productivity growth

Benchmarking Egypt's structural change performance

**Counterfactual analysis: what if Egypt looked more like Turkey?**

What explains structural change?

Policy recommendations: Igniting structural change in Egypt

Concluding remarks

# Counterfactual analysis: what if Egypt looked more like Turkey?

- We construct a counterfactual scenario where:
  - Egypt's *within* sector productivities remain as they were in 2010
  - But instead of using Egypt's actual *across* sector productivity changes, we calculate the counter-factual across sector productivity changes that would have resulted if the employment structure in Egypt evolved to look like Turkey's by the end of the decade.

**Lost opportunity** incurred by Egypt by failing to undergo positive structural change

=

**Actual** overall labour productivity in Egypt in 2010

-

**Counterfactual** overall productivity that would have resulted in Egypt, had it transformed to match Turkey's sectoral employment shares

# Answer: improved sectoral mix leading to higher average labour productivity

Change in sectoral share in output  
(percentage points)



....leading to a  
**17% increase in average labour productivity**

Source: Author's calculations

Motivation

Stylized facts: Egypt's growth without change

Decomposing labour productivity growth

Benchmarking Egypt's structural change performance

Counterfactual analysis: what if Egypt looked more like Turkey?

**What explains structural change?**

Policy recommendations: Igniting structural change in Egypt

Concluding remarks

# What drives structural change?



European Bank  
for Reconstruction and Development

- Based on cross-country analysis, we have identified the following key factors that affect the extent to which a country is able to undertake positive structural change:

## Initial Conditions

- **Initial share of agriculture in employment (+)**
  - Large potential from having many workers in the primary sector to begin with
- **Share of primary commodities in exports (-)**
  - Dutch disease – labour concentrates in sectors with existing comparative advantage at expense of more sophisticated sectors like manufacturing

## Policy-driven changes

- **Change in trade openness (+)**
  - Increase in foreign competition incentivises more efficient allocation across sectors
- **Growth in domestic credit to the private sector (+)**
  - Access to financing is critical to the growth of firms in sectors with more modern sectors

Motivation

Stylized facts: Egypt's growth without change

Decomposing labour productivity growth

Benchmarking Egypt's structural change performance

Counterfactual analysis: what if Egypt looked more like Turkey?

What explains structural change?

**Policy recommendations: Igniting structural change in Egypt**

Concluding remarks

# Two sets of policies are needed: Sector-level policies...



European Bank  
for Reconstruction and Development

## Agriculture

- Land consolidation to overcome high land fragmentation and allow farmers to exploit economies of scale
- Modernizing farming practices
- Better management of urbanization to preserve high quality arable land for agriculture

## Manufacturing

- Adopting more energy-efficient technologies could expand areas such as food processing, biotechnology and labour-intensive consumer electronics

## Services

- Develop ICT sector off-shoring and training
- Diversify origins and destination of tourists to develop the hospitality sector, and also indirectly benefit transportation and retail

# ...and cross-cutting reforms



European Bank  
for Reconstruction and Development

## Access to finance

- Increasing access to finance for SMEs in manufacturing and private services
- Address crowding out of private-sector lending by public sector

## Industrial and trade policy

- Removing barriers to trade through a DCFTA with the EU
- Ending artificial support to less efficient industries through subsidies or lending by state-owned banks

## Business climate

- Better defining property rights to incentivize the set-up of new industries
- Easing regulations and reducing discretionary enforcement
- Removing barriers to entry and exit and fostering competition

## Labour market

- Increasing ease of hiring and firing to remove barriers to the efficient reallocation of workers across and within sectors
- Addressing the skills mismatch to better equip graduates to enter the marketplace and targeting the skills needed for higher-value added industries



Motivation

Stylized facts: Egypt's growth without change

Decomposing labour productivity growth

Benchmarking Egypt's structural change performance

Counterfactual analysis: what if Egypt looked more like Turkey?

What explains structural change?

Policy recommendations: Igniting structural change in Egypt

**Concluding remarks**

# Concluding remarks



European Bank  
for Reconstruction and Development

- Despite high growth rates, structural economic change contributed negatively to average labour productivity in Egypt over the decade 2000-10
- In contrast to dynamic emerging economies, Egypt has not tapped into the benefits of reallocating labour to higher value-added manufacturing and services sectors
- Both sector-specific policies and broader cross-cutting reforms have a role to play in achieving this transformation
- Positive structural economic change is critical to put Egypt on a higher, sustainable growth path, create jobs and ensure the country avoids the middle income trap
- The continuation of current trends has worrying implications for social stability as well as long-term economic performance

# Thank you!



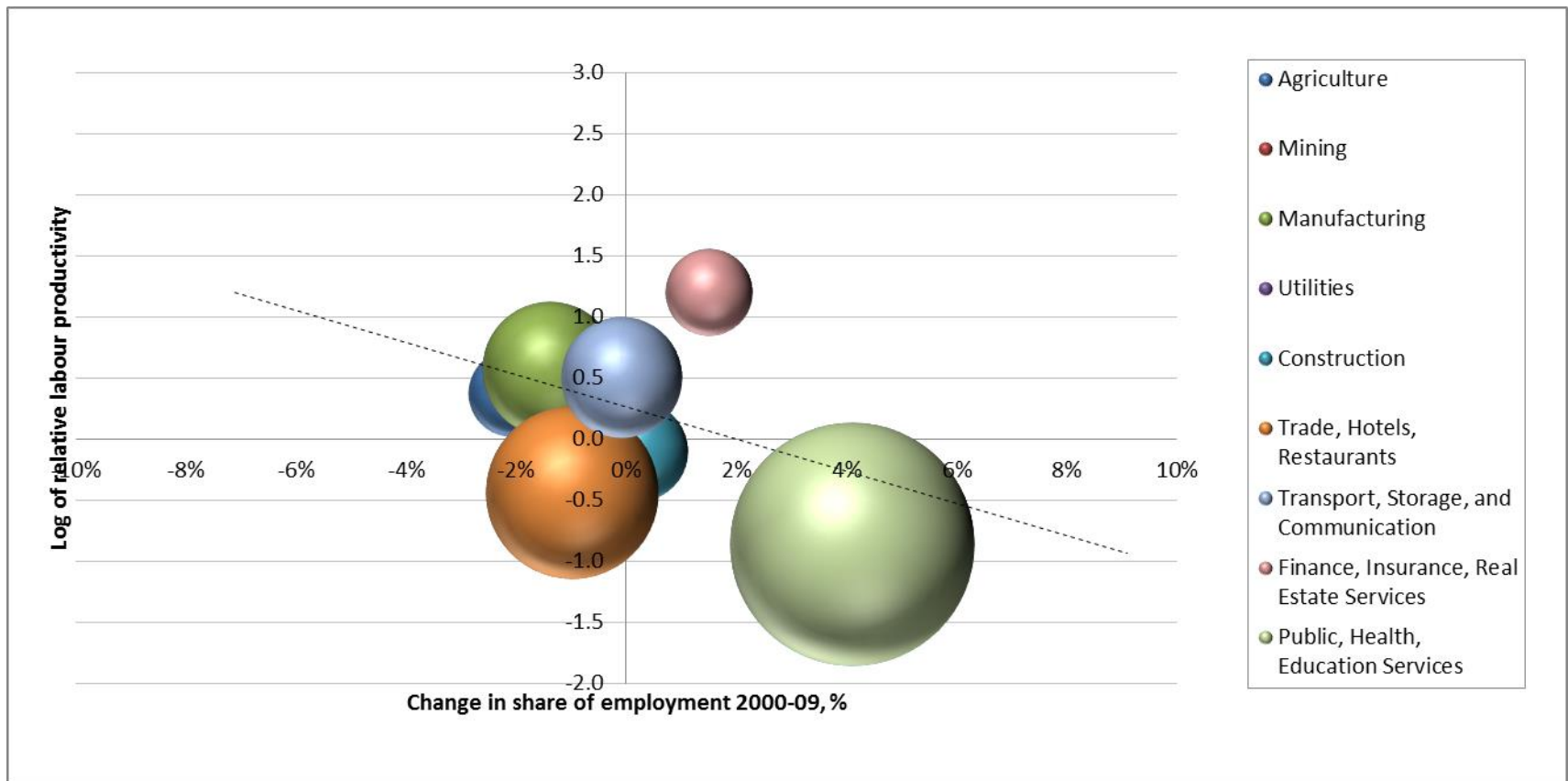
**European Bank**  
for Reconstruction and Development

# THE END

## Questions?

# Annex – Jordan’s structural transformation is also negative

Structural change in Jordan, 2000-09



Source: Author's calculations