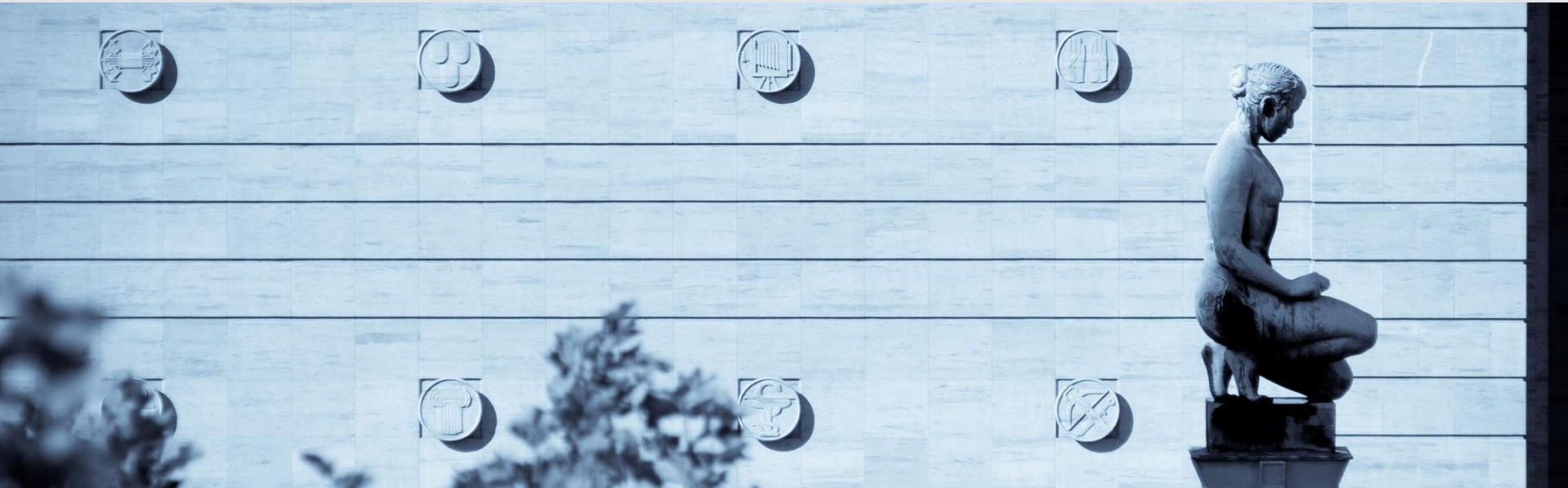


The Mystery of Low Productivity Growth: Some Insights from Belgium

Bank of Poland - 26 October 2018

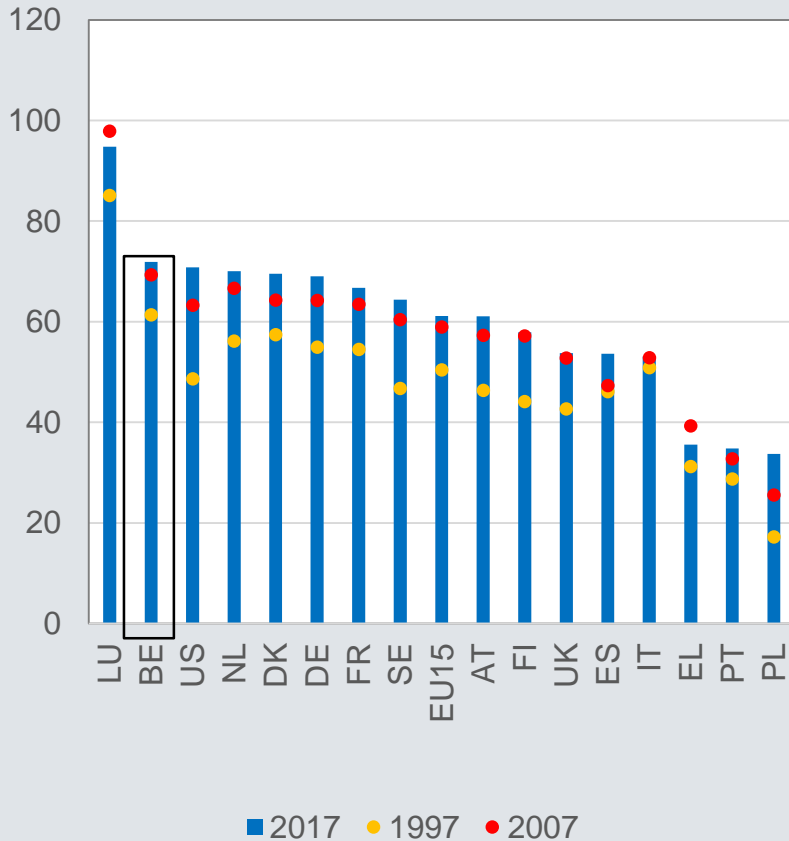


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1. Setting the scene

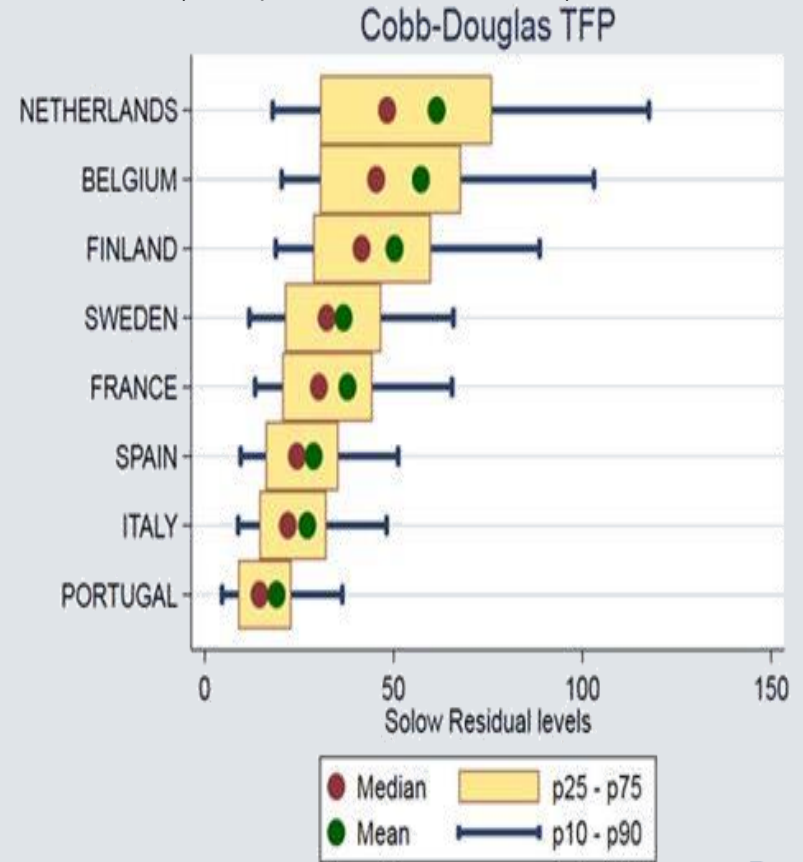
Belgium: a productive economy...

Apparent labour productivity
(USD/hour worked)



Total factor productivity distribution

(2010, private sector, € thousand)



Source: Conference Board.

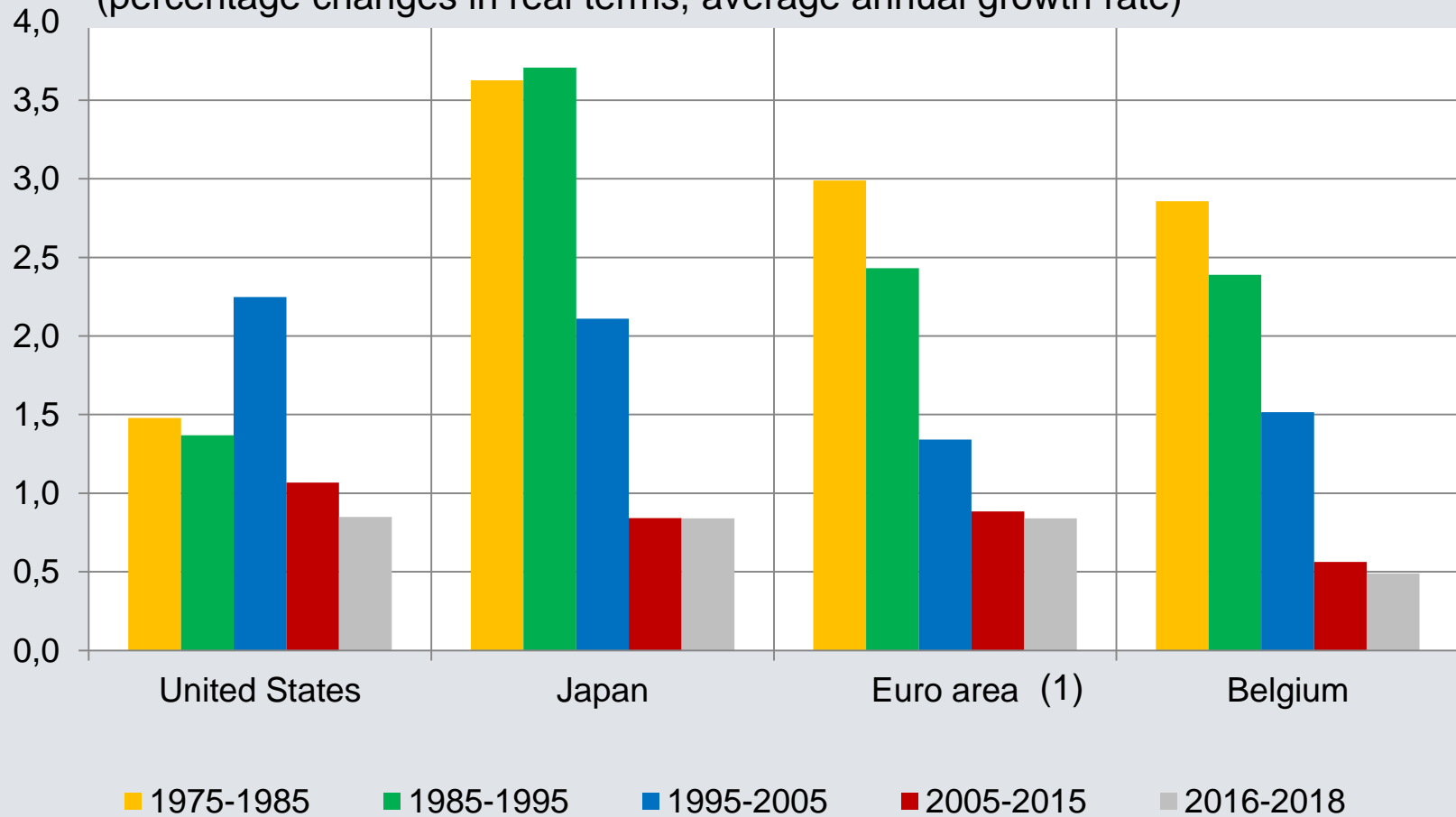
Source: CompNet.



... but productivity gains have lost steam

GDP per hour worked

(percentage changes in real terms, average annual growth rate)

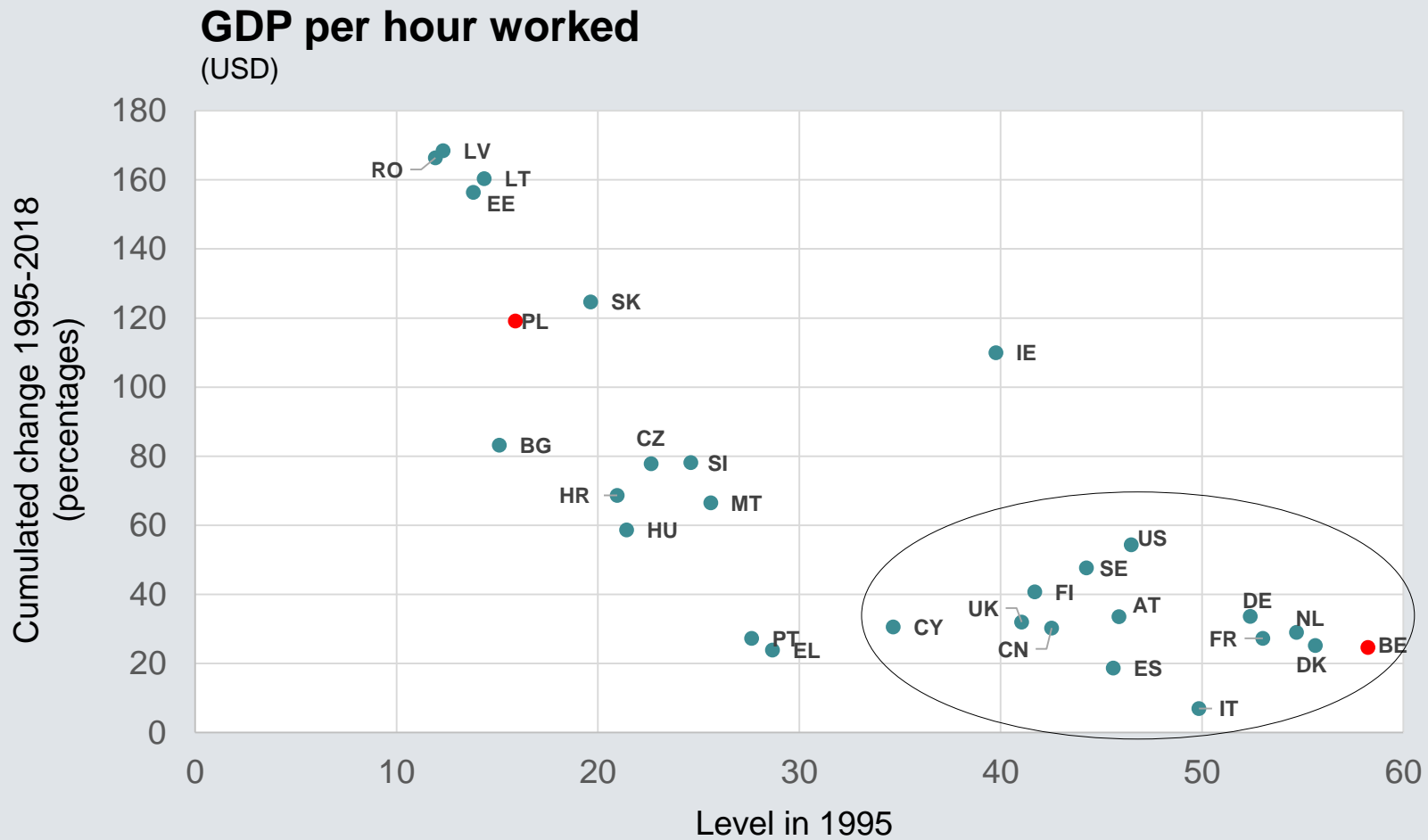


Sources: Conference Board, OECD.

(¹) 2016 for the euro area.



High level / low growth ?



The slowdown of productivity: a source of concern for an Eurosystem's national central bank

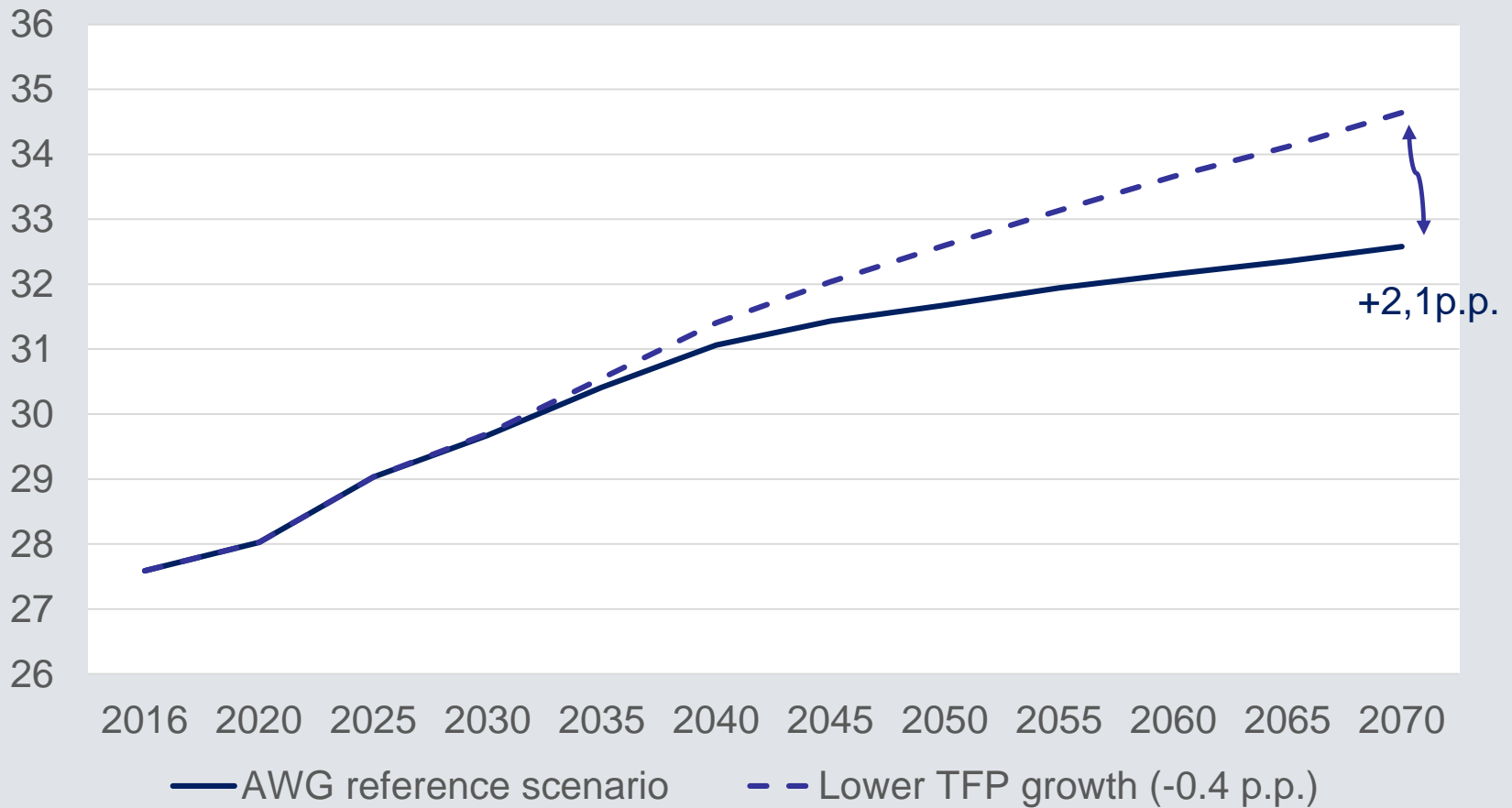
- ▶ Monetary policy: lower natural real interest rate
- ▶ Citizens' welfare: lower growth income per capita
- ▶ Fiscal sustainability



TFP growth and fiscal sustainability

Age-related costs for Belgium

(in % of GDP)



Source: EU-Ageing Working Group (2018 Report).

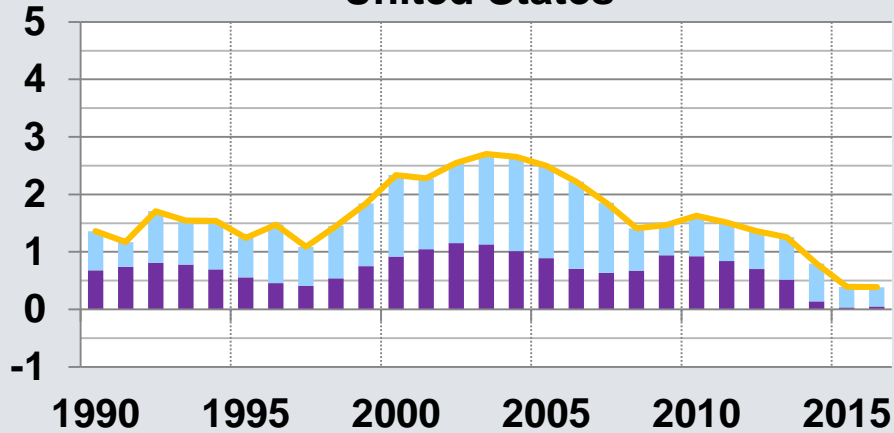


2. A widespread and multidimensional issue

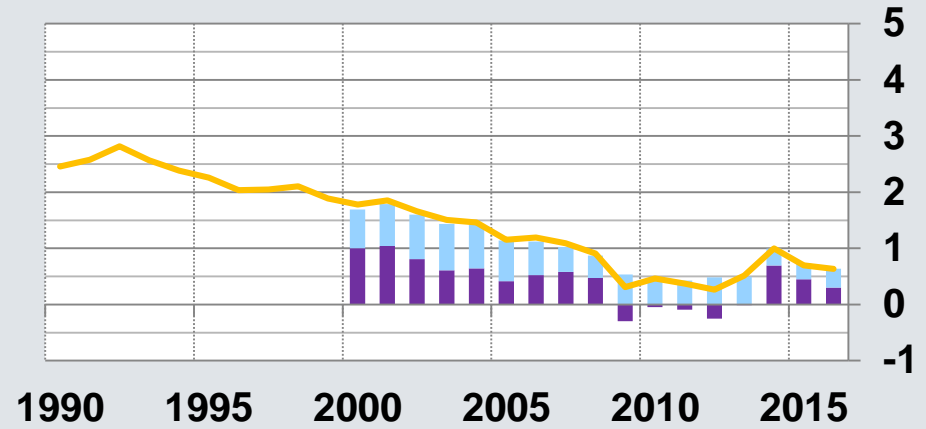
Capital deepening and TFP growth have decelerated

(annual % point contribution; 5-year moving average)

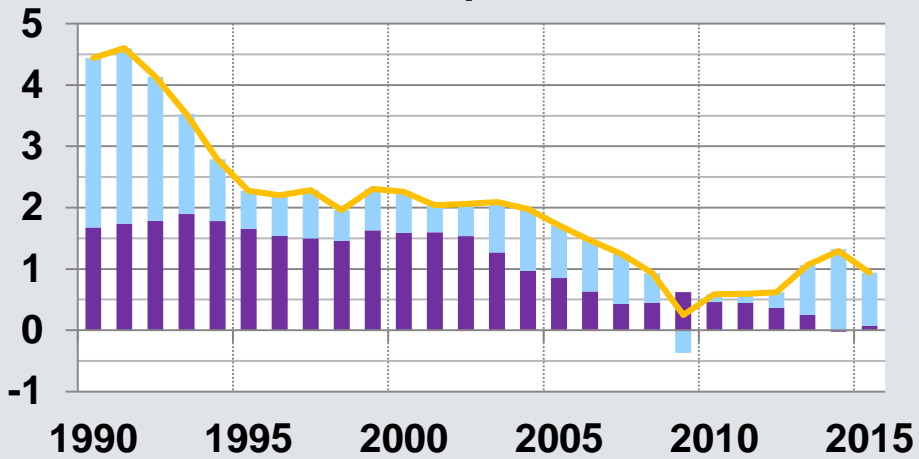
United States



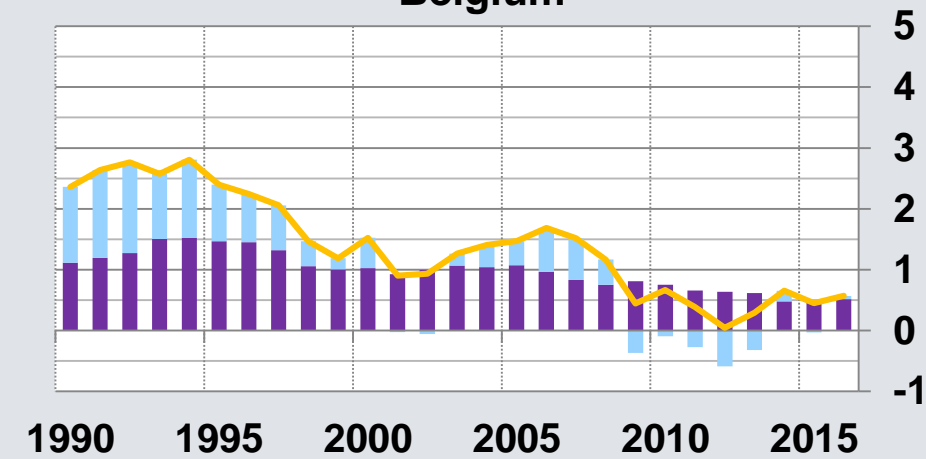
Euro area



Japan



Belgium



Capital deepening

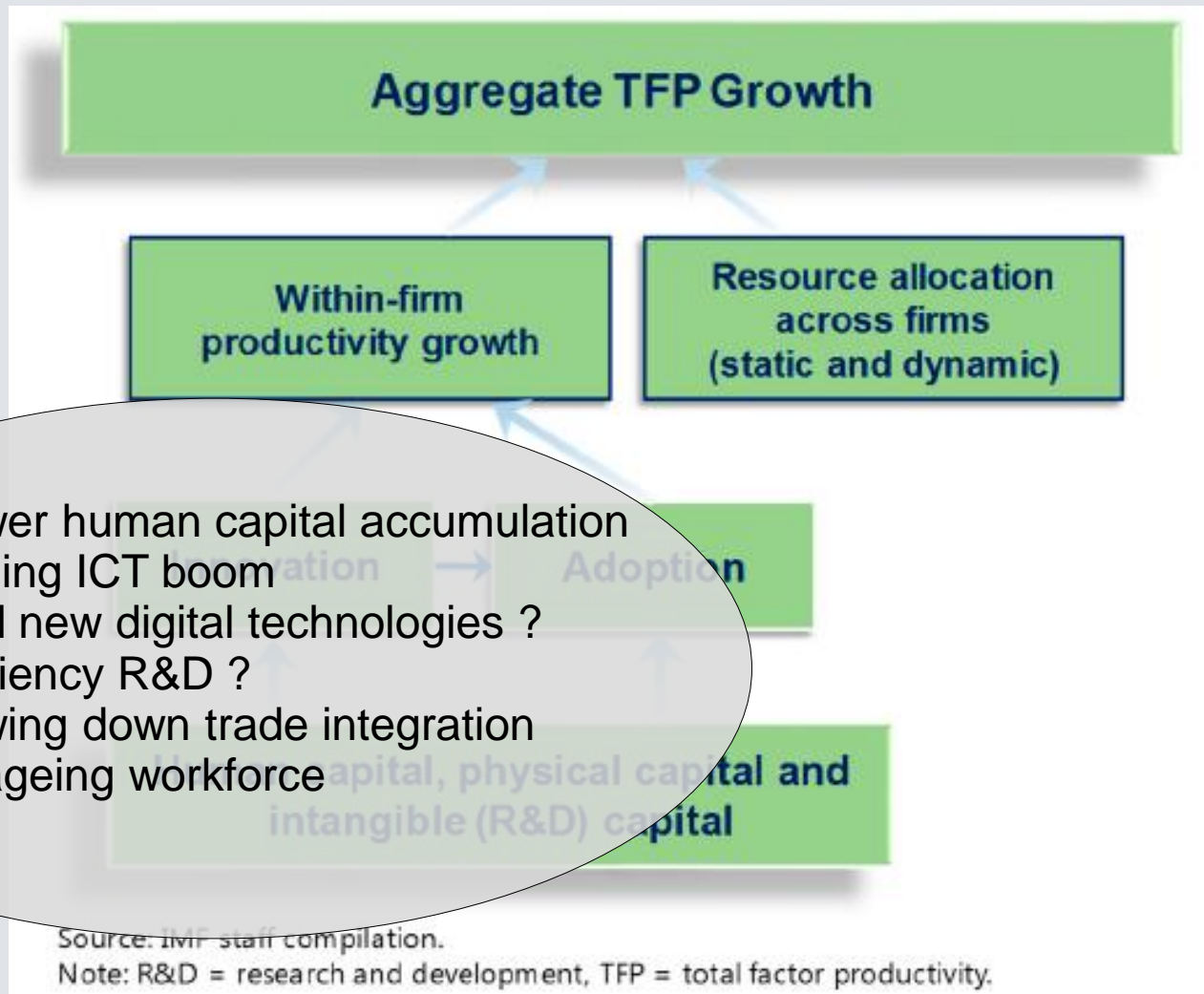
Total factor productivity

Labour productivity growth (%)

Sources: OECD, Eurostat.



Explanations for the productivity slowdown ?

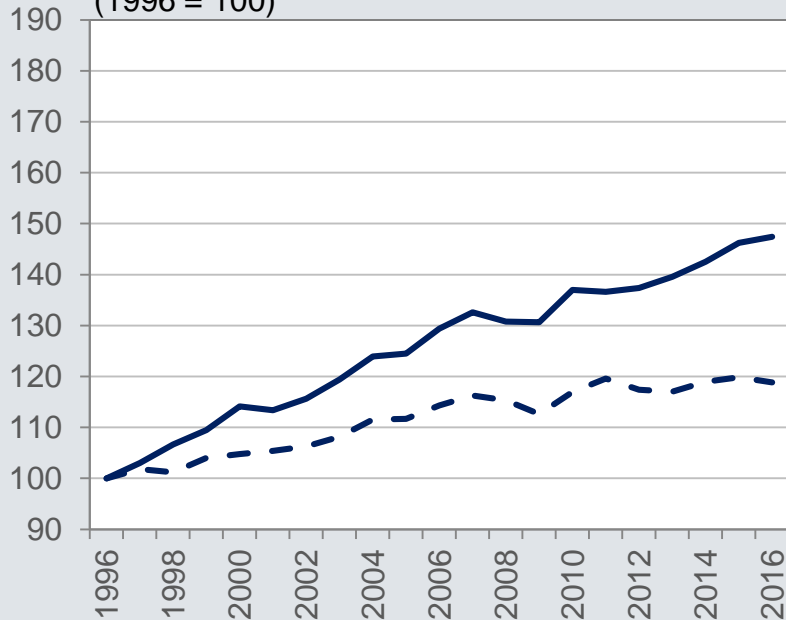


- Slower human capital accumulation
- Waning ICT boom
- Quid new digital technologies ?
- Efficiency R&D ?
- Slowing down trade integration
- An ageing workforce



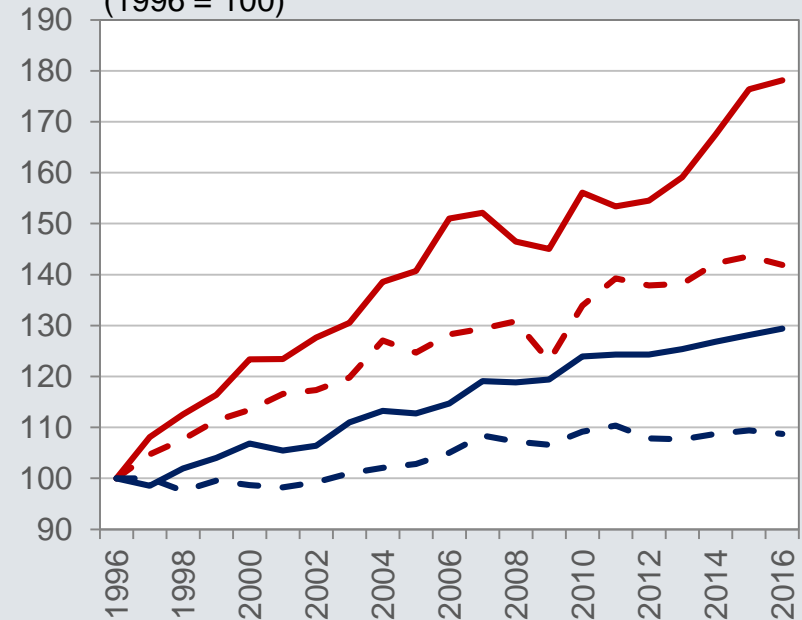
3. Resource allocation across firms in Belgium: Growing performance gap between frontier vs. non-frontier

TFP – Total population of firms
(1996 = 100)



— Frontier firms
- - Non-frontier firms

TFP: Industry vs. Services
(1996 = 100)



- - Industry / Non-frontier
— Industry / Frontier
- - Services / Non-frontier
— Services / Frontier

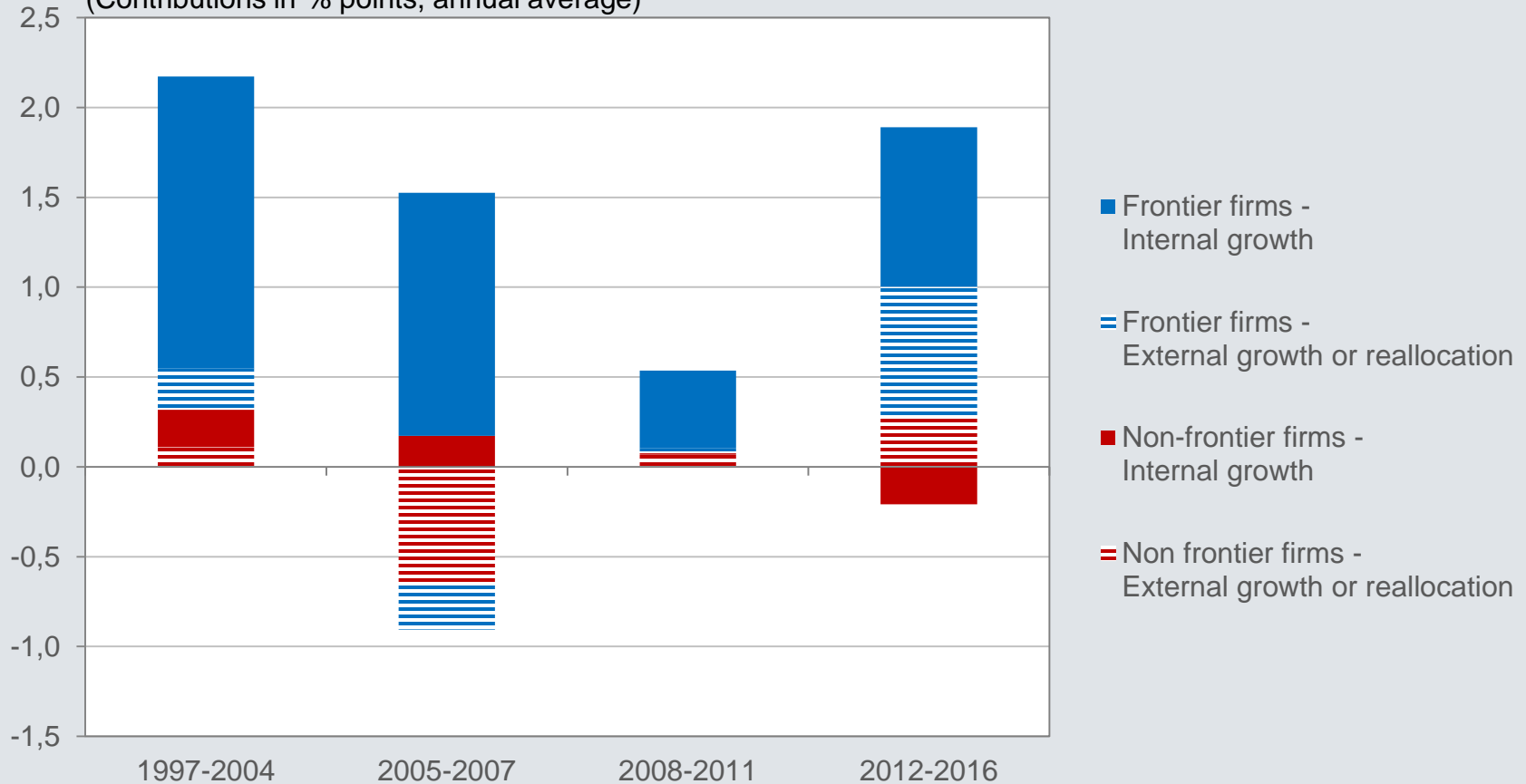
Frontier firms: productivity level above 90 percentile in the corresponding sector population for two consecutive years.



Frontier firms are the main driver of aggregate productivity growth

Decomposition of aggregate PTF growth

(Contributions in % points, annual average)



Characteristics of firms and productivity: take-aways from firm-level analyses in Belgium

▶ Productivity performances and age

- Older firms are more productive than younger firms (selection effect) ...
- ... except for Gazelles

▶ Productivity performances and external openness

- TFP ranking: both importing and exporting > importing > exporting > domestically oriented
- Domestic network effect: close relationships with exporting firms increase productivity level

▶ Productivity performances and investment

- Human capital: ↗
- Intangible: ↗
- IT capital: ↗ especially in the industry and for large companies

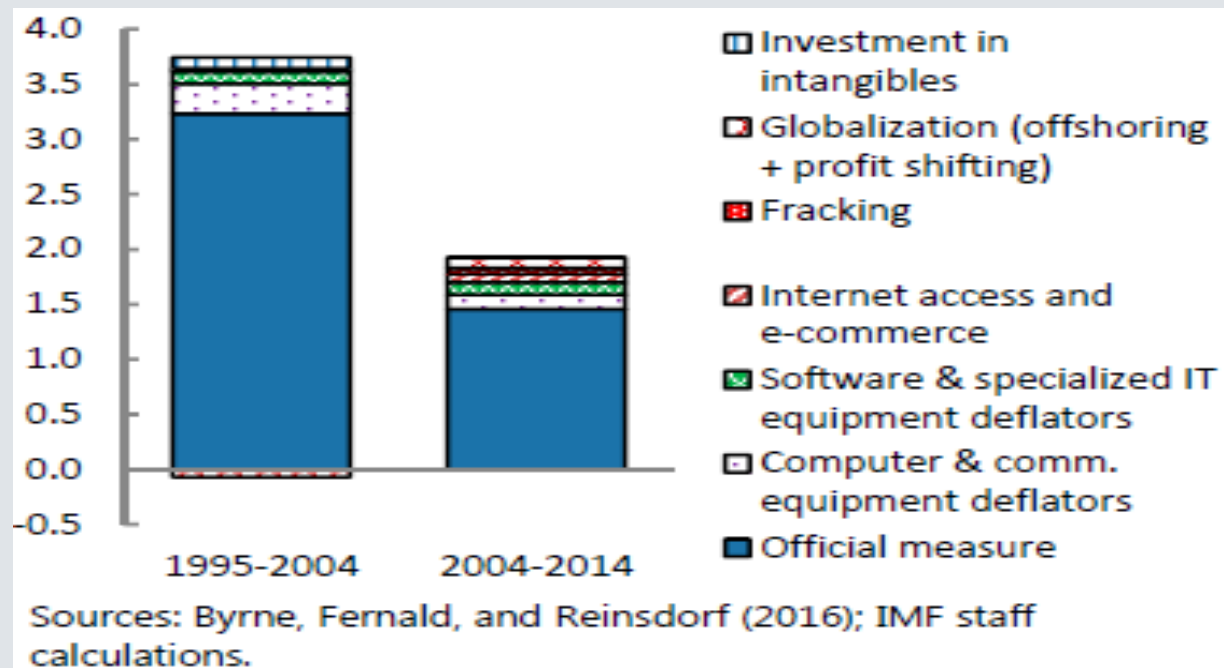
▶ Zombie firms: (OECD definition)

- 10 % of # firms in BE, 13 % of employment, 19 % of capital
- Heterogeneous group
- But on average lower productivity level and lower productivity growth than firms with similar characteristics



4. Is mismeasurement behind the productivity slowdown?

U.S. productivity growth: official and adjusted measures



- Measurement error is an issue
- Measurement issues affect the digital economy in particular
- Mismeasurement is unlikely to explain much of the productivity slowdown

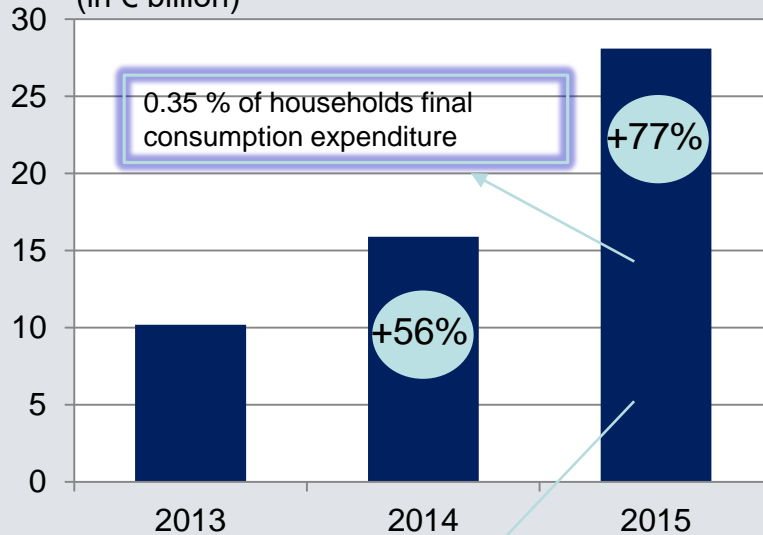


Sharing economy (platform): a manifestation of digital economy

Still limited size in Europe, but rapid growth

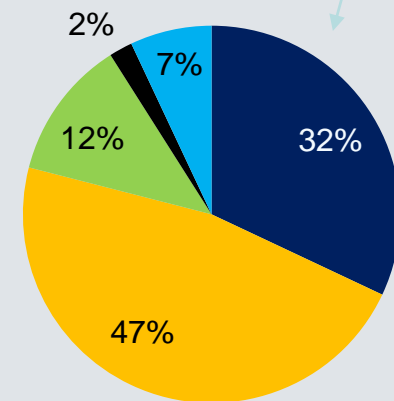
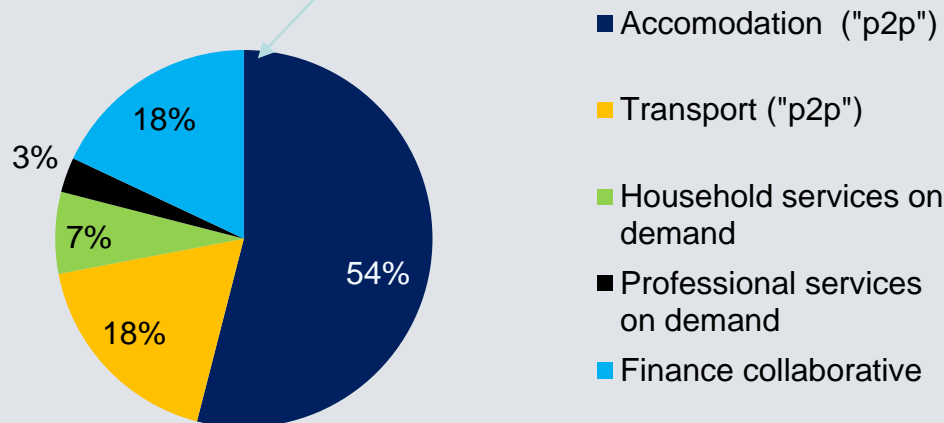
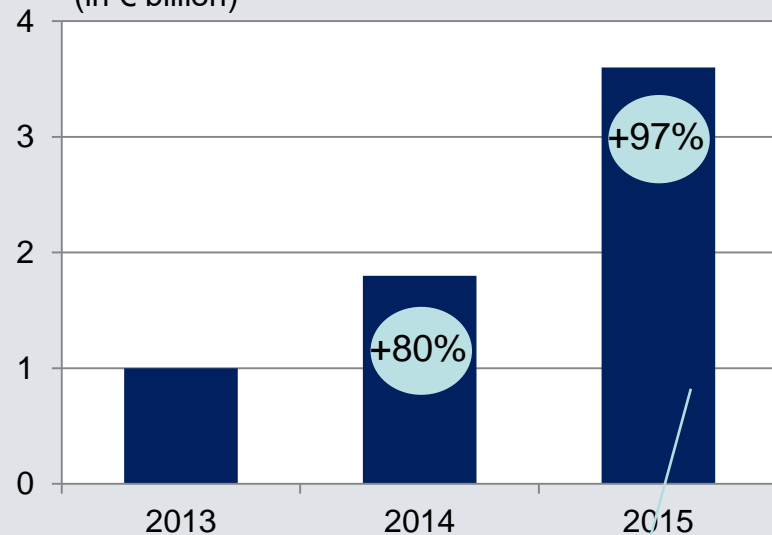
Value of transactions

(in € billion)



Platform revenues

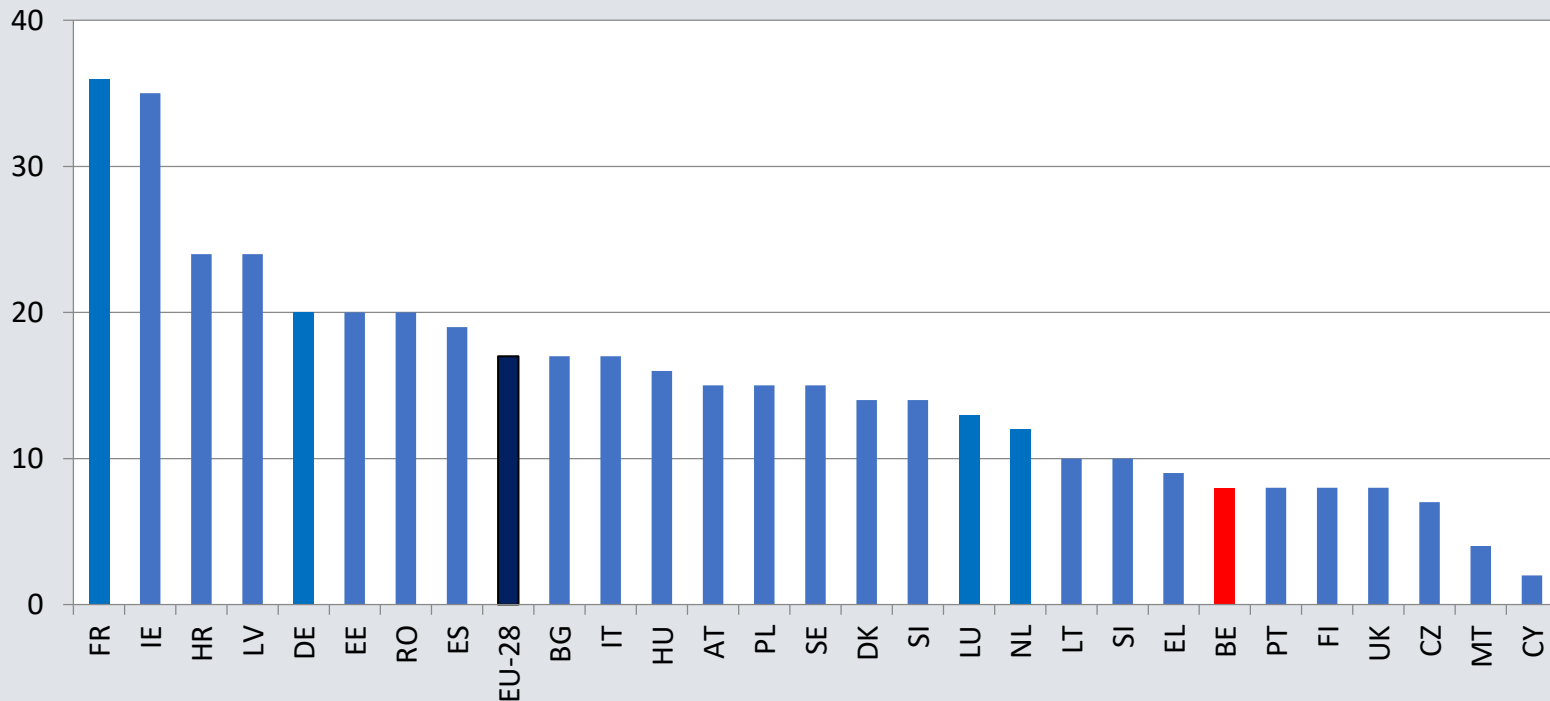
(in € billion)



In Belgium as well, sharing economy is small compared to the economy

Use of a sharing economy platform

(in % - 2016)



- ▶ ... but the potential for rapid growth is large.
- ▶ This requires progress regarding the measurement issues.



Conclusion

- ▶ Stylised facts in Belgium largely shared with other advanced economies
- ▶ Allocative efficiency is important
 - Business and Human capital
- ▶ Measurement issues: keep information system apace with digital revolution
 - Concepts
 - Methodologies
 - Data collection



