

# New Zealand and Denmark – and productivity

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# Both Denmark and New Zealand suffer from perceived productivity problems

- A puzzle against, in both cases, a perception of "good" policy settings
- The role of statistics in explaining any shortfall in productivity growth
- Evidence on the size of the puzzle in the two countries
- Some selected policy drivers – and questions about the "good" policy settings



# Is the productivity problem caused by errors in data?

The Danish Productivity Commission has investigated this question in depth.

The main conclusions are the following:

- The slow recorded productivity growth in Denmark is not just due to errors in data – it is real
- You can compare the productivity *development* between countries
- But be careful when you compare productivity *levels* between countries
  - A caveat that applies to some of this presentation

# Is the productivity problem caused by errors in data?

At a more detailed level the Productivity Commission concluded:

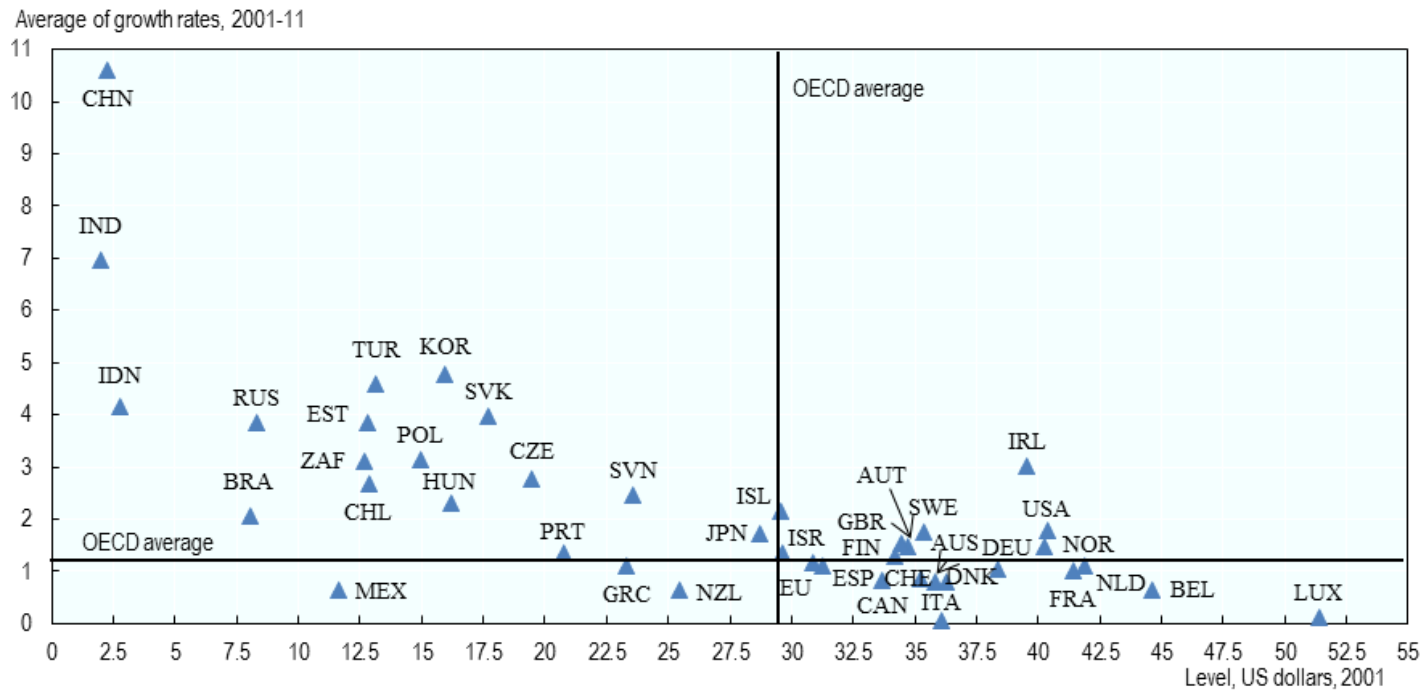
- For Market Services the difficulties with the identification of the quality component could make the price/volume split dubious. As this is an international issue comparisons should be made with care.
- In Denmark as well as other countries the productivity development in the construction industry seems implausible



# Slow productivity growth in NZL and DNK

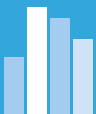
## - but is it a puzzle?

There has been uneven convergence in productivity levels over the last decade  
 Average productivity growth over the past decade against the initial level



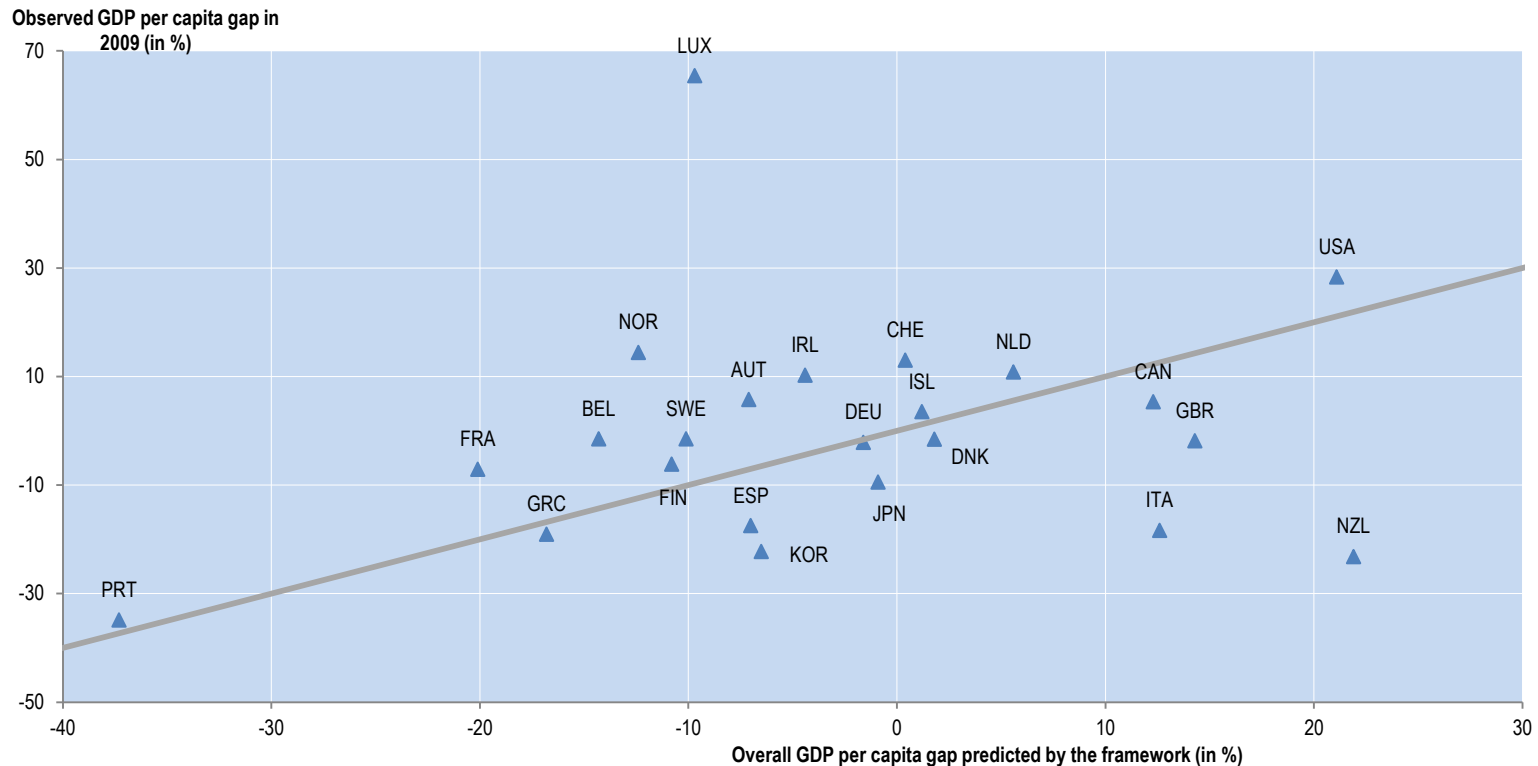
Note: Labour productivity levels are measured as GDP per hour worked based on 2005 PPPs. Since hours worked are not available for BRIICS countries except Russia, an average of the hours worked per employee in the ten countries with lowest GDP per capita (including Russia) for which data are available have been used as a proxy.

Source: OECD National Accounts Statistics (Database); OECD (2012), *OECD Economic Outlook* No. 92: Statistics and Projections (Database); OECD, *Employment Outlook* (Database).



# GDP/capita looks surprisingly low in NZL, less so in DNK

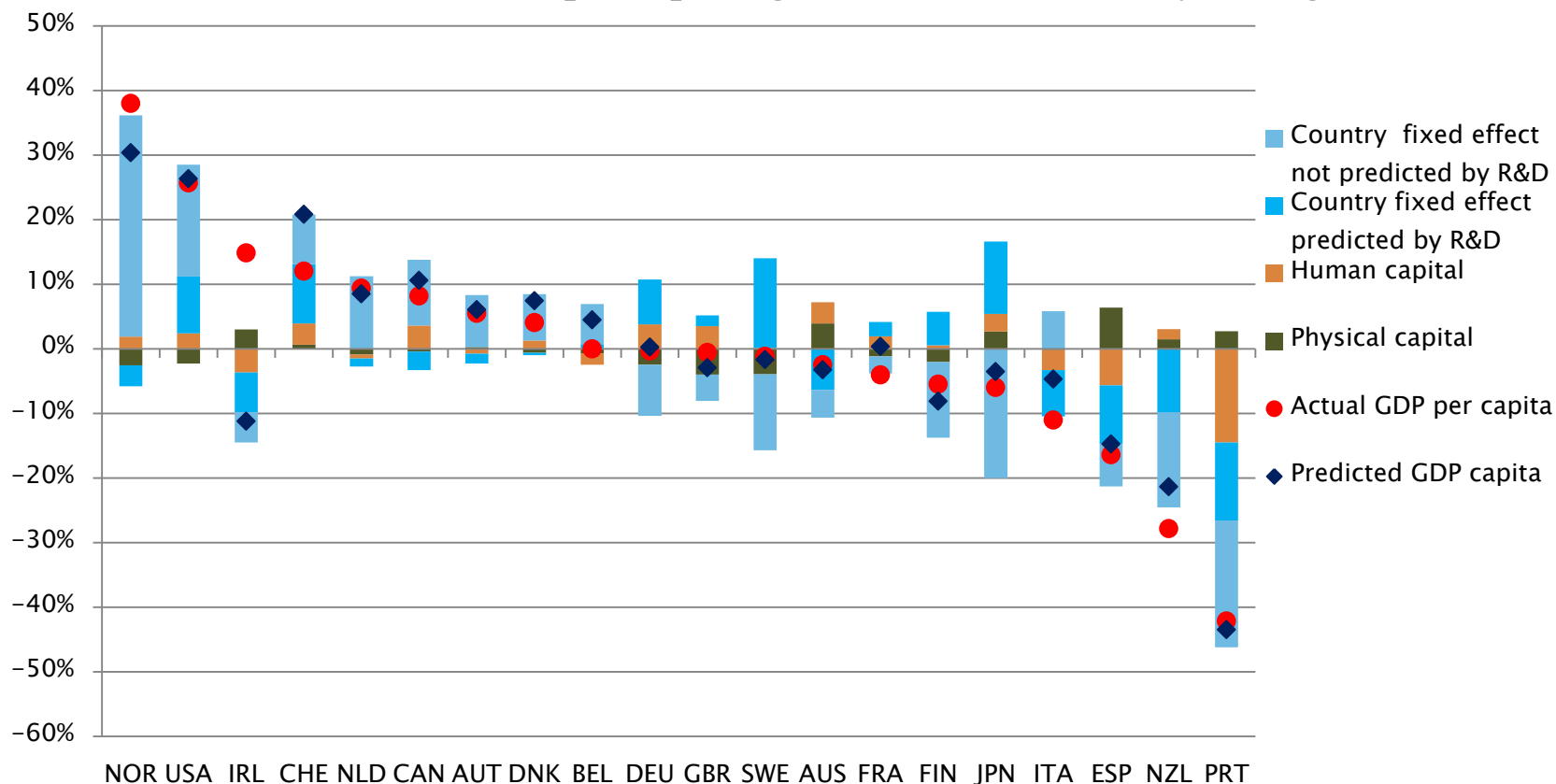
Predicted and actual gap in GDP/capita relative to OECD average, 2009



Source: OECD Department of Economics Working Paper, No.834

# GDP per capita regressions show large negative fixed effect for NZL (especially once adjusted for R&D), less so for DNK

Contribution to deviation of GDP per capita against 20 OECD country average (2000-2007)



# Perhaps more of a puzzle in NZL than in DNK?

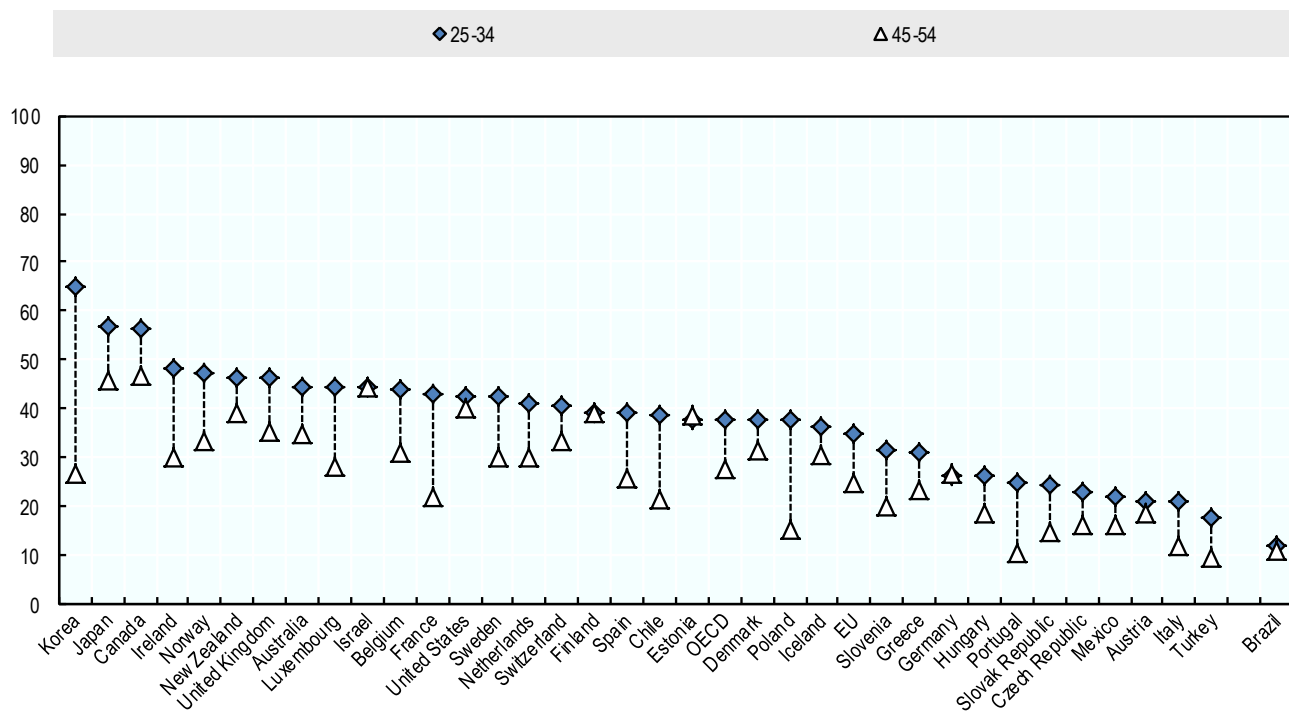
- But level comparisons are fraught
- Some of this could reflect economic geography (OECD estimates put the negative GDP/cap effect for NZL relative to the OECD avg. in the 10 per cent range)
- Shortfalls in levels and growth may also reflect that policy settings are not as "good" as thought or are deteriorating in relative terms
  - -> some selected evidence





# Other countries catch up on education

Tertiary educational attainment, 2010<sup>1</sup>  
 Percentage of population aged 25-34 and 45-54



Note: Users of the data must be aware that they may no longer fully reflect the current situation in fast-reforming countries.

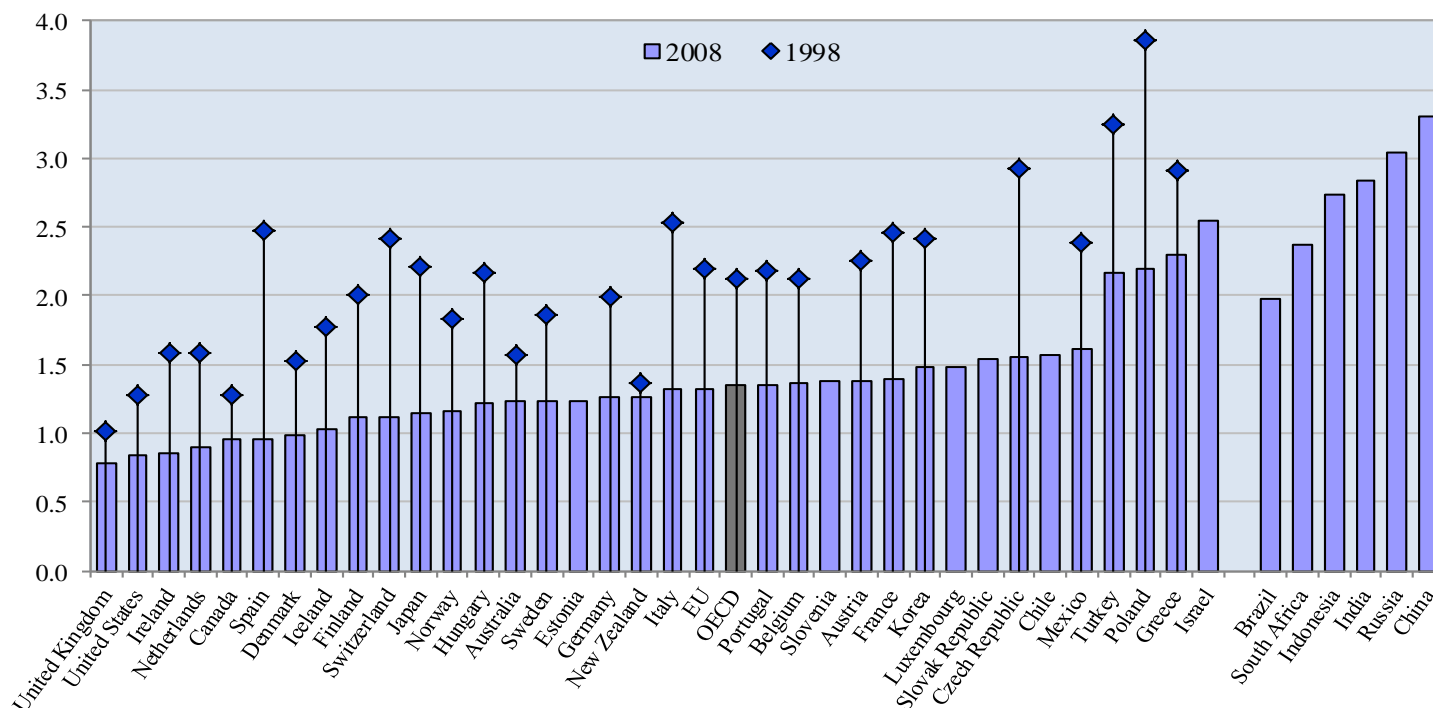
1. The reference year is 2009 for Brazil.

Source: OECD (2012), *Education at a Glance 2012*: OECD Indicators.



# Regulatory reform came early and has since been slow in NZL and has slowed in DNK

Product market regulation  
 Index scale of 0-6 from least to most restrictive  
**A. Restrictiveness of economy-wide product market regulation**

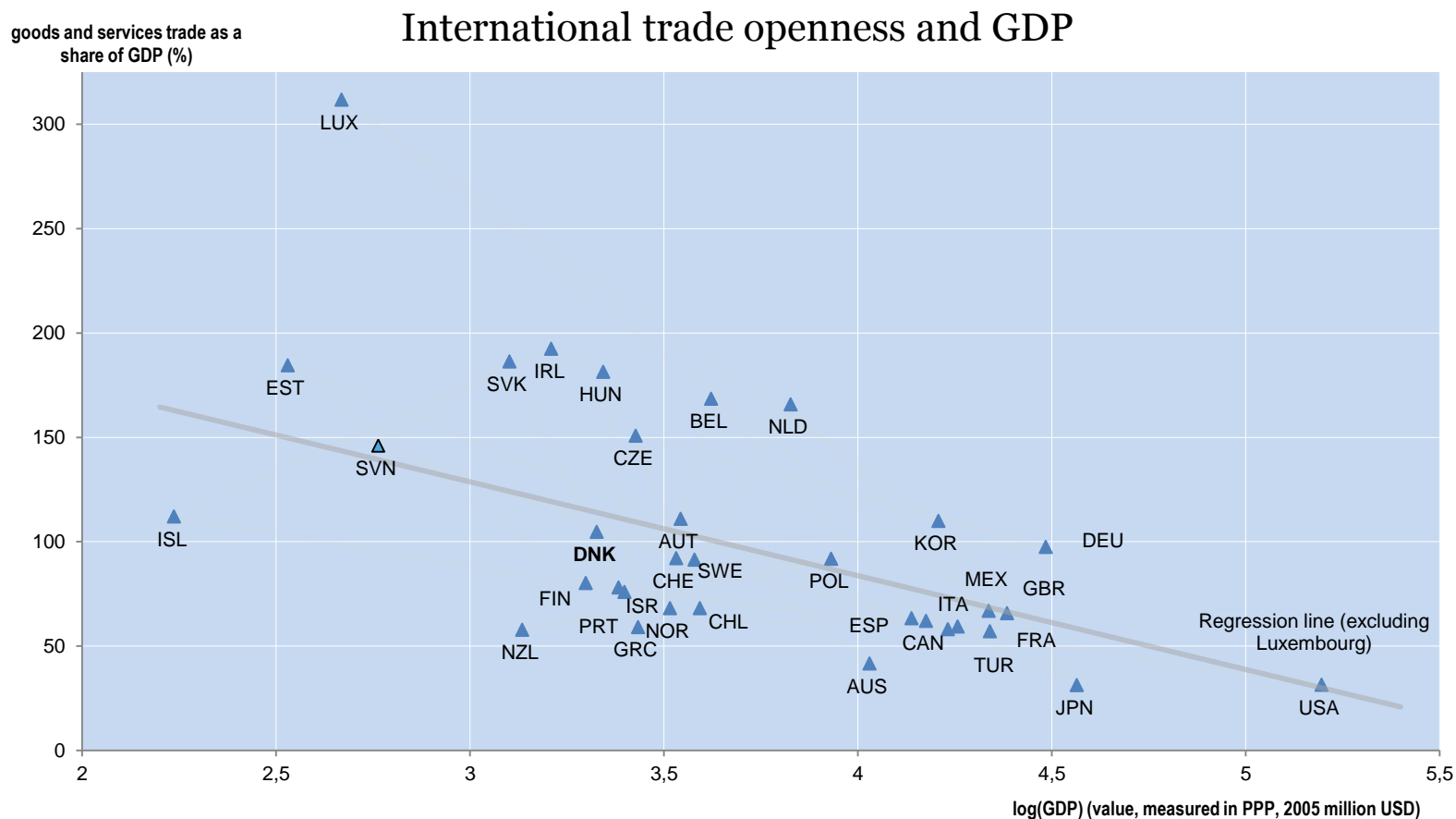


Note: Users of the data must be aware that they may no longer fully reflect the current situation in fast-reforming countries.

Source: OECD (2011), Product Market Regulation Database; Wölfl, A *et al.* (2010), "Product Market Regulation: Extending the Analysis Beyond OECD Countries", OECD Economics Department Working Papers, No. 799, OECD Publishing.

# Openness strengthens productivity

- DNK is average and NZL much below (partly related to economic geography)



Sources: OECD Economic Outlook 93 database and national accounts database; OECD calculations

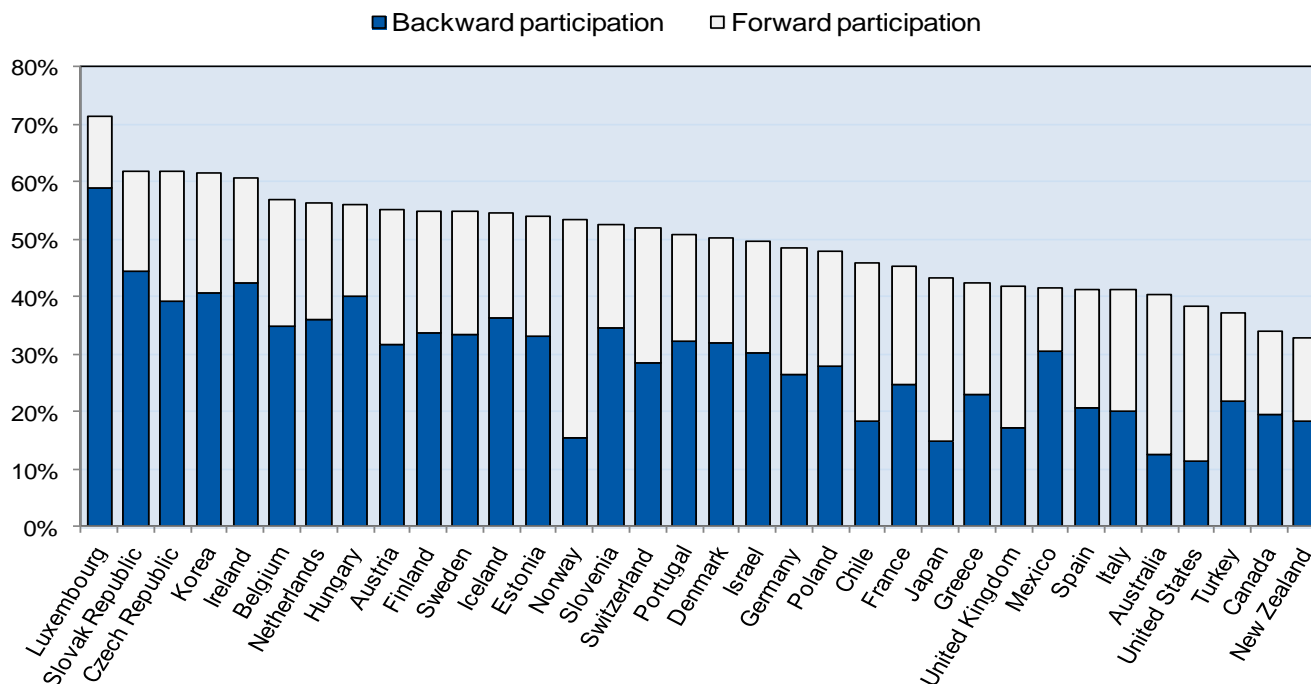
# Participation in value chains may allow specialisation gains to be reaped

- DNK and in particular NZL are not very integrated given their size

## Participation in GVCs, 2009

Foreign inputs and domestically-produced inputs used in third economies' exports as a share of gross exports (in %)

### OECD countries



Source: Miroudot and De Backer (2013).