



# Productivity by the numbers: the New Zealand experience

Productivity hub symposium:  
Unpicking New Zealand's productivity paradox

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# Outline

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1. Long-run productivity performance
2. Industry-level productivity
3. NZ's productivity performance in international context
4. Some open questions

# New Zealand's long-run productivity dynamics

**Mid to late-1980s:** Labour shedding

**Early-1990s:** Strong employment growth

**Late-1990s:** Strong MFP growth, modest capital deepening

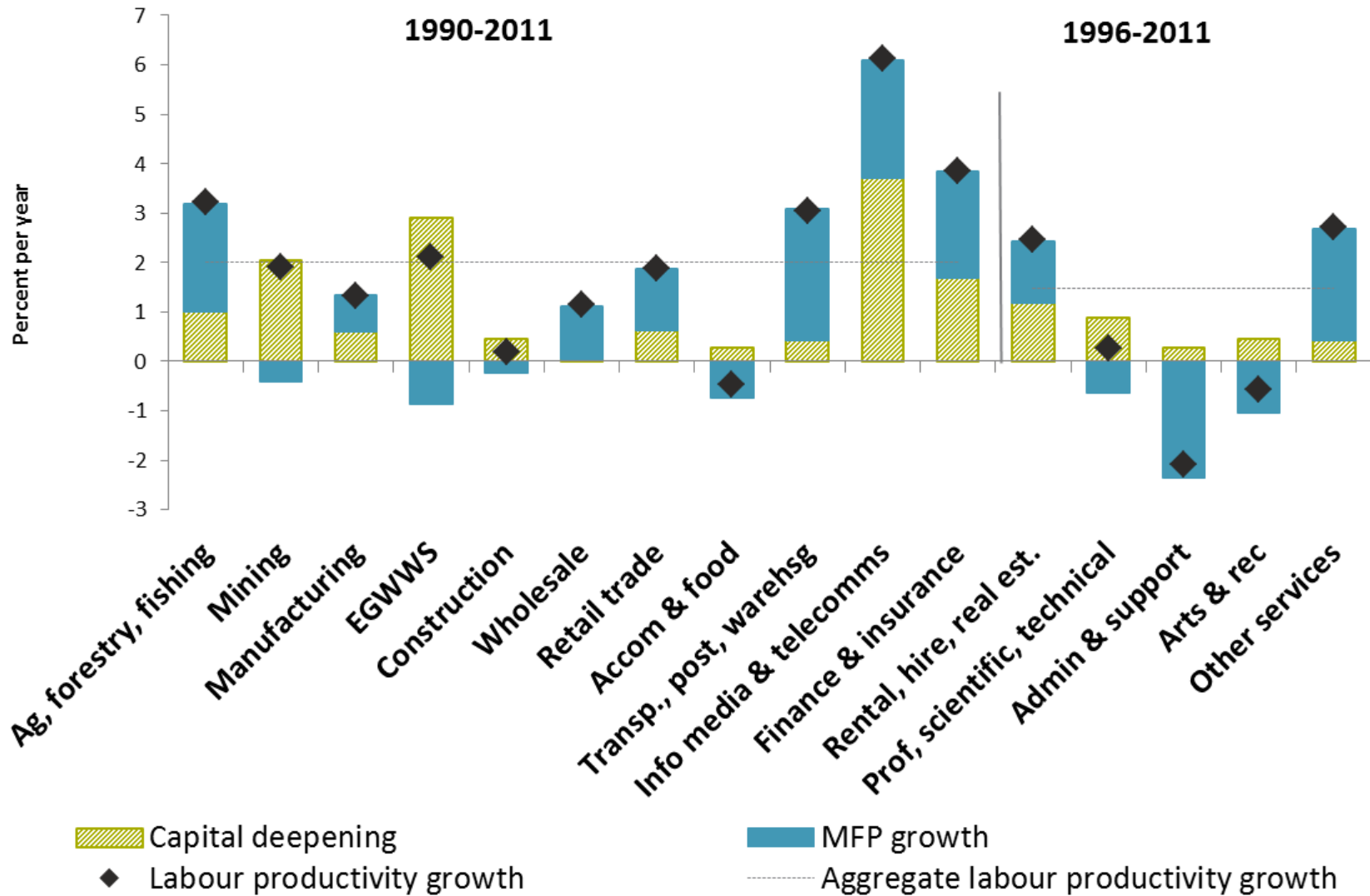
**During 2000s:** Labour productivity growth slowdown, given weaker MFP growth

# New Zealand's productivity performance by industry

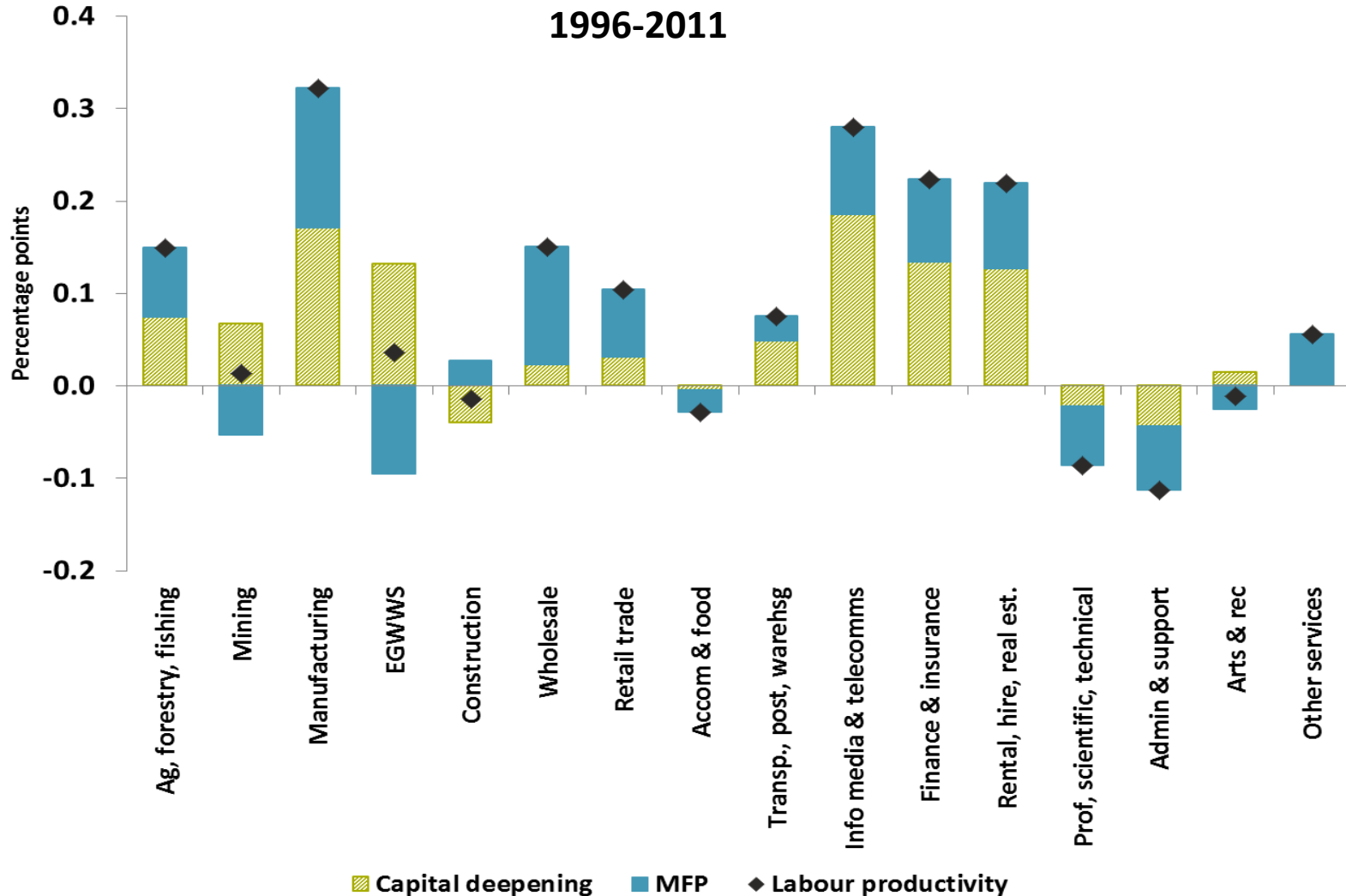




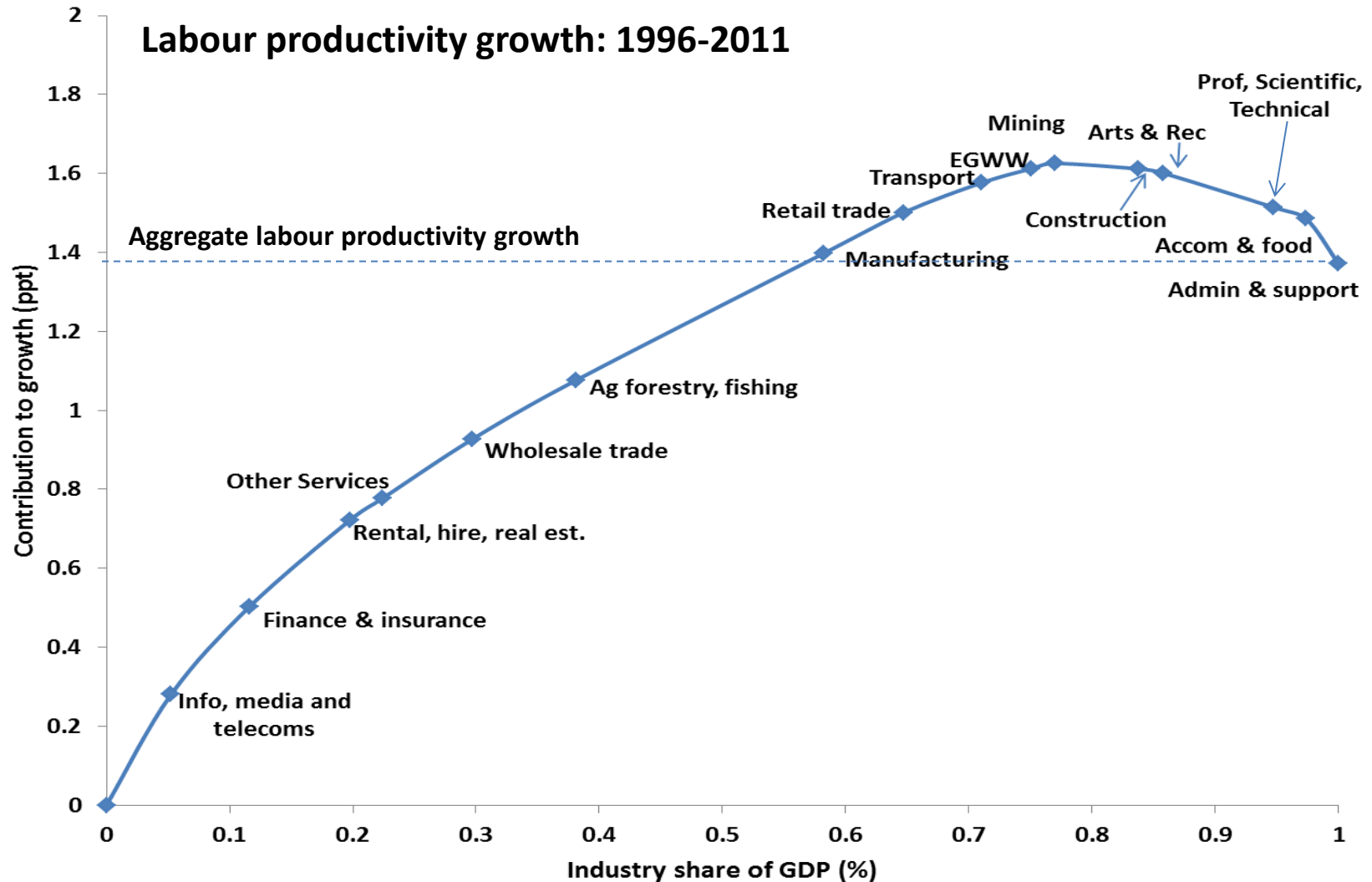
# Productivity growth by industry



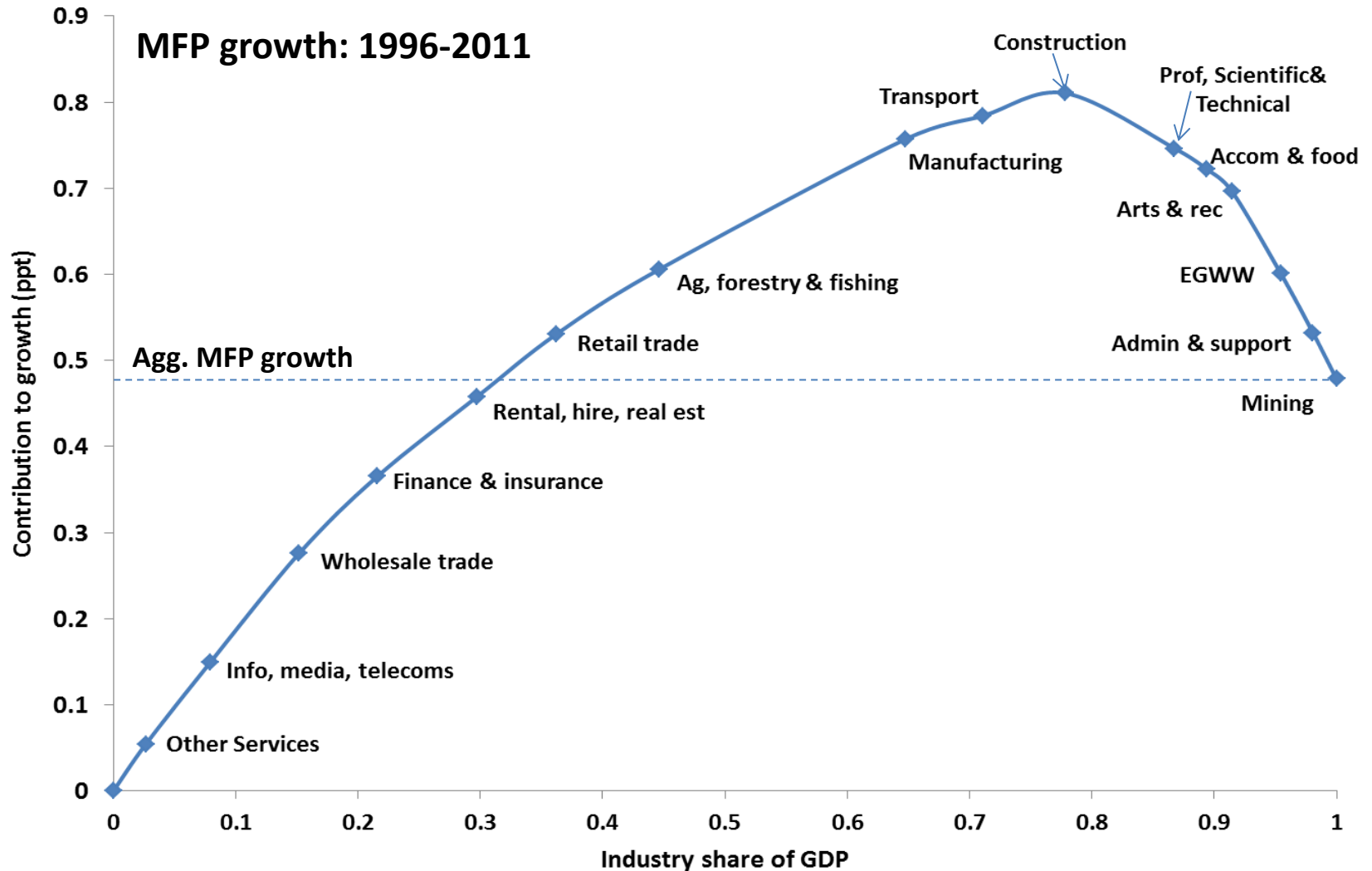
# Industry contributions to aggregate growth



# Industry contributions by GDP share

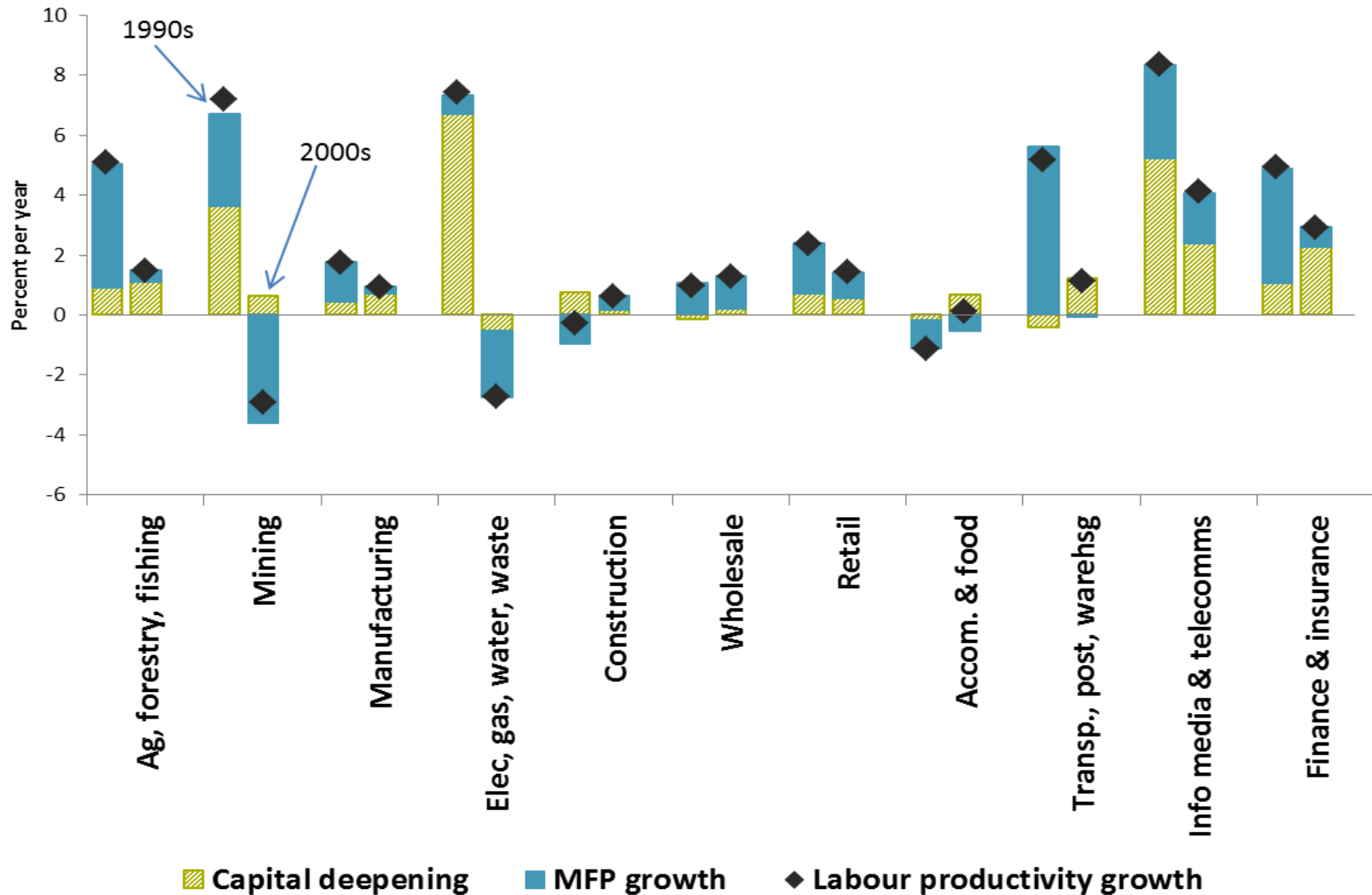


# Industry contributions vs. GDP share

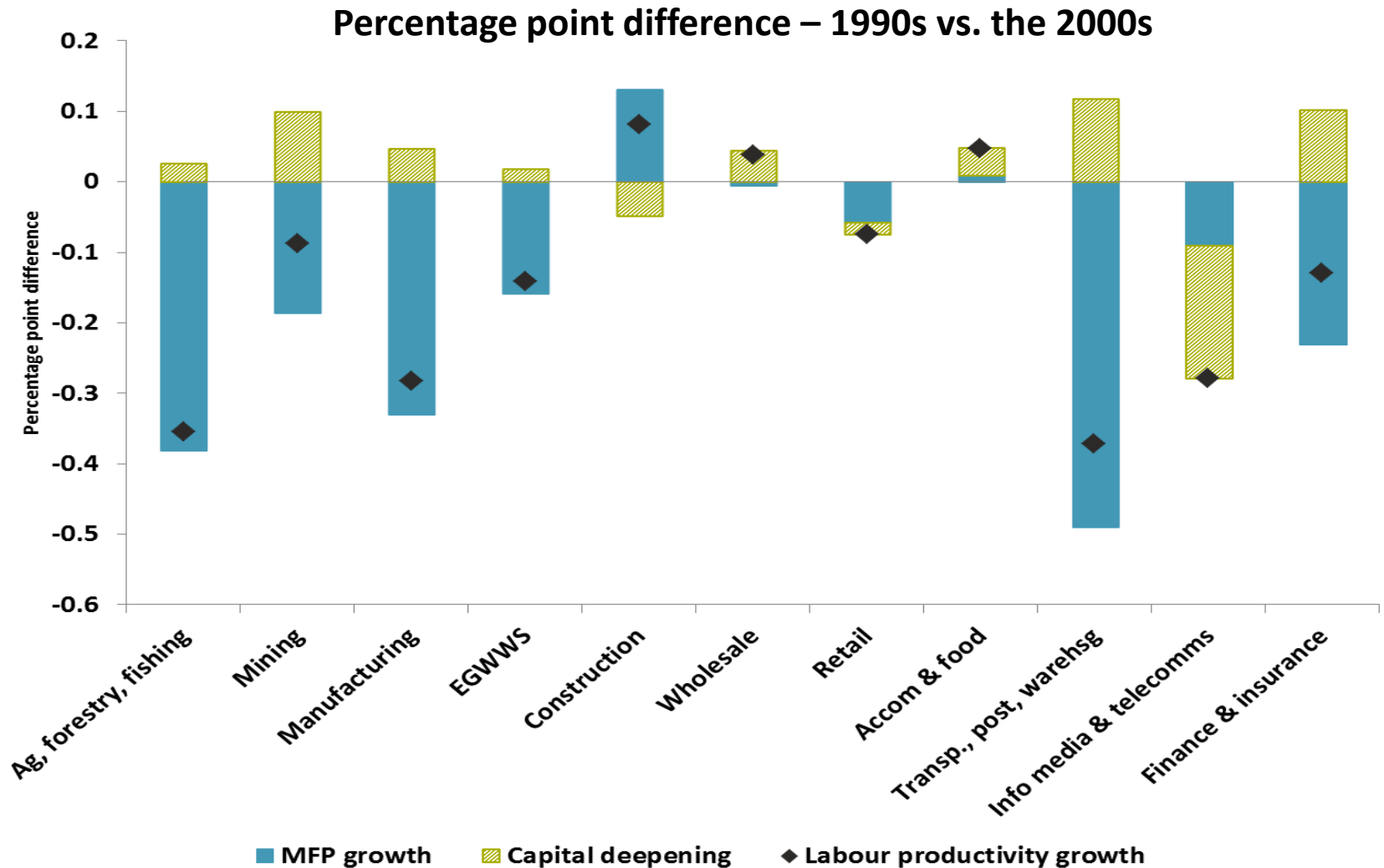




# Change in productivity growth 1990s vs. 2000s



# Industry contributions to the 2000s slowdown



# Summary of industry results

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**Outperformed:** Information, media & telecoms; Finance & insurance

**ICT-intensive industries:** some have performed well, but NZ's overall ICT story is unclear

**Underperformed:** Construction; some Service industries (including Professional, scientific & technical)

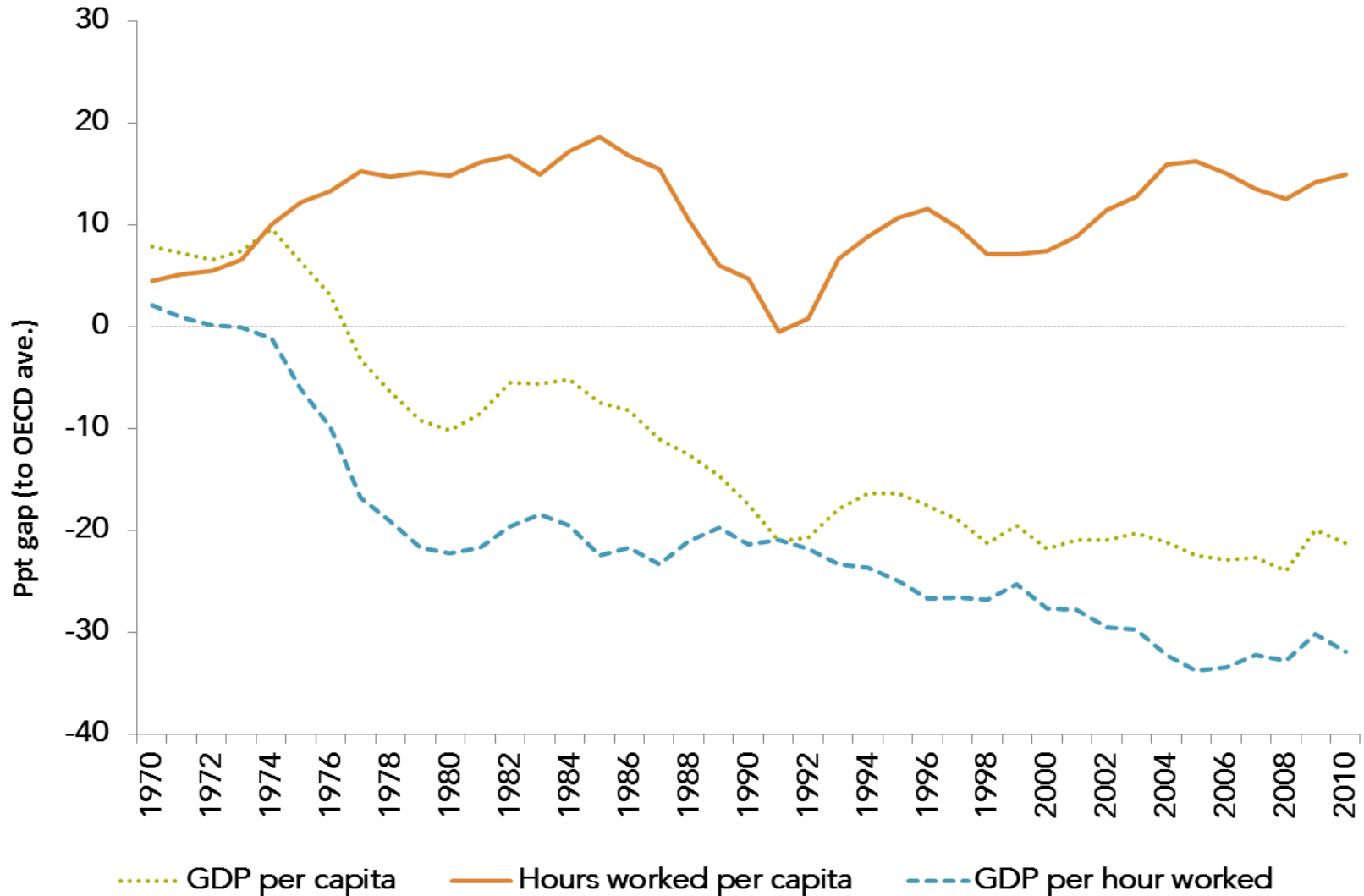
**Weaker MFP growth in the 2000s:** cause broad-based, but particularly Agriculture; Transport; Manufacturing

# New Zealand's productivity performance in international comparison



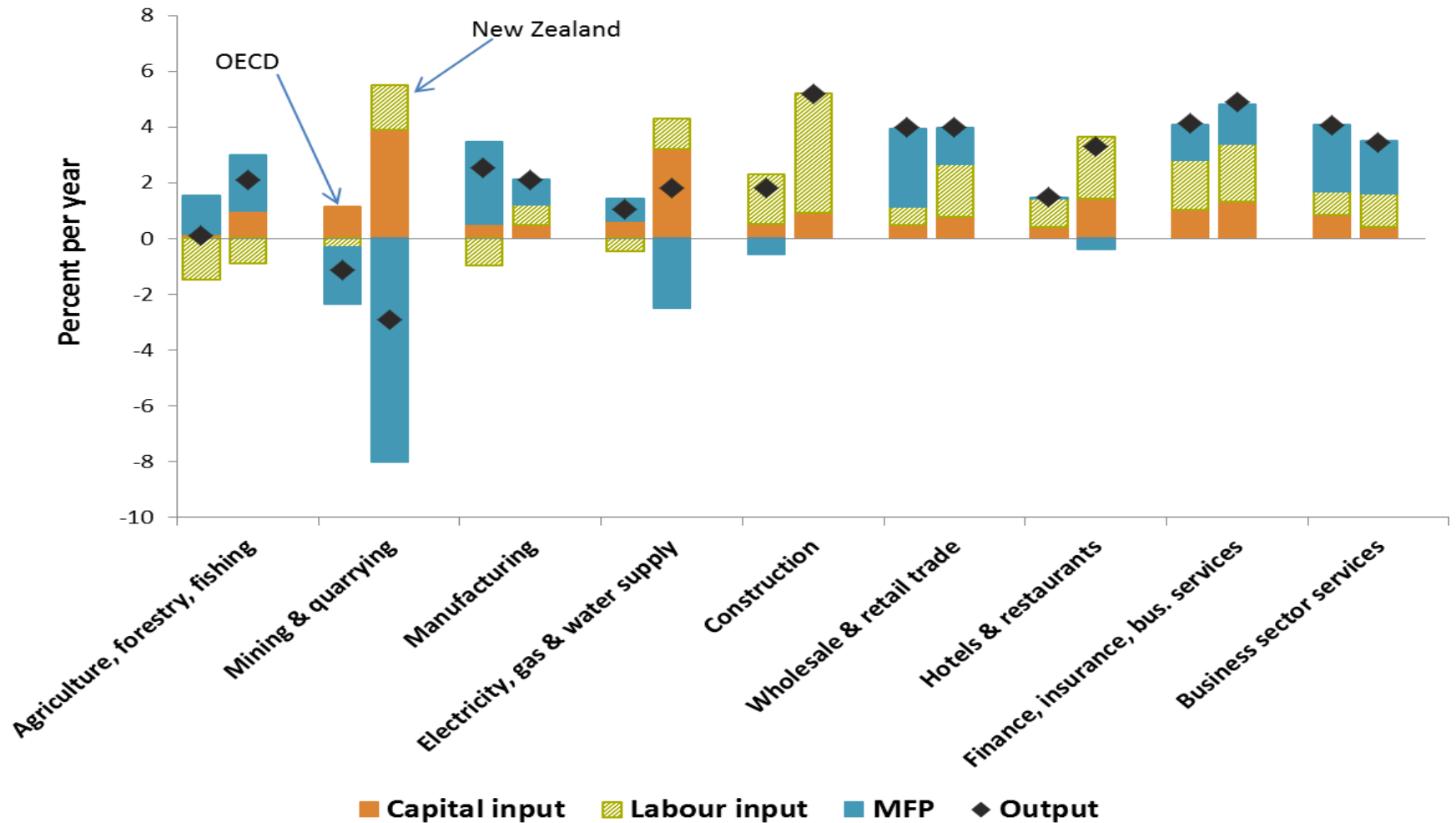


# NZ's aggregate performance compared



# NZ's industry performance compared - growth

Output growth decomposed – 2000-2007

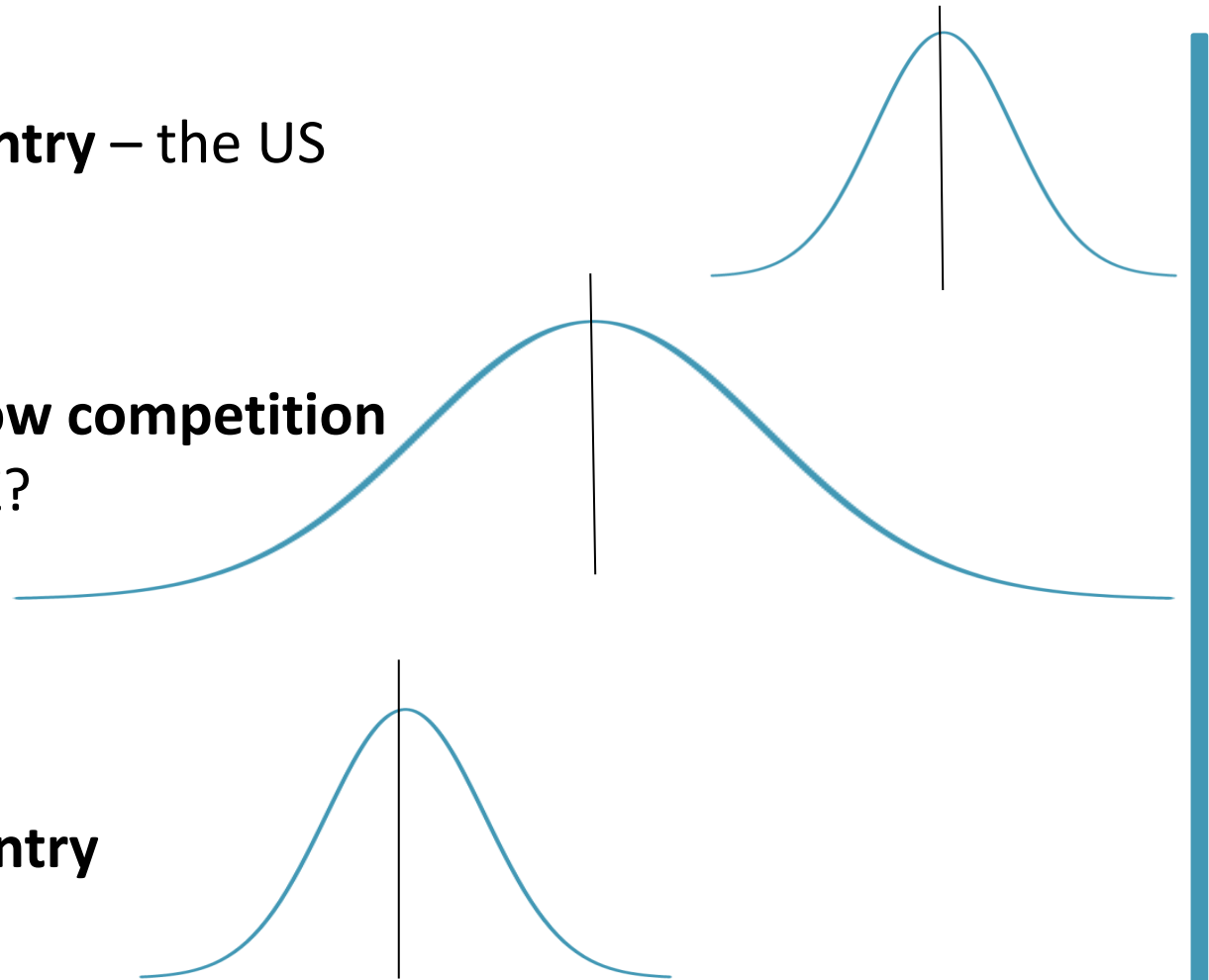


# Distance to which frontier?

Frontier country – the US

Advanced/low competition  
country – NZ?

Lagging country



Firm productivity

The technology frontier

# Open questions

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The link between **input use and productivity**

A **deeper understanding** of industries that have contributed to lower MFP growth.

**ICT:** What is the New Zealand story?

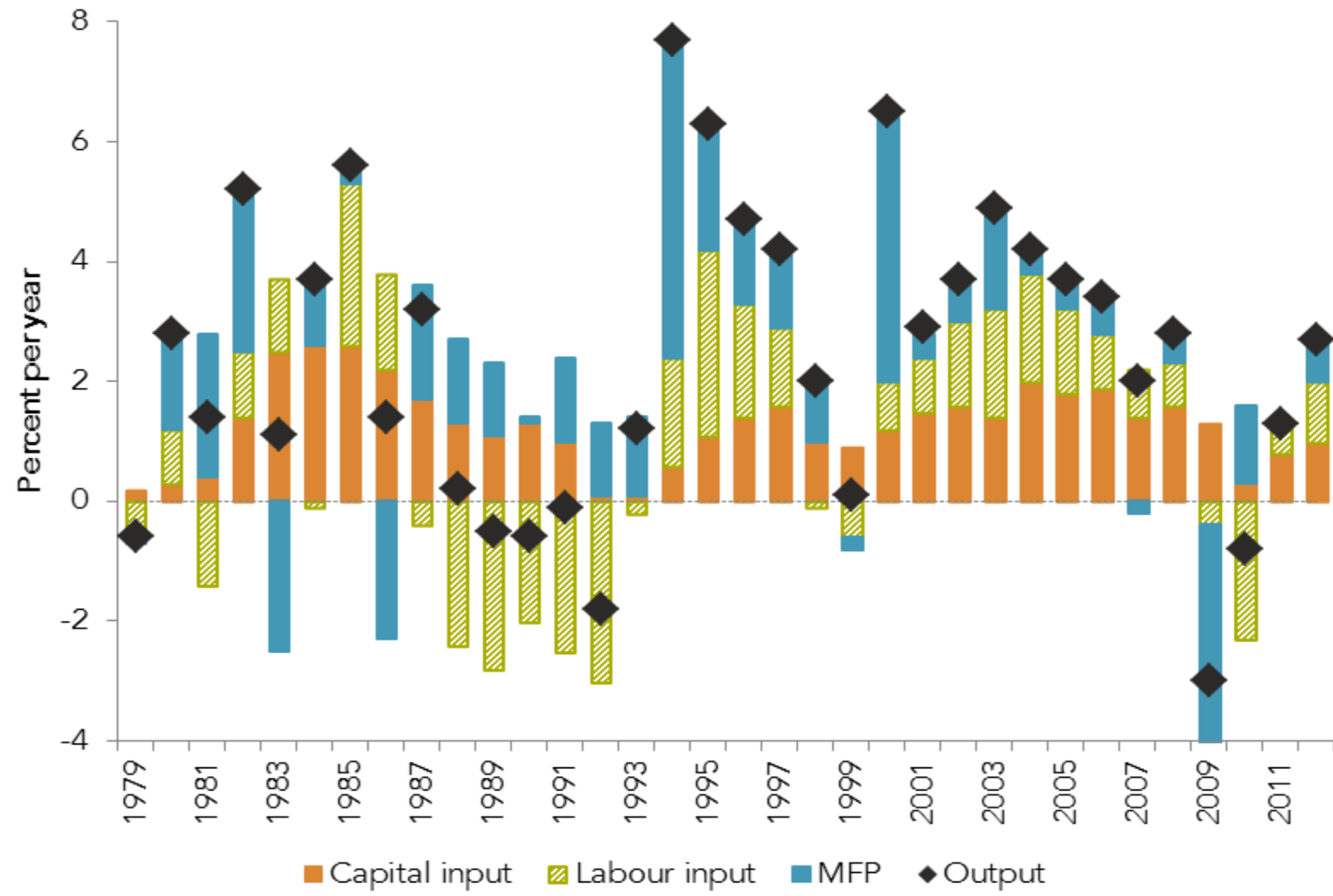
**The paradox** - which is bigger:

- low diffusion of technology into NZ?
- low diffusion of technology within NZ?

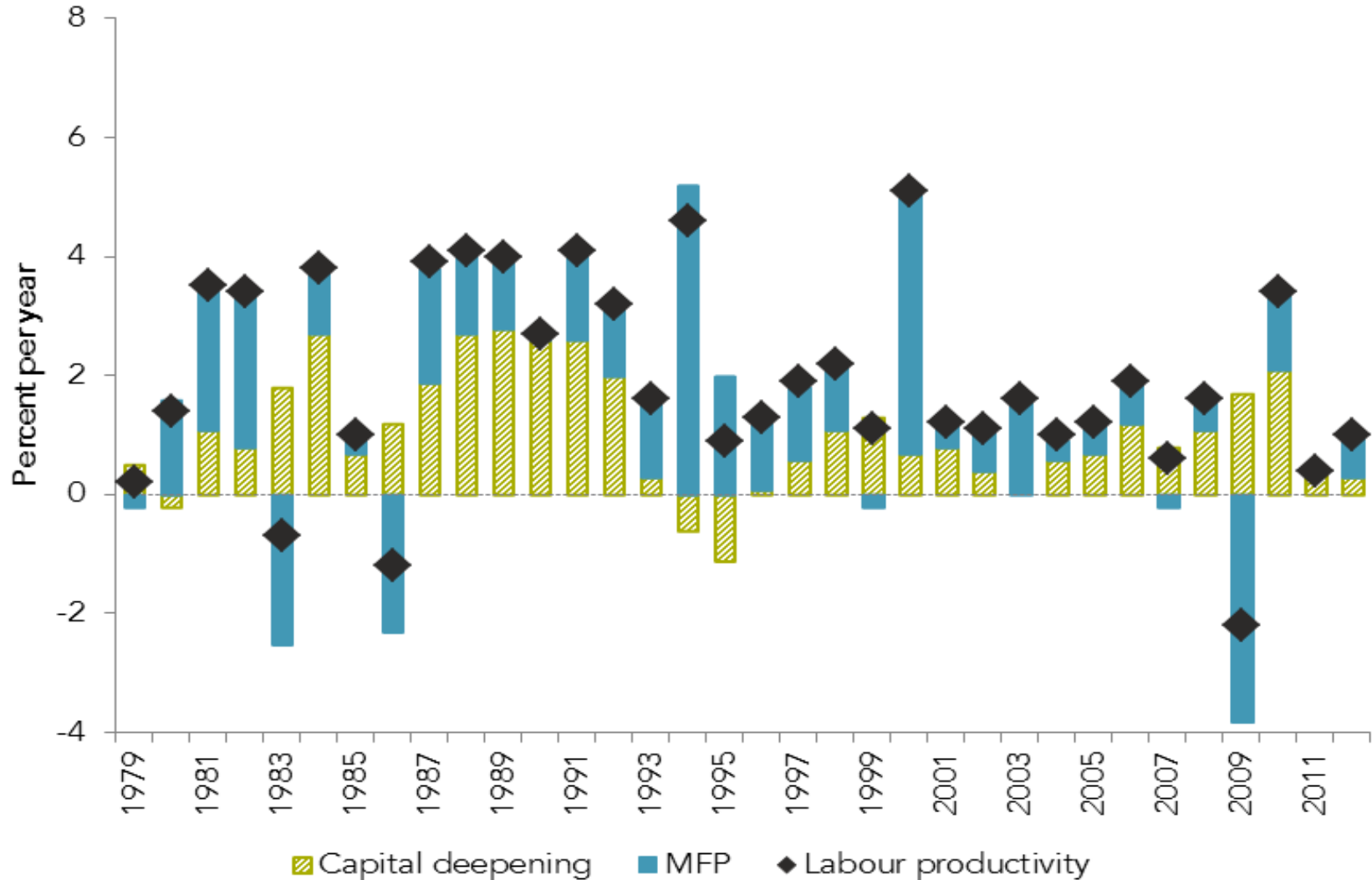




# Decomposition of measured sector output



# Decomposition of measured sector labour productivity





**SYMPOSIUM:**  
**UNPICKING**  
**NEW ZEALAND'S**  
**PRODUCTIVITY PARADOX**

2 July 2013, Oceania, Te Papa Tongarewa