

Industry training – an economist's perspective

Presentation to NZ Labour Market forum

Dr Ganesh Nana
Chief Economist

Business and Economic Research Ltd

01 December 2011



economics

www.berl.co.nz

*NZ Labour Market Forum – 011211
slide 1*

Agenda

- introduction
- industry training and ITOs
- measures of benefits
- modelling scenarios
- concluding comments



Introduction

aim is to inform the review of industry training being undertaken by MoE

- assess costs of industry training
- model economic benefits



Industry training

- on the job and in the classroom
- practical application and theory
- flexible to combine learning with work
- competency-based system



Industry Training Organisations

- provide industry leadership
- design and moderate qualifications
- arrange delivery of training

ITOs as a conduit between

- industry
- employers
- labour market
 - * including potential new entrants
- training providers
 - * and broader tertiary education system
- government



ITOs rectifying market failure

- asymmetric information
- regulating (moderating) standards
- industry perspective on skill supply
- externality benefits
 - * free riders



Some benefit measures

- various earlier studies have calculated BCRs for industry training
- selected primary industries
 - * dairy, sheep & beef, pork farms
 - * pipfruit, kiwifruit orchards
 - * vineyards, seafood and quarries
- BCRs ranging from 2:1 to 42:1
 - * 'modal' BCR around 7:1



Exploring economy-wide benefits

- standard model of NZ economy
 - * 53 industries
 - * 40 occupations
- explore various industry training scenarios
- compare with a BAU or 'control' scenario

Modelling info

- base (2010)
 - * 102,500 trainees and 39,000 completions
- BAU scenario assumes industry training continues at this level
- scenario changes imposed in 2012
 - * snapshot outcomes observed for short-term (2014) and longer-term (2021) impacts

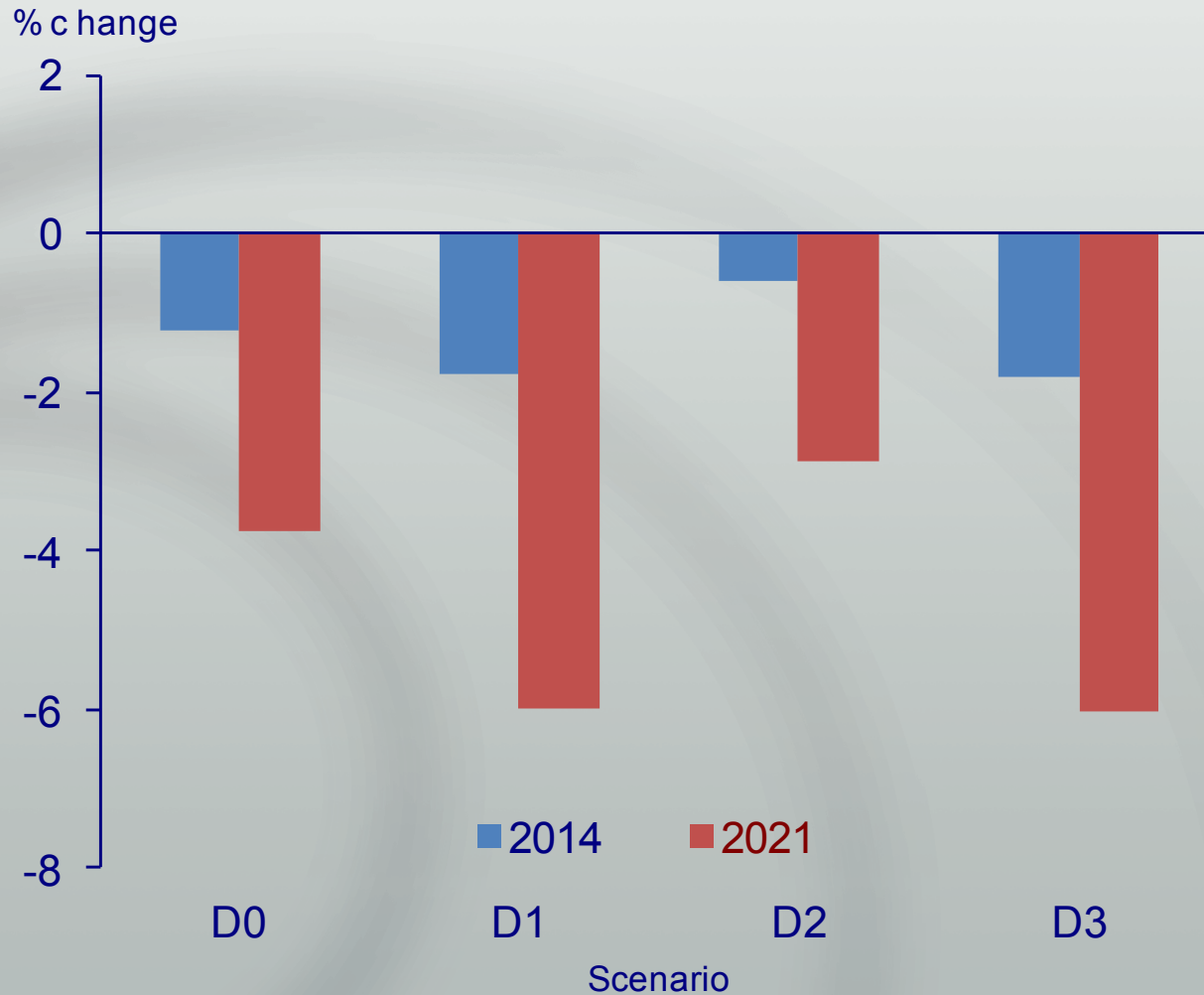


Scenarios

- no public-funded industry training
 - * leading to reduction in completions
 - * variants where industry also reduces industry training effort
- increase in public-funded industry training
 - * leading to increase in completions
 - * variants targeting selected industries



Impact on GDP (cf BAU) of no public-funded industry training



Scenario summary results

| | no public-funded industry training | + industry funded training decrease | + public funds to other tertiary education |
|-------------|------------------------------------|-------------------------------------|--|
| GDP | -1.2 | -1.7 | -0.6 |
| Consumption | 0.1 | 0.2 | 0.1 |
| Exports | -3.0 | -4.9 | -1.3 |
| Employment | -2.4 | -3.3 | -1.3 |

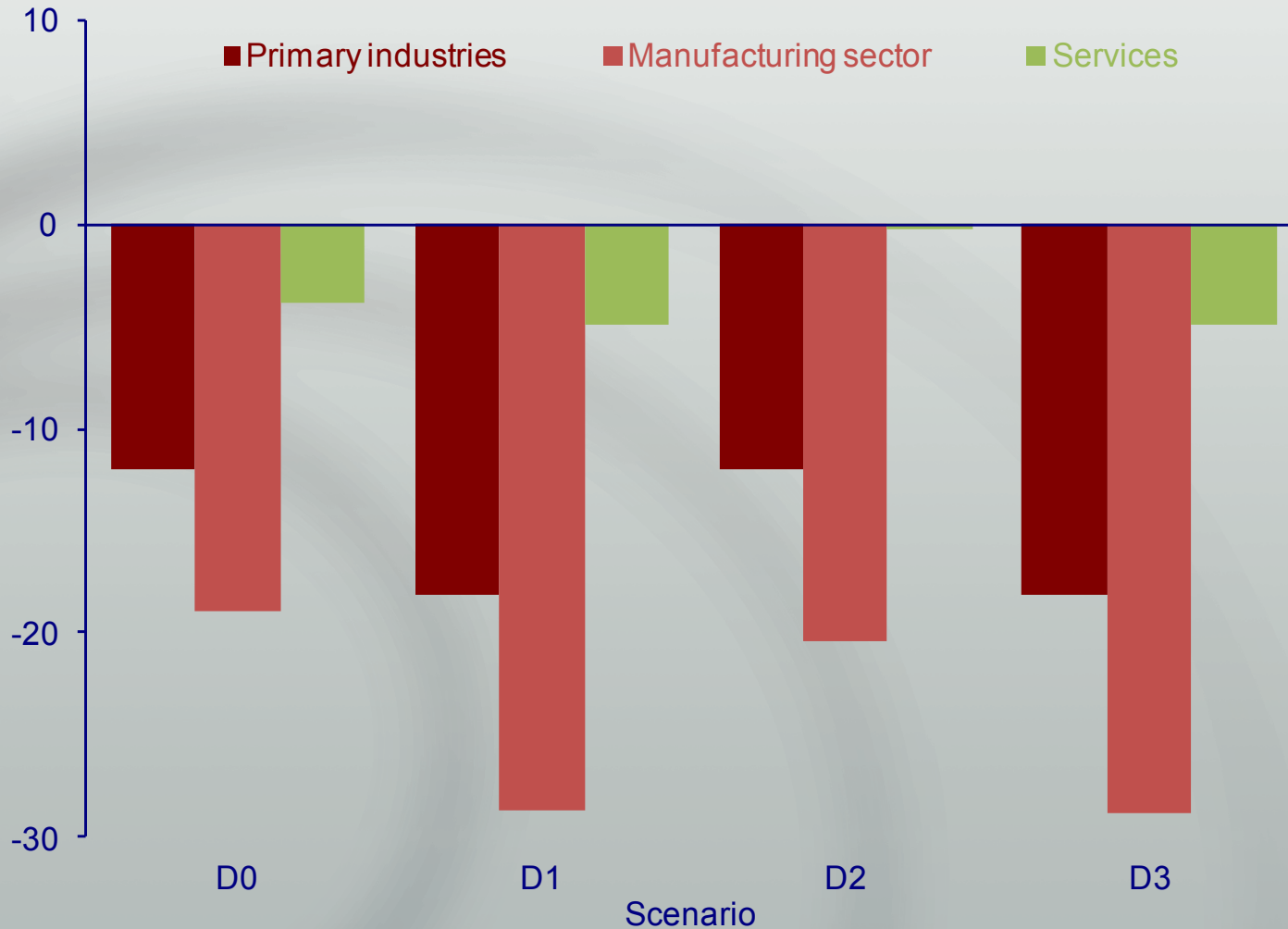
Decrease in public-funded industry training

- impact varies
 - * depends on industry
- largest loss
 - * when industry spend also declines
- transfer funds across all components of tertiary education sector
 - * net negative impact on economy

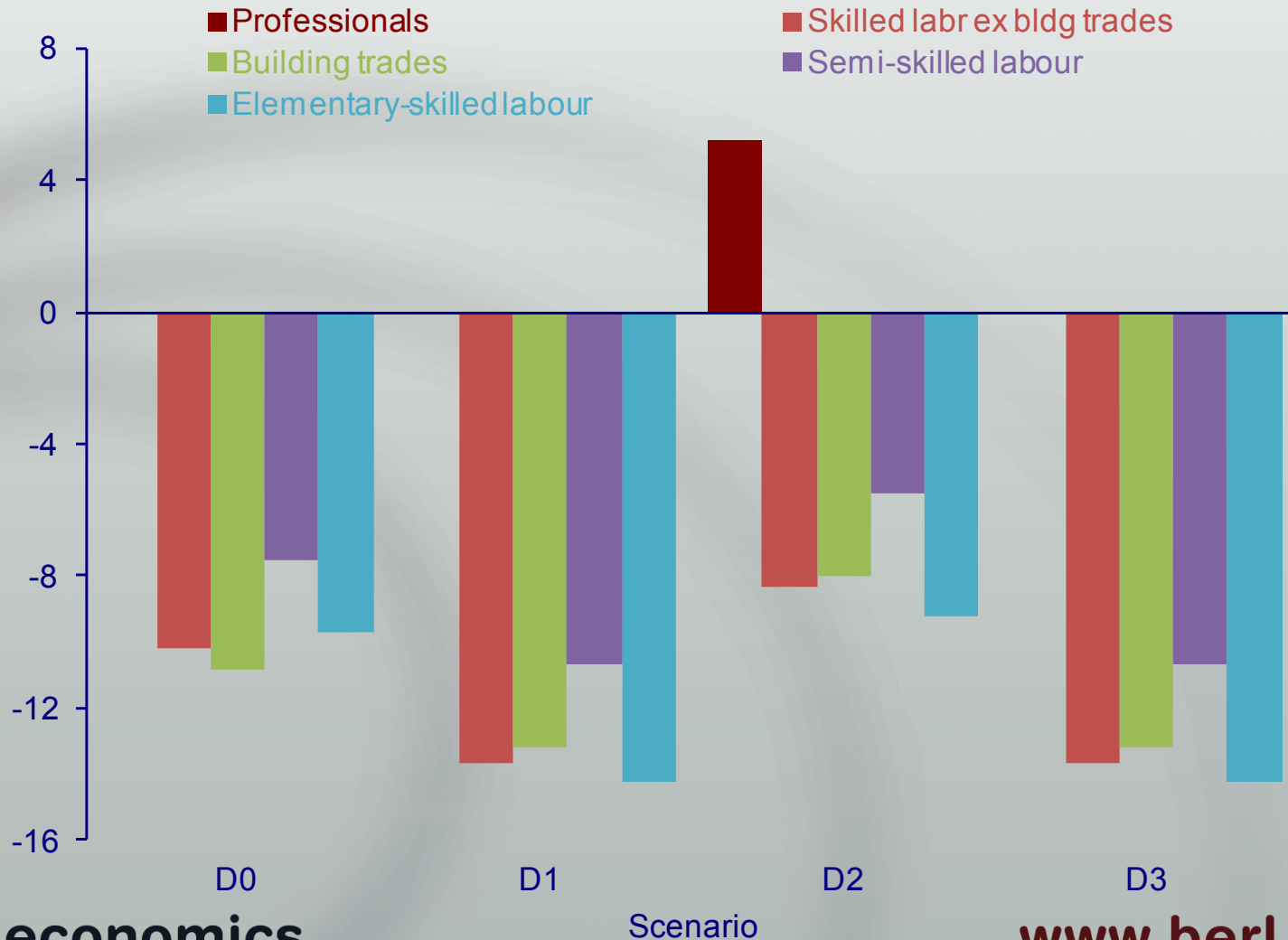


No public-funded industry training

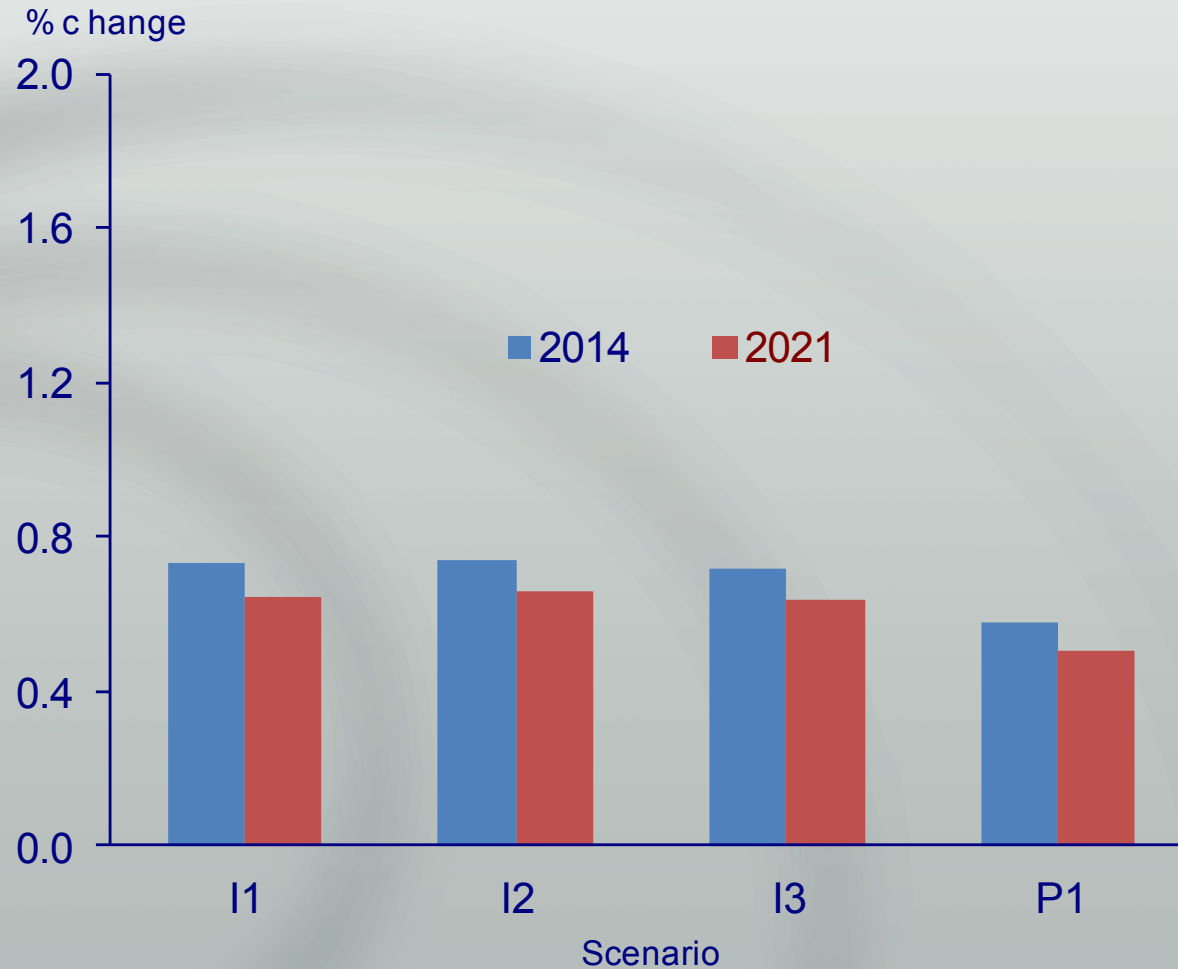
long-term impact on employment by sector (% change compared to BAU)



No public-funded industry training long-term impact on employment by occupation (% change compared to BAU)



Impact on GDP (cf BAU) of increase in public-funded industry training



Scenario summary results

| | increased industry training | increase targeted to industries consistent with EGA | increase targeted to industries consistent with TES & Chch |
|-------------|-----------------------------|---|--|
| GDP | 0.6 | 0.7 | 0.6 |
| Consumption | -0.1 | -0.1 | -0.1 |
| Investment | 0.6 | 0.4 | 0.7 |
| Exports | 2.0 | 2.1 | 1.8 |
| Employment | 1.4 | 1.4 | 1.4 |



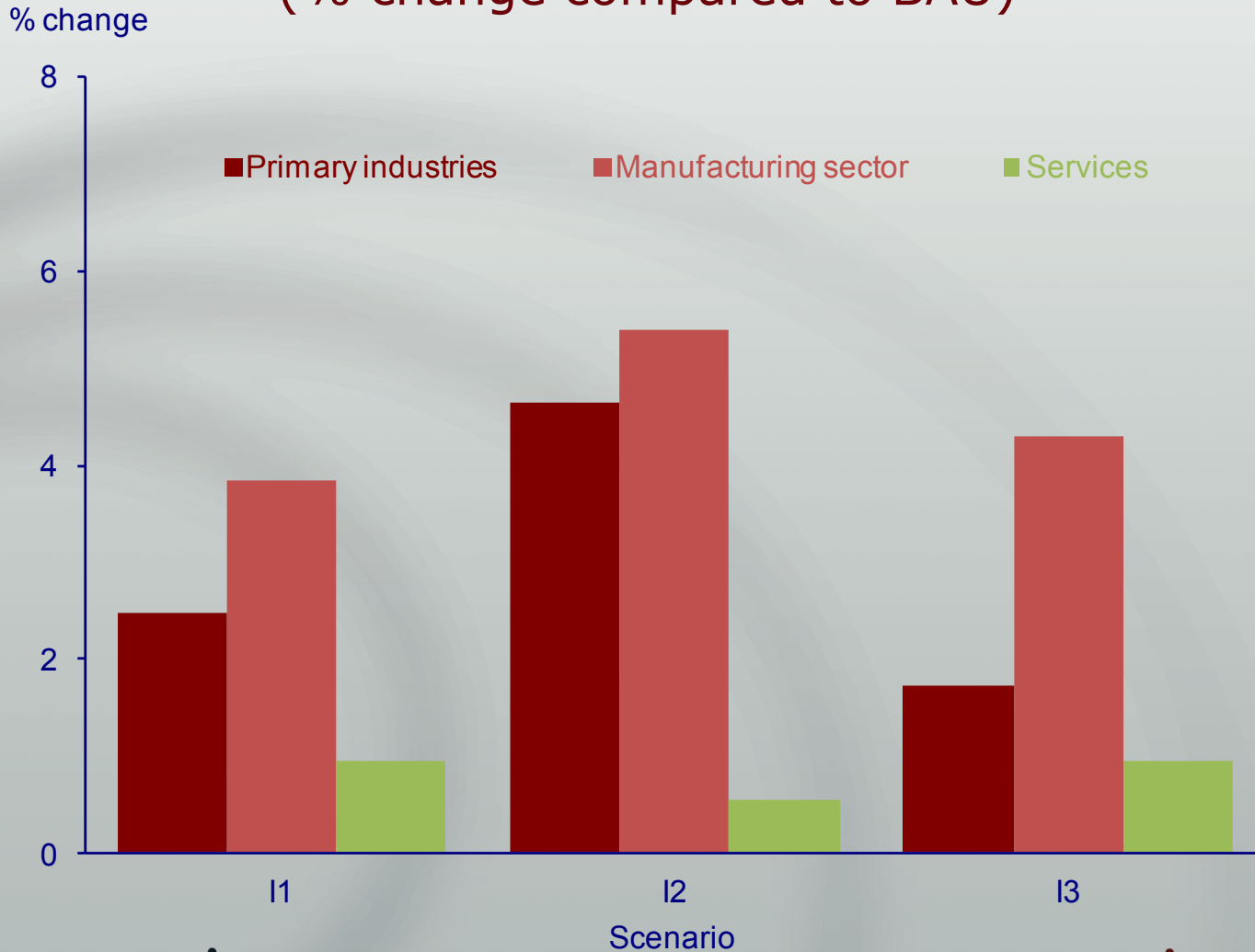
Increase in industry training

- gains in GDP and exports but limited
 - * labour supply constraint
- little difference in macro gains when focus on specific industries
- gains vary across industries



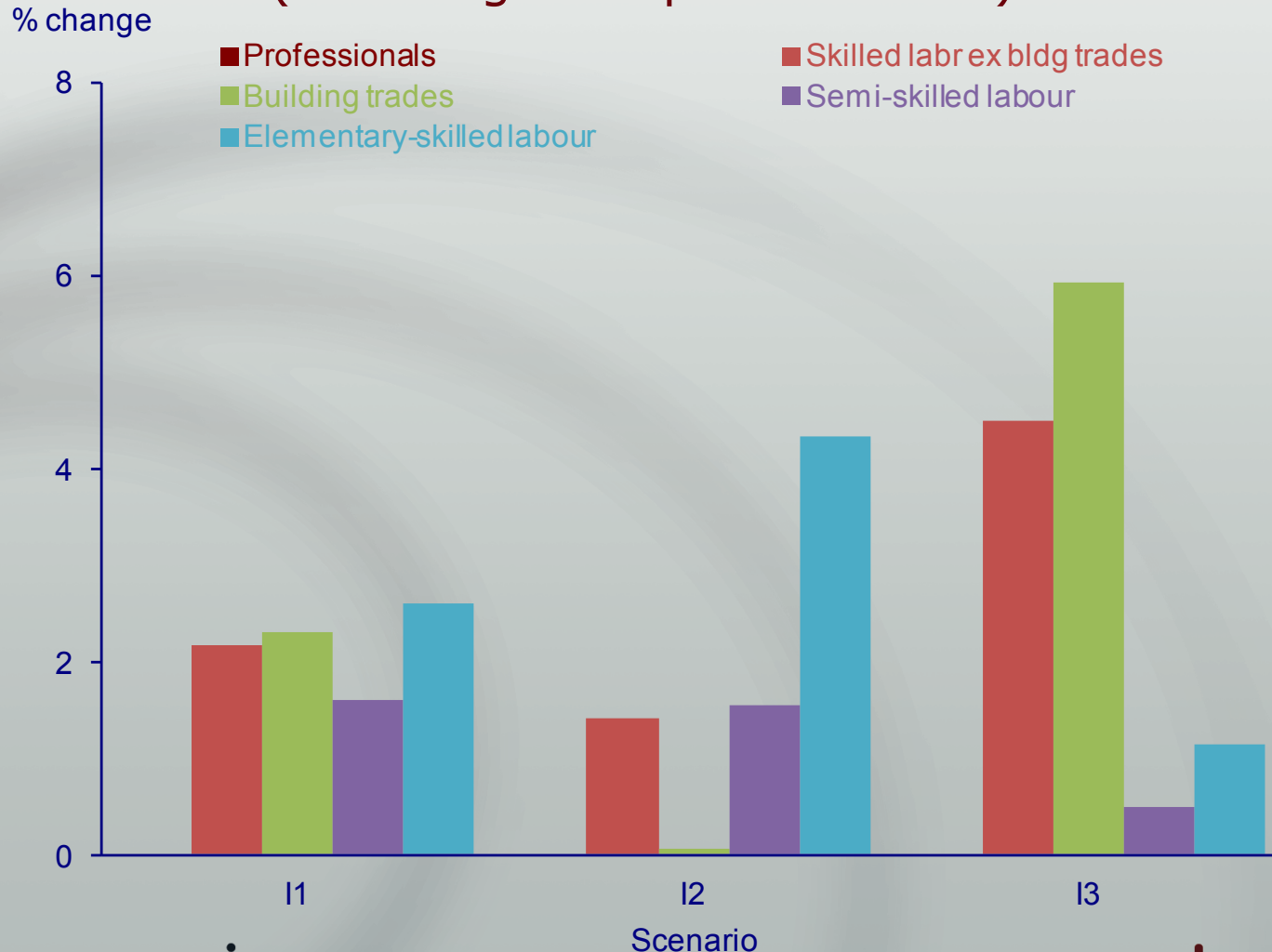
Increase in industry training

long-term impact on employment by sector (% change compared to BAU)



Increase in industry training

long-term impact on employment by occupation
(% change compared to BAU)



Comments

- significant benefit from industry training confirmed
 - * but labour constraint acknowledged
- training requirement across all skills confirmed
 - * economy needs skills (trained) of all types
- appropriate framework
 - * outputs (completions) or outcomes (long-term gains to macro economy)?

