



THE JOINING UP CONSTRUCTION CONVERSATION

CONSTRUCTION EFFECTIVENESS USING NON-PRICE MEASURES

WESTERN SYDNEY
UNIVERSITY



Centre for
Smart Modern Construction

WSU TEAM

PhD Candidate – *Mr Kasun Gunesekara*



Supervisory Panel

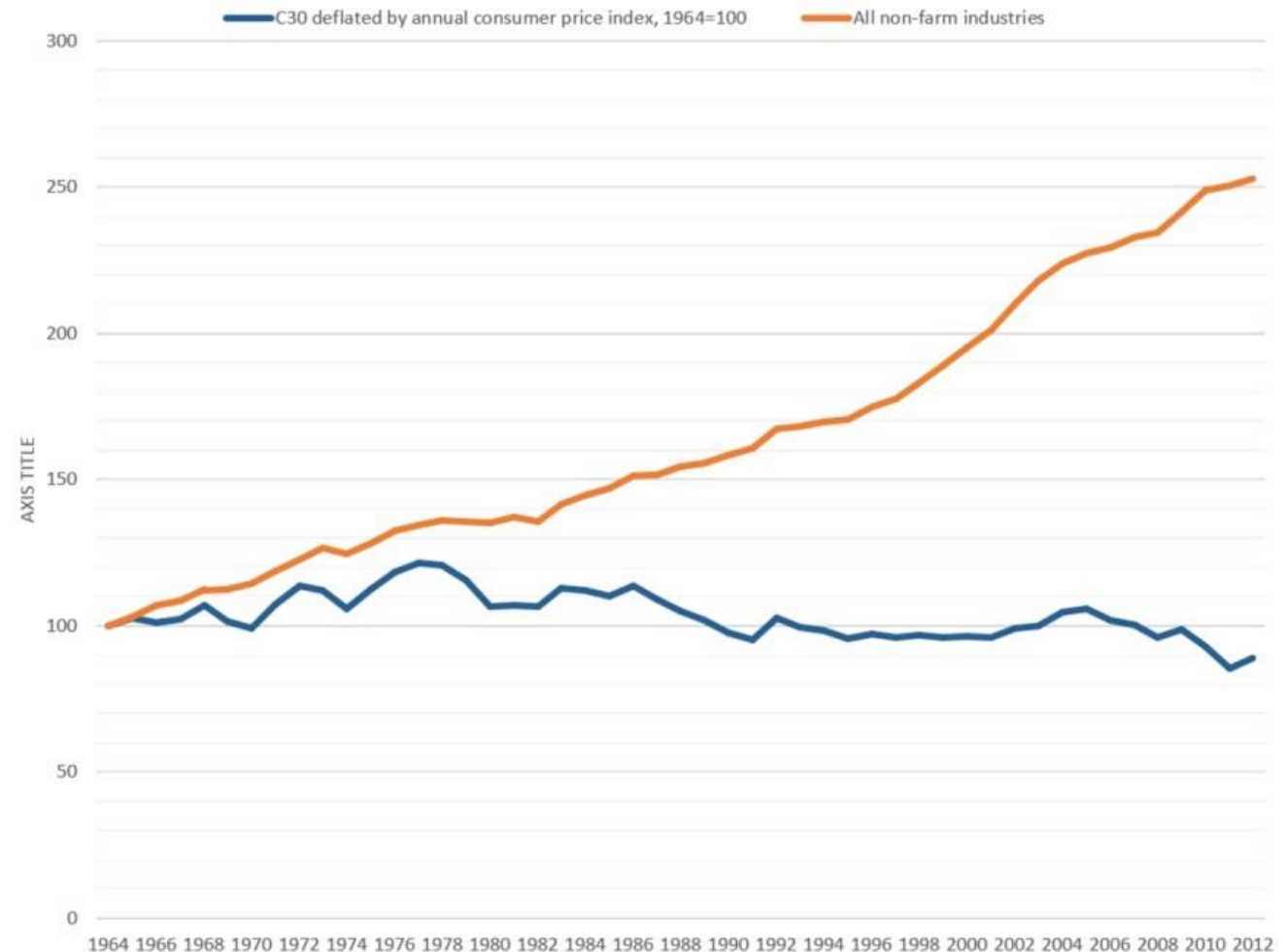
- *Prof Srinath Perera*
- *A/Prof Mary Hardie*
- *Dr Xiaohua Jin*



CHALLENGES

- Slow productivity growth
- Large and disaggregated supply chains
- Focus on initial price bid only
- Passing risk down the supply chain

Construction Labor Productivity, 1964-2012
based on various deflators
1964 = 100



BARRIERS

- Commercial in confidence
- No agreed benchmarks
- No visibility of underlying problems
- Growing complexity of industry outputs



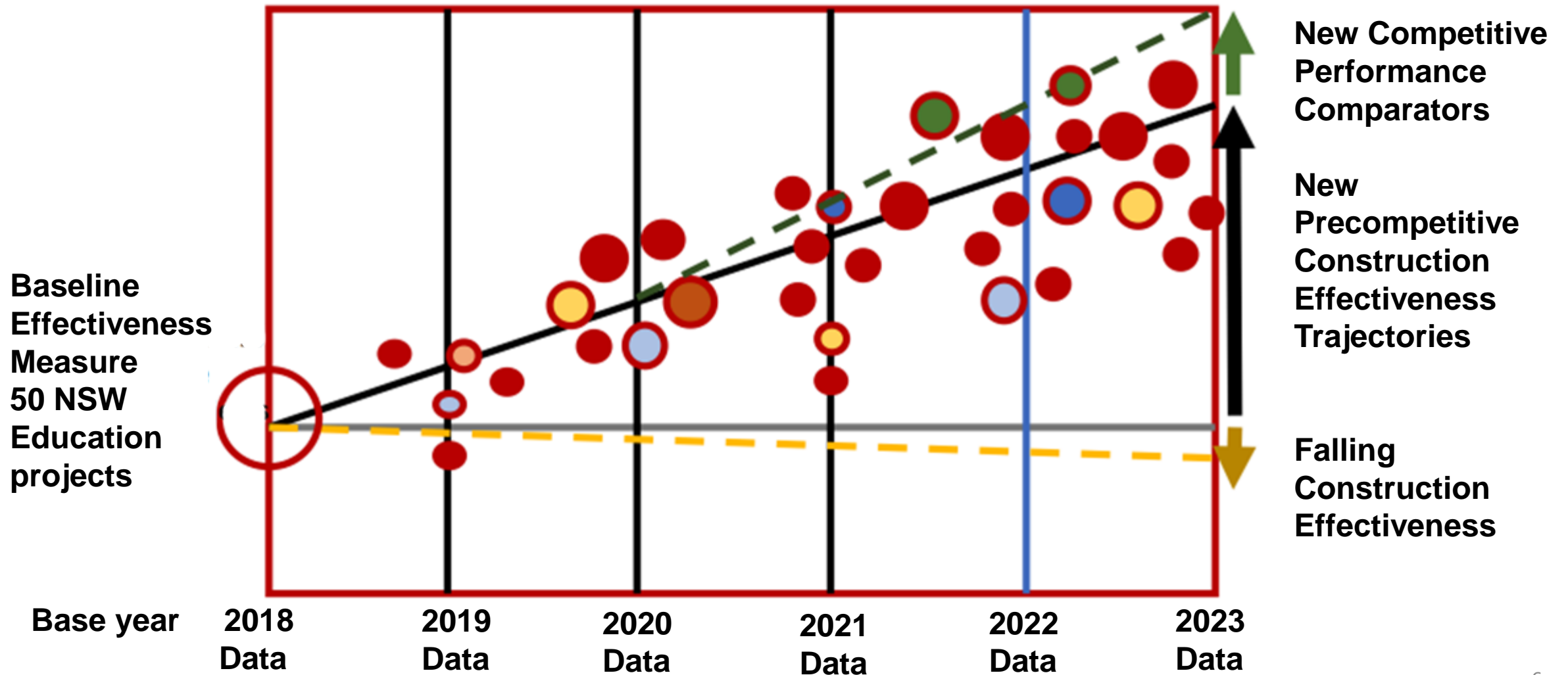
PILOT STUDY

50 baseline projects completed in the last three years

- Gross Floor Area (GFA) between 1000 and 5000m²
- Duration of project in days
- All workforce inputs in man hours (management included)
- Waste leaving site in m³
- Loss Time due to injury in days/hours

Index based on units of 100m² of completed build

Conceptual Construction Effectiveness Measurement Framework



WHAT WE WILL DELIVER

- Expand performance focus beyond cost and completion
- Select the least complex, easiest to collect, most understandable and most telling data
- A new effectiveness index
- *We need your cooperation.....*



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