



Disaster and economic resilience in Small Regional Communities: The case of Toodyay

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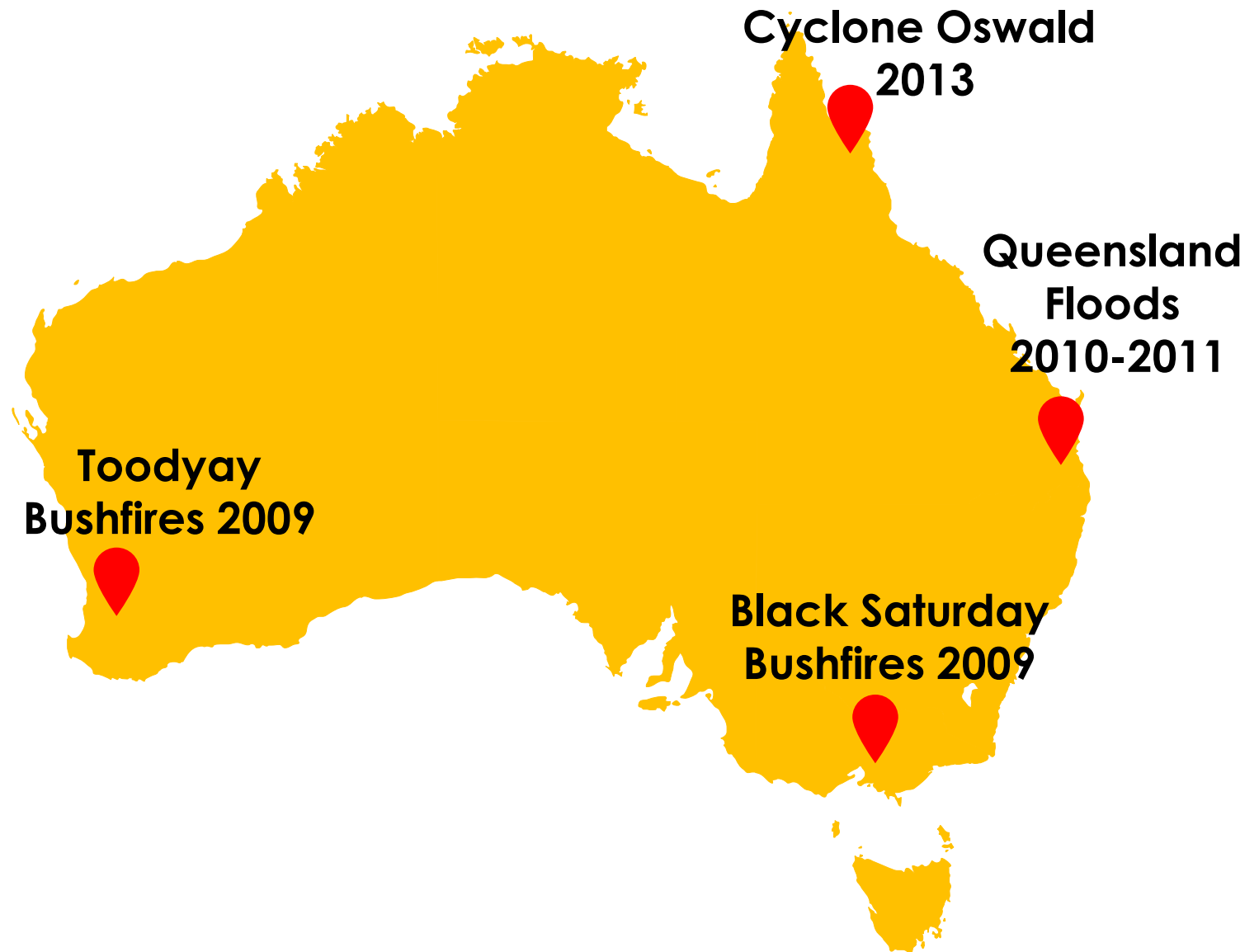
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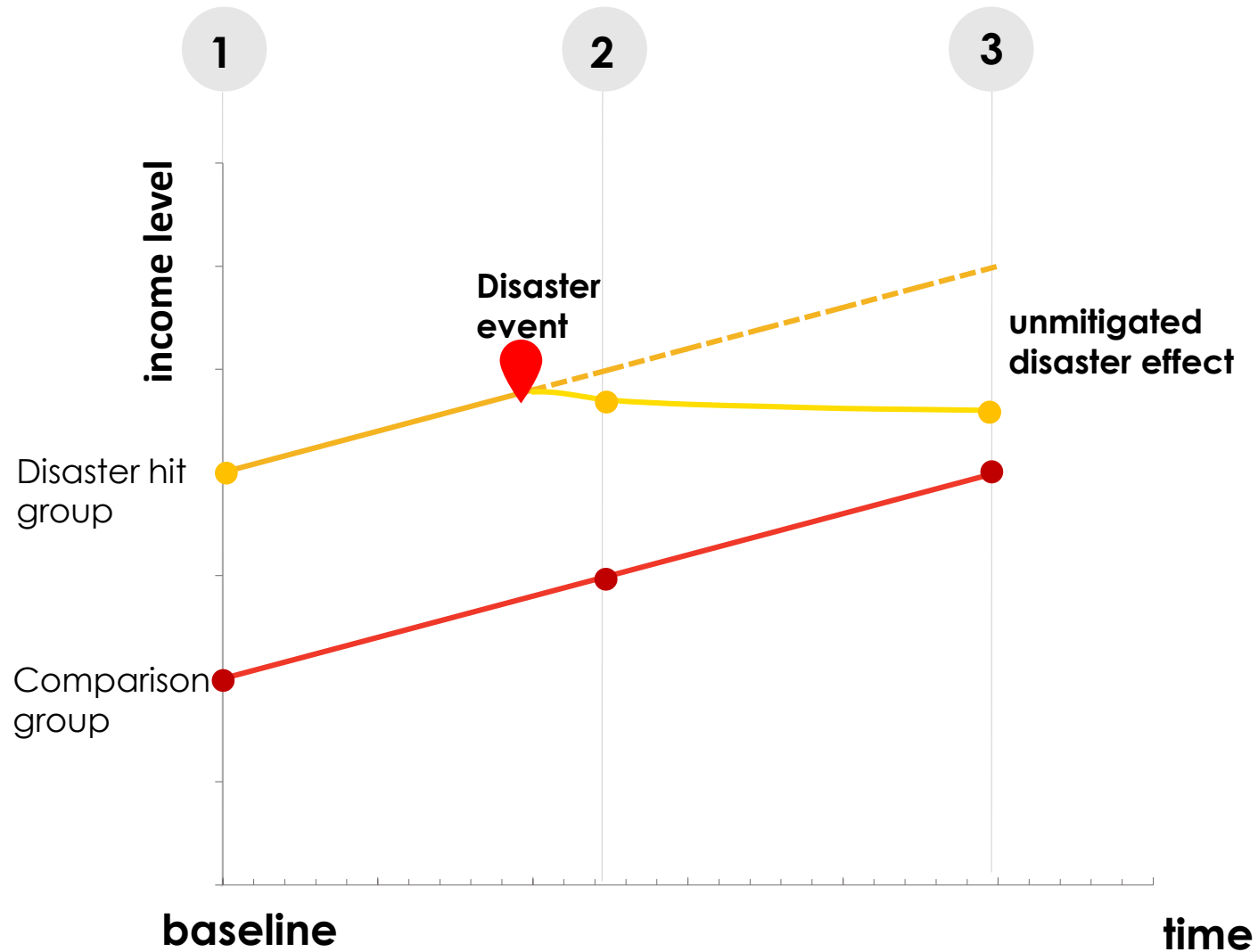
Research

- Estimate economic impact of natural disasters
- Optimise and inform a sustainable disaster recovery model



Measuring the impact

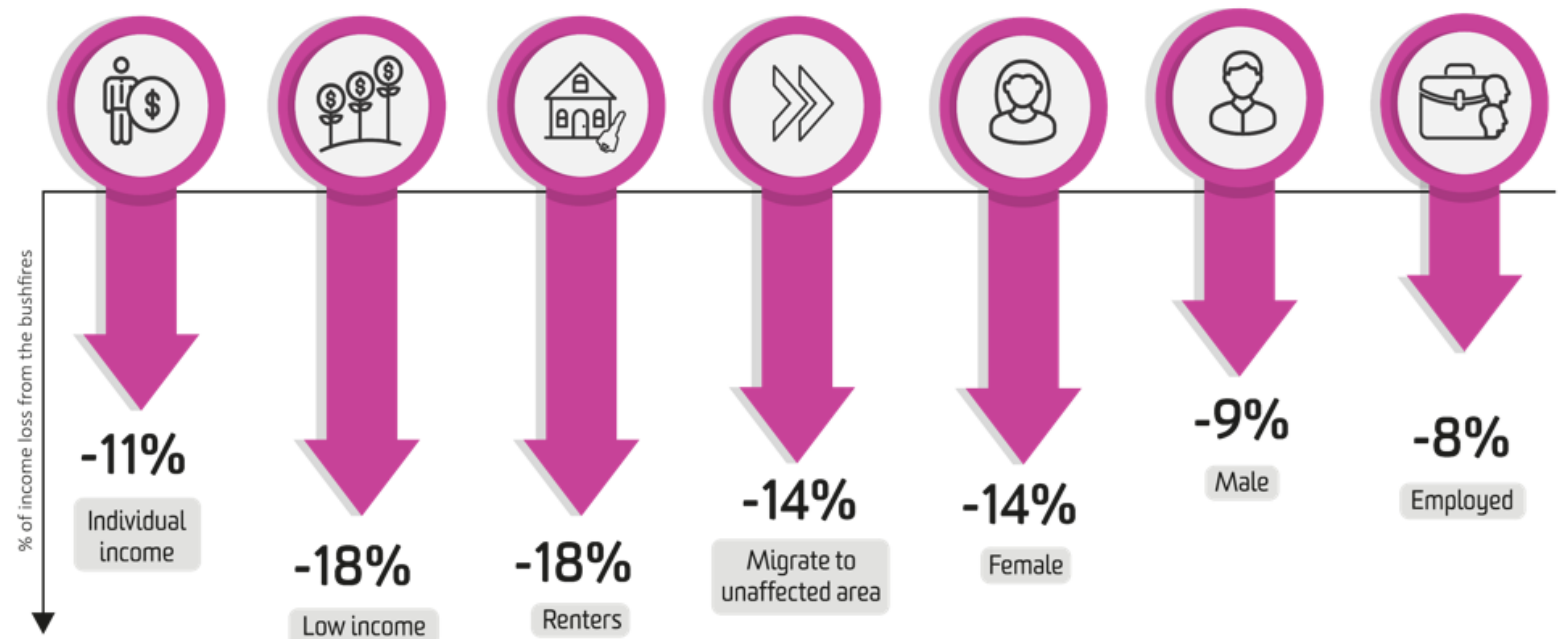
- Difference-in-difference model
- ABS Census 2006, 2011 and 2016





Black Saturday bushfires

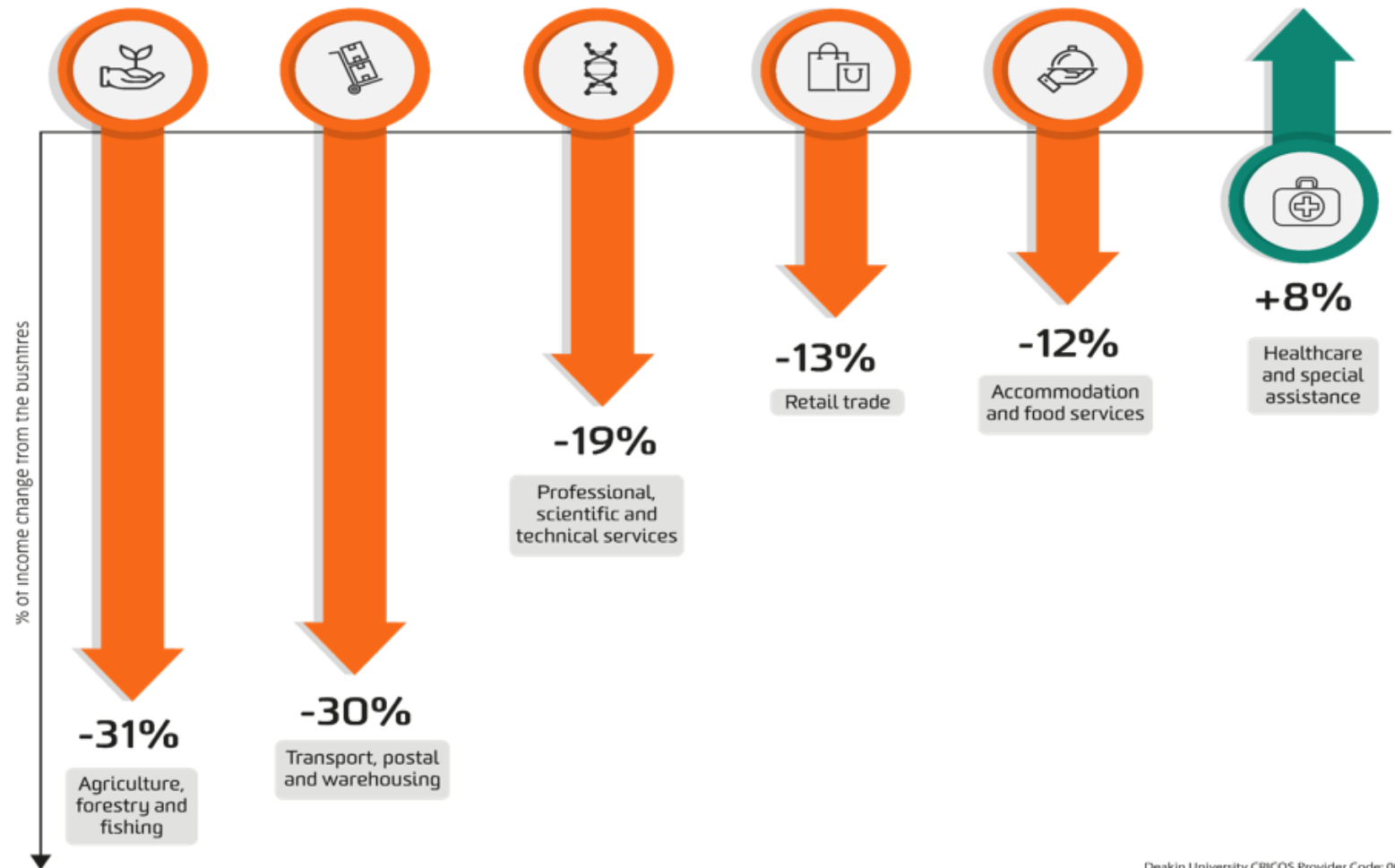
Individual income losses by demographic group





Black Saturday bushfires

Individual income losses by sectors of employment



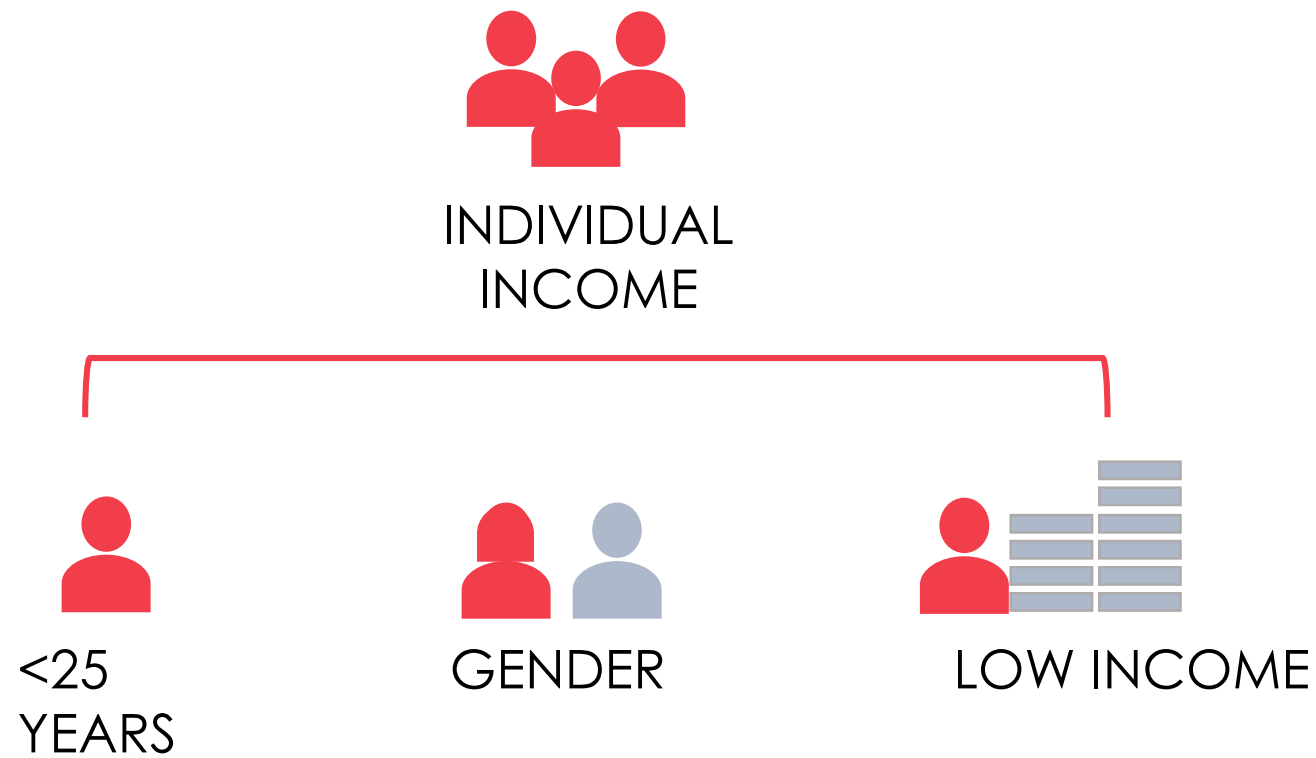
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| Toodyay bushfires

Modelling hampered
by small sample size





**Hours to
bring fire
under control**



**% Toodyay SA2
burnt**



**Employed
residents work
outside of
Toodyay**



**Public assistance
distributed within
first three months**

Toodyay bushfires

Demographic profiling
uncovered
valuable insights



Utilisation



Centre for Energy, the Environment
and Natural Disasters





Utilisation

End-users

Commonwealth

- Emergency Management Australia

Queensland

- Queensland Reconstruction Authority

South Australia

- Department of Environment, Water and Natural Resources

Victoria

- Department of Environment, Land, Water and Planning
- Inspector General of Emergency Management Victoria

Western Australia

- Office of Bushfire Risk Management, Department of Fire and Emergency Services

Utilisation

So far



Factors affecting long-term community recovery



Black Saturday: the economic cost



Ten years of emergency management reform



Black Saturday: counting the cost



AUSTRALIAN BUSINESS ROUNDTABLE
for Disaster Resilience
& Safer Communities

Utilisation

- Pre- and post-disaster funding should better reflect the long-term nature of social impacts
- A collaborative approach needed to address the medium- and long-term economic costs of the social impacts of natural disasters
- Further research must be done into ways of quantifying these costs





Utilisation

Small towns like Toodyay form 9.7% of Australia's population

