

Future-proofing Aotearoa: Preparing for the population changes ahead



Raumata
Policy Hub

ROYAL
SOCIETY
TE APĀRANGI



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Atatoa Carr



Dr Patrick Nolan



Simon Wilson
(moderator)

Agenda

09:00	Welcome and introduction	Justine Daw (Royal Society)
09:10	Recap of population forecast changes and impacts	Andrew Jackson
09:25	International responses to population change	Professor Paul Spoonley
09:40	How we should prepare for our changing population	Professor Tahu Kukutai
09:45	How we should prepare for our changing population	Associate Professor Polly Atatoa Carr
09:50	How we should prepare for our changing population	Dr Patrick Nolan (Retirement Commission)
09:55	Panel discussion: how should NZ prepare for its changing population	Moderated by Simon Wilson
10:30	Close	

Future Proofing Aotearoa: preparing for the population changes ahead

Andrew Jackson



An overview of forecasts and their implications from 9 presentations on NZ's future population

Understanding the possible futures of New Zealand's population

The changing shape of our population (*Prof Paul Spoonley*)

Ageing and urbanisation of our population (*Prof Michael Cameron*)

International drivers of immigration (*Associate Prof Kate McMillan*)

Economic and social outcomes and the implications of climate change

Economic implications of immigration and emigration (*Prof Jacques Poot*)

Factors to facilitate psychological wellbeing and socio cultural adaptation (*Associate Prof Maja Krtalic*)

Climate change implications for immigration (*Prof James Renwick*)

Affording in our future population

Healthcare for our future population (*Associate Prof Polly Atatoa Carr*)

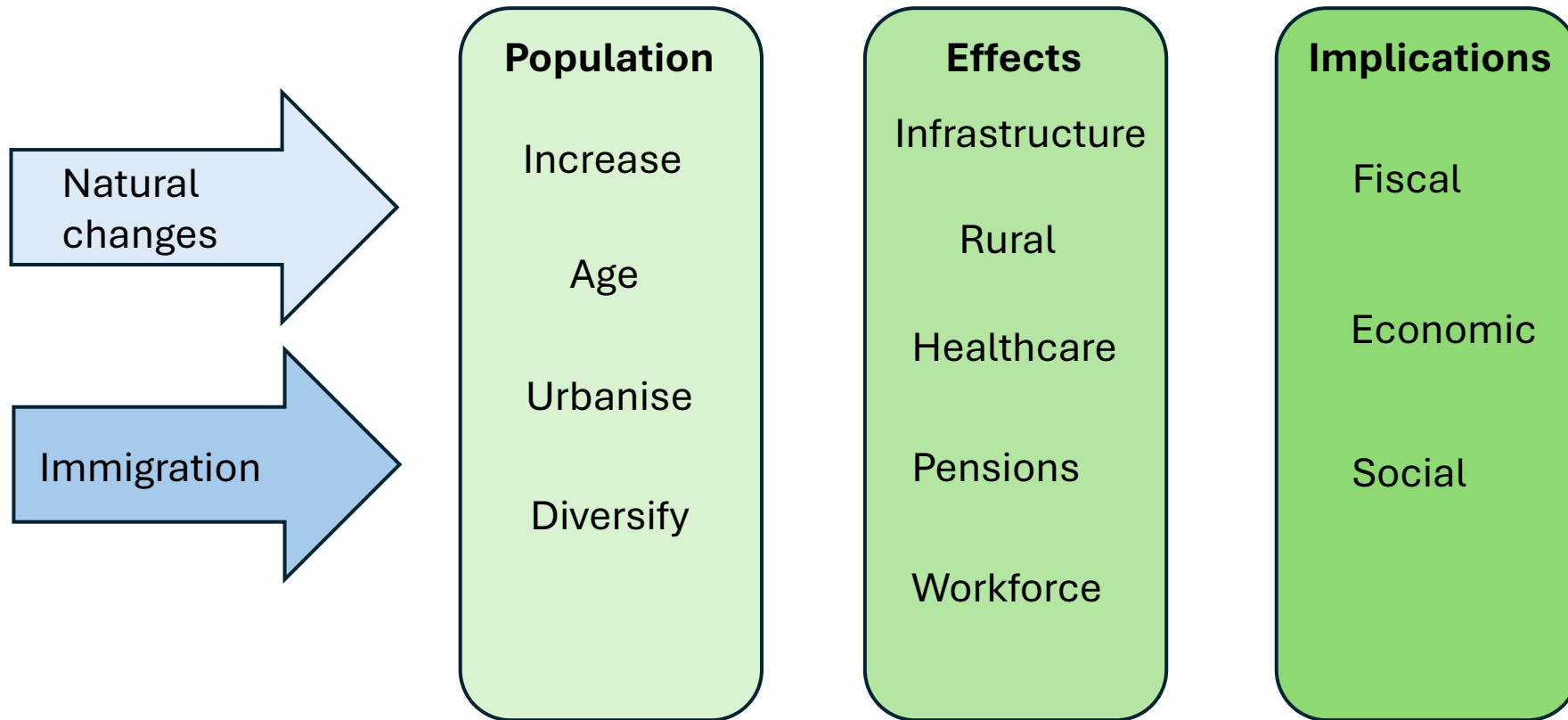
Infrastructure demands from our changing population (*Peter Nunns*)

Fiscal implications of our future population (*Julie Fry*)

The full presentations can be listened to at:

<https://www.wgtn.ac.nz/policy-hub/projects/current-projects/exploring-new-zealands-future-population-seminars>

An exploration of forecast changes in New Zealand's population and its implications



The changes in our population raise a number of important issues

Where will we get our **future workforce** from; as a greater proportion of the population retire?

Should we change **retirement policies** to make the cost of pension affordable for the nation?

How should we **invest in public health** today to provide better health outcomes for our ageing population and can investment in public health help keep total health costs in check?

What changes will be needed to ensure we are able to provide **key services to rural areas**?

What does this mean for **immigration settings** and how do we ensure a good outcome from immigration?

What does this mean for **fiscal policy**?

Should there be a **population national 10 year plan or strategy**, just as the local authorities have 10 year plans, to deliver a better outcome for our tamariki and mokopuna?



(https://informedfutures.org/wp-content/uploads/2026/04/Koi-Tu_People-place-and-prosperity-report_April-2026.pdf)

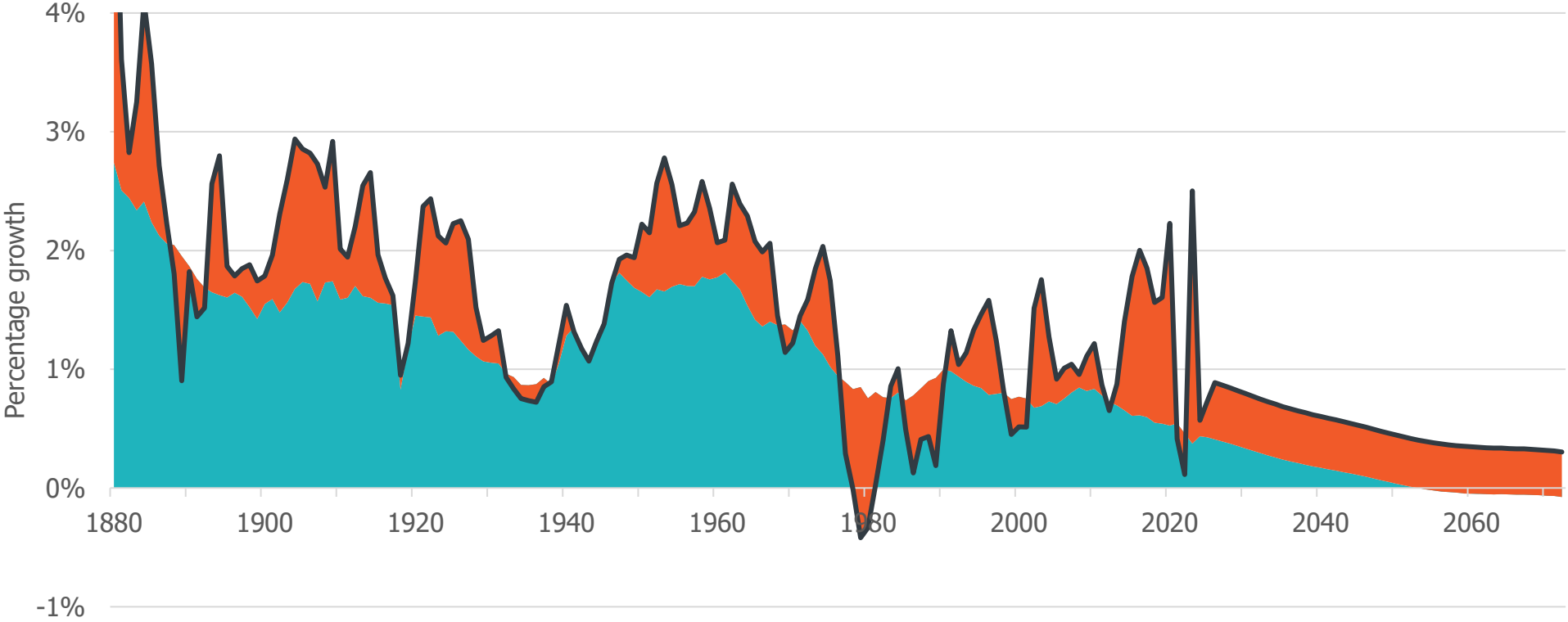
Overview of the forecasts and drivers of change



New Zealand's future population will be shaped by declining fertility rates and net immigration

New Zealand's population growth drivers, 1880-2073

Natural increase Net migration Total population growth

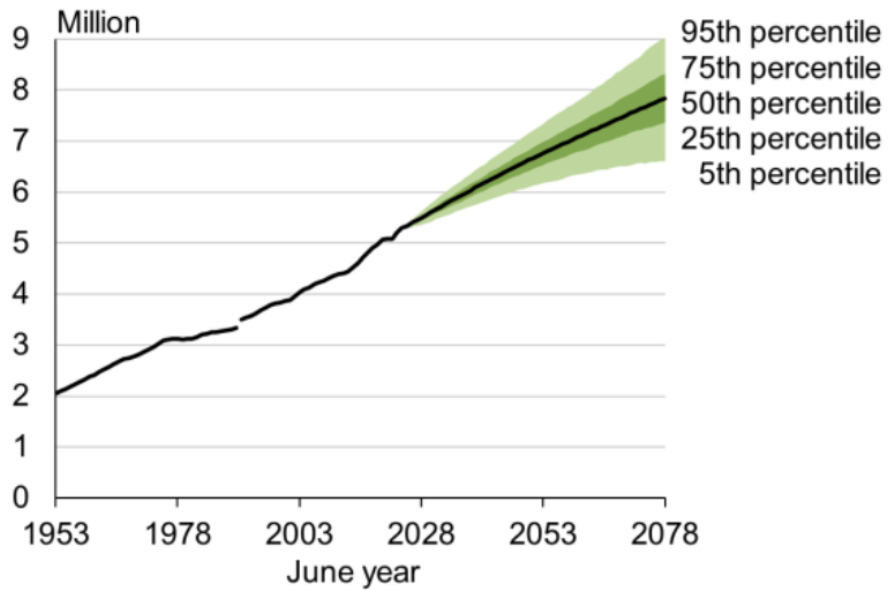


Infrastructure Commission. 2024. *Paying it forward: Understanding our long-term infrastructure needs.*
<https://tewaihanga.govt.nz/our-work/research-insights/paying-it-forward-understanding-our-long-term-infrastructure-needs>



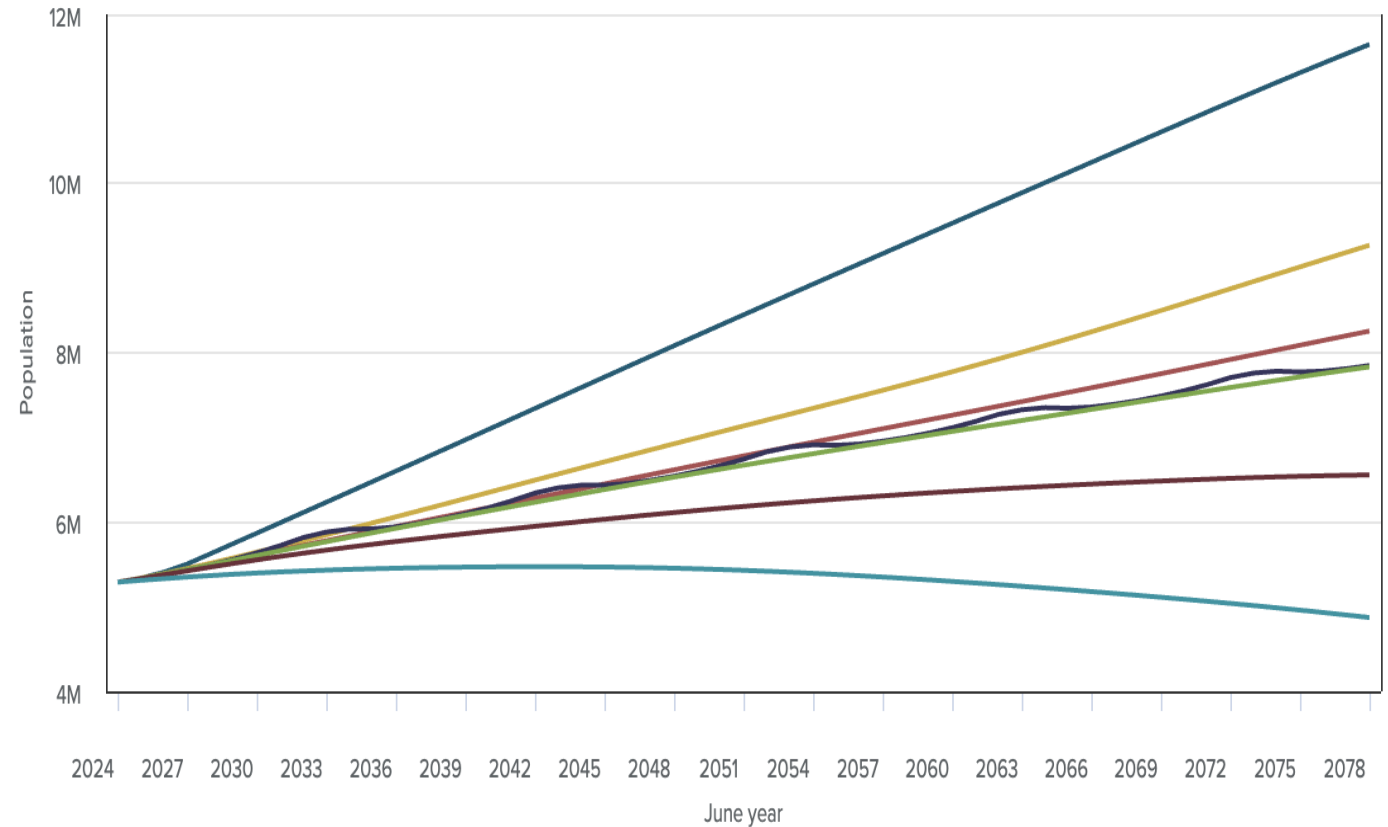
New Zealand's population will reach between 6.6 million and 9 million by 2078

New Zealand population
1953–2078



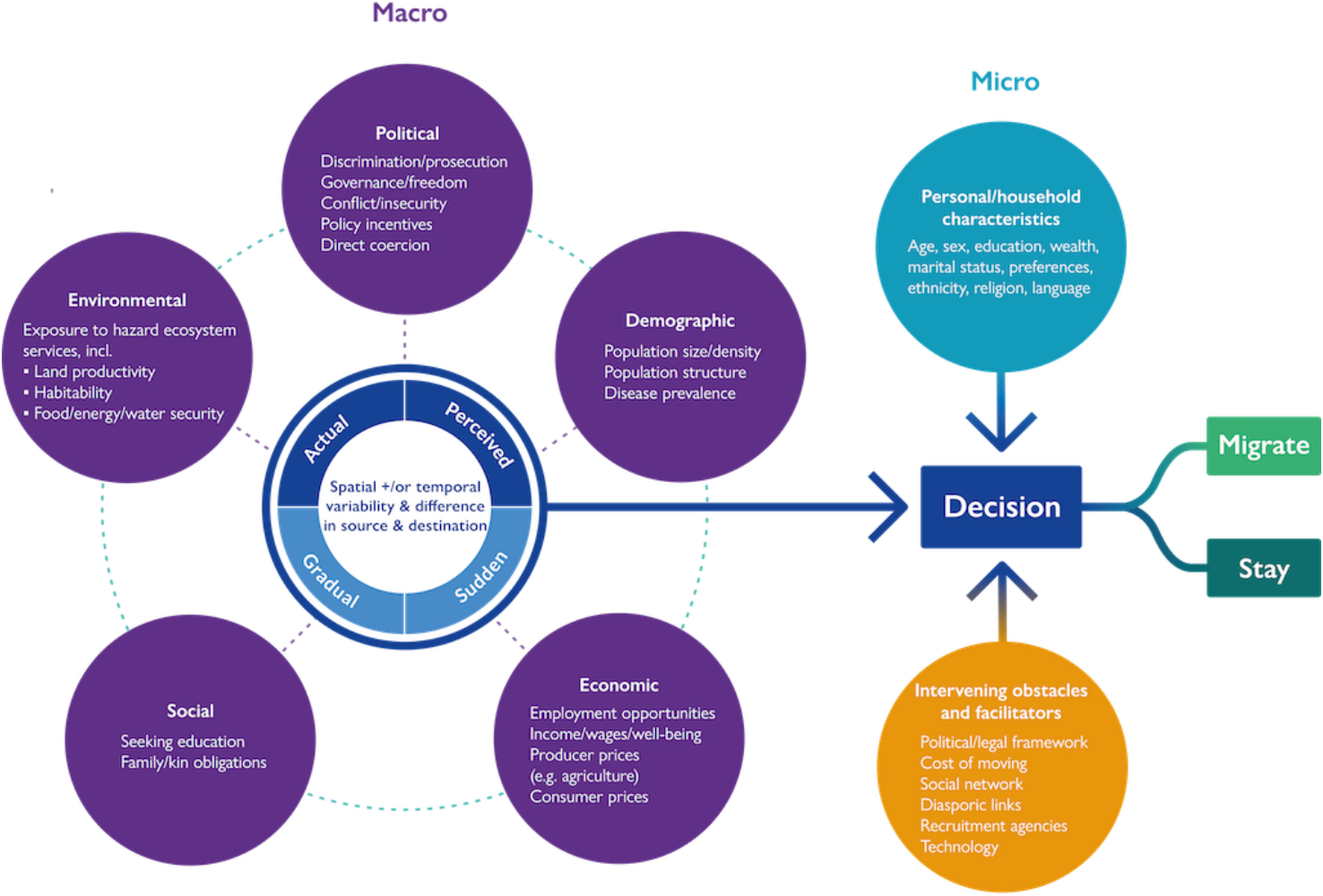
Source Stats NZ

Projected New Zealand population, 2024–2078



- Very high migration
- Very high fertility
- Very low mortality
- Cyclic migration
- 50th percentile
- Very low fertility
- No migration

A range of factors will affect New Zealand's net migration rate

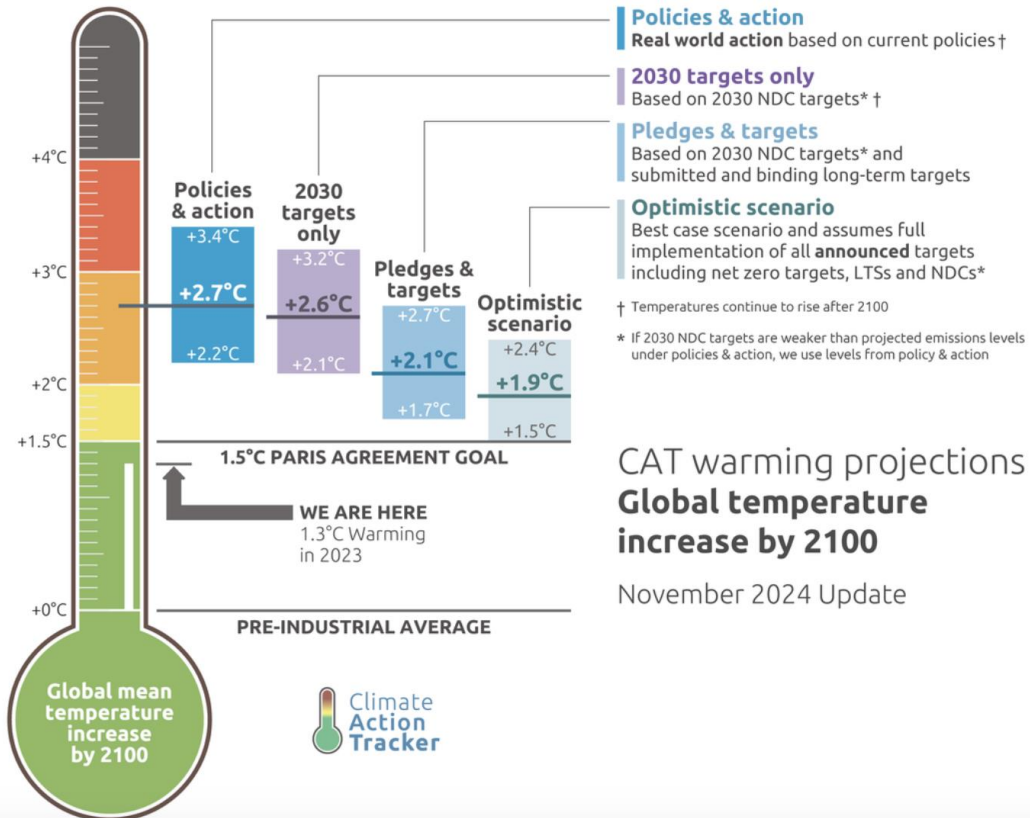


Prof Kate McMillan

Meso

IoM 2026

We could face millions wanting to come to New Zealand under current policies



- Best case:
 - World community caps warming at under 2°C
 - Major ice sheets stabilise, 0.5m sea level rise by 2100
 - A few thousand migrants come to our shores?
- Worst case:
 - No global action, 3°C warming by 2100
 - Ice sheets start to go, 2m sea level rise by 2100
 - Extremes become unbearable
 - Millions want in to Aotearoa?

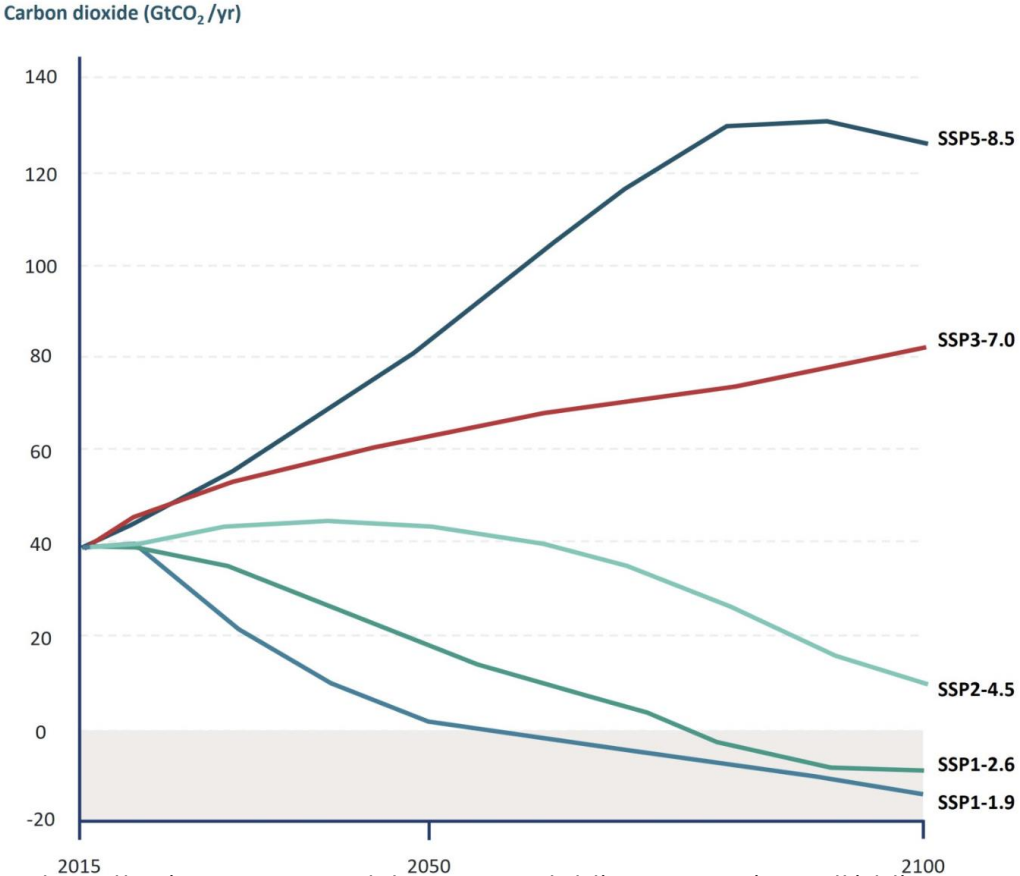
Prof James Renwick

<https://environment.govt.nz/what-you-can-do/climate-scenarios-toolkit/climate-scenarios-list/ipcc-ssp-rcp-scenarios/#combined-ssp-rcp-scenarios>

<https://climateactiontracker.org/global/cat-thermometer/>

The Intergovernmental Panel on Climate Change (IPCC) modelled green house emission pathways and impacts

To achieve the lowest pathway there would need to be a 45% reduction in emissions of global green house gases (GHG) by 2030 and for GHG emissions to be globally neutral by 2050.

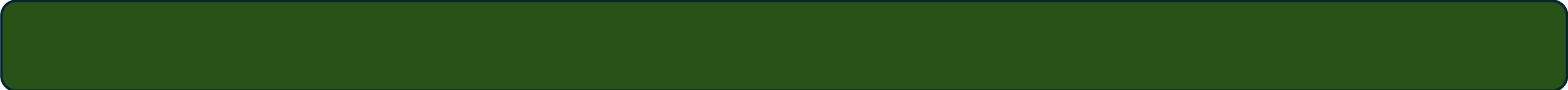


<https://environment.govt.nz/what-you-can-do/climate-scenarios-toolkit/climate-scenarios-list/ipccs-ssp-rcp-scenarios/#combined-ssp-rcp-scenarios>

Scenario	Near term, 2021-2040		Mid-term, 2041-2060		Long-term, 2081-2100	
	Best estimate (°C)*	Very likely range (°C)*	Best estimate (°C)*	Very likely range (°C)*	Best estimate (°C)*	Very likely range (°C)*
SSP1-1.9	1.5	1.2 to 1.7	1.6	1.2 to 2.0	1.4	1.0 to 1.8
SSP1-2.6	1.5	1.2 to 1.8	1.7	1.3 to 2.2	1.8	1.3 to 2.4
SSP2-4.5	1.5	1.2 to 1.8	2.0	1.6 to 2.5	2.7	2.1 to 3.5
SSP3-7.0	1.5	1.2 to 1.8	2.1	1.7 to 2.6	3.6	2.8 to 4.6
SSP5-8.5	1.6	1.3 to 1.9	2.4	1.9 to 3.0	4.4	3.3 to 5.7

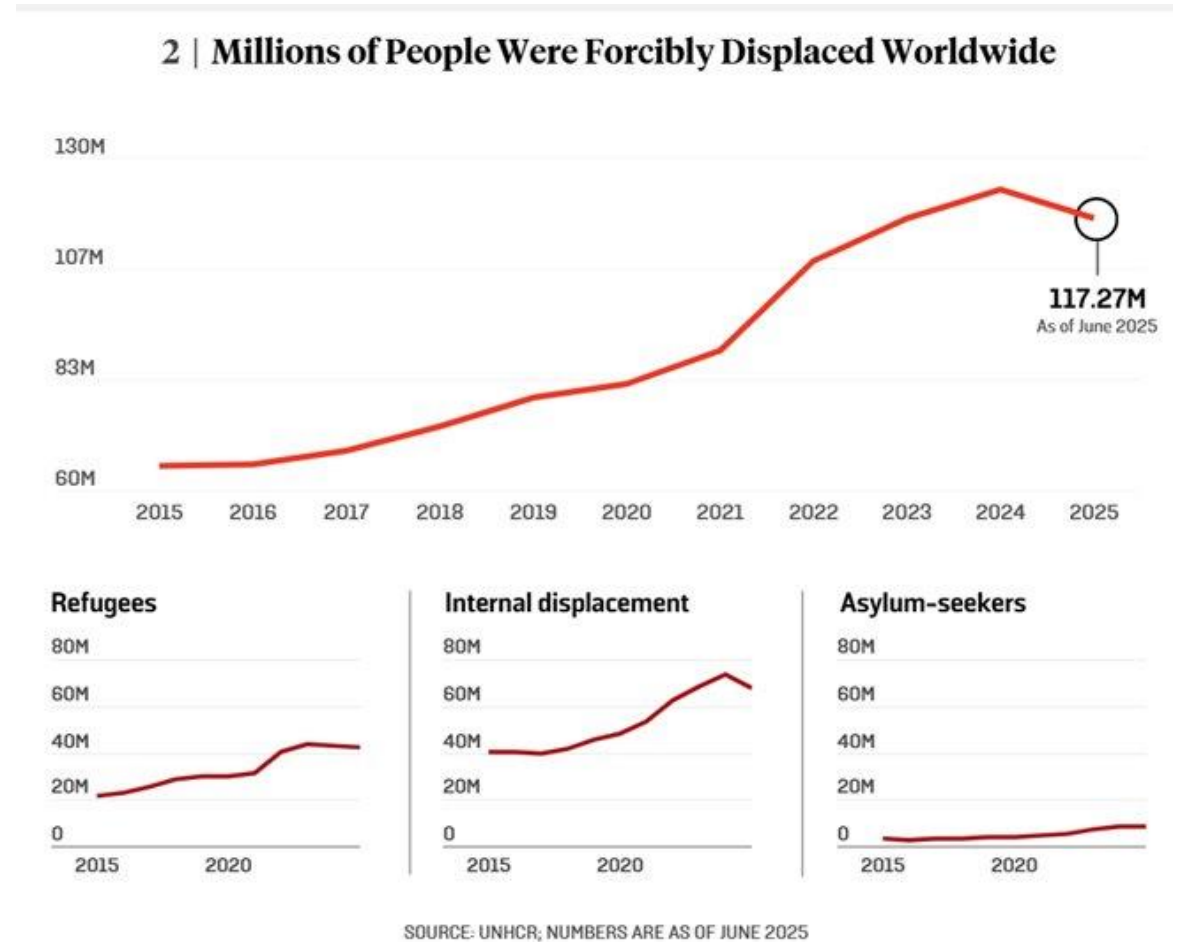
*Temperature differences relative to the average global surface temperature of the period 1850-1900 are reported in °C.

<https://environment.govt.nz/what-you-can-do/climate-scenarios-toolkit/climate-scenarios-list/ipccs-ssp-rcp-scenarios/#combined-ssp-rcp-scenarios>



Changes to liberal world order will lead to more international instability

- Trump Administration's withdrawal from the economic, social and military foundations of the Liberal International Order
- Transition to a bipolar (U.S.-China) or multi-polar world order?
- Increase in conflict internationally
- Increase in forced migration

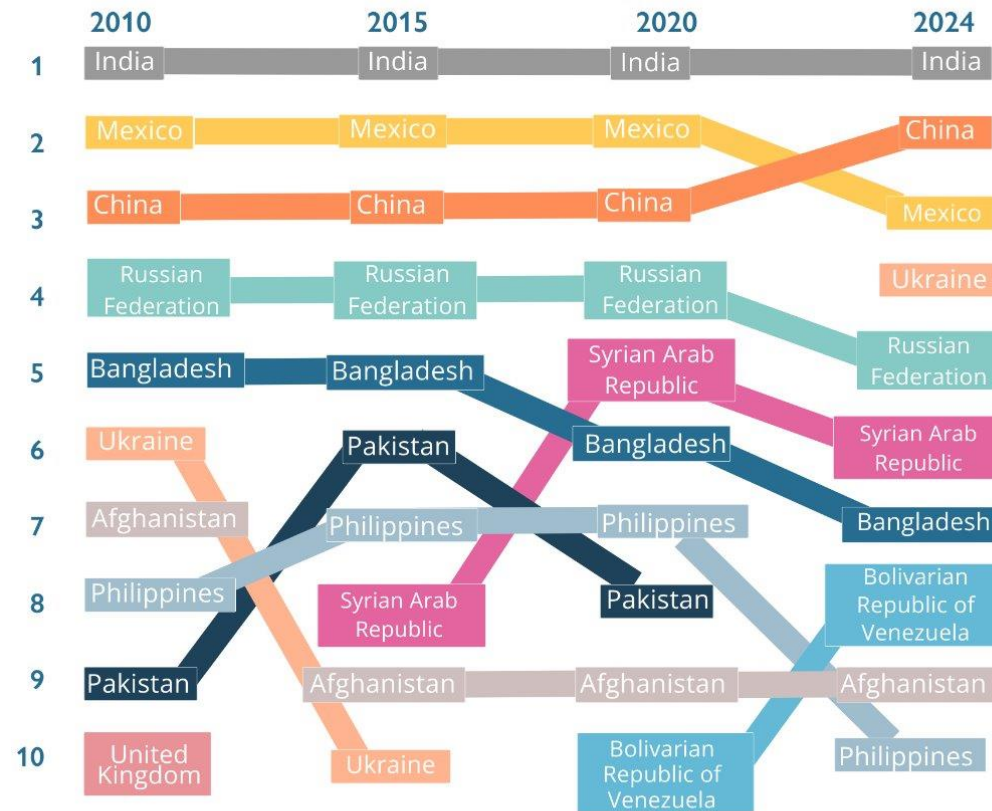


Professor Kate McMillan

Increasing international focus on migration policy



Top 10 countries of origin of international migrants, 2010 - 2024



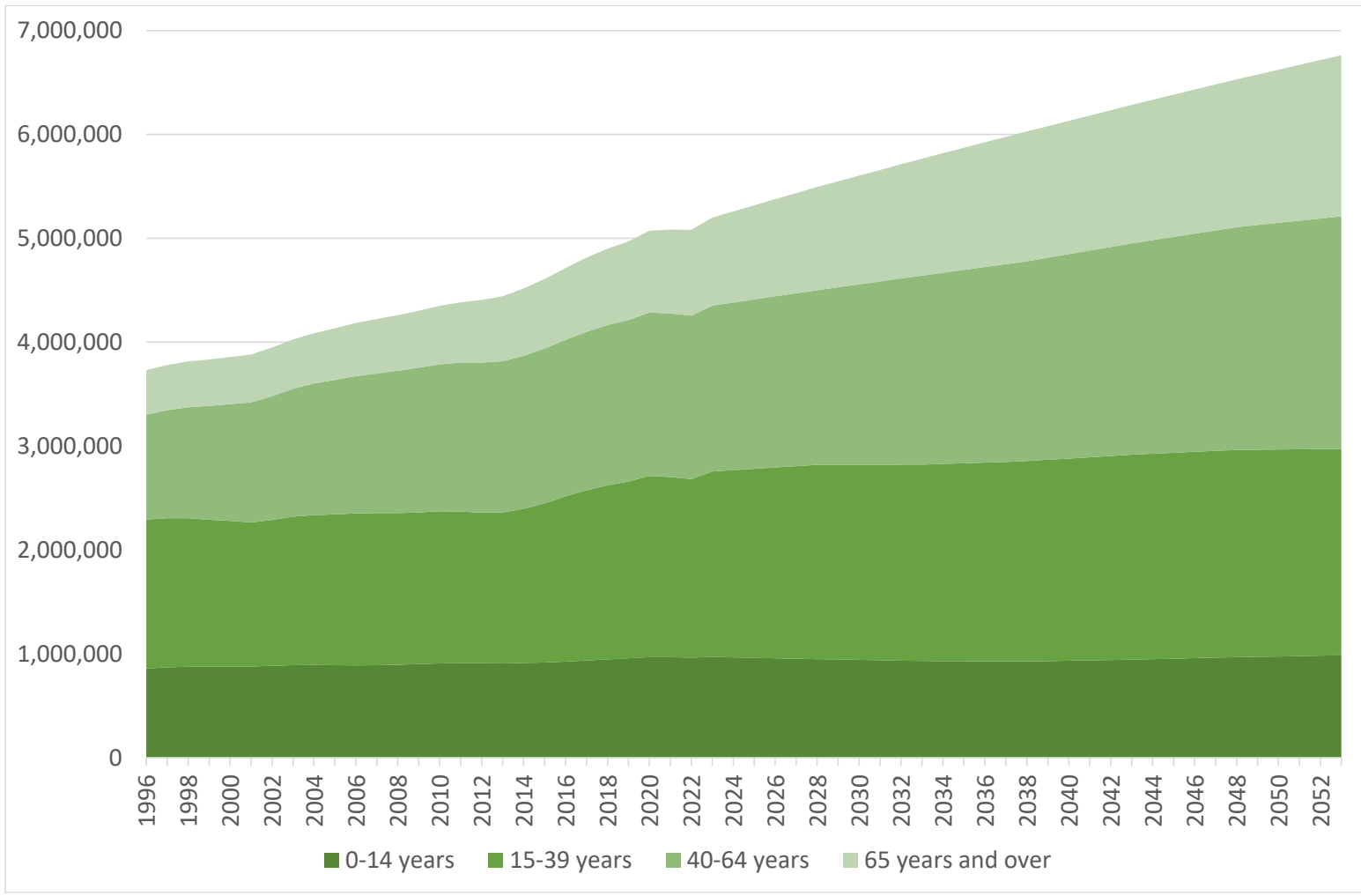
Source: UN DESA, 2025.

© IOM GMDAC 2025
www.migrationdataportal.org

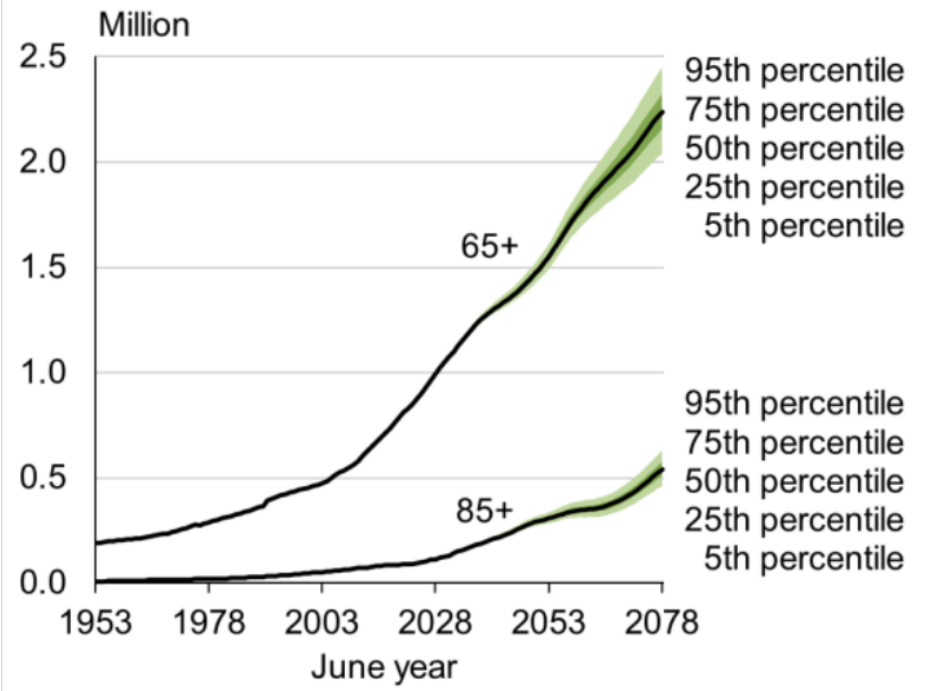
1. More forced migration and less funding for refugee and asylum support
2. Increasingly hostile and securitised domestic and international politics of migration
3. More bilateral and regional efforts to 'manage' migration
4. The two largest sending countries are also increasingly powerful: migration rule makers rather than rule takers?

Professor Kate McMillan

By 2035 20% will be over 65 and in the 2050s 22% and by the 2070s 25 to 30%



Population aged 65+ and 85+ 1953–2078



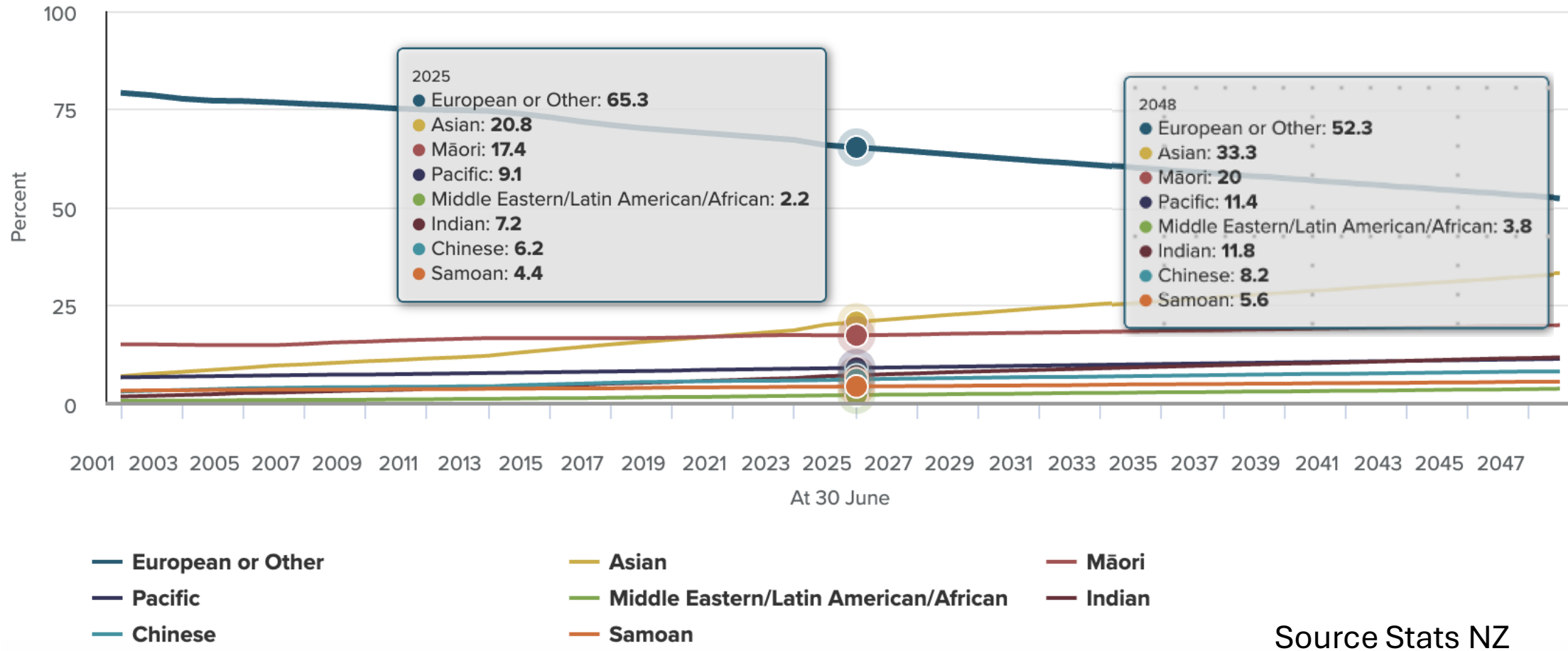
Source Stats NZ

Professor Michael Cameron



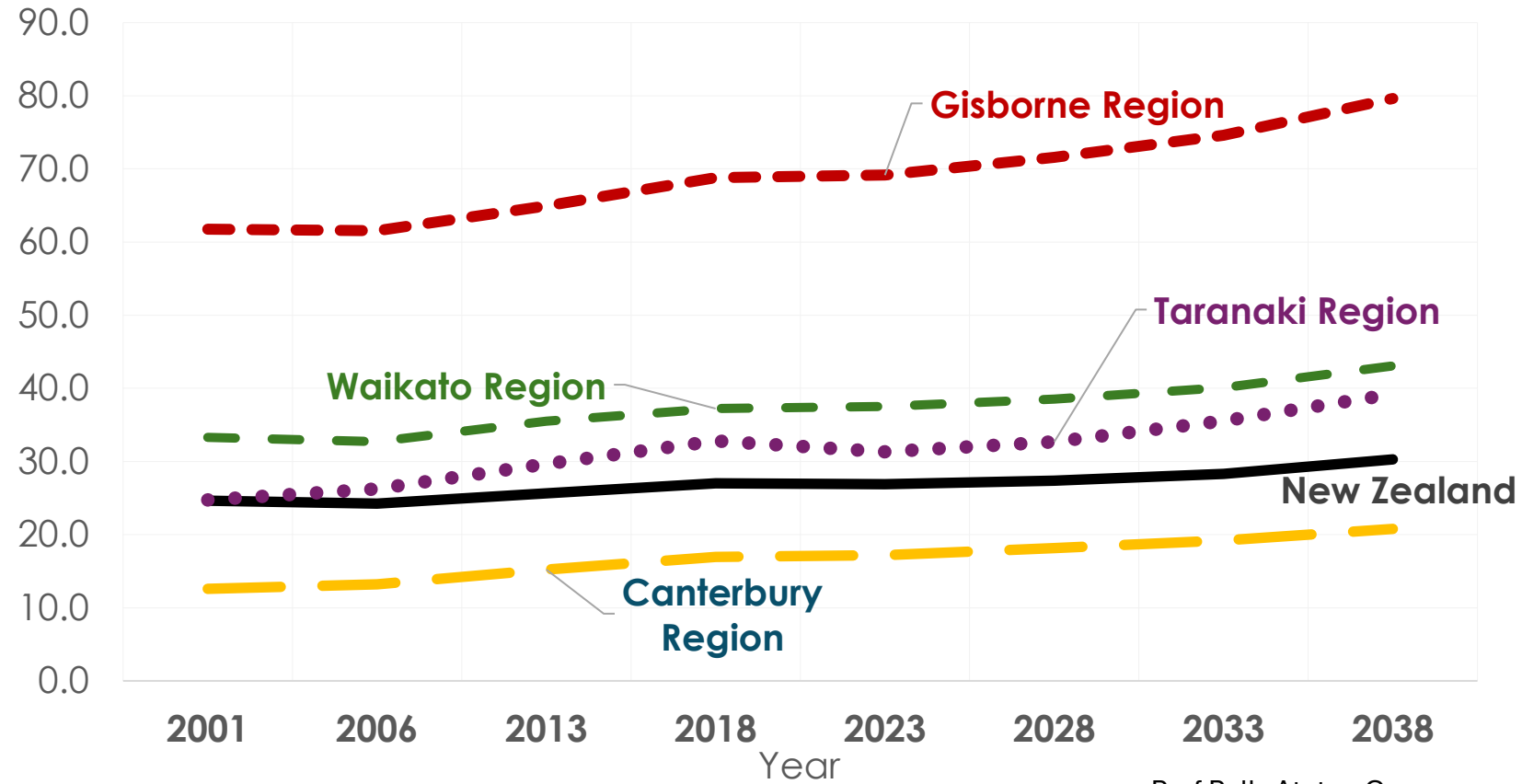
New Zealand will see increasing ethnic diversity

Ethnic proportion of New Zealand population, median projection, 2001–2048



There will be significant differences in diversity by region

Proportion of 0–14-year-olds identifying as Māori



Prof Polly Atatoa Carr

Within 20 years three-quarters of the country will live in the top half of the North Island and 40% will live in Auckland.

The rural towns fighting for survival as New Zealand grapples with a growing exodus

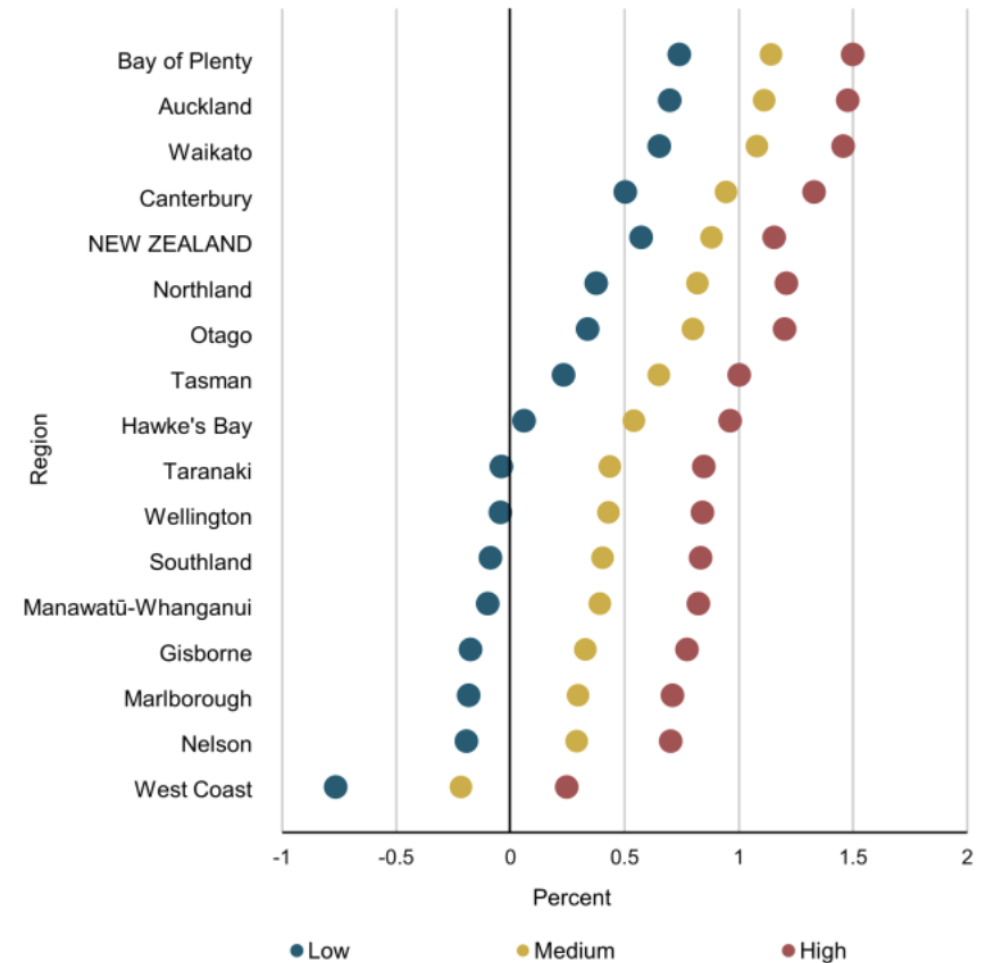
Ruapehu is emblematic of question facing New Zealand: how to prevent rural regions – and the country at large – from hollowing out

By [Eva Corlett](#) in Ohakune



Prof Paul Spoonley

Projected average annual population change, by region, 2023–2053



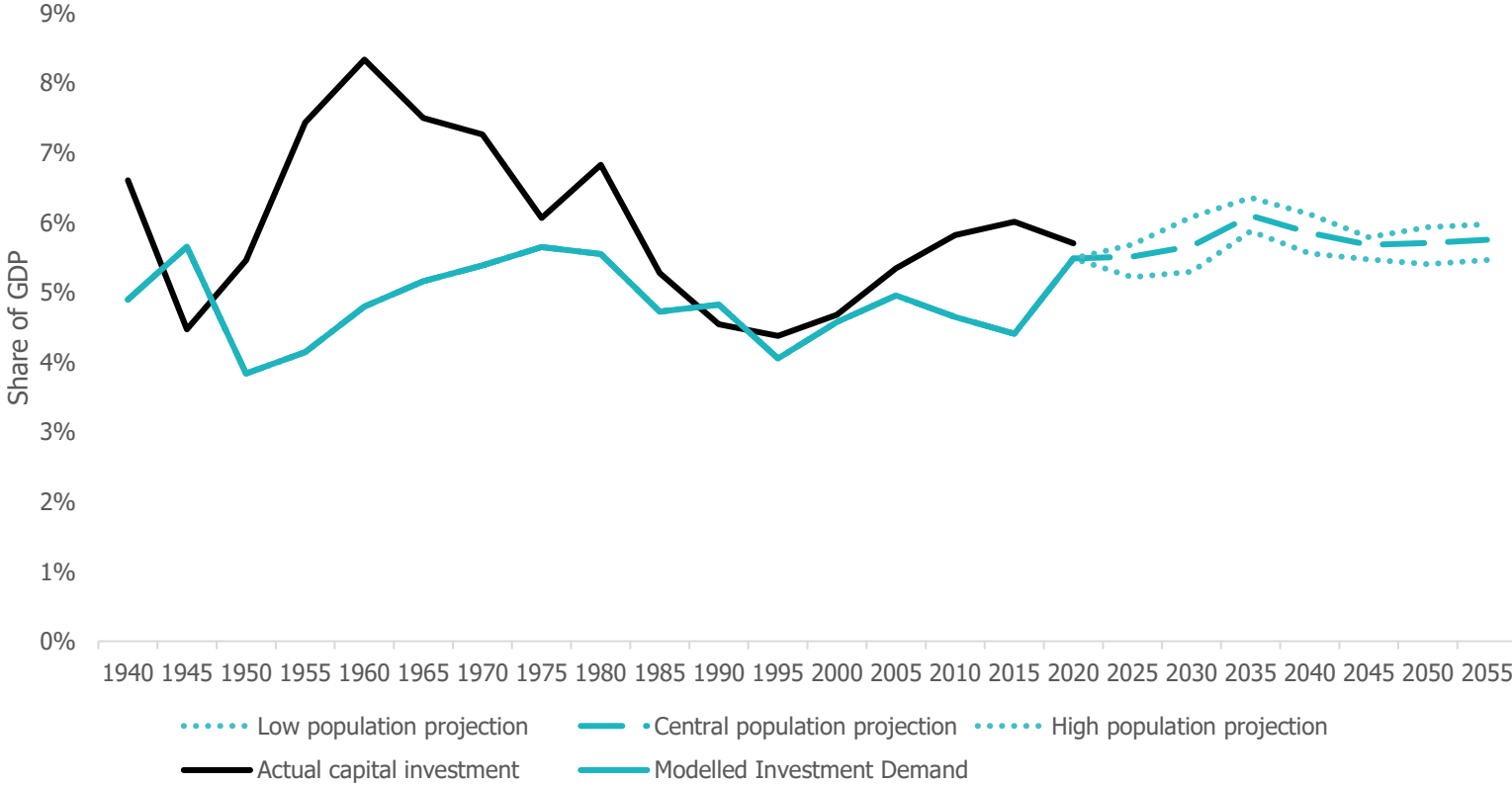
Source: Stats NZ

Associate Prof Polly Atatoa Carr

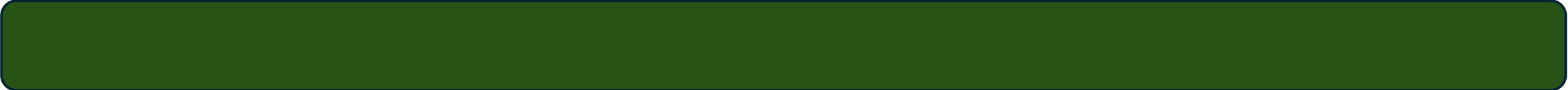
Infrastructure scales with population growth and stays affordable relative to GDP

Total Infrastructure Investment

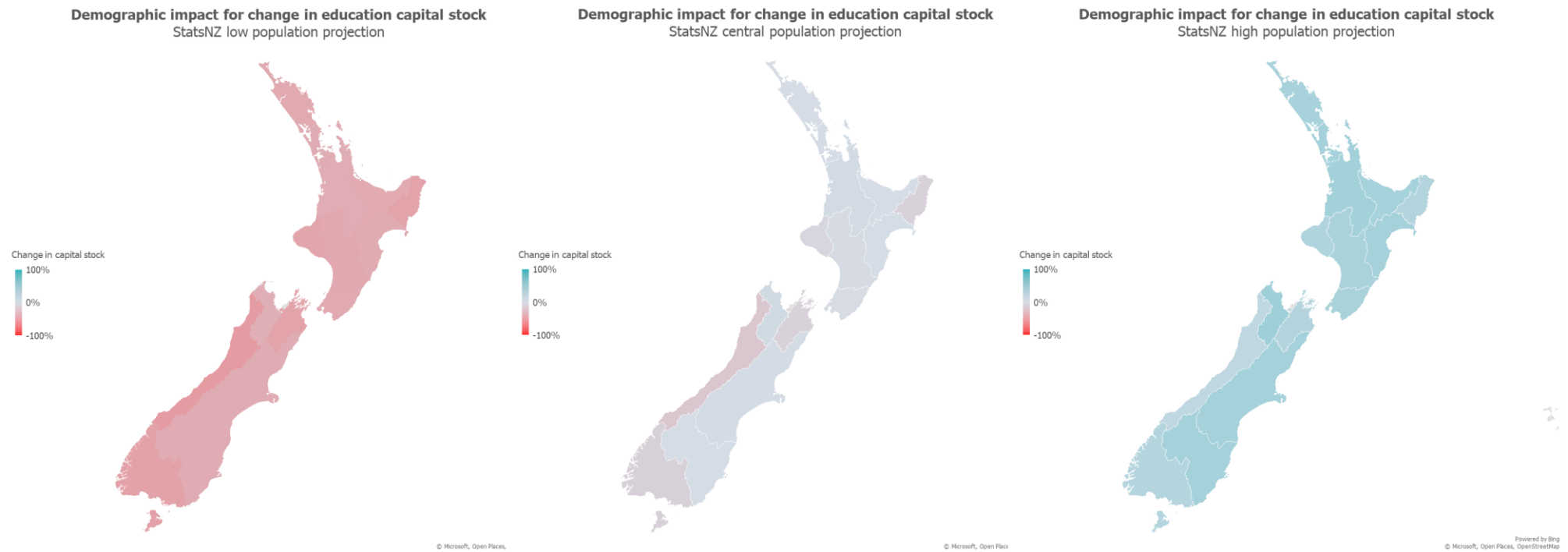
(Actual and Modelled Investment, as a share of GDP)



Peter Nunns



Uncertainty about growth or decline creates challenge for some types of infrastructure



Peter Nunns

Motu Economic and Public Policy Research. 2026. *Forward guidance – Modelling local and regional infrastructure supply.*
<https://tewaihanga.govt.nz/our-work/research-insights/infrastructure-needs-analysis>

Long term planning is needed to ensure infrastructure meets demands

Figure 2: Summary of the IMF's PIMA framework

Lifecycle stage		
<p>Planning</p> <p>Ensuring public investment is fiscally sustainable and effectively coordinated</p>	<p>Allocation</p> <p>Ensuring public investment is directed to the highest-value projects and programmes</p>	<p>Implementation</p> <p>Ensuring projects are fully funded, transparently monitored, and effectively managed</p>
Pillars		
<p>1. Fiscal targets and rules</p> <p>2. National and sectoral planning</p> <p>3. Coordination between entities</p> <p>4. Project appraisal</p> <p>5. Infrastructure financing</p>	<p>6. Multi-year budgeting</p> <p>7. Budget comprehensiveness and unity</p> <p>8. Budgeting for investment</p> <p>9. Maintenance</p> <p>10. Project selection</p>	<p>11. Procurement</p> <p>12. Availability of funding</p> <p>13. Portfolio oversight</p> <p>14. Project management</p> <p>15. Monitoring of assets</p>

Source: Adapted from IMF PIMA Handbook.

Infrastructure Commission. 2025. *From plans to projects: An assessment of how central government plans, funds, and manages infrastructure.* <https://teawaihanga.govt.nz/our-work/research-insights/from-plans-to-projects>

It is a myth that migrants drive house price bubbles and displace New Zealanders from jobs

Effect of immigration on native wages

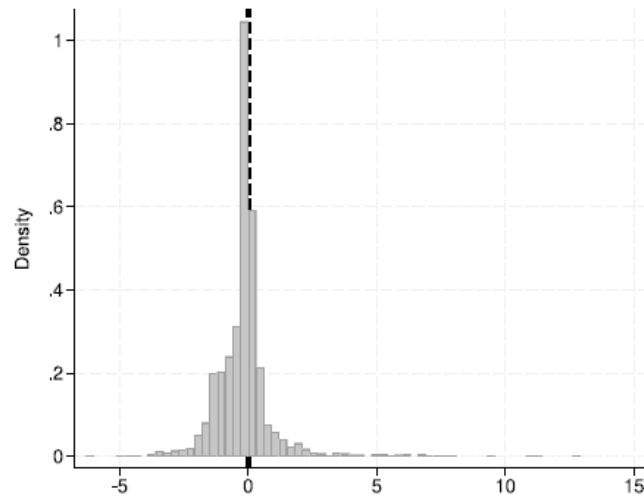


Fig. 2. Density of the estimates.

Note: The figure plots the density of 2,989 wage effect estimates from 88 studies. The dashed vertical line marks zero.

Source: Aubry et al. (2026) Does immigration affect native wages? A meta-analysis. *Labor Economics* 98: 102815

A synthesis of the literature concluded:

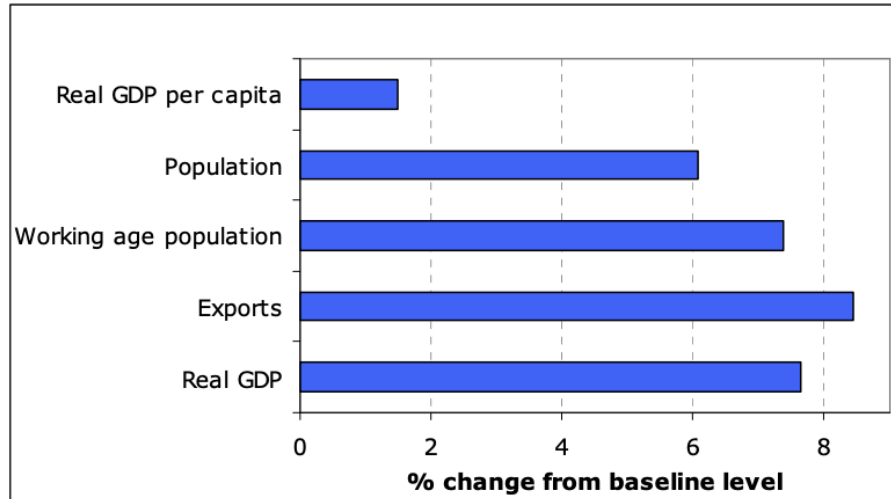
A 1% point increase in the net migration rate in a city may be expected to raise **rents** by 0.5 to 1 % points. The effect on **house prices** is about double, but there is a large variance across estimates

The new meta-analysis reconfirms a 2005 study: “**At best, our results point to a negligible average impact of immigration on native wages, centred around zero**” (Aubrey et al. 2026).

Professor Jacques Poot

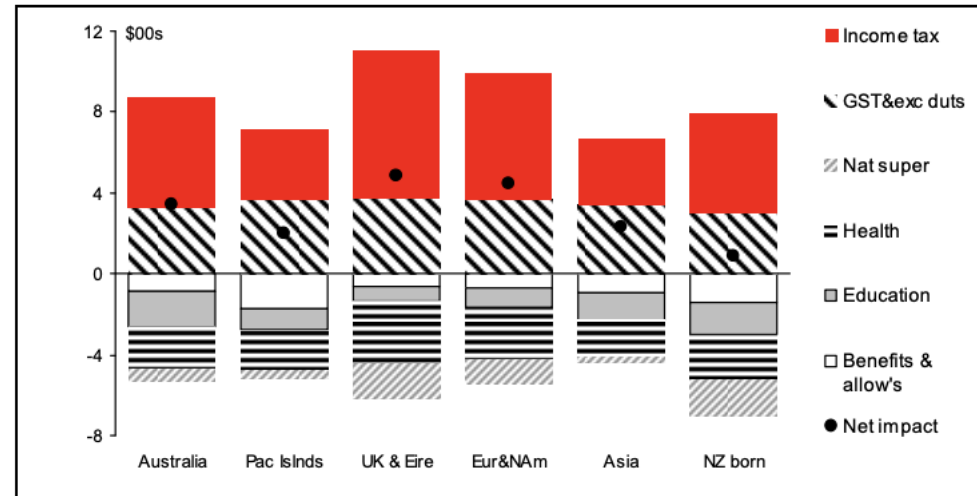
Migrants support economic growth and are net fiscal contributors

Figure 5 Economic impact in 2021 of doubling net immigration inflow



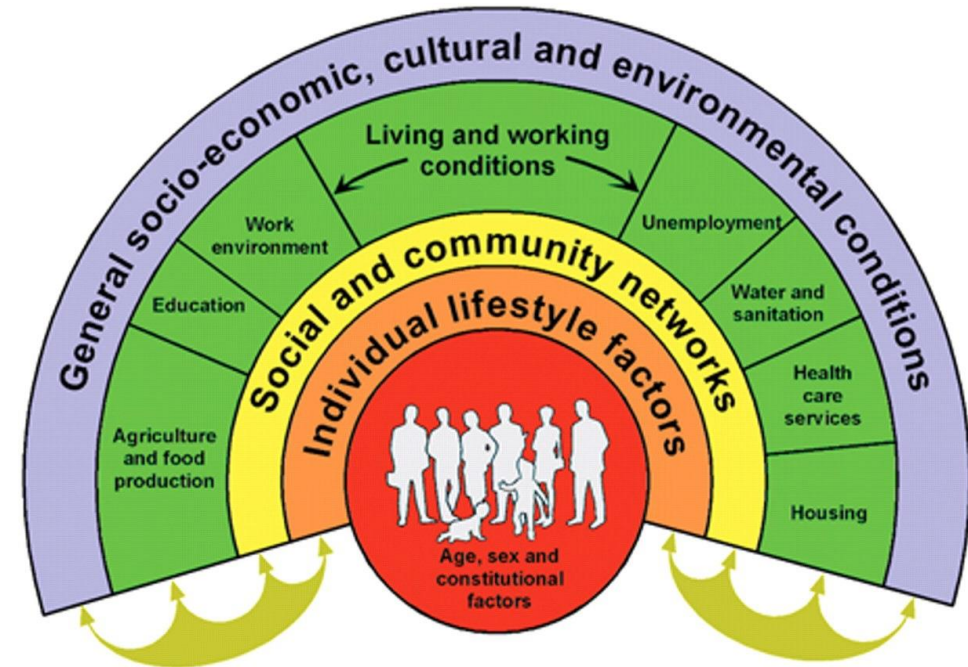
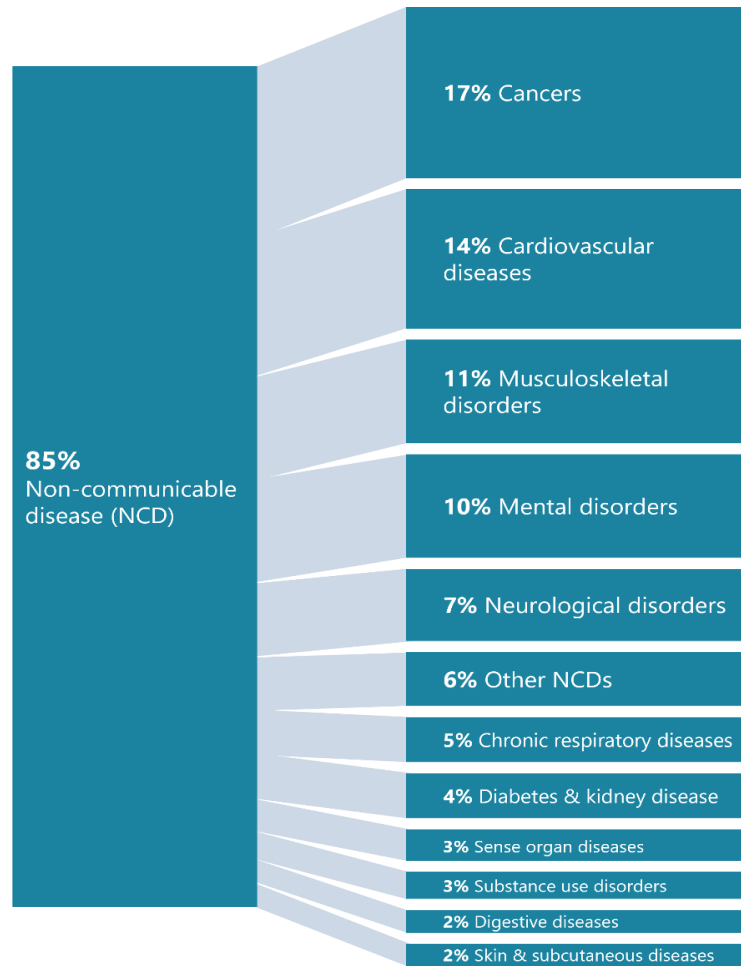
Professor Jacques Poot

Figure 4 Per capita fiscal impact by region of origin, 2006



<https://www.mbie.govt.nz/dmsdocument/2658-nz-research-economic-impacts-of-immigration-2005-2010-synthesis-research-pdf>

Health outcomes and factors affecting outcomes are largely known

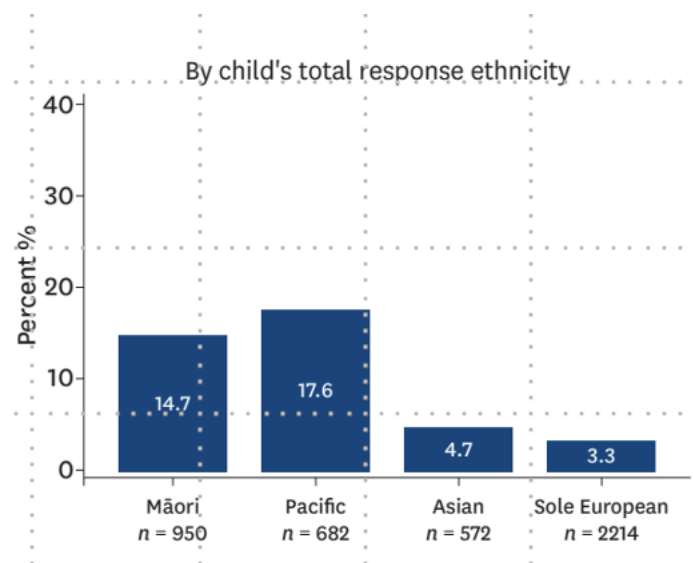


Dahlgren G, Whitehead M. 1991. Policies and Strategies to Promote Social Equity in Health. Stockholm, Sweden: Institute for Futures Studies.

Associate Professor Polly Atatoa Carr

We can improve health outcomes for our population by addressing determinants now

12 year old experience of homelessness



Atatoa Carr, Prickett, Paine, Youth homelessness in Aotearoa NZ, *EuJPH*, 35: S4, 2025, <https://doi.org/10.1093/eurpub/ckaf161.954>

Associate Professor Polly Atatoa Carr

Start with

Child poverty

Education

Housing

Youth employment

Workforce development

Diversity

Human capital

Structural change

Prevention and promotion

Early intervention - longitudinal evidence of influence of early life on later life outcomes

Challenges and strategic choices for New Zealand

The very structure of the Government decision making system is geared to meet the needs of the present and its problems, not to deal with the future and its problems.

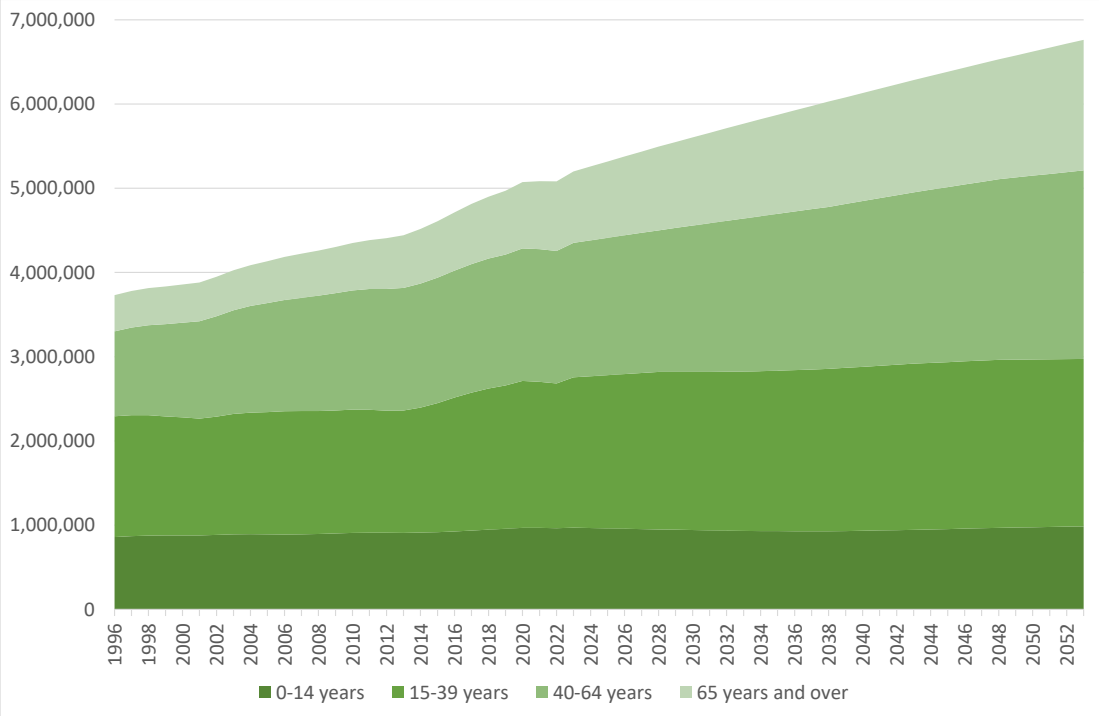
***Sir Geoffrey Palmer former Prime Minister
New Zealand***

Democracy is historically proven to be the best political system. However, we are faced with the enormous challenge of whether or not democracy can serve as a system to keep fairness between generations across the globe.

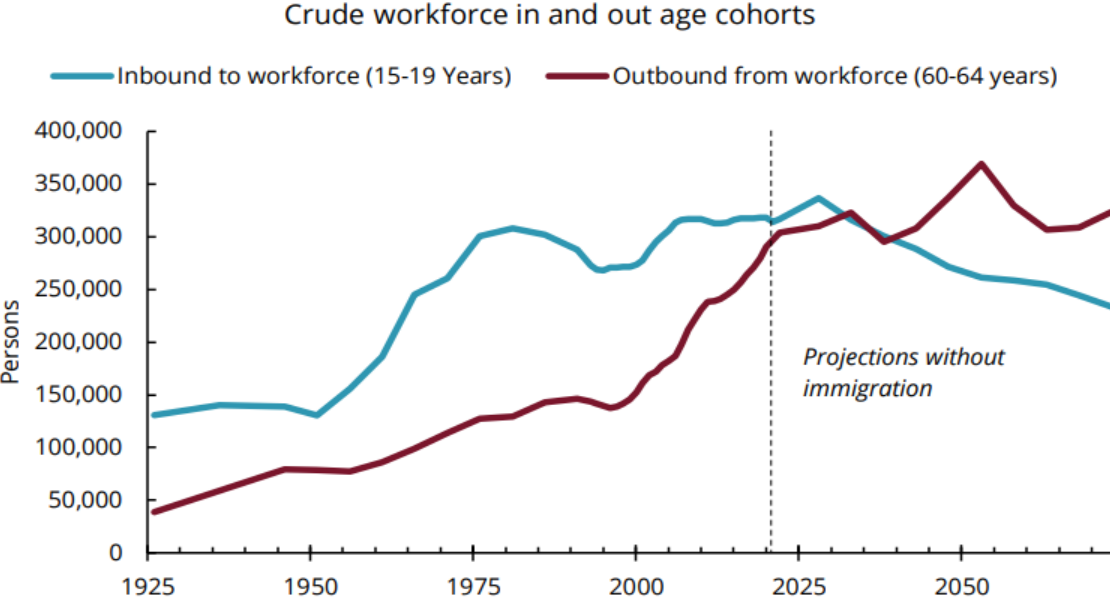
***Japanese Prime Minister Yoshihiko Noda
2012***



The ratio of workers to pensioners will decrease from 3.9 to 2.8 by 2050



Professor Michael Cameron



Source: Statistics New Zealand, Sense Partners

Professor Paul Spoonley

What approach should we take to secure our future workforce?



Grow slowly and age fast or grow more quickly and invest in good outcomes

Factors that facilitate or impede migrants' psychological wellbeing and socio-cultural adaptation?

Facilitate

Impede

Accessible and trustworthy information ecosystems

Information overload and complexity

Information literacy and digital inclusion

Data invisibility and misclassification

Informal information networks and social ties

Language and cultural translation gaps

Responsive and coherent public information

Fragmented and inconsistent information

Associate Professor Maja Krtalić

Recognising the value of immigrants

Better utilisation of skills, support for integration and recognitions of skills

Invest in social cohesion – change the national dialogue

Tilt towards regional skills needs Canadian example regional engagement on immigration settings

Professor Paul Spoonley

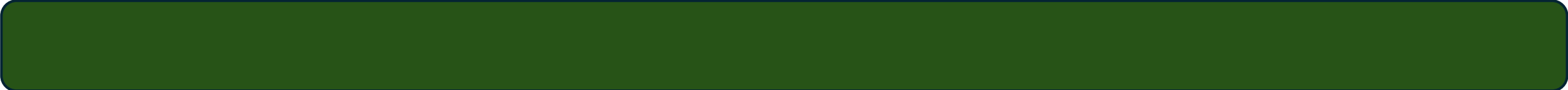


Key questions for debate: A Jackson

1. How should NZ ensure it has the future workforce it needs?

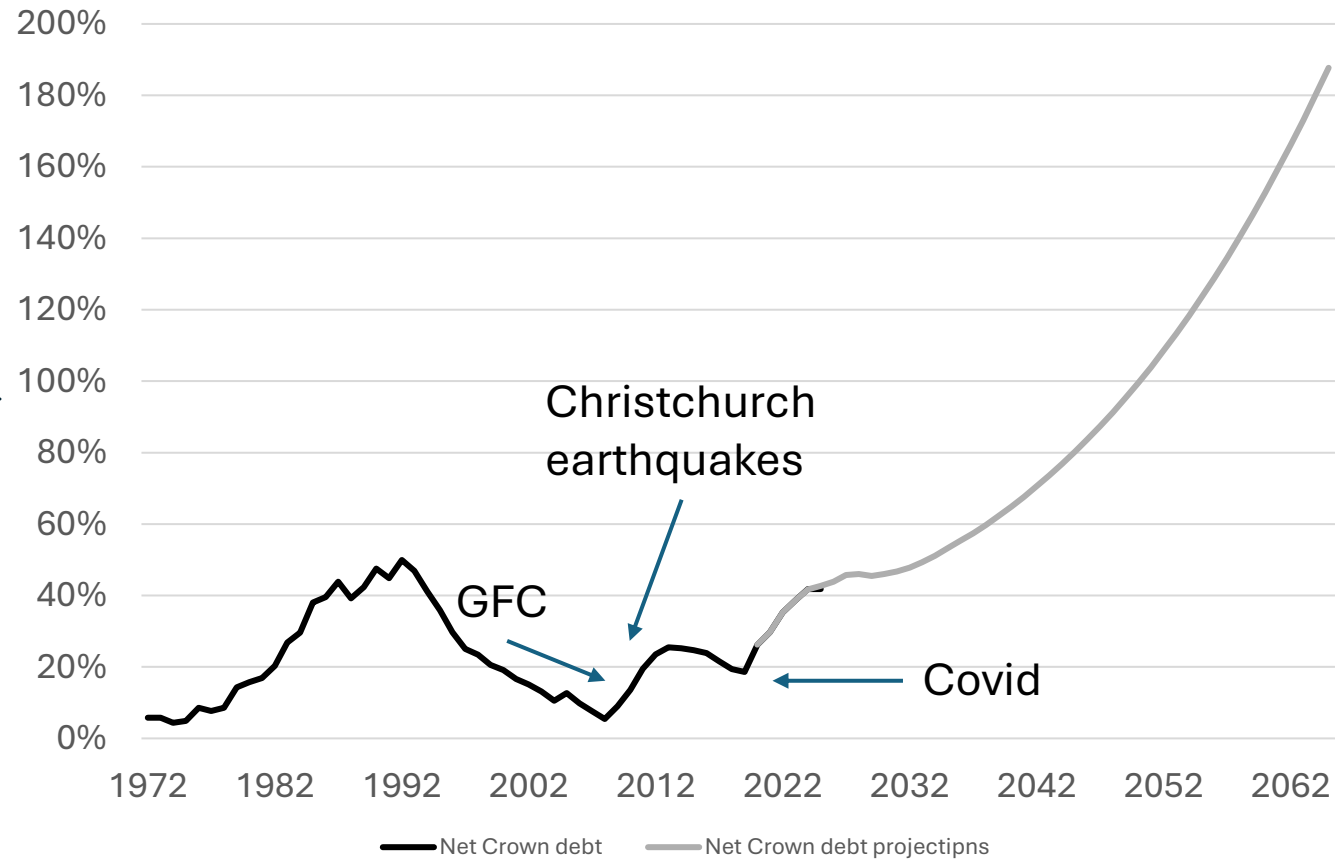
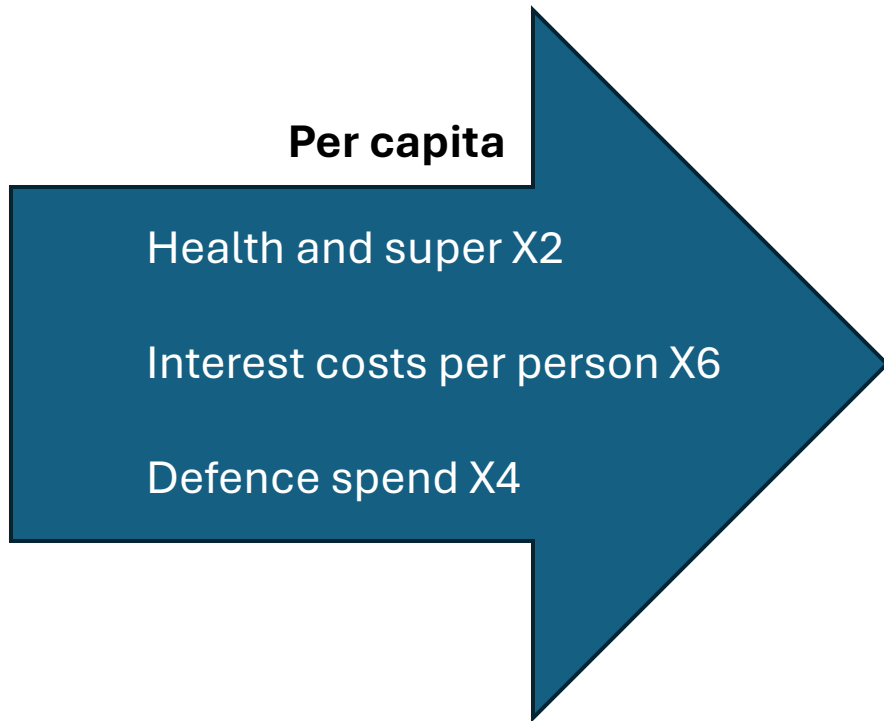
- a) Our current approach of immigration being open to skills categories is about right
- b) Take a proactive approach to attract immigrants where there are workforce gaps
- c) Invest more in skills development for New Zealanders where there are workforce gaps
- d) Invest more in AI automation and robotics to increase the efficiency and competitiveness of our economy

2. How should we manage delivery of key services in rural areas where population is declining?

- a) Leave this to local authorities to address
 - b) Consolidate local into regional authorities for regional service delivery
 - c) Get national agreement on minimum level of services
 - d) Establish mobile services to meet health and social needs
- 

Average Income tax would need to increase from 21% to 32% to stabilise debt

Net Crown debt (actual and projected)



Should we increase tax or reduce costs

Source: Treasury historical fiscal series and 2025 LTFM

Key questions for debate: A Jackson

3. How should we manage the costs of pensions?

- a) Accept continuing increases in national debt
- b) Increase taxes
- c) Increase the age at which people get the pensions
- d) Means test pensions, with decreasing pension values for those earning \$150k a year by private means

4. When should NZ increase the pension age for New Zealanders to 67

- a) From 2030
- b) From 2035
- c) From 2040
- d) Never

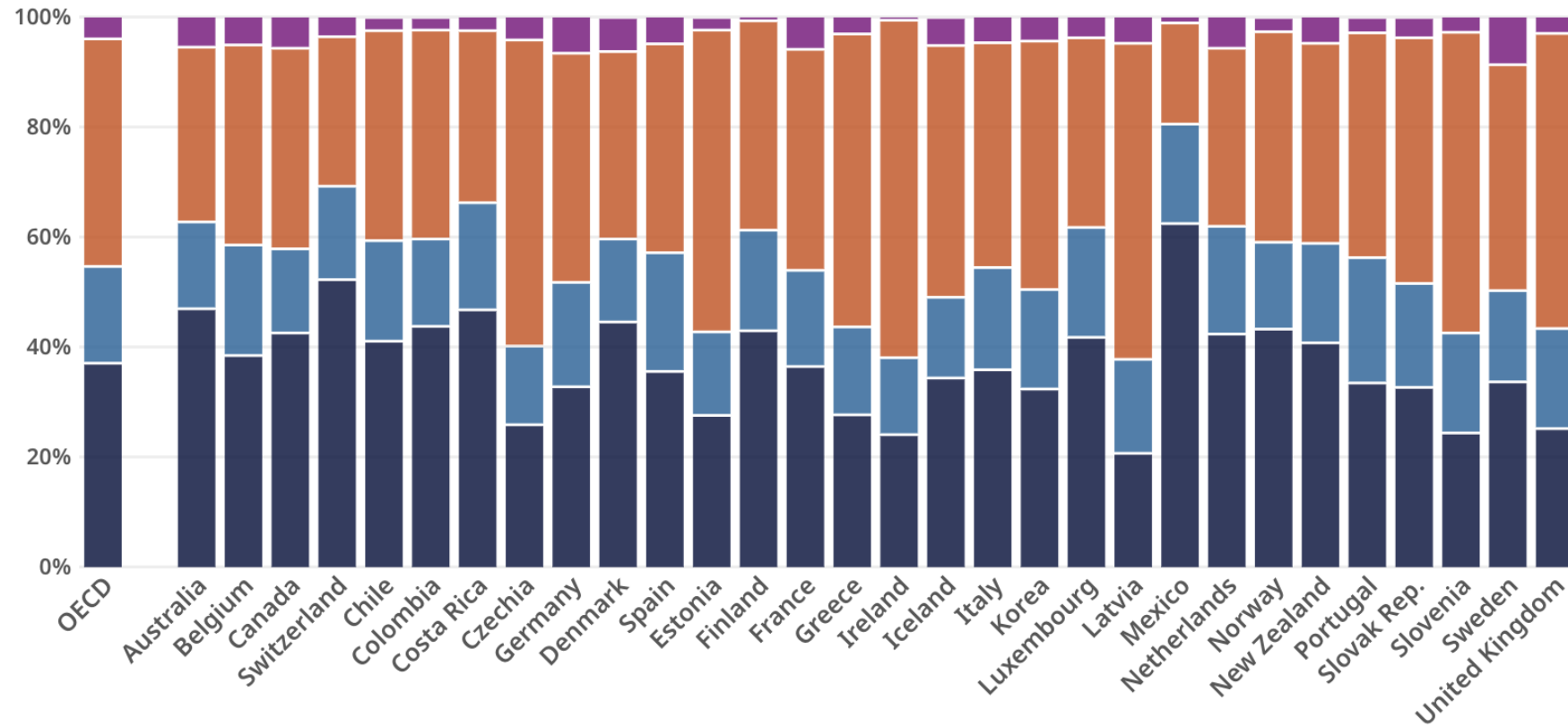
5. How should we manage the increasing costs of healthcare?

- Accept continuing increases in national debt
- Increase taxes
- Invest more in public health, with stricter regulation on food, drink and digital recreation
- Focus health care expenditure on the under 60s and take a harder line on expensive interventions for over 70s

Confidence in the national government to balance the interests of current and future generations

% of population, 2023

Confident Neutral Not confident Don't know



Source: OECD (2024), [OECD Survey on Drivers of Trust in Public Institutions – 2024 Results](#) (Figure 4.5).

Key questions for debate: A Jackson

6. Should NZ have a population strategy?

- a) No, keep the current approach it works well
- b) We have an infrastructure plan, we should have equivalent plans for our future workforce, healthcare and pensions
- c) Yes there should be a 10 year national population plan
- d) We should have a strategy with a population target

7. How should we ensure good long term planning for NZ?

- a) Keep our current approach it works well
- b) Extend the term of governments to 4 years
- c) Have national 10 year plans
- d) Have a cross party parliamentary committee responsible to consider long term issues

8. What key data is needed and what are the research gaps?

- a) We have the information we need, we just need action
- b) We should reinstate the census
- c) We have other research needs – free text option



Want of Foresight, unwillingness to act, lack of clear thinking, confusion of counsel until the emergency comes, until self preservation strikes its jarring gong, these are the features which constitute the endless repetition of history.

Winston Churchill