



CaDDANZ

Capturing the Diversity Dividend
of Aotearoa/New Zealand

The future trajectory of ethnic diversity in New Zealand's regions

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Acknowledgements



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CADDANZ



- In the CADDANZ project, we are not only concerned with looking at New Zealand's past and current experience of diversity, but we are also looking ahead to the future
- In terms of future focus, we are doing this quantitatively through two methods:
 - Subnational ethnic population projections
 - Spatial microsimulation modelling
- Today's presentation covers some results from the first of these two methods

Ethnic projections in New Zealand



- The official ethnic population projections for New Zealand were updated in 2017 (nationally in May and sub-nationally in October)
- These official projections are based on a Bayesian stochastic variant of the cohort component methodology
- They include projections for the 'Level 1' ethnic groups (New Zealand European or Other, Maori, Pacific, Asian, and Middle Eastern/Latin American/African), as well as for the first time a limited number of the larger 'Level 2' ethnicities (Chinese, Indian, Samoan)

Methods

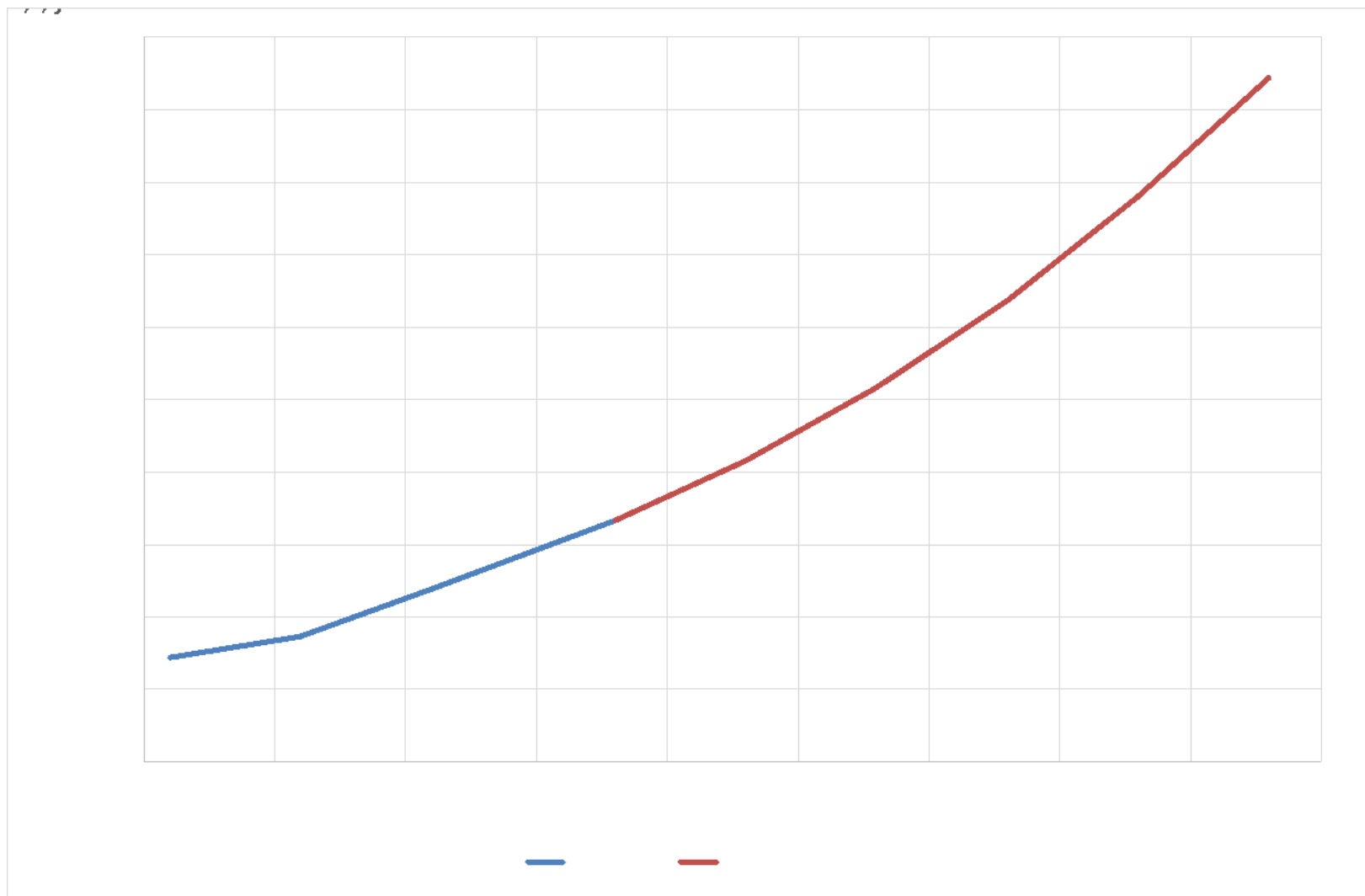


- In this paper, we instead adopt a modified Hamilton-Perry projection method to the projection of small ethnic groups, with a projection horizon of 25 years (2013-2038)
- We project **national** ethnic populations for 37 “Level 3 ethnicities” (from the SNZ standard ethnic classification) that jointly capture most of the population
- We then project **sub-national** ethnic populations for a subset of these ethnicities (essentially all region-groups with 2013 populations of 500 or more) for the 16 regions of New Zealand

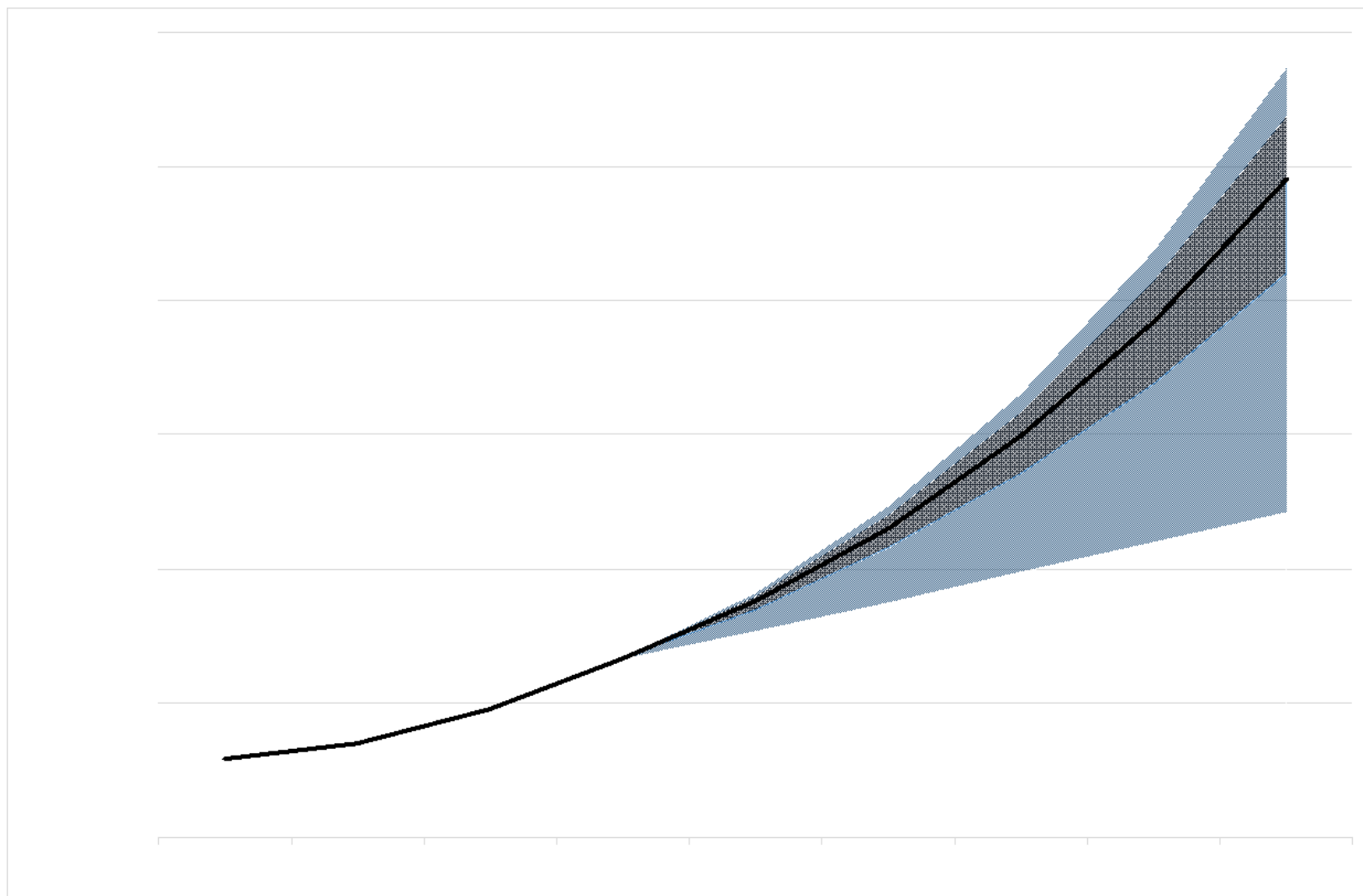
NZ Official Ethnic Classification

Level 1 Classification	Level 3 Classification
1 European	111 New Zealand European
	121 British and Irish
	122 Dutch
	123 Greek
	124 Polish
	125 South Slav
	...
2 Māori	211 Māori
3 Pacific Peoples	311 Samoan
	321 Cook Islands Māori
	331 Tongan
	...
4 Asian	411 Filipino
	412 Cambodian
	413 Vietnamese
	...
5 Middle Eastern/Latin American/African	511 Middle Eastern
	521 Latin American
	...
6 Other Ethnicity	611 Other Ethnicity

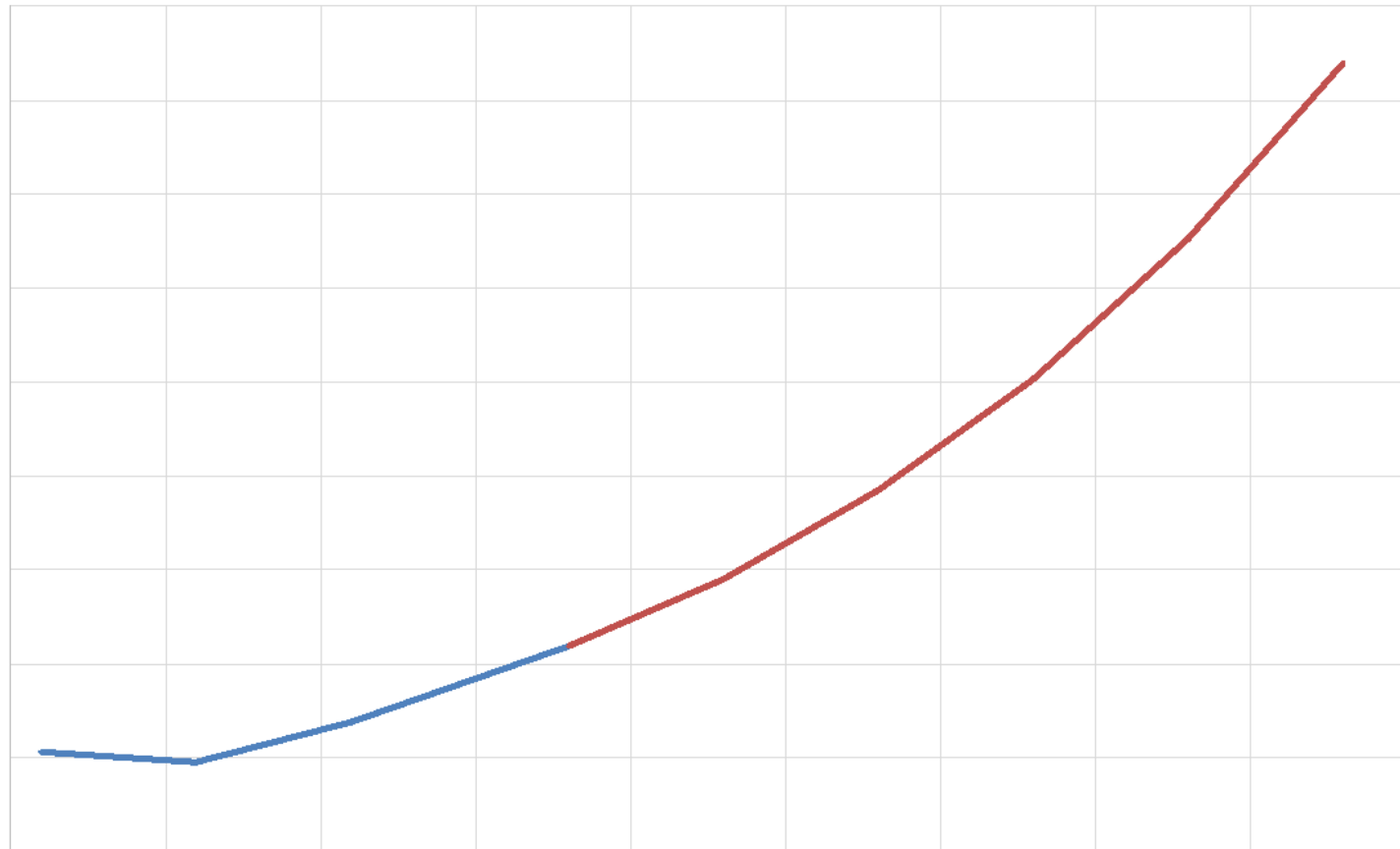
Deterministic results – 2013-base projections: Vietnamese population (national)



Stochastic results – 2013-base projections: Vietnamese population (national)

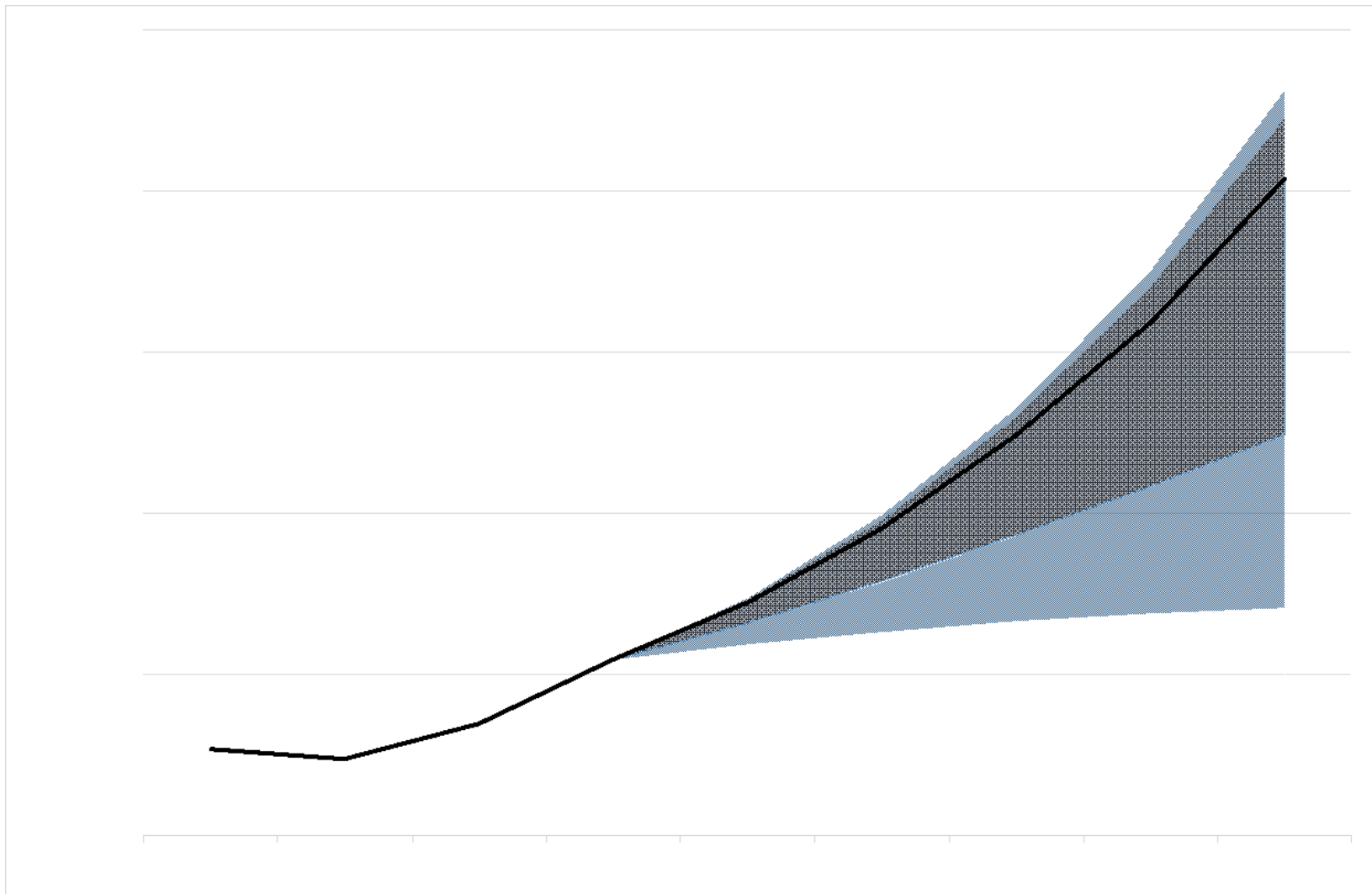


Deterministic results – 2013-base projections: Fijian population (Waikato)

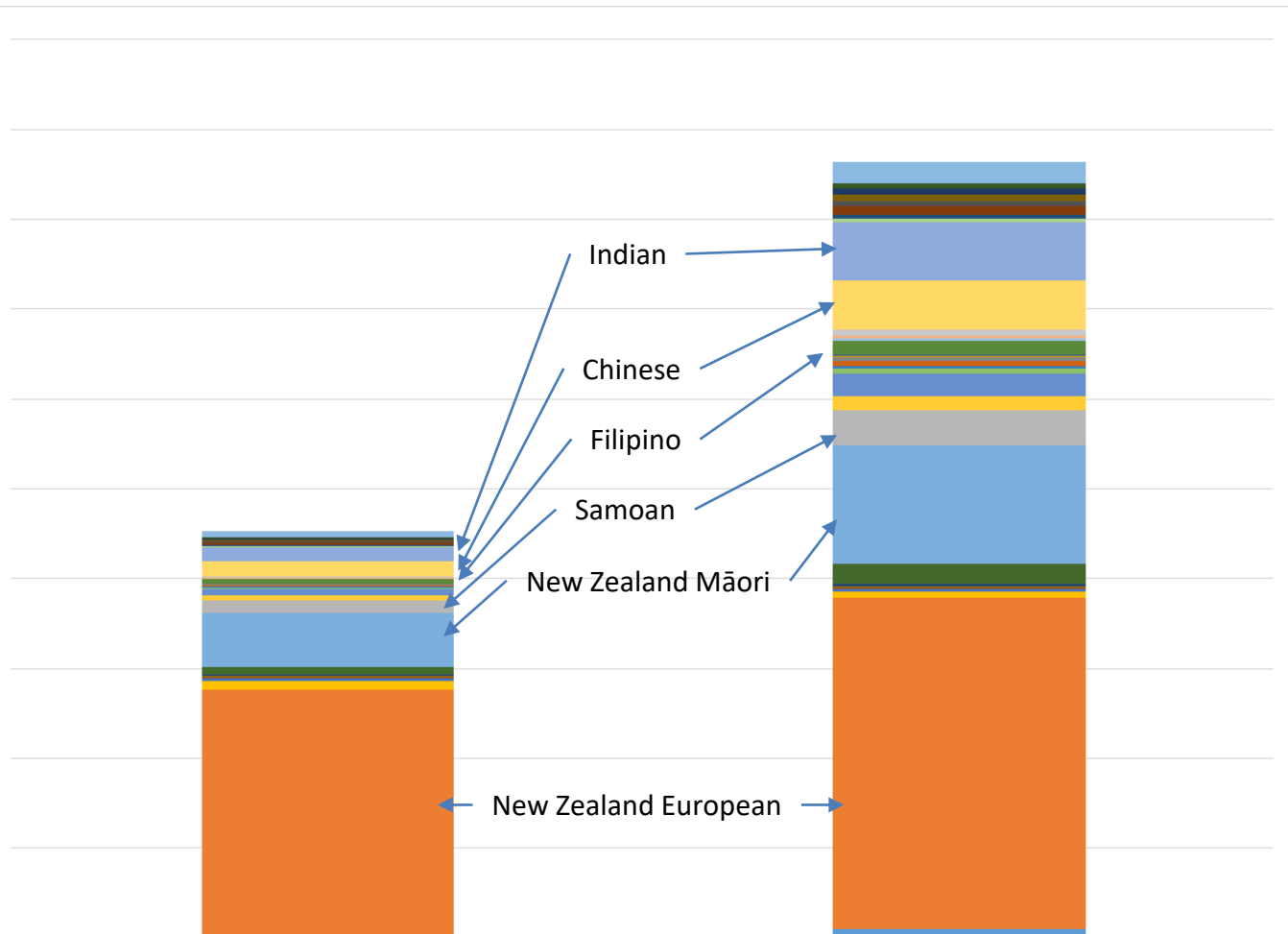


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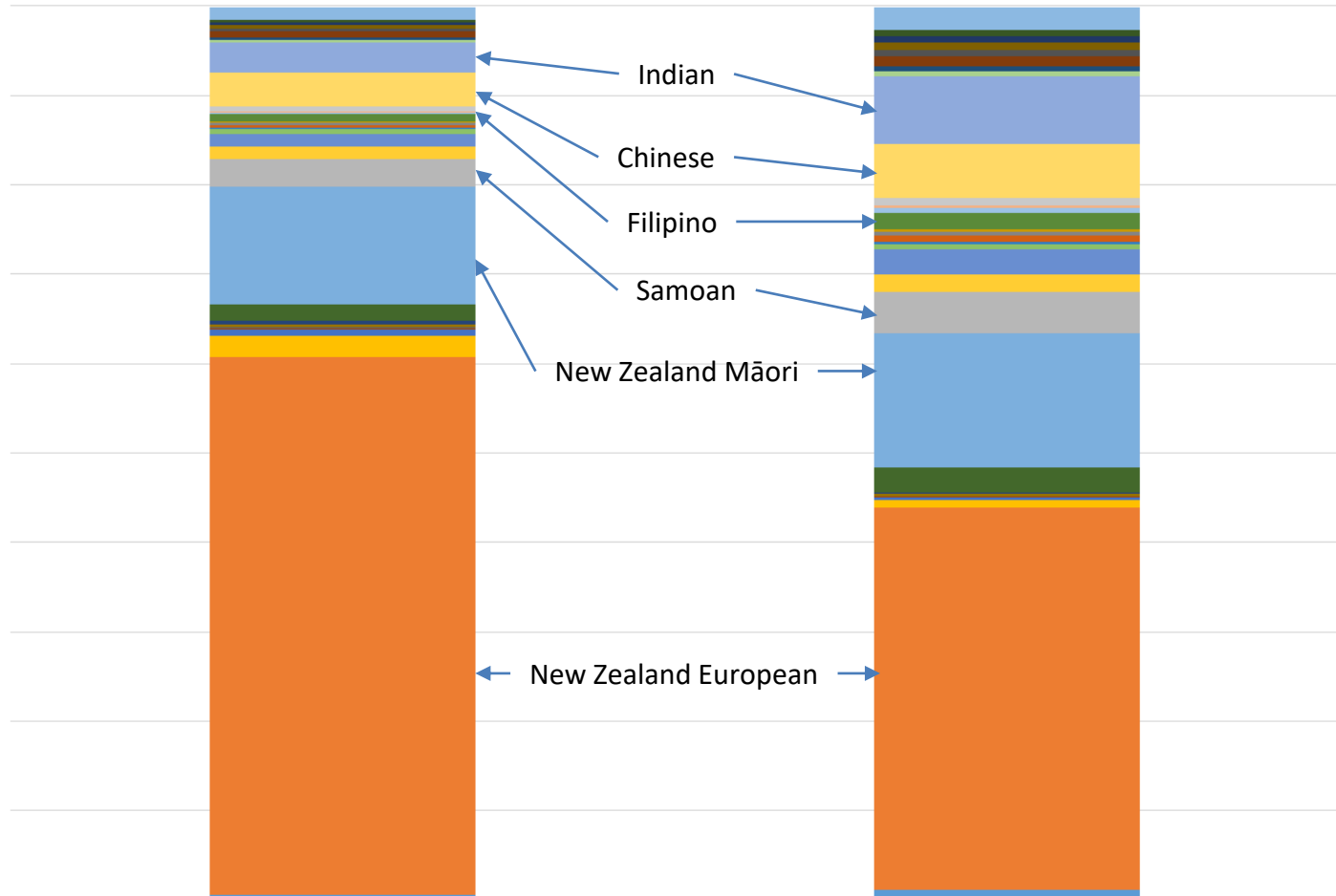
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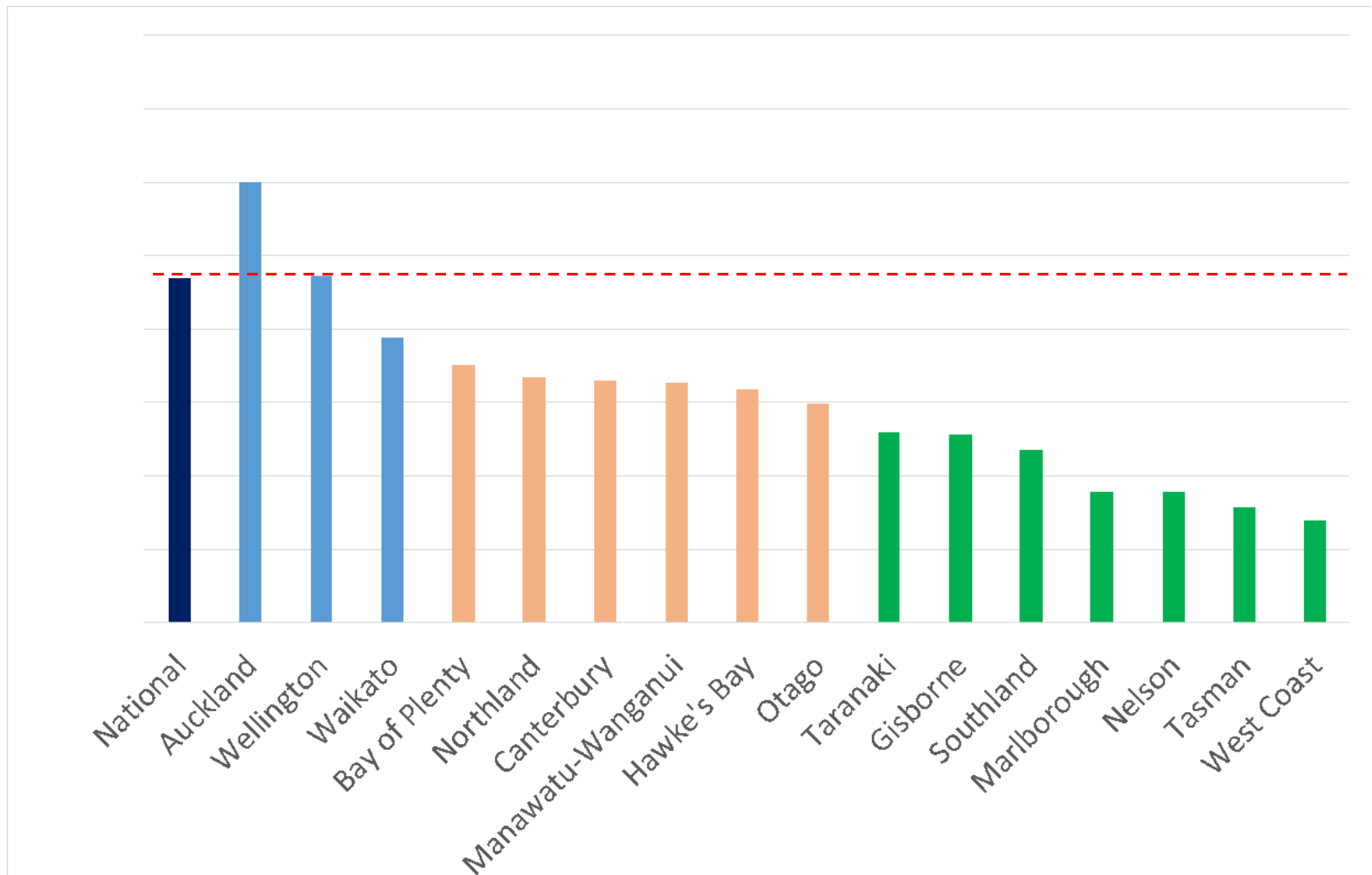
Diversity, 2013 and 2038 (national deterministic projection)



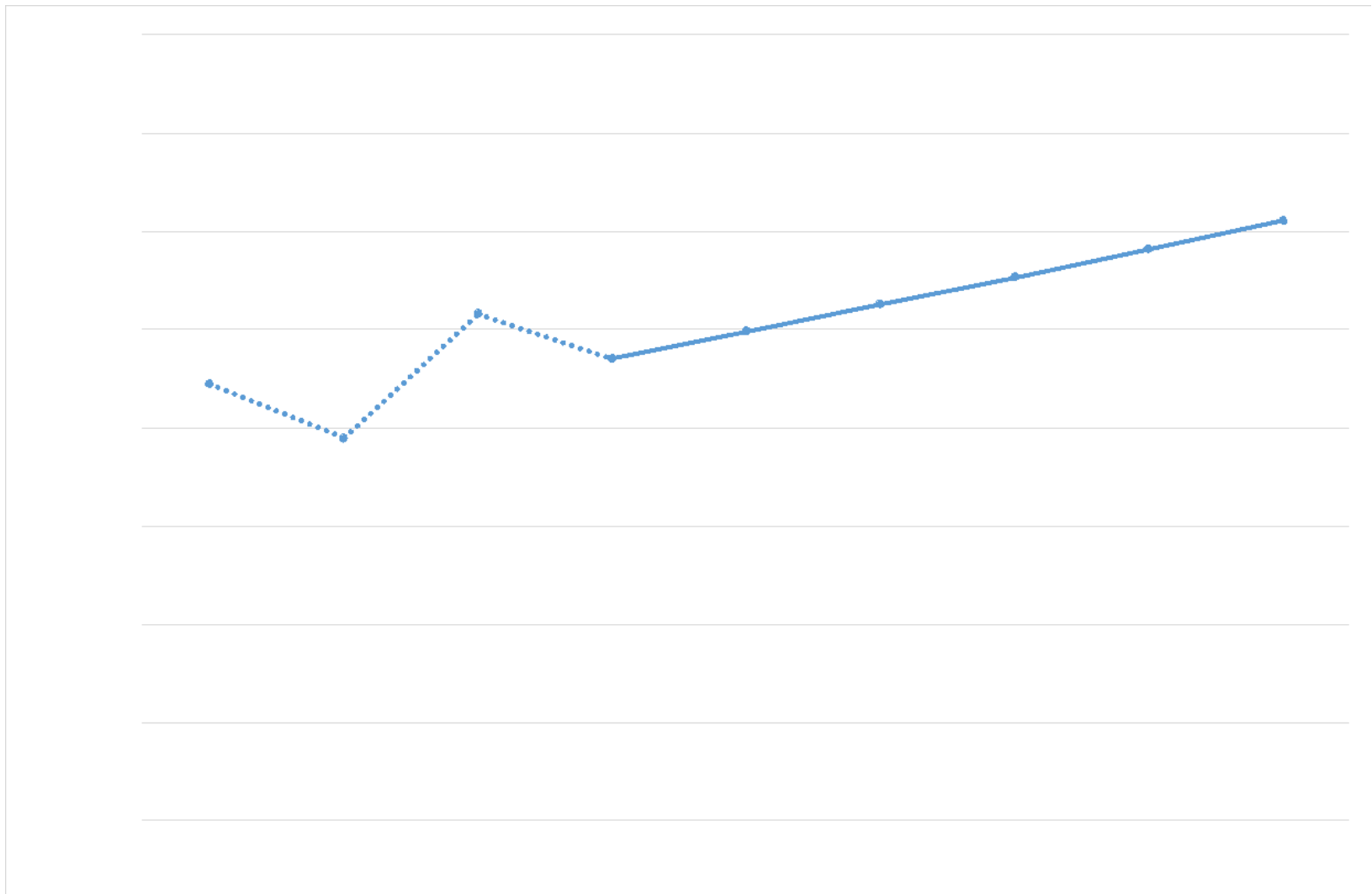
Diversity, 2013 and 2038 (national deterministic projection)



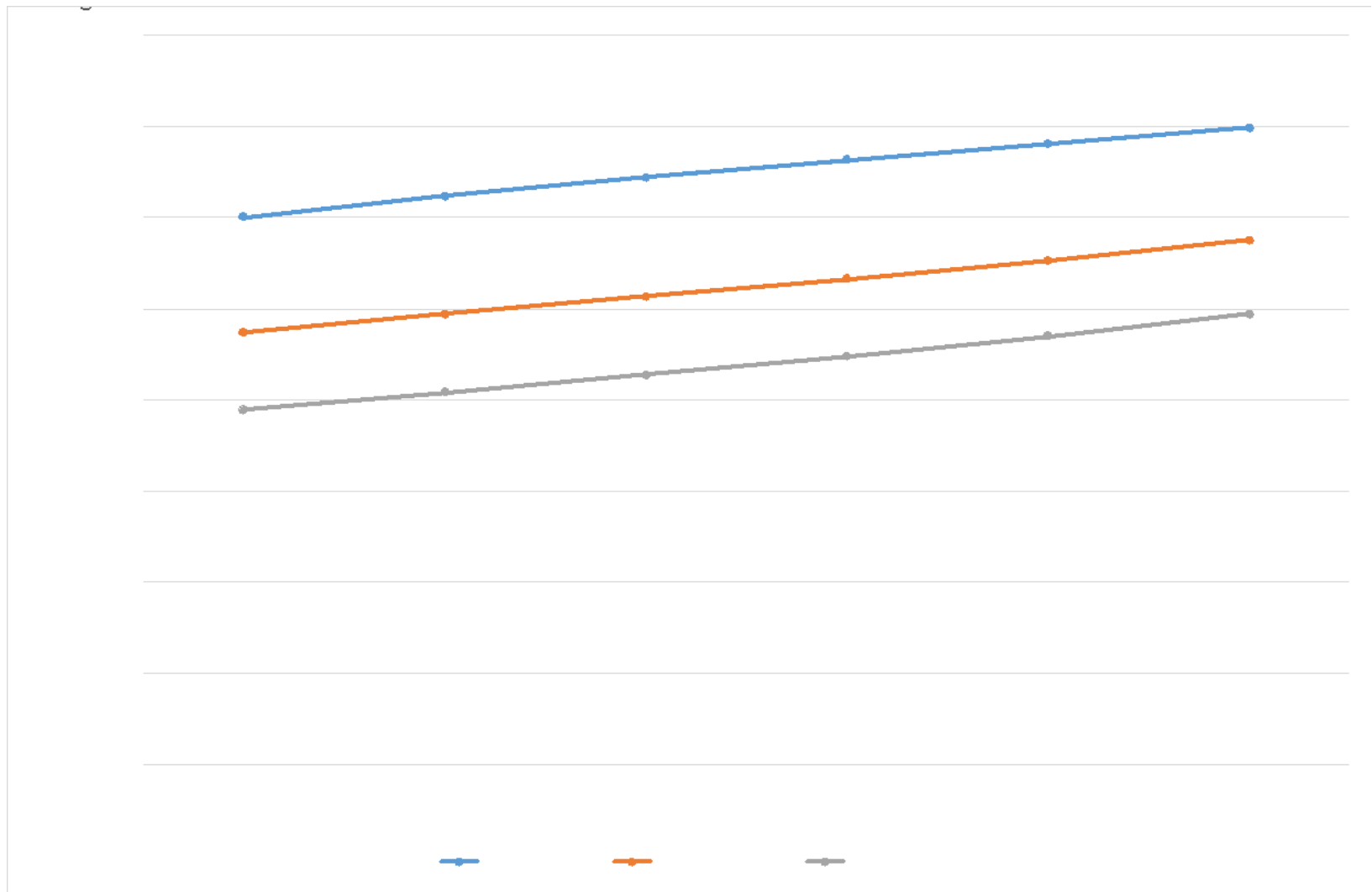
Entropy-based evenness index, 2013 (deterministic projections)



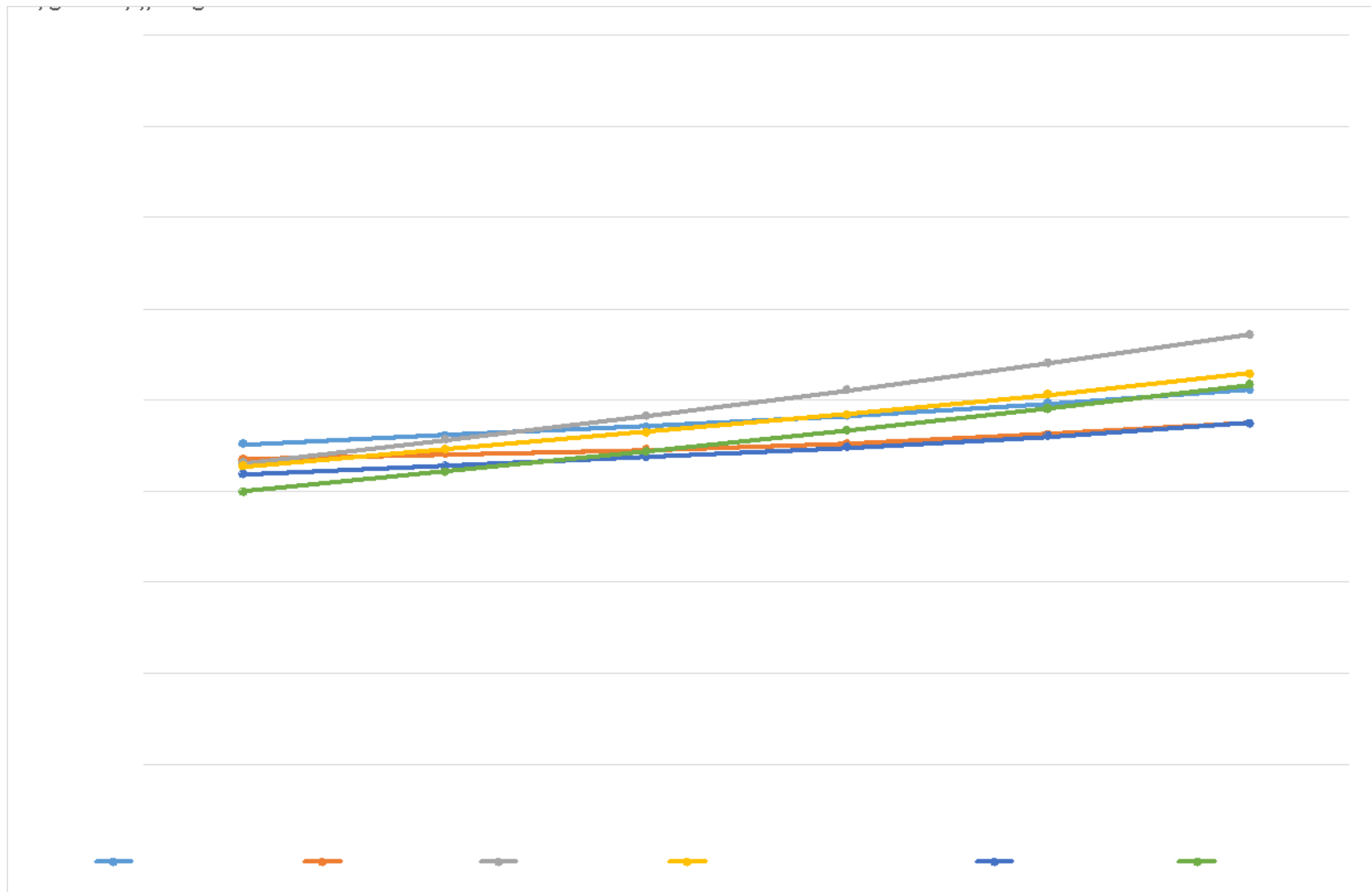
Entropy-based evenness index, 1996-2038 (national, deterministic projection)



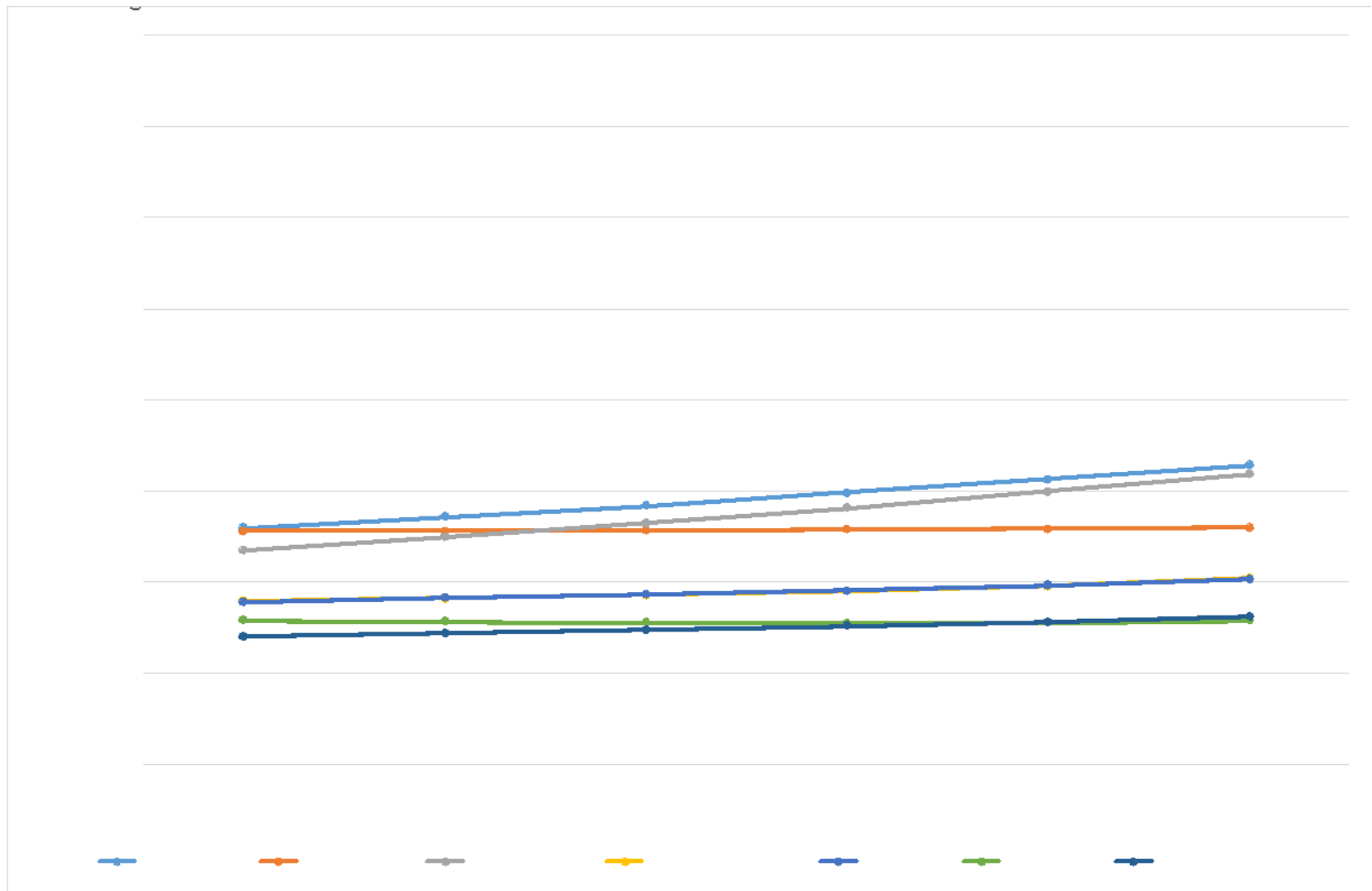
Entropy-based evenness index, 2013-2038 (deterministic projections)



Entropy-based evenness index, 2013-2038 (deterministic projections)



Entropy-based evenness index, 2013-2038 (deterministic projections)



Conclusions



- Ethnic diversity in New Zealand is increasing, and projected to increase into the future
- Diversity is projected to increase substantially in all regions, except for Tasman and Gisborne
- Auckland, Wellington and Waikato are the most diverse now, and are projected to remain the most diverse into the future
- Canterbury, Manawatu-Wanganui, and Otago are projected to increase in diversity faster than other regions with similar initial diversity



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