



THE AUSTRALIAN NATIONAL UNIVERSITY

Indigenous population projections to 2031: A test of policy impacts

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Forecast accuracy: Ratios of national Indigenous projections to ERPs

| | 1991 | 1996 | 2001 | 2006 |
|---------------------------------------|------|------|------|------|
| Gray & Tesfaghiorghis (1986 based) | 0.72 | 0.71 | 0.66 | |
| ABS Low (1996 based) | | | 0.93 | 0.91 |
| ABS High (1996 based) | | | 1.10 | 1.26 |
| ABS Low (2001 based) | | | | 0.97 |
| ABS High (2001 based) | | | | 1.05 |

Indigenous population projections

- Cohort component methodology

$$Pop_{t+\Delta} = Pop_t + Births_{t,t+\Delta} - Deaths_{t,t+\Delta} + (immigration_{t,t+\Delta} - outmigration_{t,t+\Delta}) + (immigration_{t,t+\Delta} - emigration_{t,t+\Delta}) + \varepsilon_{t,t+\Delta}$$

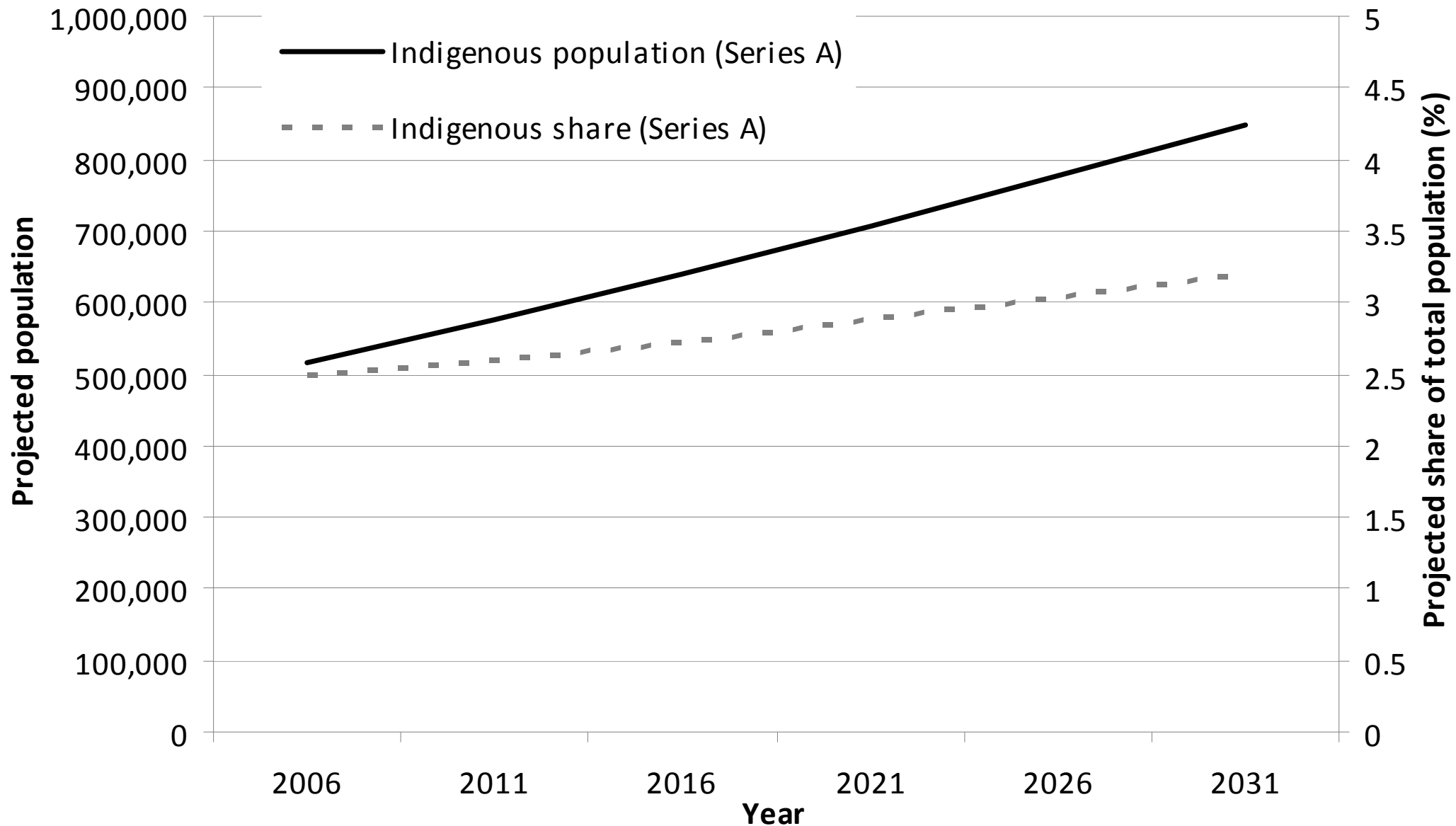
Indigenous population projections

- Cohort component methodology

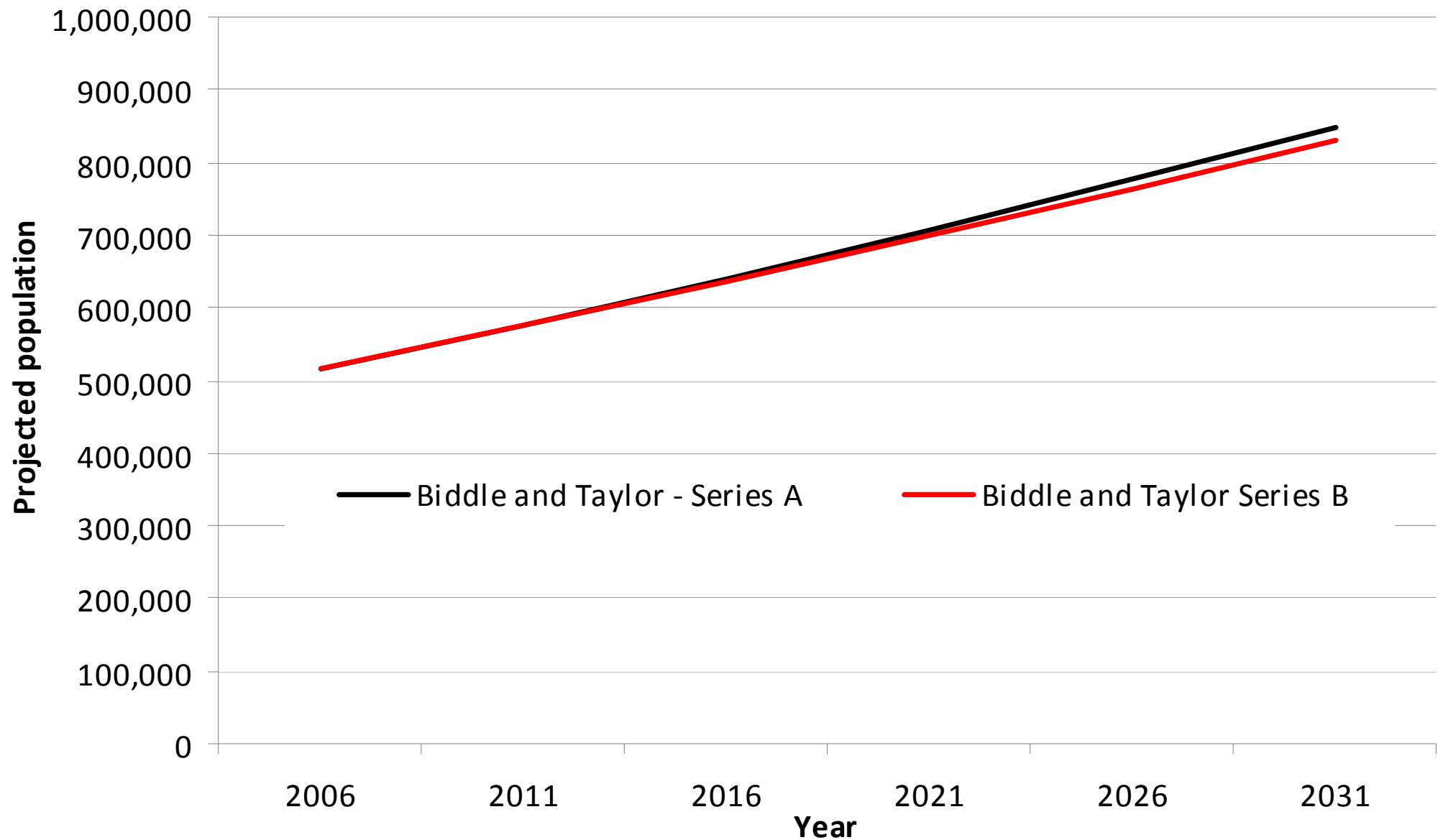
$$Pop_{t+\Delta} = Pop_t + Births_{t,t+\Delta} - Deaths_{t,t+\Delta} + (immigration_{t,t+\Delta} - outmigration_{t,t+\Delta}) + (immigration_{t,t+\Delta} - emigration_{t,t+\Delta}) + \varepsilon_{t,t+\Delta}$$

| Series | Years | Fertility/births | Mortality/Life expectancy | Internal migration |
|----------------------------|-------|--|--|---------------------------------|
| Biddle and Taylor Series A | 06-31 | Constant at 05-07 levels | Constant at 06 levels | Zero migration |
| Biddle and Taylor Series B | 06-31 | Convergence with non-Ind popn by 31 | Convergence with non-Ind popn by 31 | Zero migration |
| Biddle and Taylor Series C | 06-16 | Constant at 05-07 levels | Constant at 06 levels | Continuation of 01-06 migration |
| ABS Series A | 06-21 | 0.5% p.a. decrease in fertility 1% p.a. increase in paternity | Constant at 06 levels | Continuation of 01-06 migration |
| ABS Series B | 06-21 | 0.5% p.a. decrease in fertility 1% p.a. increase in paternity | Increase in l.e. by 5 years from 06-21 | Continuation of 01-06 migration |

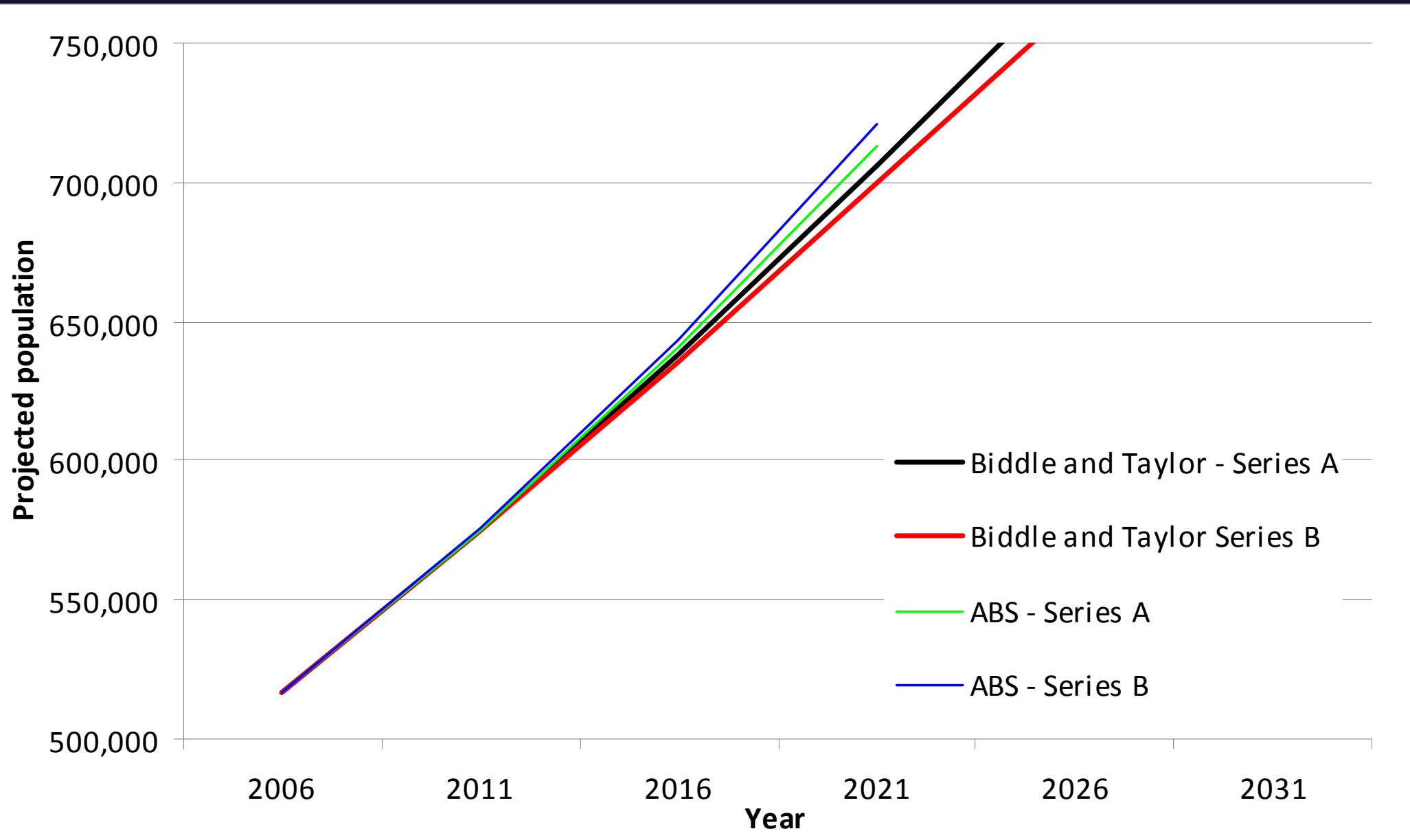
National projections – Indigenous population and share (Series A)



National projections – Series comparisons

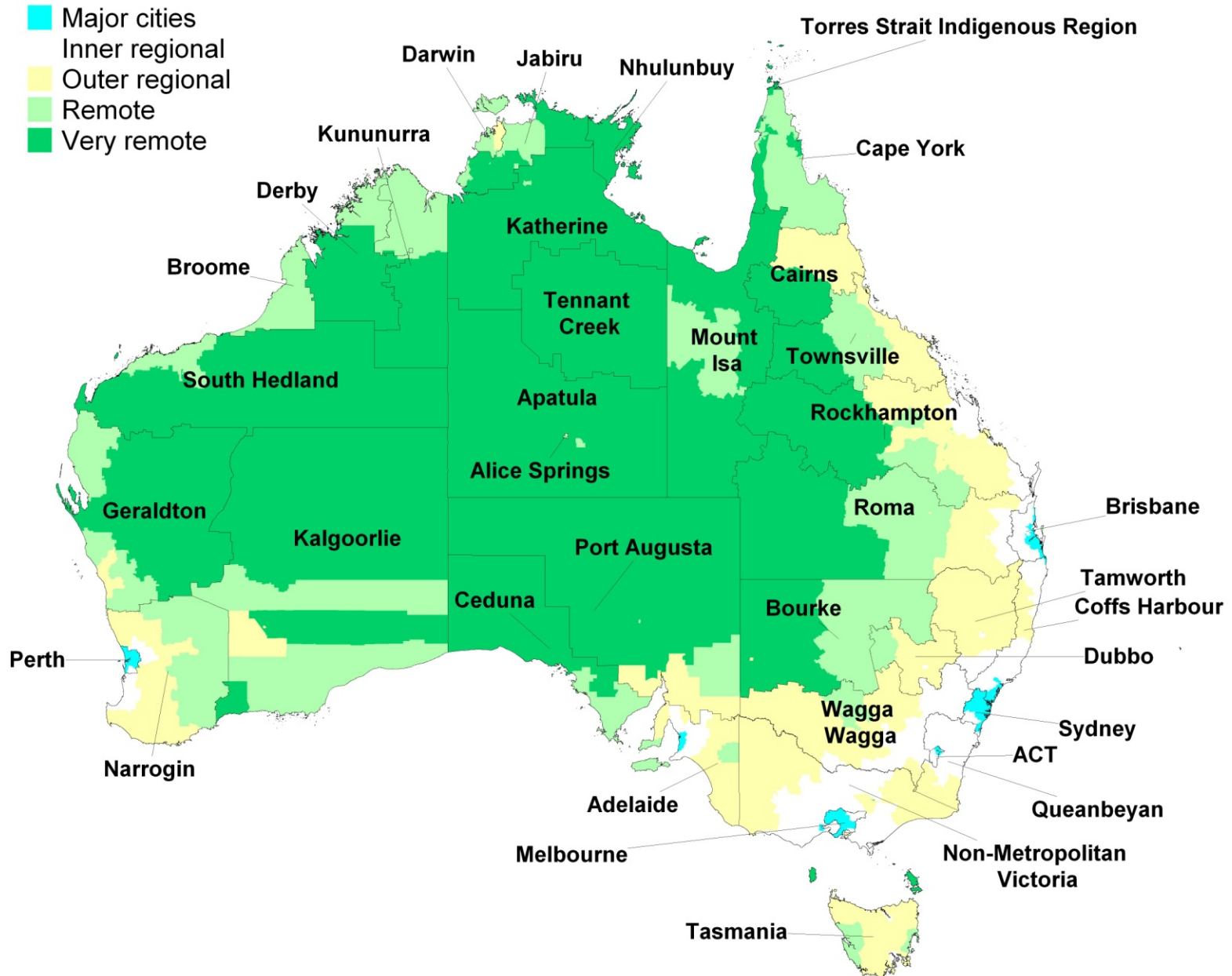


National projections – Series comparisons



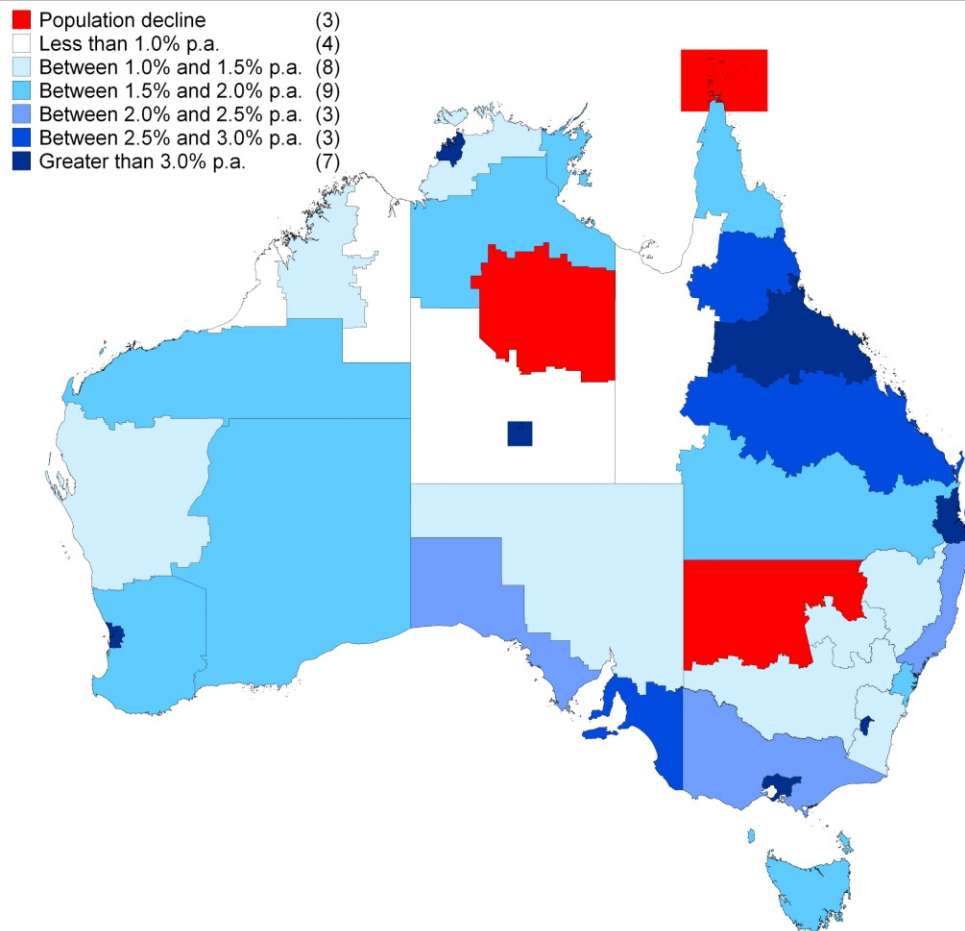
Indigenous Region and remoteness

Geographical structure

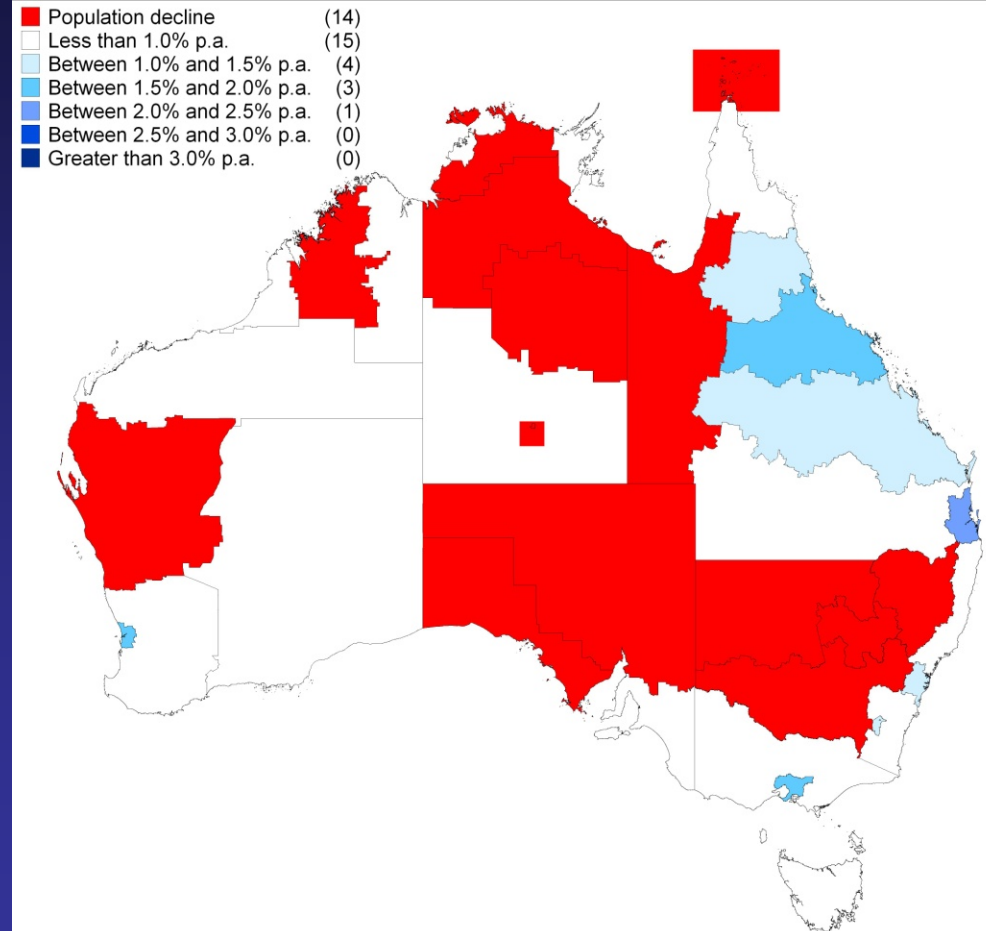


Indigenous Region and remoteness - Annualised growth rates (Series C)

Indigenous growth rates – 2006 to 2016

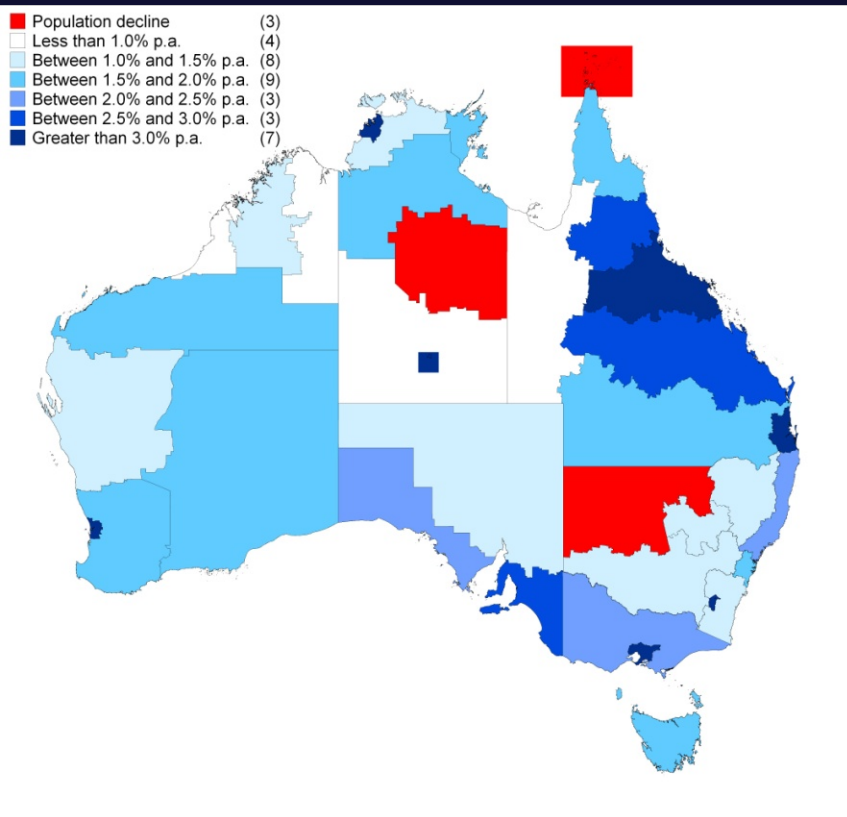


Non-Indigenous growth rates – 2006 to 2016

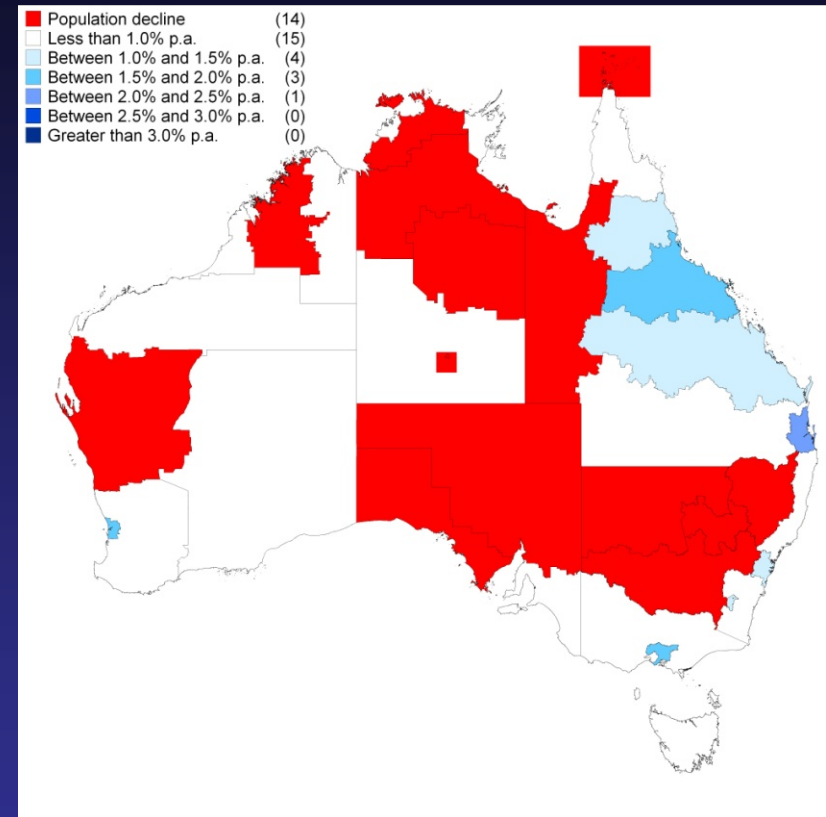


Indigenous Region and remoteness - Annualised growth rates (Series C)

Indigenous growth rates – 2006 to 2016

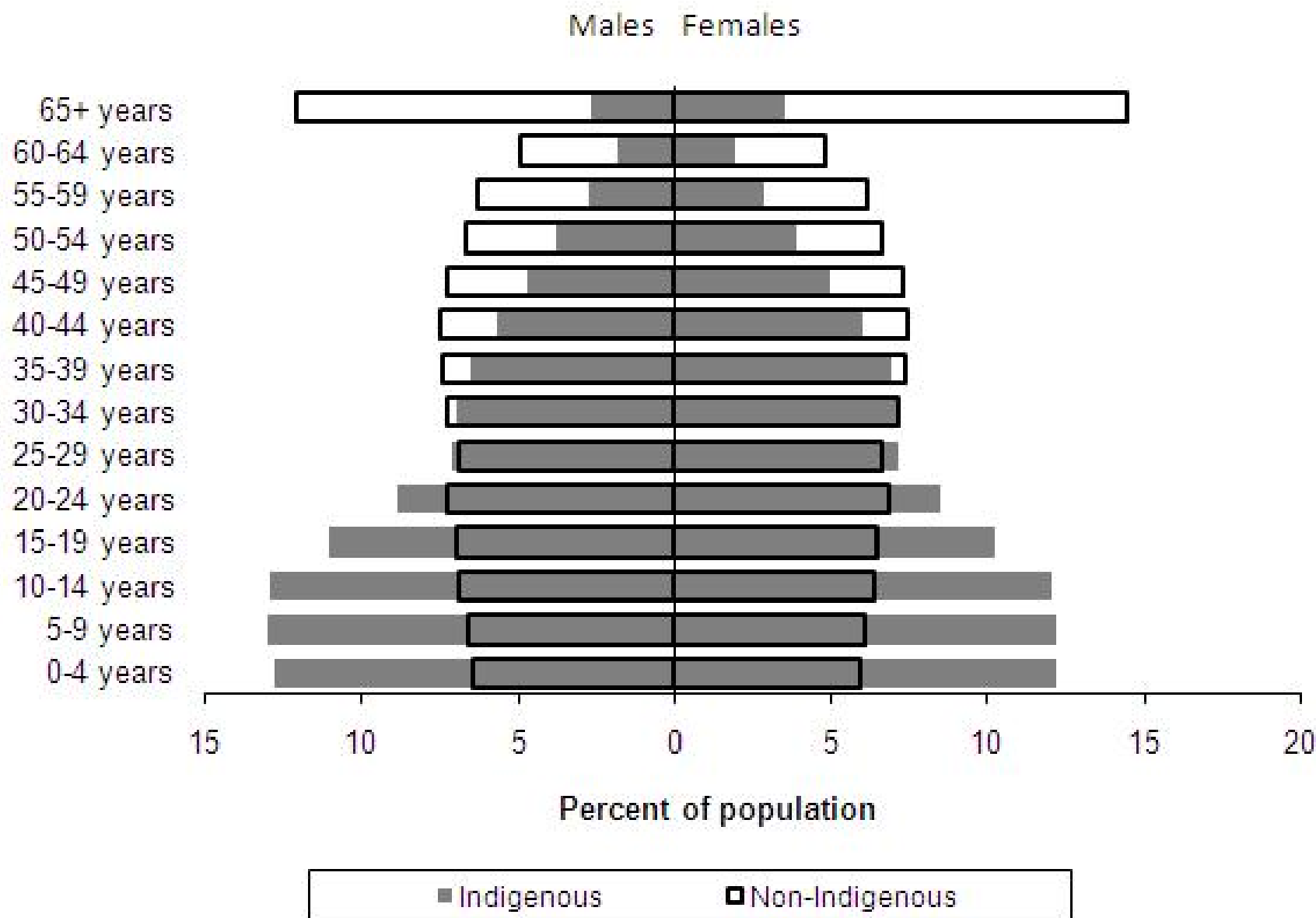


Non-Indigenous growth rates – 2006 to 2016



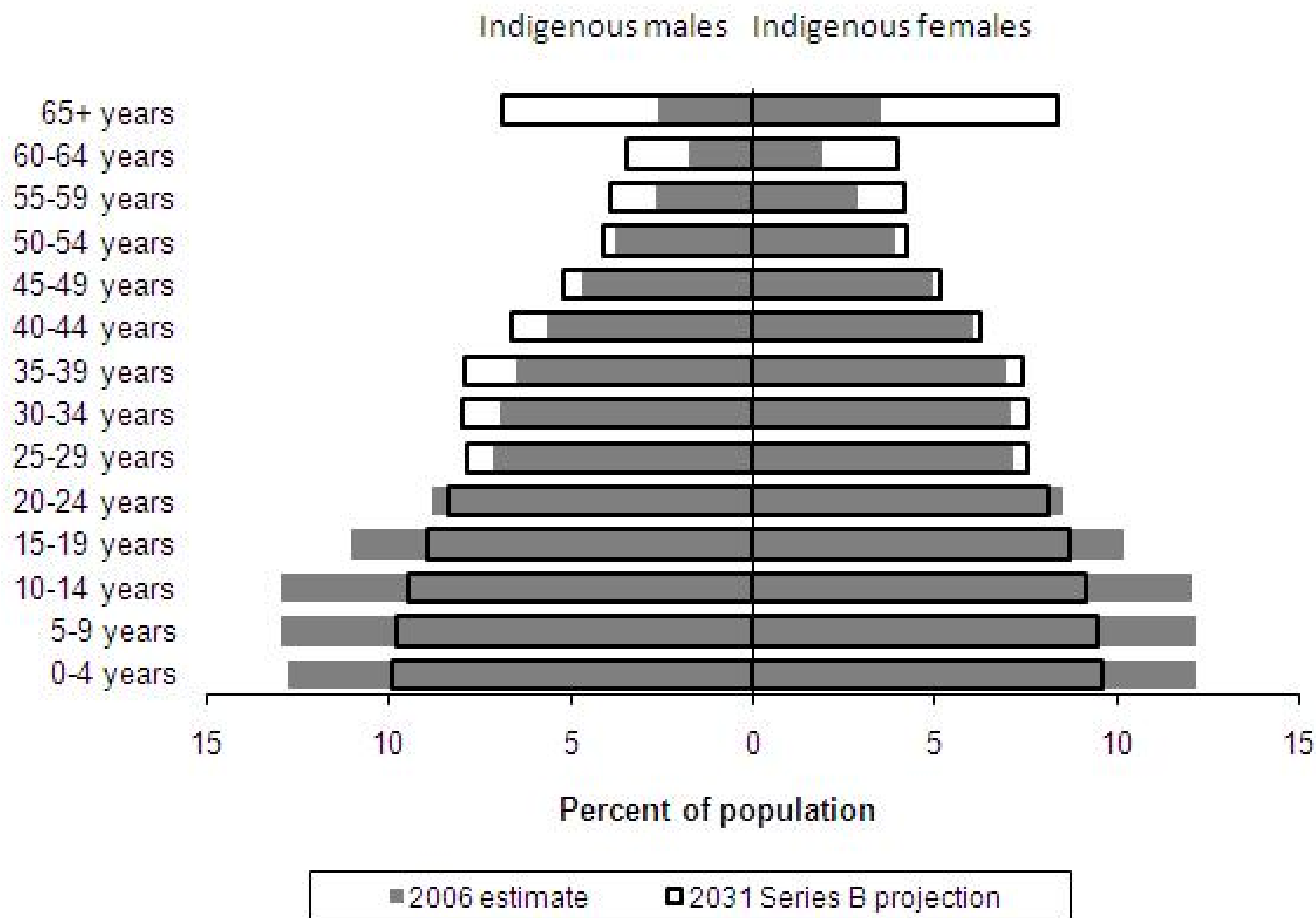
| | Ind pop - 06 | Ind pop - 16 | Ind growth p.a. | Non pop - 06 | Non pop - 16 | Non growth p.a. |
|----------------|--------------|--------------|-----------------|--------------|--------------|-----------------|
| Major cities | 164,220 | 220,137 | 2.97 | 13,988,072 | 16,167,627 | 1.46 |
| Inner regional | 108,993 | 134,674 | 2.14 | 3,885,649 | 4,173,897 | 0.72 |
| Outer regional | 112,226 | 137,502 | 2.05 | 1,788,801 | 1,853,367 | 0.36 |
| Remote | 49,370 | 54,101 | 0.92 | 229,890 | 215,296 | -0.65 |
| Very remote | 72,665 | 79,123 | 0.85 | 73,125 | 67,780 | -0.76 |

Indigenous age distribution – 2006 and 2031 (Series B)

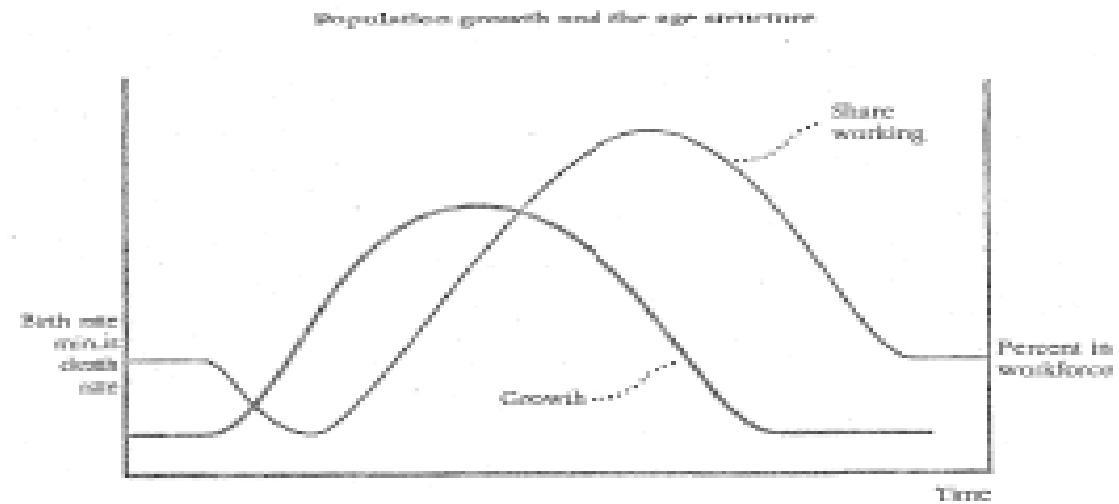
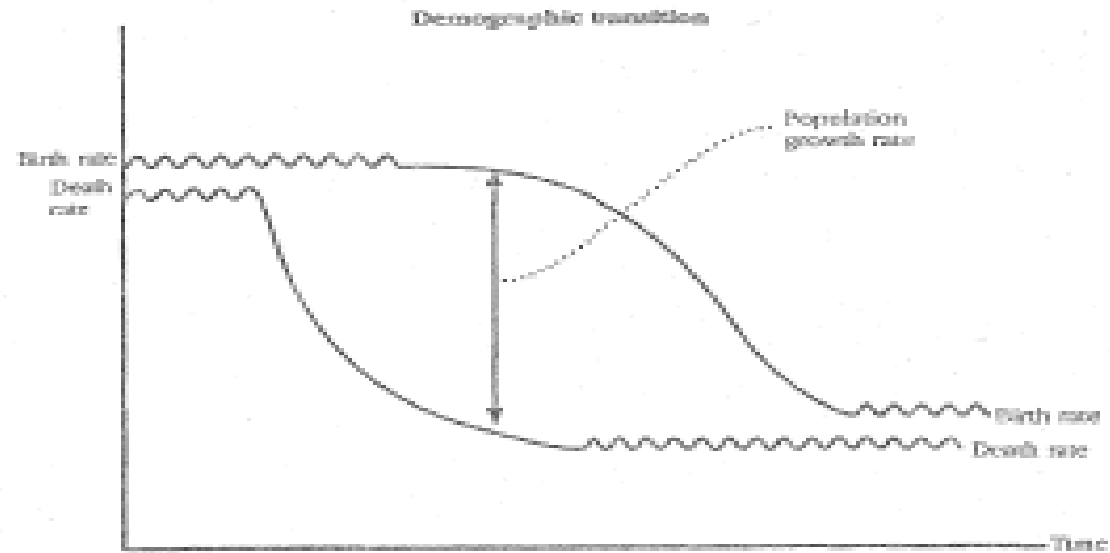


Indigenous age distribution – 2006 and 2031 (Series B)

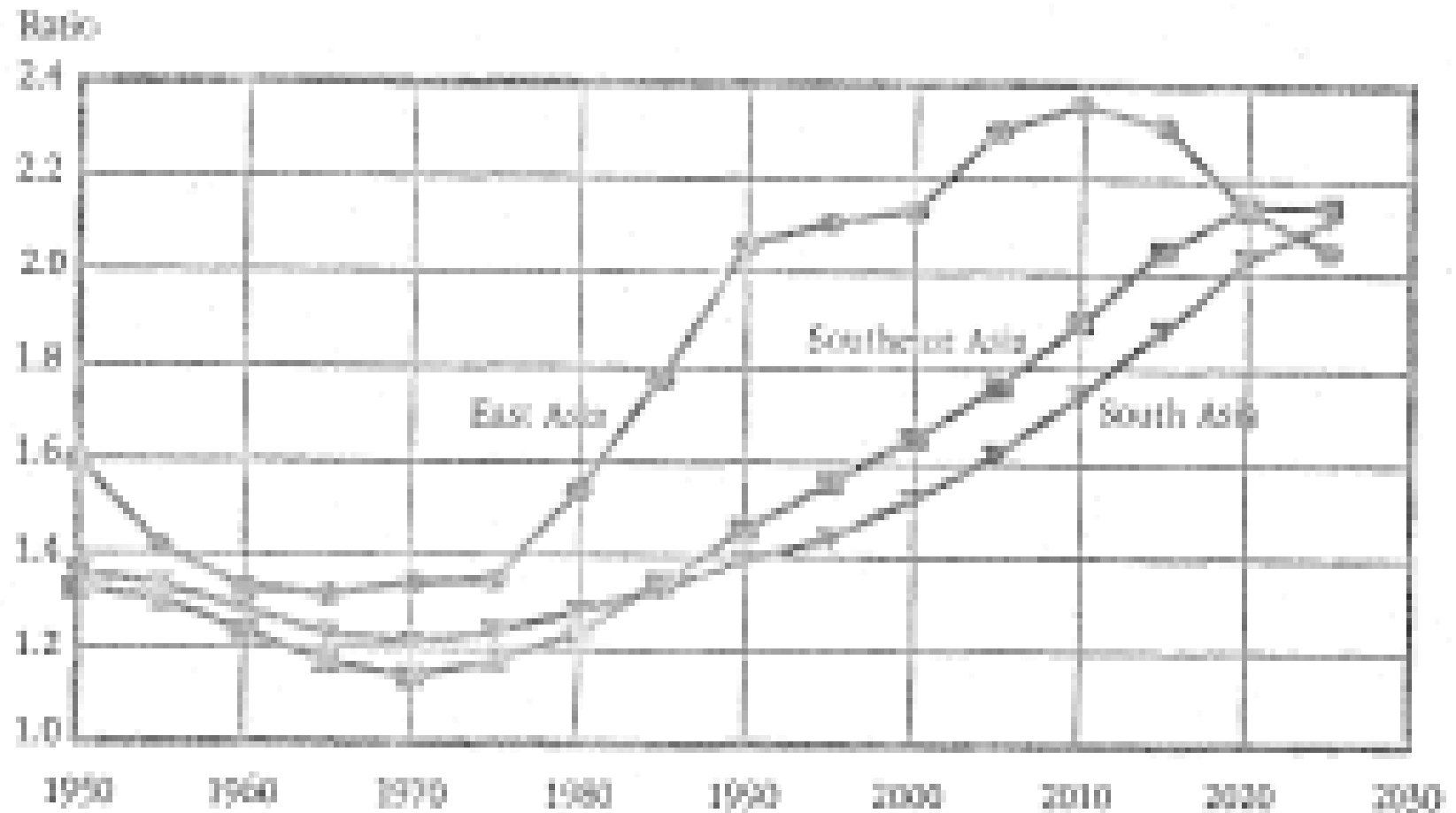
Indigenous age distribution – 2006 and 2031 (Series B)



Demographic transition and age structure

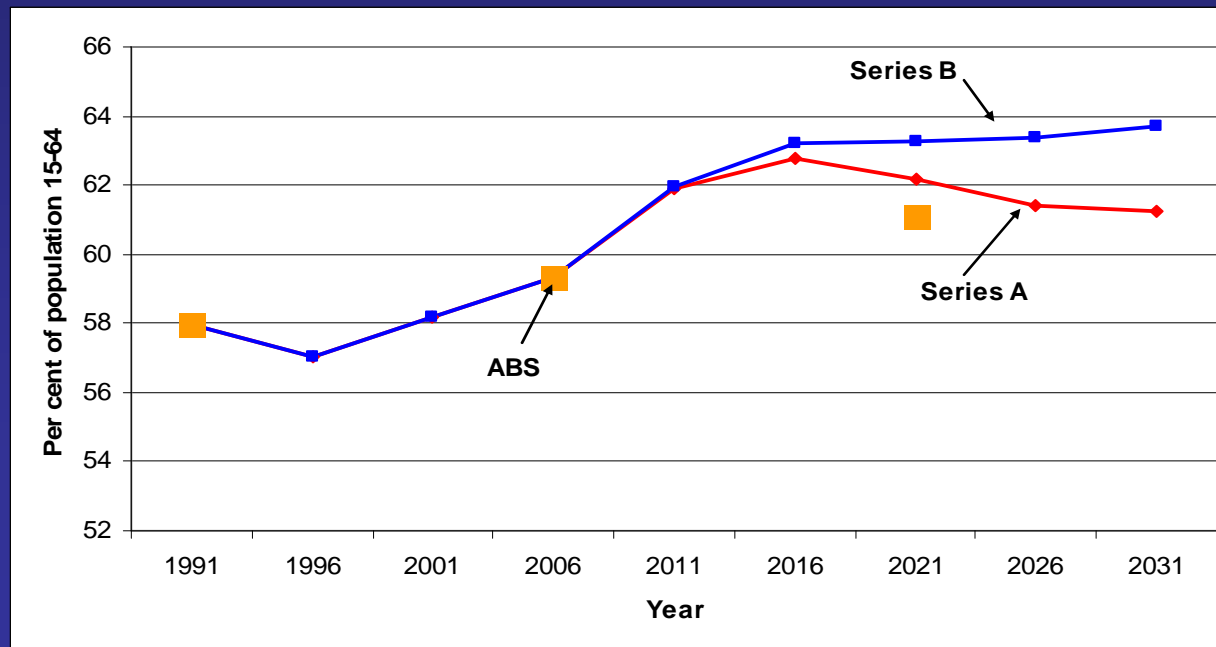
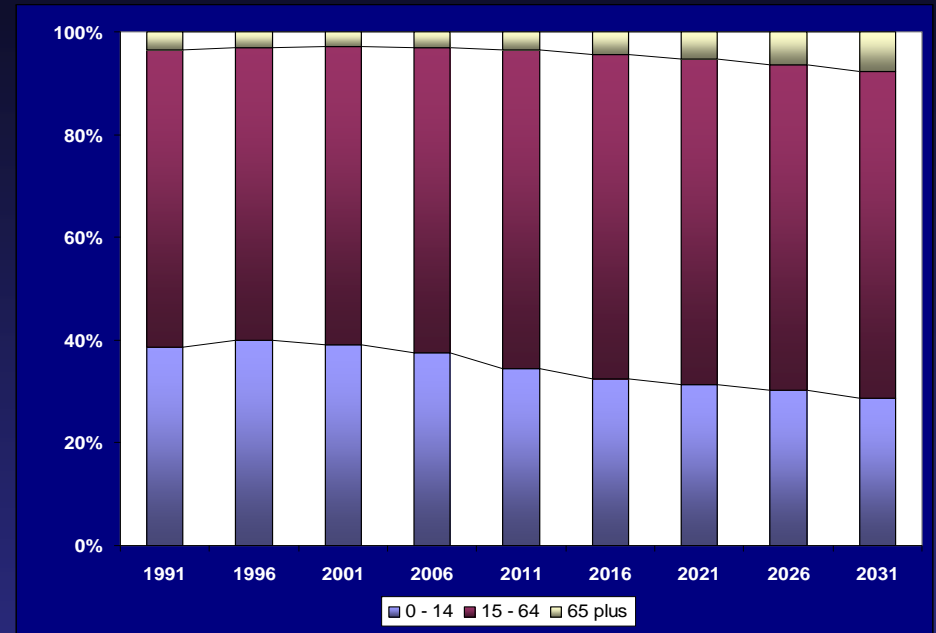
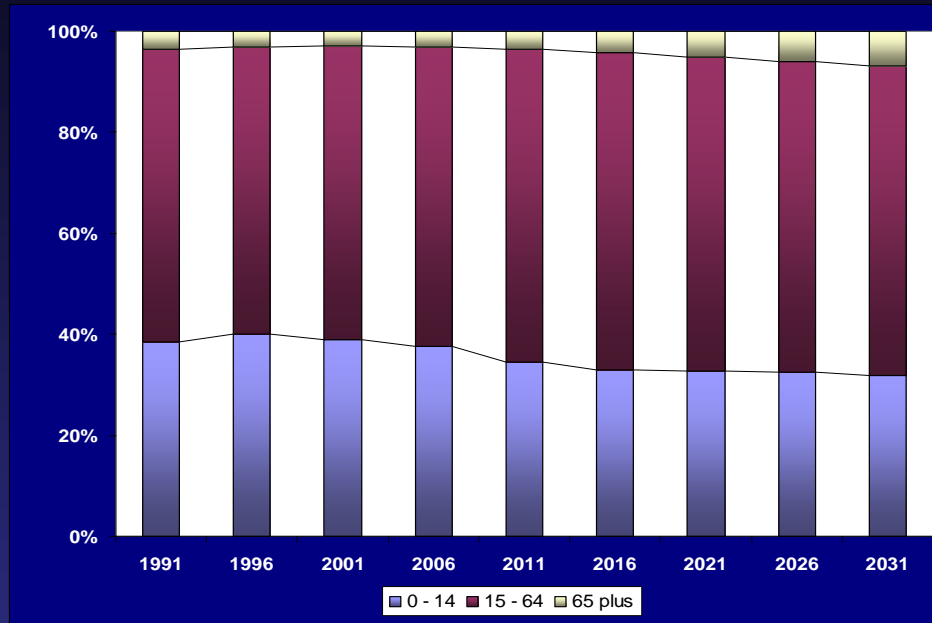


Demographic dividend in Asia



Source: United Nations (1994).

CAEPR Series A & B



Key issues

- Forecast accuracy improving but inherently volatile
- Pop levels appear in broad agreement: looking at 1m by 2040
- Ageing underway: increasing aged burden and decreasing youth burden
- Urban shift underway: lower remote growth but higher Indigenous shares reflecting net migration and TFR
- Status quo shortens the potential demographic dividend
- 'Closing the gaps' prolongs the potential demographic dividend
- Converting potential to actual dividend depends on 'quality' of labour force and education outcomes
- Spatial variation in demographic outcomes and implications
- Data quality checks: Groote example, NT Urban example
- Need better understanding of links between modernisation and demography
- Impact of Indigenous births to non-Indigenous women: have measures of scale and composition but little understanding of process

<http://www.anu.edu.au/caepr/population.php>