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Population and Labour Force Prospects for Australia

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The 2010 'Big Australia' debate

- Conclusion from Gillard Government Enquiry:
- It is more useful for governments, businesses and communities to focus on ways of improving our wellbeing, protecting our environment and making better use of the resources we have, rather than trying to determine an absolute limit to our population and focussing efforts on restricting growth in order to not exceed this 'limit'.

• Source: Department of Sustainability, Environment, Water, Population and Communities 2011: 25).

In other words:

- Australian population policy does not take the form of specification of a target population level or even a target rate of population growth.

We are not alone in this regard:

- While countries may have policies to increase or decrease the rate of population growth, usually because their fertility rate is regarded as too high or too low, no country in the world is aiming for a specific population number or a specific rate of population growth.
- Governments around the world recognise that human populations are not subject to the same levels of control that the farmer has in controlling the number of cattle in the top paddock.

Does this mean we don't have a population policy?

Australia has a highly sophisticated, multi-faceted and mainly effective population policy. Its components are:

- 1. Maximising survival.
- 2. Supporting families to have the number of children that they want.
- 3. Moderating the speed and extent of population ageing through immigration.
- 4. Through the immigration programme, providing the skills that Australia needs to promote its economic development.
- 5. Dealing with the distribution of population across cities and regions.

1. Maximising Survival

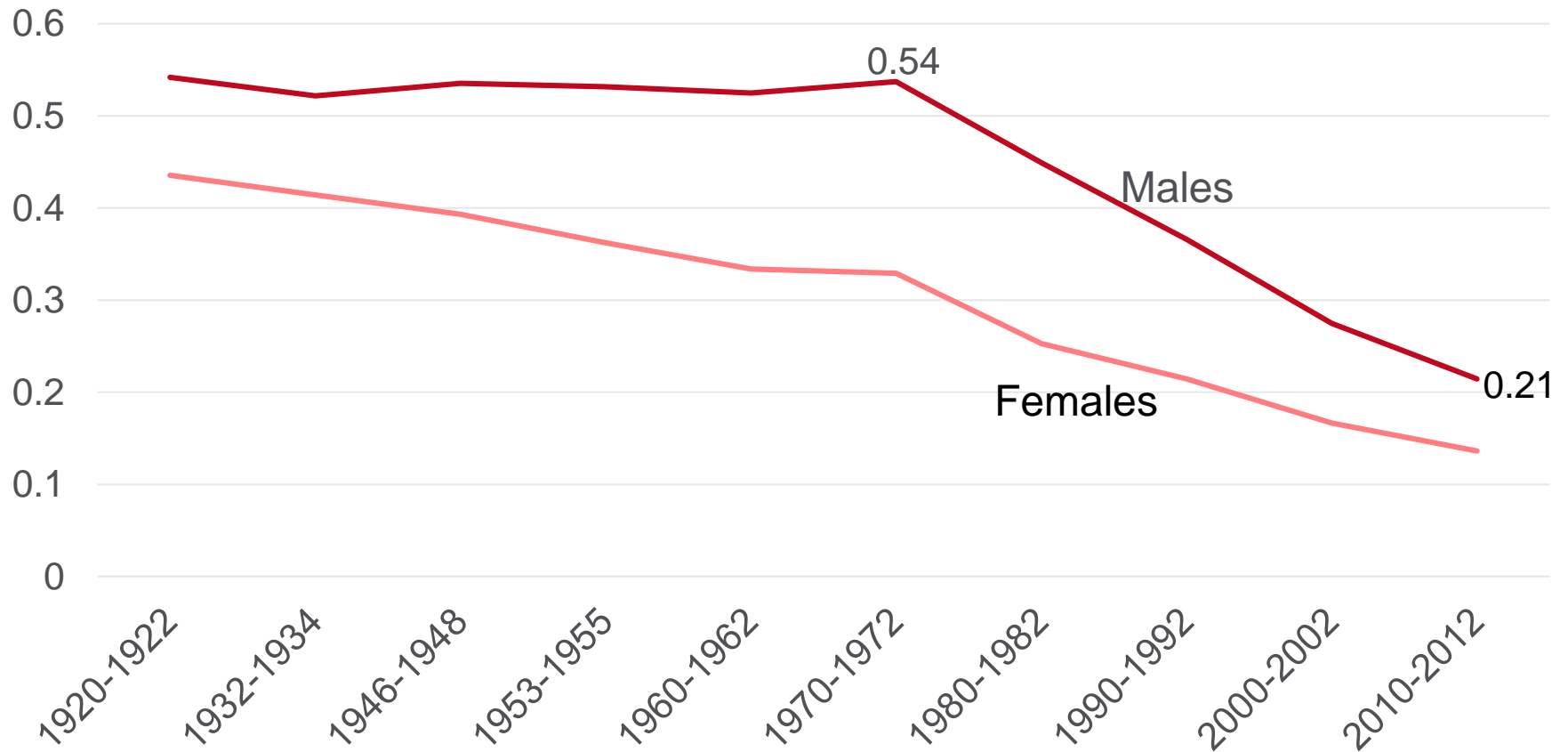
- Australia aims to keep its population healthy and living long lives. This policy has been particularly successful from the 1970s onwards.
- For Australian women today, deaths under the age of 75 years are so low in number that their complete elimination would add only two years to the expectation of life at birth.
- Expectation of life for Australian men in 2015 ranked No. 3 among the countries of the world.
- Successful health campaigns: eg. smoking, accidents

1. Maximising Survival

- Between 1981-82 and 2009-10, per capita public health expenditure on persons aged 75 and over increased in real terms by 6.4 times.
- As the population aged 75 years and over increased three times in the same period, real public expenditure on the health of persons aged 75 years and over increased by an amazing 19 times.
- Australia has been able to achieve this remarkable result without undue fiscal strain because government revenue increased during this period as a result of sustained economic growth.

1. Maximising Survival

Probability of Death Between Ages 55 and 75, Australia

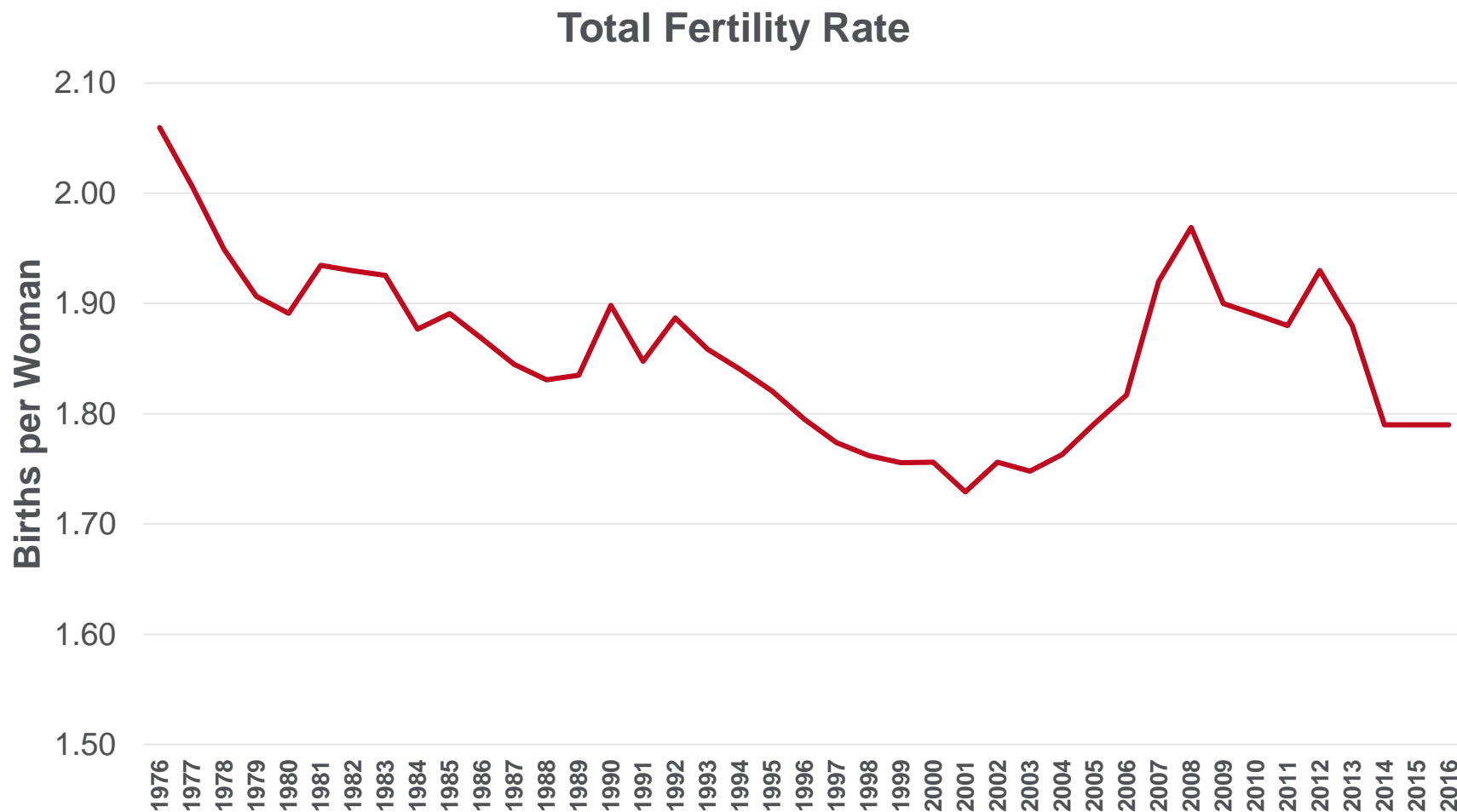


Source: ABS, Australian Life Tables

2. Supporting families to have the number of children they want

- Most countries would like to see their fertility rate fall in the relatively narrow range of 1.5 to 2.5 births per woman.
- This is very sensible because sustained high fertility leads to very rapid population growth which impedes economic and social development while sustained very low fertility leads to rapid population decline and excessive population ageing.
- Planning to keep the fertility rate within this relatively narrow band is good policy.
- Australia's fertility rate has fluctuated between 1.7 and 2.0 births per woman, an ideal range, for the past 42 years.

2. Maintain Fertility Between 1.7 and 2.1 Births per Woman



Source: Compiled by the author from ABS Historical Demographic Statistics and ABS issues of Australia Demographic Statistics.

2. Supporting families to have the number of children they want

- This excellent result did not just happen.
- Its achievement has been supported by the provision to women and men at low cost of the means to control the number of children that they have, that is, access to contraception and abortion.
- While there remains room for improvement, Australian governments have also implemented a range of policies to support families with children such as subsidised childcare, parental leave, social security payments related to children, and public support for education.

2. Supporting families to have the number of children they want

- Paul Ehrlich (during a visit to Australia in 2016) and Sustainable Population Australia (in 2009) have called for a China-style, one-child policy for Australia.
- It is not difficult for a demographer to demonstrate that this is a very silly idea, leaving aside the human rights implications. Even China now considers it to be a bad idea.
- Among countries where fertility is below 1.5 births per woman, only one does not want to increase its fertility rate.

3. Moderating the speed and extent of population ageing through immigration

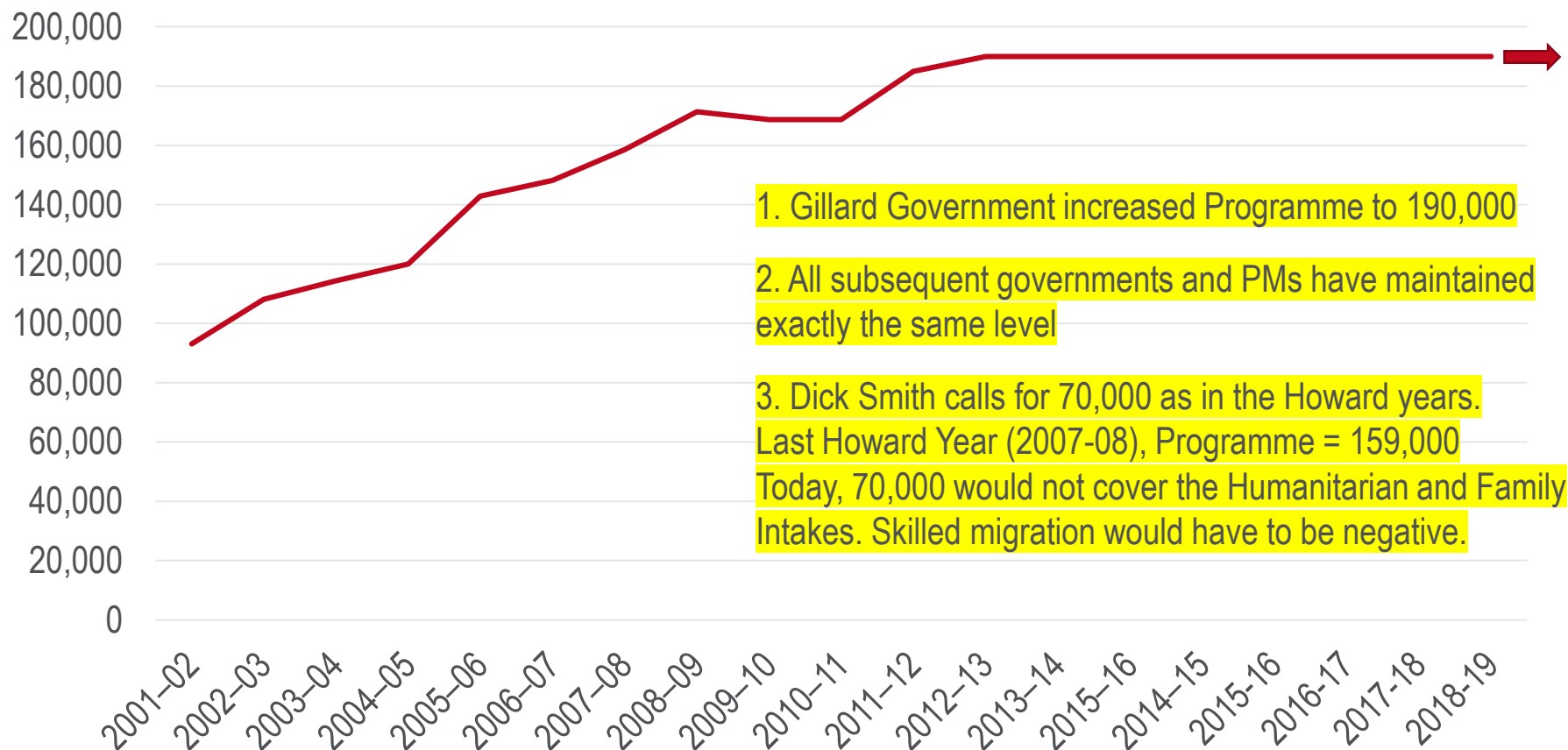
- At the first Gillard government budget in 2011-12 budget, somewhat ironically, the level of the Australian permanent migration was **increased** to around 200,000 per annum (including humanitarian).
- Since then, the programme level has remained virtually unchanged at this level.
- This policy level is based on modelling by McDonald and Temple showing that Net Overseas Migration between 160,000 and 220,000 optimises the impact of immigration on the growth rate of GDP per capita (though its impact on the ageing of the population).

Source: McDonald, P. and Temple, J. 2010 Immigration, Labour Supply and Per Capita Gross Domestic

Product: Australia 2010-2050. http://www.immi.gov.au/media/publications/research/_pdf/labour-supply-gdp-2010-2050.pdf

Government Permanent Programme Levels

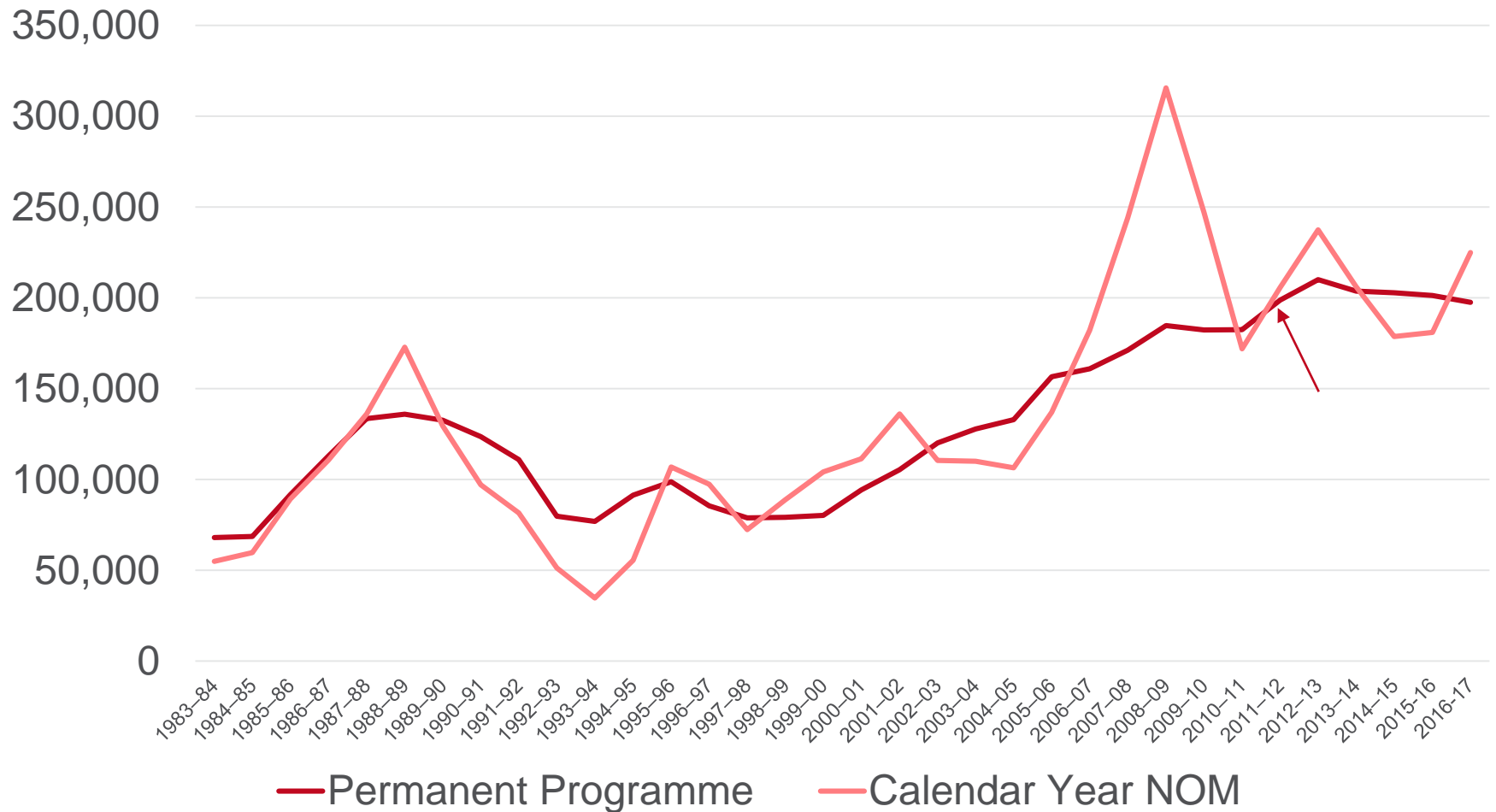
Skilled + Family Streams



A diversion: temporary migration and the permanent programme

- The McDonald-Temple modelling was based on the level of Net Overseas Migration (NOM), not on the level of the government's permanent programme.
- NOM includes the permanent programme but it also includes arrivals and departures of Australian citizens and permanent residents, the movements of New Zealand citizens and the various temporary movements (skilled temporary, international students, bridging visas, working holiday makers, etc).
- Some have argued that we have gradually built up 'millions' of long-term temporary immigrants, and that policy should be directed at reducing the temporary entrants.

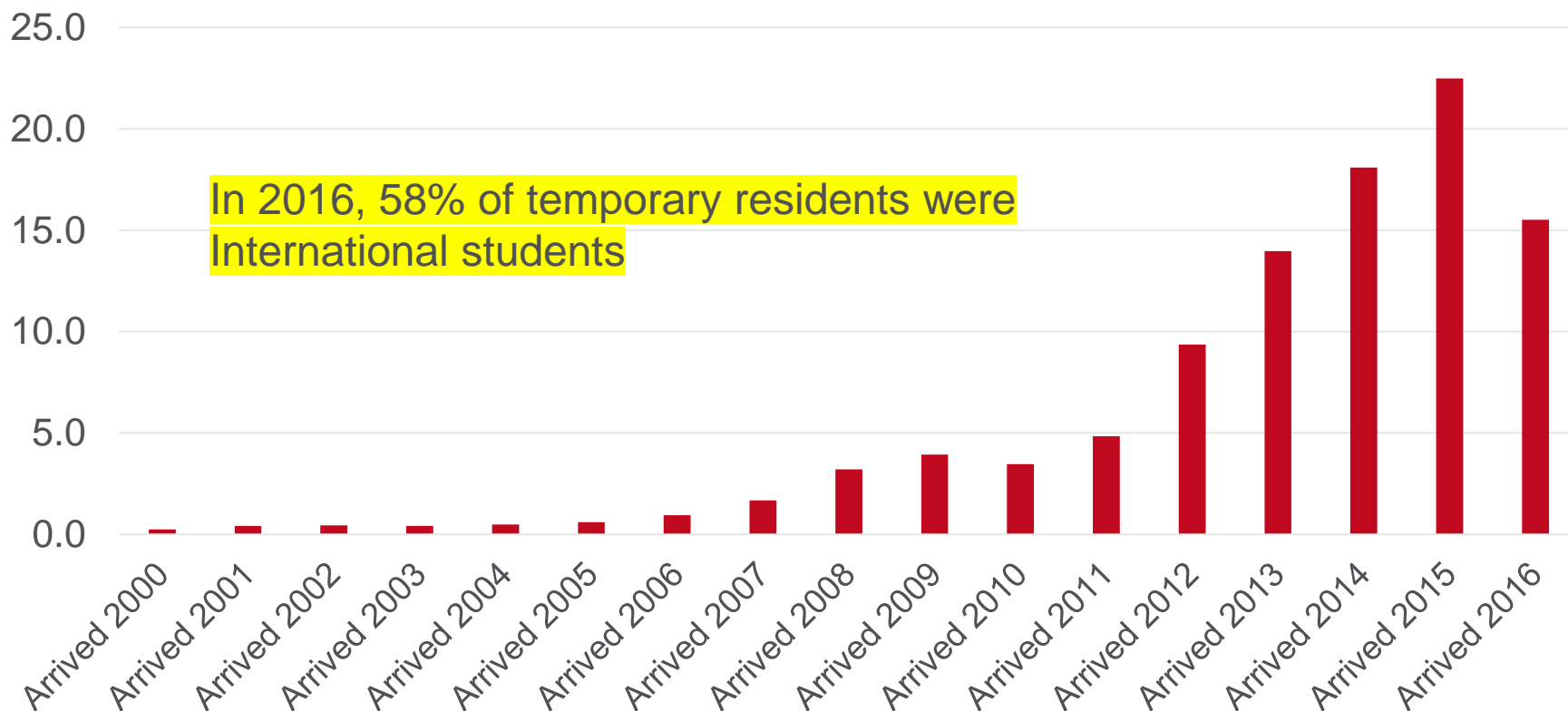
Australia's Migration Level Is Determined by the Government's Permanent Programme



Source: Derived by author from data provided on the Department of Home Affairs website and ABS, Migration series

Temporary Migrants **ARE** Temporary

Temporary Residents by Year of Arrival 2016 Census, % Distribution (excludes persons born in New Zealand)



Source: Australian Bureau of Statistics (ABS) (2018) *Australian Census and Migrants Integrated Dataset*, Cat. No.3417.0.55.001, Microdata, TableBuilder

Visa/Movement Type	Visa Components of NOM 2004-05 to 2015-16	
	Net (NOM)	Net (%)
Permanent	864,656	34.0
Skilled	410,609	16.2
Family	335,610	13.2
Humanitarian	128,788	5.1
Other	-10,351	-0.4
Temporary	1,545,887	60.8
Skilled	246,056	9.7
Student	792,106	31.2
Working Holiday	281,941	11.1
Visitor	343,719	13.5
Other	-117,943	-4.6
New Zealand Citizen	297,662	11.7
Australian Citizen	-175,393	-6.9
Other	8,331	0.3
TOTAL	2,541,143	100.0

Source: ABS Migration statistics

How is it so?

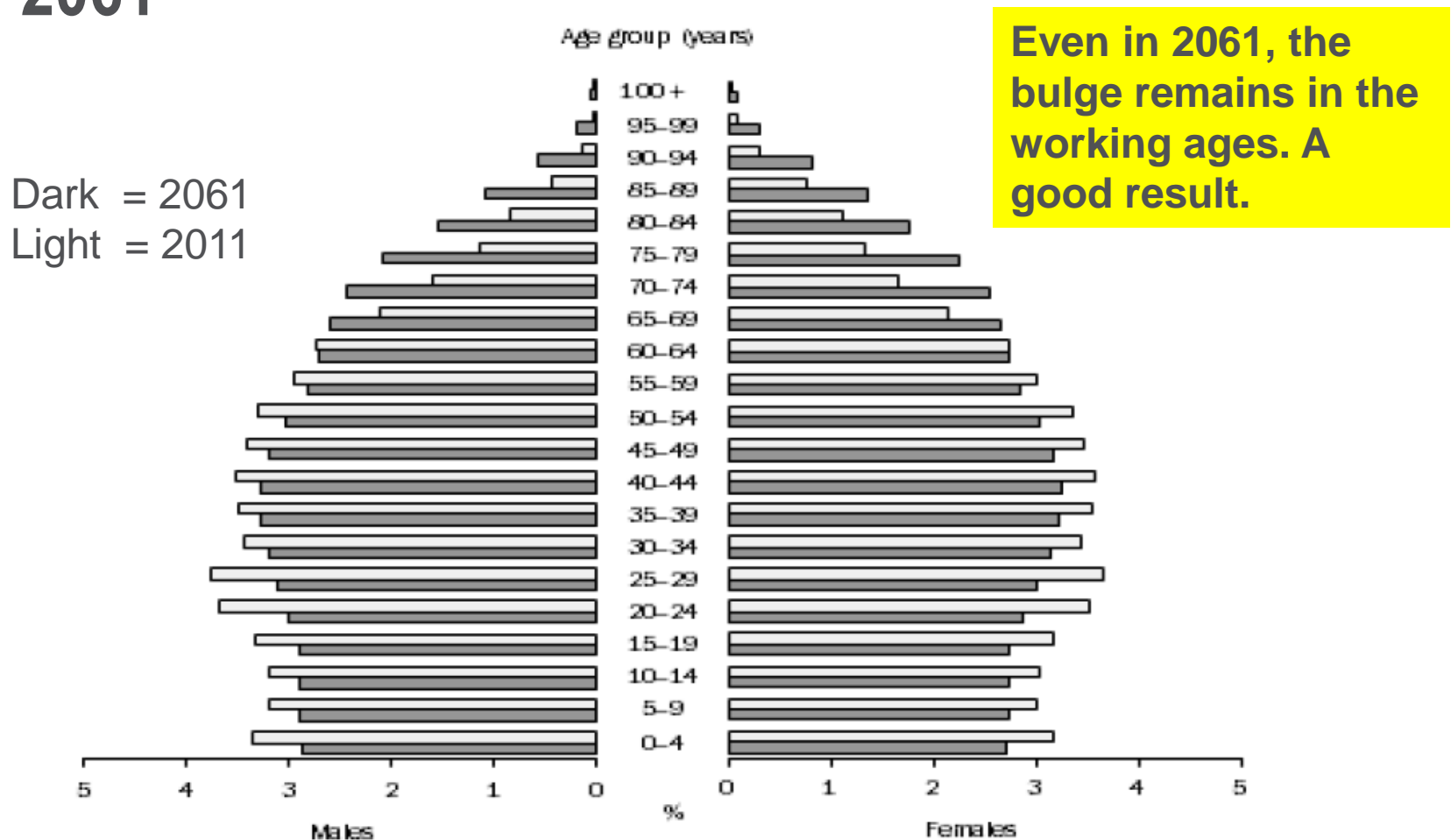
- The puzzle that 61% of NOM results from persons arriving on a temporary visa but that, in the long run, it is the level of the permanent programme that is important comes about because:
 - Temporary residents are the main pool from which permanent residents are drawn.
- *‘There is nothing more permanent than a temporary migrant’* is false. It is very expensive to remain in Australia as a temporary resident. The vast majority of temporary migrants either become permanent or leave.
- The focus of policy is and should be the level of the permanent intake.
- **High priority research:** a study of the visa histories of people awarded permanent residence and their subsequent movements (30% of offshore skilled independent category do not take up residence in Australia)

3. Population Ageing **IS** Modified Significantly by Migration

Annual Net Overseas Migration	Per Cent of Population Aged 65+ in 2051
0	26.8
200,000	20.5
% Aged 65+, June 2017	15.4

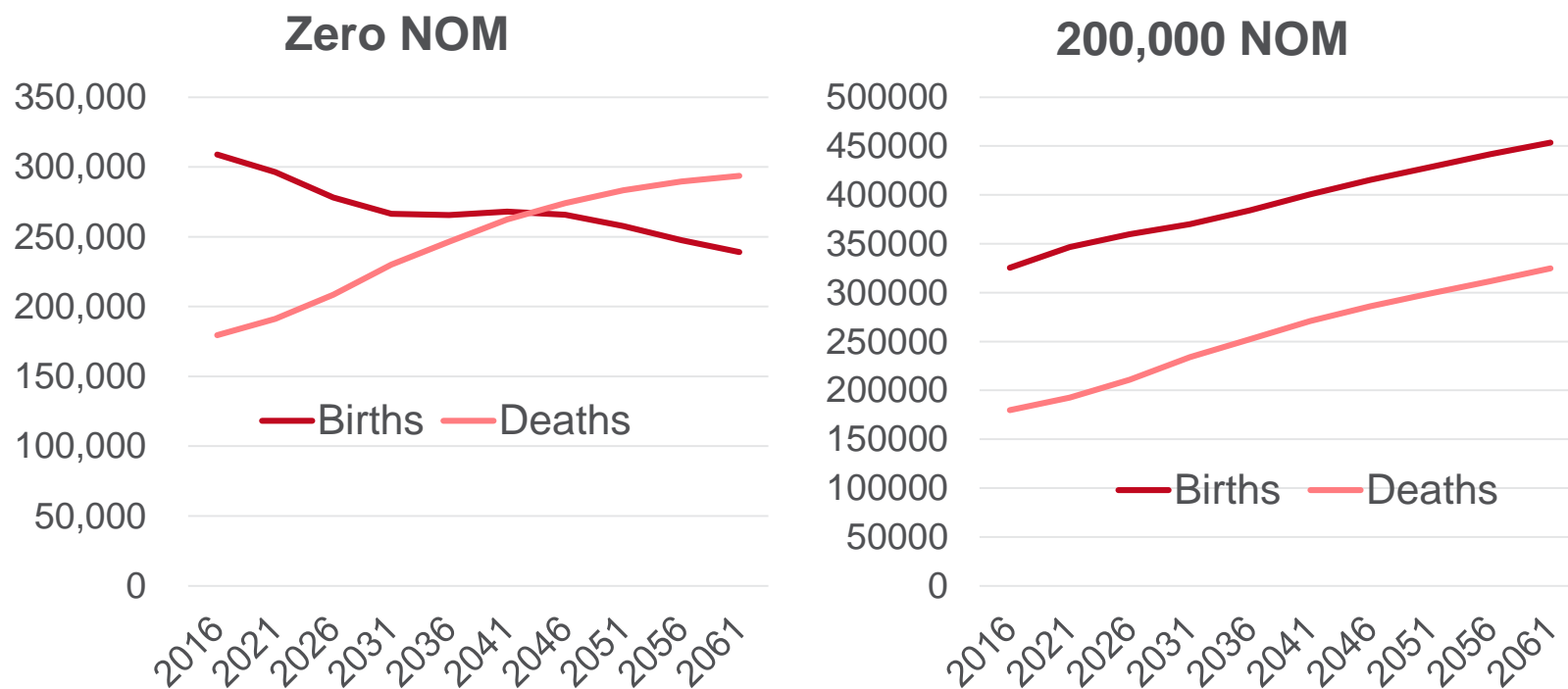
Source: Author calculation

3. Australia's Age Distribution in 2011 and 2061



Source: ABS 2013. *Population Projections, Australia*. ABS Catalogue No. 3222.0

3. Annual Natural Increase, 2016-2056, Australia, Zero and 200,000 NOM*



*Assumes migrants and non-migrants have same birth and death rates

Source: Author calculation

Natural increase is not independent of NOM. It is very dependent on past NOM

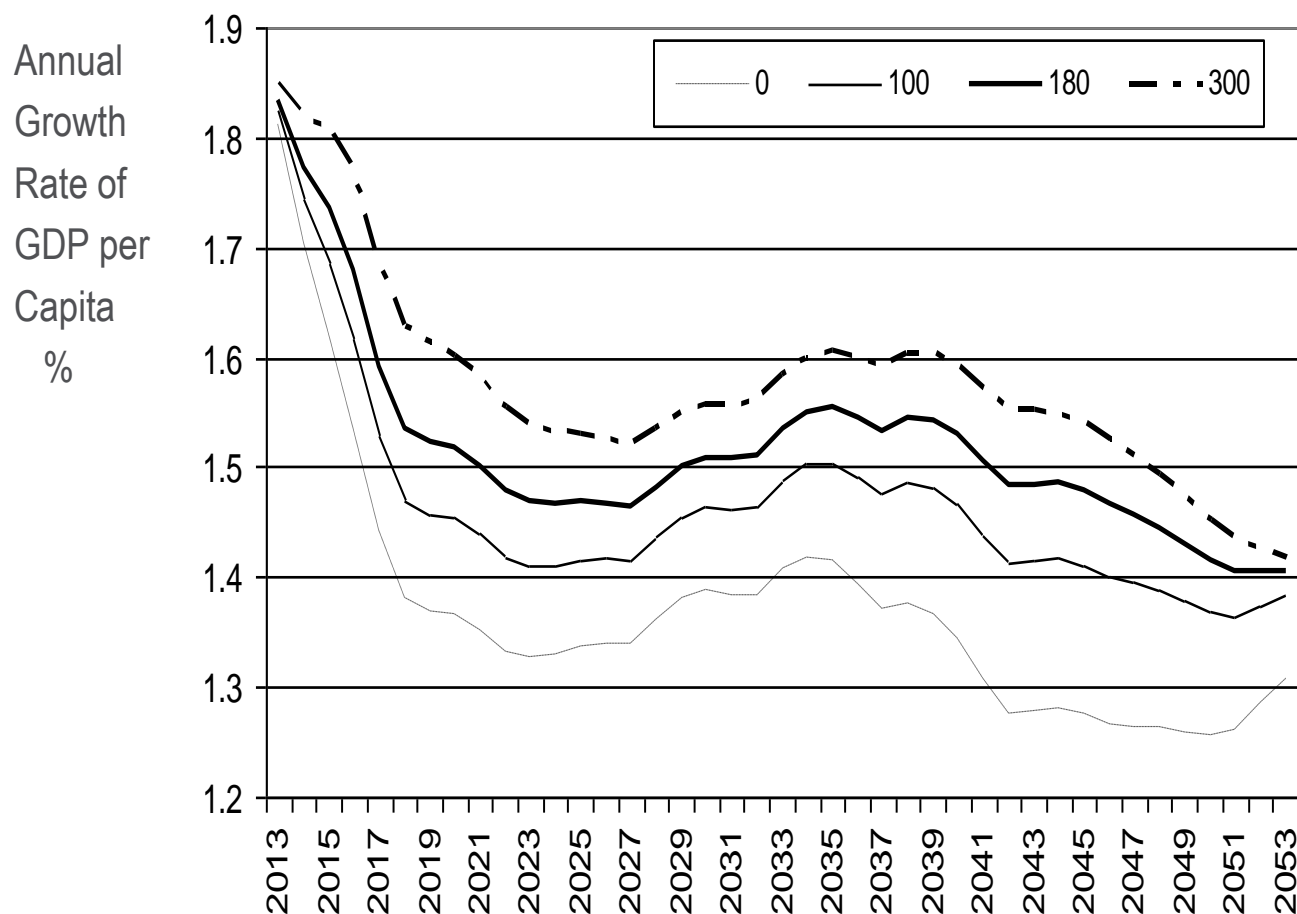
3. Projected Population by Age in 2051, (000's)

Age Group	NOM = Zero	NOM = 200,000 p.a.	Difference (NOM 200K-NOM Zero)
65+	6966	7392	426
20-64	13716	20508	6792

Source: Author calculation

The level of migration from now to 2051 makes almost no difference to the number aged 65+ in 2051 but adds 6.8 million to the work force ages.

3. GDP per Capita Growth Rate (2013-2053) under different levels of net overseas migration



GDP per capita is 12% higher in 2053 with 180K migrants compared with zero migrants – due only to the impact of migration on age structure.

12% is higher than the entire growth of GDP per capita in Australia over the past decade.

(all in real terms)

Assumption: Migrants have same labour productivity as other Australians: 1.6%

Source:
McDonald and Temple,
2010.

4. Through the immigration programme, providing the skills that Australia needs to promote its economic development

- This is about the balance of labour demand and supply in the short to medium term.
- There is no point having migrants come into the country to modify longer-term population ageing if they are in excess of short and medium term labour demand.
- Furthermore, the skills of migrants need to be consistent with the skills required by the Australian labour market.
- Ideally, immigration policy should be flexible and responsive to changes in labour demand and supply and to changes in skill needs.

4. Medium Term Labour Demand

New Job Openings, Australia, 2017-2024

Replacement Demand	Economic Expansion	Total
2.26 million	1.87 million	4.13 million

Note: Based on ABS projection of NOM of 240,000 per annum

July 2018: Total Employed = 12.58 million. Replacement demand due mainly to the retirement of the baby boom generation

Shah C and Dixon J (2018) *Future job openings for new entrants by industry and occupation*. Adelaide: Commonwealth of Australia, NCVER. (using CGE model)

4. How Employment Demand Was Met in the Recent Past

Change in Employment: June 2011 – June 2016 (000's)

Age Group	Population Growth (no migration)	Change in Employment Participation	Net Migration 2011-16	TOTAL
15-24	-137.9	-40.1	199.5	21.5
25-54	43.9	-8.4	395.8	431.3
55+	192.9	75.0	18.1	286.0
TOTAL	98.9	26.5	613.4	738.8

Note: NOM for the 5-year period was 1,027,700 (av: 205,500 per annum).

Source: McDonald, P. 2017. International migration and employment growth in Australia, 2011-2016, *Australian Population Studies* 1(1): 3-12

4. Projected Labour Supply By Age Group

Projected Change in Employment, 2016-2026* (000's)			
	Zero NOM	NOM = 200,000 p.a.	Increase due to NOM= 200,000
15-34	-518	425	943
35-44	310	709	399
55+	320	349	29
TOTAL	112	1483	1371

* Assuming constant age-specific employment participation ratios

Source: Author calculation

4. The Importance of a Flexible Labour Market

- Considerable change is projected in Australian employment by detailed occupations between 2016 and 2024 (Shah and Dixon, App. Table A1).
- It is much easier for younger workers especially those who have not yet entered the labour force to adjust to changes in demand for particular occupations.
- Training in Australia should be directed towards meeting the projected shortages in specified occupations but the previous table shows that, in aggregate, the number of employed 15-34 year olds would fall by over half a million by 2026 without migration.
- With NOM = 200,000, employed 15-34 year olds would increase by 2026 by 425,000, a turnaround of almost a million workers.

Thus migration greatly enhances the capacity for the occupational composition of Australian employment to change in response to demand.

4. Enhancing productivity

- In each generation, it is younger workers who are the holders and assimilators of new technology.
- Thus, there is an argument that by bringing in younger skilled workers, immigration contributes to the enhancement of labour productivity.
- This argument is difficult to prove but it is receiving more attention in the international literature.

4. Summary

- Projecting and meeting future skills shortages is a relatively imprecise (and volatile) exercise so it is not possible to specify an 'optimum' level of migration based on this perspective.
- While the constant level of the migration programme over the past 8 years may have been formulated on the basis of the impact of immigration upon population ageing, in broad terms, this constant level seems also to have served the economy well in providing appropriate skills.
- In recent years, international students have dominated in the selection of skilled immigrants and, on present settings, this is likely to remain the case.
- To enhance flexibility and precision, there is a case to spread the net a little wider, especially though skilled temporary migration.

5. Population Distribution

- In Australia, residents are free to move and take up residence in another location. This means that the population distribution reflects the preferences that they make. These preferences are conditioned by local and regional labour demand.
- In recent times, residents, old and new, have displayed a distinct preference to live in the major cities of Sydney, Melbourne and Brisbane and in their satellite towns and cities.
- In 2016-17, 77 per cent of Australia's total population growth was in Sydney, Melbourne, Brisbane and their satellites (Newcastle, Wollongong, Central Coast, Geelong, Melton, Bendigo, Ballarat, Gold Coast, Sunshine Coast and Toowoomba)*.

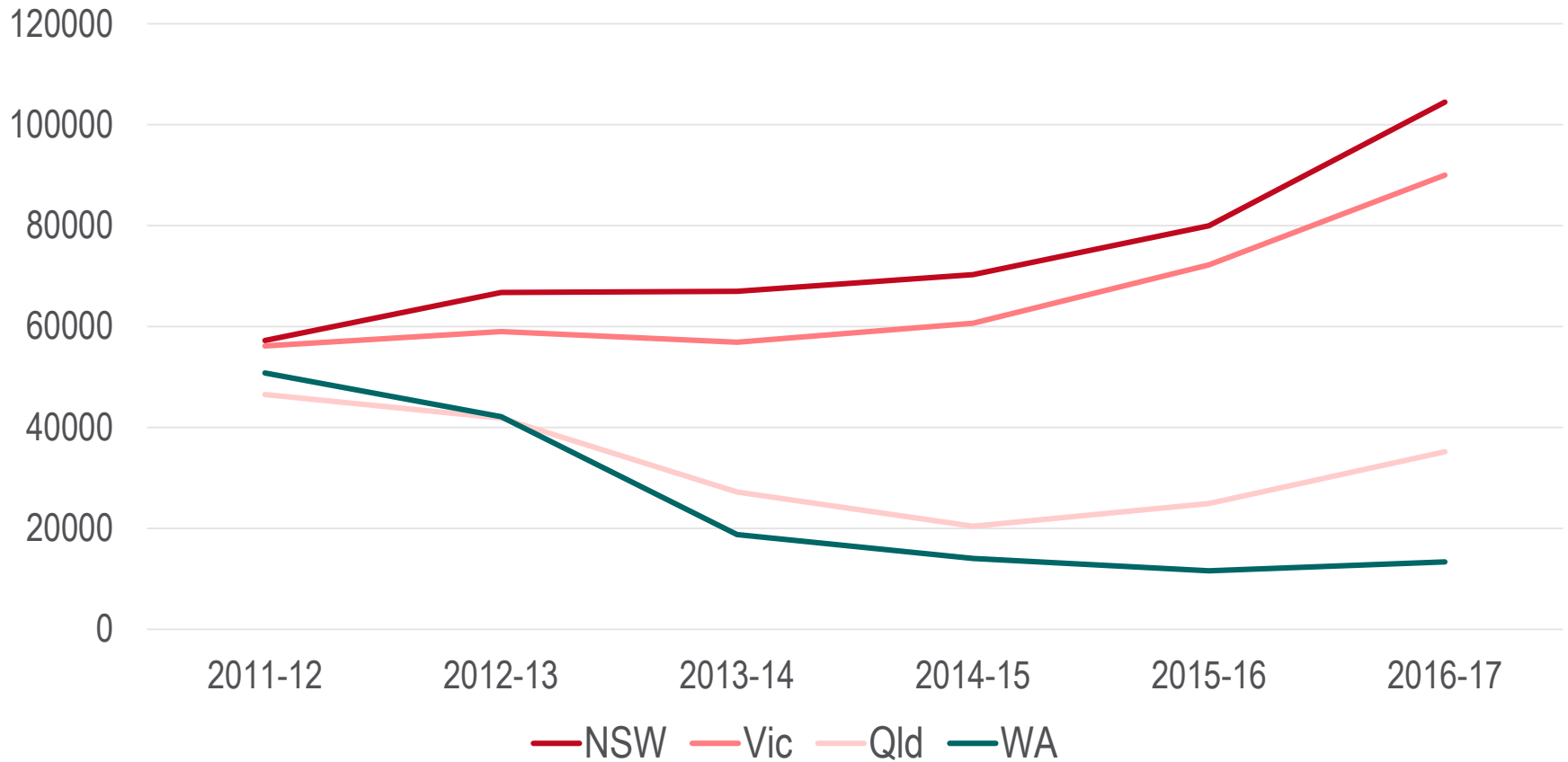
*Source: ABS: Australian Demographic Statistics, December 2017

Labour demand is the principal driver of regional population growth

- Do jobs move to where the workers are OR do workers move to where the jobs are?
- While both are relevant, the dominant paradigm is that workers move to where the jobs are.
- There is lots of evidence that movement is responsive to labour demand. Net **internal** migration to Victoria has swung from -30,000 in the mid 1990s to +20,000 now – that's a swing of 50,000 per annum from within Australia.
- The key factor is the investment decisions of firms.

Migration is Responsive to Geographic Changes in Labour Demand

Net Overseas Migration: Four Largest States



Rate of Population Growth (%), 2016-17

22 Fastest Growing Urban Centres

1	Melton	5.32
2	Geelong	2.71
3	Melbourne	2.63
4	Gold Coast-Tweed Heads	2.53
5	Sunshine Coast	2.52
6	Sydney	2.11
7	Brisbane	2.03
8	Ballarat	1.86
9	Busselton	1.84
	AUSTRALIA	1.68
10	Bendigo	1.58
11	Canberra-Queanbeyan	1.57

12	Port Macquarie	1.52
13	Albury-Wodonga	1.49
14	Dubbo	1.46
15	Bowral-Mittagong	1.39
16	Hervey Bay	1.30
17	Cairns	1.26
18	Wollongong	1.20
19	Toowoomba	1.19
20	Hobart	1.08
21	Coffs Harbour	1.03
22	Perth	1.00

The high growth inland towns, Albury-Wodonga and Dubbo combined grew by less than 2,000 people. Melbourne grew by 2,000 in a week.

Redirect international migrants away from Sydney, Melbourne and Brisbane – what happens?

- Because of the strong labour demand, the high wages and opportunities in these cities, they would draw even more people from the rest of Australia than they do now.
- Among total migrants to Victoria (international plus national), the percentage that is national (from somewhere else in Australia) is at its highest point in 40 years.
- Ironically, reducing international migration to the large cities would make it harder for the regions (including Adelaide and Hobart) to maintain their populations.
- And if job opportunities are limited in the places to which international migrants are sent, the migrants will be unemployed.

Will settlement patterns change in the longer term?

- Maybe, they certainly have in the past.
- However, big cities are the future. There are 33 cities in the world with 10 million or more people; 43 by 2030. No Australian city will hit 10 million for a very long time.
- The benefits of agglomeration arise from the spatial concentration of creative workers, physical capital, companies, and consumers.
- Connectedness to the rest of the world matters. Australia would be a backwater without Sydney and Melbourne.
- Successful cities are not just about business; they are about culture, leisure, excitement, variety. Places that are hot-beds of creativity.

Keep moving forward

- 1. Sydney and Melbourne are heading for 8 million by 2050. Diversion approaches will have only a marginal effect.
- 2. Urban infrastructure plan for next 30 years.
- 3. Encourage some firms to the satellites of Sydney, Melbourne and Brisbane. Provide rapid transit between the big cities and their satellites.
- 4. Assist other places to gain international migrants. Temporary skilled migration is a way to do this – followed, potentially by permanent residence.

Change in NOM, 2015-16 to 2016-17, by Visa Type

Visa Type	Change in NOM 2015-16 to 2016-17
Students	15,980
Temporary Skilled	5,020
Working Holiday Maker	1,550
Visitor	9,620
Other Temporary	810
TOTAL TEMPORARY	32,980
Family	-1,470
Skill	4,500
Special Eligibility and Humanitarian	12,830
Other Permanent Visas	-210
TOTAL PERMANENT	15,640
New Zealand Citizen (subclass 444)	-70
Australian Citizen	7,240
Other	470
TOTAL	56,260