Emerging Population Trends in the Metropolitan Areas of Australia’s Capital Cities:

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Recent Demographic Changes

• Mini “baby boom” 2007 onward, TFR reached 1.96 in 2008
• Considerable regional variations in terms of fertility and ageing;
• Higher fertility was observed in some inner city areas – reflection of changes in fertility behaviours or just a short-term temporary phenomenon?
• Fluctuation in international migration intakes and uneven patterns of interstate migration – impacts on LGAs
Data

• A time series database at Local Government Area (LGA) level in Australia’s capital cities, 2003 to 2016 - RESIMAC/Macquarie University joint project
• Based on 2001, 2006 and 2011 census data, projected to 2016
• All major demographic parameters, fertility, mortality, net migration at LGA level are constructed in the database
• Time series age profiles for all LGAs are available.
Puzzling New Patterns of Population Change

- Increase in fertility level was observed in a number of inner city areas in Sydney metropolitan area.
- Those inner city areas tended to have stable age structure, some even experienced ‘younging” in terms of median age, not only due to migration of young labour force participation age population, but also due to increase in fertility.
- Ageing has started to occur in regions where historically experienced high fertility rates, e.g. Outer Western Sydney region, median ages increased 3 years 2003-2016 for both genders, while other regions only increased around 1 year in median age.
Mini “Baby Boom” – Increase in TFR
Total Fertility Rates (per woman), Sydney Metropolitan Area, 2004 and 2010
Total Fertility Rates (per woman), Brisbane Metropolitan Area, 2004 and 2010

The graph above illustrates the total fertility rates per woman for various areas within the Brisbane Metropolitan Area for the years 2004 and 2010. The bars represent the fertility rates, with blue indicating the year 2004 and red indicating the year 2010. The data shows a comparison of fertility rates across different regions, with certain areas showing higher rates in 2010 compared to 2004.
Total Fertility Rates (per woman), Adelaide Metropolitan Area, 2004 and 2010
Total Fertility Rates (per woman), Perth Metropolitan Area, 2004 and 2010
Increase in ASFR in age groups 30-34 and 35-39 contributed largely to the overall increase in TFR.

The increase in TFR started to emerge prior to the implementation of national policy on parental leave (Jan 2011). Behavioural and structural factors might have played a more important role.

The level of increase in fertility observed in inner Sydney areas was not observed in other metropolitan areas, such as Inner Melbourne, Inner Brisbane, Eastern Adelaide, and Central Metropolitan Perth.

Are inner city areas in Sydney the exceptional cases or the other cities will follow the trends?
Australian Population is Ageing

• Increase in proportion of aged 65+

• Both numerical and structural ageing

• Gradual increase in median age – 1 year increase on average in most capital cities

• Median ages for females are on average 2 years older than that for males in all capital cities, e.g. in Melbourne, female median age - 35 years, males - 33 years
Diverse Patterns of Changes in Age Structures

- Inner cities: not as ageing, or even ‘younging”
- Outer metropolitan areas – ageing more rapidly with highest median ages
- Ageing is often associated with social and economic disadvantages
- Regions with youngest median ages (Blacktown in Sydney and Melton-Wyndham in Melbourne) also have highest fertility levels (traditional pattern).
Median Ages in Australian Capital Cities (Females)

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<th>City</th>
<th>2003</th>
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Changes in Population Distribution

• The youngest regions experienced in-migration of population in young age groups, and at the same time, out-migration of middle and older age population.

• The in-migration of young population to these regions will decrease over time while out-migration of older people will increase, so the population age structure will remain young in these regions.
  – Blacktown in Sydney
  – Boroondara City in Melbourne

• Other young region experienced significant number of in-migration of young families, not much out-migration
  – Melton-Wyndham in Melbourne
  – Ipswich City in Brisbane
Migration to Blacktown, Sydney Metropolitan Area, 2015-16
• Surprisingly, some oldest regions (in terms of median age) also experienced considerable out-migration of elderly population, e.g. Central Coast in Sydney metropolitan area;
• In other older regions, such as Mornington Peninsula Shire in Melbourne area, out-migration of young population in 2003-04 was observed. This trend is projected to reverse in 2015-16, when an increase in-migration of young population will be expected.
Migration to Mornington Peninsula Shire, Melbourne Metropolitan Area, 2015-16
Implication of Ageing on Supply of Labour Force

• Decrease in Entry/Exit ratio in labour force (ratio of aged 15-24 to aged 55-64)
  – Sydney 2003 - 1.47, 2016 - 1.28
  – Melbourne 2003 – 1.46, 2016 – 1.28
  – Brisbane 2003 – 1.56, 2016 - 1.39
Conclusion and Discussion

• It is too early to tell if the mini “Baby Boom” is going to sustain.
• With the implementation of paid parental leave policy in 2011 and the emergence of fertility increase in some inner city areas in Sydney, one would expect that a decrease in fertility in the near future would be unlikely.
• There have been considerable variations in the patterns of ageing in Australia’s metropolitan areas.
• Ageing is often associated with social and economic disadvantages of the areas, resulted from lack of job opportunities and subsequently out-migration of young people.
• All major metropolitan areas in Australia will experience decrease in Entry-Exit ratio in labour force as a result of population ageing.
• Recent increase in fertility would not have any impacts on labour force supply until 15 or so years later.