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COVID-19 and Potential Impact on South Australia's Population

Policy implications emerge in wake of migration changes

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COVID-19 and Potential Impact on South Australia's Population

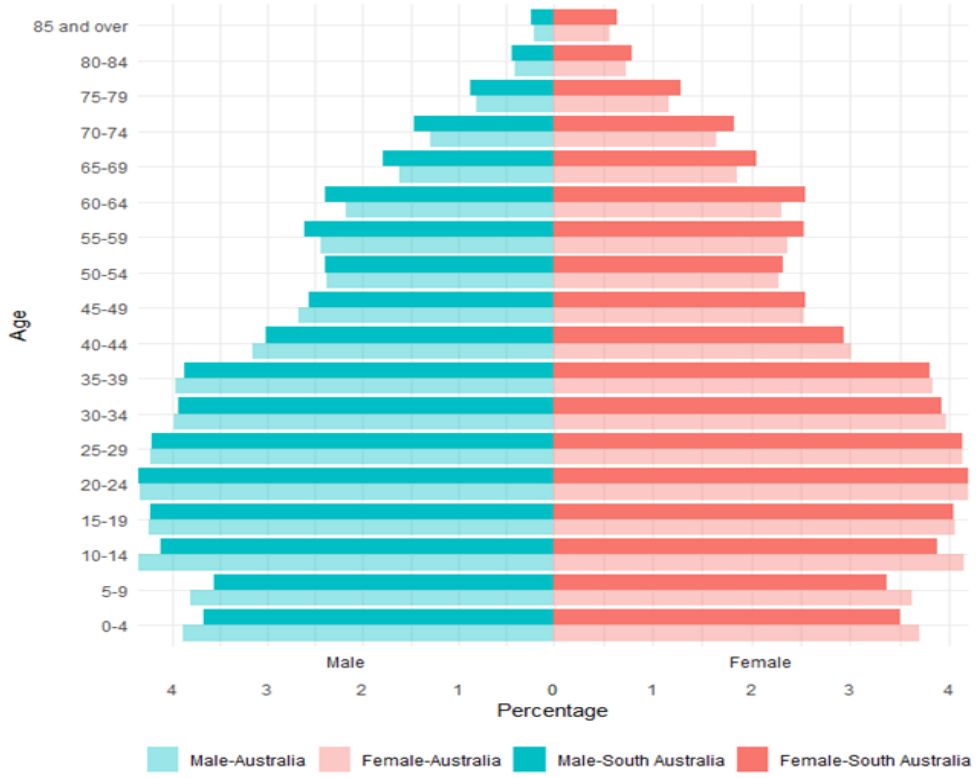
Policy implications emerge in wake of migration changes

In this second paper which explores the implications of COVID-19 on South Australia's population, we consider the growth, trends and composition of that population, including the impact of future migration scenarios on the demographic profile of the state, and potential implications for the South Australian labour market. Forthcoming papers in this series will consider future labour demand for the fastest employment growth sector in South Australia – health care and social assistance – while in the final paper we will discuss potential policy responses with respect to future population growth and participation in the labour market.

The context: South Australia's Ageing Society…

Although the dynamic of population ageing is widely understood, it is worth quickly reviewing how population ageing has manifest in South Australia over recent decades. Revisiting 1985 population data shows that the age profile of the South Australian population at the time was similar to the national population – see population pyramid in Figure 1. While South Australia had a slightly higher proportion of older persons in the 50 plus age group and a lower proportion of persons in the 0 to 14 and 30 to 49 age groups compared to Australia, the two populations were broadly similar, resembling a pyramid shape with a broad base and narrow top.

Figure 1: Population Pyramid – South Australia and Australia, 1985



Source: ABS, National, state and territory population, December 2020.

In contrast, 2020 population estimates show that the population pyramid for South Australia and Australia resembles more the shape of an 'apple' – see Figure 2. Between 1985 and 2020 in South Australia:

- the proportion of population of dependent children (0 to 14 years old) declined for both males (11.3 to 9.0 per cent) and females (10.7 to 8.5 per cent);
- the proportion of the younger working age group (15 to 24 years) declined for both males (8.6 to 6.3 per cent) and females (8.2 to 5.9 per cent); and
- the middle-aged working age group (25 to 44 years) also declined for both males (15.0 to 12.8 per cent) and females (14.8 to 13.0 per cent).

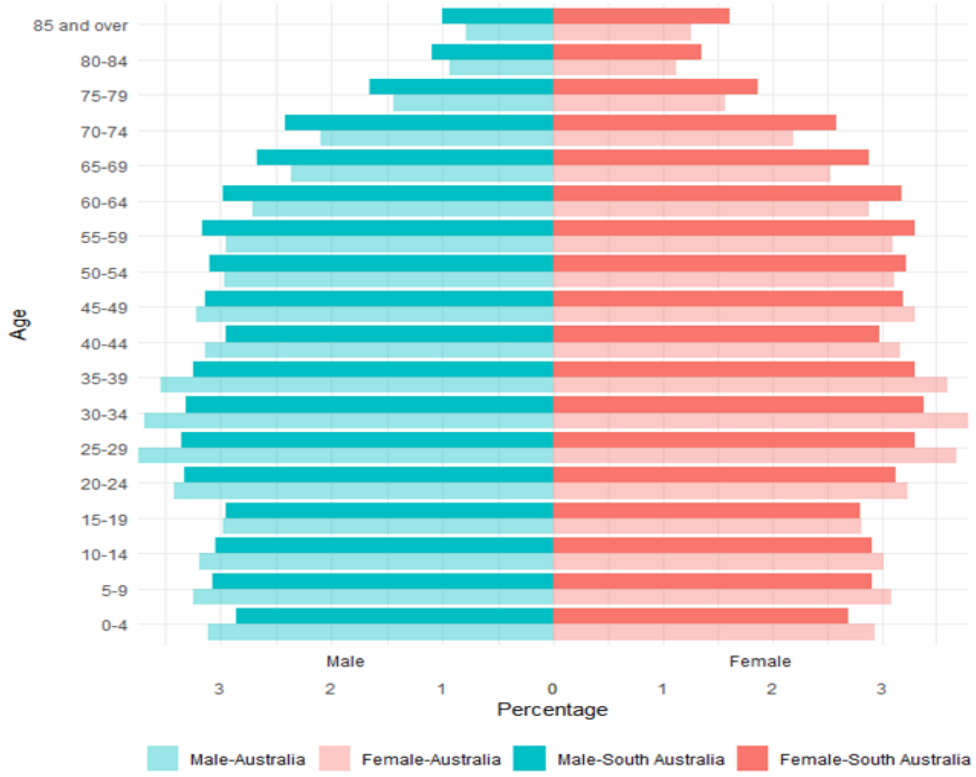
A closer examination of the relative population shares for the cohorts aged 20 to 24 years, 25 to 29 years, 30 to 34 years and 35 to 39 years reveals that by 2020 South Australia had fallen behind the national picture as we lost young workers to interstate over the preceding decades. As a consequence, South Australia was deprived of the economic dividend that comes from these aged cohorts due to them being:

- in prime working age;
- in the family formation stage; and
- more 'savvy' with digital and emerging technologies.

Between 1985 and 2020 the share of the population of those aged less than 45 years declined. The share of the population of those in the age group 0 to 14 years declined by 4.6 percentage points confirming the decline in the fertility rate over this period. Similar declines were observed for the younger working age groups 15 to 24 years (down 4.6 percentage points) and 25 to 44 years (down 4 percentage points). In contrast, the largest increase was for the mature working age group aged 45 to 64 years (up 5.4 percentage points),

Among the older age cohorts, the proportion of those in the age groups of 65 to 79 years and 85 years and over also rose noticeably between 1985 and 2020. The relative size of these cohorts has grown rapidly with the first wave of baby boomers moving into retirement, improvements in life expectancy, and advancements in medical science. Growth among these cohorts has led to increased demand for services related to healthcare, residential care, social services and other personal care.

Figure 2: Population Pyramid – South Australia and Australia, 2020



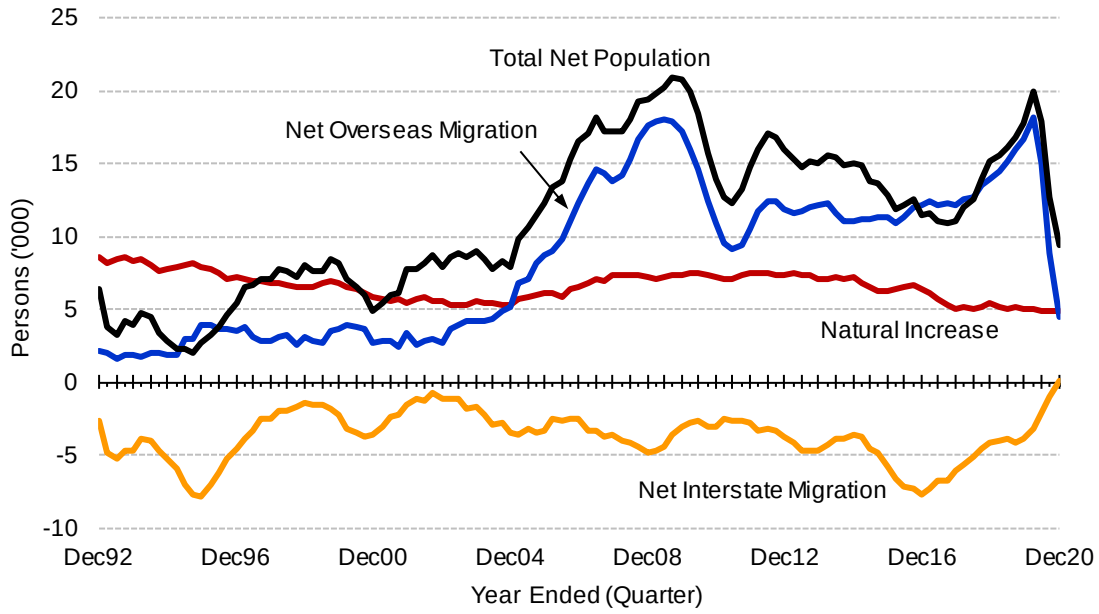
Source: ABS, National, state and territory population, December 2020.

Components of population growth

Looking back over the past two decades, South Australia's population growth has largely been driven by net overseas migration (NOM) with a much smaller contribution from natural increase – see Figure 3. The latter received a brief boost under the mid-first decade financial incentive 'baby bonus' policy of the then Federal Treasurer Peter Costello as a response to the first Intergenerational Report. A large increase in net overseas migration during the 2000s also provided a boost to the fertility rate and therefore natural increase, which further emphasises the importance of overseas migration to driving population growth in South Australia.

Net interstate migration has consistently made a negative contribution to overall population growth for South Australia over recent decades – see Figure 3. This trend predominantly reflects younger people and those with a post-school qualification leaving South Australia for greater employment and career opportunities in other states.

Figure 3: Components of population growth, South Australia moving annual totals 1992-2020



Source: Australian Bureau of Statistics, Demography

Figure 3 shows the impact of the pandemic commencing in late 2019 with the marked decline in net overseas migration (NOM) and the slowdown in net interstate migration (NIM) outflows. Pleasingly, while still in negative territory, the slowdown in net interstate migration had commenced in 2016 with gradual improvements in employment opportunities in South Australia, most noticeably in the CBD and inner suburbs of Adelaide.

In the most recent years for South Australia (as at December each year) net interstate migration was –4,224 (2018), -3,861 (2019) and then +98 (2020).

The data behind Figure 3 with respect to the components of population growth in 2019 is that net overseas migration (NOM) contributed 0.8 percentage points, natural increase contributed 0.3 percentage points, and net interstate migration contributed a negative -0.2 percentage points to total population change in South Australia. However, the impact of COVID-19 has changed these proportions to some extent for NOM and NIM though the contribution of net natural increase to total population growth remained the same. In the December quarter 2020 NOM contributed 0.2 percentage point, natural increase contributed 0.3 percentage points and net interstate migration contributed 0.01 percentage points to total population change in South Australia. NIM recorded a positive contribution to total population change in South Australia for the first time in decades.

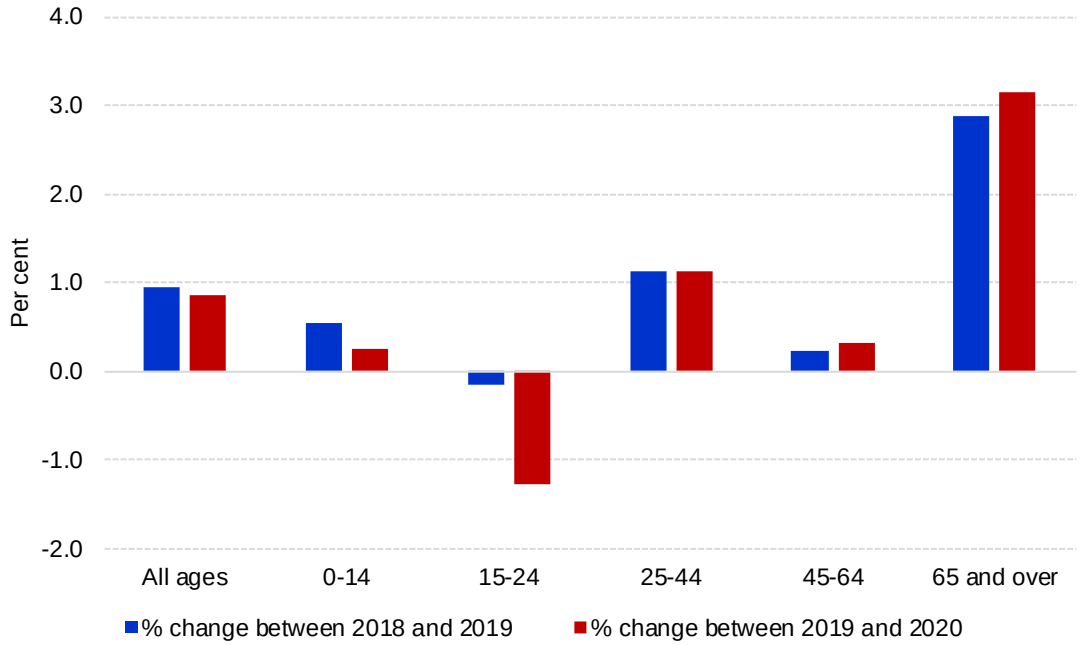
COVID: Impact on age groups…

The impact of COVID-19 on SA's population was felt differently for different age groups. Comparison of annual data for 2019 and 2020 reveals that South Australia's total population increased by 0.9 per cent over that year – see Figure 4. This was largely driven by an increase of those aged 65 years and over (3.1 per cent).

In 2020 the number of persons aged 25-44 years increased by 1.1 per cent when compared to 2019. The strongest decline was the age group 15-24 years which emphasises the important contribution of international students. The proportion of 0-14 years old increased modestly by 0.3 percentage points compared to the previous year.

Comparison of changes across various age groups pre-COVID 19 (2018 and 2019) and during the pandemic (2019 and 2020) shows that proportion of those in the age group 0-14 years and 15 to 25 years have declined over the two periods while those in the age group 25 to 44 years remained stable. In contrast, proportion of persons in the age group 45 years and over have increased across the two periods reinforcing the population ageing status of South Australia.

Figure 4: Impact of COVID-19 on SA's population, by age groups, 2018-2020



Source: ABS, Australian Demographic Statistics. ABS Stat.

COVID: Impact on Net Interstate Migration (NIM)

South Australia has a relatively long history of losing population through net interstate migration which goes back to at least the 1970s. The net change by state over the last twenty years from 2001 to 2020 is shown at Table 1.

Table 1: Interstate Migration Movements by State and Territory, 2001 to 2020

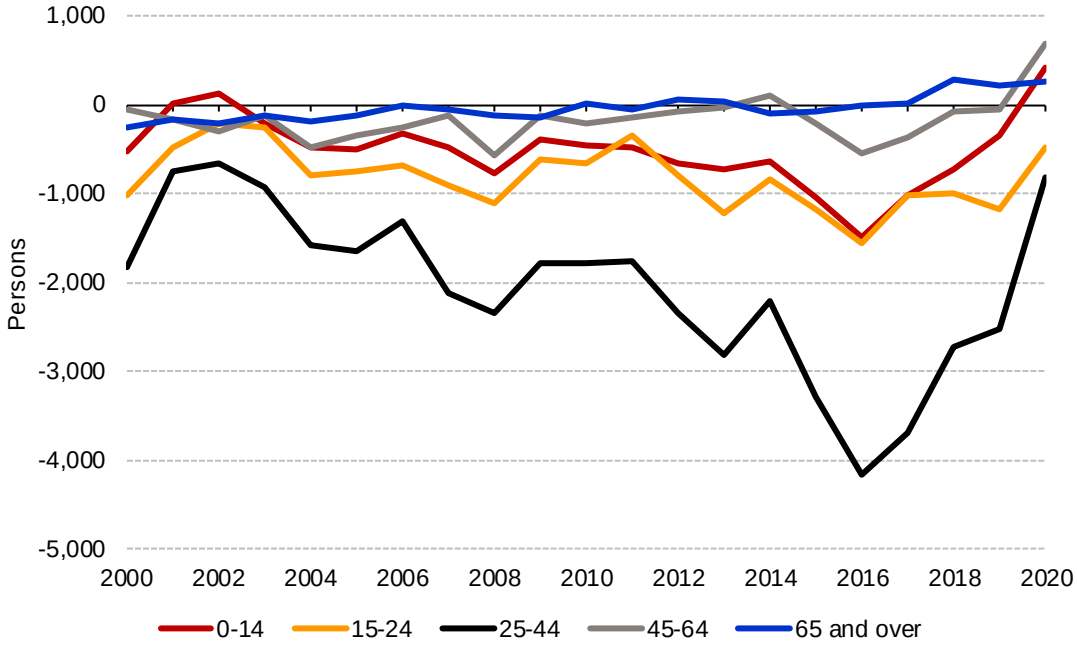
	Inward migration	Outward migration	Net change
New South Wales	1,775,890	2,160,670	-384,840
Victoria	1,460,550	1,373,970	86,560
Queensland	1,978,050	1,584,160	393,920
South Australia	475,600	546,740	-71,160
Western Australia	657,330	665,670	-8,320
Tasmania	257,880	248,770	9,100
Northern Territory	307,570	336,930	-29,370
Australian Capital Territory	392,780	388,990	3,790
Other Territories	2,560	2,171	389

Source: ABS, Interstate population, ABS.Stat

Of most concern is the core workforce age group, those aged 25-44 years old. Taking a longer period than that shown in Table 1, for the forty years from 1981-82 to 2020, the compound average annual growth rate (CAGR) of the 25-44 age group in South Australia was 0.5 per cent. Comparatively in NSW it was 1.2 per cent, in Victoria it was 1.4 per cent, and for Australia it was 1.8 per cent.[i]

Somewhat pleasingly, since 2016 there has been a noticeable and steady decline in net interstate migration outflows for the 25 to 44 year age group – see Figure 5. In fact, 2016 represents somewhat of a turning point with net interstate migration losses reaching their most recent peak for each age group, and then declining significantly thereafter. COVID-19 has reinforced this positive trend with net interstate migration flows actually resulting in a net gain of people the June, September and December quarters of 2020.

Figure 5: NIM, by age groups, South Australia 2000 to 2020



Source: ABS, Australian Demographic Statistics. ABS Stat.

COVID: Impact on Net Overseas Migration

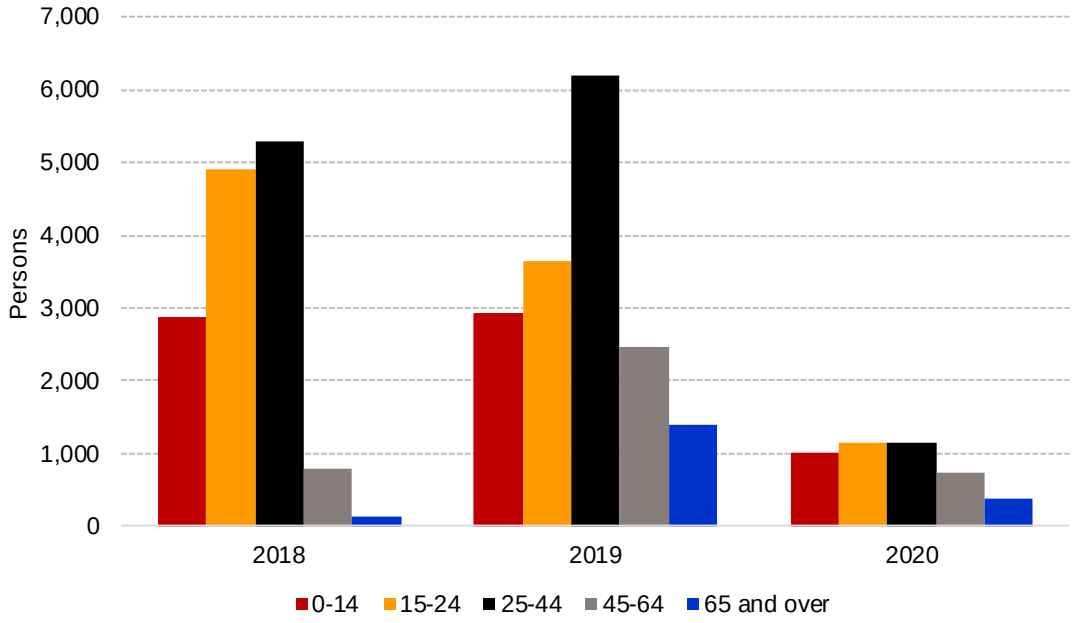
Turning to net overseas migration (NOM), we are reminded that this is the major contributor to South Australia's population. In 2019 pre-COVID net migration to South Australia contributed more than seventy per cent of population increase in South Australia. As shown in Figure 6, net overseas migration in South Australia is largely dominated by the cohorts aged 25-44 years and 15-24 years, which helps to make a small contribution to offsetting the ageing demographic of the total population.

Figure 7 shows net overseas migration by age group for the 16 years to 2020, which provides insight into the impact of global events and policy decisions around the planned migration intake on overseas migration. Net overseas migrations rose rapidly in the early 2000s as the Howard and Rudd governments substantially raised the planned migration intake, primarily to address skills shortages during a period of rapid economic expansion. Net overseas migration peaked in 2008 at 17,630 persons but then declined sharply with the onset of the Global Financial Crisis, reaching a low of 10,450 persons in 2011. Thereafter it resumed an upward trend, with the number of overseas migrants into South Australia reaching its most recent peak of 16,630 in 2019. However, with the outbreak of the pandemic overseas migration collapsed, falling to 4,410 persons in 2020.

The major reasons for the decline in numbers was, of course, national border closures imposed to help prevent the spread of COVID-19. These restrictions not only prevented inward migration of potential new migrants for family and economic reasons (i.e. skilled labour), they prevented international students from entering Australia. Student visas declined by some 55 per cent in 2020 and the ripple effect as students would flow through too years two and three will be felt even more so into the future.

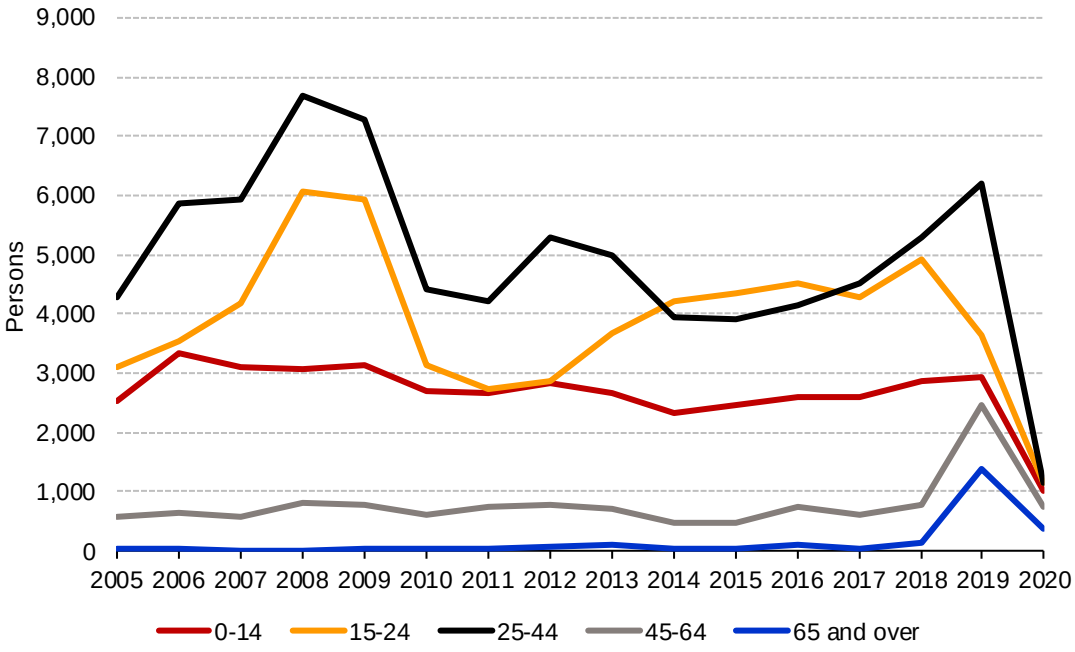
Research by the Australian Parliamentary Library indicates that at the national level an average of 15,962 overseas students per year were granted Permanent Residency Visas over the five years to June 2020.[ii] With South Australia having around 5.5 per cent of Australia's Higher Education enrolments by overseas students, this would suggest some 800 to 900 overseas students per annum became permanent residents in South Australia. This estimate is equivalent to 6 to 7 per cent of average annual net overseas migration to the state over the last five years, which indicates that overseas education plays a small but not insignificant role in driving overseas migration.

Figure 6: NOM by age groups, South Australia 2018-2020



Source: ABS, Australian Demographic Statistics. ABS Stat.

Figure 7: Impact of COVID-19 on Net Overseas Migration, South Australia 2004-2020



Source: ABS, Australian Demographic Statistics. ABS Stat.

Natural increase

Population increase arising from natural increase has continued to decline since the cessation of the baby bonus in 2014 and earlier downturn in overseas migration. A similar trend is noticeable in the fertility rate. South Australia's fertility rate reached a peak of 1.97 births per female in 2008 and has been declining steadily ever since, reaching a low of 1.69 in 2019, which is below the replacement level of 2.1 per cent. According to the ABS, the number of coupled families without children is expected to exceed the number of families with children sometime between 2023 and 2029.[iii]

In the year ending September 2020, the increase in population contributed through natural increase declined by 2.5 per cent. There are likely multiple reasons for this, but as the experience of Treasurer Costello's baby bonus has illustrated, the fertility rate is amenable to policy. Overseas experience suggests, however, that the trend of a declining fertility rate is highly unlikely, for various social, female education and demographic reasons, to be sustainably reversed, particularly once it falls below the estimated replacement level.[iv]

As noted earlier, natural increase contributed approximately 5,013 persons (28 per cent) of the state's population growth in 2019 calendar year, which is significantly smaller than overseas migration (16,643 persons). While it will be an important contributor to the state's population and demographic profile to 2030, it is waning.

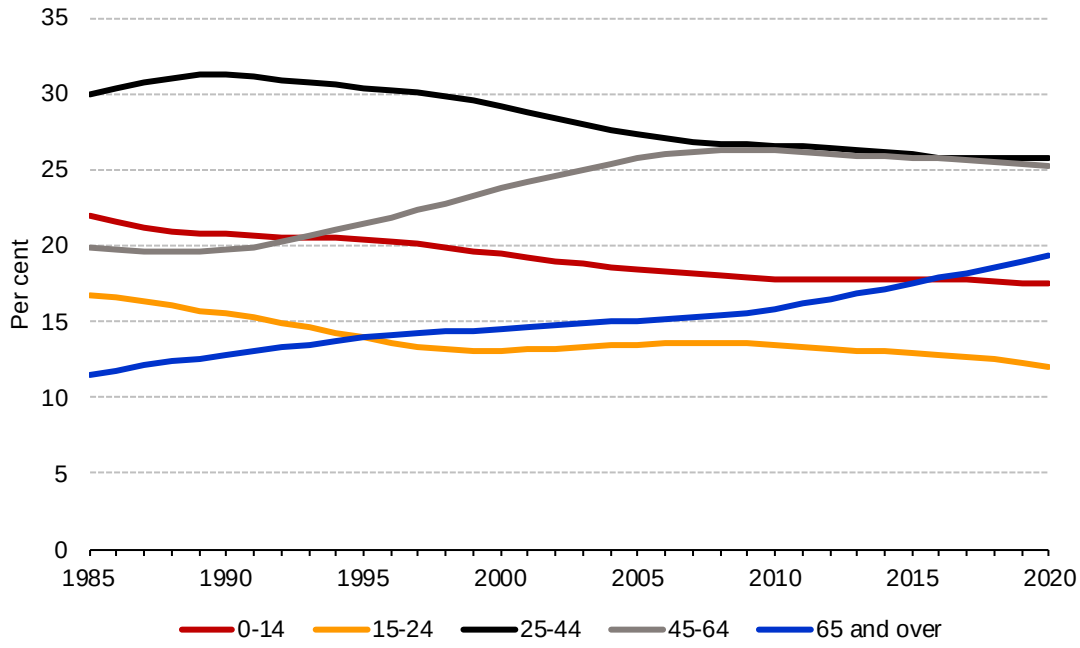
The ABS mid and low case scenarios, which assume trend fertility rates of 1.76 and 1.61 respectively, have births rising to 21,098 by 2030 (up 3.3 per cent on 2020), or falling to 19,026 (down 7 per cent on projected 2020). Under these assumptions, net population gains through natural increase fall from their projected level of approximately 6,000 in 2020 to 4,000 by 2030 under the mid case scenario, and to 2,000 under the low case scenario. Under the latter, deaths exceed births by 2035, meaning natural increase starts to detract from overall population growth from this point on.

Proportion of working age population in South Australia

We now turn to longer term trends in the working age population in South Australia and the possible future impacts of the pandemic on the working age population. Trends in the relative size of population age groups are shown in Figure 8 for the period December 1985 to 2020. They illustrate the general ageing of the population, in particular the decline since the 1980s in the relative size of the youngest and prime working age groups aged 15 to 24 years and 25 to 44 years respectively.

Overall, the proportion of the total working age population (15-64 years) in South Australia has been declining whereas the share of the dependent or non-working age population (0-14 years and 65 years and over) has been increasing over time, due entirely to growth in those aged 65 years and over.

Figure 8: Proportion of population in South Australia, by age group, December 1985-2020

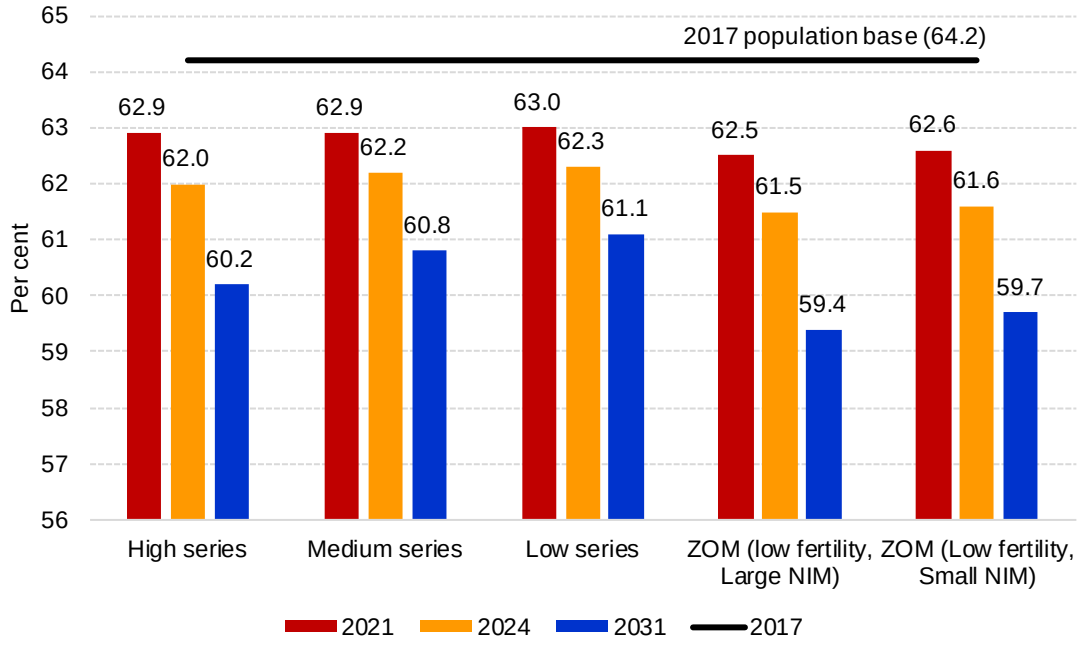


Source: ABS, National, State and Territory population

Figure 9 shows how the relative size of the working age population is expected to change over the short- and medium-term future. It shows the projected size of the working age population for the three baseline ABS population projections and two scenarios developed by SACES in our first paper.[v] The latter consider a hypothetical scenario of a continuation of COVID conditions whereby zero net overseas migration (ZOM) is maintained, with the only variation arising in terms of whether net interstate migration losses return to a high level in line with historical norms, or are maintained at a much smaller level. Under each of the scenarios considered the proportion of the working age population in South Australia decreases from a base of 64.2 per cent in 2017.

The obvious implication is that the proportion of tax payers supporting the economy will be lower in the future. Furthermore, each scenario highlights the importance of overseas migration in balancing the working aged population and the desirable policy goal of reducing net interstate migration (NIM) that ultimately would result in a 'economic dividend' to the South Australian economy.

Figure 9: Proportion of working age population in SA in short and medium term



Source: ABS population projections

Labour Market Implications of COVID-19

COVID-19 has had a more significant impact on women in the labour market. In the year to May 2021 the unemployment rate for males declined by 0.2 percentage points from 7.1 to 6.9 per cent, whereas for women it increased from 5.9 to 6.9 per cent – a full one percentage point increase. As is summarised in Table 2, women in the age groups 15-25 years and 45-64 years experienced the most severe contraction in employment.

Of equal importance is the deterioration in the labour market for young people in the 15-24 age group which compounds the employment outcomes this group experienced a full decade after the Global Financial Crisis.

COVID-19 has more severely adversely impacted industries and occupations in which young people predominate such as sales and retail, cafes, restaurants, small bars, hotels, travel and tourism, sports, and the creative industries. These industries were most affected by restrictions on the numbers of people able to gather together and were not amenable to remote working.[vi, vii]

Recent analysis concludes that from "2008 to 2019 the employment/population rate for 15 to 24 years decreased by 4.3 percentage points, whereas the rate for the population aged 25 years and above increased by 1.0 percentage point".[viii] There are a number of factors behind the decline in employment participation for young adults including increased participation in education and training, delayed retirement of older workers, the decline in low skilled jobs that are prone to automation (e.g. supermarkets and manufacturing), increased competition from overseas students, and offers of unpaid work.[ix]

Compounding the loss of employment, many young people were not eligible for the Job Keeper payment as they were casual employees. Labour economists warn of the impacts of COVID-19 compounding long-term implications for young people of skills mismatches, the difficulty of transitioning from education to employment, the inevitable 'scarring effects' of poor entry jobs and long-term unemployment experienced by many young entrants to the labour force.

Table 2: Impact of COVID-19: Unemployment rate, participation rate by gender and age group South Australia, year to May 2021

Age group	Change in employment ('000)		Change in Unemployment rate (%)		Change in Participation rate (%)	
	Male	Female	Male	Female	Male	Female
15-25	0.3	-1.9	0.3	3.6	1.8	2.0
25-44	2.2	0.9	0.4	0.4	1.0	-0.2
45-64	1.6	-4.9	-0.1	2.8	1.5	-2.6
65 and over	-3.8	-2.6	1.6	0.9	-2.8	-1.7

Source: ABS, Labour Force Status by Labour Market Region and sex.

ABS data on employment by industry and gender provides further insights into the different impacts of COVID-19. Table 3 shows the change in total employment in the period June 2019 to June 2020 for both males and females and the change in hours worked in the same period.

Between June 2019 and June 2020 across all industries there was a net gain in total employment for males (up 7,600) and a net loss for females (down 5,200).

Employment and hours worked in construction for males had the most substantial increase, largely driven by government policies including HomeBuilder and spending on infrastructure/construction projects. On the other hand, employment for males decreased most sharply for health care and social assistance sector, while financial services had the largest decrease in hours worked.

For females, by far the most gains in employment and hours worked were in education and training and health care and social assistance. Retail trade, the second largest employing industry in South Australia, saw an increase in employment as well as number of hours worked for men, and a decrease in employment for women but an increase in hours worked.

Accommodation and food services, which employs fairly equitable shares of men and women, experienced an increase in employment and hours worked for both males and females. This result appears to be due to employment related to hotel quarantine and that many food service outlets switched to 'take-away' services while cancelling table bookings.

Table 3: Change in employment and number of hours worked, by sectors, by gender.

Industry Sectors	Change in employed total between June 2019 and June 2020 ('000)		Change in Number of hours worked in all jobs between June 2019 and June 2020 ('000)	
	Male	Female	Male	Female
Agriculture, Forestry and Fishing	2.4	-1.3	89.4	-98.0
Mining	-0.9	0.1	-41.2	16.8
Manufacturing	-0.2	0.4	93.3	26.9
Electricity, Gas, Water and Waste Services	2.4	-0.5	100.2	-30.9
Construction	4.6	0.1	265.4	26.9
Wholesale Trade	-0.9	1.0	-32.1	57.2
Retail Trade	2.2	-0.5	53.6	47.5
Accommodation and Food Services	2.2	2.5	89.8	81.8
Transport, Postal and Warehousing	0.9	-1.7	46.6	-59.7
Information Media and Telecommunications	0.0	0.5	6.1	16.8
Financial and Insurance Services	-3.2	0.8	-134.1	11.1
Rental, Hiring and Real Estate Services	1.0	-1.1	49.9	-31.3
Professional, Scientific and Technical Services	-0.3	0.7	41.9	16.8
Administrative and Support Services	-1.3	-0.8	29.5	-11.7
Public Administration and Safety	0.5	-2.8	57.9	-57.9
Education and Training	1.2	4.6	35.3	176.7
Health Care and Social Assistance	-4.1	3.8	-93.0	129.2
Arts and Recreation Services	-0.6	-0.8	8.1	-13.2
Other Services	1.7	0.2	54.7	-6.4
Net gain	7.6	-5.2	721	299

Notes: Average of February, May, August and November mid quarter month data for June 2019 and June 2020 data.
Source: ABS, Employed persons by industry group of main job, sex, state and territory.

A Brief Conclusion….

Population growth in South Australia will remain reliant on the resumption of overseas migration which was the largest source of overall population gains in the 15 years prior to the pandemic. Its importance will only grow in the future given the expectation that gains from net natural increase will decline and eventually reverse as deaths rise and births remain broadly static or decline.

In the interim there needs to be a much closer examination of employment prospects for young people to support retention of the young and qualified in South Australia and much greater attention to reducing the rate of long-term unemployment for all age groups.

Workforce Participation Rate

Increasing the participation rate would likely be the single biggest policy issue as it could offset in the short to medium term the likely low level of net overseas migration for the next few years at least,

It could be argued that COVID-19 has accentuated the problem of an ageing society by hastening the decline in the working age population through the effect of border restrictions in preventing permanent overseas migration and the temporary migration of international students.

Reversing and maintaining the current trend in net interstate migration is a key public policy priority that can be partially achieved through much faster job creation in high valued added sectors. Paid commencement internships and payroll tax support are possible policy levers in this regard.

The combination of attention to increasing the share of the working age population and building a much stronger local skills base should occur in tandem. As well, social and income support policies designed for a pre-COVID environment will need to be reviewed to support higher workforce participation rates, including access and support for child care and increasing the earned income test for (some) pensions and allowances.

Vocational Skills Training

While employers of apprentices are generally financially well subsidised, for many young people poor entry jobs are the norm, while long-term unemployment transfers and exacerbates current negative labour market experiences into the future. More than that, greater on-the-job protections for young workers are necessary, including for international students. Future skill shortages and a tightening of the labour market are reasons to invest more heavily in 'youth supports' now and not simply use access to skilled workers through the migration system. That serves to reduce the need for training while putting downward pressure on wages.

Vocational skills training is the highest priority in regional South Australia to address skill shortages and social equity in our regional economies. This is not just an educational challenge in or for the regions but a state-wide agenda. There is scope to reduce the length of the traditional apprenticeships which would make it more attractive to employers and young people while also encouraging the take-up of dual trade apprenticeship programs.

Regional and urban reforms

Disused land needs to be brought into use. Vacant shops can be quickly occupied through support for creative industries and endeavours, while permitting small bars in our six major provincial cities is another immediate strategy that could be implemented to improve regional vitality.

Regional cities would benefit from coordinated urban reform policies, renewal and upgrade of housing stock, strategies in regional centres to improve the concentration of people in precincts for health, retail, administration and cultural/sporting activities. There are a variety of options to harness Commonwealth Government support and funding programs to commence housing and urban reforms through regional city renewal programs.

End notes

[i] SACES, (2016) The Age Structure of the Population and Economic Growth-Does it Matter? Economic Issues Paper Series No 47

[ii] Parliamentary Library, Parliament of Australia (2021), Overseas Students in Australian higher education: a quick guide

[iii] https://www.abs.gov.au/ausstats/abs%40.nsf/mediareleasesbyCatalogue/5E4BABA5BD22D73DCA2581210009D3D8

[iv] Lancet 2020; 396: 1160-203, Global age-sex-specific fertility, mortality, healthy life expectancy (HALE), and population estimates in 204 countries and territories, 1950–2019: a comprehensive demographic analysis for the Global Burden of Disease Study 2019

[v] SACES, COVID-19 and Potential Impact on South Australia's Population.

[vi] SACES 2021, Impacts of COVID-19 Lockdown: A Case Study of the South Australian Hotel Industry November

[vii] *Stein Emil Vollset, et al* Fertility, mortality, migration, and population scenarios for 195 countries and territories from 2017 to 2100: a forecasting analysis for the Global Burden of Disease Study, The Lancet July 2020

[viii] Melbourne Institute Applied Economics and Social Research,(2021) "is it 'dog day' for the young in the Australian Labour Market, Working Paper No.5/21 May 2021

[ix] In terms of participation in education and training, data from the ABS Survey of Education and Work indicates that 43 per cent of 20 to 24 year olds in 2020 were enrolled in study at the time of the survey, up from 36 per cent in 2008. In comparison, the proportion of 15 to 19 year olds enrolled in study rose from 79 per cent in 2008 to 88 per cent in 2019 (ABS, Education and Work Australia, May 2020).