POPULATION DYNAMICS IN QUEENSLAND: A REVIEW

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Population growth in Queensland has been strong for the last 30 years, but has slowed in 2009 and 2010. There are three drivers of Queensland's growth: natural increase, net overseas migration (NOM), and interstate migration. For most of the 30-year period interstate migration was the strongest factor. Currently, however, it is weak, while national increase has grown and NOM, though lower than in 2008, is still significant.

Why has interstate migration fallen? New South Wales has been the main source of internal migrants, attracted by plentiful jobs, lower house prices, and by the Queensland lifestyle. But levels of job creation in Queensland have eased and the cost of housing has risen steeply, thus mitigating two of the three main incentives for making a long-distance move.

Though NOM has also fallen since 2008 this was from a record level and numbers remain high. Many immigrants are temporary workers sponsored not so much by the mining industry as by employers in healthcare and construction. Others are New Zealanders who are disproportionately attracted to Queensland. Whatever happens to interstate migration NOM will almost certainly continue to be a key driver of Queensland's population growth, as will natural increase.

INTRODUCTION

In terms of population growth, Queensland has in recent decades had the reputation of being the nation's powerhouse state—often accompanied by strong economic growth. However, this was not the case during the 1940s, 1950s and 1960s when Queensland recorded a disproportionately low share of Australia's population growth. In the post World War II period from 1946 to 1970, Queensland's average annual population growth was less than 30,000 people each year (29,300), with the state capturing only 13.9 per cent of the national increase over this period. This was primarily due to Queensland not experiencing the same influx of overseas migrants from the United Kingdom, Ireland and Europe as the southern states, as it did not offer the same employment opportunities in manufacturing industries. These dynamics were to change markedly in the following decades.

In the last three decades (1981–82 to 2009–10), average levels of growth in Queensland more than doubled to 74,700 per annum and accounted for 30.3 per cent of Australia's total growth. This continued high population growth saw Queensland increase its share of the nation's population from 14.2 per cent in 1970 to 20.2 per cent by 2010. Queensland has frequently (15 times over the last 30 years) recorded the highest annual population growth of any Australian state despite its current population being 2.7 million less than New South Wales (NSW) and one million less than for Victoria's. However, for the last two years Queensland's pre-eminent position in terms of population growth has been overtaken by both these states, each of which has experienced unprecedented levels of overseas migration. While Queensland also recorded high levels of net overseas migration in the last few years, population growth has slowed due to historically low levels of net interstate migration.

This paper explores these trends in Queensland's population change: specifically, the dynamics of growth experienced over the last three decades with a focus on the recent past. The paper argues that there has been a fundamental change in the drivers of growth in this period. This change has resulted, in more recent years, in a significant decline in the contribution to growth from interstate migration, while

the contribution from overseas migration has risen substantially and this growth is also being supported by record levels of births. The paper concludes with a view on the likely future levels of population growth in Queensland.

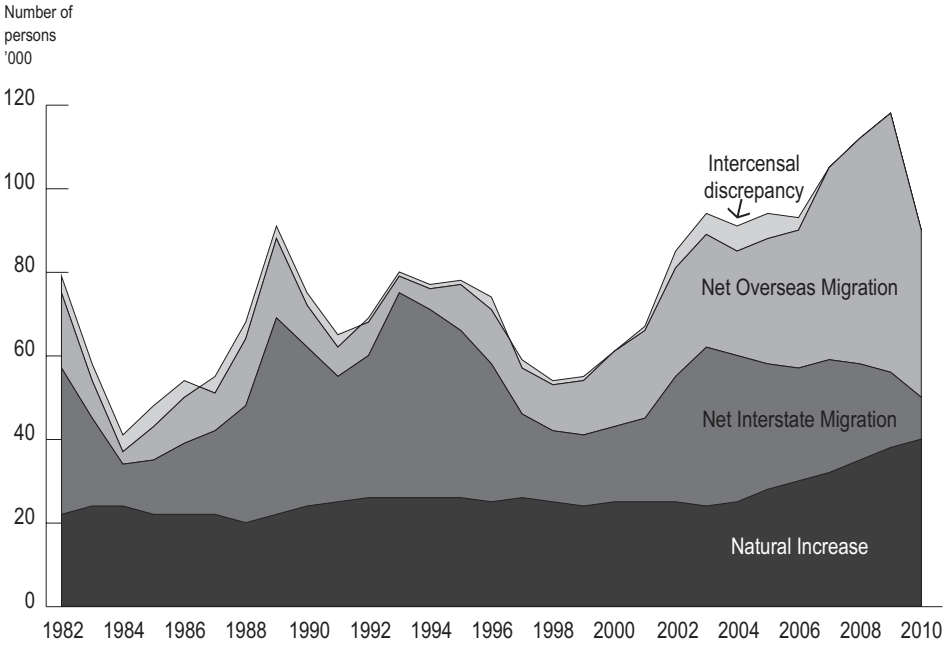
POPULATION GROWTH SINCE THE 1980s

Queensland experienced considerable fluctuations in annual growth over the past three decades. Annual growth ranged from a low of 41,557 in 1983–84 to a high of 118,700 in 2008–09 (more than two and a half times larger than the lowest amount of growth). Not only did the level of annual growth fluctuate substantially over this period, but the contribution of each of the components of population growth also varied widely (Figure 1).

While natural increase was by far the most stable component of population change up until 2004–05, ranging between 20,000 and 26,000 each year, it has risen dramatically since the mid 2000s to reach a record level of 39,800 in 2009–10. This was due to the rising number of births, peaking at 66,300 in 2009–10. In contrast, the number of deaths (at between 22,000 and 27,000 each year) has remained fairly stable for the past decade.

It is noteworthy that natural increase in Queensland is currently higher than in Victoria even though that state's population substantially exceeds that of Queensland. A closer examination reveals two contributing factors. First, Queensland has a higher total fertility rate meaning that Queensland women have, on average, more children than do Victorian women (2.1 for Queensland and 1.8 for Victoria in 2009–10). Second, Queensland's relatively young age structure resulted in a lower proportion of the population in the age

Figure 1: Components of population change, Queensland, 1982 to 2010, years ending June



Source: ABS, *Australian Demographic Statistics*, Catalogue no. 3101.0 (various issues)

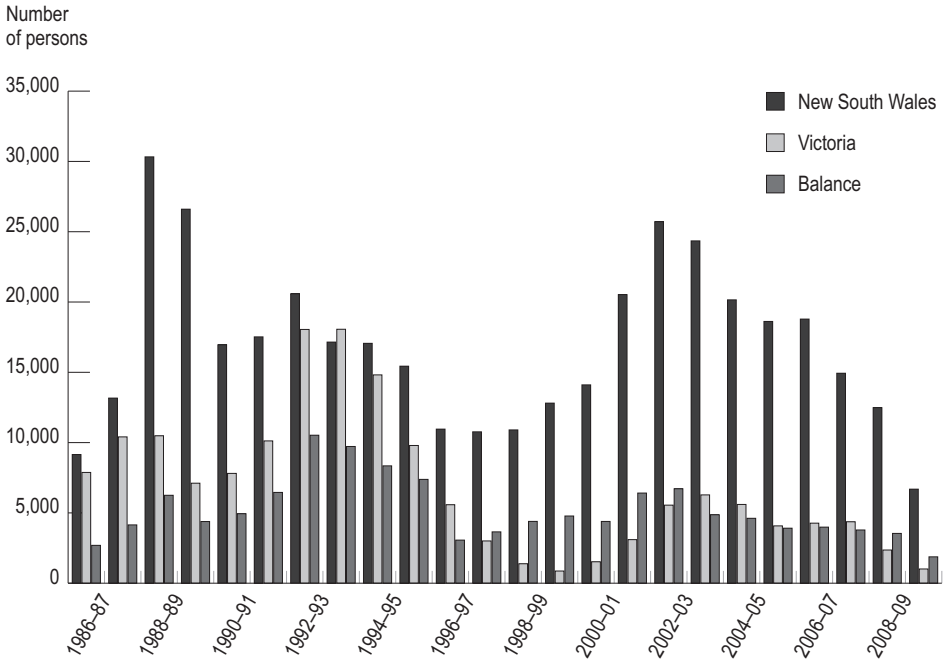
group accounting for the majority of deaths (in 2009–10 persons aged 65 years and over accounted for 77 per cent of deaths in Queensland and 81 per cent in Victoria). Some 13.7 per cent of Victorians were aged 65 years and over at June 2010 compared with 12.6 per cent of Queenslanders.

A seldom recognised aspect of consistently high population growth is the additional number of House of Representative seats allocated to Queensland at the expense of the southern states. Since 1977, Queensland has received an extra seven seats by redistribution. Currently it has 30 lower house seats in the Australian Parliament out of a total of 150. Over the last thirty years Queensland has gained seats from NSW, Victoria and South Australia while those states have lost seats because of below average national population growth.[1]

THE CONTRIBUTION OF INTERSTATE MIGRATION

Net interstate migration had been the main driver of population growth in Queensland in recent decades, accounting for just less than half (43.2 per cent) of its total growth in the 20 years to 2001. This was the largest contributor to Queensland's population growth over this time. Natural increase made the next largest contribution of 37.0 per cent while net overseas migration was less than half that of interstate migration at 19.4 per cent (plus a small amount for the intercensal discrepancy or that amount of growth not attributed to any individual component). Over more recent years, the contribution of net interstate migration to Queensland's population growth has declined sharply from 29.7 per cent in 2000–01 to 10.7 per cent in 2009–10 even though the state's total population growth has increased from 67,400 to 89,100 over

Figure 2: Queensland, net interstate gains, 1986–87 to 2008–09



Source: ABS, *Australian Demographic Statistics*, catalogue no. 3101.0

the same period. What is behind this sharp fall in Queensland's net interstate migration gain? How have the push and pull factors that lead to interstate movement altered in the last decade?

An investigation into the flows of internal migration into and out of Queensland over the last three decades reveals that, in the 1980s, NSW and Victoria combined accounted for more than 80 per cent of the net interstate migration gain to Queensland. However, the contribution from Victoria changed dramatically in the early 1990s. In a three-year period (1991 to 1994), net interstate migration gains to Queensland from Victoria more than doubled to reach just over 18,000 in 1993–94 and again in 1994–95. In 1993–94, Victoria overtook NSW as the primary source state for movement to Queensland.[2] (See Figure 2.)

This substantial increase in interstate migration flows from Victoria to Queensland can be attributed to both push and pull factors, in this case related to economic conditions and employment opportunities.[3] During the early 1990s the then Premier of Victoria, Jeff Kennett, undertook a program of public sector reform which reduced the size of the state's public sector substantially.[4] As a consequence many former public-sector employees took the opportunity to move interstate, particularly to Queensland, seeking better employment opportunities. Many also sought improved lifestyle outcomes, in some cases associated with early retirement. In addition, this was a period of low economic growth in Victoria. This provided further push factors and encouraged the move to comparatively better economic conditions in Queensland.

The high interstate migration movement out of Victoria was, however, relatively short lived. While the state registered a record net loss to the remainder of Australia of 29,200 in 1993–94, by 1998–99 this had reversed to a small net gain of 2,500. During this period the Victorian economy also grew strongly in terms of employment growth, thus reducing the strength of economic push factors encouraging interstate movement out of the state.

Since the late 1990s, NSW again became the primary source for interstate movement to Queensland and, since 1997–98, has regularly accounted for 60 per cent or more of Queensland's net gain. Substantial differentials in house prices between Sydney and South East Queensland during the early part of this period are considered to have been the main driver of this movement. In addition, close proximity between Northern NSW and South East Queensland (SEQ) encouraged movement, probably in response to a range of push and pull factors.

In the last decade, Queensland's net interstate migration gain peaked at just under 38,000 in 2002–03 and remained above 30,000 for the following two years. However, from 2005–06, Queensland's net interstate migration gains steadily declined to reach only 9,600 in 2009–10. This rapid decline in net interstate migration to Queensland (plunging more than 28,000 in the eight years since 2002–03) suggests considerable change may have occurred in the drivers of interstate movement during this period.

Previous research on internal migration suggests that the main reasons people move long distance, including across state boundaries, can be broadly categorised into three groups.[5] First, the availability of jobs and improved employment prospects with higher incomes are key pull factors (the loss of employment, retrenchment, unemployment or job dissatisfaction are the corresponding push factors). Second, differentials in house prices that allow movers to take advantage of better returns at their source location and more affordable properties in their destination location provide an important combination of push and pull factors. Finally, a group of amenity, lifestyle and family factors form the third

group of pull factors, factors that have been found to be of increasing importance to the long-distance mover.[6] In reality, it is the cumulative effect of a range of push and pull factors that influences an individual's decision to move long distances. Each of these broad categories is investigated below to determine what has changed in the last decade compared with earlier periods.

First, how significant have economic reasons, specifically the availability of jobs, been to declining levels of net interstate migration in Queensland? Total employment growth of 591,700 in Queensland over the last nine years has been higher than for either NSW (445,300) or Victoria (494,300) (Table 1). However, employment growth has been very volatile from year to year. In the year when net internal migration gains to Queensland peaked (2002–03), there were an additional 68,400 people employed in Queensland, compared with 61,500 in NSW and 46,600 in Victoria. More recently however, in two of the last three years, Queensland's employment growth has been less than the other two states. This was particularly evident in 2009–10 when the increase in the number of people employed in Victoria (74,900) was more than three times the increase for Queensland (21,300). A similar story is evident at the capital city level where, over the last three years, employment growth in Melbourne has exceeded growth in Brisbane by close to threefold.

Second, a persistent theme underpinning the high level of interstate migration to Queensland from NSW and Victoria (particularly from Sydney and Melbourne) has been the sizeable differences in house prices in the southern capitals compared with Brisbane and other popular destinations in SEQ, namely the Gold Coast and Sunshine Coast. According to the Real Estate Institute of Australia and BIS Shrapnel, in June 2001 median house prices in Sydney and Melbourne were $364,000 and $302,000 respectively, compared with $160,000 in Brisbane (Table 2). In proportional terms, Sydney and Melbourne house prices were

Table 1: Employment growth NSW, Victoria and Queensland 2000–01 to 2009–10

Year ending June	New South Wales Employed[a] '000	New South Wales per cent change	Victoria Employed '000	Victoria per cent change	Queensland Employed '000	Queensland per cent change
2001	3,035.5	1.9	2,272.3	3.4	1,681.7	1.8
2002	3,060.3	0.8	2,293.5	0.9	1,723.9	2.5
2003	3,121.8	2.0	2,340.1	2.0	1,792.3	4.0
2004	3,151.7	1.0	2,376.2	1.5	1,852.8	3.4
2005	3,188.4	1.2	2,450.1	3.1	1,953.3	5.4
2006	3,251.0	2.0	2,505.7	2.3	2,031.4	4.0
2007	3,320.5	2.1	2,586.8	3.2	2,128.3	4.8
2008	3,419.0	3.0	2,669.5	3.2	2,192.2	3.0
2009	3,440.9	0.6	2,691.8	0.8	2,252.2	2.7
2010	3,480.8	1.2	2,766.6	2.8	2,273.4	1.0

Source: ABS, *Labour Force, Australia*, Catalogue no. 6202.0 (various issues)
Note: [a] 12-month average of original series data.

127 per cent and 89 per cent higher than the median house price for Brisbane at that time.

During the early and mid 2000s, investment in Queensland residential real estate was heavily promoted in the southern states. Combined with strong employment growth in Queensland, it is reasonable to conclude that this acted as a compelling pull factor for an increasing number of people to move to Queensland. Annual data for the period 2000 to 2003 show that net interstate migration gains to Queensland from NSW increased from 14,100 to 25,700 (an increase of 82 per cent). Similarly the net gain from Victoria to Queensland increased from 1,500 to 5,600 over the same period (a 270 per cent increase).[7]

Since 2003, median house price differentials between Sydney and Brisbane have declined from 121 per cent to a low of 30 per cent in 2008, reaching 36 per cent in June 2010. The narrowing of the house price differential between Melbourne and Brisbane is even more dramatic, dropping from 60 per cent in 2003 to only five per cent in 2009 but increasing to 22 per cent by June 2010. It is reasonable to assume that, over the last two to three years, the incentive to move to Queensland because of this factor would have diminished.

The remaining key reasons driving long-distance moves relate to liveability, a concept including aspects of lifestyle and general amenity. It is difficult to find quantitative evidence for these factors and we acknowledge that the strength of their push and pull impacts are likely to be related to perceptions based on knowledge available to each individual. Thus, national media reporting on water restrictions in SEQ in 2007 and 2008, and perceived worsening traffic congestion in the Brisbane region, may have reduced the attraction of SEQ to some potential interstate movers.

It appears, then, that the dynamics of the range of push and pull factors that have led to strong net interstate migration gains to Queensland over past decades have changed. Current economic conditions in the key source states of NSW and Victoria are providing job opportunities (albeit subdued in NSW, although there was still a larger increase in employed persons in 2009–10 in NSW than in Queensland). Combined with relatively affordable housing in new estates in the Victorian case, this appears to be leading to a lull in interstate departures. A result of this has been that Victoria has recorded net interstate migration gains over the past two years (700 in 2008–09 and 2,500 in 2009–10) after six successive years of net interstate migration losses.[8] Similarly, in 2009–10 NSW recorded the lowest number of interstate departures (93,500) and net interstate migration loss (10,500) since 1996–97. This followed the lowest level for the past decade in the median house price differential between Sydney and Brisbane of $126,000 at June 2008.

Finally, there is a long-held perception that Queensland has been a popular destination for retirement migration in Australia. However, analysis of census data since 1976 and more recent data based on Medicare enrolments shows that the available evidence does not support this perception.[9] Data for 2008–09 reveals that net interstate migration for people aged 60 years and over represents only 3.1 per cent of the net interstate movement to Queensland.

OVERSEAS MIGRATION CLIMBS SIGNIFICANTLY

Historically, overseas migration has made a lower contribution to Queensland's population growth than has either interstate migration or natural increase. In the post-World War II period from 1946 to 1970, net overseas migration (NOM) accounted for less than four per cent of the state's growth compared with 27 per cent from net interstate migration and 69 per cent

from natural increase. In 1975–76, NOM to Queensland was at a record low of 968 people and accounted for only three per cent of the state's total growth of nearly 33,000 people. The primary reason Queensland has historically recorded a relatively low level of Australia's immigration intake was due to the southern states having a much larger manufacturing base that provided abundant job opportunities for new migrants in the 1950s, 1960s and 1970s.

In the decades following, there have been two clear cycles evident in Queensland's NOM. The first, where NOM peaked at 18,200 in 1980–81, also coincided with a period of relatively high net interstate migration. The second peak occurred in 1988–89 and may have been related to the successful staging of the Expo in Brisbane in 1988 (net interstate migration also reached a peak in 1988–89). Following a subsequent decline to a low of 3,700 in 1992–93, Queensland's NOM steadily increased to reach a high of 61,800 in 2008–09. In this year, NOM also accounted for more than half of Queensland's population growth (52.1 per cent). In contrast, net interstate migration to Queensland recorded a further peak in 1992–93 but then slumped to 20,000 or less between 1996–97 and 1999–2000.

While the overall size of the official migration program covering family, skilled and humanitarian components increased during the 2000s, there has been a changed emphasis towards skilled migration at the expense of family reunion. Over this time, Queensland's share of the nation's NOM increased from 15.5 per cent in 2000–01 to peak at 25.4 per cent in 2003–04 and has since declined to be slightly less than its pro-rata share of Australia's population by 2009–10 (18.4 per cent and 20.2 per cent respectively).

At both the national and Queensland level, the largest contributor to NOM in recent years has been from people on a range of temporary visas. There are a variety of drivers for such movement with the growth in particular visa types providing some hints. For Queensland, students comprised the largest category of temporary net overseas migration and accounted for 26.3 per cent of all NOM in 2007–08. At the

Table 2: Median house prices, Sydney, Melbourne and Brisbane, 2001 to 2010

	Sydney		Melbourne		Brisbane	
quarter ended June	$'000	per cent variance	$'000	per cent variance	$'000	per cent variance
2001	364.0	8.0	302.0	14.4	160.0	3.2
2002	452.0	24.2	330.5	9.4	185.0	15.6
2003	519.0	14.8	355.0	7.4	235.0	27
2004	552.0	6.4	365.0	2.8	307.3	30.7
2005	528.0	-4.3	360.0	-1.4	315.0	2.5
2006	526.8	-0.2	371.1	3.1	326.0	3.5
2007	532.6	1.1	415.0	11.8	366.3	12.4
2008	546.0	2.5	450.0	8.4	420.0	14.7
2009	551.2	1.0	442.0	-1.8	419.0	-0.2
2010	624.0	13.2	559.0	26.5	460.0	9.8

Source: *QBE Australian Housing Outlook 2010–2013*, prepared by BIS Shrapnel

Australian level, the corresponding figure was 39.0 per cent of all NOM reflecting the disproportionately high contribution of students to NOM in NSW and Victoria. The number of overseas students contributing to Queensland's NOM has more than doubled from 5,300 in 2005–06 to 14,230 in 2007–08.[10]

This increase coincided with a concerted program by Australian tertiary education institutions to attract overseas students. Combined with favourable exchange rates and a perception of Australia as a clean, green and safe developed country in which to obtain qualifications, this formed a set of strong pull factors. An increasing number of students also looked to gain permanent residency following their period of study. However, in 2009 and 2010, the Australian government progressively tightened eligibility conditions in order to contain the large growth in student numbers. Many overseas students currently in Australia will have to return home because their qualifications will not be sufficient to lead to a skilled permanent resident visa.[11]

The next largest visa category for temporary entrants to Queensland over recent years has been the Temporary Business Entrant (sub-class 457—Business visa). People entering on 457 visas are sponsored by an employer to fill skilled positions for a period from several months, up to four years. In response to the large and increasing demand for skilled labour (a significant economic pull factor), net migration to Queensland of people on 457 visas increased fourfold between 2004–05 and 2007–08 to reach 7,310.

Contrary to popular belief, it is not workers in the mining industry that dominate the numbers entering Queensland under this program. In 2009–10, the main industry sponsoring applicants that were granted visas were Health care and social assistance (23.3 per cent), followed by Construction (13.7 per cent) and then Mining (10.8 per cent).[12]

However, migration of New Zealand citizens has been Queensland's largest single contributor to NOM over the four years to 2007–08 (larger than any single temporary entrant visa category). Under the Trans-Tasman travel arrangements, New Zealand citizens have the right to enter Australia and to stay indefinitely. They are not included in the official migration program. New Zealanders have tended to favour Queensland as their preferred destination in Australia with the state consistently attracting over 40 per cent of the nation's net gain from New Zealand over the four years to 2007–08. Why does Queensland attract a disproportionate share of New Zealanders moving to Australia?

One key driver attracting New Zealanders to Queensland is the positive wage differential between New Zealand and Australia. Combined with a diminishing difference in unemployment rates between the two locations, it appears that economic reasons, and especially employment opportunities, are acting as strong pull factors that are attracting increasing numbers of New Zealanders to move to Australia. A further important reason that attracts New Zealanders to settle in Queensland in particular, is the large number already resident in the state.

The push and full factors of amenity, lifestyle and family are no doubt contributing reasons for this movement. Anecdotal evidence suggests that the preference for New Zealanders to holiday in Queensland may also play a role in later permanent movement. Frequent and cheaper flights between Brisbane–Gold Coast and New Zealand have facilitated this easier and regular movement across the Tasman. As a result of all of these drivers, the contribution of New Zealanders to Queensland's NOM over the three years to 2007–08 almost doubled from 8,810 to 16,550.

QUEENSLAND'S FUTURE POPULATION GROWTH

What does the future hold in terms of expected levels of population growth in Queensland and how will each of the components of change contribute to that growth?

In terms of migration to Queensland both from other states and territories in Australia and from overseas, the state's future economic growth and individuals' perceptions about Queensland will markedly influence the number of future migrants. It is clear that economic conditions form a very strong set of push and pull factors driving long-distance migration. In this regard, it is significant that Queensland's pending resources boom will lead to robust employment growth. This is particularly so for the Coal Seam Gas (CSG) industry in the Surat and Bowen Basins and associated Liquid Natural Gas (LNG) development. These activities will see a substantial increase in the demand for labour over the next decade. Increased employment growth arising from known expansion in coal mining and subsequent exports, which are predicted to increase from 170 million tonnes in 2009–10 to nearly 300 million tonnes by 2020, is also anticipated to drive labour demand.[13]

It should be remembered, that while Queensland is currently experiencing historically low levels of interstate migration, past volatility suggests that net interstate migration will rebound in the future—provided the fundamental drivers of long-distance internal migration have not altered permanently. Past data on interstate migration show that net interstate migration to Queensland peaked at 49,200 in 1992–93 (after being less than 10,000 only nine years earlier), but that within four years in 1996–97 the level had fallen to less than 20,000. This volatility over a relatively short term suggests that the complex mix of economic, social and personal push and pull factors driving an individual's decision to move is difficult to predict with any certainty and can alter dramatically over a short period. However, it does seem clear that future levels of interstate migration will largely depend on the state's share of the nation's employment and economic growth—assuming that house price differentials for Brisbane and SEQ remain positive compared with Sydney and Melbourne.

Given extensive reporting on impending labour shortages, and with large numbers of the baby-boom generation leaving the workforce during the 2010s, it is likely that the size of the skill component of the migration program will be at least maintained if not increased.[14] There is already considerable pressure from a range of business organisations seeking to increase the skilled migration intake because of pending labour shortages. In contrast, based on the strong likelihood that current policy will be unaltered, the family reunion and humanitarian components of the migration program will remain fairly stable.

While the growth in the number of overseas students in both Australia and Queensland has been exceptional in the second half of the 2000s, it is expected, based on policy decisions already implemented, that there will be a decline in the number of students in the short term. A number of factors are weighing against the current high numbers being maintained. These include changes to the eligibility criteria for students wanting to gain permanent residency in Australia, a high Australian dollar and strong competition for overseas students from other developed countries including the United States of America, Canada and the United Kingdom.

However, at June 2010, Queensland accounted for only 14.4 per cent of the number of overseas students in Australia, significantly below the state's share of the nation's resident population. Therefore, there is clearly an opportunity for

Queensland to increase its future share of Australia's overseas student population.

It is also important to recognise that much of the rapid increase in NOM between 2005–06 and 2008–09 was due to a rising number of temporary entrants. This was largely due to the upswing in the number of students; however, many of those students' visa conditions oblige them to leave Australia after their course of study and any work contract is complete. In addition, as noted above, the Australian government has recently announced a tightening in the eligibility requirements for overseas students who want to apply for permanent residency.

While some students will be able to apply to stay in Australia under the old rules, the record high NOM figure for both Australia and Queensland in 2008–09 can be viewed to some extent as a bubble created by a one-off substantial excess in long term arrivals over long term departures.[15] Evidence that the peak has passed is already available with the preliminary NOM for Australia of 215,600 in 2009–10 being almost 100,000 lower than the 2008–09 figure. Similarly in Queensland, NOM has dropped to 39,700 in 2009–10, about 22,200 lower than the previous year.

Due in part to the worldwide economic downturn, the number of applications granted to 457 visa holders with a destination in Queensland has declined in recent years. However, increasing skills shortages driven by the resource sector, and related industries, suggest that the level of applications granted under this category will rise.

CONCLUSION

Each of the three components of population growth is expected to continue to make a large contribution to Queensland's future population growth. For example, natural increase will rise slowly over the coming decades. This is because, assuming current fertility levels are maintained, the number of births will increase in line with the growing number of women in key child-bearing age groups.

Net interstate migration is expected to slowly recover over the next decade as the resource boom and concomitant employment growth gathers momentum. The level could to rise to more than 20,000 per annum over the next few years—provided the resource boom proceeds as expected, and as rebuilding following the January 2011 floods occurs. In fact, rebuilding associated with the Queensland floods is expected to provide a boost for economic growth lasting until 2012–13 and beyond, and by one estimate totalling $10 billion.[16] In addition, as increasing numbers of baby boomers reach retirement age over the next decade or so, larger numbers of retirees may well move to Queensland—assuming the propensity to move at such ages remains the same—simply due to the increased numbers of retirees.

The level of future net overseas migration is largely dependent on the size of the Australian government's official migration program, the net movement of New Zealanders to Queensland, and the number of temporary entrants in the key categories of international students, 457 visa holders and working holiday makers. While policy changes relating to eligibility and residency entitlements will be a key determining factor affecting the numbers contributing to NOM, economic factors will continue to exert a strong pull encouraging people to move to Queensland and suggest that NOM to the state will remain relatively high.

It seems clear then that NOM will remain a significant contributor to Queensland's future population growth. It is probable that, on average, NOM, will exceed net interstate migration over the coming decades. However, one clear lesson evident from an analysis of past population trends is that volatility in patterns of growth is unpredictable. Unexpected events can

intervene and individuals will react in a variety of ways to the entire range of push and pull factors discussed here. A deeper understanding of the impact and dynamics of the drivers of long-distance migration, and how they may be changing, would provide an important contribution to the art of projecting future population growth.

Authors note

The views expressed in this paper are those of the authors and do not necessarily reflect those of the Queensland Treasury.

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