Deloitte Access Economics

The housing aspirations of new settlers to Australia

National Housing Supply Council

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Deloitte.

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Ilse Wurst
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15 June 2011

Dear Ilse

The housing aspirations of migrants – draft report

Deloitte Access Economics was commissioned to undertake an analysis of the impacts of migration on underlying demand for housing for the National Housing Supply Council's State of Supply Report.

Our findings are contained in this report. This report presents findings across a range of key Australian data sources, including:

- the 2006 Australian Bureau of Statistics (ABS) Census;

- the Survey of Income and Housing, conducted by the ABS in 2008;

- the Continuous Survey of Australian Migrants from the Department of Immigration and Citizenship (DIAC) in 2008;

- the second and third instalments of the Longitudinal Survey of Immigrants to Australia (LSIA), conducted by the (then) Department of Immigration and Multicultural and Indigenous Affairs in 2000 (LSIA 2) and 2005 (LSIA 3); and

- the DIAC Survey of New Arrivals conducted in 2010.

Key characteristics of the housing choices of migrants are then presented, with comparison to the Australian born population, and between different streams of migrants.

Based on these characteristics, the report concludes with a projection of the expected housing needs of migrants into the future, for a given level and composition of the migrant intake.

Yours sincerely,

David Rumbens
Director
Deloitte Access Economics Pty Ltd

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ABS	Australian Bureau of Statistics
CSAM	Continuous Survey of Australian Migrants
DIAC	Department of Immigration and Citizenship
DIMIA	Department of Immigration and Multicultural and Indigenous Affairs
LSIA	Longitudinal Survey of Immigrants to Australia
NOM	Net overseas migration
ROW	Rest of the world
SONA	Survey of New Arrivals

Executive Summary

Deloitte Access Economics was commissioned to undertake an analysis of the impacts of migration on underlying demand for housing for the National Housing Supply Council's State of Supply Report.

Areas of specific interest include:

- the housing formation patterns, preferences and outcomes of migrants (with reference to the Australian born population, or Australian average characteristics);
- the economic circumstances of migrants which underlie these housing characteristics;
- how migrants' housing characteristics change over time after arrival in Australia; and
- differences in housing characteristics by broad visa stream.

Housing characteristics

The report draws extensively on data from the 2006 Census. Migrants as defined in the 2006 Census are those people resident in Australia for more than one year who were born outside of Australia. The remainder of the resident Census population are those who were 'Australian born'.

There are differences in the housing tenure patterns of migrants relative to the Australian born population, and these show up across most age cohorts. In all age categories migrants are more likely to rent than non migrants. In all bar the oldest age group (80+), migrants are less likely to be living in their own home than non migrants.

While the propensity to rent remains higher for migrants by age, the housing tenure of migrants does change notably over time depending on the amount of time they have been in Australia. Chart i illustrates the housing tenure status of migrants over time.

Chart i: Housing status of migrants, by year of arrival
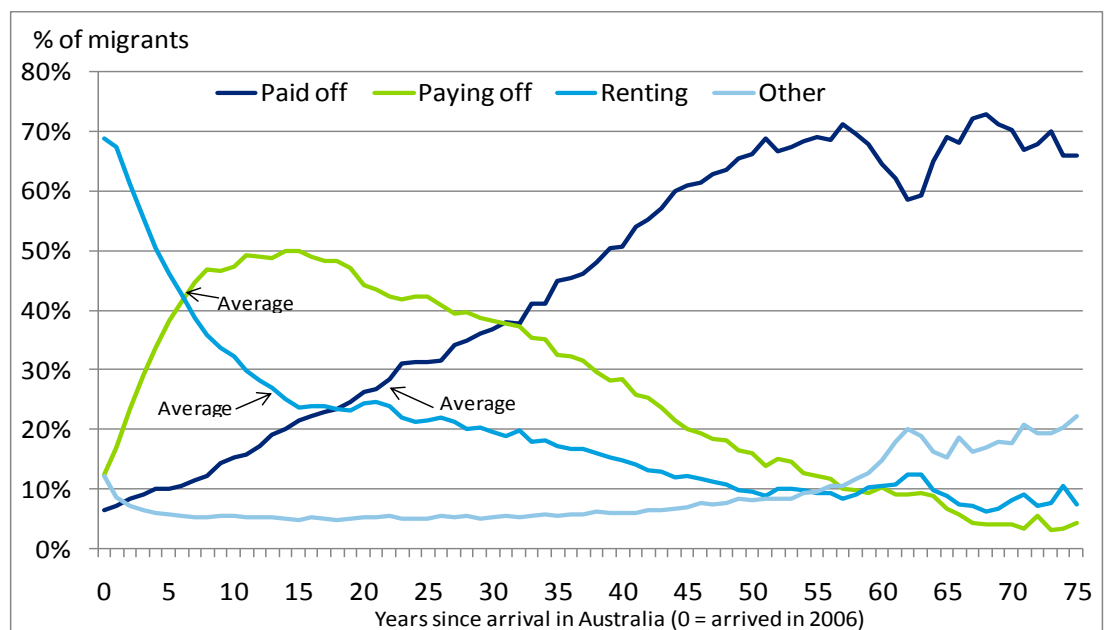
Source: Derived from ABS, 2006 Census

Some 70% of new migrants to Australia are initially renters. However, over the first decade since arrival:

- the proportion of renters drops notably (to 32% by year 10 after arrival);
- there is also a drop in the share of migrants who are living with others rather than being self-sufficient (from 12% in year 1 to 6% by year 5);
- there is a sharp increase in migrants who are paying off their house (from 12% in year 1 to 38% by year 5, and peaking at 50% in year 14); and
- there is a slow and steady increase over time in the share of migrants who have paid off their home, which eventually reaches 70% of migrants, but not until almost 60 years after arrival.

What about income differences of migrants? On average, migrants who are in the labour force do not earn significantly more or less than Australians in the labour force. However, migrants' income tends to start lower and rises over time as they spend more time in Australia. This is partly a function of age and the fact that migrants coming to Australia are generally in search of greater work and life opportunities.

When looking separately at each income category, migrants are more likely to rent, and hence less likely to live in their 'own' home, than Australian born people.

Differences in housing tenure are also apparent by source country of migrants.

Some 74% of European born migrants in Australia live in their own home, whether fully paid off or paying off, while 18% live in rented properties. By contrast, 59% of Asian born migrants live in their own home (whether paid off or paying off), while 34% live in rented accommodation. This is not really a function of year of arrival, with similar differences still showing across recently arrived migrants. However, income differences are a major contributing factor to the different tenure status of Asian born and European born migrants.

Housing preferences

The housing preferences of migrants in part reflect their reasons for migrating to Australia. Those on a family visa, who were migrating to join a partner or family unit, were more likely to be living in their own home rather than renting (80% of skilled migrants live in a rental property compared to 50% of family migrants). At the other end of the spectrum, those coming to Australia to study had the greatest likelihood to be renting rather than any other housing outcome.

What type of property do migrants live in?

There is some difference in the type of dwelling structure that is lived in by migrants. This difference is most noticeable by migrants from different places of origin compared with the Australian born population. Some 86% of Australian born people live in a separate house, 7% in a townhouse, and 8% live in a flat or an apartment. The dwelling profile of European migrants is very similar to the picture for Australian born. American and in particular Asian migrants are much more likely to live in a townhouse or a flat than Australian born (34% and 41% respectively).

Data from the recent CSAM provides some insight into the difficulties migrants either have faced or are currently facing in securing accommodation.

The difficulties faced by migrants appear to be heavily related to the state of the housing market in Australia in general. A majority of both the skilled and family migrants who faced difficulties in securing accommodation cited the cost or unavailability of housing as their most significant difficulty.

Differences by visa stream

Migrants of all ages are more likely to live in rental accommodation than Australian born people of the same age. It is also the case that migrants who came to Australia on a skilled visa are far more likely to rent than migrants who came to Australia on a family visa.

A sizeable share of family migrants are initially dependent on others for housing (such as family or friends). Skilled and humanitarian migrants, who generally do not have the same connections as family migrants, are less likely to be dependent on others for their initial housing arrangements.

Looking at longitudinal data which tracks the same migrants over time, twelve months on, there is a greater share of migrants across all visa categories who own their own home.

A migrant's tenure status also has an effect on the type of dwelling they live in. Approximately 80% of migrants who own their own home live in a separate house and not a flat or townhouse. By contrast, approximately 70% of migrants who rent live in a flat or townhouse and not a separate house. Across visa streams, once tenure status is accounted for there is very little difference in the type of dwelling migrants live in. That is, most migrants who own or are paying off their own home live in houses (regardless of visa status), while only around 30% of migrants who rent do so, again regardless of visa status.

Migrants are also highly mobile. Some 40% of all migrants interviewed in the second wave of LSIA 2 indicated that they had moved since the first wave (36% of family visa holders, 44% of skilled visa holders and 45% of humanitarian visa holders). About 11% of these 'movers' had moved more than once.

Migrants' initial tenure status is also often not their last. While many migrants when they first arrive live for free or pay board with an existing Australian connection (be it friends or family) and thus do not immediately add to the demand for housing, this is only temporary. In a year's time, many of those migrants are then looking for their own house, either to own or rent.

Propensities to change tenure status can be used to give us an idea of how many houses might be demanded by migrants based on their time since arrival into the future.

Comparison with Australian born

Bourassa (1994) found that after controlling for a number of key demographic variables, for most countries of birth there was not a significant difference in the housing preferences of migrants and the Australian born population. This study was undertaken using data from the 1991 Housing and Location Choice Survey.

The analysis for this report has reviewed a range of contemporary data sources. In making comparisons of housing preferences between migrants and Australians we have focused our analysis on the two most obvious endowment variables: age and income. One might expect age and income to be strong drivers of tenure choice. If this were the case, then we would expect that after controlling for these two factors (i.e. comparing migrants and

Australians in the same income category and the same age group) the tenure characteristics should be similar for people born in Australia and overseas.

Indeed, Bourassa's main conclusion is that "with respects to the great Australian dream of homeownership, immigrant groups are at least as and sometimes more 'Australian' than the Australian-born population."

Data from the 2006 Census suggest otherwise. For given age cohorts and income categories, Australians were more likely to list either 'paid off' or 'paying off' as their tenure status than migrants. This is shown in Chart ii below for the 35-39 year age cohort.

Chart ii: 'Own home' share by income and country of birth, 2006 (age = 35-39)
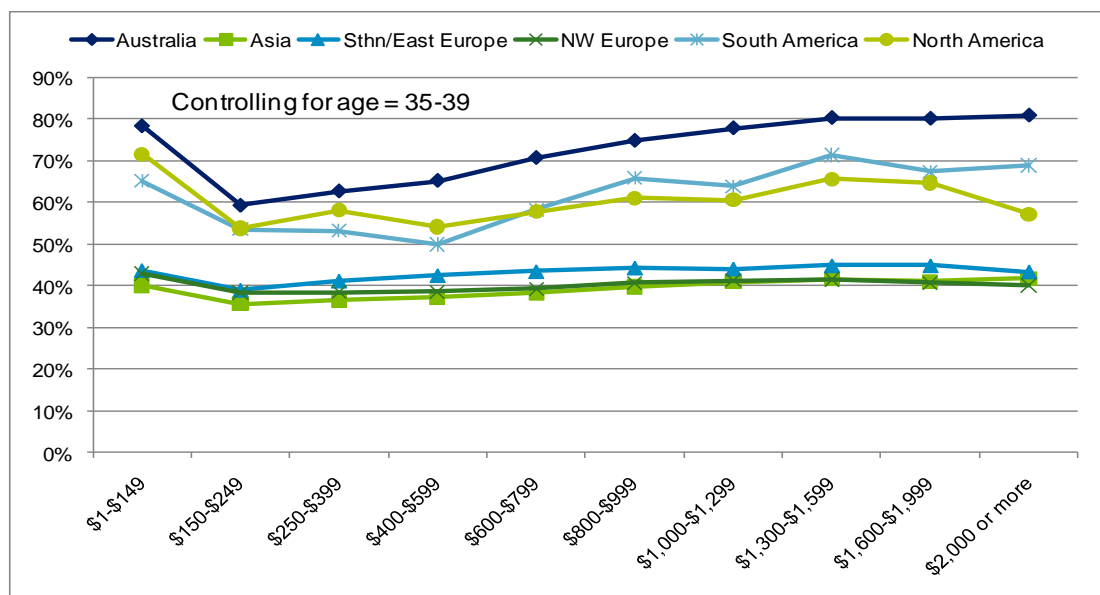
Source: ABS Census data, 2006

The data we have analysed suggest, regardless of income and age, a greater share of Australian born people live in their own home than migrants. The data suggest that other exogenous factors, be they cultural, demographic or socioeconomic play a role in determining a person's tenure status.

The Census data which is applied by McDonald and Temple in their discussion of housing propensity are Australian averages, but the data in this study show that new migrants have a somewhat different profile. It would seem appropriate therefore that when attempting to forecast housing choices of migrants, a wide range of cultural, demographic and socio-economic indicators be considered.

Forecasts of housing demand related to migrants

Based on the propensities of new migrants to be self-sufficient in housing (not living with family and friends), and their revealed preference for types of houses we have developed for this report illustrative forecasts of the likely demand for housing by permanent migrants in both the skilled and family visa streams going forward.

The estimates have been developed by using DIAC arrivals data and forecasts to 2013-14. Beyond 2013-14, we have assessed two different arrival scenarios: a baseline, where the number of arrivals is assumed to be constant beyond 2013-14; and a growth scenario, where the number of arrivals is assumed to grow at 5% per year beyond 2013-14.

In any one year, we estimate that about 64% of the number of family arrivals will directly add to the demand for housing in that year. The remaining 36% will initially be dependent on others for housing. At some point over the next five years about 20% will become self sufficient and enter the property market. In other words, about 16% of family migrants will arrive as dependents and will continue to be dependent into the future – for example they may be parents or grandparents who have moved to Australia to live with their loved ones.

Unsurprisingly perhaps, about 89% of skilled migrants directly add to housing demand in their first year in Australia. About three quarters of the dependents, or 8% of all skilled migrants, will have moved out of dependency and have entered the property market within five years.

Estimates of the number of dwellings needed have been obtained by dividing our estimated number of migrants in any one year adding to the demand for accommodation by the average household size for each visa and dwelling category (see Chapter 5).

We estimate that a total of 80,000 dwellings are needed to house the new permanent migrant component of property demand in 2010-11. Of these about 55% would be flats, owing to the large number of student migrants. A further 26% would be houses and 19% townhouses.

Under the baseline, using DIAC forecasts and holding constant the number of arrivals beyond 2013-14, we estimate that the number of dwellings required to house new migrants would rise to 85,000 by 2014-15.

Under the growth scenario, with the number of new migrant arrivals growing at 5% a year beyond 2013-14, it is estimated that about 89,000 houses will be needed by 2014-15, 4,000 more than under the baseline scenario. By 2019-20 about 113,000 houses are needed under the growth scenario, compared to about 85,000 under the baseline.

Conclusions

This study has shown that the housing characteristics of migrants do differ from those of the Australian born population. These characteristics also change over time, particularly in the first few years after arrival, and continue to add to housing demand after the initial year (as many migrants initially stay with family or friends before becoming self-sufficient).

In planning for future housing requirements it can therefore be important to take account of the specific housing characteristics of migrants. This is particularly the case where the size of Australia's migration program changes rapidly over time, as has been the case over the past decade.

Looking forward, given current concerns over skills shortages, there may be an increased need for migration in the short term in order to meet labour market needs. Part of that increase is now planned via a higher target for permanent migration in 2011-12 as recently announced, while another part may be 'demand driven' as businesses seek to bring in additional workers under temporary visas.

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1 Surveys assessed for this study

This study has assessed data from six different sources:

- The second Longitudinal Survey of Immigrants to Australia (LSIA), conducted by the (then) Department of Immigration and Multicultural and Indigenous Affairs (DIMIA) on migrants who arrived in Australia between September 1999 and August 2000;
- The third LSIA, conducted by DIMIA on migrants who arrived between December 2004 and March 2005;
- The Continuous Survey of Australia's Migrants (CSAM), conducted by the Department of Immigration and Citizenship (DIAC), which commenced in September 2009;
- The Survey of New Arrivals, conducted by DIAC in 2010;
- The Survey of Income and Housing, conducted by the ABS in 2008; and
- Data from the 2006 Census.

We have drawn extensively on data from the 2006 Census, which has allowed us to compare the housing characteristics of migrants and the Australian born population, and also to gain a broad level understanding of the demographic and socio-economic characteristics of migrants.

Migrants as defined in the 2006 Census are those people resident in Australia for more than one year who were born outside of Australia. Those expected to reside in Australia for less than one year are termed overseas visitors.

Much of the data presented in this report then shows the migrant group by their years since arrival in Australia. The remainder of the resident Census population are those who were 'Australian born'.

The most directly relevant survey for this project is the LSIA, which is a longitudinal survey. This means it interviews migrants in two distinct stages, called 'waves' – the first wave about 6 months after arrival and the second wave about 18 months after arrival (i.e. 12 months after the first wave). Hence, it allows migrants' housing status to be tracked for the first 6 to 18 months of their time in Australia. This report analyses results from the second and third LSIAs (we have not assessed the first LSIA because it was conducted in the mid 1990's and it is unlikely that its findings would still be relevant today).

The CSAM was conducted by DIAC in 2009 and is intended to be a 'continuing' survey which, similar to the LSIA, will allow cross sectional data to be analysed through time. Results from the CSAM have allowed for useful comparisons to be drawn with the earlier LSIA data.

Although not as recent as other sources, the second LSIA included much greater detail about housing characteristics (mostly due to a higher budget) than either the third LSIA or the CSAM. Because of its greater detail, and because the general profile of migrants (i.e. where they come from, where they live, etc.) has not changed in any drastic sense since the early to mid 2000s, we consider the LSIA 2 to be very useful for this project. Additionally, LSIA 2 included questions about dwelling type where the latter surveys did not. We therefore draw heavily on LSIA 2 data in relation to dwelling types for the forward

projections (discussed in Chapter 5), which we consider a reasonable approach given the similarity of results from all three surveys.

The SoNA is the most recent available survey, conducted by DIAC in 2010. Although its focus is not specifically on housing choices, it nonetheless provides interesting, and timely, insights. It should be cautioned however that the SoNA results are not weighted -that is, no attempt has been made to produce population estimates. Where relevant we have supplemented our detailed analysis of other sources with estimates from the SoNA.

This study assesses migrant housing characteristics across a range of primary data sources. Whereas many studies (such as the ones discussed in the literature review provided as Appendix A) perform econometric tests on one data source, we have instead performed a high level analysis across several data sources.

Given the broad similarities of the results from the several surveys we have analysed, we are able to gain a good understanding of the housing choices of migrants, and the factors that influence those choices.

That being said, care does need to be taken when comparing results from different surveys. A survey, by definition, produces estimates from the sample that is surveyed. These estimates are generally weighted to produce population estimates. However, it should be kept in mind that different surveys are produced by different people at different times and with different priorities, and also that the survey sample generally changes from year to year.

Some questions in different surveys may be asked in different ways, or the coverage of different topics may be expanded or reduced to reflect the different priorities at the time. This may ultimately affect the comparability of survey results through time. Throughout the report, we have noted where differences in coverage and/or question structure may affect the comparability of results from different surveys. The associated discussion of such results should be read with this in mind.

1.1 Survey definitions and populations

When we refer to migrants in this report we are referring to Australian residents (for more than one year) who were not born in Australia. This is the broadest definition of migrants, as reported in the 2006 Census.

Other surveys have a slightly different coverage of migrants. For example, the LSIA 2 only interviewed migrants who were granted their visa off-shore (i.e. they obtained their visa approved before arriving in Australia). At the time of the LSIA 2, relatively few migrants received their visa on-shore so it was not considered necessary to include these migrants in the sample. At the time of the LSIA 3 however, on-shore migrants accounted for about 30% of the migration program. Therefore, the LSIA 3 and the later CSAM surveyed both on-shore and off-shore migrants.

Table 1.1 shows the estimated survey populations from each of the key DIAC surveys studied, as well as DIAC data showing Net Overseas Migration arrivals for 2008-09. Note that the population figures for the surveys are not the sample size, but rather the estimated population after each respondent has been multiplied by their estimated weight. However, because none of the surveys assessed were fully comprehensive, in the sense that each

survey interviewed only a subset of total migrants, even these estimated population figures do not represent the 'true' population.

To allow comparison across the different surveys, it is therefore necessary to convert the survey data to a consistent basis. Hence, for the remainder of this report survey data are presented as shares of the relevant total group, rather than absolute numbers.

Table 1.1: Survey populations and 'official' NOM data

	LSIA 2	LSIA 3	CSAM	DIAC (2008-09)*
Family	16,860	20,242	34,103	56,366
Skilled	13,144	13,357	37,689	114,777
Humanitarian	2,411	-	-	11,548
Total permanent migration	32,415	33,599	71,792	182,691
Net movement of temporary migrants	-	-	-	117,173
Total Net Overseas Migration (NOM)	-	-	-	299,864

Source: LSIA and CSAM datasets; DIAC

*Data for family and skilled migrants are taken from DIAC's *Migration Program Statistics* available at http://www.immi.gov.au/media/statistics/statistical-info/visa-grants/migrant.htm; Humanitarian and total NOM data are taken from DIAC (2011).

2 A snapshot of migrants to Australia

This report provides a profile of the housing characteristics of migrants from across a range of relevant, contemporary data sources.

We commence in this chapter with a broad level overview of Australian migrants, their income and countries of birth, as well as their tenure arrangements (whether they rent or own their own home).

The data analysed here is primarily drawn from the 2006 ABS Census, with some data from DIAC's Continuous Survey of Australian Migrants (CSAM) also utilised.

The total population from the 2006 Census was just over 20 million people. Of this, 70% (14 million) were born in Australia, 29% (5.8 million) were migrants and 1% (206,000) were visitors from overseas. As noted in Chapter 1, migrants are defined in the 2006 Census as any person resident (or intending to be resident) in Australia for more than one year and who were born outside Australia. All other people born outside Australia are classified as visitors.

2.1 Housing tenure status

Tenure status by age

In all age categories, people born overseas are more likely than those born in Australia to live in rental properties (Chart 2.1). The difference is more significant in the younger age categories.

The 20 to 29 year age group is the age group most likely to live in rental homes across both the migrant and Australian born categories. Within this age group 51% of those who were not born in Australia lived in a rental property, compared to 40% of those who were born in Australia.

Chart 2.1: Living in rental properties, 2006
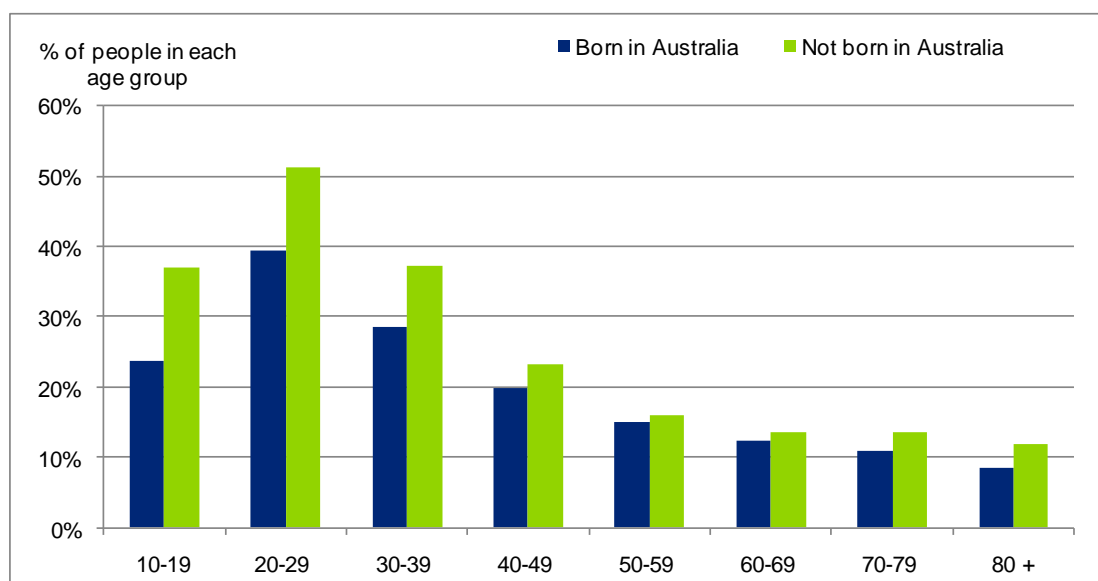
Source: ABS, 2006 Census

Chart 2.2 indicates that for migrants under the age of 40, the propensity to move out of the rental market and into one's 'own' home (whether fully owned or paying a mortgage) is significantly lower than non-migrants of the same age. Note that the term 'migrants' in this context refers to all people born outside Australia, so it includes many people who may have migrated to Australia a long time ago.

In all age categories migrants are more likely to rent than non migrants. In all bar the oldest age group, migrants are less likely to be living in their own home than non migrants.

Chart 2.2: Living in 'own' home, 2006 (whether paid off or paying off)
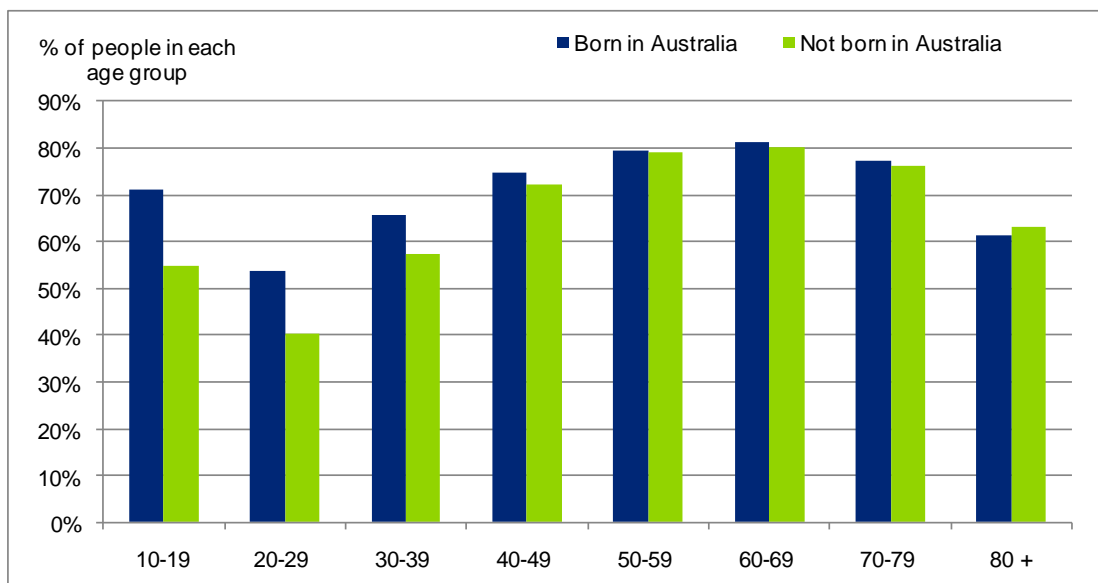
Source: ABS, 2006 Census

Tenure status by year of arrival

Chart 2.3 extends from the previous two charts, and shows the housing status of migrants according to the year that they arrived in Australia. Some 70% of new migrants (those who arrived in 2006) at the last Census were living in a rental property. By contrast, only 24% of people born in Australia were living in a rental property. **It is only migrants who have been in Australia for over a decade who match the Australian average rental share**.

Less than 10% of new migrants at the last Census lived in a fully owned house, where a fully owned house is one that has no mortgage left. In comparison about 28% of Australian born people at the last Census lived in a fully owned house. Of course, it should be kept in mind that house prices in the 1990s were significantly lower than they are today. It is likely that this contributes to the higher proportion of 'own home' living observed along migrants who arrived in the 1990s.

Chart 2.3: Housing status of migrants, 2006, by year of arrival
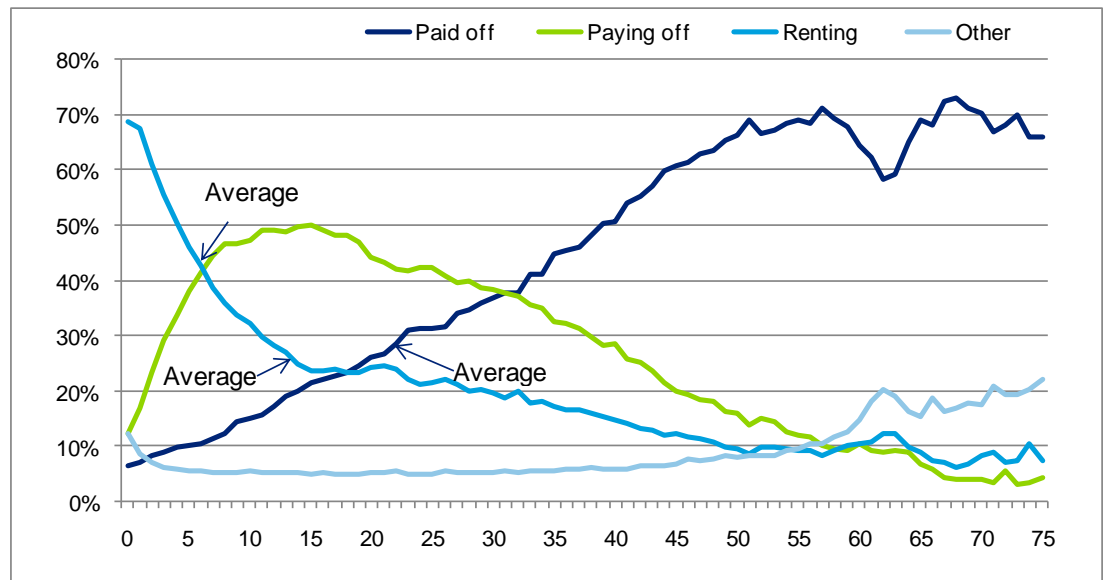
Source: ABS, 2006 Census

2.2 The income and work characteristics of migrants

From section 2.1 we know that migrants of all ages are more likely to live in rental accommodation than Australian born people of the same age. It is also the case that migrants who came to Australia on a skilled visa are far more likely to rent than migrants who came to Australia on a family visa. This section explores the income and work status of migrants and its effects (if any) on the tenure status (i.e. paid off, paying off or renting) of those migrants.

How much income do migrants earn?

On average, the earnings of migrants who are in the labour force are not significantly different to the earnings of Australians in the labour force (Table 2.1). However, this aggregate figure belies significant differences in the characteristics of migrants, discussed in further detail below.

Table 2.1: Income of Australian and migrants in the labour force, 2006

Income ($/ week)	Migrants	Australian born
Nil income	3%	2%
$1-$149	4%	6%
$150-$249	6%	7%
$250-$399	9%	10%
$400-$599	17%	18%
$600-$799	16%	16%
$800-$999	12%	12%
$1,000-$1,299	12%	12%
$1,300-$1,599	7%	7%
$1,600-$1,999	4%	4%
$2,000 or more	6%	5%

Source: ABS, 2006 Census
Note: Columns do not add to 100% because the table excludes those who did not state their income

Chart 2.4: Weekly income of migrants in the labour force, 2006, by year of arrival
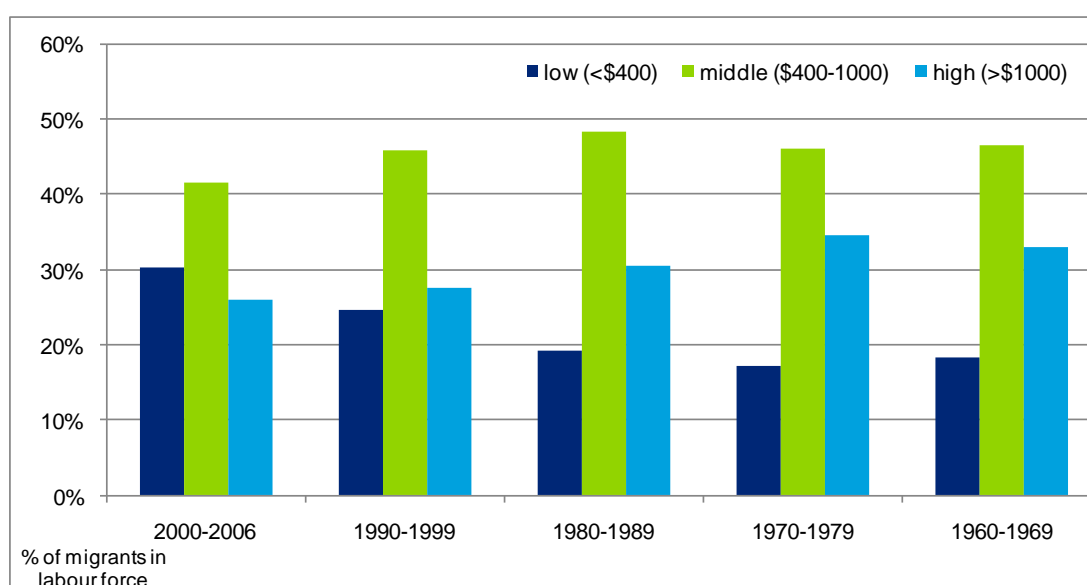
Source: ABS, 2006 Census

Chart 2.4 shows that recently arrived migrants are twice as likely to be on 'low' incomes (less than $400 a week) than migrants who arrived in Australia in the 1960s or 1970s. As one would expect, migrants' incomes rise over time as they spend more time in Australia. This is partly a function of age, and partly just due to the fact that migrants coming to Australia generally come in search of greater work and life opportunities (particularly skilled migrants, who outnumber family migrants by a ratio of 2:1).

Chart 2.5: Income of migrants by visa category, 2009
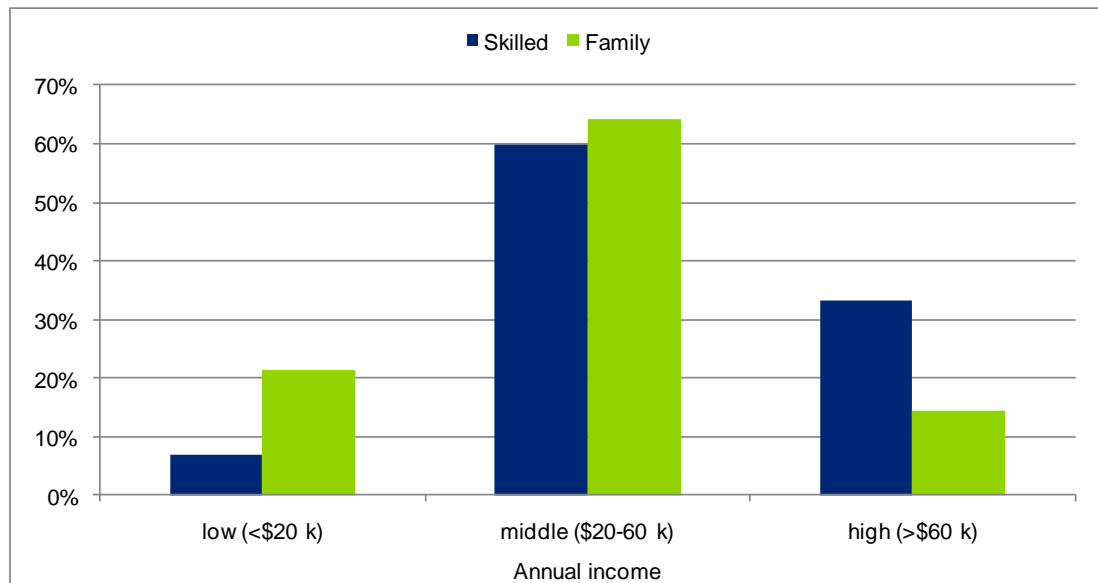
Source: DIAC, CSAM, 2009

Chart 2.5 shows that a majority of both family and skilled migrants earn between $20-60,000 per annum (which we have denoted 'middle income'). Unsurprisingly, the share of migrants earning greater than $60,000 per annum is more than double the corresponding share of family migrants. As one would expect, humanitarian migrants (refugees) have much lower incomes still.

Broadly speaking, it might be expected that the more a person earns, the more likely they are to live in their own home (whether paying off a mortgage or owning outright) as opposed to a rental property. Chart 2.6 below indicates that **in each income category, migrants are more likely to rent, and hence less likely to live in their 'own' home, than Australian born people**. It also shows that the rental share of both migrants and Australian born people is lower for higher income categories than for lower income categories.

It is worth noting, however, that the 'reduction' in the rental share across both Australian born people and migrants as income increases does appear to be limited. In other words, although there clearly is some form of 'income effect' whereby higher incomes translate to lower rental rates, there are clearly a lot of factors that determine a person's choice of tenure arrangement.

Chart 2.6: Tenure status and income of Australian born and overseas born Australians, 2006
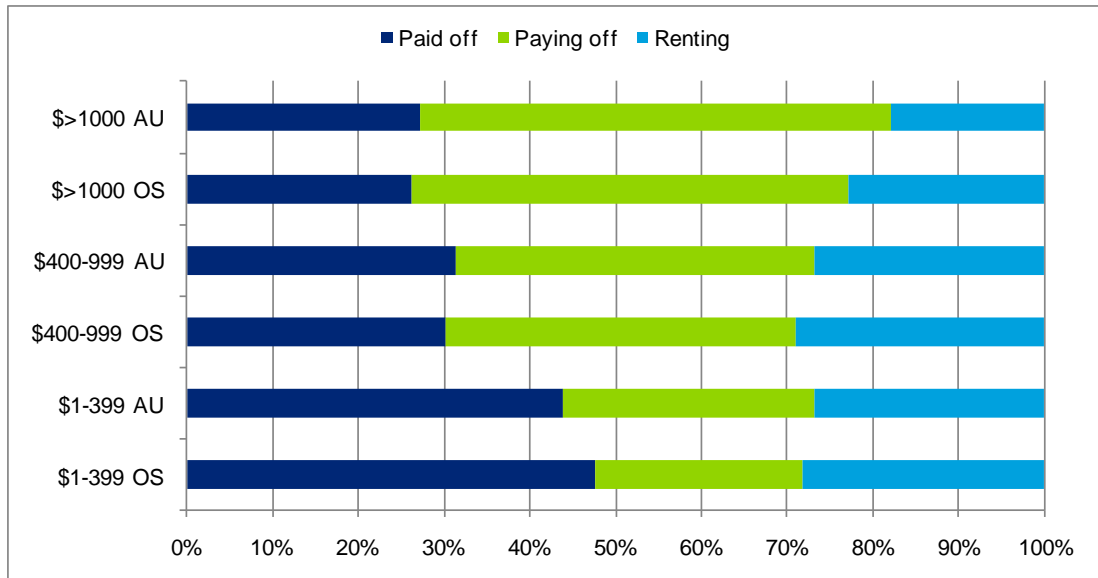
Source: ABS, 2006 Census

Note: "AU" means Australian born; "OS" means overseas born.

The education characteristics of migrants

Chart 2.7 shows the educational characteristics of recently arrived migrants, and really needs no further explanation – virtually all skilled migrants have at least secondary schooling (over 80% have tertiary qualifications). The educational attainment of family migrants is more varied, while almost 20% of humanitarian migrants have no formal schooling at all.

Chart 2.7: Highest qualification of recent migrants on arrival in Australia, 2010
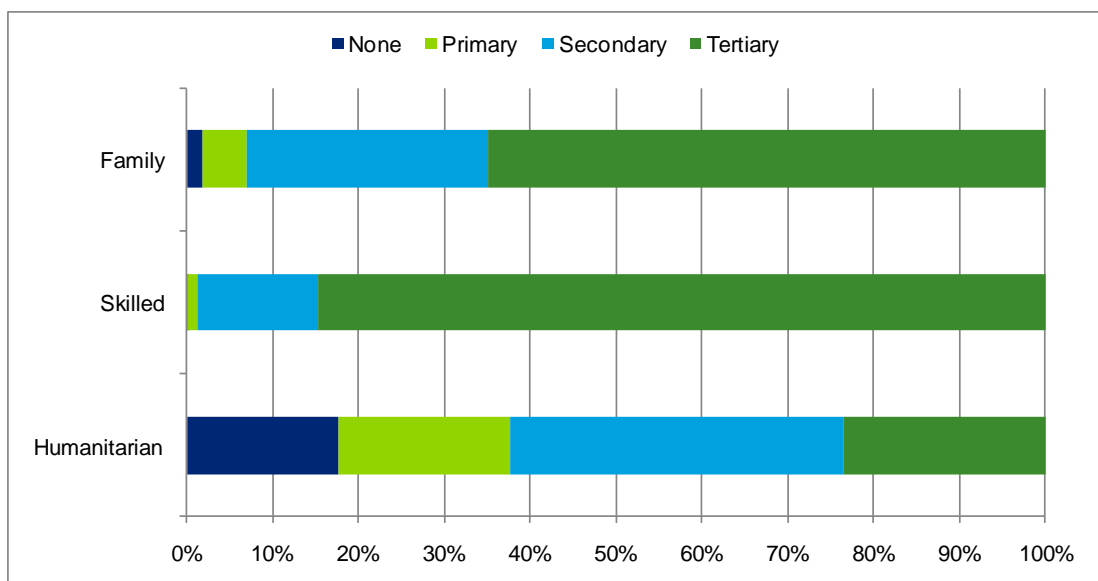
Source: DIAC, SoNA, 2010

Does a migrant's educational status affect their likely housing behaviour? To the extent that skilled migrants are the most likely to hold tertiary qualifications, and skilled migrants

are more likely to rent than other visa types (which will be discussed further later), then it follows that tertiary educated migrants are more likely to rent when they initially arrive in Australia. That is certainly the case examining the CSAM data of recent migrants shown in Chart 2.8.

Chart 2.8: Education and tenure status of recent migrants, 2009
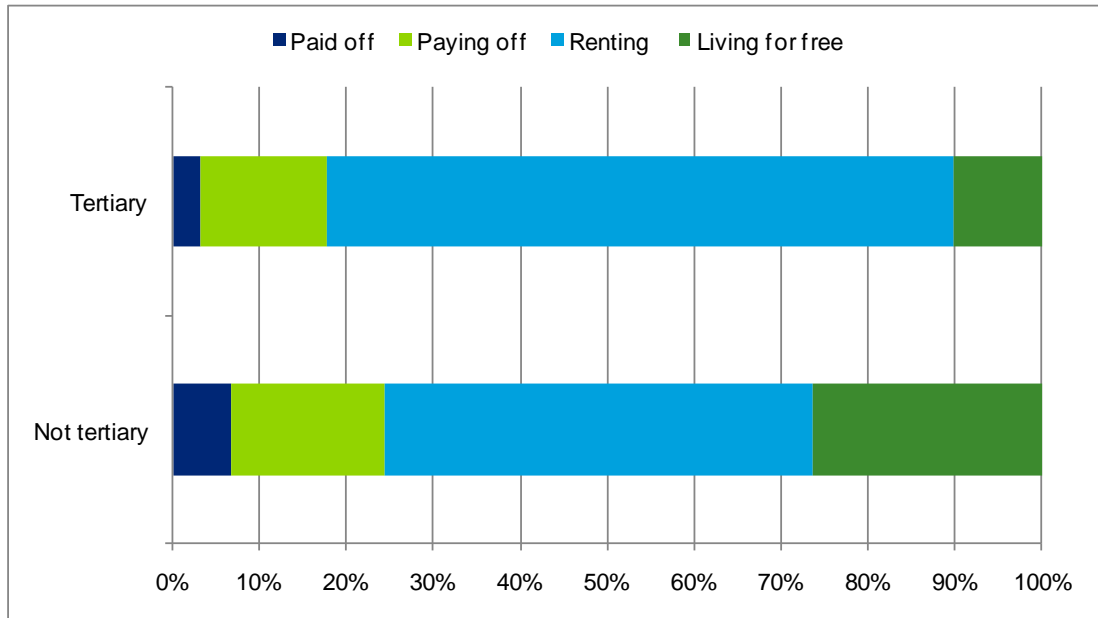
Source: DIAC, CSAM, 2009

2.3   Where do migrants come from?

The charts above indicate that, of the migrants who work, their housing and income characteristics are somewhat different, though not significantly different, to Australian born people. Now we will explore whether the country from which the migrants hail makes a difference to their housing and income characteristics.

Historically most of Australia's migrants have come from Europe (Chart 2.9). In 1960, 90% of migrants were from Europe, with equal shares from North-West and South-East Europe; 4% came from Asia, with approximately equal shares from Southern and Central Asia, North-East Asia and South-East Asia; 3% from Africa and the Middle East; 3% from Oceania, which includes New Zealand; and only 1% from the Americas.

In 2006, Europe accounted for 41% of all migrants who have arrived since 1960, and Europe and Asia together accounted for 72% of all migrants who have arrived since 1960. 47% of migrants who arrived in 2006 were from Asia, 21% from Europe, 14% from Africa and the Middle East, 13% from Oceania, and 6% from the Americas. The number of migrants in 2006 was approximately double that in 1960, and has been increasing fairly steadily over the past 50 years.

Chart 2.9: Birthplace of migrants who arrived in Australia between 1960 and 2006
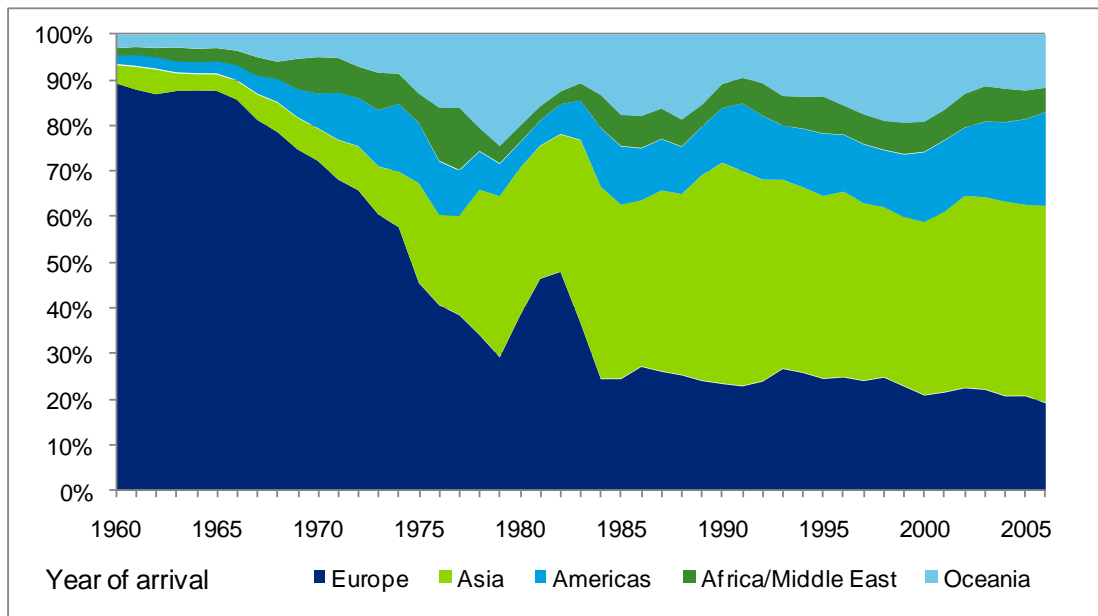
Source: ABS, 2006 Census

Given that Europe and Asia are the two main sources of migrants in Australia, a key focus of this discussion will thus be on the differences between European and Asian born migrants. European born migrants are more likely to live in their own home (whether it is fully paid off or being paid off) than any other group, including Australian born (Chart 2.10).

Some 74% of European born migrants in Australia live in their own home, whether fully paid off or paying off, while 18% live in rented properties. By contrast, 59% of Asian born migrants live in their own home (whether paid off or paying off), while 34% live in rented accommodation.

Chart 2.10: Tenure status of all residents, 2006, by region of birth
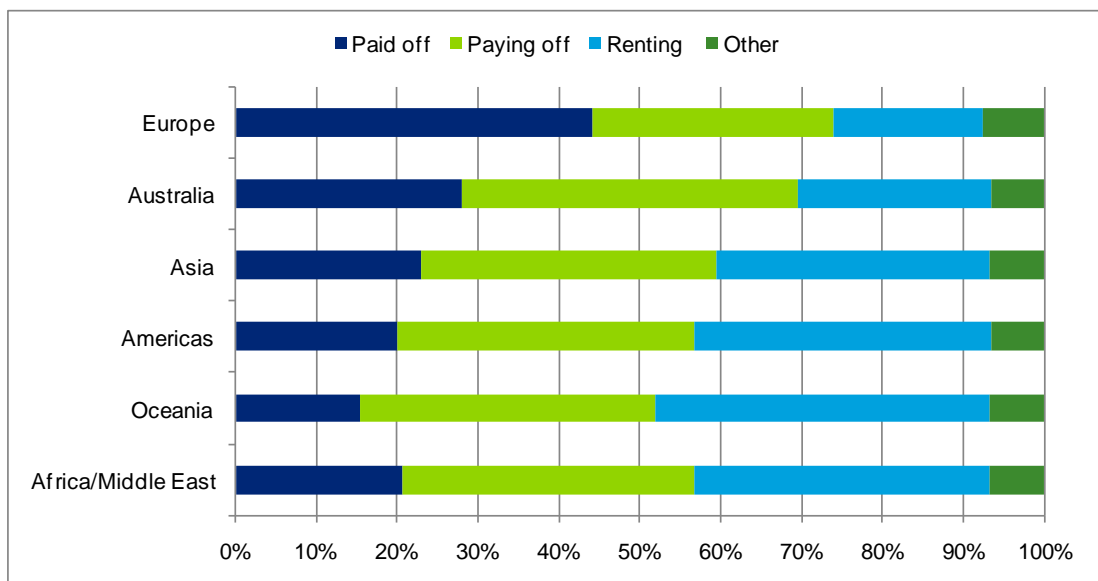
Source: ABS, 2006 Census

The same general insight can be gleaned from Chart 2.11, which shows the tenure status of migrants who arrived in Australia between 2000 and 2006. Some 60% of recent migrants from Asia were living in rental properties, compared to 46% of recent European migrants. Similarly, European migrants were about 16% more likely to be living in their own home (whether paid off or paying off) than Asian migrants.

Chart 2.11: Tenure status of recent migrants, 2006, by region of birth
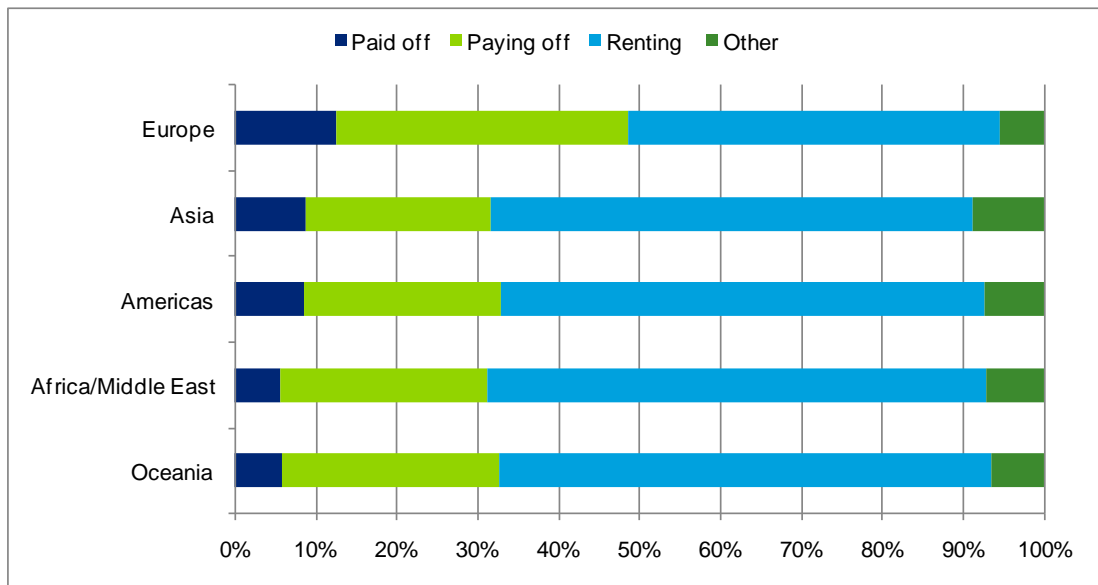
Source: ABS, 2006 Census

So why are European migrants more likely to live in their own home, while Asian migrants are more likely to live in rental accommodation? Is it because European migrants are richer than their Asian counterparts, or simply that Asian migrants do not share the same housing preferences as European migrants?

Chart 2.12 shows the income distribution for migrants who arrived in Australia between the years 2000 and 2006. Some 64% of Asian migrants who arrived between 2000 and 2006 reported living on less than $400 a week, with 55% of these having negative or zero income. By contrast, 32% of recent European migrants reported earning more than $1000 a week, compared to only 9% of recent Asian migrants. **So it seems that income, in this case, is a major contributing factor to the different tenure status of Asian born and European born migrants**.

Chart 2.12: Income of recent migrants, 2006, by region of birth
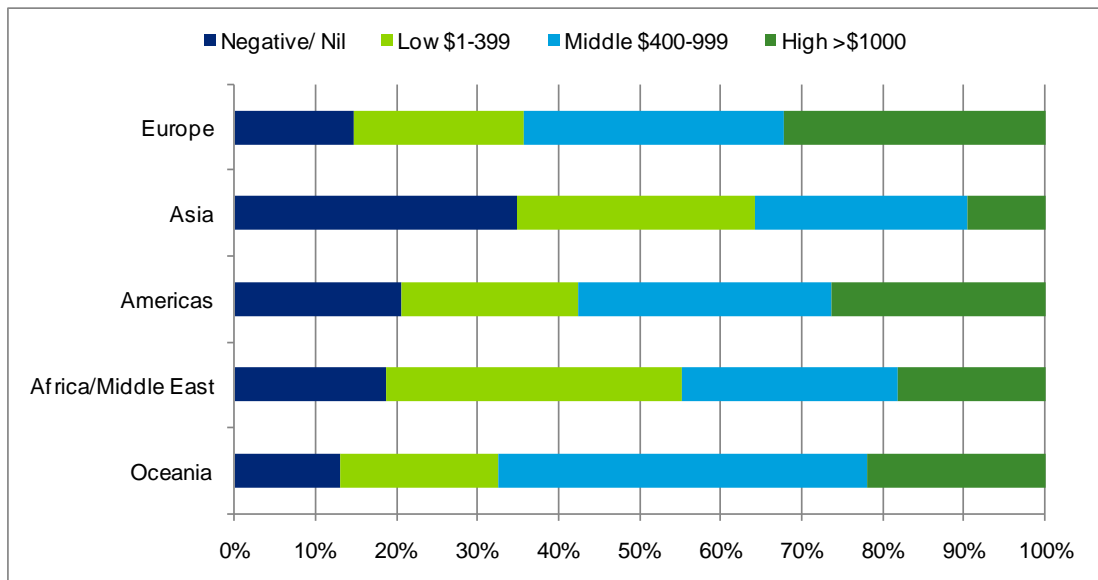
Source: ABS, 2006 Census
Note: Excludes migrants who answered 'not applicable' when asked about their income or who declined to state their income.

Chart 2.13, as well as Chart 2.3 shown earlier, suggests that recently arrived migrants are more likely to be living in rental properties, regardless of their income. However, Chart 2.14 suggests that migrants who have been in Australia between 6 and 16 years are more likely to be living in a mortgaged home than a rental property. For the lower income groups this makes immediate sense – housing affordability has become a much more significant issue over the past decade, such that people on relatively low incomes find it much more difficult to live in their own home.

Looking at these charts together, we can see that in each income category, a greater share of migrants who have been in Australia for some years lived in their own home than migrants recently arrived. In each income category, a greater share of migrants who arrived between 1990 and 1999 lived in their own home than migrants who arrived between 2000 and 2006. The reduction in the rental share between the two charts is greater for the higher income categories. Hence, **it appears migrants switch to privately owned homes when such become available (whether through time or income)**.

Chart 2.13: Tenure status of recent migrants, 2006, by income category

Migrants arrived 2000-2006
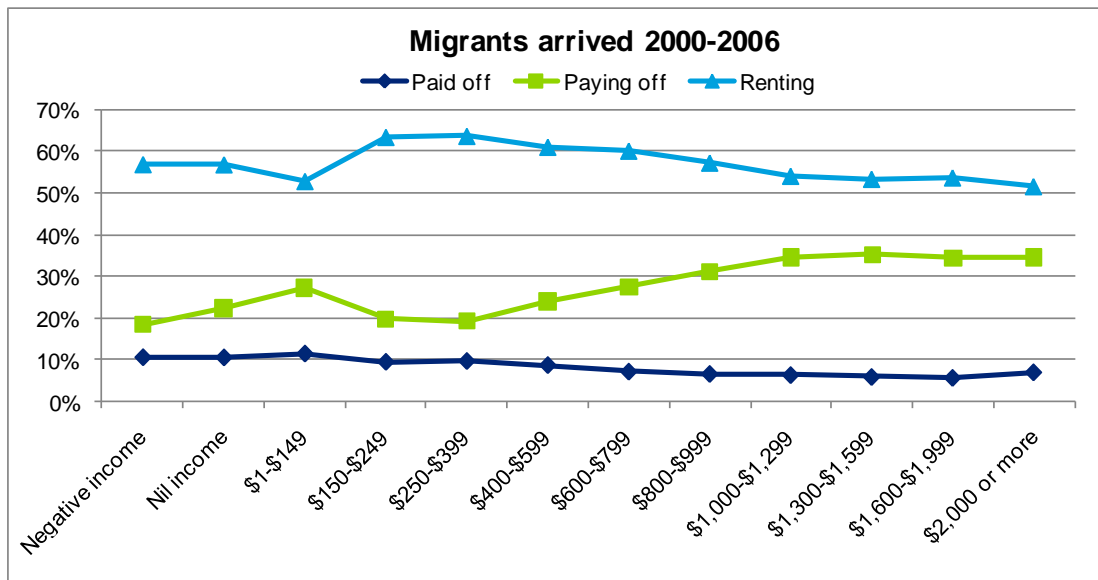
Source: ABS, 2006 Census

Chart 2.14:Tenure status of less recent migrants, 2006, by income category

Migrants arrived 1990-99
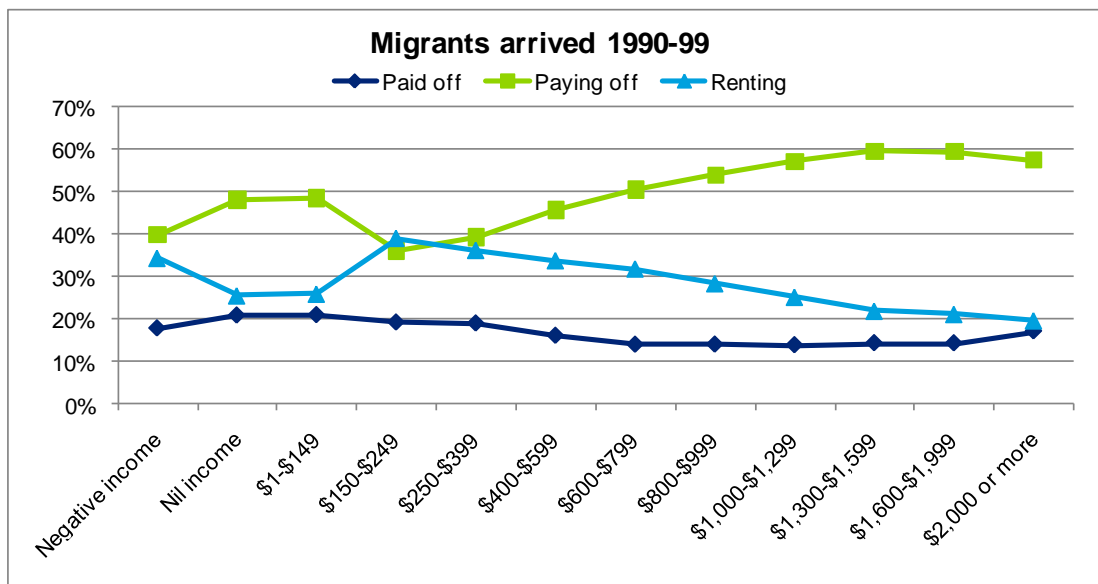
Source: ABS, 2006 Census

2.4   Where do migrants live?

The previous sections have explored the income, housing and work characteristics of migrants at an Australia wide level. This section explores whether the findings hold true when we assess migrants at a State level. Table 2.2 shows each State's share of family migrants, skilled migrants, total migrants, as well as the share of Australia's population (based on the population at September 2009 when the CSAM was undertaken). Unsurprisingly given that they are by far the two most populous states, New South Wales and Victoria housed the majority of migrants interviewed in the CSAM.

That said, the distribution of migrants does not necessarily match the distribution of the general population. Victoria for example houses 32% of migrants but only 24% of Australia's population. In a similar vein, Western Australia houses about 17% of skilled migrants and 10% of Australia's population – this likely reflects the booming mining sector and its need for skilled workers. At the other end of the scale, Queensland houses one in five people in Australia, but only one in eight of the migrants interviewed in the CSAM.

Table 2.2: State based shares of migrants and population, 2009

% of total	Family visa	Skilled visa	Total Migrants	Total population
NSW	37	25	31	32
VIC	30	33	32	24
WA	11	17	14	10
QLD	14	13	13	20
SA	5	10	8	7
ACT/NT/TAS	3	3	3	6

Source: DIAC, CSAM data; ABS 2011(a)

The general finding that migrants are more likely to rent than Australian born people, but that skilled migrants are far more likely to rent than family migrants, holds true for each of the States (albeit to different extents).

Chart 2.15 and Chart 2.16 show the tenure status of family and skilled migrants respectively, broken down by the State in which they lived at the time of the CSAM. Across the five main States, between 50% and 53% of family migrants, and between 73% and 82% of skilled migrants, lived in a rental property. To give a rough indication of whether housing affordability plays a role in the housing choices of migrants, the median house price (in September 2009 when the CSAM was undertaken) in the relevant capital city is also displayed on the charts.

NSW has the highest share of renters under both visa categories, and Sydney had the highest median house price of all the capitals. Similarly, in both visa categories Queensland had the highest share of home owners of the five main states, and Brisbane's median house price was among the lowest.

Overall, these charts suggest that although house prices may to some degree affect on the tenure choices of migrants, there is clearly a raft of other factors, be they economic, demographic or socio-economic, which must be taken into account. The charts also suggest that there is not a significant difference in the tenure choice of migrants in different States.

Chart 2.15: Tenure status by state, 2009 (family visa)
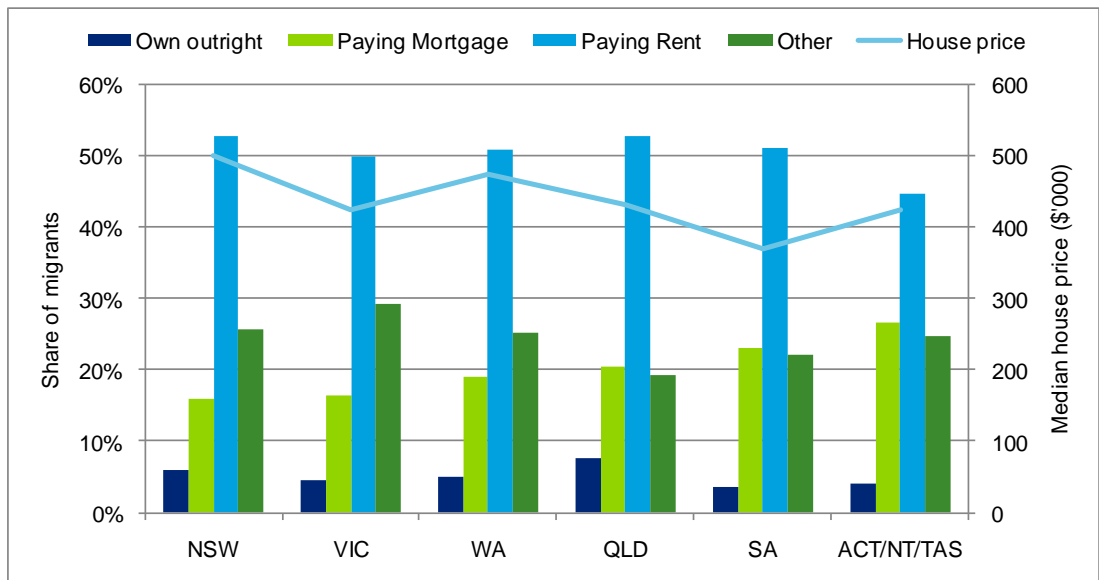
Chart 2.16: Tenure status by state, 2009 (skilled visa)
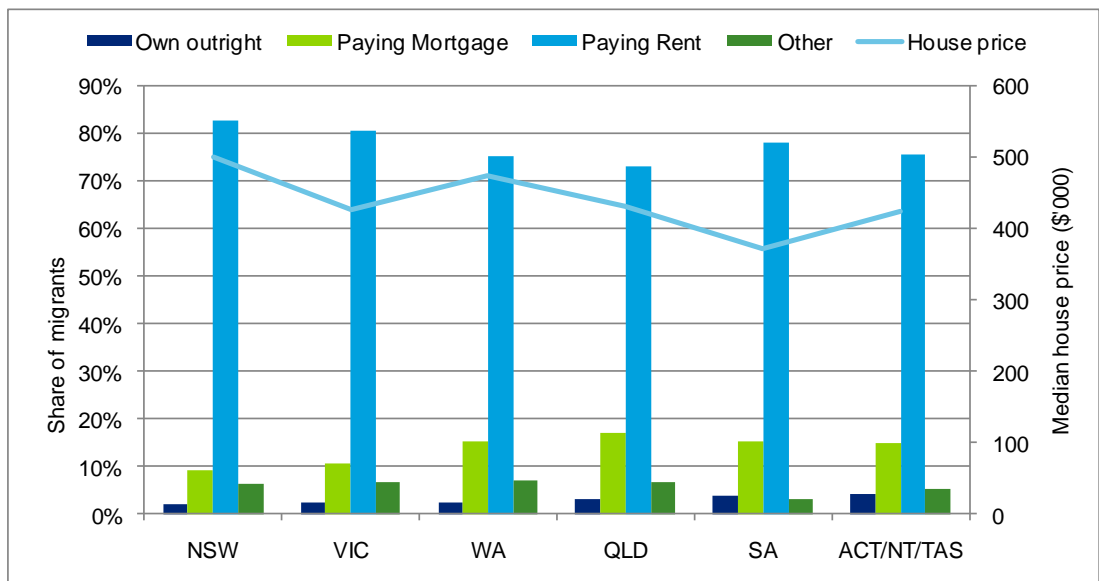
Source: ABS 2011(b); DIAC, CSAM data

3 Housing preferences of migrants

This chapter examines further the housing characteristics of migrants and seeks to determine the drivers behind migrants' housing choices, as well as the barriers faced by migrants in attempting to enter the rental/property market.

The data shown here is primarily drawn from the ABS Survey of Income and Housing, along with the DIAC CSAM data.

3.1 What influences migrants' housing decisions?

In order to understand what drives migrants' housing decisions we first need to examine what their motivations were for coming to Australia (Chart 3.1). Unsurprisingly, the vast majority of those on a family visa said that they came to Australia to join their partner. On the other hand, those on a skilled visa listed the possibility of a brighter future, or work opportunities, as the main motivation for their migrating to Australia.

Chart 3.1: Reasons for migrating to Australia, 2009, by visa category
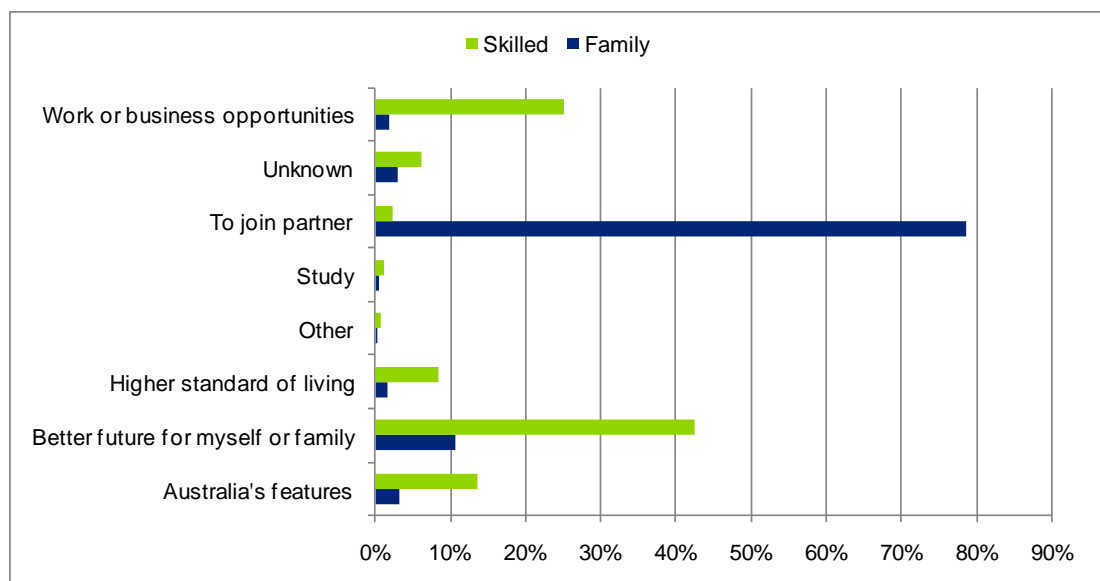
Source: DIAC, CSAM, 2009

Regardless of their motivation for moving to Australia, a majority of migrants live in rental accommodation. However, the difference in rental shares between Australian born people and migrants is far less pronounced for family migrants than it is for skilled migrants (80% of skilled migrants live in a rental property compared to 50% of family migrants).

Chart 3.2 demonstrates that the likelihood that a migrant will be renting rather than any other housing outcome is much lower for migrants who come to Australia to join their partner. This result is as one might expect. At the other end of the spectrum, those coming to Australia to study are more likely to rent rather than any other housing outcome.

Chart 3.2: Tenure status of migrants, 2009, by reason for migrating
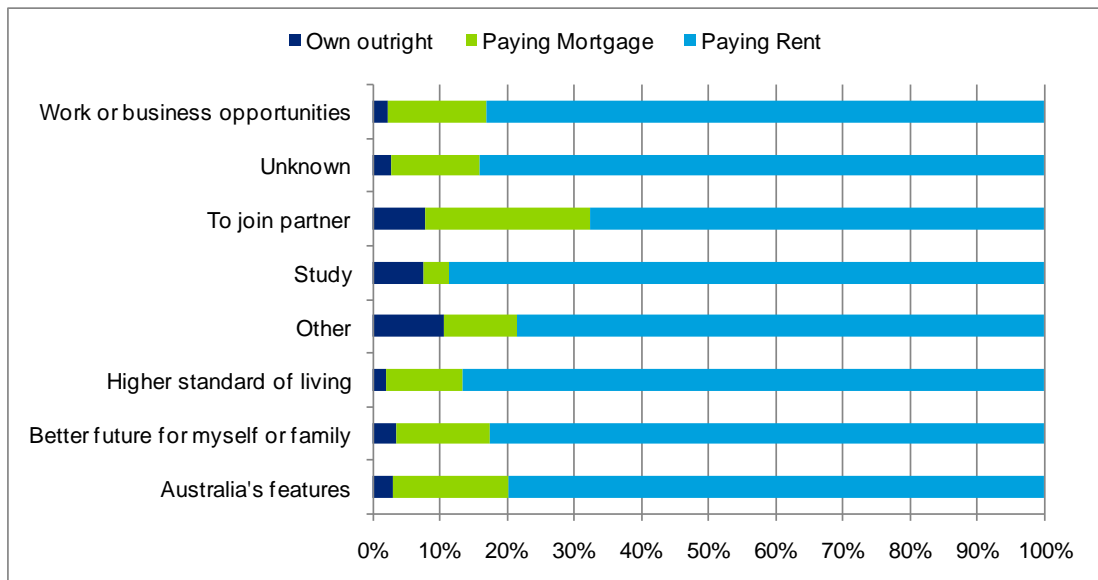
Source: DIAC, CSAM, 2009

What type of property do migrants live in?

There is also some difference in the type of dwelling that migrants live in. Not only that however, but the dwelling type of different ethnic groups appears to vary considerably.

Some 86% of Australian born people live in a separate house, 7% in a townhouse, and 8% live in a flat or an apartment (Chart 3.3). The dwelling profile of European migrants is very similar to the picture for Australian born. American and in particular Asian migrants are much more likely to live in a townhouse or a flat than Australian born (34% and 41% respectively). However, the most likely housing outcome of both these groups is also to live in a separate house (though this may not occur until some years after their arrival in Australia).

Part of the story is likely to be income related – European migrants tend to have higher incomes than Asian migrants so they are more able to afford a house, while many Asian migrants can only afford a townhouse or a flat. But if that were the sole (or indeed a major) explanator, then we would expect the rental share of Americans and New Zealanders to approach that of Europeans, given the income similarities of these countries. Clearly, therefore, a multitude of factors in addition to income account for migrants' housing decisions.

Chart 3.3: Dwelling type by region of origin, 2008
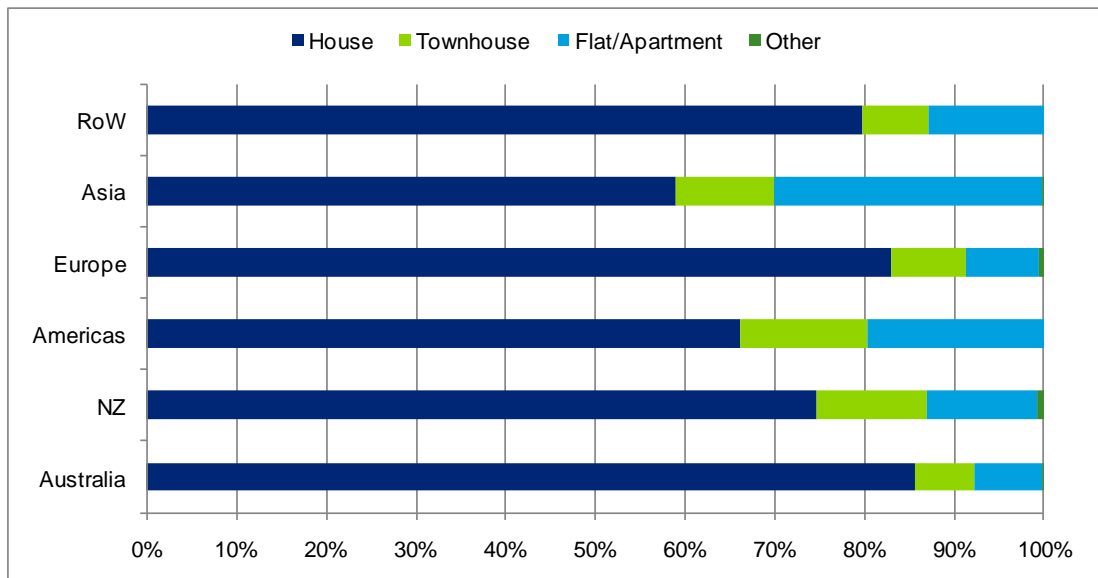
Source: ABS, Survey of Income and Housing, extracted from ABS databases using RADL
Note: "RoW" means rest of world.

3.2   Do migrants move about more than Australian born people?

It is also important to understand if migrants are more or less likely to move around than their Australian born counterparts. Chart 3.4 and Chart 3.5 show the propensity to move of migrants by their place of birth, depending on their current housing choice. Across all birth places renters are less satisfied with their tenure arrangements, particularly for those born in Australia and New Zealand. This is perhaps reflective of cultural differences – the 'great Australian dream' of buying one's own house may be a stronger characteristic within Australian and New Zealand renters than renters from other cultures.

Across both renters and home owners, people born in America (be it North, Central or South America) are the most satisfied with their current arrangements, while New Zealanders are the least satisfied.

Chart 3.4: Satisfaction of renters, 2008, by region of birth
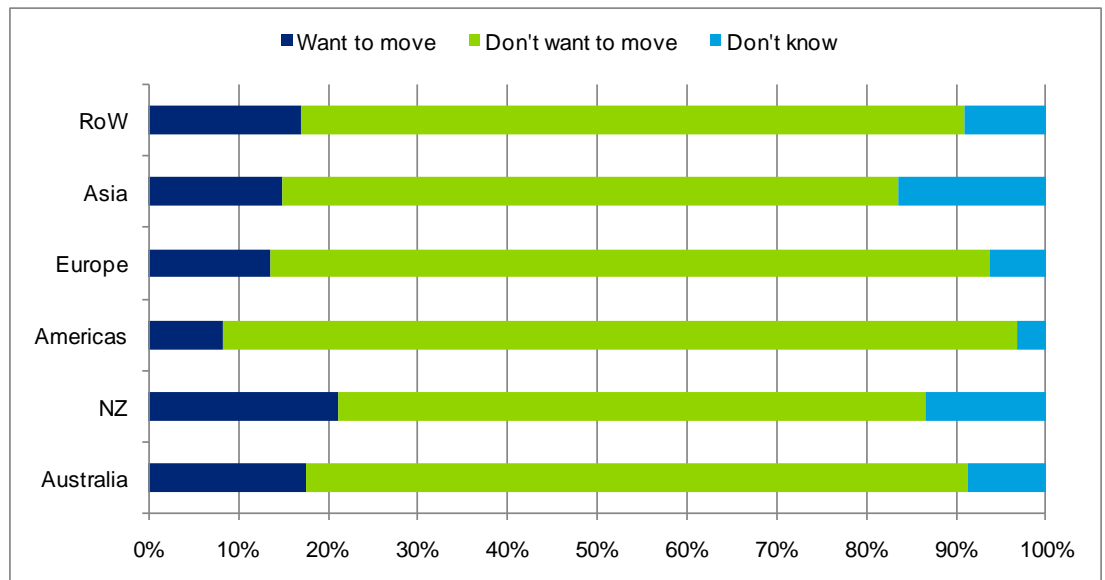
Source: ABS, Survey of Income and Housing, extracted from ABS databases using RADL

Chart 3.5: Satisfaction of home owners, 2008, by region of birth
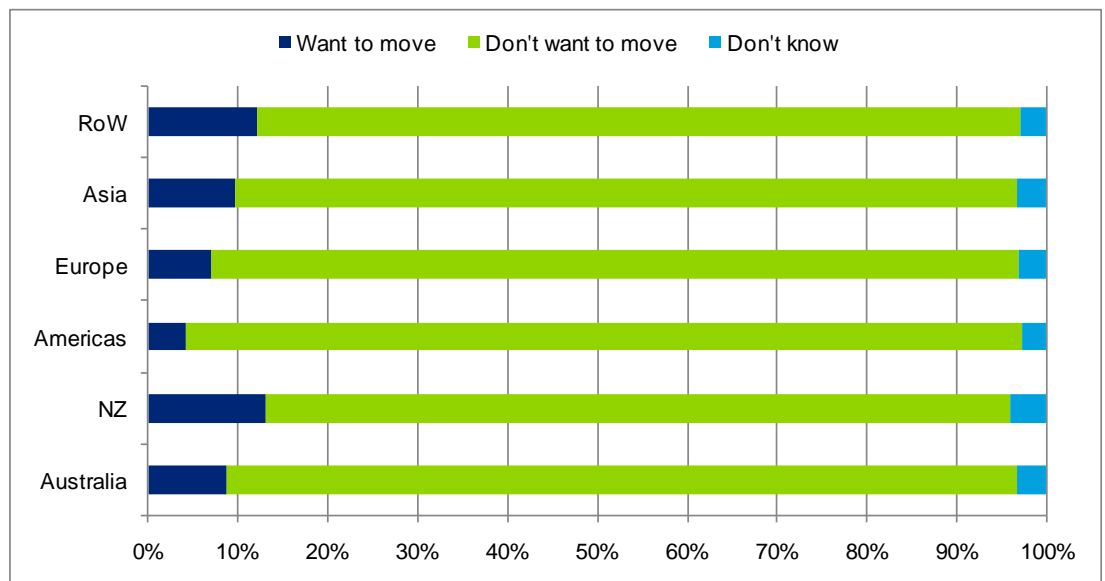
Source: ABS, Survey of Income and Housing, extracted from ABS databases using RADL

Barriers to moving house

Housing intentions should be evaluated against the likelihood that these intentions will eventuate, and with that in mind it is also important to understand the greatest barriers to moving house faced by migrants. Data from the recent CSAM provides some insight into the difficulties migrants either have faced or are currently facing in securing accommodation. The difficulties faced by migrants appear to be heavily related to the state of the housing market in Australia in general. That is, land releases for new housing are insufficient to keep up with a growing population, and this is creating a squeeze on available properties, thus putting upward pressure on prices.

In addition, a majority of both the skilled and family migrants who faced difficulties in securing accommodation cited the cost or unavailability of housing as their most significant difficulty. Perhaps unsurprisingly, given that skilled migrants are more skewed toward higher incomes than family migrants, the proportion of skilled migrants whose main difficulty was the cost of housing (32%) was lower than the proportion of family migrants (45%) who stated that cost of housing was the main difficulty.

Although cost is cited by skilled migrants as a significant difficulty in securing accommodation, it is only one among a range of factors creating difficulty. This is in contrast to family migrants where cost is reported as the most significant difficulty. This is likely to be because skilled migrants being more likely than family migrants to have higher incomes and find affording accommodation less difficult.

Chart 3.6: Difficulties reported by skilled migrants and family migrants in securing accommodation, 2009
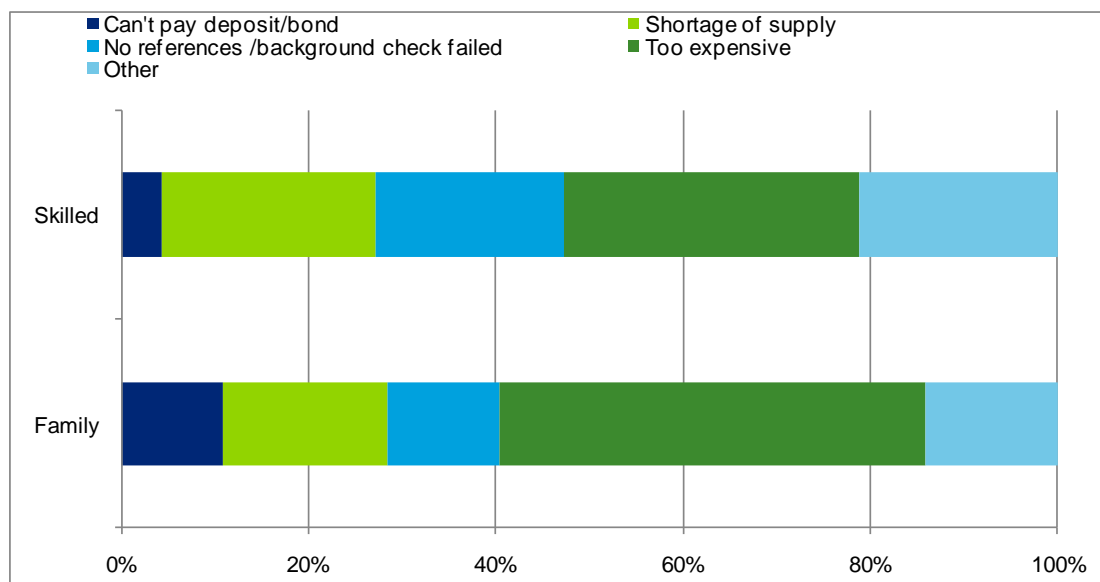
Source: DIAC, CSAM, 2009
Note: this chart represents only those migrants who indicated that they had some difficulty in securing housing – approximately a quarter of all migrants indicated they had experienced difficulty.

Again, one can assess whether a migrant's birth place makes a difference to the barriers they face in securing accommodation. Chart 3.7 shows the barriers that are faced by Australian born as well as migrants of varying origins. Consistent with the higher incomes of European than Asian migrants, Asian migrants were more likely than European migrants to note housing costs as their biggest barrier to moving.

The generally wealthier countries of origin, (Australia, New Zealand, Europe and the Americas) were more likely to note 'other' issues (which include such things as frailty, disability or ill health) as their main barrier to moving. In comparison, the poorer groups of Asia, and RoW (which is made up of Africa, the Middle East and Oceania), were more likely to note costs (both of housing and moving) rather than 'other' as their main barriers to moving.

Chart 3.7: Barriers to moving, 2008, by birth place
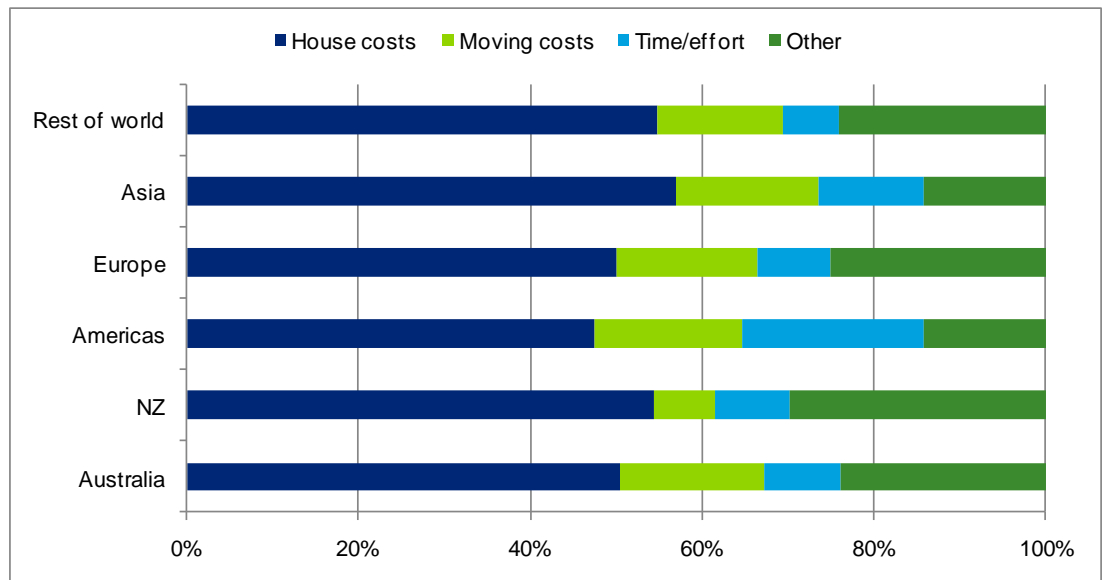
Source: ABS, Survey of Income and Housing, extracted from ABS databases using RADL

3.3   Labour force status and its effect on housing

The labour force status of a migrant has an impact on their housing choice. Chart 3.8 shows that migrants who are unemployed or not in the labour force (neither working nor looking for work) are far more likely to list 'other' as their tenure status (where 'other' is composed mainly of living with family or friends) than migrants who are employed.

Unemployed migrants are the least likely to live in their own home (whether paid off or paying off) than other migrants. Migrants who are not working and not looking for work are slightly more likely to own their homes than migrants who are still in the labour force (that is either employed or unemployed). On the surface this may seem slightly confusing, however it reflects different reasons for coming to Australia.

Chart 3.9 shows that a majority of those not in the labour force listed 'joining friends and family' as their primary reason for coming to Australia. Hence, a sizeable portion of those not in the labour force will in fact be retired age migrants (coming to Australia to live the rest of their lives with their families) who can easily afford their own home.

Chart 3.8: Housing tenure and labour force status of migrants, 2005

Legend: ■ Paid Off ■ Paying off ■ Renting ■ Other

Categories (top to bottom): Not working or looking, Unemployed, Employed

X-axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
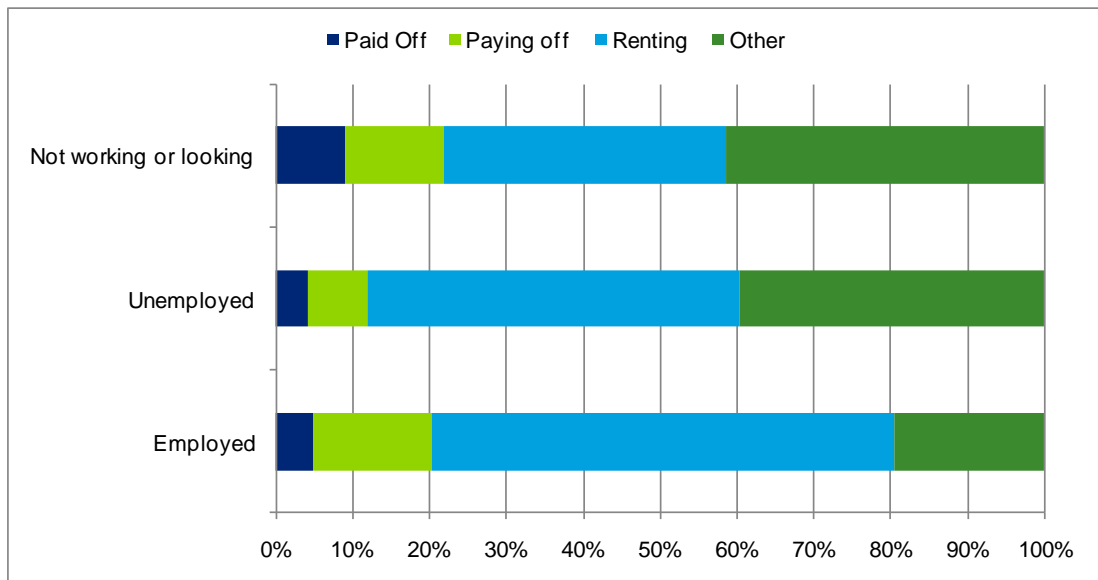
Source: DIAC, LSIA 3, 2005.

Chart 3.9: Labour force status of migrants and reason for migrating, 2005

Legend: ■ Better future for family ■ A higher standard of living ■ Australia's features - beaches, climate, lifestyle ■ To join family or relatives ■ Work or business opportunities ■ Other reason

Categories (top to bottom): Not in labour force, Unemployed, Employed

X-axis: 0% 20% 40% 60% 80% 100%
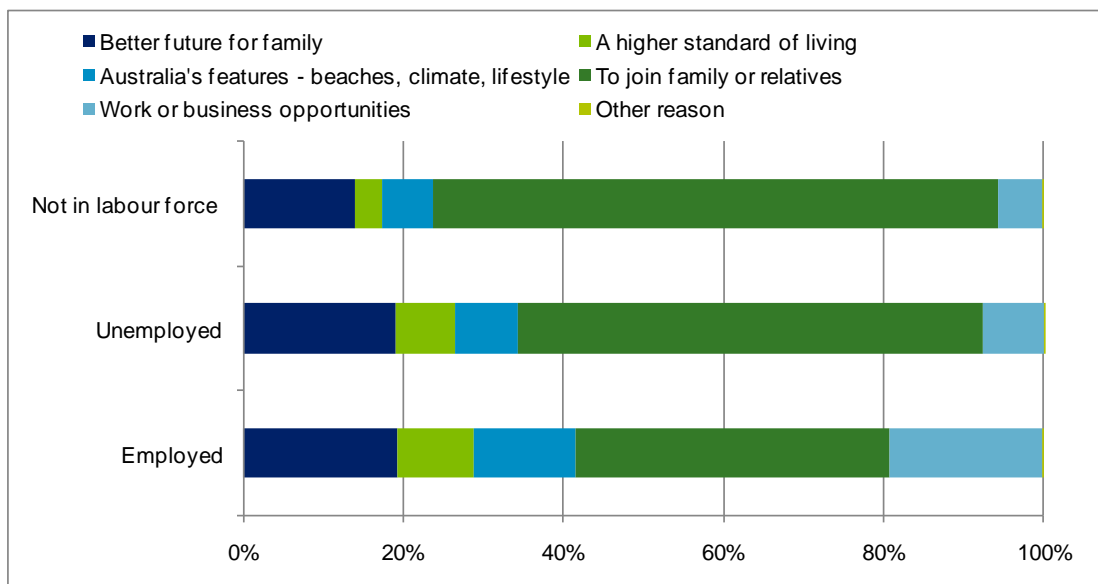
Source: DIAC, LSIA 3, 2005.

4 Housing characteristics by visa stream

This chapter focuses on housing characteristics for new migrants based on the visa stream they entered under.

This builds on some of the data presented in Chapter 2, with additional analysis drawn largely from three DIAC datasets:

- the Longitudinal Survey of Immigrants to Australia (LSIA);
- the Continuous Survey of Australian Migrants (CSAM); and
- the Survey of New Arrivals (SoNA).

4.1 Does visa status affect tenure type?

First we need to get a picture of the tenure status of recently arrived migrants. This is shown in Chart 4.1. Data from the two LSIAs and the CSAM are remarkably similar for the four key tenure categories. In all three surveys between 51% and 56% of recently arrived migrants lived in rental properties, and between 16% and 23% of people lived in their own home. Finally, in each of the three surveys, about 23% to 27% of migrants were 'dependents' – that is, they lived with family or friends.

Chart 4.1: Tenure status of recently arrived migrants, 2002, 2005 and 2009
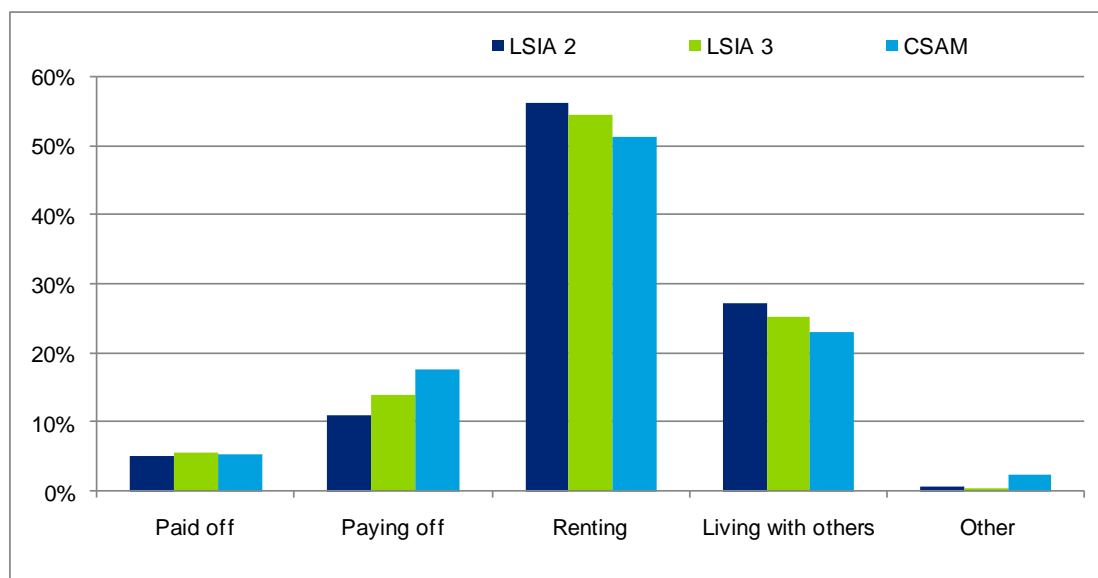
Source: DIAC, 2002 LSIA 2; 2005 LSIA 3; 2009, CSAM

Recently arrived migrants, regardless of visa stream, predominately live in rental properties (Chart 4.2). However, significant differences between the different visa categories are evident.

In all three surveys (the CSAM and the two LSIAs), a sizeable share of family migrants are initially dependent on others for housing (whether family or friends) – being 35% in LSIA 2 (the sum of 'living rent free' and 'paying board'), 35% in LSIA 3 and 23% in the CSAM. Skilled and humanitarian migrants, who generally do not have the same connections as family migrants, are less likely to be dependent on others for their initial housing arrangements – being 19% of skilled migrants in LSIA 2, 10% in LSIA 3 and 5% in CSAM.

The CSAM shares are probably lower because of a broader inclusion of 'dependence' in the LSIAs. Whereas the LSIAs allowed those paying board to classify themselves as 'dependent,' the CSAM's category specifically states living rent free. Therefore people who pay board were unable to list themselves in the CSAM's 'dependence' category.

Some 18% of recently arrived family migrants live in their own home in LSIA 2, and 23% from both LSIA 3 and the CSAM. In all three surveys approximately 15% of skilled migrants lived in their own home, and less than 1% of humanitarian migrants in LSIA 2. The vast majority (84%) of humanitarian migrants rented, virtually none of them lived in their own home (unsurprisingly), and about 14% either lived rent free or paid board. This was equally the case in the more recent SoNA.

Humanitarian and skilled migrants' lack of family or other connections in Australia are likely the main reason for the high rental shares among these visa categories. It may also be the case that skilled migrants prefer to rent, as it allows them the flexibility to move according to work opportunities, whereas family migrants prefer the relative stability of owning their own home.

Chart 4.2:Tenure status by visa types, 2002, 2005 and 2009
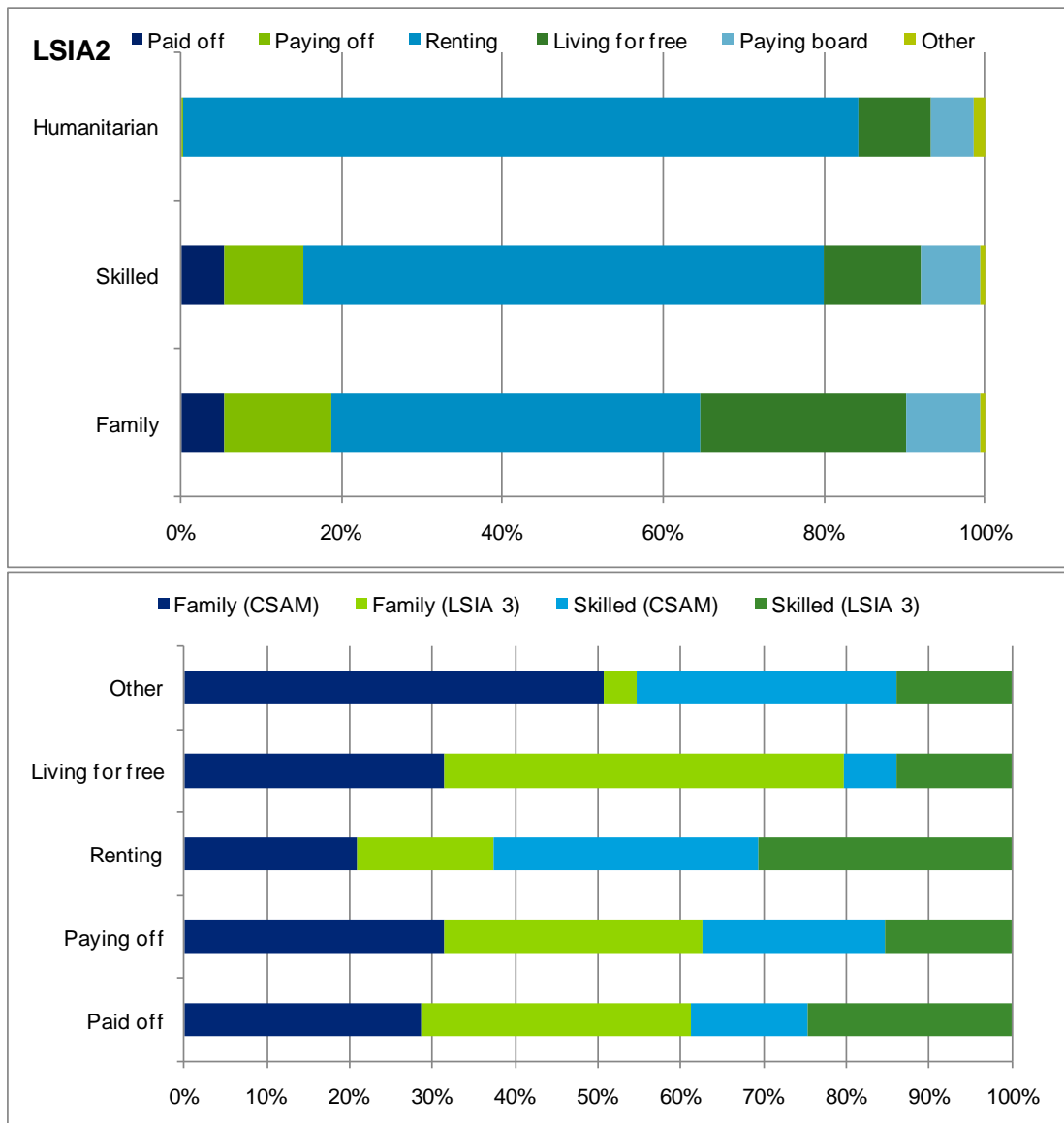
Source: DIAC LSIA 2, 2002; LSIA 3, 2005; CSAM, 2009

Data from the more recent SoNA are consistent with the finding from LSIA 2 that the vast majority of humanitarian migrants rent. Also consistent with other surveys is the fact that family migrants were more likely to be dependent than other visa streams. Interestingly however, and in contrast with the other surveys analysed, data from the SoNA suggest that skilled migrants are more likely to live in their own home than family migrants. However given the SoNA's emphasis on humanitarian migrants, this latter finding may be more a result of the SoNA data being unweighted than due to a real shift in the tenure habits of migrants.

Chart 4.3Tenure status by visa type, 2010
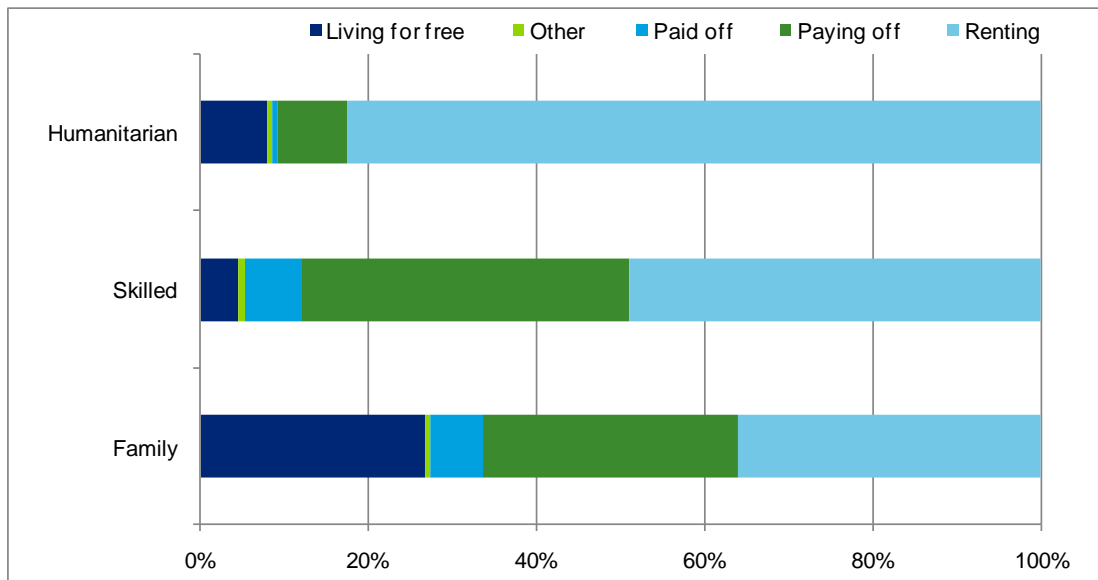
Source: DIAC, SoNA, 2010

How about 12 months later?

Twelve months on, a greater share of migrants across all visa categories owned their own home.

In LSIA 2 the skilled migrants are the quickest to make the move, with the proportion of skilled migrants owning their homes outright increasing from 5% to 8%, and the share paying off a home increasing from 10% to 24%. The corresponding rise in LSIA 3 was 5% to 12% for 'paid off' and 9% to 16% for 'paying off.'

In LSIA 3 the family migrants were the quickest to make the move, with the proportion of family migrants owning their homes outright increasing from 6% to 18%, and the share paying off a home increasing from 17% to 24%. The corresponding rise in LSIA 2 was 5% to 6% for 'paid off' and 13% to 24% for 'paid off.'

For humanitarian migrants in LSIA 2, while none of them lived in their own home initially, twelve months down the track 6% of them were paying off their own home.

All in all, considering that these were two different surveys conducted three years apart from one another, the results are remarkably similar. **We can therefore be reasonably confident that in any given year, approximately half of all the new migrants will initially rent, but after a year, at least some of those renters will have bought their own home.**

Chart 4.4: Tenure status by visa types, 2002 and 2005 (Wave 2, LSIA 2 and 3)
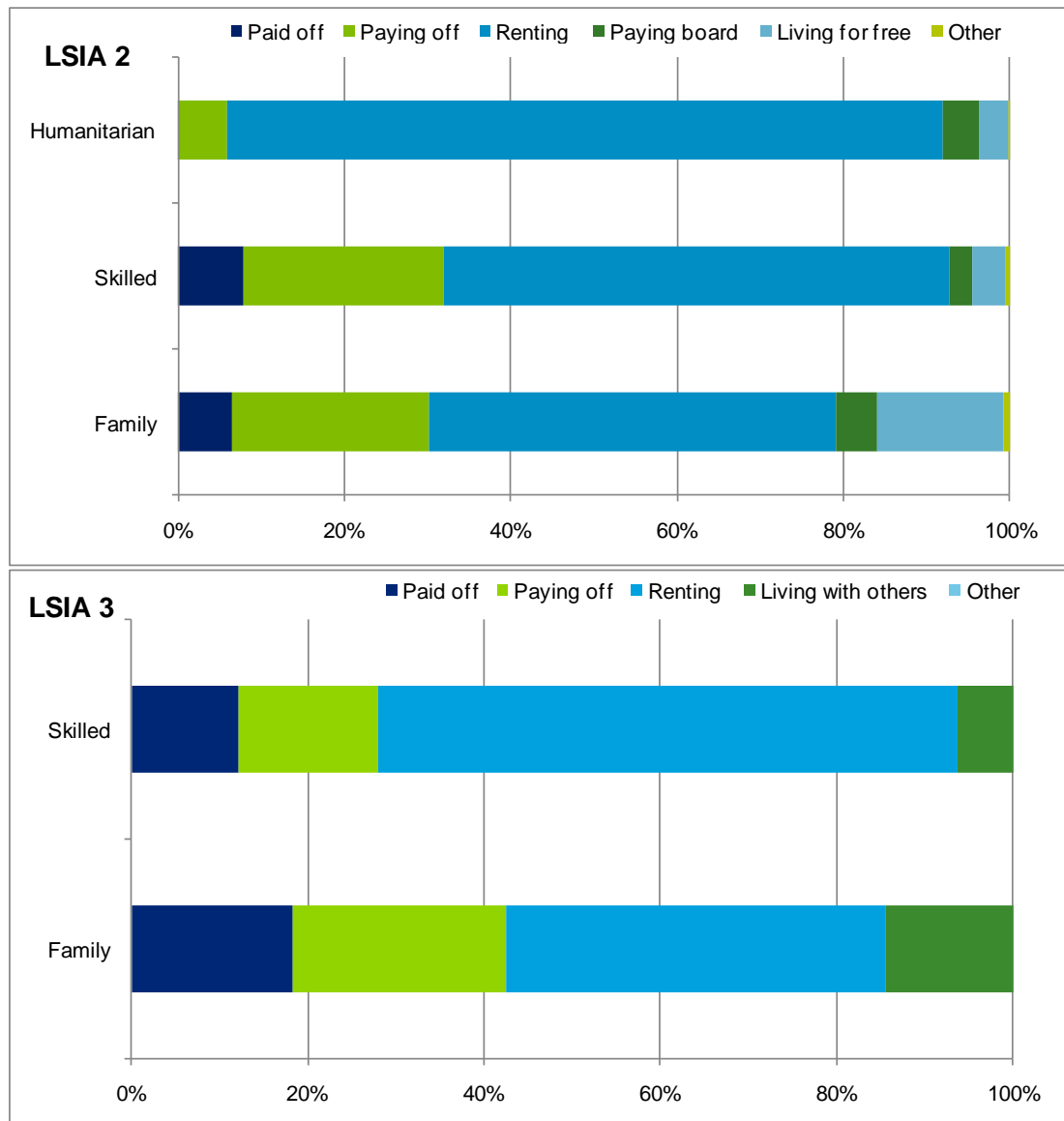
Source: DIAC, LSIA 2, 2002; LSIA 3, 2005

4.2 Does visa stream affect choice of dwelling type?

The discussion above highlighted that a migrant's visa stream has a strong bearing on their likelihood of renting rather than owning and vice versa. And a migrant's tenure status certainly has an effect on the type of dwelling they live in. Approximately 80% of migrants who own their own home live in a separate house and not a flat or townhouse. By contrast, approximately 70% of migrants who rent live in a flat or townhouse and not a separate house (Chart 4.5).

Across visa streams however, once tenure status is accounted for there is very little difference in the type of dwelling migrants live in. That is, most migrants who own or are paying off their own home live in houses (regardless of visa status), while only around 30% of migrants who rent do so, again regardless of visa status.

Chart 4.5: Tenure status, 2002, by visa and dwelling type
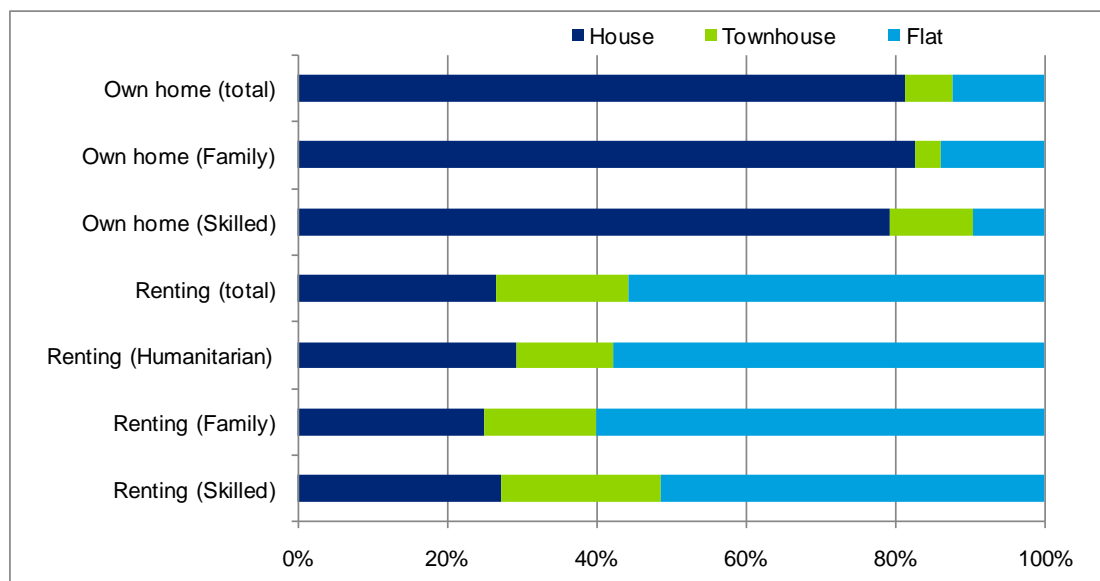
Source: DIAC, LSIA 2, 2002

4.3 'Inter-wave' analysis – a lot can change in 12 months

One of the key benefits of longitudinal surveys such as the LSIA is the ability to track a specific migrant 12 months down the track and find out what has changed and what has stayed the same. Therefore this section will specifically deal with the changes between waves.

Before discussing the results, it is worth mentioning that a change in the question structure between the second and third LSIA has likely affected the results. In LSIA 2, respondents in the second wave were asked "Have you lived in any different dwellings since the last interview?", while in LSIA 3 second wave respondents were asked "Are you still living in <location of first interview>?"

Though the difference may seem subtle, for a mobile section of the community such as recently arrived migrants, it may be significant. Some migrants, particularly those who arrived on a skilled visa, may have lived in multiple places in one year. Consider the example of a recently arrived doctor who participated in both interviews from the same property (say, their own house), but in the inter-wave period worked for 6 months in a regional community. That doctor would be considered as having moved in LSIA 2, but not moved in LSIA 3.

Migrants are highly mobile...

Table 4.1 shows just how mobile recently arrived migrants are. Some 40% of all migrants interviewed in the second wave of LSIA 2 indicated that they had moved since the first wave (36% of family visa holders, 44% of skilled visa holders and 45% of humanitarian visa holders). About 11% of these 'movers' had moved more than once.

Table 4.1: The moving habits of migrants, LSIA2

Number of moves	Family	Skilled	Migrants	Total	Share of movers
1	5,344	5,101	934	11,380	87%
2	691	654	144	1,489	11%
3	51	69	4	125	1%
4	39	14	0	53	0%
Total movers	6,125	5,838	1,082	13,046	
Total migrants	16,860	13,144	2,411	32,415	

Source: DIAC, LSIA 2, 2002

Table 4.2: The moving habits of migrants, by tenure

% of migrants in each tenure category	
Paid off	7%
Paying off	6%
Renting	46%
Living rent free	46%
Paying board	58%

Source: DIAC, LSIA 2, 2002

Unsurprisingly, almost all of the movers in LSIA 2 came from a home other than their own. Some 64% of those migrants who moved came from a rental property, 21% from a free living arrangement, 12% from paying board, and the remaining 3% from their own home or another arrangement.

Chart 4.6: Previous tenure status and dwelling type of movers, LSIA 2

Other
1%

Flat
39%

House
46%

Townhouse
14%

Other/Own home
3%

Paying
board
12%

Living for free
21%
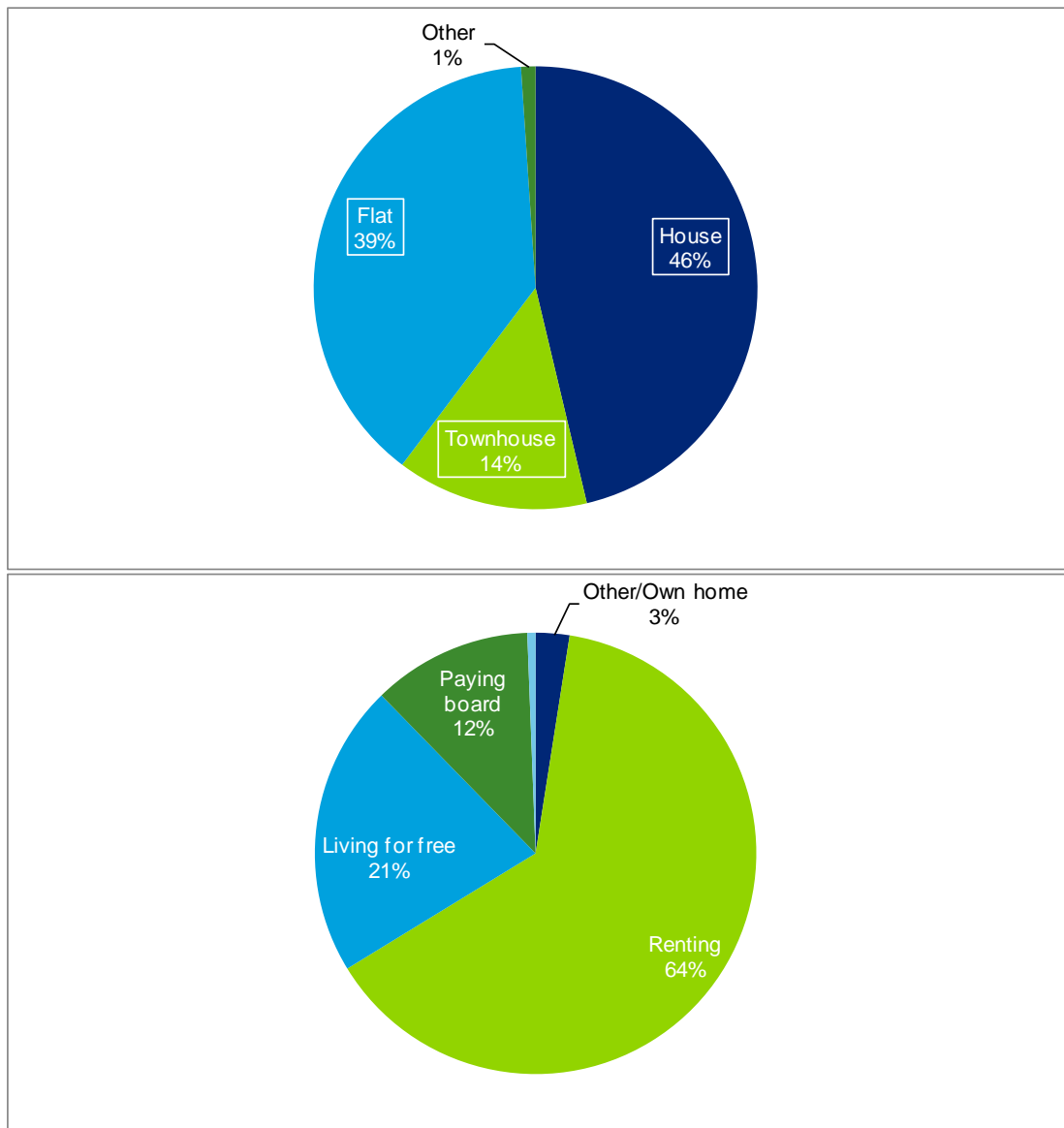
Renting
64%

Source: DIAC, LSIA 2, 2002

Data from LSIA 3 tells much the same story. Very few movers came from their own home, a reasonable proportion (23%) came from living with others and 72% came from renting.

Over time the share of movers who are renting has increased (from 64% to 72%). However, between the two LSIAs the share of renters who moved declined. In the second wave of LSIA 2, some 46% of renters indicated that they had moved during the inter-wave period, while the corresponding figure in LSIA 3 was 32%. (Keep in mind, however, that the difference in question structure between the two surveys that was noted above may in fact be the cause of these slightly different results.)

Chart 4.7: Previous tenure status of movers, LSIA 3

Paid off 2% · Paying off 4% · Living with sponsor / relatives 22% · Renting 72%
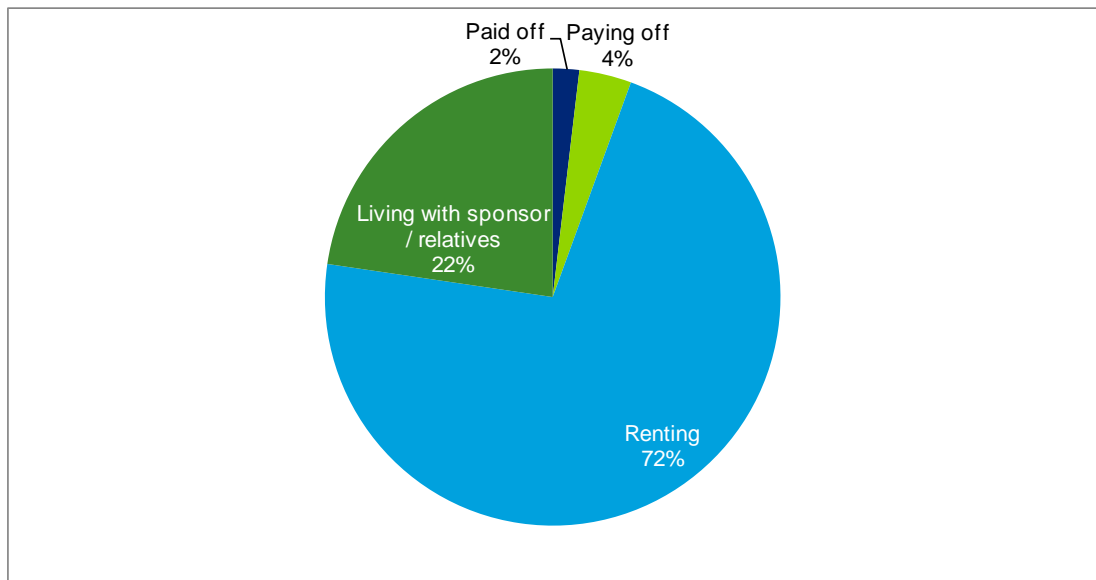
Source: DIAC, LSIA 3, 2005

...and their initial tenure status is often not their last.

As shown earlier in this report, the proportion of migrants just arrived who rent is fairly high, but this share rapidly declines over time. That general finding from the 2006 Census is borne out by LSIA data. Chart 4.8 shows the 'new' tenure status of movers (i.e. the wave 2 status) broken up by their 'old' tenure status (i.e. the wave 1 status).

The vast majority of those that paid board or lived for free initially ended up changing their tenure status, either to a rental property or to their own home. For both the LSIA 2 and LSIA 3, of those who rented initially, 34% had moved to their own home by the time of the second wave interview (Chart 4.8).

This tells us two things. First, although many migrants when they first arrive live for free or pay board with an existing Australian connection (be it friends or family) and thus do not immediately add to the demand for housing, this is only temporary. In a year's time, many of those migrants are then looking for their own house, either to own or rent.

Second, and re-enforcing the finding earlier on that renters are generally not as satisfied with their tenure status as homeowners, a little over a third of all renters will have moved into their own home after a year's time.

These propensities to change tenure status can be used to give us an idea of how many houses might be demanded by migrants based on their time since arrival into the future. Forecasts using this information are presented in Chapter 5.

Chart 4.8: Previous tenure status vs. new tenure status, 2002 and 2005
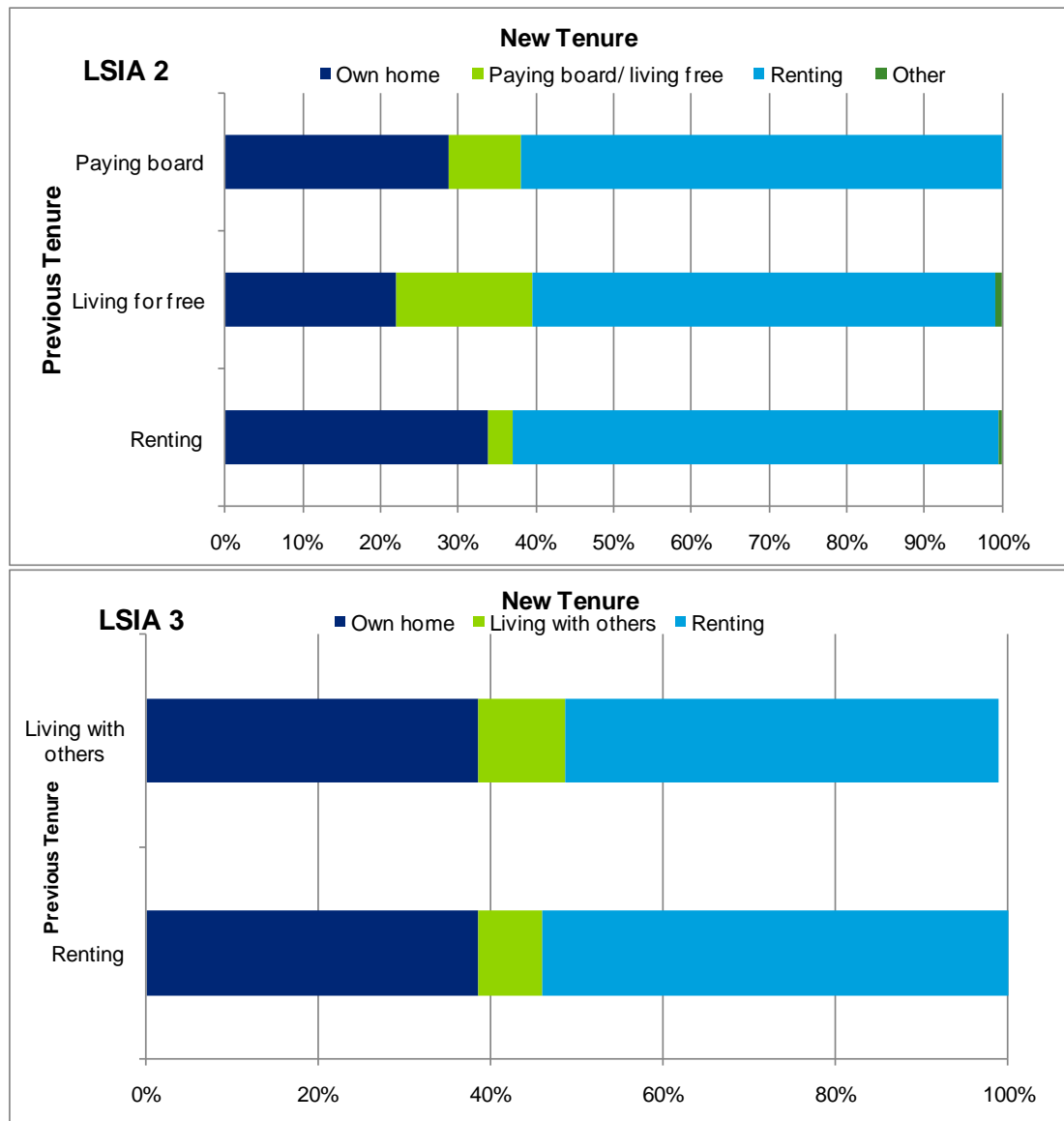
Source: Deloitte Access Economics estimates from DIAC, LSIA 2, 2002; LSIA 3, 2005.
Notes: 'Own home' is not included on the vertical axis because very few migrants who lived in their own home in the first weave had moved by the second wave. Technically there should be an 'other' category' on both axes but this accounts for less than 1% of the total.

What sort of property do migrants move into?

Discussing a migrant's tenure can only tell us so much. What is potentially more relevant for policy makers is the type of dwelling migrants inhabit, since it is dwellings that need to be built, regardless of whether they are rented, owned or lived in for free.

From Chart 4.5 above, we know that approximately 80% of recently arrived migrant homeowners live in a house, with the remainder being split between townhouses and flats. Approximately 56% of recently arrived migrant renters live in a flat, with 18% in a townhouse and 27% in a house.

Chart 4.9 below shows the relative propensity of renters and free livers/boarders (which we will classify 'dependents') to move into houses, townhouses and flats. Regardless of visa

type, approximately 40% of renters who moved transferred to a flat and another 40% to a house – the remaining 20% moved to a townhouse. Of those who lived for free or paid board, approximately 50% of family and skilled migrants moved into a house, compared with only 20% of humanitarian migrants.

Chart 4.10 shows the different tenure shares after accounting for movers. It is the equivalent of Chart 4.5, except it is focused on the second wave not the first wave. Because of the approximately equal shares moving into houses and flats in an aggregate sense, the relative distribution of type of housing does not change significantly between wave one and wave two of LSIA 2. This is significant for forecasting purposes, since it means we can be fairly confident that the relative propensity of each 'type' of migrant to live in different dwellings will be more or less constant.

Chart 4.9: "Old" tenure and "new" dwelling types by visa stream, LSIA 2
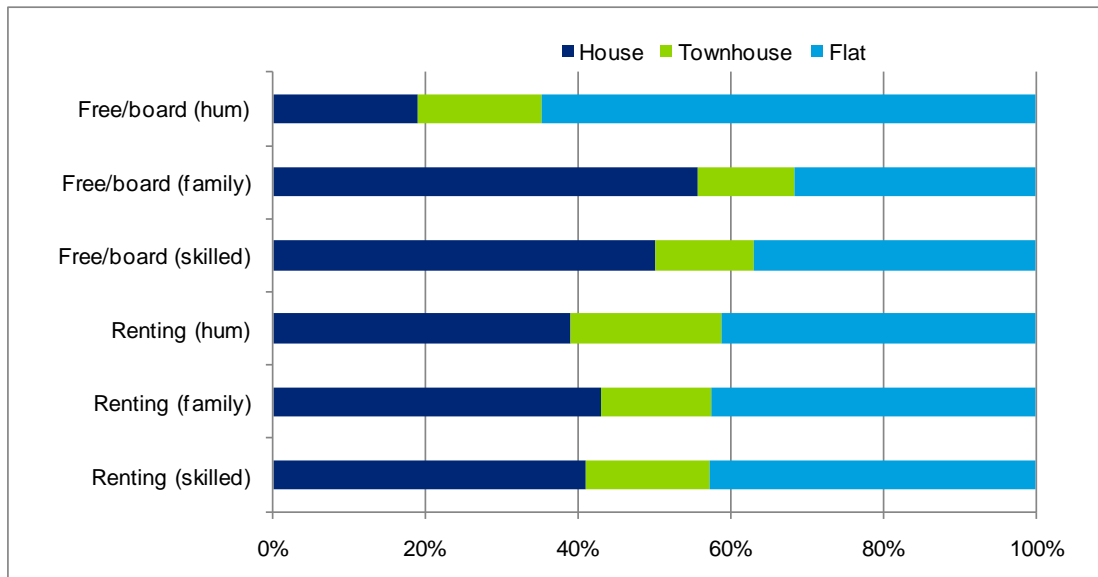
Source: DIAC, LSIA 2, 2002

Chart 4.10: "New" tenure and "new" dwelling types by visa stream, LSIA 2
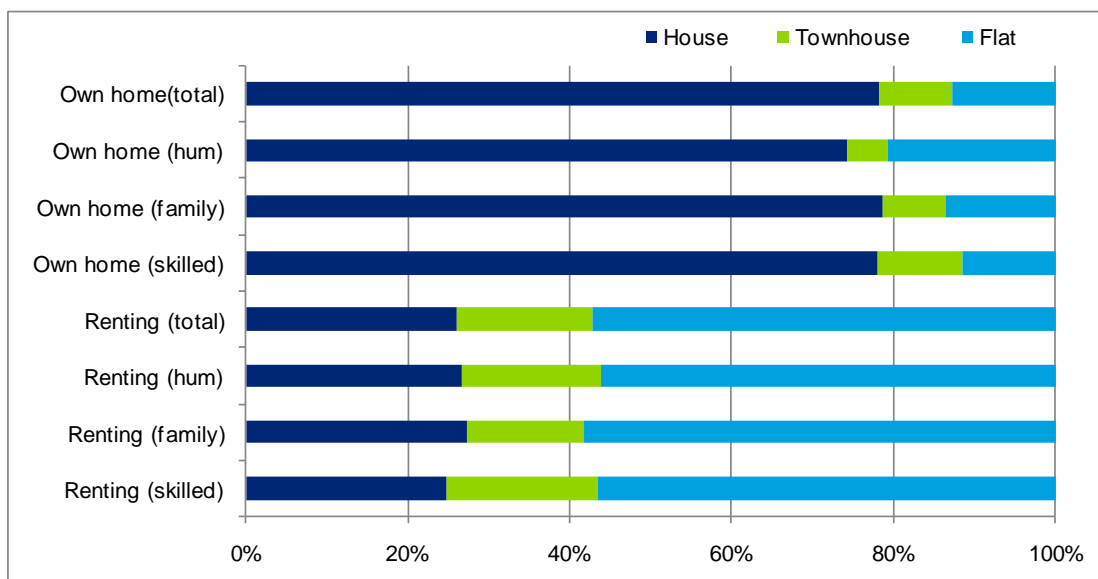
Source: DIAC, LSIA 2, 2002

Table 4.3 shows the number of family, skilled and humanitarian migrants in each major dwelling category for LSIA 2, and Table 4.4 shows the corresponding figures for LSIA 3. Note that the total number of migrants does not change between waves. This is because in the LSIA 2, different weights were created in the second wave to ensure that the population remained the same regardless of smaller sample size. This was not done for LSIA 3. To allow comparison between waves we have re-weighted the wave 2 data based on each respondent's share of the total population in wave 1 for their visa type.[1]

Unfortunately, the LSIA 3 did not ask respondents which type of dwelling they inhabit. Dwelling data for LSIA 3 are instead estimated by using the relative propensities of migrants in LSIA 2, broken up by region of birth and visa stream, to live in different types of dwelling. The results are presented in Table 4.4. Although clearly not a perfect measure, given the broad similarities between the two surveys in terms of visa streams and tenure status, we consider this will give us a reasonable indication of the dwelling types inhabited by migrants from LSIA 3.

By mixing and matching some key components we are able to derive an estimate of the number of self sufficient migrants in each visa category for both waves. Self sufficient migrants are considered to be those whose tenure was neither 'living rent free' nor 'paying board' – they are the migrants who are not living in anyone else's home and thus directly add to the demand for housing. Thus, it is these migrants that are of key interest to the forecasts presented in the following chapter.

Table 4.3: Housing allocations of migrants, LSIA 2

WAVE 1	Family	Skilled	Humanitarian	Total
House	4563	3906	628	9097
Townhouse	1258	2027	260	3544
Flat	5066	4567	1169	10802
Other	89	80	10	179
Self sufficient	**10975**	**10580**	**2067**	**23622**
'Dependents'	5885	2564	344	8793
Total Migrants	16860	13144	2411	32415
WAVE 2	**Family**	**Skilled**	**Humanitarian**	**Total**
House	6318	5251	662	12231
Townhouse	1586	1927	363	3876
Flat	5510	5035	1191	11736
Other	51	38	3	92
Self sufficient	**13466**	**13144**	**2219**	**27936**
'Dependents'	3394	893	192	4479
Total Migrants	16860	13144	2411	32415

Source: Deloitte Access Economics estimates based on DIAC, LSIA 2, 2002

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[1] For each respondent in wave 2, the new weight is: $w'_2 = \frac{w_2}{\sum w_{2\,f/s}} * \sum w_{1\,f/s}$, where w_2 is an individual's weight in wave 2, w_1 is the individual's weight in wave 1, and f/s denotes whether the individual is a family or skilled migrant. Because of the smaller sample size in wave 2, $\sum w_{1\,f/s} > \sum w_{2\,f/s}$., but for each individual $w_{1f/s} = w_{2f/s}$. Following the transformation, $\sum w'_2 = \sum w_1$.

Table 4.4: Housing allocations of migrants, LSIA 3

WAVE 1	Family	Skilled	Total
House	6,532	3,656	10,188
Townhouse	1,563	1,944	3,507
Flat	6,170	5,091	11,262
Other	92	101	194
Self sufficient	14,357	10,793	25,150
'Dependents'	5,885	2,564	8,449
Total Migrants	20,242	13,357	33,599
WAVE 2	**Family**	**Skilled**	**Total**
House	9,221	5,073	14,294
Townhouse	1,902	2,003	3,905
Flat	6,125	5,404	11,529
Other	54	42	96
Self sufficient	17,302	12,523	29,824
'Dependents'	2,940	834	3,774
Total Migrants	20,242	13,356	33,598

Source: Deloitte Access Economics estimates based on DIAC, LSIA 3, 2005

5 Comparisons and forecasts

5.1 Comparison with Australian born population

Bourassa (1994) found that after controlling for a number of key demographic variables, for most countries of birth there was not a significant difference in the housing preferences of migrants and those born in Australia. This study was undertaken using data from the 1991 Housing and Location Choice Survey.

Bourassa helpfully defined two different effects on a migrant's choice of housing: endowment effects and residual effects. Endowment effects represent the demographic and sociological factors of an individual which might be expected to affect their housing preferences. They include such variables as age and income. Residual effects are defined as the drivers of any remaining difference between the housing choices of Australian born people and migrants once the endowment effects have been controlled for.

The analysis for this report has reviewed a range of contemporary data sources. In making comparisons of housing preferences between migrants and people born in Australia we have focused our analysis on the two most obvious endowment variables: age and income. One might expect age and income to be strong drivers of tenure choice. If this were the case, then we would expect that after controlling for these two factors (i.e. comparing migrants and Australian born people in the same income category and the same age group) the tenure characteristics should be similar regardless of where a person was born.

Indeed, Bourassa's main conclusion is that "with respects to the great Australian dream of homeownership, immigrant groups are at least as and sometimes more 'Australian' than the Australian-born population."

Data from the 2006 Census suggest otherwise. The charts below show that for three key age groups (25-29, 35-39 and 45-49), in all income categories Australians were more likely to list either 'paid off' or 'paying off' as their tenure status than migrants.

We are not suggesting that income and age have no effect on the rate of home ownership. Clearly they have some effect. For all three age cohorts, beyond the lowest income category, in which it is likely that a sizeable proportion of people would technically be classified 'dependents' (living in their parents' home perhaps), the ownership rate of Australians steadily increases as we move to higher income categories. Home ownership rates also increase from the 25-29 to the 25-39 and 45-49 age cohorts (observed by moving down the charts).

Chart 5.1: 'Own home' share, 2006, by income and country of birth (age = 25-29)
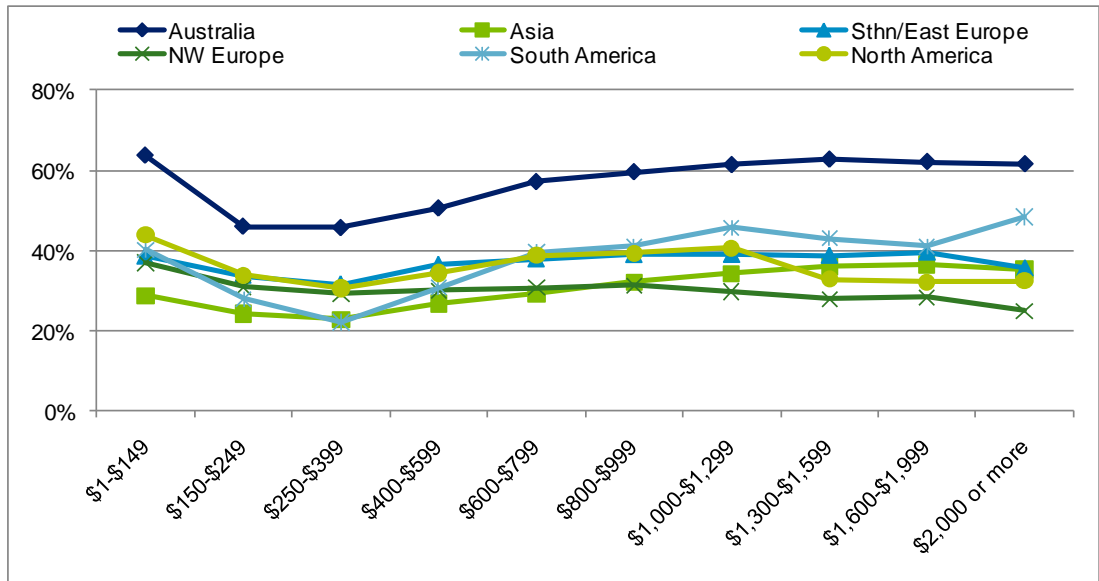
Source: ABS Census, 2006

Chart 5.2: 'Own home' share, 2006, by income and country of birth (age = 35-39)
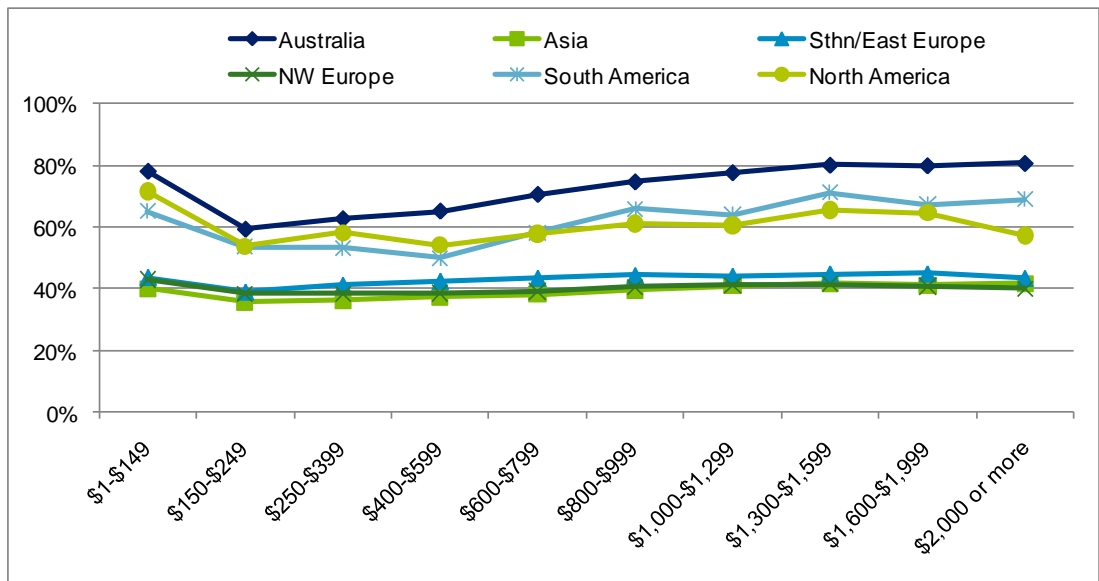
Source: ABS Census, 2006

Chart 5.3: 'Own home' share, 2006, by income and country of birth (age = 45-49)
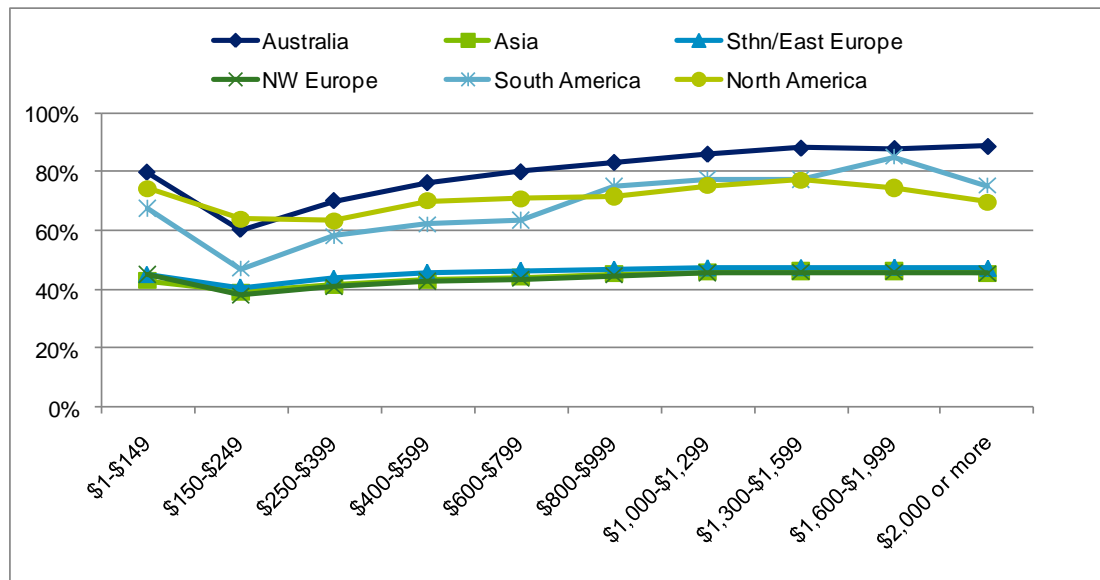
Source: ABS Census, 2006

The data we have analysed suggest, regardless of income and age, a greater share of the Australian born population lives in their own home than migrants. The data suggest that other exogenous factors, be they cultural, demographic or socioeconomic play a role in determining a person's tenure status.

The Census data which is applied by McDonald and Temple in their discussion of housing propensity are Australian averages, but the data in this study show that new migrants have a somewhat different profile. It would seem appropriate therefore that when attempting to forecast housing choices of migrants, a wide range of cultural, demographic and socio-economic indicators be considered.

5.2 Projected housing demand, 2010-11 to 2019-20

This section presents illustrative forecasts of the likely demand for housing by permanent migrants in both the skilled and family visa streams going forward. The estimates have been developed by using DIAC arrivals data to 2010-11, along with the announced planned permanent migrant intake for 2011-12 (including an additional 16,000 skilled migrants). Beyond 2011-12, the number of arrivals is held constant at the planned level for 2011-12.

Data from the LSIA 2 and 3 have then been used to derive an estimate of the 'new migrants' component of housing demand.

The formula

As discussed in the previous chapter, we define two key types of migrant: self sufficient migrants, who come to Australia and immediately seek their own accommodation (be it rented or owned), and dependent migrants, who live with others upon arrival in Australia (be they family or friends) and thus do not immediately contribute to the demand for housing.

In any one year the additional housing demand created by 'new migrants' is made up of self sufficient migrants in the current period and dependent migrants from earlier periods who have moved into self sufficient accommodation through time.

The estimated new migrant component of housing demand is given by the following formula:

$$M'_t = \theta_t.M_t + M_{t-1}.(\alpha_{t-1}.\beta_{t-1}.\gamma_{t-1})\text{.......} (1)$$

Where M'_t = the estimated new migrant component of housing demand in period t;

M_t = migrant arrivals in period t;

θ_t = the share of self sufficient migrants in period t ('original self sufficients');

α_t = the share of dependent migrants in period t $(1 - \theta_t)$;

β_t = the share of dependent migrants in period t who will move before the next period; and

γ = the share of dependent migrants in period t who will move **and** become self sufficient before the next period ('new self sufficients').

Equation (1) gives us migrants who have either entered the housing market immediately upon arrival in Australia as well as the number of dependent migrants who became self sufficient within a year. But some dependent migrants will take more than a year to become self sufficient. We therefore define a new variable to represent the 'left over' dependent migrants from the previous year who have not become self sufficient yet.

$$M^L_{t-1} = (\alpha_{t-1}.M_{t-1}) - [M_{t-1}.(\alpha_{t-1}.\beta_{t-1}.\gamma_{t-1})] \text{.......} (2)$$

In plain English, the number of 'left over' migrants from the previous period equals the number of dependent migrants from the previous period less the number of dependent migrants from the previous period who became self sufficient before the current period.

Using a similar process we have allocated a dwelling type to both visa categories of migrants. This involved three key steps:

- Derive initial housing allocations for the self sufficient migrants according to estimated dwelling shares from LSIA 2.
- Assign dwelling categories to dependent migrants from previous periods who have moved to self sufficient accommodation. This uses LSIA propensities for dependents who move within a year, and Census shares for all others (see below).
- Add the numbers together from the above two steps to determine the total number of migrants adding to demand for housing in any one year.

The propensity shares

The key propensities used to arrive at our final estimates are summarised below based on LSIA and Census data.

The share of dependent (α) versus self sufficient (θ) migrants, the share of dependent migrants who move within a year (β), the share of dependent movers who move to self

sufficient accommodation (γ), and the estimated housing choices both of self sufficient migrants and 'new self sufficient' migrants are taken from LSIA data.

It also be noted that the share of dependents that move within a year was lower in the LSIA 3 than the LSIA 2 (see the note at the bottom of the table). We have used the more recent shares (LSIA 3) for our forecasts – however it is likely that the 'true' share may lie somewhere in the middle of the LSIA 2 and LSIA 3 shares.

To estimate the moving propensities of 'left over migrants' (i.e. the dependents who do not move within a year), we have used Census data (presented earlier in Chart 2.3). Specifically, the proportional reduction in the "Other" tenure category from that Chart as we move along the x-axis is used as a proxy for the proportion of 'left over migrants' who will move in any given year – we assume that all of these movers will gain self sufficiency.

So, for example, taking dependent family migrants, 17.1% (19% *x* 90%) will move and become self sufficient within a year. A further 17% will move within 2 years of arrival in Australia, 11% will move within 3 years of arrival, 6% within 4 years and 4% within 5 years. Beyond five years it is assumed that no more dependents move. It should be noted that the 'moving shares' below are based on the initial stock of dependent migrants. Hence, after three years, 45.1% of migrants who were initially dependent on others will have gained self sufficiency (0.19*0.9+0.17+0.11).

As discussed below, students were not included in any of the surveys; however, we have obtained a reasonable proxy for students based on a subset of skilled migrants in the LSIA 2 datasets. It is assumed that all students are independent upon arrival in Australia. Unsurprisingly, students (or our proxy for students) display a higher tendency than other skilled migrants to live in flats or townhouses rather than separate houses.

Table 5.1: Estimated propensities used to develop forecasts

Estimated shares				
Self sufficient share (θ)		*Moving shares of 'left over' dependents*		
Family*	64%	Years in Aust.	Share	
Skilled	89%	2	17%	
Humanitarian	84%	3	11%	
Moving dependents (β)**		4	6%	
Family	19%	5	4%	
Skilled	37%			
Humanitarian	16%			
Tenure changing (γ)				
Family	90%			
Skilled	88%			
Humanitarian	93%			

Estimated housing choices	**House**	**Townhouse**	**Flat**	**Other**
Self sufficient				
Family	42%	11%	46%	1%
Skilled	37%	19%	43%	1%
Humanitarian	30%	13%	57%	0%
Students	28%	18%	53%	1%
'New self sufficient'				
Family	51%	14%	34%	1%
Skilled	48%	11%	41%	0%
Humanitarian	13%	16%	69%	2%

Source: Deloitte Access Economics estimates from DIAC (LSIA and CSAM) and ABS (Census 2006) data.

 *The self sufficient share in CSAM was higher (75%). However this is because the CSAM did not include 'paying board' as a tenure category, which in the LSIAs was quite significant (and which is classified as dependent for our purposes). Therefore we have used LSIA 3 shares for our forecasts.

**The estimated share of 'moving dependents' here is taken from LSIA 3. The share in LSIA 2 was much higher (43% family and 62% skilled).

The results

A key assumption of the forecasts is that **the estimated propensity shares presented in Table 5.1 above will remain constant into the future.** Given the broad similarities between the different data sets analysed, this is considered a reasonable assumption. However the accuracy of this assumption is necessarily affected by the accuracy of our estimated shares.

Reflecting the different purposes for which migrants in different visa streams come to Australia, as well as the different degrees of connectivity already shared with the Australian community, skilled and family migrants display different housing tendencies.

In any one year, we estimate that about 64% of the number of family arrivals will directly add to the demand for housing in that year. The remaining 36% will initially be dependent on others for housing. At some point over the next five years about 56% of these dependents will become self sufficient and enter the property market. In other words, a

large share (44%) of family migrants that are initially dependent will continue to be so – for example they may be parents or grandparents who have moved to Australia to live with their loved ones.

Unsurprisingly perhaps, about 89% of skilled migrants directly add to housing demand in their first year in Australia. Of the remaining 11% that are dependents, three quarters will have moved out of dependency and have entered the property market within five years.

Chart 5.4 takes 2010-11 migrant arrivals under each stream[2] and applies the 'moving shares' presented above to show the extent to which initially dependent migrants under each visa stream eventually gain self sufficiency. It shows a move from dependency to self sufficiency across the three visa streams.

Upon arrival in Australia, some 11% of skilled migrants (or 12,900 people) are dependent on others. Family migrants are the most likely to be dependent, with 36% (or 19,600 people) reliant on others, while 16% of humanitarian migrants (or 1,800 people) are dependent on arrival.

After five years, about 8,600 family migrants remain dependent, compared to 3,700 skilled migrants and only 140 humanitarian migrants.

Chart 5.4: Movements out of dependency for 2010-11 migrant arrivals over a five year period
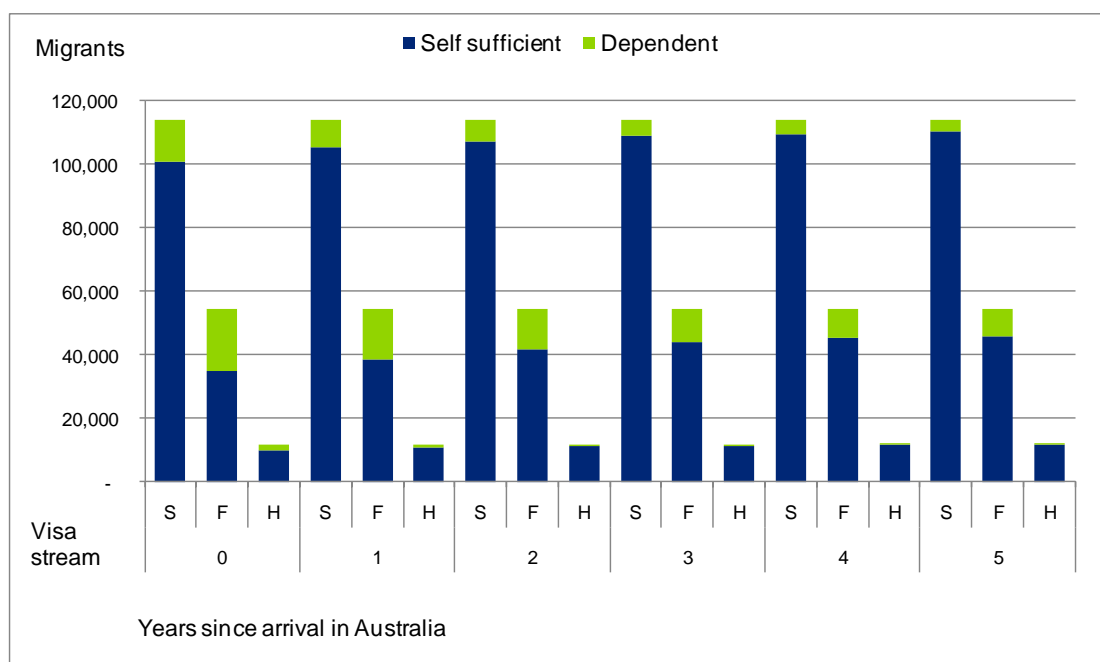
Source: Deloitte Access Economics estimates; 'S' = skilled, 'F' = family, 'H' = humanitarian.

Note: The absolute number of migrants in each category remains the same throughout the five year period displayed. That is, the chart shows the movement of 2010-11 migrants without considering arrivals in other periods.

Estimates of the number of dwellings needed have been obtained by dividing the estimated number of migrants adding to the demand for accommodation in any one year by the

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[2] In 2010-11 migrant arrivals are assumed to be 113,850 skilled migrants, 54,550 family migrants and 11,700 humanitarian (see Appendix B)

average household size for each visa category and each dwelling type. These household sizes have been obtained from DIAC's LSIA 2 databases, and represent a *weighted average* – that is, for each household size and each dwelling and visa category, it is the sum of the household size multiplied by the share of people in the relevant visa/dwelling category that correspond to that household size.

In mathematical terms, it is $\sum h_i^j . \delta_i^j$, where h is the household size, i is the dwelling category, j is the visa type and δ is the share of the total in each (i,j) combination of dwelling and visa type that have a certain household size.

Note that students were not included in any of the surveys studied. In this context we have taken independent skilled migrants under the age of 30 as a proxy for students. A high proportion of these migrants are likely to have been former student migrants and so would be expected to display approximately the same housing tendencies as student migrants. Although not a perfect measure, the average household size of this category is lower than each other visa category for each dwelling type. This corresponds with intuition (many students live independently in student housing and thus generally have lower household sizes than other migrants).

Table 5.2: Weighted average dwelling size

	House	Townhouse	Flat	Other
Family	4.4	3.1	2.8	2.5
Skilled	4.0	3.0	2.8	2.1
Humanitarian	5.3	3.7	3.3	2.1
Student	3.2	2.4	2.4	1.6

Source: Derived from DIAC, LSIA 2

The forecasts

As a starting point, we have used DIAC forecasts of the level of Net Overseas Migration arrivals to 2013-14. Beyond 2013-14, we have assessed two different arrival scenarios: a baseline, where the number of arrivals is assumed to be constant beyond 2013-14; and a growth scenario, where the number of arrivals is assumed to grow at 5% per year beyond 2013-14.

Appendix B presents our forecasts for NOM arrivals and dwelling demand. These forecasts are not an estimate of the total demand for dwellings; rather, they are an estimate of the number of dwellings required to house the 'new migrant' component of property demand.

Under the baseline, using DIAC NOM forecasts and holding constant the number of arrivals beyond 2013-14, we estimate that around 80,000 dwellings will be required to house new migrants in 2010-11, rising to 85,000 dwellings by 2014-15.

Under the growth scenario, with the number of new migrant arrivals growing at 5% a year beyond 2013-14, it is estimated that about 89,000 houses will be needed by 2014-15, 4,000 more than under the baseline scenario. By 2019-20 about 113,000 houses are needed under the growth scenario, compared to about 85,000 under the baseline.

These findings have clear implications for policy makers – even under the baseline scenario, with the number of new migrants held constant beyond 2013-14, **85,000 properties will be needed each year to house new migrants**.

Of course, it should be noted that these forecasts essentially make a *ceteris paribus* assumption looking forward. That is, they assume that there is no change to the underlying economic, demographic and socioeconomic drivers that influence the number of migrants arriving in Australia in any given year. They further assume that the estimated housing propensities discussed throughout this report will remain constant going forward. As a result, we point out that **these forecasts are better seen as illustrative.**

Nonetheless, the forecasts do make a very important point. Even if there is no change to the number of migrant arrivals going forward, the number of houses needed in any given year to house the 'new migrants' will continue to gradually rise, as previous years' dependent migrants gain self-sufficiency and eventually enter the property market in their own right.

6 Conclusions

Having analysed a range of data sources the current study has reached the following broad conclusions.

- Migrants, regardless of their visa stream, are more likely to rent than those born in Australia.

- When they first arrive, skilled migrants are more likely to rent than family migrants. However 12 months on the difference is not as stark, with approximately between 60 and 70% of migrants who move within a year of arrival coming from rental accommodation.

- About 80% of migrants in their own home live in a house, while approximately 70% of migrants who rent live in a flat or townhouse.

- Although clearly relevant in explaining the housing choices of migrants, broader variables such as age and income cannot be used in isolation to predict a migrant's housing status. That is, the housing characteristics of migrants differ from those of the Australian born population, in a way which cannot be explained solely by age and income differences.

- Across both family and skilled visa streams, a number of migrants when they first arrive in Australia are dependent on others (be they friends or family) for accommodation. The majority of these 'dependents' move to self sufficient accommodation within five years of arrival.

- Hence, the demand for housing in any one year depends not only on the number of migrants arriving in the current period, but also on the number of dependent migrants from previous periods who might also be looking to enter the property market.

This study shows that when migrants arrive in Australia they have different housing characteristics to the Australian born population, and that migrants of different ethnic groups can have significantly different characteristics. For example, despite having fairly similar income characteristics, European migrants are about 20% more likely than American migrants to live in their own home. Further, after controlling for both age and income we still observed significant differences in the housing characteristics of different ethnic groups.

The number of migrants entering Australia is of crucial importance to the performance of the Australian economy which faces a range of potential skill shortages in accommodating a booming resources sector (alongside other sectors which are performing less well). Skill shortages may become acute over the next two years, because Australia's growth prospects rest on a very narrow base of sectors, occupations and States.

In planning for future housing requirements it can therefore be important to take account of the specific housing characteristics of migrants. This is particularly the case where the size of Australia's migration program changes rapidly over time, as has been the case over the past decade.

Looking forward, given current concerns over skills shortages, there may be an increased need for migration in the short term in order to meet labour market needs. Part of that increase is now planned via a higher target for permanent migration in 2011-12 as recently

announced, while another part may be 'demand driven' as businesses seek to bring in additional workers under temporary visas.

Our forecasts indicate that even with no increase in total migration beyond 2013-14 (the final year for which DIAC forecasts are available), about 85,000 new properties each year will be required to house new migrants. If the number of migrant arrivals grows by 5% a year beyond 2013-14, perhaps a more realistic assumption given the potential need for heightened numbers of skilled migrants, then that number will be about 113,000 by 2019-20.

However, if we were to pick one take home message from the current study it would be this. In terms of housing characteristics, the current study has shown many differences, not only between migrants and people born in Australia, but also between different visa categories and ethnic backgrounds of migrants.

References

ABS 2006, Census of Population and Housing.

ABS 2008, Survey of Income and Housing, data extracted from Remote Access Data Laboratory.

ABS 2011(a), Australian Demographic Statistics, September 2010, cat. no. 3101.0, released March 2011.

ABS 2011(b), House Price Indexes: Eight Capital Cities, March 2011, cat. no. 8416.0, released May 2011.

Borjas, G 2002 'Home Ownership in the Immigrant Population,' NBER working paper 8495.

Bourassa S, 1994, 'Immigration and Housing Tenure Choice in Australia', Journal of Housing Research, 5(1): 117-137.

Carter, T 2005, 'The Influence of Immigration on Global City Housing Markets: The Canadian Perspective', *Urban Policy and Research*, 23(3): 265-286.

DIAC 2008, Continuous Survey of Australian Migrants.

DIAC 2000, Longitudinal Survey of Immigrants to Australia, Second instalment.

DIAC 2005, Longitudinal Survey of Immigrants to Australia, Third instalment.

DIAC 2010, Survey of New Arrivals.

DIAC 2011, 'The Outlook for Net Overseas Migration,' May 2011, Available from http://www.immi.gov.au/media/publications/statistics/immigration-update/nom-may11.pdf

Khoo S E 2008, 'Household diversity and Dynamics of recent immigrants to Australia' *Journal of Population Research*, 25(3): 315-336.

McConnell E D and Akresh IR 2008, 'Through the Front Door: The Housing Outcomes of New Lawful Immigrants,' *International Migration Review*, 42(1): 134-162.

Myers D, Megbolugbe I, Lee S W, 1998, 'Cohort Estimation of Homeownership Attainment among Native-Born and Immigrant Populations,' *Journal of Housing research*, 9(2): 237-269.

Painter G, Gabriel S and Myers D, 2001, 'Race, Immigrant Status and Housing Tenure Choice'*, Journal of Urban Economics,* 49(1): 150-167*.

Appendix A: Literature review

This appendix provides a review of Australian and international literature relevant to the analysis of household formation patterns of migrants. The focus of this literature review is the household formation patterns, preferences and outcomes of new migrants to Australia. Primary consideration was given to research from Australia as well as research which utilised primary data sources from the ABS and DIAC which are also being analysed for this report. Secondary consideration was given to research from comparable countries, which resulted in a focus on the United States of America.

Methodologies and data

Past research into new migrants and housing has primarily examined the effect of housing tenure choice, in particular the effect of homeownership on assimilation into the receiving country. Emphasis has also been on the effect of migrant demand for housing on the housing market in the receiving country (for example the effect of migrants on rental or housing prices). There has also been significant amounts of research on the effect of migrant enclaves within gateway cities, the location settlement patterns of migrants and the inequality of homeownership rates between migrants and non-migrants.

Previous work with the LSIA data set has focused on economic integration of new migrants, employment outcomes, language skills, health and housing outcomes.

There are three main themes from the literature analysed in this review, which are:

- the living arrangements and housing structure of new migrants, including formation patterns and tenure choice;
- the predictors and likelihood of homeownership of migrants, and in comparison to non-migrants; and
- the effect of migrants on the receiving country's housing market.

The majority of data sources used for the research in this literature review were from:

- Census data, both Australian and United States; and
- survey data, both in relation to housing and migrants.

The **Longitudinal Survey of Immigrants to Australia** was utilised by Khoo (2008) to examine household size, structure and dynamics of new migrants. Khoo undertook multiple regression analysis to determine the probability of living within a certain household structure given a set of characteristics. Bourassa (1994) similarly utilised survey results in his analysis of migrants and housing. Using data from the Housing Location Choice Survey undertaken in Sydney and Melbourne in 1991, Bourassa estimated a housing tenure choice model which predicted the probability of homeownership given certain characteristics.

Both Khoo and Bourassa estimated their models using demographic and economic characteristics as the dependent variables. The variable that both Khoo and Bourassa are attempting to explain are similar - Khoo examines housing patterns of new migrants, while Bourassa explains the probability of homeownership of new migrants. Khoo estimates the housing decisions of new migrants in comparison to other new migrants. In contrast,

Bourassa constructs a model which allows him to compare housing tenure choices of new migrants with non-migrants in Australia.

A majority of the research on migration and housing in Australia has been based on Census data which provides information on household size and living arrangements by country of birth. Burnley (2005) utilised ABS Census data and provides a mainly descriptive analysis of the housing preferences and outcomes of new migrants in Sydney.

McConnell and Redstone (2008) utilise data from the New Immigrant Survey (2003) to explore factors associated with housing tenure for immigrant groups in the USA. This survey contained comprehensive information on immigrant demographic and economic characteristics as well as characteristics on connections to U.S financial institutions and housing outcomes which was necessary to analyse their research question.

Painter et al (2001) and Myers et al (1998) utilise the 1980 and 1990 decennial U.S. Census data to estimate housing outcomes of new migrants. Borjas (2002) also utilise this Census data, as well as the 1998-2000 Annual Demographic files. The analysis of both Painter et al and Myers et al is confided to a specific region - Myers focuses on California, while Painter focuses on the Los Angeles metropolitan area. In contrast, Borjas looks at entire households from any identifiable metropolitan area within the Census.

Most research acknowledges that age is an important determining factor of the likelihood of homeownership. Research has also suggested that time spent in the receiving country is an important factor in the likelihood of migrants owning their own home. This creates a dual temporal effect that needs to be controlled for when determining the housing outcomes of new migrants. As a result, much research has gone into controlling for these two factors simultaneously.

Bourassa (1994) constructs a model which estimates a set of coefficients for Australian born which explain the housing outcomes of Australian born. The coefficients which are established in this model are then estimated using the characteristics of the immigrant group, as if they behaved like the Australian born group. In doing this Bourassa establishes a hypothetical homeownership rate for the immigrant population. The difference between these two rates is defined as the endowment effect - the proxy for wealth within the endowment effect is time spent in Australia. Demographic characteristics separately control for the age of migrants.

Myers et al (1998) use longitudinal data over a period of time in order to circumvent the dual temporal problem created by migrants in the USA. A cohort model is estimated to analyse homeownership between 1980 and 1990 for two native born groups. A double cohort model which incorporates both birth and immigration status is then estimated for Mexican immigrants. This enables Myers et al to compare the homeownership attainment of Mexican immigrants with that of the two native born groups.

Different to other research Painter et al (2001) choose to focus on recent movers, rather than the entire population of migrants in order. They note that those who are aged older than 45 years are more likely to own their own home, which reflects life cycle stage rather than differences in income or preferences. In order to overcome the dual temporal problem Painter et al (2001) suggest that the tenure decisions of recent movers instead of the entire population of migrants, more closely reflects the current conditions.

Questions and structure of research

All of the literature that was reviewed controlled for a number of key variables which included:

- temporal factors, including age and time spent within the receiving country;
- economic endowments, including income, accumulated wealth, education status; and
- demographic characteristics, including age, marital status and number of children.

The main area that the research differed was the key characteristic which was being examined. For example, the housing outcome of new migrants, be it renting, owning or living rent free; the likelihood of owning their own home; and the formation pattern of households.

Khoo (2008) examines living arrangements of new migrants with a particular focus on the transition between different household structures. Khoo analyses the nature of transitions between household structures to understand the characteristics that are likely to be present to explain household formation patterns. The model estimates the likelihood of living within an extended family or non-family household compared with a nuclear family household (where nuclear consists of only parents and related children). Khoo suggests that changes to any of these characteristics will result in changes in migrant household structure, which may result in divergence or convergence to the patterns prevailing amongst the Australian born population. Comparisons are made between new migrant groups, and no comparisons to the Australian born population are given.

Bourassa (1994) examines whether there is a significant difference in the behaviour of migrants and non-migrants in terms of housing tenure choice. To do this Bourassa establishes whether there was a difference in the homeownership rates between migrants and non migrants in Australia. Bourassa suggests that the differences in homeownership rates can be decomposed into endowment effects and residual effects. He further decomposes the residual effects to determine whether there are significant differences between migrants and non-migrants once endowment effects have been accounted for.

Similar to Bourassa, Burnley (2005) examines the differences in homeownership of the migrant population and Australian-born. Burnley uses Census data to determine the trends in homeownership among key immigrant groups in Sydney from post World War II until recent times.

Myers et al (1998) also analyses the housing outcomes of migrants in comparison to non-migrants. The comparison is made between one migrant group, Mexicans, against two native born groups, white and native born Hispanic. The likelihood of entering into homeownership is modelled in terms of income, education and marital status as well as taking into account prices of renting and owning. Bourassa (1994) similarly controls for price using a rental to house price ratio.

McConnell and Redstone (2008) determine the likelihood of renting, or living rent free as well as the likelihood of owning a house as the dependent variable in this analysis. They propose that relationships to financial institutions and the amount of financial remittances to country of origin are important explanatory variables in the homeownership difference between migrants and non-migrants.

Key results

Many of the research papers which were reviewed suggested that the majority of the difference in migrant and non-migrant housing patterns can be explained by differences in economic endowment. Some authors suggested that there were other explanatory variables, including:

- point of origin of the migrant; and
- location choice of new migrants within the receiving country.

The results obtained by **Khoo (2008) suggest that after controlling for differences in endowments there is still significant difference in household formation structure**. These differences can be explained by country of birth - Middle Eastern and Asian migrants are more likely to reside in larger extended family households, and less likely to live alone. The propensity to live in extended families falls over time for those from the Middle East. In general Khoo has found that the primary determinants of changes in household structure and size related to age, visa category and changes to marital status.

Bourassa's (1994) model suggests there is not a significant difference in the ten groups of migrants' behaviour with that of the Australian-born group. Bourassa found that where there was significant difference between the migrant population and the housing choices of Australian born a significant amount could be explained by differences in initial endowments. Seven out of ten migrant groups show no significant difference in housing tenure choice after differences in endowments have been controlled for. In the case of the other three migrant groups there was a greater likelihood of homeownership above the Australian born population. Bourassa concluded that because the housing characteristics of the ten immigrant groups behaviour is virtually the same after controlling for differences in endowments, then the same model of tenure choice can be applied across both migrant and non-migrant population in Australia.

Burnley has found that those who were classified as overseas born were over represented in the private housing market in 2001. While fully owned houses were highly comparable to the Australian born population (37.8% overseas born and 38.2% Australian born), there was a substantial difference in those classified as being purchased (23.3% overseas against 32.1% Australian born). There was also a significant difference between migrant groups – those of Southern European origin had higher proportions of homeownership even against the Australian born, reflecting the ageing of the cohort, and the time period when much of the migration from this region took place. Burnley found that 42% of all apartments in Sydney in 2001 were occupied by overseas born, which is high compared to their proportion of population (31%). He also found that migrants from the Middle East, Southeast and East Asia were more tolerable at living in apartments than Australian born, reflecting differences in cultural norms.

Borjas (2002) and Myers et al (1998) found that there is significant difference between homeownership rates of non-migrants in comparison to migrant population. Myers et al found that temporal factors such as ageing and duration of U.S residence are strong predictors of homeownership attainment, and that a lot of the difference in homeownership rates between migrants and non-migrants can be explained by these factors. Myers et al (1998) found that comparison of Mexican immigrants with native-born Mexican men who are otherwise similar found few substantive differences between the models. However, there was significant difference even after controlling for endowment differences between Mexican immigrants and native born Americans. The more recent

arrivals have less likelihood of homeownership than native-born residents. This gap is reduced the longer the period of residence in the United States. Adding covariates for marital status, education, and income and housing prices does not alter the fundamental differences between migrants and natives.

Borjas (2002) found that there has been a persistent decline in homeownership rates across a number of migrant cohorts, both in absolute terms and in comparison to homeownership rates that are apparent in the native born population. In addition there was a widening gap in homeownership rates between native and immigrant households over the 1990s. Borjas does find that there is significant assimilation over time of immigrants. The rate of assimilation is faster for those who enter at younger ages.

Bourassa (1994), and Myers et all (1998) have focused on specific regions to analyse the homeownership outcomes of new migrants. In contrast Borjas (2002) and McConnell and Redstone (2008) has examined the entire United States and as a result determined that the location choice of differences between new migrants and native populations explain a far larger part of the ownership gap than do differences in background characteristics, such as socioeconomic characteristics or household incomes. This finding is unique to Borjas and may be as a result of a different methodological approach.

Both Bourassa (1994) and McConnell and Redstone (2008) find that housing costs (renting or owning) are not linked with the housing outcomes of new migrants.

Employment immigration and population statistics of Canada were used by Carter (2005) to analyse the household formation patterns of migrants and non-migrant households. Carter (2005) found that migrant households tended to be larger than non-migrant households; this result is similar to that of Khoo (2008) who established that newly arrived migrants were more likely to live in extended family households. Myers et al (1998) found that migrants were more likely to choose locations with migrants from similar points of origin. Similarly, Carter (2005) found that migrants are more likely to live in locations that have others from the same region of origin. The results in both of these reviews found that the price of housing and the price of rents increased as a result of the enclaves that were created by groups of new migrants.

Conclusion

Khoo provides the only analysis of the LSIA in regards to migrant housing that was reviewed in this literature review. The research was limited to an analysis of differences in household structure and size between different migrant groups. There was no analysis between migrants, and non-migrants within Australia. There is also no discussion of household preferences and outcomes in terms of preference for renting or owning - only size and structure is analysed. There is therefore a limitation to the usefulness of this work in establishing whether there is a difference in the housing preferences of migrants relative to non migrants.

Bourassa (1994) provides an analysis of differences between migrants and non-migrants and their housing preferences. He established that there was not a significant difference between these two groups. However his research is based upon a survey undertaken in 1991, and it is likely that given the change in the number, and type of migrants to Australia which have taken place over the past two decade, the results may be different. Nonetheless his model provides an interesting example of how to establish preferences and outcomes of the migrant population.

Appendix B: Forecast housing demand

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Arrivals (Baseline)										
Family	54,550	60,274	60,274	60,274	60,274	60,274	60,274	60,274	60,274	60,274
Skilled	113,850	137,279	137,279	137,279	137,279	137,279	137,279	137,279	137,279	137,279
Humanitarian	11,700	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600
Students	79,100	73,400	72,100	71,100	71,100	71,100	71,100	71,100	71,100	71,100
Arrivals (Scenario)										
Family	54,550	60,274	60,274	60,274	63,288	66,453	69,775	73,264	76,927	80,773
Skilled	113,850	137,279	137,279	137,279	144,143	151,350	158,918	166,863	175,207	183,967
Humanitarian	11,700	12,600	12,600	12,600	13,230	13,892	14,586	15,315	16,081	16,885
Students	79,100	73,400	72,100	71,100	74,655	78,388	82,307	86,422	90,744	95,281
Dwellings needed to house new migrants (Baseline)										
Family										
House	4,482	4,844	4,881	4,910	4,926	4,929	4,938	4,938	4,938	4,938
Townhouse	1,719	1,859	1,873	1,884	1,890	1,891	1,894	1,894	1,894	1,894
Flat	7,022	7,645	7,683	7,715	7,732	7,735	7,744	7,744	7,744	7,744
Skilled	-	-	-	-	-	-	-	-	-	-
House	10,288	12,255	12,369	12,411	12,436	12,451	12,461	12,461	12,461	12,461
Townhouse	6,637	7,958	7,992	8,004	8,011	8,016	8,019	8,019	8,019	8,019
Flat	16,510	19,726	19,864	19,915	19,945	19,963	19,975	19,975	19,975	19,975
Humanitarian										
House	572	615	615	616	616	616	616	616	616	616
Townhouse	392	418	422	422	423	423	423	423	423	423
Flat	1,962	2,094	2,110	2,114	2,116	2,117	2,117	2,117	2,117	2,117
Student										
House	7,003	6,498	6,383	6,294	6,294	6,294	6,294	6,294	6,294	6,294
Townhouse	6,094	5,655	5,555	5,478	5,478	5,478	5,478	5,478	5,478	5,478
Flat	17,117	15,883	15,602	15,385	15,385	15,385	15,385	15,385	15,385	15,385

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Total (Baseline)										
House	22,344	24,212	24,248	24,231	24,272	24,291	24,309	24,309	24,309	24,309
Townhouse	14,842	15,890	15,840	15,788	15,802	15,808	15,814	15,814	15,814	15,814
Flat	42,611	45,348	45,259	45,129	45,178	45,200	45,222	45,222	45,222	45,222
Total	79,797	85,450	85,348	85,148	85,252	85,299	85,345	85,345	85,345	85,345
Dwellings needed to house new migrants (Scenario)										
Family										
House	4,482	4,844	4,881	4,910	5,110	5,329	5,582	5,850	6,137	6,444
Townhouse	1,719	1,859	1,873	1,884	1,961	2,044	2,142	2,244	2,355	2,473
Flat	7,022	7,645	7,683	7,715	8,052	8,416	8,822	9,252	9,709	10,195
Skilled	-	-	-	-	-	-	-	-	-	-
House	10,288	12,255	12,369	12,411	13,004	13,646	14,325	15,034	15,783	16,572
Townhouse	6,637	7,958	7,992	8,004	8,396	8,813	9,253	9,714	10,199	10,709
Flat	16,510	19,726	19,864	19,915	20,877	21,911	23,002	24,144	25,348	26,615
Humanitarian										
House	572	615	615	616	646	678	712	747	775	814
Townhouse	392	418	422	422	441	462	485	509	517	543
Flat	1,962	2,094	2,110	2,114	2,207	2,315	2,429	2,549	2,595	2,724
Student										
House	7,003	6,498	6,383	6,294	6,609	6,939	7,286	7,651	8,033	8,435
Townhouse	6,094	5,655	5,555	5,478	5,752	6,039	6,341	6,658	6,991	7,341
Flat	17,117	15,883	15,602	15,385	16,155	16,962	17,811	18,701	19,636	20,618
Total (Scenario)										
House	22,344	24,212	24,248	24,231	25,369	26,592	27,905	29,282	30,729	32,266
Townhouse	14,842	15,890	15,840	15,788	16,549	17,359	18,221	19,125	20,062	21,065
Flat	42,611	45,348	45,259	45,129	47,291	49,604	52,064	54,646	57,288	60,153
Total	79,797	85,450	85,348	85,148	89,209	93,555	98,189	103,054	108,079	113,483

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