National Institute of Labour Studies
Flinders University, Adelaide, Australia

The Labour Force Experience of New Migrants.

Report prepared for DIMA by
Professor Sue Richardson
Ms Frances Robertson
Ms Diana Ilsley
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Executive Summary

The successful settlement of a cohort of migrants can in part be judged by their employment experience. The key indicators of this experience are participation in the labour force, employment, unemployment, earnings and other private income, use of qualifications and competence in English. For the first time we are now able to trace in detail the early settlement experience of two different cohorts of migrants, followed over a period of up to three years. The data are derived from the unique Longitudinal Survey of Immigrants to Australia (LSIA), conducted by the Department of Immigration and Multicultural Affairs.

This report examines key indicators of labour market success, plus a range of other characteristics, for the cohort of migrants who arrived in Australia between September 1999 and August 2000. These are referred to as Cohort 2. It also compares the outcomes for Cohort 2 with the outcomes of an earlier group of migrants (Cohort 1) who arrived in Australia between September 1993 and August 1995. Cohort 1 has been interviewed three times, six months (wave 1), eighteen months (wave 2) and 42 months (wave 3) after arrival. Cohort 2 has, to date, been interviewed only once, six months after arrival. Comparable questions were asked of both cohorts. This report examines the changing outcomes of migrants in Cohort 1 as their time in Australia lengthens. For most of the analysis, the experience of migrants in the different visa categories is separately identified.

Unlike other studies, including the major previous study of Cohort 1 conducted by VandenHeuvel and Wooden (1999) for the Department of Immigration and Multicultural Affairs, we include in the analysis both primary applicants and spouses. Other members of the migrating unit (mostly children) are excluded, because only a very small number are employed. There are 6,960 primary applicants/spouses in the sample of Cohort 1 and 4,181 in the sample of Cohort 2. The total numbers of applicants/spouses who immigrated over the period covering Cohorts 1 and 2 are 95,503 and 42,633 respectively. The sample refers only to immigrants who had their visas issued offshore, and excludes immigrants from New Zealand.

We report on the extent to which people who migrate under different visa categories have different outcomes; the impact of personal attributes such as English language proficiency, age, formal education, prior work status and gender on economic independence; and the role played by Australian migrant services in assisting settlement.

In the interval between the arrival of Cohort 1 (in the mid-1990s) and the arrival of Cohort 2 (1999-2000), there were several changes in policy and in the economy that were likely to affect the economic outcomes of recent migrants. Unemployment fell from around 9 per cent to 6.5 per cent. Employment rose by approximately 1.26 million people, or 16 per cent, between September 1993 and February 2001. At the same time, there was a considerable change in migration policy that was directed to improving the prospects for economic independence of new migrants, and reducing the demands on taxpayer-supported services and payments. We present evidence on the extent to which these changes in policy and the economy have caused different outcomes for migrants in Cohort 2 as compared with those in Cohort 1.

A comparison of migrants in each cohort

Compared with Cohort 1, a higher proportion of migrants in Cohort 2 were Independent and Business Skills and Employer Nomination Scheme and a smaller proportion were Humanitarian and Preferential Family/ Family Stream. Partly for this reason, and partly because of the change in eligibility criteria, there were more fluent English speakers, fewer with little English, more with high levels of qualifications and fewer with little education in Cohort 2. These changes alone will improve the aggregate labour market outcomes of Cohort 2.

The difference in levels of qualifications is particularly marked. While qualification levels were already quite high for Cohort 1, by Cohort 2 there was a substantial increase in the proportion with post-graduate qualifications (from 12 per cent to 19 per cent) and, importantly, an even larger fall in the proportion with less than year 12 schooling (from 23 per cent to 13 per cent).

Within the two visa categories most affected by the change in eligibility criteria, Concessional Family/Skilled-Australian Linked and Independent, there has been a clear increase in the self-reported level of English competence. There has been a 10-15 percentage point increase in the proportion who say they speak English as their only or best language and a slight increase in the proportion saying they speak English very well. Matching this has been the virtual disappearance of people quite unable to speak English and a sizeable fall in the proportion who say they have limited or modest competence in English. These changes for the Concessional Family/Skilled-Australian Linked and Independent categories are not matched for the other visa groups. On this evidence alone, it would appear that the change in migration policy has had a noticeable impact on the levels of English competence among migrants in the affected categories.

Overall labour market outcomes

The major conclusion of this report is that, on all measures, *the employment outcomes six months after arrival in Australia are substantially better for Cohort 2 than they were for Cohort 1*. This is true for each of the visa categories other than Humanitarian and Business Skills and Employer Nomination Scheme, and is true for men and women, primary applicants and spouses of primary applicants. For the Concessional Family/Skilled-Australian Linked, the Independent and the Preferential Family/Family Stream migrants, those in Cohort 2 had higher employment, lower unemployment and lower non-participation in the labour force. The fall in unemployment is particularly striking for Independent migrants who, in Cohort 2 six months after arrival, had an unemployment rate not much in excess of that for the Australian workforce. The halving in unemployment among recently arrived migrants (from 21 per cent for Cohort 1 to 10 per cent for Cohort 2) far exceeds the overall fall in unemployment, or the rate of increase in employment, for Australia as a whole over the relevant period.

The improvement in employment has been particularly strong for the Concessional Family/Skilled-Australian Linked category and within this group, for spouses of the primary applicant.

The improved employment for Cohort 2, and their exclusion from eligibility for social welfare benefits, is reflected in a significant difference between the cohorts for the main source of income. Reliance on government payments fell from 36 per cent for Cohort 1 to 11 per cent for Cohort 2. Offsetting this, reliance on wages and salaries rose from 31 per cent of Cohort 1 to 51 per cent of Cohort 2.

It has earlier been identified by Cobb Clark, D. and Chapman, B. (1999) that migrants in Cohort 1 who settled in Queensland had a distinctly higher rate of employment and lower rate of unemployment than would be expected given their age, education, language skills etc. Whatever advantage Queensland had as a place for migrants in Cohort 1 to find jobs, had evaporated by Cohort 2. Knowledge of which States provided the best employment prospects for Cohort 1 migrants in each visa group gives little guide as to where the best prospects lay for migrants in Cohort 2.

Improvement over time

If we consider Cohort 1 as a whole, the employment to population ratio rose from 33 per cent in wave 1 to 49 per cent twelve months later. Three and a half years after arrival, 56 per cent of the cohort was employed— about 15 per cent less than the Australian average. For every visa category, the first eighteen months in Australia saw a rapid integration into the labour market. This integration continued over the subsequent eighteen months but, except for the Humanitarian group, at a slower pace. Note that after three and a half years in Australia, 40 per cent of Humanitarian primary applicants and spouses had a job.

After six months in Australia, Cohort 2, with 50 per cent employed, looks the same as Cohort 1 after eighteen months in Australia. The superior outcomes for Cohort 2 are concentrated in the Concessional Family/Skilled-Australian Linked, Independent and Preferential Family/Family Stream groups.

After three and a half years in Australia, the employment to population ratio of Cohort 1 migrants in the three main ‘economic’ visa categories (Concessional Family/Skilled-Australian Linked, Independent and Business Skills and Employer

Nomination Scheme) are high compared with the Australian average. Note that Cohort 1 was eligible during this period for social welfare benefits, and many migrants in that cohort drew support from these benefits in their early period in Australia. But it has not taken long for them to move from social welfare support to economic independence via employment. On this evidence, the availability of social welfare support did not undermine the motivation of recent migrants to become economically independent. Furthermore, whatever the disadvantage of migrants in Cohort 1 relative to migrants in Cohort 2 in their initial six months in Australia, it did not take Cohort 1 migrants in most visa categories long to establish high levels of economic independence.

For all visa categories, the rise in the number of Cohort 1 migrants employed as wage and salary earners exceeded the (substantial) fall in unemployment as the duration of stay in Australia lengthened. The extra employees came from both those who in the first wave were students and those who in the first wave were home duties (except for those in the Preferential Family/Family Stream, where the number in home duties stayed constant).

The falls in unemployment over the three and a half year settlement period for Cohort 1 are dramatic. It is clear that initial unemployment rates give little indication of subsequent success in attaining economic independence. Not everyone who left unemployment did so because they found a job. But those who did not find a job presumably found supported roles within the family. The Concessional Family/Skilled-Australian Linked and Independent migrants had particularly large falls in unemployment, from rates of 28-38 per cent six months after arrival to rates of only 7-8 per cent three and a half years after arrival. That is, after three and a half years, the unemployment rate of these groups of migrants was indistinguishable from that of the general Australian workforce. The most spectacular fall in unemployment was in fact among the Humanitarian group, who started with extremely high rates and saw them fall almost by two-thirds.

The overall pattern of integration into the labour market for Cohort 1 can be described as being a move from unemployment, student or home duties into wage and salary employment. This was accompanied by a modest move into self-

employment. The exception to this pattern is among the Business Skills and Employer Nomination Scheme migrants, where the growth in economic independence was focussed on a movement from home duties (and to a lesser extent from “other”) into self-employment.

Getting a job

For Cohort 1, English language difficulties were clearly the major obstacle to getting a job reported at each wave, with about one third of respondents indicating this problem. About half that number (15 per cent) said that their problem was that there were not enough jobs, a proportion that stayed constant over the three year interval. The inability to have qualifications recognised was cited by only a small percentage of people. Since 60 per cent of people in Cohort 1 arrived in Australia with some sort of post-school qualification, this suggests that the recognition systems in place are working commendably well.

It is notable that only half as many people in Cohort 2 said that the main reason that they could not get work was that there were not enough jobs. This is the most direct evidence available in the survey data that an improvement in the labour market was one of the important reasons why Cohort 2 has had much better outcomes than did Cohort 1.

To summarise, the main differences between the cohorts in the type of problems they encountered in finding work are a) a reduction in problems caused by inadequate English and b) a reduction in problems caused by insufficient jobs. Both a general improvement in the labour market and the effects of the changes in migrant selection criteria seem to be at work here.

The views of migrants about the importance of English skills for getting a job is reinforced by multivariate analysis that predicts the probability of being employed. English language competence is an important predictor of the probability of being employed for all visa groups. The effect of less than perfect English is similar for all the visa groups, and reduces the probability of employment substantially. For example, for Independent migrants, those who do not speak English well have a one

in four chance of being employed compared with otherwise similar people who speak English fluently. Note that even after controlling for English language ability, being born in the UK, Ireland or North America confers still greater chance of being employed.

Men are much more likely to be employed than are women in all visa groups, especially Concessional Family/Skilled-Australian Linked and Preferential Family/Family Stream. Migrating as a spouse also reduces the likelihood of being employed, except for Preferential Family/Family Stream. Migrants who had visited Australia prior to migrating have a significantly higher chance of being employed than migrants who had not. Younger people, other things being equal, have a higher chance of being employed.

An important outcome of the multivariate analysis is that the advantages of being fluent in English, of being male and the primary applicant, of having visited Australia, of being employed prior to migration and of being younger are all similar for the two cohorts. This suggests that it was not so much the change in the state of the labour market, as the change in the attributes of migrants that improved the employment outcomes for Cohort 2.

For the many who did get a job, two-thirds (66 per cent) of Cohort 2 were working as associate professionals, professionals or managers and administrators prior to migration: after migration, half (51 per cent) were. The comparable figures for Cohort 1 are 55 per cent and 39 per cent. Thus the “quality” of the migrant intake in both cohorts, and particularly Cohort 2, is high and is reflected in the level of jobs they are able to obtain.

The high quality of the migrants is apparent also in the level of the qualifications that they have obtained prior to migration. These qualifications are only beneficial (from a labour market perspective) if they are used in the jobs that the migrants were able to get. Overall, Cohort 2 migrants were *less* likely than Cohort 1 migrants to have made extensive use of their qualifications prior to migration. Despite this, when looked at by visa group, Cohort 2 migrants made *more* extensive use of their qualifications on arrival in Australia than did Cohort 1 migrants.

Income

Employment status is not the only important aspect of labour market success. Also relevant is whether the level of earnings is sufficient to provide for economic independence. People may be employed, but working only a small number of hours per week and/or on very low wages. As previously noted, there has been a large shift from reliance on government social welfare payments to reliance on wages and salaries between the two cohorts.

The Concessional Family/Skilled-Australian Linked and Independent migrants have seen a large rise in their average income - indeed almost a doubling. This large rise suggests that the much greater reliance of Cohort 2 on wages as compared with government payments has had a strongly positive effect on their income levels: the wages received must typically have exceeded the value of social welfare benefits significantly. It is also likely that the average wages of people who had a job has risen for Cohort 2, since the migrants in Cohort 2 have higher levels of education and English language skills.

The Preferential Family/Family Stream migrants have had a different experience. The median income for this group has fallen, from levels that were already very low.

We used multivariate analysis to see whether the return to specific migrant attributes had changed between Cohorts 1 and 2. The most interesting conclusion, for policy purposes, is that Cohort 2 migrants who were Independent earned significantly more than did Cohort 1 migrants, other attributes held constant. This is the visa category most influenced by the recent changes to the eligibility criteria. As with the probability of getting a job, it suggests that Independent Cohort 2 migrants have unobserved qualities that make them more productive workers.

As the duration of residence in Australia rose for Cohort 1, there was very large fall in the proportion of people who received no income, from 26 per cent in wave 1 to only 6 per cent by wave 3. The second significant change across the three waves of Cohort 1 is the large increase in the proportion of people earning in the highest category of $674 or more per week. This fraction grew from 7 per cent six months

after arrival to 20 per cent three years later. Perhaps even more interesting is that Cohort 2 had a higher proportion earning in the top band after six months than did Cohort 1 after three and a half years in Australia. This is partially accounted for by the fact that half of migrants in Cohort 2 were earning a wage six months after arrival whereas only 31 per cent of Cohort 1 were. Virtually all of these additional wage earners were earning the equivalent of a full-time wage.

While the total proportion of people who receive some form of government payment did not change much between waves 1 to 3 of Cohort 1, the composition of those benefits did. Specifically, the proportion who reported receiving unemployment benefits halved, from 25 per cent to 13 per cent. At the same time, the proportion who received family payments almost doubled, from 15 per cent to 28 per cent. These two movements offset each other and mark a substantial change in people's relation with government.

A sizeable proportion of migrants in Cohort 1, and a much smaller proportion of those in Cohort 2, reported receiving social welfare benefits in the first six months of their residence in Australia. The precise impact of the changes in eligibility for social welfare payments is thus not easy to identify. This matter is discussed further in the report.

Impact of denial of access to social welfare benefits

We find no support for the proposition that migrants in Cohort 2 have been forced to accept worse jobs by virtue of the unavailability of social welfare benefits. They are no more likely than Cohort 1 to dislike their job, to be unable to use their qualifications, to have low weekly earnings or total income, or to work less than 15 hours per week. They are at least as likely to love their job, to earn a high income and not to have sought to have their qualifications assessed.

Neither has the denial of access to unemployment benefits increased the proportion of people with no income, or low earnings. Indeed, it is hard to see in the aggregate data any adverse effect of ineligibility for social welfare on the outcomes for Cohort 2 migrants. In saying this, it is important to emphasize that the perspective is a global

one, and there may indeed be individuals or families who have struggled with low incomes as a result. It is also relevant that the overall employability of migrants in Cohort 2 was particularly high.

Why did Cohort 2 have better employment outcomes?

We conclude that the most likely explanations for the improvement in the employment outcomes of Cohort 2 six months after arrival are that:

- they had better levels of English and educational qualifications and fewer people with low levels of each of these attributes;
- they are likely to be of higher employability in ways that are not captured in the characteristics that we can observe;
- they may have more actively sought jobs soon after arrival; and
- there was an overall improvement in the state of the Australian labour market.

It is probable that the improved outcomes for Cohort 2 are in large part a product of the changes to eligibility criteria. They may also be influenced by the fall in unemployment for the economy as a whole, by the reduction in the size of the migrant intake, and by denial of access to social welfare benefits for two years after arrival. The impact of the last two of these probably arises from the self-selection that occurs among intending migrants, so that those who did migrate assessed themselves as having relatively good employment prospects. The better employment outcomes for Cohort 2 do not seem to be the result of some change in the labour market that meant that, for example, qualifications were more valued or English language skills more important. In drawing these conclusions, we emphasize that our analysis was not comprehensive and more detailed work may produce alternative interpretations.

The Changed Migrant Labour Market Experience
1994-2000

1. Introduction

Modern Australia is a migrant country and it has a fine history of overall successful settlement of its new arrivals. Despite its significance in the Australian story, the way in which new migrants acquire economic independence has not been well understood. Nor has there been good evidence from which to assess the consequences for successful settlement of changes in migration policy and services. For the first time we are now able to trace in detail the early settlement experience of two different cohorts of migrants, followed over a period of up to three years. The information collected in the Longitudinal Survey of Immigrants to Australia (LSIA) provides a unique insight into a number of important questions. These include the extent to which people who migrate under different visa categories have different outcomes; the impact of personal attributes such as English language proficiency, age, country of origin, formal education, prior work status and gender on economic independence; and the role played by Australian migrant services in assisting settlement. Since the LSIA has recently completed interviews with a second cohort of migrants, it is now also possible to investigate whether changes in the overall state of the economy and in government policy have had a substantial effect on the early integration of migrants into employment.

In the interval between the arrival of Cohort 1 (in the mid-1990s) and the arrival of Cohort 2 (1999/2000), there were several changes in policy and in the economy that were likely to affect the economic outcomes of recent migrants. Unemployment fell from around 9 per cent to 6.5 per cent. Employment rose by approximately 1.26 million people, or 16 per cent, between September 1993 and August 2000. At the same time, there was a considerable change in migration policy that was directed to improving the prospects for economic independence of new migrants, and reducing the demands on taxpayer-supported services and payments. There were two main components to these changes. The first was a change to eligibility for social welfare payments. Between the arrival of migrants in Cohort 1 and those in Cohort 2, migrants (with the exception of those with Humanitarian visas) have been excluded from access to most social welfare payments for a period of two years after arrival.

They remain eligible for family payments. The second was a change in the selection criteria for migrants. The intake of migrants in the skilled categories was increased and the intake of those in the Preferential Family/Family Stream was decreased. There was a cap placed on the entry of parents under the Preferential Family/Family Stream, which had the effect of reducing the average age of migrants in this category. For migrants entering under the Independent or Concessional Family/Skilled-Australian Linked categories, applicants:

- had to meet higher minimum skill, age and English (at the vocational level);
- standards were given preference if their occupation was in short supply; and
- were given preference if they had obtained their qualifications in Australia.

Migrants under the Employer Nomination Scheme had to be under age 46, have vocational level English and have a commitment from their employer of at least three years' employment.

In January 2001, the National Institute of Labour Studies was commissioned by the Department of Immigration and Multicultural Affairs to examine the changes in the labour market experiences of migrants who arrived in Australia between September 1999 and August 2000 (Cohort 2), compared with those who arrived in Australia during the period September 1993 and August 1995 (Cohort 1). Each cohort has been surveyed by the Department approximately 6 months after arrival. Cohort 1 has also been surveyed 18 months and three and a half years after arrival. There are 6,960 primary applicants/spouses in the sample of Cohort 1 and 4,181 in the sample of Cohort 2. The response rate to the first wave of Cohort 1 was 60 per cent. Most of the non-response arose from an inability to locate the selected migrant (a sizeable number were temporarily overseas) direct refusal was very low. The analysis in this report covers both primary applicants and the spouses who migrated with them. This distinguishes the results from those reported in some other research, that has focussed only on primary applicants (eg that by Cobb-Clark and Chapman 1999, Cobb Clark 1999 and VandenHeuvel and Wooden 1999).

This report focuses on the labour market outcomes of the two cohorts of migrants. These outcomes are expressed in terms of employment, unemployment, non-employment and earnings. On all measures, the outcomes six months after arrival

in Australia are substantially better for Cohort 2 than they were for Cohort 1. This is true for each of the visa categories other than Humanitarian and Business Skills and Employer Nomination Scheme, and is true for both men and women, primary applicants and spouses of primary applicants. The crucial policy question is to identify what proportion of this improved outcome can be attributed to an overall stronger labour market, and what proportion can be attributed to policy-induced changes in the characteristics of the new migrants, and the withdrawal of access to social welfare payments.

The report documents the improved labour market outcomes, and provides a set of additional information that will help in understanding why Cohort 2 has done relatively well. This information is reported separately for each visa category, and describes major characteristics of the migrants. These characteristics include English language proficiency, qualifications, field of study, broad occupation groups, and use of migrant services. Where relevant, the report compares the outcomes of migrants before and after their arrival in Australia. It also reports some of the changing outcomes for Cohort 1 as their period of residence in Australia extends to 18 and then 42 months. The report also uses multivariate statistical techniques to identify the separate influences of each of these, and of employment growth in the state of residence, on successful labour market outcomes. Conclusions are drawn on the impact of changes in social welfare and migrant selection policy on the outcomes of Cohort 2, as compared with changes in the overall state of the labour market.

2. An Overview of the Two Cohorts

The analysis is reported for all people who migrated as a primary applicant or the spouse of a primary applicant. There were about another 50 per cent of other people who migrated as part of the migrating unit in Cohort 2. Of these, only 13 per cent were over the age of 19 (most of whom were 20-24), and nearly all were the children of the migrating unit. Fewer than 100 were in the labour force. The inclusion of people other than the primary applicant or spouse makes the technical side of the analysis much more complex and time consuming. Further, many of the relevant questions were not asked of these people. Given these factors, and that such a small number of such people (fewer than 100) are relevant to an examination

of the labour force outcomes of recent migrants, we do not include them further in the analysis: they can have no perceptible effect on the story.

The two cohorts differ in terms of some of the major socio-demographic characteristics. Table 1 gives an overview of how they compare.

Table 1: Major Characteristics of Migrants (Principal Applicants and Spouses) approximately Six Months after Arrival (per cent in each category)

Major Characteristic of Migrant		*Cohort 1*	*Cohort 2*
Primary applicant or spouse, males, females		**%**	**%**
Male, primary applicant		41.3	39.2
Female, primary applicant		37.6	37.5
Male, spouse		3.8	6.5
Female, spouse		17.2	16.8
Visa Category			
Concessional Family/Skilled Australia- Linked		10.1	12.4
Independent		20.3	29.7
Preferential Family/Preferential Family/Family Stream		48.5	41.4
Business Skills and Employer Nomination Scheme		4.6	7.7
Humanitarian		16.4	8.9
Age			
Average years		35.2	35.0
Labour Force Status			
Employed		32.8	49.5
Unemployed		21.4	9.6
Not in labour force		45.7	41.0
Country of Birth			
Oceania		2.3	2.9
UK, Ireland		15.5	15.0
Other Europe		18.4	13.6
Middle East, Nth Africa		9.5	9.5
SE Asia		19.8	16.4
NE Asia		13.5	16.0
Sth, Central Asia		10.7	12.6
Nth America		3.3	2.9
Central, Sth America		1.7	1.2
Other Africa		5.2	9.9
Current Main Activity			
Wage, salary earner		28.3	43.1
Own business		2.7	4.6
Other employed		1.8	1.7
Unemployed		21.4	9.6
Student		15.3	14.0
Home duties		22.5	20.8
Retired, pensioner		5.7	3.6
Other		2.3	2.5
Duration of Stay			
Up to 3 months		13.6	2.8
>3 months < 6 months		74.9	55.0
> 6 months		11.5	42.2
How well speak English			
English only language or best language		30.7	38.0
Other language -	Speak English very well	10.1	12.5
	Speak English well	20.6	19.6
	Speak English, not well	26.2	21.6
	Not speak English	12.3	8.2

Table 1 cont'd.

Major Characteristic of Migrant	*Cohort 1*	*Cohort 2*
Major source of income		
Government payment	36.1	11.2
Wage, salary	30.7	49.8
Business	1.9	3.5
Investment	8.0	10.0
No income	23.2	25.6
Level of highest qualification		
Higher degree, post-graduate diploma	12.0	19.0
Bachelor degree	20.3	24.2
Diploma, certificate, trade	27.4	27.2
Year 12	17.1	15.7
Less than Year 12	23.3	13.9
(total number)	6961	4181

Notes: (1) Cohort 1 arrived in Australia between September 1993 and August 1995.
(2) Cohort 2 arrived in Australia between September 1999 and August 2000.

While men comprise 45 per cent of both cohorts (primary applicant or spouse of the migrating unit), in Cohort 2 their chances of being a spouse rather than a primary applicant are higher than for Cohort 1.

There are some noticeable differences in the visa categories of the two cohorts. Cohort 2 has a higher proportion who migrated as Independent (30 per cent compared with 20 per cent) or Business Skills and Employer Nomination Scheme (8 per cent compared with 5 per cent); and a lower proportion who migrated as Preferential Family/Family Stream (41 per cent compared with 49 per cent) or Humanitarian (8 per cent compared with 16 per cent). Since the labour market outcomes of the different visa categories vary systematically (the Independent and Business Skills and Employer Nomination Scheme categories having the highest rates of employment and the lowest rates of unemployment and conversely for Humanitarian), the changing composition will affect the overall performance of the two cohorts.

The average age and country of birth is similar for the two cohorts, with Cohort 2 being a little less likely to come from Other Europe or South East Asia and a little more likely to come from North East Asia, South and Central Asia and Other Africa.

The timing of the two surveys has had the effect that Cohort 2 has been in Australia a bit longer at the time of interview than Cohort 1. For example, 42 per cent of

Cohort 2 had been in Australia for more than 6 months while this was the case for only 12 per cent of cohort 1. We will see later whether this difference has had a significant effect on outcomes.

Cohort 2 had a higher proportion (38 per cent as compared with 31 per cent) of people who were fluent speakers of English, and commensurately fewer who did not speak English well or at all. Cohort 2 migrants also had distinctly higher levels of formal education. The proportion with post-graduate qualifications has risen from 12 to 19 per cent while those with less than Year 12 have almost halved to 14 per cent.

The most striking difference between the two cohorts is, however, apparent in their employment experience. As Table 1 shows, the proportion employed rose from 33 to 50 per cent. Most of the increase in employment is matched by a fall in the proportion who are unemployed, although there is also a higher participation rate among Cohort 2. The higher employment levels for Cohort 2 are reflected in the proportion who are wage and salary earners (which has risen from 28 to 50 per cent). There is a more than commensurate fall in the dependence on Government payments for people's main source of income. For Cohort 1, more people depended on Government payments than earned a wage. For Cohort 2, there were more than four wage earners for every person whose main source of income was Government payments.

We can conclude from Table 1 that Cohort 2 migrants were rather different from those in Cohort 1. The former group were weighted more to those selected on the basis of likely success in the labour market and less to those selected on family or humanitarian grounds. Partly for this reason, Cohort 2 migrants have, on average, better English language skills and more education. This provides part, but only part, of the explanation for the distinctly superior labour market outcomes of Cohort 2.

We examine the differences in labour market outcomes more closely in the next section.

3. Labour Force Outcomes

The labour force outcomes of the migrant groups will be examined using the major classifications of employed, unemployed and not in the labour force. These are rather crude measures, and the difference between them is not as clear cut as it appears to be. For example, a person who works a few hours a week for pay is classified as employed, whereas they may mostly be, and see themselves as, unemployed or a student or home maker certainly, the wages from a couple of hours work are not enough to live on. Similarly, a non-employed person who is not actively looking for work is classified as not in the labour force. The reality may be that they very strongly wish to work, but are not actively looking because they believe they have little chance of success.

Despite these imprecisions at the margins of the groupings, the distinctions between the three states are for the most part real and important, and they provide satisfactory classifications at this point. In recognition of the blurred boundaries, however, we report also on the employment to population ratio. This ratio expresses the number of employed people from a specific group as a proportion of the total number of people who are in that group (for example, women primary applicants). It is the single most useful figure for assessing the labour market success of a group. It does not distinguish between people who are not employed because they are not looking for work, and people who are unemployed.

3.1 Labour force status

We saw in Table 1 that the labour force status of the two cohorts is quite different, with Cohort 2 having much higher rates of employment and half the rate of unemployment. For each of the two cohorts as a whole, the employment to population ratio has risen from 33 per cent for Cohort 1 to 50 per cent for Cohort 2. This is a very major change in the space of 6 years. Table 2 shows the change by visa category. The improved employment performance is apparent for each visa category except Humanitarian (where employment rates in both cohorts are very low) and Business Skills and Employer Nomination Scheme. The decline in employment of the latter group in the face of the general improvement for Cohort 2 is a surprise. Nearly all the primary applicants in the Business Skills and Employer

Nomination Scheme category had spouses but the proportion of spouses did not change across the cohorts. The fall in employment applies also to primary applicants considered on their own.

Table 2: Employment to population ratios for Recently-arrived Migrants by Visa Category (per cent)

Visa Category	*Cohort 1 %*	*Cohort 2 %*
Concessional Family/Skilled-Australian Linked	42.3	64.5
Independent	52.5	69.9
Preferential Family/Family Stream	29.1	40.6
Business Skills Nomination Scheme and Employer Nomination Scheme	58.2	46.5
Humanitarian	6.4	4.2
Total	32.8	49.5
(Sample size)	(6960)	(4181)

Thus it is clear that the fall in employment is not caused by a rise in the proportion of Business Skills and Employer Nomination Scheme migrants who have non-employed spouses.

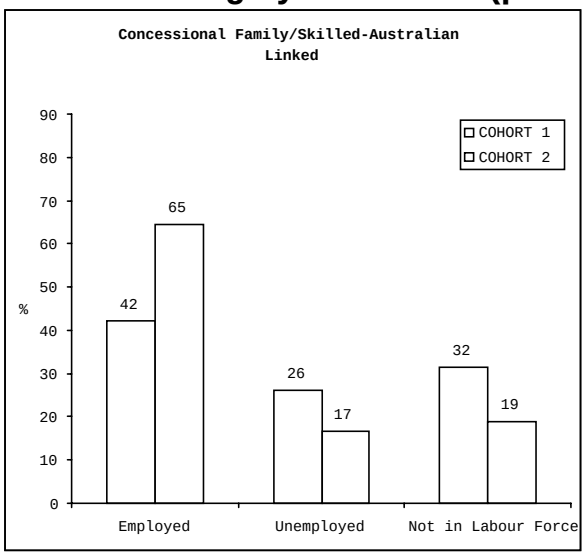
We note that the Business Skills and Employer Nomination Scheme group is one of the categories which has been least subject to change in selection criteria over the period.

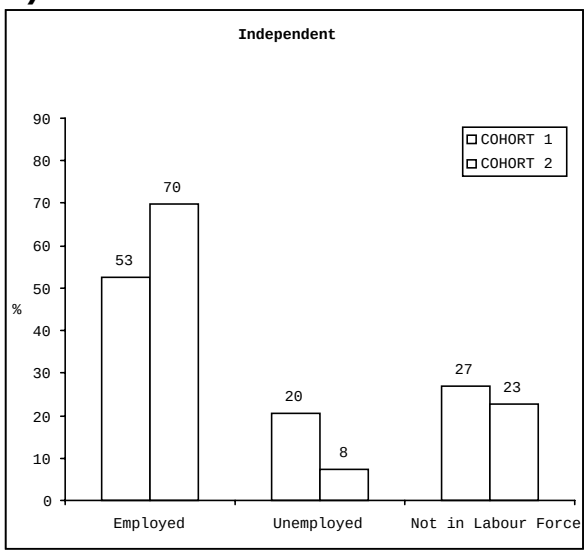
Figure 1 summarises the same information as Table 2, but distinguishes the unemployed from those who are not in the labour force. It is immediately apparent that for the Concessional Family/Skilled-Australian Linked, the Independent and the Preferential Family/Family Stream migrants, those in Cohort 2 had higher employment, lower unemployment and lower non-participation in the labour force. The fall in unemployment is particularly striking for Independent migrants who, in Cohort 2 six months after arrival, had an unemployment rate not much in excess of that for the Australian workforce. The slight fall in employment among the Business Skills and Employer Nomination Scheme and Humanitarian migrants is matched, not by a rise in unemployment, but by a rise in non-participation in the labour force.

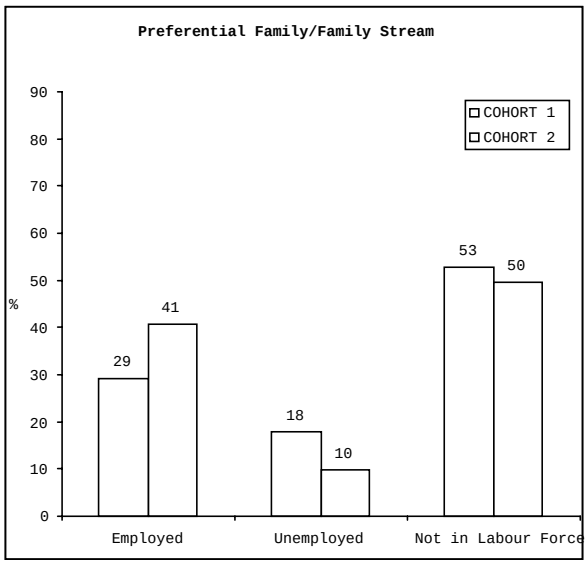
Figure 2 summarises the change in the employment to population ratio for the different visa categories. The diagonal line joins all the points where the outcome for Cohort 2 would be the same as for Cohort 1. If a group is above that line, then

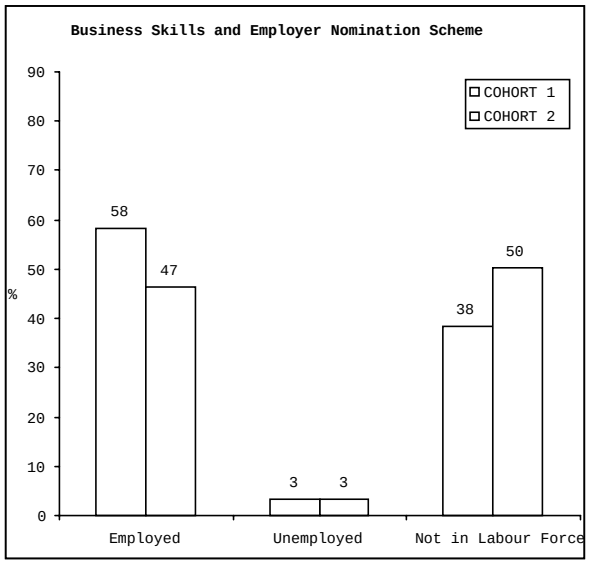
this indicates a higher employment to population ratio for Cohort 2 compared with Cohort 1, and vice versa. The improved performance overall and for all but the Business Skills and Employer Nomination Scheme and Humanitarian categories is immediately apparent.

Figure 1: Labour Force Status of Migrants Six Months after Arrival, by Visa Category and Cohort (per cent)









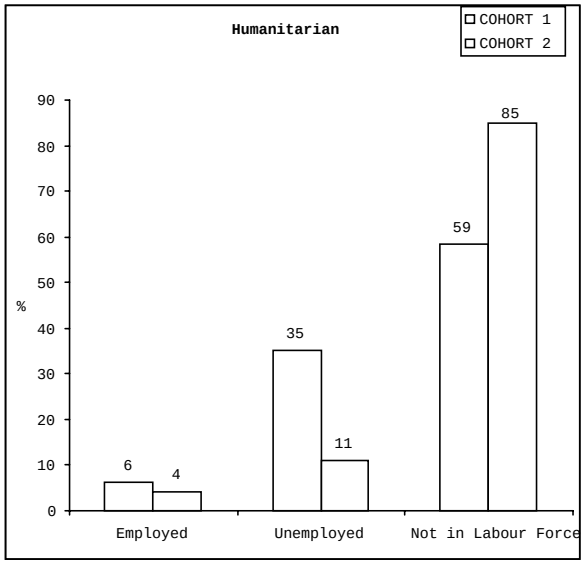


Figure 2: Employment to population ratio of Migrants Six Months after Arrival, by Visa Category: Comparison of Cohorts 1 and 2

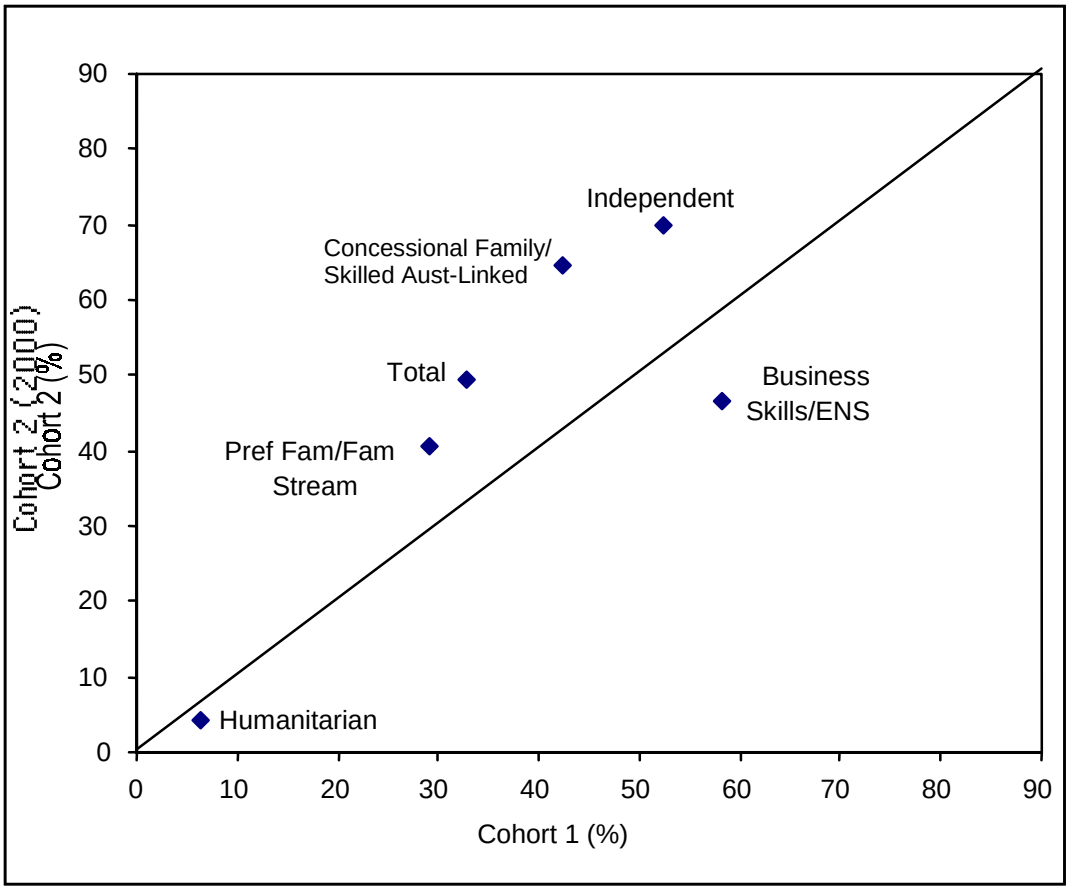


Figure 3 gives more detail on the employment to population ratio. It shows this ratio for each cohort, distinguishing by visa category, sex and primary applicant/spouse. This figure shows how widely spread is the gain in employment for Cohort 2. Both men and women, primary applicants and spouses have increased their probability of being employed if they migrated as Concessional Family/Skilled-Australian Linked, as Preferential Family/Family Stream or as Independent. About 80 per cent of migrants come in one of these visa categories. The improvement in employment has been particularly strong for the Concessional Family/Skilled-Australian Linked category and within this group, for spouses of the primary applicant. Note that the fall in employment in the Business Skills and Employer Nomination Scheme category that was noticed previously is mainly among the female primary applicants (and not among female spouses, who in fact have a slightly higher rate of employment in Cohort 2).

Recent changes to migrant eligibility criteria, intended to improve the employability of migrants, have included giving greater preference to people under age 45. These

changes were motivated by the research that showed that younger people had greater success in finding jobs.

Figure 3: Employment to population ratio of Migrants Six Months after Arrival by Sex, Primary Applicant/ Spouse, Visa Category and Cohort (per cent)

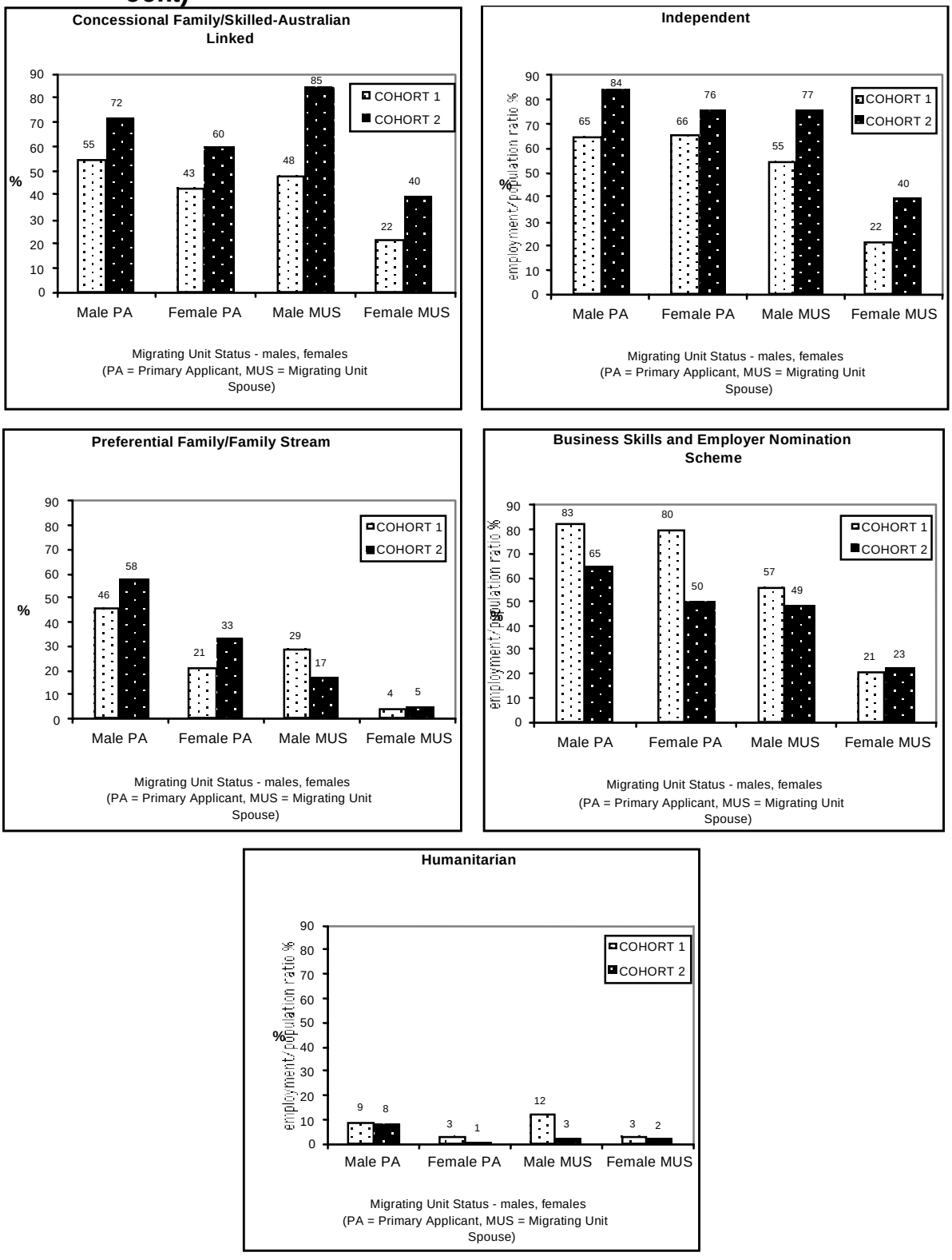


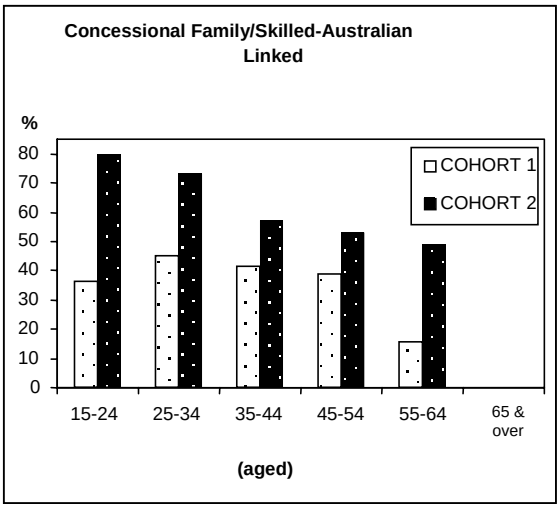
Figure 4 shows the employment to population ratio for different age groups, within each visa category. The main message of this figure is that the advantage of youth is less apparent for Cohort 2 than it was for Cohort 1. People aged 55-64 have done particularly well in obtaining jobs if they migrated as Business Skills and Employer Nomination Scheme or Concessional Family/Skilled-Australian Linked. Among the Independent and Preferential Family/Family Stream groups, those aged 45-55 had the same or higher probability of being employed as did people in the younger age groups. Figure 4 shows nothing about the individuals except their age and visa category. It may be that in Cohort 2, older migrants have relatively high levels of education or English competence, for example, compared with the earlier cohort. Later in this report we discuss the impact of age (among other attributes) on employment success when we hold constant other characteristics that might also be important.

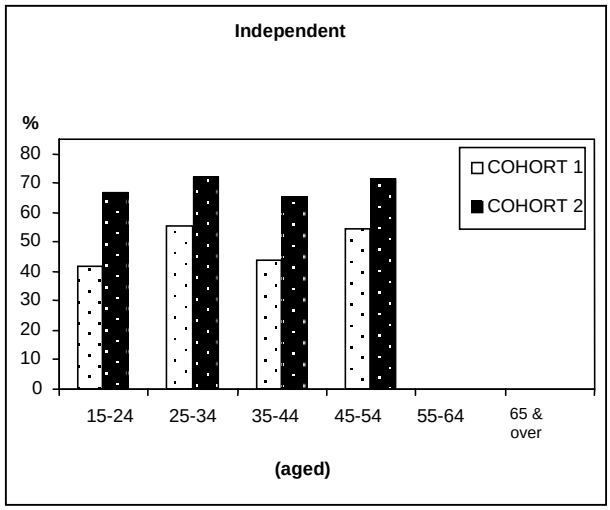
3.2 The evolving employment pattern

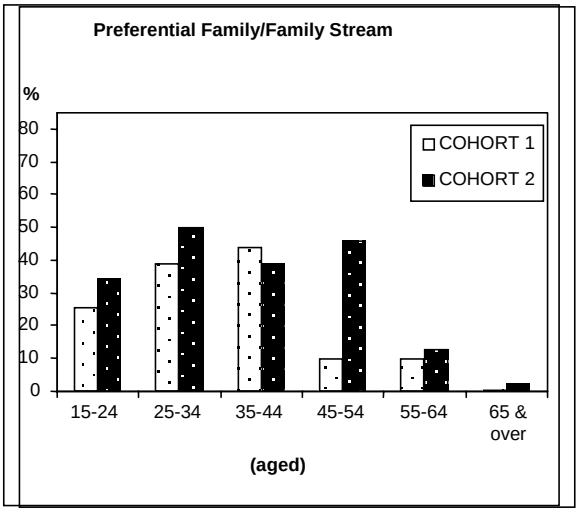
The success of migrants in finding jobs rises with their time in Australia. Cohort 1 was interviewed on three separate occasions, six months (wave 1), eighteen months (wave 2) and three years (wave 3) after arrival. This makes it possible to see how their success in finding jobs changes as they settle into life in Australia. Cohort 2, having only one interview six months after arrival, is comparable with Cohort 1 wave 1.

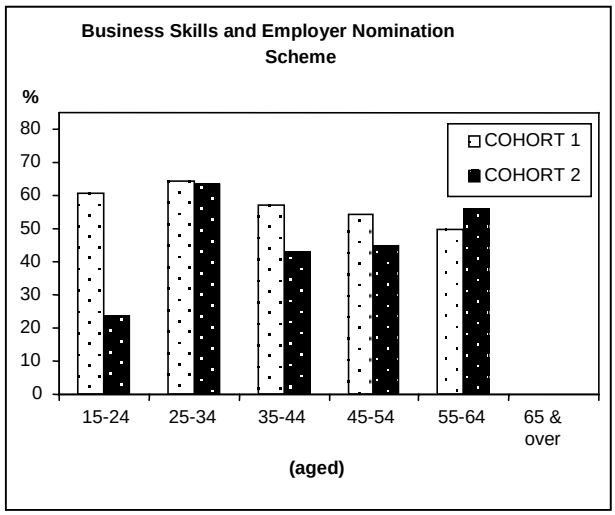
If we consider the cohort as a whole, the employment to population ratio rose for Cohort 1 from 33 per cent in wave 1 to 49 per cent twelve months later. Three and a half years after arrival, 56 per cent of the cohort was employed - about 15 per cent less than the Australian average. Cohort 2, with 50 per cent employed after six months in Australia, looks the same as does Cohort 1 after 18 months in Australia.

Figure 4: Employment to population ratio of Migrants Six Months after Arrival, by Age, Visa Category and Cohort (per cent)









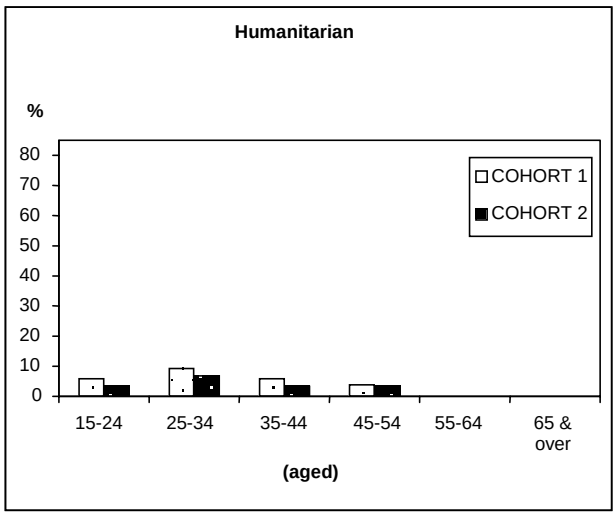
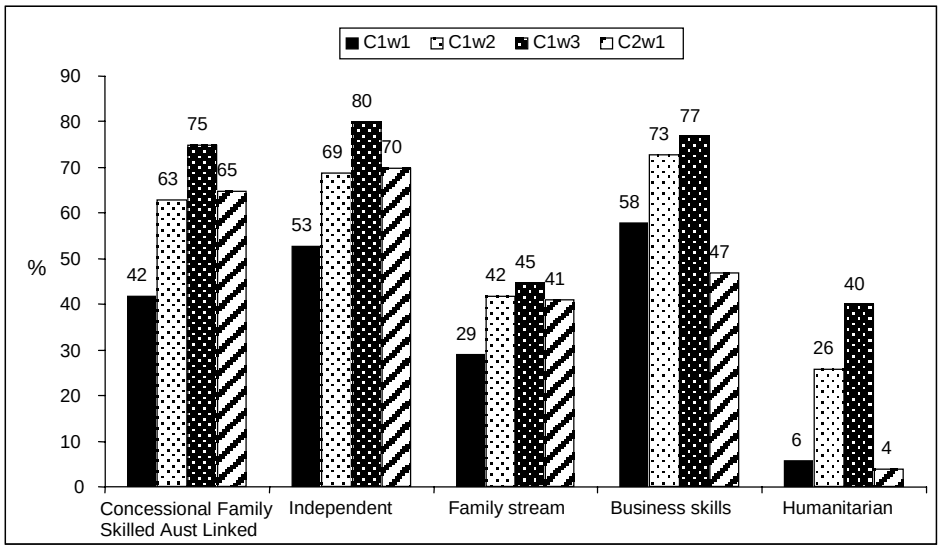


Figure 5 presents this information for each visa category. The first panel reports the data for primary applicants and spouses combined. The next two panels report the data just for primary applicants, distinguished by sex. For every visa category in Cohort 1, the first eighteen months in Australia saw a rapid integration into the labour market. This integration continued over the subsequent eighteen months but at a slower pace. Note that after three years in Australia, 40 per cent of Humanitarian primary applicants and spouses had a job. For the Concessional Family/Skilled-Australian Linked, Independent and Preferential Family/Family Stream groups, the rate of employment of Cohort 2 after six months in Australia is almost the same as that for Cohort 1 after eighteen months. Figure 5 again shows that Business Skills and Employer Nomination Scheme migrants were the exception, with the Cohort 2 employment rate lower than the comparable rate for Cohort 1. As we have seen earlier, and is shown in the last panel of Figure 5, this is accounted for mainly by a fall in the employment rate of female primary applicants.

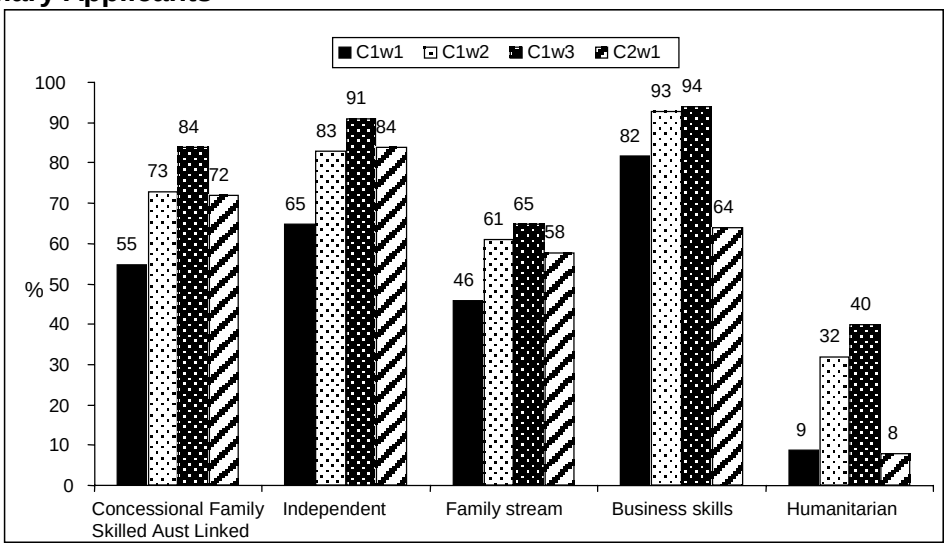
Overall, the employment to population ratio of migrants in the three main 'economic' visa categories (Concessional Family/Skilled-Australian Linked, Independent and Business Skills and Employer Nomination Scheme) are high compared with the Australian average of about 70 per cent (about 80 per cent for men and 60 per cent for women). After three and a half years in Australia, all three groups have ratios above the Australian average. Indeed, for both the male and female primary applicants, the ratio was well above the Australian average by gender.

Figure 5: Employment to population ratio, Cohort 1, Waves 1-3 and Cohort 2, by Visa Category and Male and Female Primary Applicants (per cent)

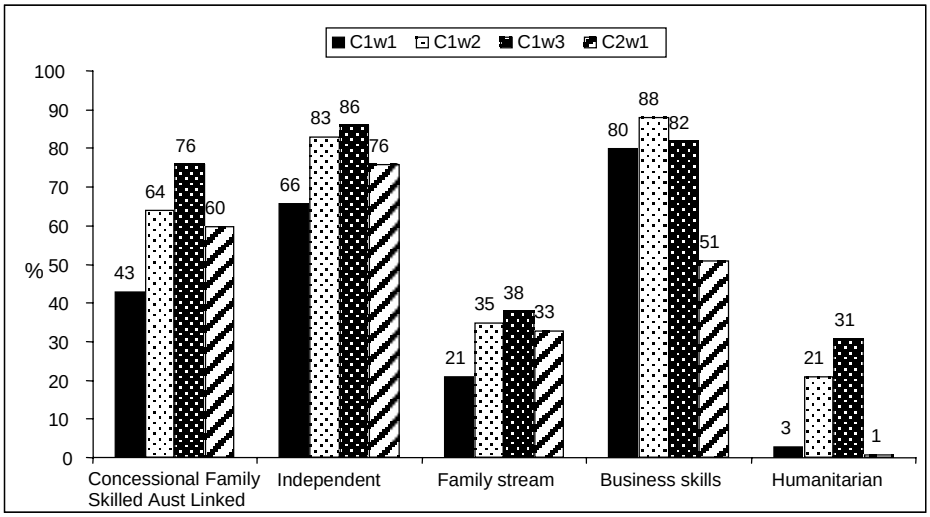
All Primary Applicants and Migrating Unit Spouses



Male Primary Applicants



Female Primary Applicants



Note that Cohort 1 was eligible during this period for social welfare benefits, and many migrants in that cohort drew support from these benefits in their early period in Australia.

But it has not taken long for them to move from social welfare support to economic independence via employment. On this evidence, the availability of social welfare support did not undermine the motivation of recent migrants to become economically independent.

Preferential Family/Family Stream and Humanitarian migrants are the exceptions, in having employment to population ratios below the Australian average even after three and a half years. For the Preferential Family/Family Stream, this is especially the case for female primary applicants. In Cohort 1, many of these are older women who, in the normal course, would not be expected to find jobs: they would be supported by their families. For both men and women primary applicants among the Humanitarian group, employment has risen sharply during their period in Australia, but from a very low base.

3.3 Change in main activity

It is possible to look in more detail at the different range of activities in which migrants were engaged, and how this has changed over time and between cohorts. This gives a more complete picture of what people who were not in employment were doing. The information is presented separately for each visa group. As a consequence of the high level of disaggregation of the data, the number of cases in some categories is too small to be a reliable indication of the true situation. Cells with very small numbers have been omitted, as has the category “other”. Hence percentages will not always sum to 100. The group “other employed” has been added to those who have their own business, to reduce the number of small cells (the remaining employed category being wage and salary earner). Except for the Business Skills and Employer Nomination Scheme migrants, numbers were more or less evenly divided between “other employed” and “own business”. For the Business Skills and Employer Nomination Scheme group, a much higher proportion owned their own business. The category “other” has been omitted altogether. There were very few people in this category for all groups except Business Skills and

Employer Nomination Scheme migrants, where the proportion was small for Cohort 1 but as high as 14 per cent for Cohort 2.

For all groups except Business Skills and Employer Nomination Scheme, most employed people were wage and salary earners. However, by wave 3 of Cohort 1, between 8 and 13 per cent of each visa group were self employed (own business plus other). The figure for the Business Skills and Employer Nomination Scheme group was 33 per cent, compared with 37 per cent who were employees. Note that many people in the Business Skills and Employer Nomination Scheme category came in under the Employer Nomination Scheme, and worked as employees.

For all visa categories in Cohort 1, the rise in the number of people employed as wage and salary earners exceeded the (substantial) fall in unemployment as the duration of stay in Australia lengthened. The extra employees came from both those who in the first wave were students and those who in the first wave were home duties (except for those in the Preferential Family/Family Stream, where the number in home duties stayed constant). For example, for the Independent migrants, employees rose from 46 per cent to 67 per cent of the group in the interval between six months and three and a half years after arrival in Australia. At the same time, the proportion of students fell from 10 per cent to 4 per cent and the proportion whose main activity was home duties fell from 16 per cent to 10 per cent.

With the exception of Business Skills and Employer Nomination Scheme and Humanitarian migrants, the distribution among the main activities of people in Cohort 2, six months after arrival, looks much like that for Cohort 1 by wave 3, three and a half years after arrival. Cohort 2 has slightly higher percentages of people who are students or unemployed, but the differences are mostly small.

The overall pattern of integration into the labour market for Cohort 1 can be described as being a move from unemployment, student or home duties into wage and salary employment. This was matched by a modest move into self-employment. The exception to this pattern is among the Business Skills and Employer Nomination Scheme migrants, where the growth in economic independence was focussed on a movement from home duties (and to a lesser extent from “other”) into self-employment. The proportion who were wage and salary earners hardly changed,

whereas the proportion who had their own businesses doubled from 13 per cent in wave 1 to 27 per cent in wave 3. It is interesting that most of this growth in self-employment came from people whom we presume to be wives.

It should be noted that only among Preferential Family/Family Stream and Humanitarian do more than a handful list their main activity as retired or pensioner.

Figure 6 compares the main activities of Cohort 2 and Cohort 1, and shows how these change for Cohort 1 as they settled into life in Australia. Table 3 compares the main activity of migrants in each cohort before they migrated, with their main activity six months after arrival.

Table 3: Main Activity of Migrants Prior to and 6 months after Arrival in Australia: Cohorts 1 and 2 (per cent)

a) Cohort 1

	After Migration								
Main Activity	*Wage, salary*	*Own business*	*Other employed*	*Unemployed*	*Student*	*Home duties*	*Retired, pensioner*	*Other*	*Total*
Before Migration	%	%	%	%	%	%	%	%	%
Wage, salary	39.1	2.4	1.6	23.2	13.3	15.2	3.0	2..3	55.6
Own business	26.1	11.4	2.4	21.3	15.2	17.6	2.4	3.7	10.7
Other employed	19.8	0.6	5.8	35.8	19.5	12.8	2.8	2.8	4.7
Unemployed	23.8	0.5	0.3	40.0	15.8	16.0	2.3	1.1	2.9
Student	17.2	n.a	2.7	17.7	43.1	16.6	n.s	2.7	7.7
Home duties	3.0	1.2	1.1	10.7	7.9	71.8	3.8	0.6	12.0
Retired, pensioner	1.8	0.1	0.3	3.0	3.2	17.1	73.0	1.5	4.1
Other	18.1	1.0	0.1	27.9	20.8	20.1	5.6	6.3	2.4
Total	28.3	2.7	1.8	21.4	15.3	22.5	5.7	2.3	100.0

b) Cohort 2

	After Migration								
Main Activity	*Wage, salary*	*Own business*	*Other employed*	*Unemployed*	*Student*	*Home duties*	*Retired, pensioner*	*Other*	*Total*
Before Migration	%	%	%	%	%	%	%	%	%
Wage, salary	56.3	3.3	1.9	11.5	10.9	13.7	0.8	1.5	61.5
Own business	33.1	21.5	0.6	6.9	13.3	11.1	2.5	11.0	10.7
Other employed	37.0	1.5	5.2	11.5	25.1	17.2	1.8	0.7	3.0
Unemployed	15.9	n.a	1.0	20.1	37.0	21.0	1.2	3.9	2.0
Student	31.8	1.3	1.4	6.8	36.0	21.7	n.a	1.0	6.1
Home duties	9.5	1.4	1.6	1.1	13.1	70.8	1.3	1.0	11.8
Retired, pensioner	0.9	n.a.	0.8	1.8	1.0	12.9	81.1	1.4	3.0
Other	22.4	n.a	n.a	20.9	31.2	9.8	10.7	5.1	1.8
Total	43.1	4.6	1.7	9.6	14.0	20.8	3.6	2.5	100.0

Figure 6: A comparison of Main Activity for Cohort 1, Waves 1-3 and Cohort 2

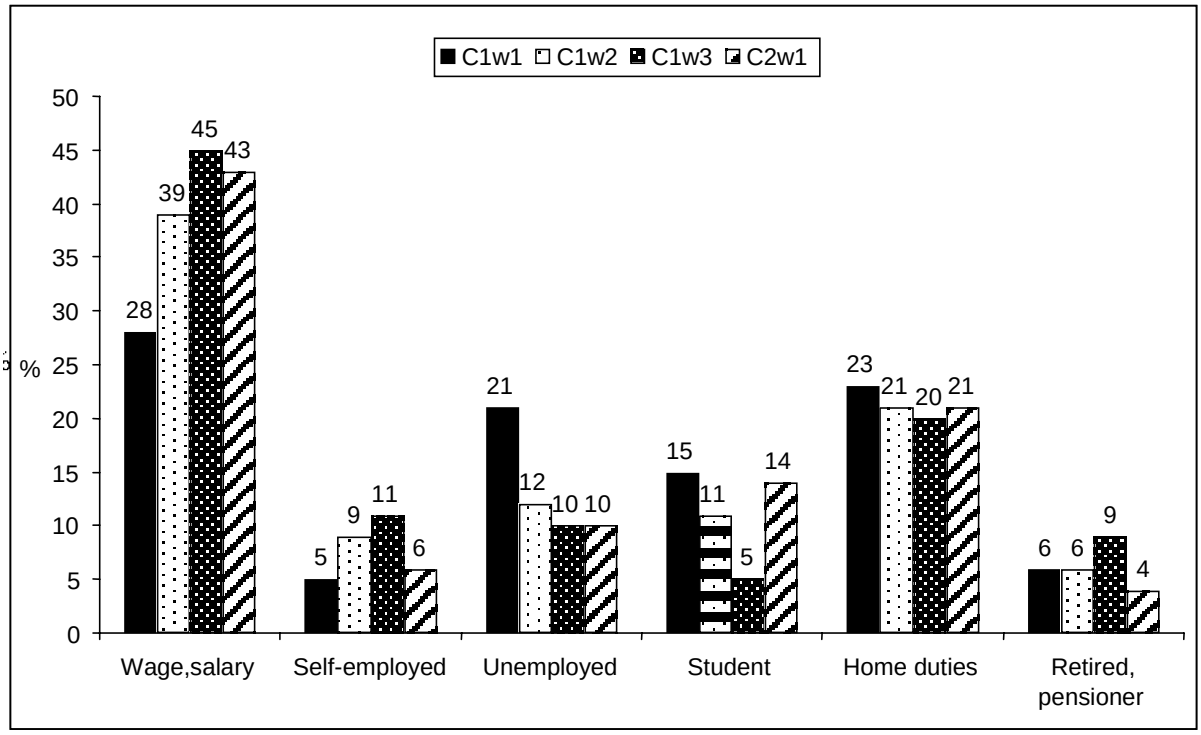
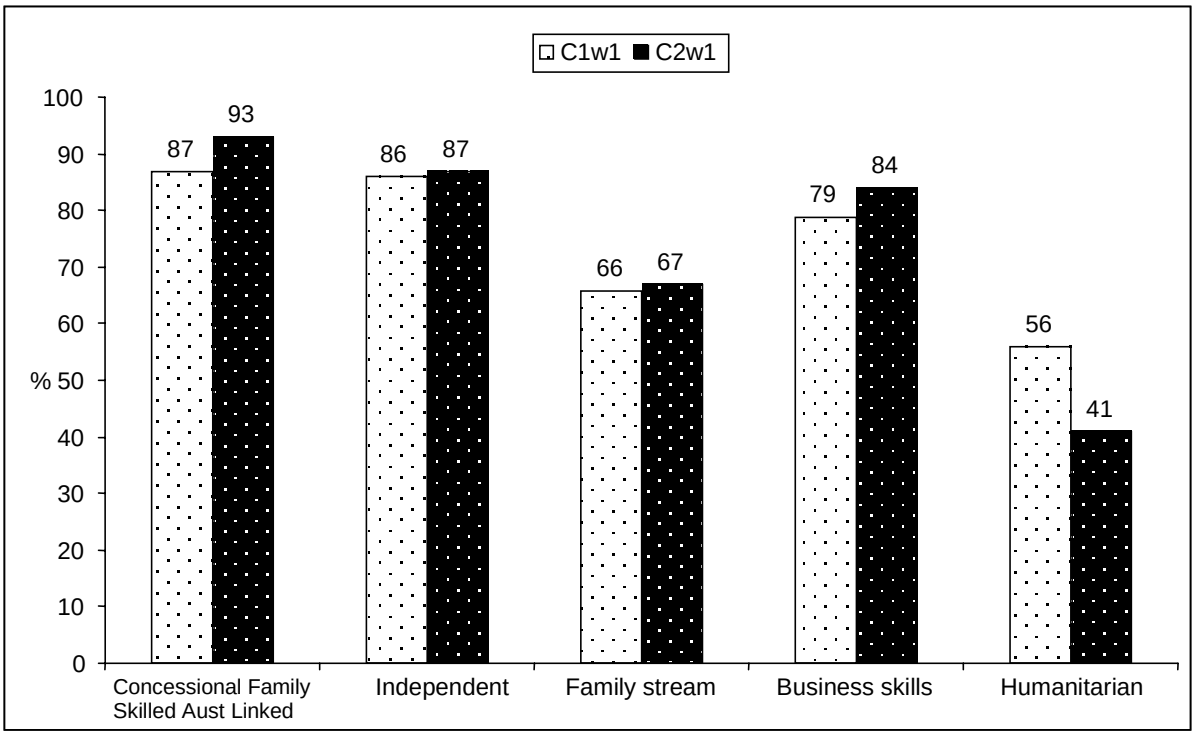


Figure 7: Pre-Immigration Employment to population ratio by Visa Category and Cohort (per cent)



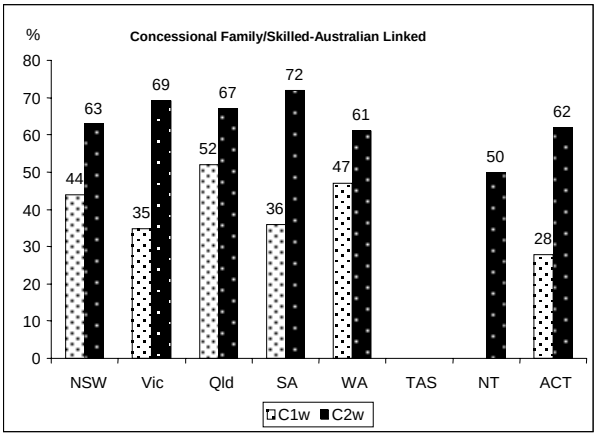
3.4 Employment to population ratio prior to immigration

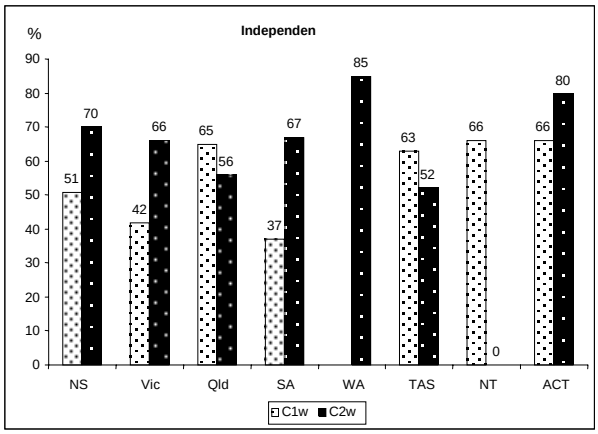
As we will show in a later part of this report, the probability of having a job within six months of arrival is for most groups significantly affected by whether or not a person had a job prior to migration. Figure 7 shows the employment to population ratio by visa group prior to immigration. In all categories except Humanitarian, the proportion employed prior to immigration is a little higher in Cohort 2 than in Cohort 1. This is especially so for the Concessional Family/Skilled-Australian Linked and Business Skill groups.

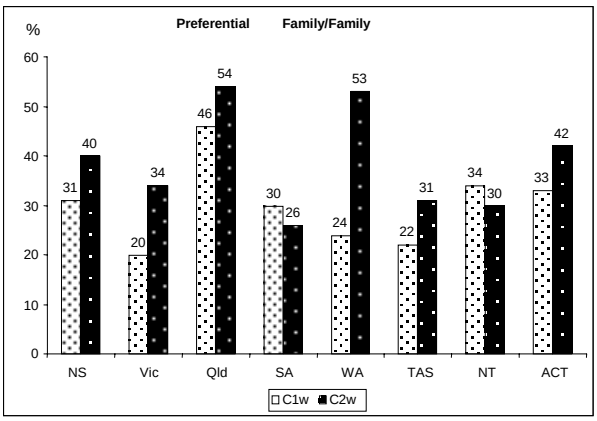
3.5 Employment to population ratio by state

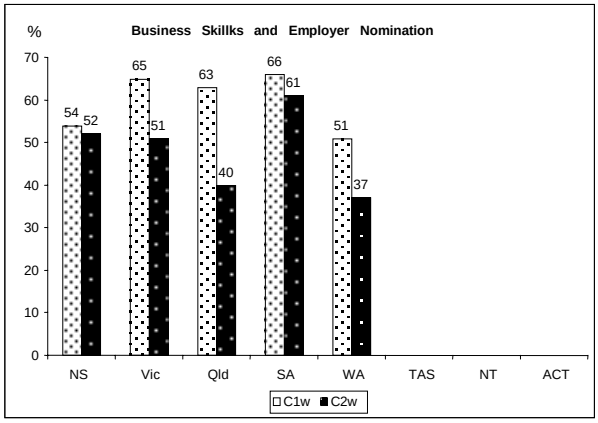
Our final perspective on the employment to population ratio is to see how this has differed across the States and Territories. Figure 8 compares the employment to population ratio of each cohort, six months after arrival, by State. The information is provided separately for each visa category. Note that columns have been left blank where the number of migrants in the relevant category is fewer than 5. Cobb-Clark and Chapman (1999) have shown that Cohort 1 migrants to Queensland seem to have done better in their employment than would be expected given their skills and experience. An examination of Figure 8 suggests that whatever advantage Queensland had as a place for migrants in Cohort 1 to find jobs, this had evaporated by Cohort 2. Indeed it is interesting to note that for Concessional Family/Skilled-Australian Linked and Business Skills and Employer Nomination Scheme, South Australia has the highest employment to population ratio for Cohort 2. If we ask which States have above average employment rates for migrants in Cohort 2, the answer is that it depends entirely on which visa category they are in. For example, NSW is above average only for Business Skills and Employer Nomination Scheme migrants. Victoria is above average for Concessional Family/Skilled-Australian Linked and Business Skills and Employer Nomination Scheme. Queensland is above average for Concessional Family/Skilled-Australian Linked and Preferential Family/Family Stream, but well below average for Independent migrants. We can conclude that knowledge of which States provided the best employment prospects for Cohort 1 migrants in each visa group gives little guide as to where the best prospects lay for migrants in Cohort 2.

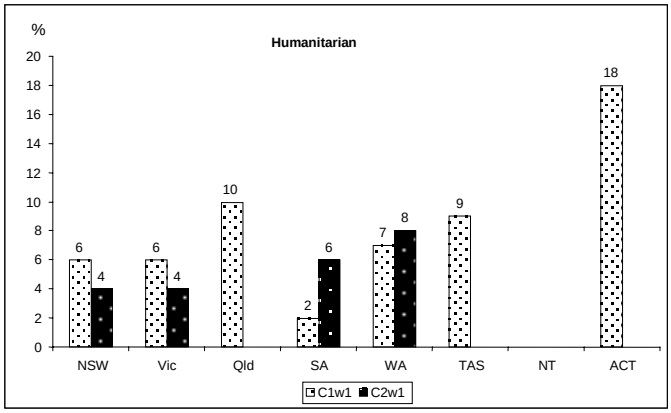
Figure 8: Employment to population ratio of Migrants Six Months after Arrival by Cohort, Visa Category and State (per cent)











3.6 Occupation

In this section we look at the occupations that people had before they migrated, and compare this with the occupations they had within six months of arrival in Australia. Only a crude comparison of the occupations of Cohorts 1 and 2 is possible. In the interval between the arrival of the two cohorts, the system used by the Australian Bureau of Statistics (ABS) to classify occupations was changed substantially. We cannot make the coding frames comparable across the two cohorts. We thus make two types of comparison. The first is to use the Australian Standard Classification of Occupation 1 (ASCO1) to compare the occupations of Cohort 1 before and after migration, and to use ASCO2 to make a similar comparison for Cohort 2 (see Table 4(a)). This is straightforward. The more difficult task is to compare the occupational outcomes of Cohorts 1 and 2. We can only do this in a gross way. By using the concordance tables published by the ABS, we conclude that a five-category occupational grouping can be constructed that provides adequate comparability between the two cohorts (see Table 4(b)). The five categories are (1) administration; management and associate professionals; (2) professionals; (3) trades; (4) machine operators and drivers; and (5) other. Note that the "other" category is quite heterogeneous, and includes various levels of clerical and sales as well as labourers. For the two cohorts combined, about half of employed people were in the "other" occupation category in their current occupation, and about 20 per cent were in this category prior to migration.

For Cohort 1, half were in the same occupational category after migration as they were before migration. Those most likely to stay in the same occupational category were professionals and tradespeople (the two biggest occupational groups). All occupations saw more downward than upward mobility in the transition to the Australian labour market, though some upward mobility was evident. Managers and administrators appeared to have the greatest downward mobility, with half working as sales, trades, clerks, machine operators and labourers. Of course, since this group is ranked highest, a move down is the only form of mobility possible. Prior to immigration, 4 per cent were labourers and related and 16 per cent were in these occupations after arrival. The upward mobility was to be found mainly in the movement of labourers and machine operators into sales and trades jobs.

Table 4a): Occupation of Migrants prior to and 6 months after Arrival in Australia: Cohorts 1 and 2 (per cent)

a) Cohort 1

After Migration

Occupation	*Mgrs. and admin.*	*Professionals*	*Para-professionals*	*Trades-persons*	*Clerks*	*Sales*	*Machine ops, and drivers*	*Labourers and related*	*Total*
Before Migration	%	%	%	%	%	%	%	%	%
Mgrs. and admin.	38.9	10.5	0.2	7.5	6.5	13.9	6.5	16.0	13.5
Professionals	6.3	62.5	2.5	3..0	7.6	7.1	3.2	7.9	33.9
Para-professionals	1.6	9.4	52.9	6.7	3.9	7.7	5.9	11.9	7.4
Trades-persons	2.4	0.8	1.1	61.3	0.8	3.0	7.9	22.9	19.2
Clerks	1.6	6.8	0.4	2.3	49.5	22.1	0.7	16.7	10.3
Sales	5.5	7.9	0.3	4.5	6.8	47.3	5.3	22.4	9.5
Machine ops, and Labourers and	-	2.8	0.9	11.5	-	14.5	28.6	41.7	3.9
Total	8.6	25.0	5.1	15.8	9.6	12.9	6.6	16.3	100.0

b) Cohort 2

After Migration

Occupation	*Mgrs. and admin.*	*Professionals*	*Assoc.-professionals*	*Trades-persons*	*Adv. clerical serv.*	*Int. clerical serv.*	*Int. prodn, transport*	*Elem. cler, sales*	*Labourers and related*	*Total*
Before Migration	%	%	%	%	%	%	%	%	%	%
Mgrs and admin.	46.7	17.7	10.8	0.4	0.2	6.8	5.9	3.0	8.4	13.6
Professionals	1.9	66.5	5.4	1.6	1.5	10.6	1.8	4.8	5.8	40.3
Assoc.-	3..6	7.9	37.4	14.6	1.4	19.2	5..9	1.4	8.7	12.6
Tradespersons	0.4	2.2	2.7	68.1	0.7	5.7	5.5	0.1	14.5	12.7
Adv. clerical serv.	1.5	4.3	2.6	-	31.3	35.6	-	4.5	20.2	3.9
Int. clerical serv.	1.7	5.4	5.6	4.6	1.9	61.4	2.4	8.4	8.5	9.6
Int. prodn,	-	5.8	0.6	9.3	11.5	6.0	20.3	1.2	45.3	2.8
Elem. cler, sales	1.4	11.1	4.8	3.6	-	14.0	18.9	12.4	33.7	3.2
Labourers and	2.6	-	3.6	19.9	4.6	8.5	13.3	7.2	40.4	1.3
Total	7.9	31.7	9.6	12.3	2.7	16.3	4.6	4.1	10.9	100.0

Table 4b): Comparison between Cohorts 1 and 2 of Broad Occupational Change of Migrants prior to and 6 months after Arrival in Australia (per cent)

a) Cohort 1

After Migration

Occupation	*Admin, mgr,assoc.*	*Professional*	*Trades*	*Mach Op. driver*	**Other**	*Total*
Before Migration	%	%	%	%	%	%
Admin, mgr,assoc.	44.6	10.1	7.2	6.3	31.9	20.8
Professional	8.8	62.5	3.0	3.2	22.6	33.9
Trades	3.4	0.8	61.3	7..9	26.6	19.2
Mach Op. driver	2.8	0.9	17.4	42.5	36.4	2.4
Other	3.3	6.6	4.7	7.1	78.3	23.7
Total	13.8	25.0	15.8	6.6	38.8	100.0

b) Cohort 2

After Migration

Occupation	*Admin, mgr,assoc.*	*Professional*	*Trades*	*Mach Op. driver*	*Other*	*Total*
Before Migration	%	%	%	%	%	%
Admin, mgr,assoc.	49.6	13.0	7.2	5.9	24.3	26.2
Professional	7.4	66.5	1.6	1.8	22.7	40.3
Trades	3.1	2.2	68.1	5.5	21.1	12.7
Mach Op. driver	0.6	5.8	9.3	20.3	64.0	2.8
Other	6.3	5.8	4.6	5.6	77.7	18.1
Total	17.5	31.7	12.3	4.6	34.0	100.0

The overall picture for Cohort 2 is similar to that for Cohort 1, but with less downward mobility. The comparison is tentative, because even though the categories of managers and administrators, associate professionals, and labourers have the same title in ASCO 1 and ASCO 2, they do not match closely in terms of the detailed occupations that are allocated under these broad headings. The groups that are comparable are professionals and trades. Our descriptions must be understood with this in mind. Fifty five per cent of Cohort 2 stayed in the same broad occupational category after migration. As with Cohort 1, the highest occupational stability was displayed by the professional and trades people. It was also high for the intermediate clerical group. Apart from the intermediate production and transport workers, downward mobility appears to be less for Cohort 2 than for Cohort 1. For example, a smaller proportion of professional and trades people were working as labourers in Cohort 2.

It is striking that two-thirds (66 per cent) of Cohort 2 were working in the skilled occupational group of associate professionals, professionals or managers and administrators prior to migration: after migration, half (51 per cent) were. The comparable figure for Cohort 1 (and the combined categories are comparable) are 55 per cent and 39 per cent. Thus the "quality" of the migrant intake in both cohorts, and particularly Cohort 2, is high.

3.7 Have Cohort 2 been forced to accept bad jobs?

We present below a range of evidence that looks at the types of jobs that migrants in each cohort were employed, and compares their situation after migration with that prior to migration. The evidence is directed to answering the question: "Has the ineligibility of Cohort 2 for social welfare benefits forced a substantial number to take inferior jobs?" The evidence looks at their jobs pre and post migration, at their earnings and income, at their hours worked, at efforts to have qualifications recognised and to learn English prior to migration, and at how they feel about their jobs.

There is no support in Table 5 for the proposition that migrants in Cohort 2 have been forced to accept poor jobs by virtue of the unavailability of social welfare benefits. They are no more likely than Cohort 1 to dislike their job, to be unable to use their qualifications, to have low weekly earnings or total income or to work 15

hours or less. They are at least as likely to love their job, to earn a high income and not to have sought to have their qualifications assessed. This last point is taken to indicate that Cohort 2 migrants were not especially anxious about the difficulty and urgency of obtaining a job, since a higher proportion (compared with Cohort 1) of those who had post-school qualifications did not take the steps necessary to have those qualifications recognised in Australia.

Table 6 provides some evidence on the extent to which migrants in each cohort accepted jobs that were of substantially lower socio-economic status than the jobs they had prior to migration. As discussed previously, the two cohorts span the period in which the Australian Bureau of Statistics introduced a substantial change in the way it codes occupations (from ASCO1 to ASCO2). For this reason, only quite aggregated occupational categories can be made comparable across the two cohorts. The category "other" includes sales, clerks and labourers. We interpret movement into machine operators and drivers, and "other", as downward mobility. On this measure, there was less downward mobility apparent for Cohort 2 than for Cohort 1. Thus, of people who were employed as managers, administrators or para-professionals in their country of origin, 32 per cent in Cohort 1 and only 24 per cent in Cohort 2 were employed as "other" in Australia approximately six months after arrival. Similarly, the downward mobility from prior employment as a tradesperson to current employment in "other" was less for Cohort 2 (21 per cent) than for Cohort 1 (27 per cent). Again, the results of this table give no support to the proposition that ineligibility for social welfare benefits has forced migrants in Cohort 2 to take poor jobs.

Table 5: Selected Attributes of the Jobs and Income of Migrants in Cohorts 1 and 2, Six Months after Arrival

	All Migrants %		*Economic Migrants %*		*Family Migrants %*	
% who	*Cohort 1*	*Cohort 2*	*Cohort 1*	*Cohort 2*	*Cohort 1*	*Cohort 2*
Love or really like job	49	53	46	53	48	48
Dislike or hate job	6	4	2	4	7	4
Rarely use quals in current job	36	30	28	22	52	49
Rarely used quals pre-immigration	13	21	6	9	20	32
Earn $1-154 pw	3	5	3	5	4	6
Earn $155-308pw	4	4	4	3	5	4
Earn $674+	8	19	15	31	3	9
Own income nil	26	27	15	17	41	42
Own inc $1-154	29	18	26	15	25	20
Own inc $674+	9	22	16	33	4	11
Work < 15 hours	7	7	6	5	9	10
Work 15-24 hrs	8	8	7	7	10	7
Sought asses't of Quals pre-immig	14	18	38	37	3	4
Sought asses't of Quals post-immig	8	7	12	9	5	7
Did not seek asses't of quals	36	40	30	34	39	44

Table 6: Downward Occupational Mobility for Each Cohort

Post Immigration Occupation (%)				
Pre-Immigration Occupation	*Machine Operators, drivers etc*		*Other*	
	Cohort 1	*Cohort 2*	*Cohort 1*	*Cohort 2*
Managers, admin and para-professional	6	6	32	24
Professionals	3	2	23	23
Trades	8	6	27	21

4. Unemployment

Much of the higher rate of employment for Cohort 2 is mirrored by a fall in unemployment. Over the period 1994 to 2000, the overall unemployment rate in Australia fell from 9.7 per cent to 6.6 per cent[1]. The halving in unemployment among recently arrived migrants (from 21 per cent for Cohort 1 to 10 per cent for Cohort 2) far exceeds this Australian average experience. It is to be expected that when the labour market is improving, the impact on new entrants to the labour force will be greater than the impact on the workforce as a whole. Apart from migrants, the main source of new entrants is young people looking for their first job. In many ways these young people are not comparable with migrants, since most migrants have substantial labour force experience. Nonetheless, it is useful to compare the fall in unemployment among youth over the relevant period with the fall experienced by recent migrants. For young people age 15-24, the unemployment rate fell from 17.0 per cent on average in 1994 to 12.6 per cent on average in 2000 (the comparable figures for those aged 20-24 are 13.6 and 9.5)[2]. The proportionate fall in unemployment for youth of about one-quarter, is less than the one-third fall for the whole population and considerably smaller than the 50 per cent fall for recent migrants.

4.1 Unemployment by visa category

Figure 9 gives a quick visual impression of where the falls in unemployment are concentrated. All visa groups except Business Skills and Employer Nomination Scheme have recorded a fall in unemployment, with Independent and Concessional Family/Skilled-Australian Linked showing the greatest falls. For Cohort 1, the Business Skills and Employer Nomination Scheme migrants had by far the lowest levels of unemployment six months after arrival (at about 5 per cent, less than the Australian average). Independent migrants had levels of unemployment that looked more like those of the Preferential Family/Family Stream and Family Skilled. For Cohort 2, unemployment among Business Skills and Employer Nomination Scheme migrants was still very low, but now it was almost matched by the levels for the Independent migrants. While unemployment in total has halved between Cohorts 1 and 2, the really big gain has been among the Independent migrants: for them,

[1] ABS catalogue no. 6291, table 91
[2] ABS catalogue no. 6291, table 91

unemployment has fallen by two-thirds, from 28 to 10 per cent. Humanitarian migrants had high levels of unemployment in both cohorts.

Figure 9: A Comparison of Unemployment Rates for Migrants Six Months After Arrival, Cohort 1 and Cohort 2, by Visa Category

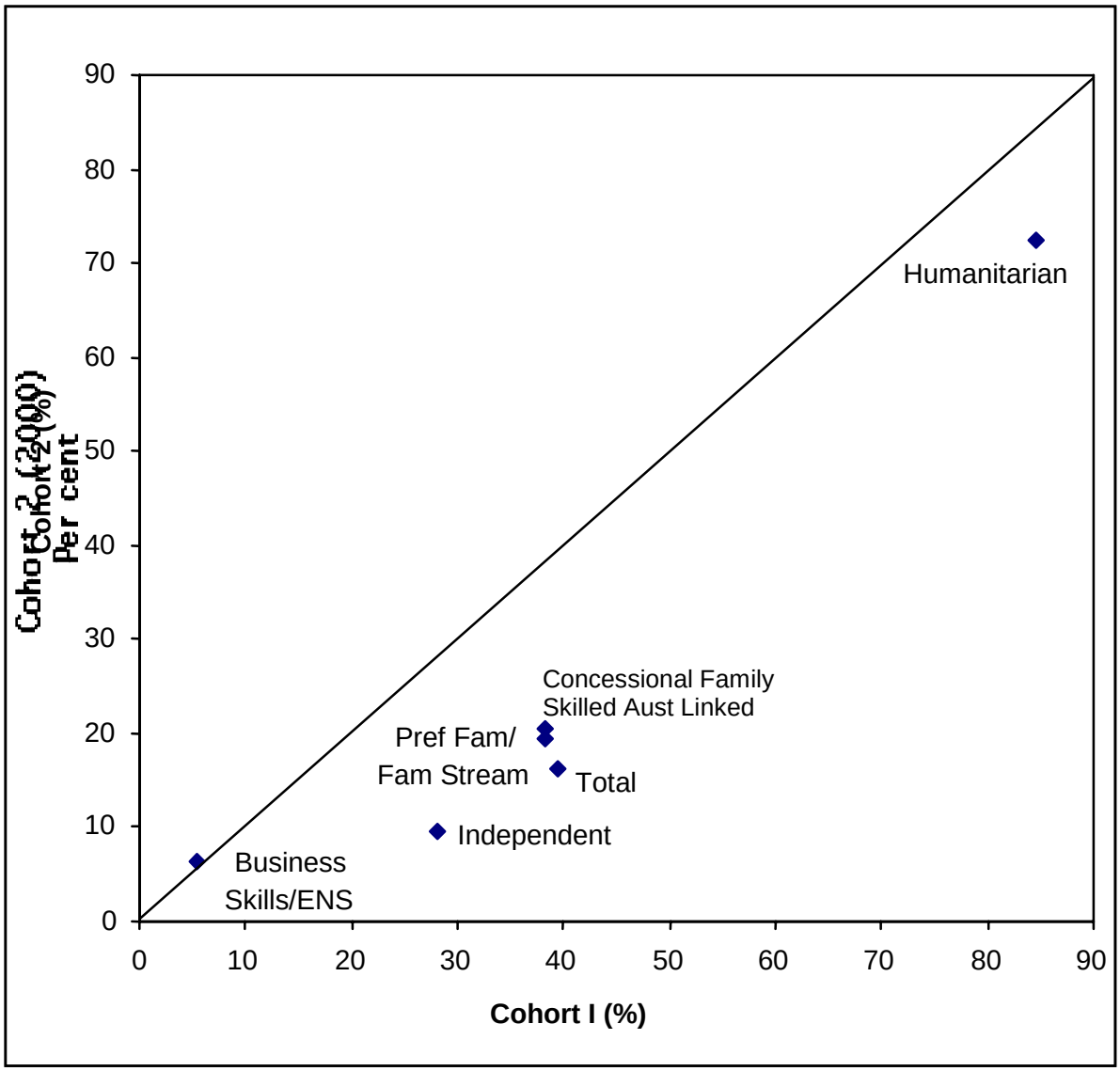
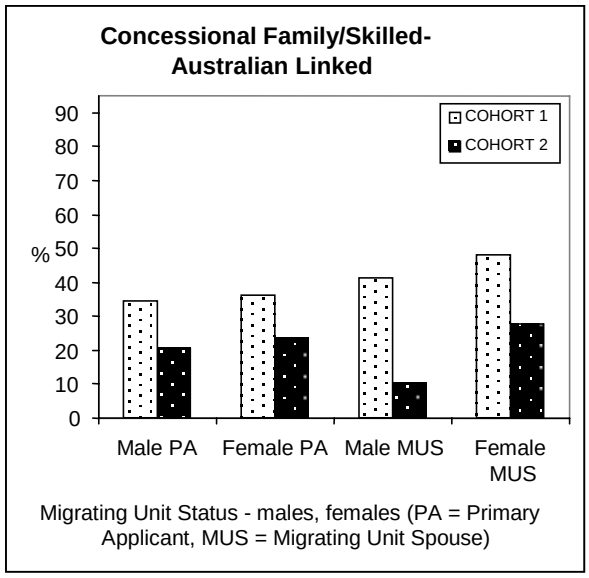
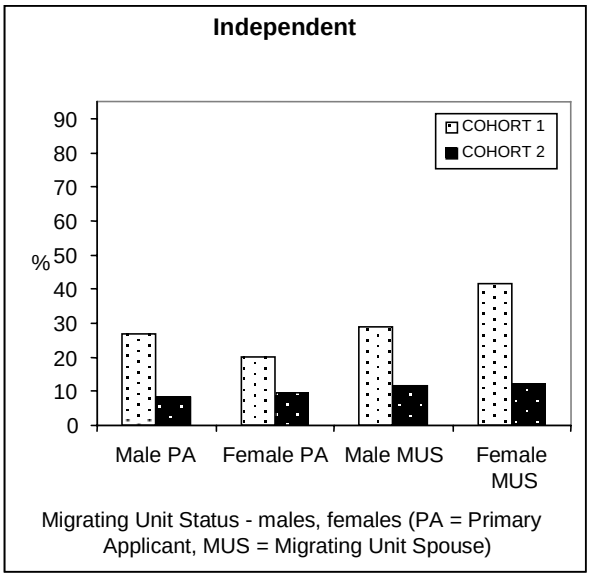
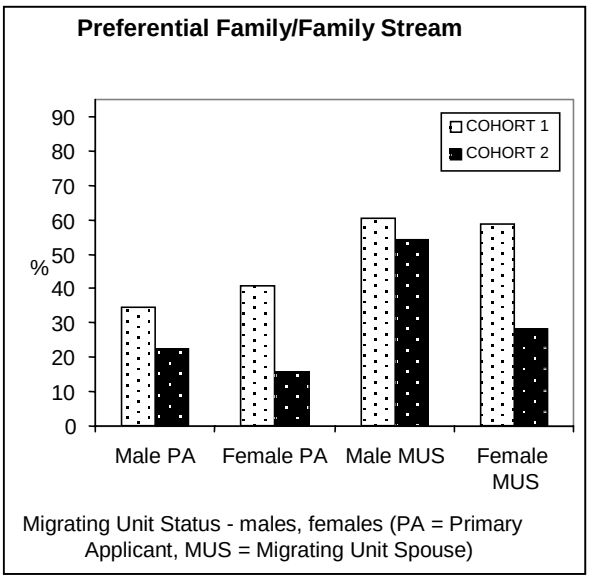


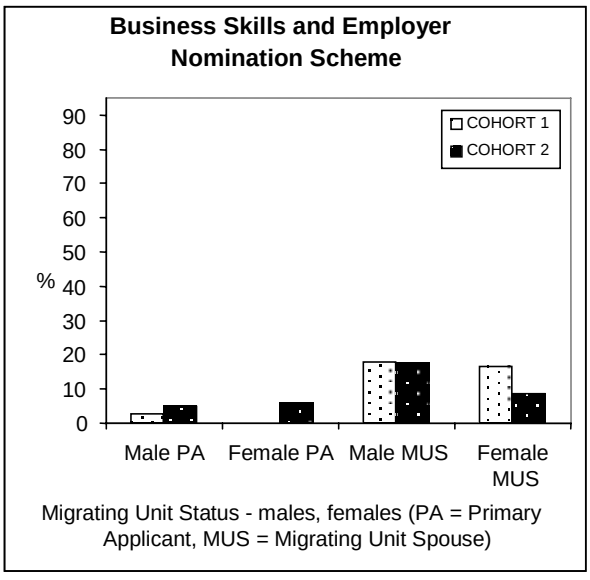
Figure 10 shows the fall in unemployment in more detail. Among the main visa categories, the fall in unemployment is to be found for both men and women and for primary applicants and spouses. Female migrating unit spouses, who in Cohort 1 had the highest rates of unemployment, seem to have gained the most from the improvements for Cohort 2. In all visa groups except Concessional Family/Skilled-Australian Linked their unemployment rates were lower than those of male migrating unit spouses.

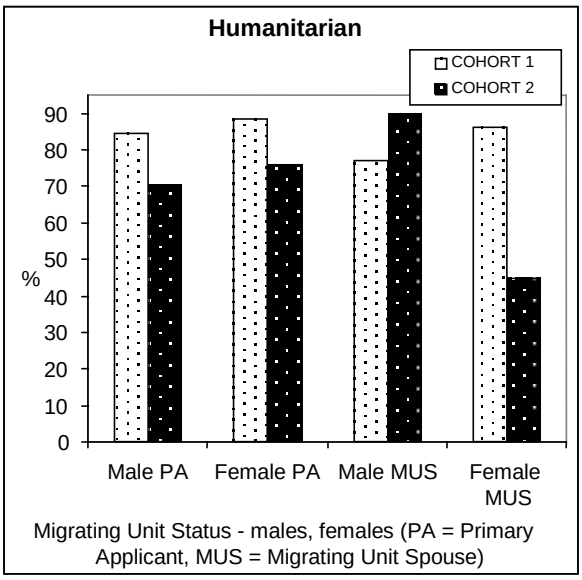
Figure 10: Unemployment Rates for Migrants Six Months After Arrival, Cohort 1 and Cohort 2, by Visa Category, Sex and Primary Applicant/Spouse











4.2 The evolving unemployment pattern

Of central interest is the speed with which unemployment falls as migrants settle into the Australian labour market. We have already seen, in Figure 5, how employment rates rose for Cohort 1 as their time in Australia increased. Figure 11 shows the same information, but from the perspective of those unemployed and looking for work. The first panel shows unemployment rates for both primary applicants and migrating unit spouses. The second and third panels show the data just for primary applicants, distinguished by sex.

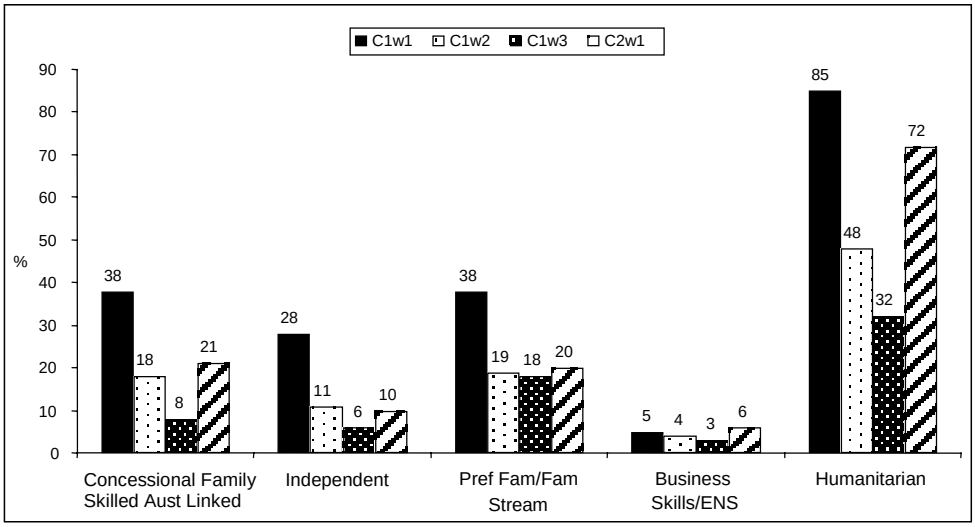
The falls in unemployment over the three and a half year settlement period for Cohort 1 are dramatic. It is clear that initial unemployment rates give little indication of subsequent success in attaining economic independence. Not everyone who left unemployment did so because they found a job. But those who did not find a job presumably found supported roles within the family. From panel (a), we see that the Concessional Family/Skilled-Australian Linked and Independent migrants had particularly large falls in unemployment, from rates of 28-38 per cent six months after arrival to rates of only 7-8 per cent three and a half years after arrival. That is, after three and a half years, the unemployment rate of these groups of migrants was indistinguishable from that of the general Australian workforce. The most spectacular fall in unemployment was in fact among the Humanitarian group, who started with extremely high rates which fell almost by two-thirds. Even with this success, however, there was still an unemployment rate of 31 per cent among Humanitarian migrants. The Business Skills and Employer Nomination Scheme group started with very low levels of unemployment and had even lower levels after three and a half years (only 2.6 per cent).

The group that saw the least progress in reducing unemployment was the Preferential Family/Family Stream. They started with an unemployment rate (38 per cent) the same as the Concessional Family/Skilled-Australian Linked group and their unemployment rate fell in the same way for the first eighteen months (to 19 per cent). But there it stayed and the subsequent eighteen months of residence in Australia saw no further fall in their unemployment. After three and a half years in Australia, they had the high unemployment rate of 18 per cent (only marginally less than the unemployment rate of the same group of migrants in Cohort 2, six months after arrival).

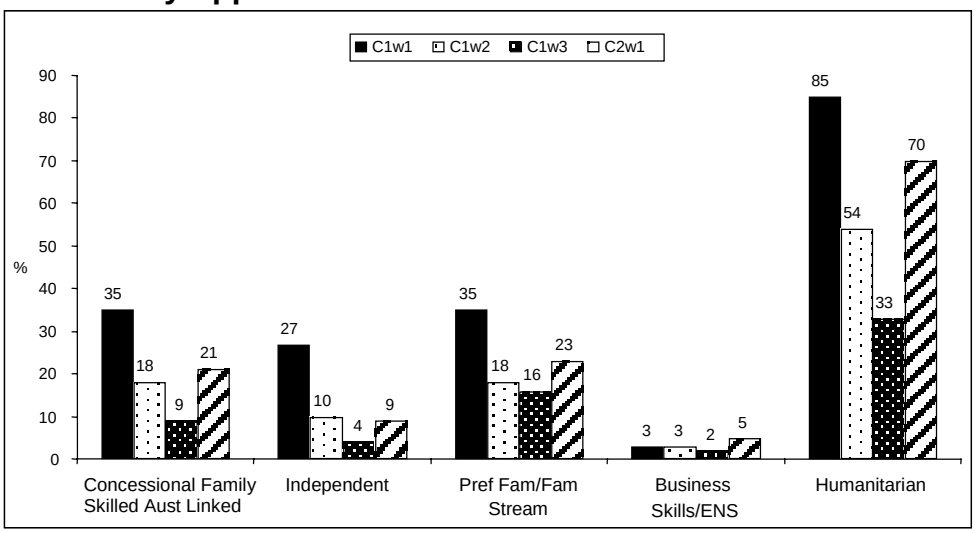
Figure 11 also reports unemployment rates by male and female primary applicants. The sex of the primary applicant has little effect on the time pattern and levels of unemployment. The only exception to this general conclusion is for Independent migrants, where the women had somewhat lower levels of unemployment in all three waves of Cohort 1. Indeed, by wave 3, the unemployment rate for female primary applicants in this group was only one per cent.

Figure 11: Unemployment Rates for Migrants Cohort 1 Waves 1-3, and Cohort 2, by Visa Category

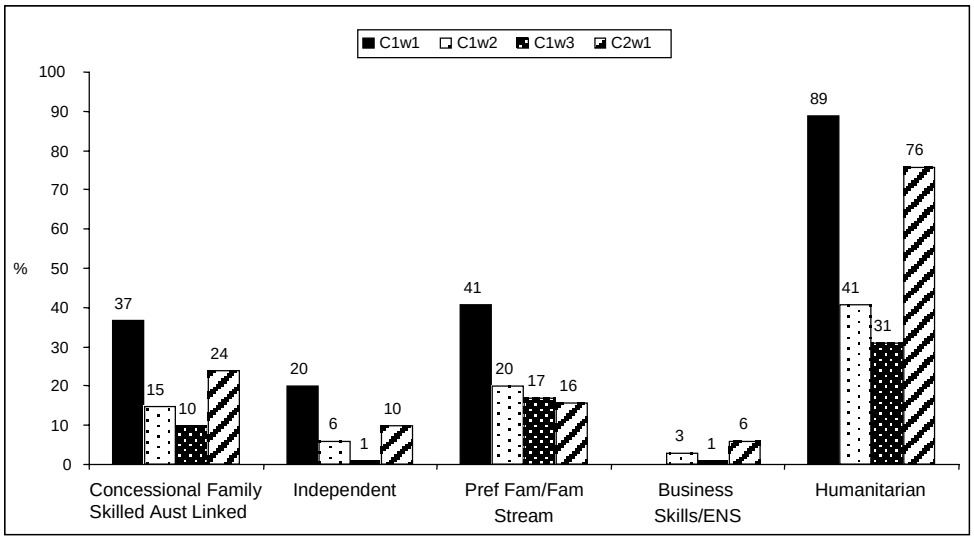
(a) All Primary Applicants and Migrating Unit Spouses



(b) Male Primary Applicants



(c) Female Primary Applicants



4.3 Unemployment and age

For the whole Australian labour force, there is a modest fall in the unemployment rate as one moves from younger to older age groups, if we put to one side the high unemployment rate among youth. In November 2000, the unemployment rate for people aged 25-34 was 5.9 per cent. It fell for each 10 year age bracket to a low of 3.7 for those aged 55 to 59. Among Australian workers who were born overseas, the comparable figures are 6.7 and 4.1[3]. With this context in mind, we look at the relation between unemployment and age among the two cohorts of recent migrants.

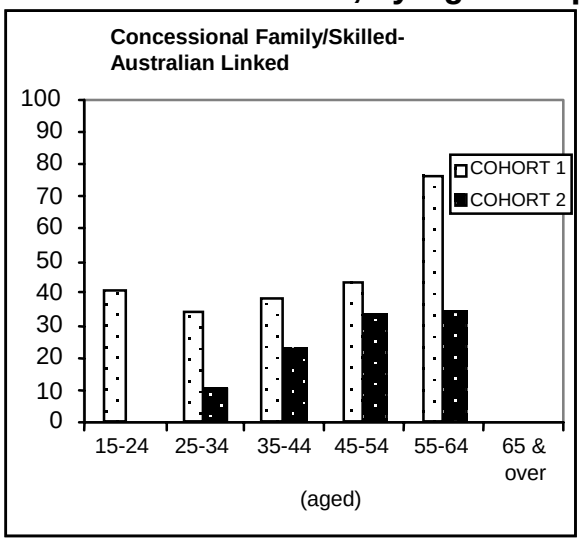
Figure 12 shows unemployment rates for each cohort, disaggregated by visa category and by age group. For recent migrants of both cohorts there is a tendency for unemployment to be higher for older people. For Cohort 2 the tendency has diminished, especially among the Concessional Family/Skilled-Australian Linked and Independent groups. For the latter, unemployment is low and confined to those aged 25 to 44: all those aged 45-54 who were in the labour force were employed. Amongst the Preferential Family/Family Stream, the 45-54 group has done particularly well compared with the earlier cohort. Employment for this age group has risen dramatically and unemployment has fallen below that of the 35-44 age group. Any age differential in unemployment rates among Independent migrants has largely disappeared for Cohort 2. Thus the propensity to higher unemployment among older workers has been attenuated for Cohort 2.

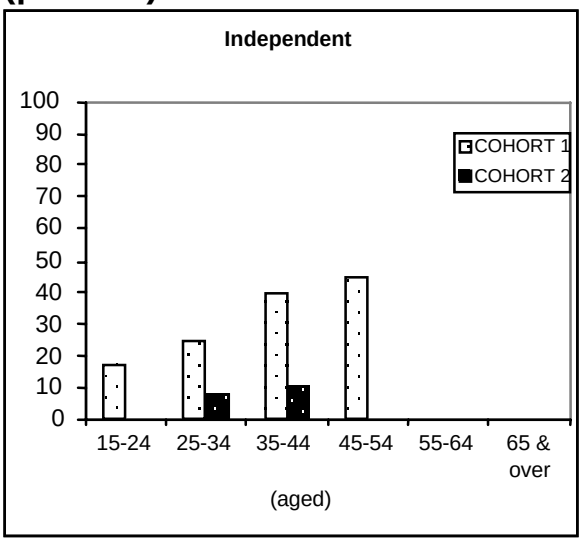
4.4 Unemployment by State

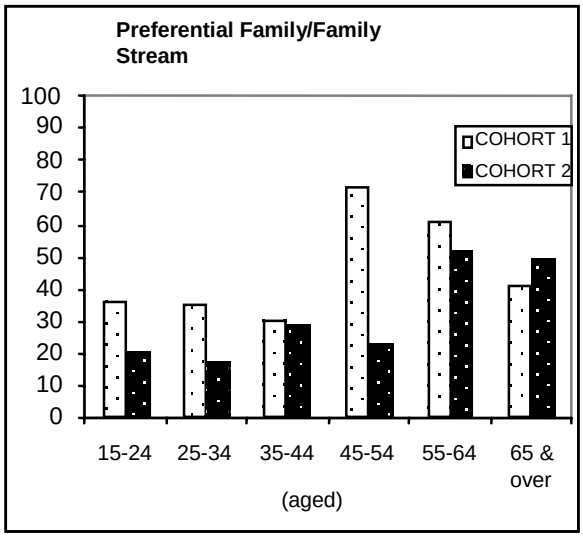
There are modest variations in the labour markets across the States, that might have an influence on the success of recent migrants in obtaining employment. As has been noted before, Cohort 1 migrants who went to Queensland had higher employment rates than would be expected from their personal characteristics. Table 7 shows whether Queensland continues to look different if the focus is unemployment rather than employment, and whether there is much difference in experience of unemployment over time and across the two cohorts, by state.

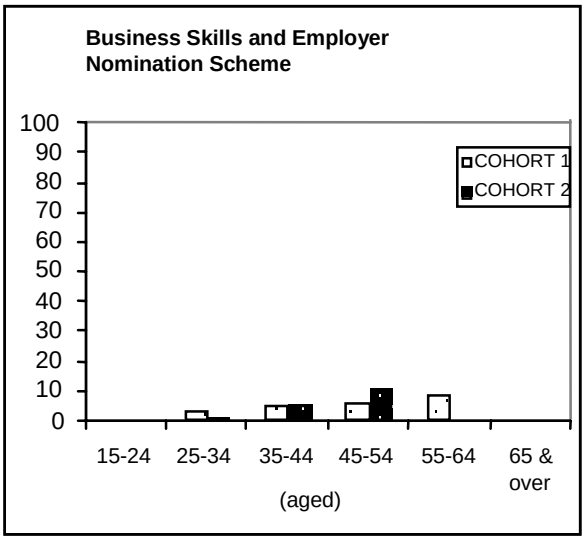
[3] ABS catalogue number 6203, tables 22 and 23.

Figure 12: Unemployment Rates for Migrants Six Months After Arrival, Cohort 1 and Cohort 2, by Age Group (per cent)









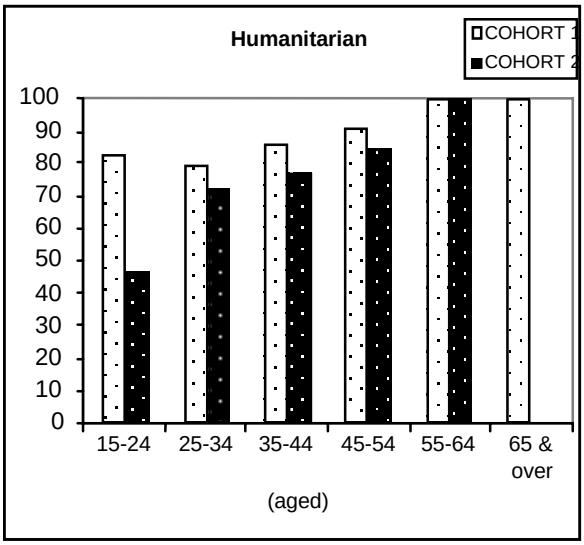


Table 7: People now Unemployed by Intended State of Residence, Cohort 1, Waves 1-3 and Cohort 2 (per cent)

	Cohort 1 %			*Cohort 2 %*
State	*Wave 1*	*Wave 2*	*Wave 3*	*Wave 1*
New South Wales	37	22	15	16
Victoria	57	25	21	20
Queensland	18	9	6	19
South Australia	42	26	21	17
Western Australia	33	11	7	11
ACT	28	19	11	12

The table presents unemployment rates for the whole migrant group, by duration of stay in Australia and by cohort, for each state. It shows that Victoria had a particularly high level of unemployment for Cohort 1 wave 1 (57 per cent) while Queensland had a particularly low rate (18 per cent). By wave 3, three and a half years after arrival, the Queensland/ Victoria difference was still pronounced, but by then the Western Australian levels had fallen to match those of Queensland. It is interesting to note that Cohort 2 levels of unemployment were approximately equal to those for Cohort 1 wave 3, in each state except Queensland. In Queensland, Cohort 2 has fared relatively badly, with an unemployment rate above that in WA, SA and NSW.

We cannot make a true comparison of risk of unemployment across the States unless we control for visa categories. When we do that, that the sample size becomes too small for meaningful numbers to be reported for the smaller States and Territories. Thus only data for NSW, Victoria, Queensland, SA and WA are reported. They show that the broad story given by the aggregate unemployment rates applies when they are disaggregated by visa group, with some variations. The main difference is that for the Cohort 1 Preferential Family/Family Stream, those in SA started off with relatively low unemployment rates but saw these rates *rise* over the following three years.

4.5 Duration of unemployment

The economic and psychological costs of unemployment are strongly linked to the time that a person spends looking for work. If a given level of unemployment among, say, Preferential Family/Family Stream migrants, is widely experienced but of short duration, then it is likely to be much less stressful than if a smaller group experiences long periods of joblessness. With this in mind, we report below in Table 8 the average duration of unemployment experienced by those people who had any unemployment. The data are presented by cohort and compare the experiences of waves 1-3 of Cohort 1, and Cohort 2.

If we compare Cohort 1 wave 1 with Cohort 2, we see that the average duration of unemployment for people who were unemployed at the time of interview was the same (14 weeks). The duration of unemployment of people who had gone on to find jobs or who had withdrawn from the labour force was also similar (indeed, slightly higher for Cohort 2). The difference in the extent of unemployment between the two cohorts is thus explained by the greater proportion of people in Cohort 1 who experienced a spell of unemployment. For Cohort 2, 38 per cent experienced some unemployment during their first six months in Australia. The comparable figure for Cohort 1 is 50 per cent. This implies that the greater unemployment experienced by Cohort 1 was largely a reflection of more people experiencing some unemployment in the process of job search. The better unemployment experience of Cohort 2 is also reflected in the movement out of unemployment. Of all the people who had experienced some unemployment, 59 per cent for Cohort 2 and only 38 per cent for Cohort 1 had found a job by the time of first interview (about six months after arrival): 24 per cent (Cohort 2) and 42 per cent (Cohort 1) were still unemployed. [4]

[4] Note that the timing of the interviews was such that people in Cohort 2 had typically been in Australia a few weeks longer than was the case for Cohort 1.

Table 8: Duration of Unemployment, for those who Experienced Some Unemployment, by Labour Force Status for Cohort 1, Waves 1-3 and Cohort 2 (weeks)

Current Labour Force Status	*Cohort 1*						*Cohort 2*	
	Wave 1		*Wave 2*		*Wave 3*		*Wave 1*	
	Weeks	*No.*	*Weeks*	*No.*	*Weeks*	*No.*	*Weeks*	*No.*
Employed	7	1327	21	1022	32	731	9	936
Unemployed	14	1484	41	708	64	456	14	381
Not in Labour Force	12	678	32	602	48	308	14	265

Not surprisingly, the duration of unemployment rises with waves 2 and 3, Cohort 1, as more time has elapsed during which people could be unemployed. Migrants in Cohort 1 who were unemployed after three and a half years in Australia had typically experienced 64 weeks of unemployment. Those who were now employed had experienced 32 weeks of unemployment.

4.6 Obstacles to finding a job

Respondents were asked to nominate if they had had difficulties in finding a job, and if so what those difficulties were. We report the responses for each of the two cohorts as a whole, ie, not by visa group. This is necessary because the numbers in each cell become unreliably small if further disaggregation is attempted. In Table 9 we show the number of people who reported each of a range of difficulties, and the percentage of the total that this represented.

For Cohort 1 the problems that people reported in finding work did not change much over the three waves, although the number reporting problems fell steadily. English language difficulties were clearly the major problem reported at each wave, with about one third of respondents indicating this problem. About half that number (15 per cent) said that their problem was that there were not enough jobs, a proportion that stayed constant over the three year interval. The inability to have qualifications recognised was cited by only a small percentage of people. Since 60 per cent of people in Cohort 1 arrived in Australia with some sort of post-school qualification, this suggests that the recognition systems in place are working commendably well.

Table 9: Problems that Migrants had in Finding Work, Cohort 1, Waves 1-3 and Cohort 2 (per cent)

Problem	*Cohort 1 %*			*Cohort 2 %*
	Wave 1	*Wave 2*	*Wave 3*	*Wave 1*
English language difficulties	34	38	30	20
Qualifications not recognised	6	5	3	5
Lack of training, experience	9	8	10	8
Not enough jobs	16	14	14	9
No particular problem	11	5	-	22
Insufficient local experience	8	14	12	24
Discrimination	4	6	5	2
Other	13	11	25	9

n = 8977

The most striking difference between Cohort 1 and Cohort 2 was that only half as many people in Cohort 2 said that the main reason that they could not get work was that there were not enough jobs. This is the most direct evidence available in the survey data that an improvement in the labour market was one of the important reasons why Cohort 2 has had much better outcomes than Cohort 1. But Cohort 2 also reports much less of a problem in terms of English language difficulty. It is possible that the shortage of jobs identified by Cohort 1 applied particularly to people looking for manual employment where language skills were of little importance. Cohort 2 report that the most frequent problem that they faced was lack of local experience. By its nature, this is likely to be a temporary problem, and suggests that many of those who were looking for work after six months would be likely to find a job in the next period, as they gain local knowledge.

Discrimination and lack of training or experience rate low in terms of being an obstacle to employment, for both cohorts.

An examination of the problems reported by visa category supports the general conclusions described above, with some variation. English language difficulties were trivial for Concessional Family/Skilled-Australian Linked in Cohort 2 but much more of an obstacle for such migrants in Cohort 1. They remained a problem for Preferential Family/Family Stream migrants. The Independent migrants saw the greatest fall in those reporting not enough jobs as an obstacle (from 22 per cent of Cohort 1 to 9 per cent of Cohort 2). The Concessional Family/Skilled-Australian Linked, Independent and Preferential Family/Family Stream categories all had much higher percentages reporting no particular problem in Cohort 2, for example, for the

Independent group this category rose from 18 per cent for Cohort 1 to 36 per cent for Cohort 2.

In summary, the significant changes across the cohorts in problems in finding work are a) a reduction in problems caused by inadequate English and b) a reduction in problems caused by insufficient jobs. Both a general improvement in the labour market and the effects of the changes in migrant selection criteria seem to be at work here.

4.7 Strategies for finding a job

The previous section looked at the obstacles that people met in their search for a job. In this section, we report on the strategies that people used successfully to find their current job. Again we report this for each of the cohorts as a whole. Table 10 reports the strategies used, by Cohort 1, waves 1-3, and by Cohort 2. The responses refer to current job, so we may expect to see some changes as people have been in Australia longer. Some of the response categories are not identical across the cohorts. We have treated the responses “arranged myself after arrival” for Cohort 1 wave 1, “arranged myself” for waves 2 and 3, and “direct approach” for Cohort 2 as being the same.

The overall picture provided by Table 10 is that the methods that people used to find jobs did not change much as a result of being in Australia longer. For each wave of Cohort 1 and also for Cohort 2, the main ways of finding a job (of about equal importance) were English language media, friends and making direct arrangements oneself. Employment agencies were quite important, especially for Cohort 2 where 20 per cent said they found their job in this way. About 10 per cent had their job arranged before they arrived, and another 10 per cent found their job through family contacts. The ethnic media and sponsors had little role to play. Cohort 2 looks very much like Cohort 1 in the strategies used to find jobs. They were much less likely to have used Employment National/Centrelink, but this is probably because of the sizeable fall in the share of Employment National in the public job search market that occurred between the arrival of Cohort 1 and Cohort 2.

Table 10: How Migrants Found Work, Cohort 1, Waves 1-3 and Cohort 2 (per cent)

How Migrant found Work	*Cohort 1 %*			*Cohort 2 %*
	Wave 1	*Wave 2*	*Wave 3*	*Wave 1*
English language media	21	23	21	17
Ethnic media	2	1	2	3
Sponsor	4	-	1	2
Employment Nat.. Centrelink	6	7	5	2
Other employment agency	7	6	8	18
Arranged pre-arrival	11	-	-	8
Family	11	10	11	8
Friends	18	28	21	17
Arranged myself	17	19	25	21

n = 7594

5. English Language Proficiency

Migration policy has changed between the two cohorts with the intention of increasing new migrants' prospects for obtaining a job. The changes have been designed to increase the level of English language competence, the level of skills relevant to available jobs, and to reduce the number of older people, especially those over age 45, entering as migrants. The main method for effecting these changes has been through changing the points score for specific attributes in the different visa categories (excepting the Humanitarian category), to give higher weights to English language competence, youth and skills deemed to be in short supply. Below we set out the changes in the profile of migrants between the two cohorts, in terms of their English language skills according to visa category.

Figure 13 shows the effect of the change in policy. The two visa categories that have been affected by the increased emphasis on English language competence are Concessional Family/Skilled-Australian Linked and Independent. In these two groups there has been a clear increase between Cohort 1 and Cohort 2 in the self-reported level of English competence. There was a 10-15 per cent increase in the proportion who say they speak English as their only or best language and a slight increase in the proportion saying they speak English very well. Matching this has been the virtual disappearance of people unable to speak English and a sizeable fall in the proportion who say they have limited or modest competence in English. These changes for the Australian Skilled and Independent categories are not matched for the other visa groups. Indeed, for the Preferential Family/Family Stream and

Business Skills and Employer Nomination Scheme, there has been some fall in the overall level of English competence. On this evidence alone, it would appear that the change in migration policy has had a noticeable impact on the levels of English competence among migrants in the affected categories.

In a later section of this report we will examine whether the greater English language proficiency in the two affected groups has had an impact on the probability of recent migrants in these visa categories being employed. As background to this later analysis, Figure 14 shows the language that employed recent migrants report they need to be able to write in order to perform their job. Overwhelmingly, the Australian-Skilled and Independent migrants report that the only language they need in their job is English, and this is little changed between the cohorts. About 10 per cent say they need to be able to write both English and another language. Among the Preferential Family/Family Stream and Business Skills and Employer Nomination Scheme, the exclusive need for English literacy is less pronounced and has declined slightly for Cohort 2. Fewer than two-thirds of Business Skills and Employer Nomination Scheme migrants report that they only need English. By Cohort 2, a quarter say that they need to be able to write English plus another language. In the light of Figure 14, we would expect that high level proficiency in English would be a less powerful factor in labour market success for Business Skills and Employer Nomination Scheme and Preferential Family/Family Stream migrants than it is for Concessional Family/Skilled-Australian Linked and Independent migrants.

The levels of English proficiency have changed only modestly for Cohort 1 in their three years in Australia. Figure 15 shows the self-reported levels of English speaking skills for each wave of Cohort 1 and for Cohort 2. A higher proportion of Cohort 2 speak English as their only or best language. Not surprisingly, this proportion has not risen much for Cohort 1 in their three years in Australia. What has changed for Cohort 1 is the fall in the proportion who say they do not speak English well, and even more so, the fall in the proportion who do not speak English at all. By wave 3, the latter group had fallen to 5 per cent and was lower than for Cohort 2.

Figure 13: English-language Competence of Migrants Six Months After Arrival by Cohort and Visa Category (per cent)

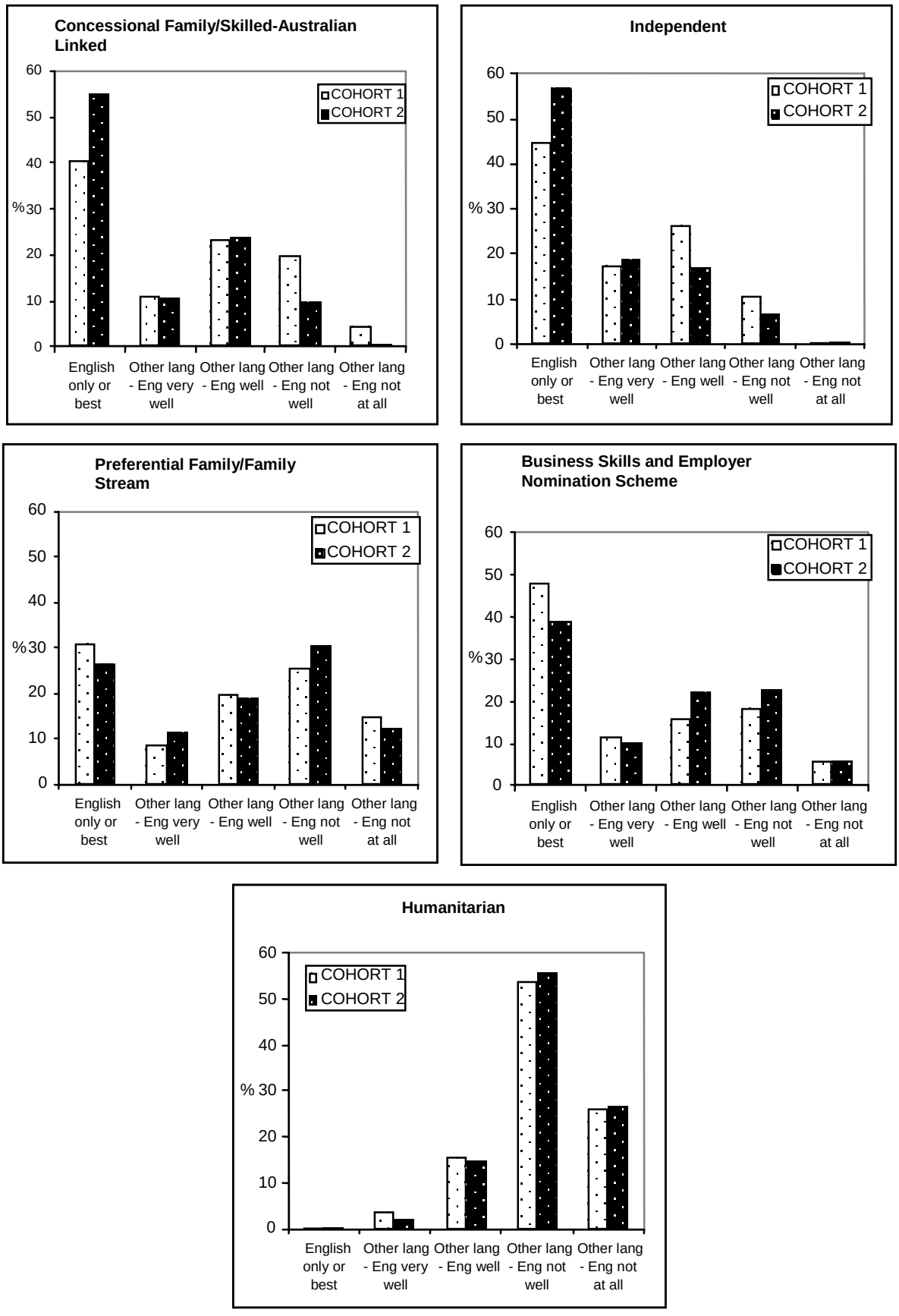


Figure 14: Languages Recent Migrants need to Write to do Main Job or Business, by Cohort and Visa Category (per cent)

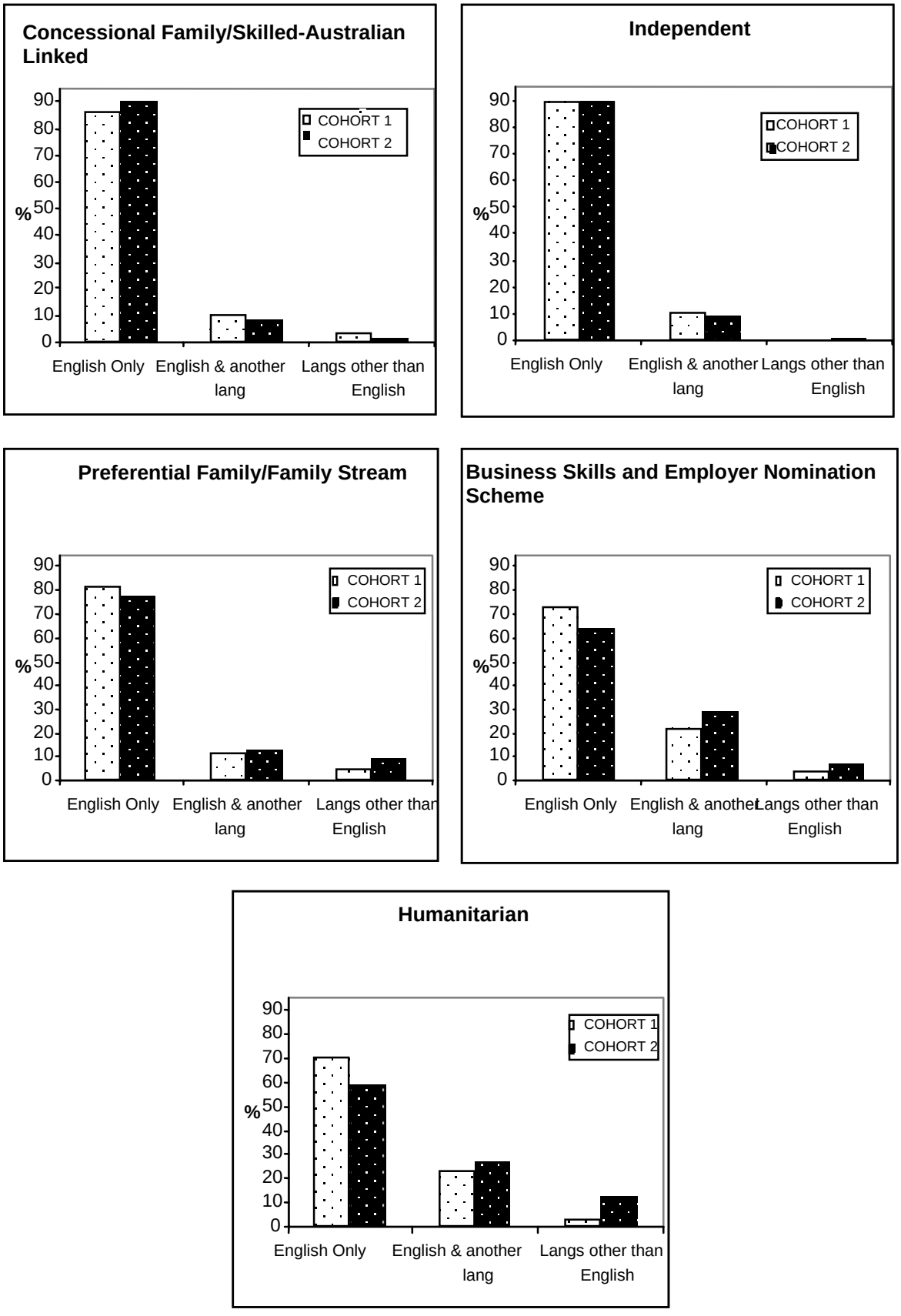
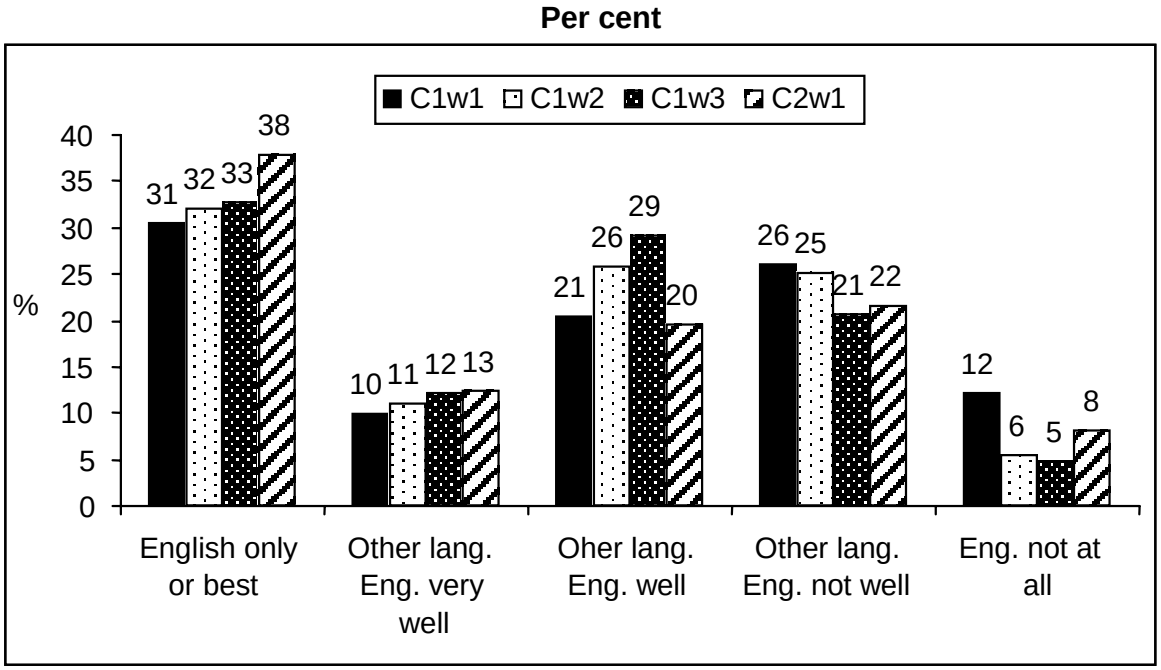


Figure 15: How well Migrants Speak English, Cohort 1, Waves 1-3 and Cohort 2



How did people improve their English language skills after they had arrived in Australia? The survey in waves 2 and 3 of Cohort 1 did not ask questions about learning English in the same way as the questions were asked in wave 1, Cohorts 1 and 2. In the table below, we add "other AMEP" (about 5 per cent of waves 2 and 3) in with the main AMEP category.

Table 11 shows that the AMEP was widely used by migrants in the first year or two after arrival, especially those in Cohort 2. Over one-third of Cohort 2 migrants used the program, twice as many as relied on informal methods. For Cohort 1, by waves 2 and 3 most migrants were not formally learning English. However, 29 per cent of wave 2 and 19 per cent of wave 3 continue to do so, mainly through the AMEP.

Table 11: The Main ways in which Migrants Learned English, Cohort 1, Waves 1-3 and Cohort 2 (per cent)

Main Way	*Cohort 1 %*			*Cohort 2 %*
	Wave 1	*Wave 2*	*Wave 3*	*Wave 1*
Not defined		64	78	
AMEP	29	29	16	37
Other formal	15	7	7	7
Informal methods	20	-	-	16
Not studied, learned	37	-	-	36

n = 14971

6. Qualifications

6.1 Use of qualifications

Table 1 shows that migrants in both cohorts, but especially Cohort 2, have high levels of post-school educational qualifications. The level of qualifications does not change much across the three waves of Cohort 1. Here we examine the extent to which migrants actually use these qualifications in their job. We compare the extent to which they use their qualifications before and after arrival in Australia, and compare Cohorts 1 and 2. We do not present the information by wave because there is very little variation across the three waves. Nor do we present information for the Humanitarian group, since very few had qualifications or indeed were employed.

Figure 16 shows people's assessments of the extent to which they use their qualifications in their job. Only people who had both a post-school qualification and a job at the time of interview (or had one prior to migration) are included. The figure reports responses for each cohort before immigration, and disaggregates responses into visa categories for post-immigration. Again the different waves are not reported, because they are largely unchanged. The exception is for Business Skills and Employer Nomination Scheme. For this group, the use of qualifications drops from wave 1 to wave 3. Fifty eight per cent of wave 1 report using their skills very often, whereas only 48 per cent of wave 3 do so. Conversely, 14 per cent of wave 1 report rarely using their qualifications compared with 19 per cent of wave 3.

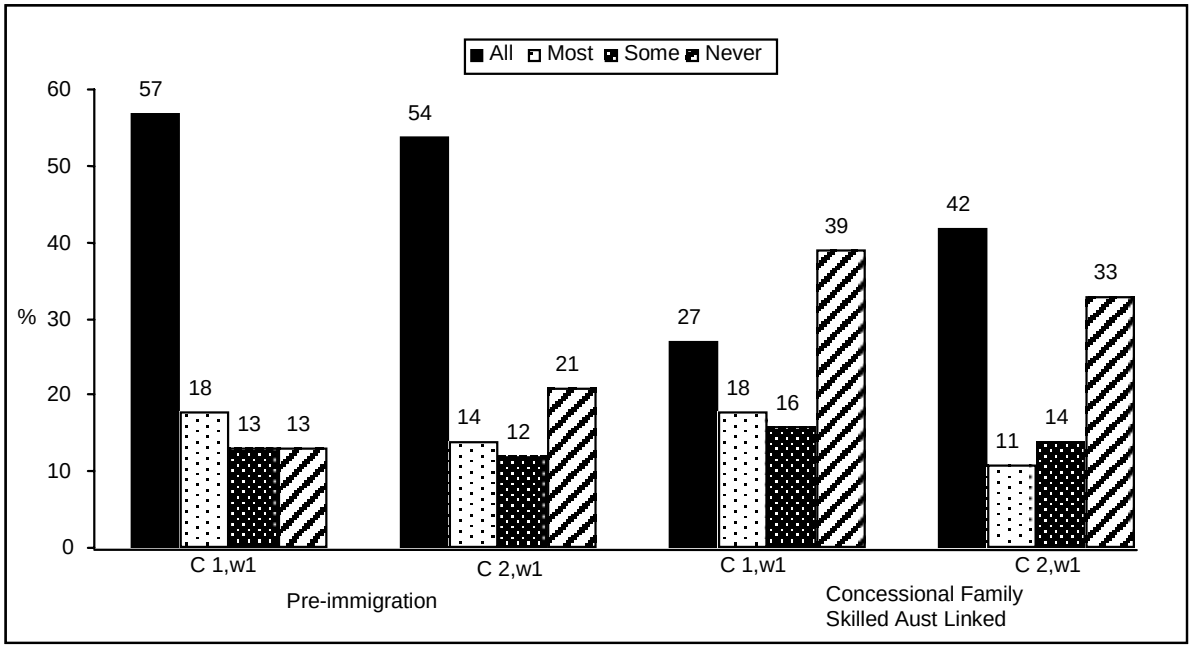
The use of qualifications prior to migration was quite high - over half saying that they used their qualifications all the time. It is interesting to note that in aggregate slightly fewer of (the more highly qualified) Cohort 2 made use of their qualifications than did Cohort 1.

The use of qualifications varied quite substantially between the different visa categories. Business Skills, Employer Nomination Scheme and Independent migrants were the ones most likely to make extensive use of their qualifications, although, as noted above, this propensity fell over time for Business Skills and Employer Nomination Scheme. Forty two per cent of Independent and 58 per cent of Business Skills and Employer Nomination Scheme in Cohort 1 wave 1 said they used their qualifications all the time, while 24 per cent and 14 per cent respectively

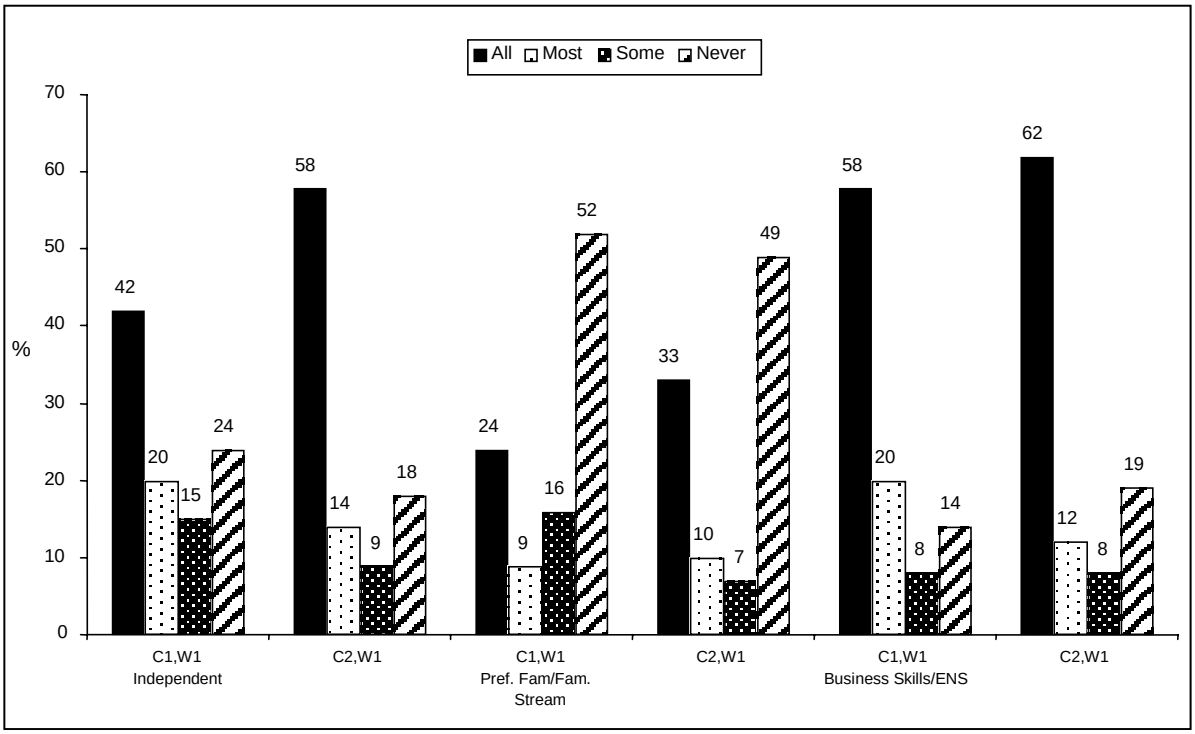
said they used them rarely or not at all. By Cohort 2, the use of qualifications of these two visa groups was almost the same at around 60 per cent.

Figure 16: Use of Qualifications in Employment Before and After Migration, Cohort 1, Wave 1 and Cohort 2, Wave 1 by Visa Category

(a)



(b)



Preferential Family/Family Stream migrants were the ones least likely to use their qualifications, with about half saying that they rarely or never used them - in both cohorts. However, Cohort 2 was more likely to use them very often. There was a sizeable increase between the cohorts in the proportion of the Concessional Family/Skilled-Australian Linked group who made extensive use of their qualifications.

It is interesting that overall, Cohort 2 migrants were *less* likely than Cohort 1 migrants to have made extensive use of their qualifications prior to migration. Despite this, when looked at by visa group, Cohort 2 migrants made more extensive use of their qualifications on arrival in Australia than did Cohort 1 migrants.

6.2 Assessment of qualifications

Qualifications are of most value if they are used in the job that a migrant is able to obtain. In many cases, such as the professions and the trades, qualifications obtained overseas need to be subject to formal assessment for their comparability with Australian qualifications before they can provide access to relevant jobs.

Australia has an extensive and effective structure for the recognition of overseas qualifications - superior to that in most other countries (see Cully and Skladzien, 2001). Support for the efficacy of the Australian system of recognition of overseas qualifications was found in Table 9, which showed that failure to have qualifications recognised accounted for a small proportion of the obstacles to getting a job.

In Table 12 we report how migrants approached obtaining recognition of their qualifications. Of course, this is an issue only for those who have qualifications. Thirty per cent of Cohort 2 and 40 per cent of Cohort 1 did not have qualifications that were relevant to the recognition process. Given this difference, there is little to distinguish the cohorts in terms of how they approached the issue of having their qualifications recognised. Thirty-six per cent of Cohort 1 migrants and 40 per cent of Cohort 2 migrants did not seek recognition of their qualifications.

For each cohort twice as many sought recognition prior to immigration compared with post-immigration. The Concessional Family/Skilled-Australian Linked and Independent migrants were much more likely than the Preferential Family/Family

Stream migrants to have qualifications and to seek to have them recognised. Thirty-eight per cent of the former group sought recognition of their qualifications prior to migrating, compared with three per cent of the Preferential Family/Family Stream.

Table 12: Assessment of Highest Qualifications, by Cohort (per cent)

Assessment Sought	*Cohort 1 %*	*Cohort 2 %*
Sought pre-immigration	14	18
Sought post-immigration	8	7
Not sought	36	40
Australian qualifications	3	5
No post-school qualifications	41	30

n – 11124

6.3 Field of qualifications

While the field in which post-school qualifications have been obtained does not have a strong impact on employment prospects or earnings (as we show subsequently), there is still some interest in the types of skills that migrants are bringing into Australia. Table 13 shows the fields in which people's highest educational qualifications have been obtained, separately for each cohort. This is not further disaggregated, because it does not change with time spent in Australia (the relevant qualifications were mostly obtained prior to immigration). Further, an examination of the field by the major visa groups shows that the story for each is similar to the story for the whole cohort. And the story is a simple one. First, as we have seen in Table 1, the proportion of migrants with formal qualifications is substantially higher for Cohort 2 than for Cohort 1. Second, the most common fields for these qualifications are engineering, management, sales, marketing and administration, and social sciences. This was true for both cohorts, although the management group saw the largest rise between cohorts.

Table 13: Field of Highest Qualification Obtained Prior to Migration, by Cohort (per cent)

Assessment Sought	*Cohort 1 %*	*Cohort 2 %*
Management, sales, marketing,	11	17
Health	6	6
Education	3	4
Social Sciences	11	13
Science	7	10
Engineering	15	15
Other	7	6
No post-school qualifications	41	30

n = 11123

6.4 Country of highest qualification

Table 14 shows where migrants' qualifications were obtained. Not surprisingly, the picture looks much like the origins of the migrants themselves, except for the few per cent (rising to 5 per cent for Cohort 2) who obtained their qualifications in Australia. This percentage can be expected to increase with the change in migration selection criteria to facilitate migration among graduates of Australian educational institutions. Apart from that change, there have been modest increases in the proportions obtaining their qualifications from Asian countries and some reduction in the proportion obtained from "other Europe". Migrants from the Middle East and North Africa, from South East Asia and North East Asia have increased their proportions with post-school qualifications between Cohorts 1 and 2.

Table 14: Country in which Highest Qualification was Obtained, by Cohort (per cent)

Country	*Cohort 1 %*	*Cohort 2 %*
Australia	3	5
UK, Ireland	12	14
Other Europe	12	10
Middle East/Africa	7	10
South East Asia	6	7
North East Asia	7	10
South, Central Asia	7	9
North America	4	3
Other	2	2
No post-school qualifications	40	30

n = 11142

7. Level and Source of Income

A prime indicator of successful settlement in Australia is the extent to which recent migrants are able to integrate into the labour market and earn an income sufficient to support themselves and their families. One of the major changes in government policy towards migrants has been to exclude migrants from access to most social welfare benefits for a period of two years after arrival in Australia.[5] This puts added pressure on migrants to find paid work, and on people to migrate only if they believe they are able to find work or private sources of financial support for the first two years. We here report several perspectives on the level and source of income of recent migrants, and how this has changed. Figure 17 shows how the two cohorts differ in the major source of personal income of recent migrants, by visa category.

The striking point made by Figure 17 is that the proportion of people whose main source of personal income is government social welfare payments has fallen substantially while the proportion who rely on wages has grown commensurately for most groups. As in other areas, the Concessional Family/Skilled-Australian Linked and the Independent migrants present a similar picture. About two thirds of migrants in these two groups had wages as their main source of income in Cohort 2, up from 40-50 per cent in Cohort 1. The proportion for whom government payments is their main source of income has fallen from about a third to less than 5 per cent. There has been little change in the other sources of income. The pattern of change for the Preferential Family/Family Stream is similar, but the magnitudes are rather less. In all three categories there has been virtually no change in the proportion who report receiving no income. There has been little change in the pattern for the Humanitarian migrants, most of whom rely on government payments. The Business Skills and Employer Nomination Scheme group changes are different from the pattern apparent for the other visa categories. Few relied on government payments even in Cohort 1. But unlike the other groups, reliance on wages has fallen, and been replaced with reliance on business and investment income, together with a small rise in no income. These changes are unlikely to have been driven by the social welfare policy change.

[5] Humanitarian migrants remain eligible for the full range of social welfare benefits and all migrants remain eligible, from the point of arrival, for family payments. Migrants in Cohort 1 were required to wait for six months before being eligible for other social welfare payments, including unemployment benefits. Migrants after March 1997, including Cohort 2, had this waiting period extended to two years.

A sizeable proportion of migrants in Cohort 1, and a much smaller proportion of those in Cohort 2, reported receiving social welfare benefits in the first six months of their residence in Australia. The precise impact of the changes in eligibility for social welfare payments is thus not easy to identify. Below we set out some relevant facts.

Humanitarian migrants in both cohorts were eligible for the full range of social welfare benefits and all migrants were eligible, from the point of arrival, for family payments.

Migrants in Cohort 1 were required to wait for six months before being eligible for main unemployment payments such as Jobsearch Allowance, Newstart Allowance and Sickness Allowance. However, the six month waiting period was not imposed on all benefits and some migrants, especially those from the family stream, were eligible for income support payments linked to their Australian partner's eligibility for payments, or to their caring function. The waiting period also did not apply to Special Benefit, a discretionary payment of last resort for people in hardship who cannot qualify for any other payment.

Migrants after March 1997, including Cohort 2, had the waiting period extended to two years for all payments, including Special Benefits, except those that already had a residence requirement (eg, 10 years for Age Pension). More immediate eligibility for Special Benefits was confined to those who had no other means of support and could show that there had been some substantial change in their circumstances since applying to migrate.

Thus the extension of the waiting period for eligibility for the main social welfare payments from six months to two years was only part of the changes that occurred in 1997. There were a number of exceptions to the initial six months waiting period that were subsequently removed or perhaps tightened in their application. In the light of this, we note that 17 per cent of Cohort 1 respondents (804 people), who were in Australia 6 months or less at the time of interview and were not Humanitarian migrants, reported receiving unemployment benefits. A further 9 per cent of this Cohort 1 group reported receiving “other” government payments, that were not family or unemployment payments. Fourteen per cent reported receiving family payments. In contrast, the comparable group for Cohort 2 had only 1.6 per cent

reporting receipt of unemployment benefits, and 5.6 per cent reporting receipt of family payments.

New migrants may not fully understand which social welfare benefit they are receiving, which may lead to some inaccuracy in the responses to the relevant survey questions. However, in the absence of further evidence, we take at face value the recorded responses to the questions about receipt of government social welfare payments. These responses show a large fall in the proportion of non-Humanitarian migrants who were in receipt of government social welfare payments, between Cohort 1 and Cohort 2.

Figure 17 reports major source of income, but does not provide any information on the level of that income, or of total income received by recent migrants. Table 15 reports levels rather than sources of income. The levels are reported as the median income[6] of people in each visa category. We note at this point that the income data in this survey are not likely to be very precise. For several reasons, it is always difficult to obtain accurate information on individual and household income from personal surveys. One reason is that some people think in before tax and others in after tax terms. Incomes also fluctuate and people must estimate what is their usual weekly income. Some people are reluctant to report all their income, especially if tax is not being fully paid or if income is being earned in ways that are on the margins of illegality. The questionnaire asks people to record their income in intervals, so any analysis cannot do better than assume that the true income is in the middle of the income bands presented in the survey. The inaccuracy of this procedure is compounded when income totals must be calculated by adding together different sources of income. For these reasons, there should be no importance attached to small differences in income.

Median income for a group will be influenced by:

- The number of people who have any personal income; and
- The levels of income received by the typical income recipient.

[6] The median income is the income level at which half the relevant group have more and half have less. As a measure of central tendency it is preferable to the mean or average value, because it is not influenced by the existence of a few very high or low values.

There will be changes in both of these aspects of median income between the two cohorts, but Figure 17 suggests that most of the change is in levels of income received. The proportion of people who received no income is similar in total and across visa categories for the two cohorts. Thus most of the change in median income that is reported in Table 15 is being driven by changes in levels of income received by people who have some income of their own.

Figure 17: Major Source of Personal Income of Recent Migrants, by Visa Category and Cohort (per cent)

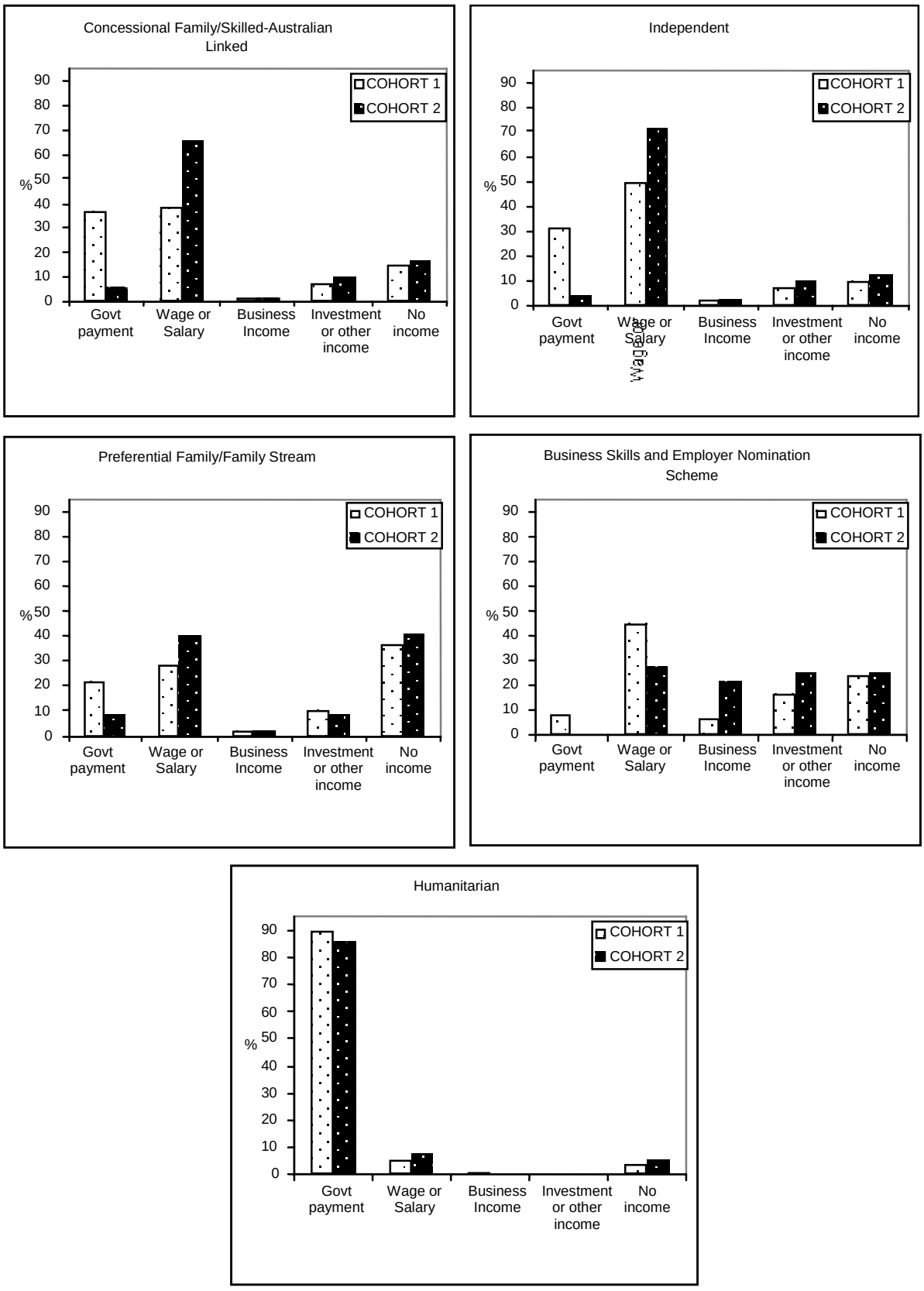


Table 15: Median Personal Income of Recent Immigrants by Visa Category and Cohort (dollars, year 2000 prices)

Visa Category	*Cohort I, 2000 prices*[(a)]	*Cohort 2*
Concessional Family/Skilled-Australian Linked	193	383
Independent	309	544
Preferential Family/Family Stream	79	51
Business Skills and Employer Nomination Scheme	375	483
Humanitarian	166	177
Total	154	211

Note: (a) 1994 values updated to 2000 values, using change in CPI, weighted average 8 capital cities, March 2000.

There is a distinct difference in the experience of migrants in the separate visa categories. Humanitarian migrants, who rely overwhelmingly on government payments, have seen no change in their median income. This is not surprising.

The big story to emerge from Table 15 is that the Concessional Family/Skilled-Australian Linked and Independent migrants have seen a large rise in their typical income - indeed almost a doubling. This large rise suggests that the much greater reliance of Cohort 2 on wages as compared with government payments has had a strongly positive effect on their income levels: the wages received must typically have exceeded by a large amount the value of social welfare benefits. It is also likely that the average wages of people who had a job is higher for Cohort 2, since the migrants in Cohort 2 have higher levels of education. This proposition will be tested more formally in a later section.

The Preferential Family/Family Stream migrants have had a different experience. The median income for this group has fallen, from levels that were already very low. A major reason for the low levels of personal income for this group is the large proportion who are dependent on other family members for their income, which shows up in Table 15 as the 40 per cent or so who have no income of their own. This, however, does not explain the fall in median income for the whole group, since there has been virtually no change in the proportion who report no income. The puzzle is compounded by the fact that this group has experienced the same shift from reliance on government payments to reliance on wages as has occurred for

Concessional Family/Skilled-Australian Linked and Independent, albeit in more muted form. It has also seen a rise in the employment to population ratio, which is the counterpart of the growth in reliance on wages, and would be expected to produce a rise in median income. It may be that many of the jobs obtained by Preferential Family/Family Stream migrants in Cohort 2 are only for a small number of hours per week, hence return only a modest weekly wage.

The Business Skills and Employer Nomination Scheme group has seen very little change in median income. There has been a change in sources of income, away from government payments and wages to business and investment income. The net effect has been to leave business migrants in Cohort 2 with a median income of $395 per week - virtually the same as for Concessional Family/Skilled-Australian Linked migrants. In Cohort 1, the Business Skills and Employer Nomination Scheme migrants received much higher incomes (almost double) than the Concessional Family/Skilled-Australian Linked migrants.

In Figure 18 we display the changes between waves and cohorts in the distribution of total income. Several features of this figure are worth noting. The first is the very large fall in the proportion of people in Cohort 1 who received no income. This fell from 26 per cent in wave 1 to only 6 per cent in wave 3. We should mention that there was above average non-response to the income question and it may be that those who received no income were more likely not to answer the question. This would only affect the comparison if those in one particular wave or cohort were more likely not to respond. Note that people in Cohort 2 had the same level of zero income as those in wave 1 of Cohort 1. The second big change across the three waves of Cohort 1 is the increase in the proportion of people earning in the highest category of $674 or more per week. This fraction grew from 9 per cent six months after arrival to 20 per cent three years later. Perhaps even more interesting is that Cohort 2 had a higher proportion earning in the top band after six months than did Cohort 1 after three and a half years in Australia.

It is easier to interpret what is going on over time and between the cohorts if we compare Figure 18 with Figure 19. Figure 19 shows only income received as wage and salary income. Thus the difference between the two figures is accounted for by self-employment income, investment income and government cash payments. Six months after arrival, only one - third (31 per cent) of migrants in Cohort 1 earned a

wage whereas three quarters (74 per cent) received income from some source.

The 20 percentage point fall in the proportion of Cohort 1 with no income from wave 1 to wave 3, is accounted for almost entirely by growth in income from wages. And most of this growth, in turn, has been in the proportion with weekly earnings of $482 or more. $481 per week represents close to the minimum wage for an adult. This invites the conclusion that most of the people who earn less than $481 are working part time, or if not are in very low paid jobs. Such employment grew from 17 per cent of migrants in wave 1 to 22 per cent in wave 3. Higher paid employment doubled from 15 per cent to 30 per cent over the same period.

As we have seen before, Cohort 2 had many more people earning wages six months after arrival than did Cohort 1. What we can see from Figure 19 is that all of these additional wage earners were earning the equivalent of a full-time wage, with the greatest difference between cohorts being in the greater proportion of Cohort 2 who earned more than $674 per week.

In Table 16 we look in more detail at the use of government social welfare benefits. The proportion of people in each cohort and each wave of Cohort 1 who receive particular benefits is set out. We also note the changes in the proportion who receive income from wages and salary and from investment income.

While the total proportion of people who receive some form of government payment did not change much between waves 1 to 3 of Cohort 1, the composition of those benefits did. Specifically, the proportion who received unemployment benefits halved, from 25 per cent to 13 per cent. At the same time, the proportion who received family payments almost doubled, from 15 per cent to 28 per cent. These two movements offset each other and mark a substantial change in people's relation with government. Initially migrants in Cohort 1 received benefits because they could not find enough work to support themselves. As they integrated into the labour market, this need diminished sharply. Over the same period, the migrants were doing what many of their Australian counterparts were doing - having children. They then became eligible for a quite different form of support offered by government - family payments to assist with the costs of bringing up children. The other side of the coin from the fall in receipt of unemployment benefits is the rise in the proportion

of Cohort 1 who received wages and salary and income from self-employment. This rose from one third of people in wave 1 to well over half of wave 3, and stood at one half of Cohort 2. There was little change in the proportion in receipt of investment income between the waves or comparing Cohort 1 with Cohort 2.

Figure 18: Total Personal Income of Migrants in Cohort 1, Waves 1-3 and Cohort 2

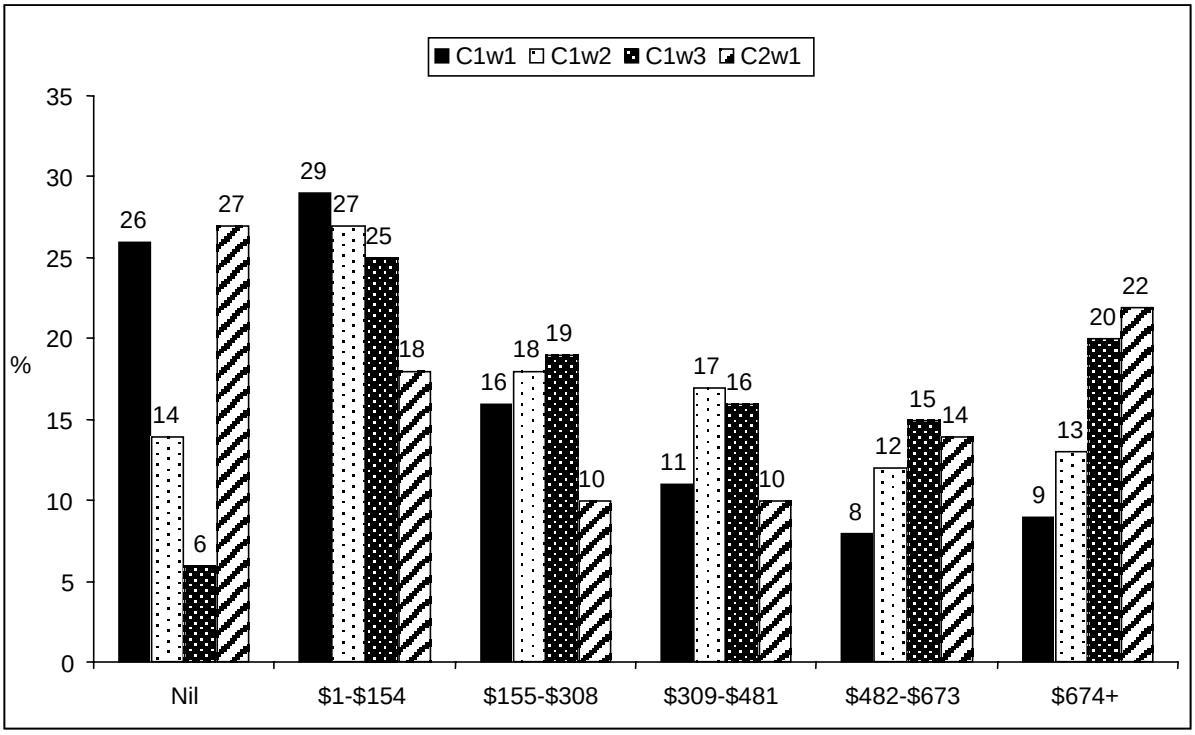


Figure 19: Wage and Salary Income of Migrants in Cohort 1, Waves 1-3 and Cohort 2

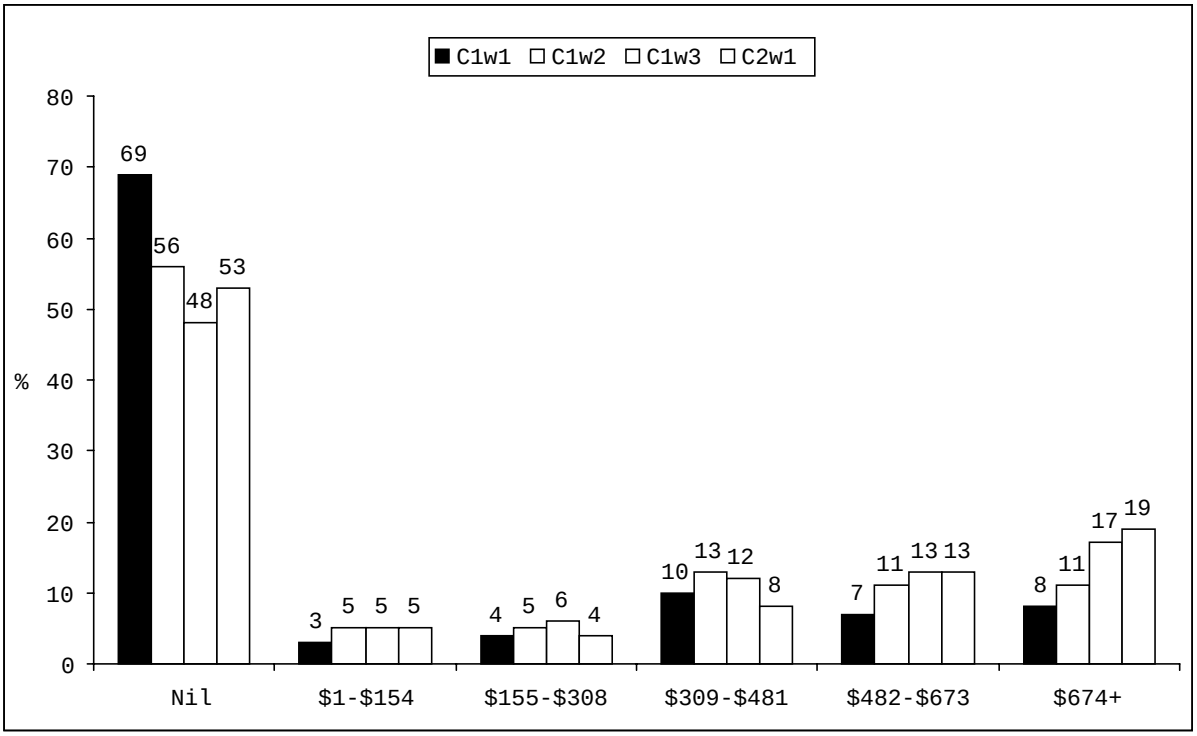


Table 16: Sources of Income, Cohort 1, Waves 1-3 and Cohort 2 (per cent)

Source of Income	*Cohort 1 %*			*Cohort 2 %*
	Wave 1	*Wave 2*	*Wave 3*	*Wave 1*
Govt. Unemployment Benefit	25	16	13	5
Govt. Family Payment	15	21	28	6
Other	11	13	10	5
Earned income	33	47	58	51
Investment income	20	22	24	22

n = 22291

The final perspective we offer on the degree of financial independence of recent migrants is to report the proportion of migrants who live in households where no-one is employed. Table 17 shows this information, for the two cohorts and the different visa groups. We note that many migrating units live, on first arrival, with relatives who are already in Australia. For Cohort 2, we report the information for four different family units. The first column reports the percentage of primary applicants who do not have a job. The second column (for each cohort) reports the percentage of family units comprising a single primary applicant or a primary applicant plus spouse, where neither the primary applicant nor spouse (if relevant) is employed. The third column, for Cohort 2, is the same as the second, but includes other members of the migrating unit over the age of 15. As noted earlier, almost none of these additional family members are employed, or even in the workforce, so columns 2 and 3 are virtually identical. Column 4 reports the percentage of primary applicant/spouse units that live in a household where no-one is employed. This household may include other relatives and is not confined to members of the migrating unit. The assumption is that a primary applicant or spouse who lives with relatives is able to share in the income of the household.

Table 17 shows that Humanitarian migrants live overwhelmingly in non-employed households and this has not changed across the two cohorts. While not employed themselves, about 10 per cent in Cohort 2 live with relatives who are employed.

The primary applicant employment data have been reported on previously. Here we will focus on the non-employment rates for units of primary applicant/spouse (PA/S) and primary applicant/spouse plus other relatives in the household (PA/S/R).

Table 17: Proportion of Recent Migrant Households where no Person aged 15 years or over is Employed (per cent)

Household members considered	*Cohort 1 %*		*Cohort 2 %*			
Visa category	*Primary applicant*	*Primary applicant and spouse*	*Primary applicant*	*Primary applicant and spouse*	*PA, spouse, others in migrating unit*	*PA, spouse, other relatives in household*
Concessional Family/Skilled-Australian Linked	48.2	44.3	33.0	21.9	21.8	10.0
Independent	34.6	32.1	18.4	11.6	11.5	10.8
Preferential Family/Family	69.4	69.2	58.2	55.1	54.6	12.6
Business Skills and Employer Nomination Schemes	17.9	17.0	37.8	22.1	21.6	18.8
Humanitarian	93.0	91.3	94.7	95.4	92.4	77.6
Total	63.3	62.2	47.4	42.5	41.9	16.2

The improved employment outcomes of Concessional Family/Skilled-Australian Linked and Independent migrants, which we have noted in much of the material presented previously, is apparent also in Table 17. Between Cohort 1 and Cohort 2, non-employment among the PA/S grouping fell by between one half and two-thirds. It is notable that in these two visa categories, either there is a higher proportion of spouses or spouses are more likely to have a job even if their partner does not, than is true for the other visa categories. The inclusion of the spouse in the unit of analysis substantially reduces the rate of non-employment among the Concessional Family/Skilled-Australian Linked and Independent migrants but has no effect on the other categories. This distinction applies only to Cohort 2: the inclusion of the spouse has little impact on non-employment for all visa categories in Cohort 1. This reinforces the conclusion reported above, that the spouses of primary applicants have improved their employment outcomes the most across the two cohorts.

For the PA/S units, non-employment has fallen for the Preferential Family/Family Stream, but not by as much as for Concessional Family/Skilled-Australian Linked and Independent migrants. It has actually risen, to one-quarter, for Business Skills and Employer Nomination Scheme migrants.

The inclusion of other relatives in the household, where applicable, has a substantial effect on the extent of non-employment for Concessional Family/Skilled-Australian Linked and Preferential Family/Family Stream migrants, but not for Independent or Business Skills and Employer Nomination Scheme migrants. In the case of the Independent migrants, rates of non-employment are already very low.

If we consider all migrants together, then rates of non-employment fall by about 20 percentage points at each step as we move from Cohort 1 PA/S to Cohort 2 PA/S and then to Cohort 2 PA/S/R. For Cohort 2, one quarter of migrating units, including Humanitarian migrants, lived in a non-employed household. Conversely, of course, three quarters lived in a household in which at least one person was employed. The relatively high rate of non-employment (22 per cent) among Business Skills and Employer Nomination Scheme migrating units is worth noting, especially since this has risen, in contrast to the other non-Humanitarian groups.

8. Explaining the Changes Across the Cohorts

One of the major changes in the environment experienced by migrants in the two cohorts is that those in Cohort 2 were not eligible for social welfare benefits (except family payments) for a period of two years after arrival. It is to be expected that this change would have two effects[7].

The first is that it would change the composition of applications for migrant visas. People who feel less confident of being able to support themselves, through employment, self-employment or income from assets, or who do not have family on whom they could rely if necessary, will face a higher risk of serious hardship on migrating. Some will be deterred by this greater risk. People who are confident of their ability to support themselves or be supported by family will not be so deterred. We expect the effect of this to be a change in the composition of applicants for migrant visas. This change should increase the average employability of migrants, by cutting off the least employable tail of potential migrants. We do not have direct evidence on the employability of applicants. However, for the expected effect to be important, it must affect not only the composition of applicants, but also the composition of those who finally migrate. We will examine whether the average level and the dispersion of the main indicators of labour market quality have improved for Cohort 2.

At the same time that the waiting period for access to most social welfare payments was extended from six months to two years for new migrants, the total migrant intake fell (from around 80,000 to 65,000). This reduction has been implemented in ways that are calculated to increase the average labour market quality of migrants: the humanitarian offshore intake has been reduced, the required levels of English competence have been increased, more weight has been given to having desired skills and being of the most productive age. It is highly likely that these changes have also cut off part of the lower section of the tail of migrants, ranked according to their expected labour market productivity. To the extent that we find such a cut in the tail, it will not be possible to disentangle the above two causes.

[7] For a more formal presentation of these ideas, see Chiswick, 2000. The exclusion from access to social welfare benefits does not apply to Humanitarian migrants. Thus the discussion to follow does not apply to this group.

The second effect of the withdrawal of access to social welfare benefits is expected to be that those who do migrate make a greater effort to find employment or other means of private support. To use an economics concept, migrants would now have a lower reservation wage - some would now be prepared to work in jobs where the earnings and conditions are inferior to those previously available from social welfare benefits. One indicator of this effect is the quality of the jobs that migrants did take. If more of them took low skilled, low status, low paying and/or part time jobs, and if more took jobs that did not use their qualifications, this would provide support for the proposition that their reservation wage has fallen.

We examine evidence for each of the two sets of effects below. Before we do this, we present evidence that the removal of eligibility for social welfare benefits did bite.

Table 18 shows the how the use of social welfare benefits differs between the two cohorts taken as a whole (ie. making no allowance for the change in the visa composition). It is striking that Cohort 2 is much less likely to have received any of unemployment, family or other social welfare benefits. For example, 5 per cent of Cohort 2 received unemployment benefits at the time of interview. This compares with 25 per cent for wave 1 Cohort 1. This difference is apparent also for the economic and family migrants[8]. It is also notable that three times as many migrants in wave 1 of Cohort 1 (36 per cent) had government social welfare benefits as their main source of income than did migrants in Cohort 2 (11 per cent). Also note from Table 18 that the percentage of migrants who received *no* income was only a little higher for Cohort 2. That is, the lower proportion who receive social welfare benefits in Cohort 2 has been almost matched by the higher proportion who receive other sources of income (mainly wages). Hence there is clear evidence that the change in social welfare rules did bite. In saying this, we recognise that many of the people in wave 1 of Cohort 1 who reported receiving unemployment benefit appear not to be eligible for this payment (as discussed earlier). Thus the change that shows up in

[8] The labour market characteristics of Independent and Skilled-Australian Linked migrants are very similar. For ease of presentation and comprehension, for some analyses we have combined these two groups and called them "economic" migrants. People who came under the Family stream were selected on different criteria and have rather different labour market characteristics. They are therefore treated as a separate category. We exclude Humanitarian migrants at this stage, since few are in employment and the change in social welfare arrangements did not apply to them. We also exclude Business migrants, since they have very high rates of employment and very low rates of use of the social welfare system, for both cohorts.

Table 18 may have arisen in part from a stricter application of the waiting period for new migrants, and not just from the change in the length of the waiting period.

Table 18: Percentage of Cohort 1 Wave 1and Cohort 2 that received social welfare payments at time of interview

	All Migrants		*Economic migrants*		*Family migrants*	
% who received	*C1*	*C2*	*C1*	*C2*	*C1*	*C2*
Unemployment	25	5	20	0.3	14	4
Family payment	15	6	21	8	8	4
Other Govt	11	5	11	4	8	3
Most of their income from Govt.	36	11	33	5	22	9
Zero income	23	26	11	14	37	41

8.1 Have less employable migrants stayed home?

Did the need to be financially self-sufficient on arrival mean that people who were less likely to be successful in the labour market did not migrate? We look at the labour market characteristics and the job outcomes of each cohort in order to obtain an initial view on this question.

Some evidence supporting the proposition that the bottom tail has been cut from the migrants in Cohort 2 is presented in Table 19. For all migrants, the proportion with fewer than 12 years of education was, at 14 per cent, rather lower for Cohort 2 than for Cohort 1 (23 per cent). But this fall is least apparent in the group that is expected to be most affected by the change in welfare policy, namely migrants in the Independent and Concessional Family/Skilled-Australian Linked categories (described in the table as Economic migrants). People in this group are the most likely to have to manage on their own resources (compared with the Preferential Family/Family Stream and the Humanitarian migrants). Perhaps for this reason, even in Cohort 1, few had less than Year 12 education (6 per cent), were labourers or other unskilled workers, were unemployed prior to immigration or could speak no English. It is true that these small percentages were even smaller in Cohort 2, which suggests some reduction in the tail in Cohort 2, but the magnitudes are small. They are not sufficient to explain the distinctly better labour market outcomes of Cohort 2. Nor do they suggest a substantial impact of the change in the social welfare rules,

on the size of the tail of low productivity immigrants. Recall that any reduction in the tail will be a joint product of the change in rules and the reduction in the total intake.

Table 19: Migrants with Low Labour Market Skills in each of Cohorts 1 and 2

% with Low	*All Migrants*		*Economic migrants*		*Family migrants*	
Labour Market	*C1*	*C2*	*C1*	*C2*	*C1*	*C2*
Less than year 12 education	23	14	6	3	31	22
Labourer pre-migration	4	1	2	0.4	7	3
Unemployment pre-migration	3	2	1	1	3	2
Not in labour force pre-migration	18	17	9	7	21	22
Speak a little English	26	22	14	8	25	29
Speak no English	12	8	2	1	15	13

8.2 Conclusion

The change in eligibility for social welfare was evident in the sizeable reduction in the proportion of recent migrants who received such benefits. It is possible, but unlikely, that the better prospects in the labour market that confronted Cohort 2 would on their own have been sufficient to explain this reduction in the use of social welfare benefits, even if the rules had not changed. We think that this is unlikely. Cohort 2 did have substantial unemployment -16 per cent of those in the labour force. Most of the unemployed who did not receive benefits would presumably have been eligible in the earlier regime, after six month's residence. But the denial of access to social welfare benefits has not forced people to take poor quality jobs. Nor has it increased the proportion of people with no income, or low earnings. Indeed, it is hard to see in the aggregate data any adverse effect of ineligibility for social welfare on the outcomes for Cohort 2 migrants. In saying this, it is important to emphasize that the perspective is a global one, and there may indeed be individuals or families who have struggled with low incomes as a result.

9. Multivariate Analysis

The material presented above documents in some detail the changes in the characteristics and labour force outcomes of migrants in each of the two cohorts. Clearly, a number of changes are occurring simultaneously and simple two-way tables and charts do not enable us to disentangle them all (although they do tell much of the story). It may be, for example, that the better employment outcomes of Cohort 2 are simply the result of the changed proportion of migrants in each visa category (although the systematic reporting of outcomes by visa category shows that this is not so). Or it may be that the superior outcomes of the Concessional Family/Skilled-Australian Linked and Independent migrants is caused by their higher levels of education and/or English language proficiency. But other factors are at work, including the general improvement in the state of the labour market in Australia, changes in the country of origin of the migrants and changes in their age distribution. In order to identify the separate effects of the variety of changes that have occurred between Cohort 1 and Cohort 2, it is necessary to use multivariate analysis.

9.1 Probability of being employed

We here report the results of a set of multivariate analyses that are directed to understanding the changes in the employment rates between the cohorts. There are other measures of labour market outcomes, including the levels of earnings and hours worked and of unemployment. But for reasons discussed earlier, the rate of employment, or employment to population ratio, is probably the best single measure of labour market success. It is also one that is measured with some accuracy, since most people are able to understand and respond correctly to questions about whether or not they are employed.

Whether or not one is employed is a dichotomous state: it has a yes/no answer, rather than continuous variation. For this reason, logit regression is the appropriate technique to use to sort out the different effects of a range of variables on the likelihood of being employed.

We have run separate logit regressions for each of the visa categories. The advantage of doing this is that it makes it possible for the effect of each of the

independent variables to differ for each visa group. While it reduces the degrees of freedom for each estimation (because the numbers of people over whom each regression is estimated is fewer) we judge the advantages to outweigh this disadvantage.

The meaning of logit regression results are not easily inferred from the estimated co-efficients. In the tables below, we present, not the co-efficients, but an interpretation of their effect on the probability of being employed. The dependent variable is whether or not a person is employed. The variables that we consider as possible explanations of variation in the probability of being employed are:

ENGWELL	*speaks English well plus other language*
Engnwell	*does not speak English well*
	The omitted variable is speaks English only or best
Engcob	*born in UK, Ireland, North America*
SPOUSE	*the respondent is the spouse of a primary applicant*
MALE	*the respondent is male*
COHORT2	*the respondent is in Cohort 2*
VISIT	*respondent had previously been in Australia*
PNOTEMP	*not employed prior to migration*
PHIGHDEG	*has a higher degree*
PPGDIP	*has a post-graduate diploma/certificate*
PDEG	*has a degree*
PTECHDIP	*has a diploma or technical certificate*
PTRADE	*has a trade qualification*
PYEAR 12	*highest qualification is Year 12*
PYR10_11	*highest qualification is Year 10 or 11*
PYR7 _9	*highest qualification is Year 7 to 9*
POTHER	*other level of schooling*
	The omitted variable is less than 7 years of schooling
AGE	*age, in years*
JOBGRTH	*net job growth in a 7 month period, for the cohort and state of the respondent*
STAY	*Duration of period of current residence in Australia, in days*

Logit equations predict the probability that a person is in one of the two categories of the dependent variable - in this case, whether employed or not employed. We report the odds that a person who has the characteristic in question will be employed, compared with the odds that a person who is the same on every other variable, but does not have that characteristic, will be employed.

The two main propositions of interest are:

c) Do migrants in Cohort 2 have a greater probability of being employed than migrants in Cohort 1, for given levels of education, English language skills, age, sex etc?

d) Is the higher employment among Cohort 2 migrants explained by improvements in the state of the labour market?

We are also interested in the role played by level of educational qualifications, age and English language skills in influencing a person's likelihood of being employed. These are the attributes that are being targeted by many of the recent changes in

migrant assessment criteria, and hence the results are likely to be of particular policy interest.

The analysis has been done separately for each visa category except the Humanitarian group. We have done this because of the express interest of the Department of Immigration and Multicultural Affairs in the differences of experience between the visa categories. We would not normally expect visa category to have an independent and significant effect on the probability of a person finding a job, unless it is standing as a proxy for unobservable personal attributes that affect the probability of employment. Rather, such probabilities are expected to be affected by personal attributes that influence a person's expected productivity in employment, such as their education and type of skills and their experience. Access to alternative sources of income, and valuable alternative uses of their time may also be relevant. The analysis shows that in fact the impact of different characteristics on the probability of employment does differ somewhat across the visa groups, though the differences are mostly not large. The Business Skills/ Employer Nomination Scheme migrants are the ones that look most different.

The Humanitarian category has been excluded because very few are in employment six months after arrival. Logit analysis is not very insightful when one of the categories of the dependent variable (in this case, employed) has very few cases.

The results of the logit regression are reported in Table 20. The figures in the columns labelled "odds" are derived from the regression co-efficients (indeed, are the exponential values of the co-efficients). They can be interpreted as showing the odds that a person with that characteristic has of being employed, compared with the odds of a person who otherwise is the same, but does not have the characteristic in question. Thus, for Concessional Family/ Skilled-Australian Linked migrants, those who came in Cohort 2 have two and a half times the probability of being employed than do otherwise identical migrants who came in Cohort 1. By "otherwise identical" we mean a person who has the same measured characteristics as represented in the equation.

In the regressions reported in Table 20, the migrants in Cohort 1 and those in Cohort 2 have been pooled into the one data set, and the regression estimated using the combined data.

Table 20: Logit Regression Estimates of the Probability of Being Employed, by Visa Category, both Cohorts Combined

Characteristic	*Concessional Family / Skilled Aust Linked*		*Independent*		*Pref. Fam/Fam Stream*		*Business Skills/ENS*	
	Odds	*Signif.*	**Odds**	*Signif.*	**Odds**	*Signif.*	**Odds**	*Signif.*
ENGWELL	-0.41**	0.00	-0.66**	0.00	-0.68**	0.00	-0.57**	0.00
ENGNWELL	-0.22**	0.00	-0.25**	0.00	-0.33**	0.00	-0.23**	0.00
ENGCOB	1.83**	0.00	2.13**	0.00	1.23	0.21	1.77*	0.01
MALE	2.61**	0.00	1.70**	0.00	2.99**	0.00	1.60*	0.01
SPOUSE	-0.64**	0.00	-0.36**	0.00	-0.74	0.30	-0.14**	0.00
COHORT2	2.47**	0.00	2.58**	0.00	1.80**	0.00	-0.78	0.14
VISIT	1.26*	0.06	1.99**	0.00	2.22**	0.00	-0.71*	0.07
PNOTEMP	-0.39**	0.00	-0.39**	0.00	-0.31**	0.00	-0.39**	0.00
PHIGHDEG	-0.52*	0.02	-0.79	0.49	1.02	0.95	3.25**	0.00
PPGDIP	-0.50*	0.02	-0.72	0.38	-0.75	0.32	0.98	0.97
PDEG	-0.53*	0.01	-0.76	0.41	-0.68*	0.09	1.03	0.93
PTECHDIP	-0.60*	0.03	-0.98	0.96	-0.86	0.49	0.89	0.75
PTRADE	-0.84	0.52	-1.63	0.22	-0.84	0.49	2.33	0.16
PYEAR12	-0.53*	0.03	-0.62	0.22	-0.74	0.17	0.65	0.24
PYR10 11	n.a	n.a	n.a	n.a	-0.56*	0.02	-0.41*	0.06
PYR7 9	n.a	n.a	n.a	n.a	-0.82	0.42	n.a	n.a
POTHER	n.a	n.a	n.a	n.a	-0.34	0.10	n.a	n.a
AGE	-0.95**	0.00	-0.95**	0.00	-0.95**	0.00	-0.96**	0.00
JOBGRTH	1.01	0.78	0.92	0.17	1.01	0.66	-0.95	0.47
STAY	1.00*	0.01	1.00*	0.05	1.00	0.71	-1.00	0.70
Constant	**	0.00	**	0.00	**	0.00	**	0.00
per cent improvement in	42		43		34		55	
number	1716		1858		3991		1487	

** indicates 99 per cent confidence that the association is not caused by chance.

* indicates 90 per cent confidence that the association is not caused by chance.

The advantage of doing this is that it enables us to include a dummy variable that indicates which cohort the respondent was in. The variable, labelled “Cohort 2”, has the value 1 if the respondent was in Cohort 2 and 0 if he or she was in Cohort 1. A positive and significant co-efficient on this variable indicates that, after taking account of all the other attributes captured in the other variables in the equation, being in Cohort 2 increases the probability of a person being employed. For each visa category except Business Skills and Employer Nomination Scheme, the co-efficient is positive and significant. Thus for migrants on an Independent or Concessional Family/Skilled-Australian Linked visa, the odds of being employed were about two and a half times greater if they were in Cohort 2 rather than Cohort 1, given their qualifications, age, sex, English language skills and so on. The cohort effect was less for the Preferential Family/Family Stream and not significant for Business Skills and Employer Nomination Scheme migrants.

Whether or not a characteristic has a statistically significant impact on the probability of employment is indicated in the neighbouring column. Values of less than 0.01 show that it is highly unlikely that the association arose by chance, and thus the characteristic does have a significant impact. Values of more than 0.10 are normally interpreted as indicating that the characteristic does not have a significant influence on the outcome.

There are two drawbacks in pooling the data from the two cohorts in this way. The first is that the variance in the data differs somewhat, and this reduces the reliability of standards tests of significance. The second is that it constrains the co-efficients on each of the other independent variables to be the same for each cohort. In response to these points, we also later report regressions estimated separately for each cohort. Despite these drawbacks, we use the pooled data approach in order to obtain a simple test of whether there is an independent cohort effect on the probability of being employed. The regression results suggest that there is.

The greater probability of employment for a “constant quality” migrant in Cohort 2 as compared with Cohort 1 has two possible causes. The first is that the migrants are not in fact “constant quality”. The regression captures differences in observable characteristics that are likely to be associated with differences in employability. But

there is a lot of variance that is not explained, and there are attributes that the outside observer is unlikely to be able to identify, such as in intensity of effort and motivation and inter-personal skills. Furthermore, we do not have variables that represent the need for earnings, or the productivity of the person in activities outside the labour market. The independent effect of being in Cohort 2 is consistent with the proposition that the reduced size of the migrant intake and the denial of access to social welfare benefits have between them caused a greater degree of self-selection among potential migrants, favouring those with greater self-assessed (and unobserved) prospects of employment.

The second possible cause is the improvement in the overall state of the economy. This possibility was tested by the inclusion in the independent variables of JOBGRTH. This variable measures the number of net additional jobs created in each State or Territory over a seven month period. For Cohort 2, the seven month period was August 2000 to February 2001 - the period of arrival and interview. For Cohort 1, the duration of arrival and interview was much longer - over two years. To make the job growth numbers comparable, the average growth in jobs per seven months within the two year period of arrival and interview was calculated. For each person, JOBGRTH took the value appropriate to the growth in employment of the cohort and State that they were in. In no case does this variable make a significant contribution to explaining the variance of employment outcomes. An alternative measure of the state of the labour market was also tried. This measured the employment to population ratio for the sex, State and cohort of each respondent at the time of interview. This measure is less theoretically appropriate than the measure of the growth in jobs, and it too was not significant for any of the visa categories.

We conclude that the most likely explanation for the improvement in the employment outcomes of Cohort 2 is that they were more actively seeking jobs, and/or were of higher employability in ways that are not captured in the observed variables. Note that our data cover spouses as well as primary applicants, and the employment rate for spouses increased rather more than that for primary applicants.

The regressions reported in Table 20 contains a range of other interesting information.

As expected, English language competence is an important predictor of the probability of being employed for all visa groups. Recall that the omitted category is 'speaks English best or English is their only language'. Thus the negative co-efficient means that people who respond that they speak English well, but it is not their best or only language, or that they do not speak English well, have a lower prospect of being employed than the comparison group. The effect of less than perfect English is similar for all the visa groups, and reduces the probability of employment substantially. For example, for Independent migrants, those who do not speak English well have a one in four chance of being employed compared with those who speak English fluently, all other attributes being the same. Note that even after controlling for English language ability, being born in the UK, Ireland or North America confers still greater chance of being employed. This is best interpreted as indicating unobserved qualities in the migrants—because these are high income places of origin, people are not likely to migrate to Australia unless they anticipate good employment prospects. This self-selection interpretation is reinforced by the fact that the co-efficient is not significant for Preferential Family/Family Stream migrants, many of whom come to Australia for reasons other than work opportunities.

Men are much more likely to be employed than are women in all visa groups, especially Concessional Family/Skilled-Australian Linked and Preferential Family/Family Stream. Migrating as a spouse also reduces the likelihood of being employed, except for Preferential Family/Family Stream.

Migrants who had visited Australia prior to migrating have a significantly higher chance of being employed than migrants who had not. It is interpreted as standing as a proxy for knowledge of the local labour market. It may also indicate a greater investment of effort on behalf of the intending migrant in learning about their intended destination. This may in turn be linked to unobservable personal qualities that enhance employability. Cobb-Clark, D. and Chapman, B. (1999) had identified the importance of prior visit in their analysis of Cohort 1 Primary Applicants. Our

regressions confirm that the effect persists for the pooled group of migrants, and when we include spouses in the data. A regression to be reported below confirms that a prior visit significantly enhances the prospects of employment for Cohort 2 examined separately.

The variables that measure the highest qualifications are in most cases not significant. However, we are puzzled by the fact that in all cases they have the unexpected sign. The omitted category is those who have fewer than 12 years of formal schooling. For the Preferential Family/Family Stream migrants, it was fewer than 7 years, as there were sufficient numbers of people in this group for it to be statistically useful as a category. Because people with higher levels of qualifications are expected to be more productive, we expect them both to be more likely to obtain a job, and to receive a higher wage when they do. We suspect that the pooling of the data may have produced this puzzling outcome. When the regression is estimated separately for each of the cohorts, higher qualifications have the expected positive sign.

Finally, we note that age is consistently significant and negative. Younger people, other things equal, have a higher chance of being employed.

In Table 21, we report the results of a similar regression, estimated separately for each cohort but not for each visa category. The advantage of this approach is that it enables us to see whether the consequences for employment of different attributes has changed between the two cohorts. We have also included variables to indicate the state of interview of each respondent. Cobb-Clark, D. and Chapman, B. (1999) show that for Cohort 1, being in Queensland gave migrants a significantly higher chance of being employed. Our regression, which includes spouses, does not identify a positive Queensland effect for Cohort 1 (compared with being in NSW). And for Cohort 2, the effect of being in Queensland is significant and negative.

Overall, the independent variables give a better prediction of employment for Cohort 2 (a 53 per cent improvement over the prediction that would be made without the inclusion of the variables, compared with a 39 per cent improvement for Cohort 1). The variables that are significant are mostly the same, except for State of interview.

With State of interview, the comparison is with NSW. For Cohort 1, the prospects of employment were significantly worse for migrants in Victoria and West Australia. For Cohort 2, they were, as noted above, significantly worse for migrants in Queensland, but also for those in West Australia and South Australia or Tasmania. We conclude that the local labour market does matter, but the advantage of one over another is mostly ephemeral.

The advantages of being fluent in English, of being male and the primary applicant, of having visited Australia and of being employed prior to migration and of being younger are all similar for the two cohorts. The effects of all of these variables are significant for both cohorts and have similar magnitudes.

Table 21: Logit Regression Estimates of the Probability of Being Employed, Cohort 1, Wave 1 and Cohort 2

Characteristic	*Cohort 1*		*Cohort 2*	
	Odds	*Signif.*	*Odds*	*Signif.*
ENGWELL	-0.47**	0.00	-0.56**	0.00
ENGNWELL	-0.19**	0.00	-0.23**	0.00
ENGCOB	2.09**	0.00	1.48*	0.01
MALE	2.63**	0.00	2.54**	0.00
SPOUSE	-0.52**	0.00	-0.73**	0.00
VISIT	2.21**	0.00	2.41*	0.00
PNOTEMP	-0.39**	0.00	-0.26**	0.00
QLD	1.19	0.30	-0.60**	0.00
SATAS	-0.68	0.16	-0.58**	0.00
TERRIT	1.26	0.56	-0.79	0.26
VIC	-0.78*	0.01	-0.83	0.32
WA	-0.65*	0.00	-0.70*	0.03
PHIGHDEG	1.73**	0.00	2.72**	0.00
PPGDIP	1.14	0.39	1.48*	0.07
PDEG	1.06	0.62	1.52**	0.00
PTECHDIP	1.20	0.10	1.38*	0.03
PTRADE	1.59**	0.00	1.56*	0.02
PYEAR12	-0.96	0.75	-0.96	0.77
AGE	-0.96**	0.00	-0.94**	0.00
JOBGRTH	1.05	0.81	0.98	0.67
STAY	1.00**	0.00	1.00	0.41
Constant		0.69	**	0.00
per cent improvement in prediction	39		53	
number	6961		4181	

** indicates 99 per cent confidence that the association is not caused by chance.
* indicates 90 per cent confidence that the association is not caused by chance.

There are modest differences in the impact of different qualifications. While the size of the effect is similar across the cohorts for most of them, having a degree or graduate diploma is not significant for Cohort 1 whereas it is for Cohort 2. In addition, the impact of having a higher degree is larger for Cohort 2. We note that the proportion of migrants in Cohort 2 who had a higher degree was considerably higher than it was for Cohort 1.

The final difference between the two cohorts is that the duration of residence in Australia prior to interview (STAY) was not significant for Cohort 2 but was for Cohort 1. Cohort 2 migrants had on average been in Australia longer at the time of

interview than had those in Cohort 1. It may be that the effect of a few weeks extra time in Australia is highest soon after arrival, and that it had largely begun to wear off by the time that most Cohort 2 migrants were interviewed.

Earlier in this report we noted that the positive association between youth and being employed was rather less for Cohort 2 than for Cohort 1. It is interesting that once we control for a range of other attributes, there remains no difference between Cohort 1 and Cohort 2 in the influence of age on the probability of being employed.

Several variations on the reported equations were tried. In one version, education was coded in years of formal schooling rather than being entered as dummy variables for level of qualification. In addition, a crude measure of employment experience was calculated, as the person's age, less the years of schooling, less 5. This was then used instead of age. The effects of this alternative on the other variables were small. The education variable was not significant, and for some visa categories was negative, for the equation reported in Table 20. This is consistent with the results of using qualifications. Similarly, education was significant and positive for each of Cohorts 1 and 2 in the equation reported in Table 21. We chose to report qualification and age, rather than education and experience, since we thought that the former were more closely related to the migrant selection criteria. They were thus of more interest to policy.

We also tried including the field in which the education qualification was obtained. With few exceptions, these did not have significant co-efficients, and some were correlated with qualification.

We conclude from the comparison of Cohorts 1 and 2 that the impact of the observed characteristics on the probability of being employed was basically the same across the two cohorts. The better employment outcomes for Cohort 2 do not seem to be the result of some change in the labour market that meant that, for example, qualifications were more valued or English language skills more important. Thus the better employment outcomes for Cohort 2 are likely to be the result of two factors. One is the better average set of characteristics (such as language and education). The other is that Cohort 2 migrants have better non-observable

attributes that increase their likelihood of being employed. These may result either from the deterrent effect of knowing that social welfare benefits are not available for the first two years, or from the cut in the size of the migrant intake, or both. The improved results may also arise from a stronger labour market, but we could detect no such effect from the proxies for state of the labour market that we used.

9.2 Variance in earnings

The previous analysis has sought to understand the sources of the difference in the probability of being employed. In this section, we confine the analysis to those who are employed (including self-employed) and enquire into the sources of variance in the level of hourly wages. We do this separately for each visa group, but pool the data for the two cohorts. As before, the reason for this is to see whether migrants in Cohort 2 who had the same characteristics as those in Cohort 1, received the same wage.

The variables used to explain the level of the hourly wage are mostly the same as those used to predict employment. The reasoning is that the people most likely to be employed are those who can expect to be paid a wage that exceeds the value to them of being not employed. Thus the attributes that affect wages are relevant to both enquiries.

The list of variables is set out below.

ENGWELL	*speaks English well plus other language*
Engnwell	*does not speak English well* The omitted variable is speak English only or best
Engcob	*born in UK, Ireland, North America*
SPOUSE	*the respondent is the spouse of a primary applicant*
MALE	*the respondent is male*
VISIT	*respondent had previously been in Australia*
PNOTEMP	*not employed prior to migration*
JOBGRTH	*net job growth in a 7 month period, for the cohort and state of the respondent*
STAY	*Duration of period of current residence in Australia, in days*
ED	*years of formal education*
EXP	*estimated years of employment experience*
EXPSQ	*the squared value of experience*

EDUCAT	*field of qualification was education*
HEALTH	*field of qualification was health*
SOCSCI	*field of qualification was social sciences*
ADMIN	*field of qualification was administration or management*
ENGIN	*field of qualification was engineering*
NOHQ	*no post-school qualification*
	The omitted category was Science
ASSPROF	*occupation was management, administration, associate professional*
PROF	*occupation was professional*
TRADES	*occupation was trades*
PRODUCT	*occupation was machine operator, driver*
	The omitted category was "other", being sales, clerical, labourer

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We have included in the earnings equation the field of the respondent's highest qualification, and their broad occupational category. In addition, we have used years of education and a crude estimate of workforce experience, rather than use age as in the logit estimates. The variables that we have chosen are theoretically more appropriate for estimating earnings. We emphasize, however, that the measure of workforce experience is not at all precise, especially for women. The occupational groupings are the broad ones derived from a comparison of ASCO1 and ASCO2, as discussed in the earlier discussion on occupation. It is necessary to use this abbreviated scale, because we wish to code occupation similarly for Cohort 1 and 2.

The estimation of hourly wage contains some imprecision. Apart from the inevitable, and unknown, errors in the data, the wage variable was calculated by dividing weekly earnings for those in employment by their reported hours of work. Both sets of data were coded in intervals, so we could not do better than use the mid-point of the interval to compute the income and hours information.

We do not report results for Business Skills and Employer Nomination Scheme or for Humanitarian migrants. In the former case, much of the earnings are from self-employment. It is notoriously difficult to get satisfactory estimates of the return to labour from people who are self-employed, and the overall explanatory power of the regression that was estimated was, not surprisingly, low. In the case of Humanitarian migrants, too few were employed to give reliable estimates. The sample size was only 104.

Ordinary least squares was used to derive the results reported in Table 22.

The co-efficients in the table show the increase, in dollar amounts, in the hourly wage associated with having the attribute in question. Thus, for Independent migrants, an additional year of formal schooling typically adds 80 cents per hour to the wage, whereas an additional year of experience in the workforce adds 64 cents. Migrants in Cohort 2 earn $2.65 more than migrants in Cohort 1, all other measured attributes held constant.

Overall, the equations look plausible. The overall explanatory power - between 23 and 29 of the variance - is acceptable for estimates of this sort. The signs on the explanatory variables are mostly as expected.

Table 22: OLS Regression Estimates of Hourly Wages, by Visa Category, both Cohorts Combined

Characteristic	*Concessional Family/Skilled Australian Link*		*Independent*		*Pref. Fam/Fam Stream*	
	Co-efficient	*Signif.*	**Co-efficient**	*Signif.*	**Co-efficient**	*Signif.*
ED	0.01	0.96	0.80**	0.00	0.33*	0.02
EXP	0.36*	0.01	0.64*	0.01	0.36**	0.00
EXPSQ	-0.01*	0.02	-0.01	0.10	-0.01**	0.00
ENGWELL	-2.97**	0.00	-2.27**	0.00	-0.30	0.64
ENGNWELL	-2.78*	0.01	-3.89*	0.02	-1.72*	0.03
ENGCOB	-0.85	0.30	0.98	0.24	1.23	0.10
MALE	1.01	0.15	1.26*	0.08	0.65	0.18
SPOUSE	-0.70	0.31	-0.49	0.56	-2.52	0.18
JOBGRTH	-0.50*	0.02	-0.07	0.80	-0.10	0.54
COHORT2	0.68	0.34	2.65**	0.00	0.07	0.90
ASSPROF	4.40**	0.00	6.70**	0.00	4.52**	0.00
PROF	8.88**	0.00	7.33**	0.00	7.76**	0.00
TRADES	0.65	0.47	3.28**	0.00	0.63	0.41
PRODUCT	0.12	0.92	0.28	0.88	-1.80*	0.03
STAY	0.00	0.86	0.00	0.87	0.01*	0.05
VISIT	2.25**	0.00	1.56*	0.02	0.18	0.73
PNOTEMP	-0.26	0.85	-2.10*	0.07	0.03	0.96
ADMIN	-2.86*	0.02	0.35	0.73	-0.29	0.78
HEALTH	-4.41**	0.00	-2.19*	0.09	-0.65	0.64
EDUCAT	-4.02*	0.04	-4.13*	0.04	-0.71	0.67
SOCSCI	-2.90*	0.03	-1.07	0.35	-0.85	0.42
ENGIN	-3.64**	0.00	-0.05	0.96	-0.09	0.93
OTHFHQ	-3.90**	0.00	-2.60*	0.05	-2.05	0.10
NOHQ	-3.73*	0.02	1.57	0.39	-0.81	0.46
Constant	14.34**	0.00	-3.63	0.39	5.24*	0.04
Adjusted R^2	0.29		0.23		0.24	
number	682		905		1075	

** indicates 99 per cent confidence that the association is not caused by chance.

* indicates 90 per cent confidence that the association is not caused by chance.

The main conclusions from the table are:

- Cohort 2 migrants earned substantially higher wages if they were Independent, but not if they were in either of the family categories;
- Experience and fluency in English both contributed significantly to higher wages, for all visa groups;
- Education was positively associated with wages, except for the Concessional Family/Skilled-Australian Linked migrants;
- For all visa categories, people working as professionals or associate professionals or in management earned more, other things equal, than people in sales, clerical or labouring jobs. For Independent migrants, this was true also for those working in the trades;
- For the Concessional Family/Skilled-Australian Linked group, the field in which one's highest qualification was obtained significantly affected wages. Science was paid best, and health and education paid worst. For the other visa groups, field was mostly not significant;
- A previous visit to Australia paid off for Concessional Family/Skilled-Australian Linked and Independent migrants, in the form of a higher wage; and
- Once you had a job, being born in the UK, Ireland or North America did not significantly increase your wage.

The most interesting conclusion, for policy purposes, is that Cohort 2 migrants who were Independent earned significantly more than did Cohort 1 migrants, other attributes held constant. This is the visa category most influenced by the recent changes to the eligibility criteria. As with the probability of getting a job, it suggests that Cohort 2 migrants have unobserved qualities that make them more productive workers.

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