

DO AUSTRALIAN QUALIFICATIONS HELP? THE EFFECT OF HOST COUNTRY QUALIFICATION ON MIGRANT PARTICIPATION AND UNEMPLOYMENT

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Abstract

The study explores whether possession of an Australian qualification helps mitigate the labour market disadvantages of immigrants in Australia. The effect of a host country qualification on the labour market assimilation is estimated by comparing the labour force participation and unemployment of natives, migrants with foreign education and migrants with Australian education. The results indicate that Australian qualification does not have a significant effect on the labour market outcomes of migrants. After controlling for factors such as level of education and experience, Australian qualifications do not result in better labour market outcomes for migrants. This finding is discussed in context of the current Australian migration program which rewards applicants for the possession of an Australian qualification.

Keywords: Assimilation, Migration Policy, Australia,

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1. Introduction

One important indicator of the success of immigration policy is the assimilation of immigrants into the host country's labour force. Smooth assimilation facilitates entry into the labour market while obviating the social tensions and costs typically associated with sustained labour market disadvantage. From the perspective of the receiving country, assimilation is a major determinant of the economic contribution that immigrants make to the host economy. Hence, this paper explores one important set of preconditions that affect the productivity of immigrants in Australia. Understanding the role of Australian education in the labour market assimilation process renders useful contributions to policy formulation in two spheres, in immigration policy as well as in the area of education policy in Australia.

The contemporary relevance of such a study is highlighted by the changes in Australian immigration policy which discriminate in favour of immigrants holding Australian tertiary qualifications. The policy in question concerns the acquisition of Permanent Residency. The revised policy in effect awards higher 'points' (weights) to tertiary qualifications obtained in Australia compared to overseas qualifications. Currently Australian qualification attracts 15 points for a doctoral degree, 10 points for a Masters or Honours (with at least upper second class Honours) degree following the completion of an Australian Bachelors degree and 5 points for a Bachelors degree, diploma or trade qualification (DIMIA, 2007). Currently, applicants for Permanent Residency need to

score 120 points to meet the pass mark for the application to be processed further for health and character tests¹. Thus, Australian qualifications constitute between 4 percent to 12.5 percent of the total points for skilled immigration. The explicit rationale for this policy is that Australian tertiary level qualifications make it easier for migrants to assimilate in the Australian labour market and to contribute to the Australian economy. This conjecture underlying the current immigration policy is tested empirically in the present research. The paper examines the effect of Australian qualification on immigrant assimilation in the Australian labour market.

The literature of migrant assimilation and studies examining the role of host country qualification are reviewed in the following Section 2. Section 3 outlines the methodology and specifics the estimation model. The dataset and variables employed in the study are discussed in Section 4. Section 5 reports the results while Section 6 contains the discussion of the results and draws out the policy implications. Section 7 concludes the paper.

2. Literature Review

The process of assimilation of immigrant workers into the Australian labour force has been discussed extensively. Recent examples include Miller and Neo (2003) and Cobb-Clark (2003). It is a common observation that immigrants are disadvantaged in the labour market in terms of their position relative to native workers. Immigrants in Australia experience a higher unemployment rate and lower earnings compared to native workers (Chiswick and Miller (1985), Beggs and Chapman (1988, 1991) and Miller and Neo (2003)). Further, studies find that the origin countries matter in terms of fluency in

¹ Source: <http://www.dimia.gov.au/skilled/general-skilled-migration/points-test.htm>

English, immigrants from non-English speaking background (NESB migrants) have higher unemployment rates and the catch-up with native workers is slow (Thapa, 2004). NESB migrants suffer from similar disadvantage in terms of earnings (McDonald and Worswick, 1999). Migrants from English speaking countries (ESB migrants) on the other hand, exhibit unemployment rates and earnings comparable to Australians. Literature discusses imperfect transferability of human capital and skills acquired by migrants in their home countries, as one of the explanations for their labour market disadvantage. Studies have recognized the importance of acquiring Australian education for the labour market success of immigrants and hence analysed the determinants of decision to invest in post-migration education.

Chiswick and Miller (1994) find that investment in education after migration declines with the age at arrival, while pre-immigration education, skilled occupations and period of residence in Australia have a positive effect on post-immigration education. The analysis by Cobb-Clark et al., (2005) using the recent Longitudinal Survey of Immigrants to Australia (LSIA) finds similar positive impact of education level at the time of arrival and the importance of visa category in the decision to invest in education post migration. The issue of transferability of skills is also important; migrants from non-English speaking countries are more likely to participate in education compared to those from English speaking countries. Given that immigrants make a decision to invest in Australian education, it is important to examine the return to this investment in the Australian labour market.

Thapa and Gorgens (2006) estimate the hazard ratios for the probability of finding a first job in Australia using LSIA data. They fail to find a positive effect of Australian

qualification or an overseas qualification assessed as equivalent to Australian qualification, on the rate at which male immigrants find their first job. In case of female immigrants, possessing an Australian educational qualification has a significant positive effect on finding the first job. Having an overseas qualification, which has been assessed as equivalent to Australian qualification, has a similar positive effect for female migrants. Chiswick et al., (2005) also use LSIA data to analyse immigrant assimilation in terms of the level of and the growth in adult male earnings in their first 3.5 years in Australia. They conclude that the level of earnings and the growth in earnings is positively related to the level of human capital of immigrants, including educational qualifications acquired in Australia. Yet the results reported in the paper indicate that the effect of Australian qualification is not significant across estimations. Thus, the few studies which investigate the effect of Australian qualification on labour market assimilation of immigrants in Australia, do not find a robust positive impact. Hence, this paper further investigates the impact of having an Australian qualification.

In contrast, a study by Sweetman and McBride (2004) for Canada finds a positive impact of having a local qualification. They analyse the assimilation of immigrants in the Canadian labour market using 1986, 1991 and 1996 censuses and conclude that having Canadian education is of great economic value in labour market assimilation. For both sexes, Canadian educated migrants have better labour market outcomes in terms of earnings, hours worked per week and weeks worked per year. Given the similarities between the Canadian and Australian immigration programmes, one expects to find a similar effect of local qualification in Australia.

3. Methodology

The impact of Australian human capital investment on labour market outcomes is modelled using the standard probability model. The starting point is the tendency of an individual to join the labour force. It is of interest to analyse the labour force participation decision as impediments faced by immigrants may result in lower labour force participation, that is, the discouraged worker effect may be strong. These effects will not be captured by looking at unemployment status alone. The observed probability of a person i participating in the labour force, which itself is a latent decision, is given by

$$\Pr(lfpart_i) = \beta_0 + \beta_i X_i + \varepsilon_i \quad (1)$$

The variable $lfpart$ denotes labour force participation and is defined as equal to 1 if a person participates in the labour force and equal to 0 otherwise. X_i consists of the factors affecting the labour supply decision, including dummy variables for Australian qualification and overseas qualification.

Education and labour market experience are important determinants, along with the host of other variables such as gender, geographical location and disability. Birthplace is another key explanatory variable; the literature review notes that immigrants, especially those from NESB countries, have worse labour market outcomes. The period of residence in Australia is included in accordance to the assimilation hypothesis. It is expected that the labour market disadvantage declines with the number of years spent in Australia. The probability of a person i being unemployed is modelled in a similar way; conditional on the person i being a labour force participant.

Estimation equations for labour force participation and unemployment are specified using the logit model and estimated separately using cross-section data. The reported parameter estimates indicate the impact of a small change in the explanatory variables on the logarithm of the odds ratio. For both estimations, regarding the labour force participation and unemployment, results for males and females are reported separately to allow for gender differences. Further, in order to account for the systematic differences across origin countries as consistently reported by the literature on immigration in Australia; estimations are disaggregated by ESB and NESB migrants. Before reporting the results, the following section outlines the data and defines the variables used in the econometric analysis.

4. Data

The analysis is carried out using data from the *Aspects of Literacy Survey 1996*. The survey collected information from adult persons aged 15 to 74 with the aim of assessing some elements of literacy and numeracy skills. The survey also collected information regarding socio-economic background, education and training and labour force characteristics². Data from this survey is particularly suited for the present analysis as it enables us to distinguish between Australians, migrants with Australian post-school qualifications and migrants with overseas post-school qualifications. The survey collects data regarding “Post-school qualification obtained” and “Post-school qualification obtained before migration”. Following the standard practice in the literature, Australian born persons are defined as Australians and persons born overseas are defined as Migrants. Migrants are further classified as having an Australian qualification if they

² See Chiswick et al., (2003) for details of the survey and analysis using data from this survey.

report a higher post-school qualification compared to their post-school qualification obtained before migration and as having overseas (Foreign) qualification, otherwise.

Most of the research on migrant assimilation in Australia uses census data. However, censuses do not collect any information regarding education before migration and it is not possible to directly distinguish between Australian qualification and overseas qualification. The *Aspects of Literacy Survey* data, therefore, has an advantage over census data for the present analysis. On the other hand, it also has some limitations. There is no information regarding some of the variables which can be important for analysing labour market behaviour, such as marital status, children, and spouse's income. Chiswick et al., (2003) also note the inadequacies and inconsistencies in the reported income variables. Given the data constraints and the main focus of this study, we analyse the labour force participation decision and unemployment using the *Aspects of Literacy Survey* data. The estimations are carried out using the sample of persons between 15 to 64 years of age.

Education is defined in terms of the level of educational attainment, dummy variables are constructed for each level and persons who “did not complete secondary school” form the base group. Labour market experience is estimated as equal to “age-years of education-5 years”. Period of residence is set to be zero for Australians and calculated for migrants as the number of years since arrival in Australia. Immigrants are divided into migrants from ESB countries (ESB migrants) and migrants from NESB countries (NESB migrants) based on English proficiency country grouping by DIMIA (2001)³.

³ ESB countries include Canada, Ireland, New Zealand, South Africa, United Kingdom and the United States of America; all other countries are included as NESB countries.

INSERT TABLE 1

Immigrants form 26 percent of the sample of 9302 persons, 551 immigrants hold Australian qualifications, while the rest have overseas qualifications. Table 1 summarizes labour force participation and employment statistics across the three groups. Compared to Australians, migrants with Australian qualification are much more likely to be employed and overseas educated migrants are less likely to be employed. The differences in labour force participation are more striking. One can see that the proportion of Australian educated migrants who are out of the labour force is very low. On the other hand, the proportion of overseas educated migrants who do not participate in the labour force is much higher than the proportion of Australians. These initial findings are, thus, in line with our intuition that Australian educated migrants should have better labour market outcomes. Further analysis in Section 5 tests whether these findings hold after accounting for other factors affecting the labour force participation and unemployment.

5. Results

The estimated coefficients for labour force participation using a logit model are reported in Table 2. The table reports the coefficients with t-statistics (in parentheses) and the partial effects of the explanatory variables have the same sign as the coefficients.

INSERT TABLE 2

The results confirm established findings from the literature and are consistent across males and females. Education has a significant positive effect: higher levels of education are associated with higher labour force participation rates. Labour market experience has a significant positive effect, though decreasing marginal effect, on participation as

indicated by the estimated positive parameter for experience variable and negative coefficient on the square of experience variable. The length of the period of residence is significant for female migrants but not for male migrants. Female labour force participation increases with the duration of stay in Australia, though additional years have a diminishing impact. Presence of a disability results in lower labour force participation while location does not seem to play a significant role in this case. More importantly for the present analysis, the estimated coefficients for Australian qualifications and foreign qualifications are significant and negative for males and females. Migrants, regardless of the origin of their qualification, have lower labour force participation compared to Australians. The reported tests for multiple coefficients indicate that Australian and foreign education are jointly significant (at 5 percent level), but the hypothesis that their effects are equal cannot be rejected. It is possible that Australian and foreign education variables are capturing the effect of being a migrant rather than the effect of an Australian or overseas qualification. This issue is addressed by controlling migrant birthplace.

INSERT TABLE 3

The results in Table 3 suggest that the above findings of positive impact of education levels and experience and the negative effect of disability on labour force participation hold; even after disaggregating for ESB and NESB migrants. Interestingly, the effects of Australian qualification and foreign qualification differ across ESB and NESB migrants. The coefficients for Australian qualifications and foreign qualifications are statistically insignificant in case of ESB males and females indicating that their labour force participation is comparable to Australians. These coefficients are significant and negative for NESB migrants; both Australian educated and foreign educated NESB migrants are

less likely to participate in the labour force than Australians. Furthermore for NESB migrants, having a foreign qualification results in a marginally lower probability of participating in the labour force. Testing for the equality of coefficients of the Australian and foreign qualification indicates that they are jointly significant but the hypothesis that they are equal cannot be rejected by 5 percent significance level. Thus, the effect of an Australian qualification on NESB migrant's labour force participation is not statistically different from the effect of a foreign qualification.

INSERT TABLE 4

INSERT TABLE 5

Table 4 and Table 5 detail the results of unemployment estimations. Factors such as education, disability, period of residence and location have similar impact on male and female unemployment. Higher education reduces the probability of being unemployed, while a disability results in higher unemployment. Similar to the results for labour force participation, location does not have a significant impact. The period of residence is also statistically insignificant. The coefficients for other variables differ across genders. Labour market experience lowers the probability of being unemployed for males, but has no significant effect on female unemployment. This finding could be due to problems in defining a robust measure of labour force experience for female workers because the calculated variable used in this analysis does not account for discontinuities in years spent in the labour market. Looking at the coefficients for Australian education and foreign education; male migrants have a higher probability of unemployment regardless of the country of their highest qualification. The coefficients are statistically insignificant for females, that is, unemployment rates for female migrants are comparable to similar

female Australians. It seems that the birthplace is not a significant determinant for female unemployment. This result, together with the earlier result for labour force participation, indicates that in the present instance, female migrants suffer from labour market disadvantage in terms of labour force participation rather than unemployment. The estimations for ESB and NESB migrants confirm these results. The overall direction and statistical significance of the effects remains as discussed above. The effects of Australian and foreign qualifications remain statistically insignificant except in the case of NESB males and in all cases we cannot reject the hypothesis that the effects of Australian qualifications and foreign qualifications are equal (at conventional levels of significance).

6. Discussion and Implications of the Results

Australian migration policy has an emphasis on selecting skilled migrants. In particular, the Skilled Independent Overseas Student Visa (Visa Subclass 880) is designed to encourage overseas students studying in Australia to apply for Permanent Residency after completion of the studies. DIMIA notes that “this visa uses a point test to select visa applicants with characteristics needed in the Australian labour market”⁴. Winkleman (2001) notes that Australian system does not award points for qualification per-se, points are awarded in relation to the occupations the qualifications lead into. The system only explicitly allows for points for qualifications obtained in Australia. This discrimination in favour of Australian qualifications has been associated with an increase in overseas students studying in Australia as well as increasing the number of such students applying for skilled migration visas (Hawthorne, 2005). Hence, examining the impact of

⁴ Source: <http://www.dimia.gov.au/skilled/general-skilled-migration/880/index.htm>

Australian qualifications is important for the implications for policy formation in the areas of migration as well as tertiary education.

Hawthorne (2005) states this policy to be highly effective; higher proportion of Australian migrants are successful in securing work in their profession (field). It is not clear from the presented results whether the analysis controlled for other factors relevant to the labour market outcomes. It is possible that the results do not reflect the *partial* effect of Australian qualification but a compound effect of Australian qualification coupled together with the effects of other factors associated with labour market outcomes and the possession of an Australian qualification. Another possibility is that these results do reflect the actual experience of immigrants in the Australian labour market. Possessing an Australian qualification may not have significant impact on labour force participation or on the probability of unemployment (as indicated by results reported in Section 5); but for those who find employment, Australian qualification may help in aligning their profession with their field of study.

It is also possible that Australian qualifications have an impact on earnings. Immigrants with Australian education might be able overcome some of the earnings disadvantage faced by immigrants in the Australian labour market as employers would find it easier to judge their human capital attributes. The effect of Australian qualification on earnings cannot be analysed in the present paper due to data constraints. Further research needs to be pursued in order to investigate this issue.

The results from this analysis, in line with the results from earlier studies do not find a robust, statistically significant, positive effect of Australian qualifications on the immigrant labour force participation or unemployment. Despite the intentions of the

Australian migration policy, empirical research fails to identify the possession of Australian qualifications as a significant factor in the labour market outcomes. Other factors such as level of education, labour market experience, origin countries and period since arrival in Australia are more important determinants of labour market participation and unemployment. Australian qualifications could have an impact on earnings and job-market fit in a professional field, but it is difficult to conclude that it has a robust positive impact on labour market adjustment of Australian migrants. A possible explanation for this finding could be that cross-border transferability of educational qualification is not one of the main impediments to labour market assimilation and that possessing an Australian qualification does not mitigate the labour market disadvantage to a significant extent. For example, Birrell (2006) finds that 34 percent of overseas students granted Permanent Resident visa failed to achieve “competent” level of English proficiency⁵. Thus, Australian qualifications fail to moderate the effects of other factors driving the labour market outcomes, such as differences between ESB and NESB migrants.

Similar findings were reported by the report by Birrell et al., (2006). Overseas students with Australian qualifications who were granted Permanent Residency under the Skilled Migration Program did not have better labour market outcome compared to other migrants who migrated under Independent Skilled Stream and who were most likely to have qualifications from their origin countries. They perform worse even when compared to recent Australian graduates, taking into account their lack of work experience. The authors propose three reasons for the lack of better labour market outcomes for recent migrants with Australian qualification: a) they have lower level of English proficiency; b)

⁵ Persons achieving band 6 or higher on the International English Language Testing System (IELTS) are classified as having “competent” English skills.

they are concentrated in a small number of fields of study such as accounting and IT and c) the quality of some courses undertaken (Birrell et al., 2006, pg. 97). Thus, the results from the present analysis may seem counterintuitive at first, but are not surprising in light of the earlier findings regarding the impact of Australian qualification on migrant labour market outcomes.

7. Conclusion

Given the impediments faced by immigrants in the labour market, local qualifications should assist in overcoming some of the problems associated with cross-border transferability of formal skills. The paper empirically investigates this hypothesis. Comparing the labour market outcomes for Australians, migrants with Australian qualifications and migrants with Overseas qualifications, the study finds no significant effect of possessing an Australian qualification on labour force participation and unemployment. Other factors such as level of education, labour market experience, disability and birthplace are found to be more important determinants of the probability of being a labour force participant or being unemployed.

These findings are important in the context of Australia's skilled migration program. The migration policy discriminates in favour of migrants with Australian qualification with an expectation that these migrants will experience easier assimilation into the Australian labour market. Results from this study suggest that Australian qualifications fail to compensate for other factors driving labour market disadvantage faced by Australian immigrants. Hence it is imperative to further investigate and debate the rationale and the outcomes of the current Australian migration program.

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Table 1: Labour Force Participation of Australians and Immigrants, 1996

	<i>Australians</i>	<i>Migrants (Australian qualification)</i>	<i>Migrants (Overseas qualification)</i>	<i>Total</i>
Employed	4427 (64.37 %)	439 (79.67 %)	949 (51.10 %)	5815
Unemployed	334 (4.86 %)	25 (4.54 %)	106 (5.71 %)	465
Not in labour force	2116 (30.77 %)	87 (15.79 %)	802 (43.19%)	3005
Total	6877 (100%)	551 (100%)	1857 (100%)	9285

Note: 17 migrants reporting “no post-school qualification” are not included in the analysis.

Table 2: Labour Force Participation: Coefficients from Logit Model Estimations

<i>Variable</i>	<i>Males</i>	<i>Females</i>
Constant	1.092 (6.35)	0.406 (3.28)
Education (did not complete school)		
Higher Degree	1.205 (3.31)	1.559 (6.73)
Bachelor's Degree	1.447 (4.76)	1.339 (8.75)
Diploma	0.846 (4.22)	0.995 (7.10)
Vocational qualification	0.616 (4.41)	0.569 (5.89)
High School	0.467 (2.90)	0.384 (3.80)
Experience	0.174 (13.01)	0.555 (6.03)
Experience squared	-0.422 (15.21)	-0.181 (9.39)
Period of Residence	0.274 (1.82)	0.304 (3.19)
Period of residence squared	-0.939 (1.21)	-0.955 (1.99)
Disability	-1.197 (10.58)	-0.551 (7.08)
Location (SA and Tasmania)		
Capital	0.923 (0.65)	0.128 (1.41)
No capital	0.204 (1.28)	0.122 (1.20)
Qualifications		
Australian (ausedu)	-2.124 (3.32)	-2.089 (4.66)
Foreign (foredu)	-2.190 (3.84)	-2.483 (6.18)
Tests: Multiple coefficients ($p > \chi^2$)		
ausedu = foredu = 0	0.0006	0.000
ausedu = foredu	0.813	0.056
No. of observations	3757	4399
LR χ^2 (df =14)	620.07	663.82
Pseudo R^2	0.205	0.119

Table 3: Labour Force Participation: Coefficients from Logit Model Estimations by Birthplace

<i>Variable</i>	<i>ESB migrants</i>		<i>NESB migrants</i>	
	Males	Females	Males	Females
Constant	1.118 (6.02)	0.417 (3.18)	1.143 (6.37)	0.398 (3.10)
Education (did not complete school)				
Higher Degree	0.965 (2.37)	1.612 (6.09)	1.443 (3.52)	1.559 (6.46)
Bachelor's Degree	1.267 (3.85)	1.294 (7.65)	1.867 (4.94)	1.512 (9.15)
Diploma	0.816 (3.59)	0.962 (6.23)	0.772 (3.58)	1.001 (6.78)
Vocational qualification	0.534 (3.58)	0.550 (5.39)	0.589 (4.02)	0.632 (6.23)
High School	0.622 (3.25)	0.407 (3.73)	0.504 (2.98)	0.429 (3.97)
Experience	0.175 (11.65)	0.051 (5.12)	0.169 (12.12)	0.051 (5.26)
Experience squared	-0.428 (13.64)	-0.168 (8.04)	-0.409 (14.12)	-0.166 (8.19)
Period of Residence	-0.165 (0.41)	0.265 (1.50)	0.296 (1.69)	0.347 (2.88)
Period of residence squared	0.679 (0.36)	-1.167 (1.31)	-0.927 (1.02)	-1.020 (1.69)
Disability	-1.160 (9.33)	-0.541 (6.51)	-1.201 (10.01)	-0.585 (7.10)
Location (SA and Tasmania)				
Capital	0.135 (0.86)	0.161 (1.67)	0.050 (0.33)	0.124 (1.29)
No capital	0.104 (0.61)	0.093 (0.88)	0.167 (0.99)	0.118 (1.11)
Qualifications				
Australian (ausedu)	0.865 (0.46)	-0.520 (0.65)	-2.495 (-3.26)	-3.002 (5.27)
Foreign (foredu)	1.227 (0.67)	-1.351 (1.86)	-2.879 (4.44)	-3.066 (5.96)
Tests: Multiple coefficients($p > \chi^2$)				
ausedu = foredu = 0	0.522	0.007	0.000	0.000
ausedu = foredu	0.356	0.012	0.325	0.810
No. of observations	3241	3804	3307	3909
LR χ^2 (df = 14)	475.35	508.36	590.72	590.85
Pseudo R^2	0.194	0.107	0.216	0.119

Table 4: Unemployment: Coefficients from Logit Model Estimations

<i>Variable</i>	<i>Males</i>	<i>Females</i>
Constant	-1.277 (5.92)	-1.968 (7.79)
Education (did not complete school)		
Higher Degree	-1.503 (3.65)	-1.783 (3.39)
Bachelor's Degree	-1.462 (4.71)	-1.361 (4.32)
Diploma	-1.152 (4.44)	-1.084 (3.46)
Vocational qualification	-0.856 (4.87)	-0.675 (3.21)
High School	-0.961 (4.58)	-0.504 (2.34)
Experience	-0.070 (4.18)	-0.006 (0.31)
Experience squared	0.113 (3.03)	-0.058 (1.10)
Period of Residence	-0.320 (1.87)	0.278 (1.36)
Period of residence squared	1.276 (1.45)	-1.924 (1.94)
Disability	0.445 (3.07)	0.649 (3.89)
Location (SA and Tasmania)		
Capital	-0.198 (1.09)	-0.190 (0.95)
No capital	0.115 (0.59)	0.164 (0.76)
Qualifications		
Australian (ausedu)	2.278 (3.08)	0.384 (0.38)
Foreign (foredu)	2.364 (3.64)	-0.319 (0.34)
Tests: Multiple coefficients($p > \chi^2$)		
ausedu = foredu = 0	0.001	0.930
ausedu = foredu	0.796	0.870
No. of observations	3235	2949
LR χ^2 (df = 14)	115.57	89.80
Pseudo R^2	0.063	0.061

Table 5: Unemployment: Coefficients from Logit Model Estimations by Birthplace

<i>Variable</i>	<i>ESB migrants</i>		<i>NESB migrants</i>	
	Males	Females	Males	Females
Constant	-1.325 (5.78)	-1.800 (6.82)	-1.294 (5.70)	-1.945 (7.35)
Education (did not complete school)				
Higher Degree	-1.858 (3.10)	-2.168 (2.99)	-1.659 (3.67)	-1.706 (3.22)
Bachelor's Degree	-1.209 (3.64)	-1.757 (4.06)	-1.565 (4.59)	-1.502 (4.49)
Diploma	-1.011 (3.62)	-0.934 (2.70)	-1.226 (4.11)	-1.231 (3.56)
Vocational qualification	-0.719 (3.94)	-0.608 (2.74)	-0.834 (4.49)	-0.741 (3.34)
High School	-1.088 (4.39)	-0.458 (2.00)	-0.993 (4.50)	-0.486 (2.14)
Experience	-0.071 (3.82)	-0.017 (0.76)	-0.062 (3.48)	-0.008 (0.35)
Experience squared	0.114 (2.73)	-0.038 (0.67)	0.082 (2.02)	-0.060 (1.07)
Period of Residence	-0.134 (0.38)	0.634 (1.41)	-0.322 (1.57)	0.089 (0.38)
Period of residence squared	0.786 (0.44)	-3.153 (1.52)	1.145 (1.07)	-1.245 (1.09)
Disability	0.521 (3.36)	0.538 (2.95)	0.507 (3.23)	0.668 (3.78)
Location (SA and Tasmania)				
Capital	-0.221 (1.13)	-0.288 (1.35)	-0.220 (1.12)	-0.178 (0.84)
No capital	0.154 (0.76)	0.137 (0.62)	0.168 (0.82)	0.205 (0.91)
Qualifications				
Australian (ausedu)	0.832 (0.53)	-2.714 (1.19)	2.100 (2.18)	2.176 (1.90)
Foreign (foredu)	0.378 (0.25)	-2.242 (1.03)	3.030 (3.97)	1.675 (1.60)
Tests: Multiple coefficients($p > \chi^2$)				
ausedu = foredu = 0	0.555	0.457	0.000	0.158
ausedu = foredu	0.290	0.479	0.191	0.309
No. of observations	2834	2607	2828	2606
LR χ^2 (df = 14)	87.37	75.02	125.66	90.97
Pseudo R^2	0.057	0.061	0.078	0.069