Immigrant Integration Revisited:
Disentangling effects of the “where and when” of migration, education and experience

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How are migrants economically affected by their own migration?

- Generally, migrants benefit from migrating, economically or in broader terms,
- .....but initial outcomes may differ considerably from those of ‘comparable’ people in the host country.
- Outcomes generally improve with years in the host country,
- .....but there may or may not be a ‘catching up’ or ‘overtaking’.
- Economic research on integration focuses predominantly on labour market outcomes such as
  - Job-skills mismatch
  - Earnings
  - Labour force participation or employment rates
  - Spells of unemployment
  - Post-arrival education and on-the-job training
Some causes of the initial pay gap

• Skills are not immediately transferable
• Communication difficulties due to a language barrier
• Job search may be longer and less efficient due to limited local labour market knowledge and limited networks
• Foreign qualifications may not be recognised
• Cultural factors may influence how immigrants ‘compete’
• Spatial, occupational and industrial clustering of immigrants
• Selection effects: e.g. ‘working holiday’; ‘lifestyle migrants’
• Employers have imperfect information, this may lead to stereotyping, also called ’statistical discrimination’
• There can also be other forms of discrimination
Just one census of data can give the wrong conclusions regarding economic integration: pooled censuses allow identification of cohort effects

US example (left): The cross-sectional age-earnings profile in 2000 erroneously suggests that immigrant earnings grow faster than those of natives.

In New Zealand (right), rising skill levels of cohorts of immigrants will underestimate earnings growth with age/years in NZ in a cross-section of e.g. census data
Besides ‘years since arrival’, ‘year’ matters in several other ways as well:

- Year of arrival (‘hysteresis’ or ‘cohort’ effects)
- Year of observation (‘business cycle’ effects)
- Age in the year of observation (‘potential experience’ effects)
- Age in the year of arrival (‘life course’ effects)
- Years of education (before or after migration)
- Years since completing education
- ....it is difficult to estimate these effects separately, but by pooling microdata from three censuses and making some reasonable assumptions, we can capture most of these effects
A selection of previous econometric research on integration of immigrants in the NZ labour market


Features of the data

• 1996, 2001 and 2006 census data
• Outcomes: (a) Employment and (b) Estimated total annual income of wage and salary earners working 30 hours or more per week
• Three groups of individuals aged 25-59:
  – New Zealand born
  – 1.5 generation (foreign born, but arriving before age 17; or older but having completed fulltime education in NZ)
  – Foreign born arriving in NZ after completing schooling abroad
• Education levels are converted to completed years of education (with quality adjustment via country of birth indicators)
• Potential experience is calculated as age minus education minus five years
  – For foreign born, the split between years of potential experience abroad and in NZ is known
Determinants of employment and income
(separate regressions by gender and migration status: NZ born, 1.5 generation, adult migrant)

• Year of observation
• Age at arrival (for 1.5 generation)
• Years of education (NZ or foreign)
• Languages spoken (number and type)
• Country of birth
• Marital status, family type, urban/rural, location (140 labour market area fixed effects)
• For total income: hours worked (>29) by wage & salary earners
## Number of observations in each group

<table>
<thead>
<tr>
<th>Group</th>
<th>Sex</th>
<th>Population aged 15-54</th>
<th>Fulltime salary and wage earners</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZ born</td>
<td>male</td>
<td>1,051,884</td>
<td>693,627</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>1,111,818</td>
<td>648,492</td>
</tr>
<tr>
<td>1.5 Generation Migrants</td>
<td>male</td>
<td>102,567</td>
<td>64,845</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>105,234</td>
<td>61,089</td>
</tr>
<tr>
<td>Adult Migrants</td>
<td>male</td>
<td>181,470</td>
<td>105,150</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>214,989</td>
<td>101,715</td>
</tr>
</tbody>
</table>
The impact of potential experience on the male employment rate

a) New Zealand-Born

Entered labour market in 1981:
Had 25 years of potential experience in 2006;
Had 20 years of potential experience in 2001
Had 15 years of potential experience in 1996
The impact of potential experience on the employment rate: 1.5 generation of male migrants, relative to NZ born

b) Child Migrants
The impact of potential experience on the employment rate: adult male migrants, relative to NZ born (foreign and NZ pot. experience are both counted)

c) Adult Migrants: Total Potential Experience
The impact of potential experience on the employment rate: adult male migrants, relative to NZ born (foreign pot. experience is not counted)

d) Adult Migrants: Only New Zealand Experience
Employment rates: Men versus women

**NZ born men and NZ born women**

**a) New Zealand-Born Males**

**a) New Zealand-Born Females**

**Male and Female Migrants relative to NZ born: only potential NZ experience counts**

**d) Adult Migrants: Only New Zealand Experience (Males)**

**d) Adult Migrants: Only New Zealand Experience (Females)**
Male Real Annual Income (1996$) by Immigrant Status

a) New Zealand-Born

b) Child Migrants

c) Adult Migrants: Total Potential Experience

d) Adult Migrants: Only New Zealand Experience
Female Real Annual Income (1996$) by Immigrant Status

a) New Zealand-Born

b) Child Migrants

c) Adult Migrants: Total Potential Experience

d) Adult Migrants: Only New Zealand Experience
Other interesting findings

- Buoyant economic conditions have a stronger positive effect on migrants than on the NZ born and the 1.5 generation;
- The more years of NZ education foreign born children have, the better;
- Speaking multiple languages worsens outcomes among the NZ born, but it can be better for migrants (and the more languages, the better);
- The “distance” between a language spoken and English can matter;
- Many country-of-birth effects are significant, but more so for adult migrants than for the 1.5 generation;
- Adult migrants who “look European” have significantly better outcomes than other adult migrants; this is much less the case for the 1.5 generation;
- These results are obtained with the full range of controls: a total of about 280 regression coefficients for each of six groups (immigration status by gender).
Conclusions

• This paper advances significantly beyond earlier census cohort analyses of immigrant integration, starting with Winkelmann and Winkelmann (1998);

• The innovations of the new research have been: (1) the distinction between adult migrants and the 1.5 generation; (2) comparing outcomes across cohorts in a simple non-parametric way; (3) distinguishing between adult migrant labour market potential experience in NZ and abroad; (4) very detailed analyses of languages and country of birth;

• It takes up to 10 years for adult migrants to fully integrate in terms of employment, even after that the employment rate remains about 10 percent lower;

• Migrant men do NOT face an earnings disadvantage and extensive experience is rewarded better than for comparable NZ born men;

• Migrant women DO face an earnings shortfall of about 20% that persists with increasing potential experience;

• 1.5 generation migrants face a slight disadvantage up to about 5-6 years after finishing education;

• No survey or administrative data could provide the depth of cultural and language analysis that these pooled census data provide; a further improvement, however, would be linking of individuals across censuses which would enable a test of cohort “contamination”.
INTEGRATION OF IMMIGRANTS PROGRAMME
2007 – 2012