Immigrant Married Women’s Labour Supply and Human Capital Investment Behaviour: Evidence from Longitudinal Data for Canada

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Context

- Immigrants often experience low earnings after arrival but then earnings growth due to post-migration human capital accumulation.
- Within immigrant married couples, it may be optimal to focus on the primary earner’s labour market adjustment, possibly at the expense of the other spouse’s career.

- Do different family members play different roles in the household’s adjustment to the new labour market?

- Are immigrant husbands perceived to be the primary earner while immigrant wives are perceived to be the secondary earner?
Literature

• Immigrant Men:
  • Shifting immigrant source countries and declining labour market performance across immigrant arrival cohorts:
    • Baker and Benjamin (1994)
    • Bloom, Grenier, Gunderson (1995)
    • Aydemir and Skuterud (2005)
    • Green and Worswick (2012)

• Immigrant Women:
  • Long (1980)
  • Beach and Worswick (1993)
  • Duleep and Sanders (1993)
Family Theories/Analyses

- Long (1980) first suggested what has evolved into Family Investment Hypothesis (FIH):
  - Immigrant wives may be perceived to be secondary earners and may make HC investments/career choices that lead to:
    - Relatively high entry earnings
    - Relatively low earnings assimilation
- Credit Constraints are often put forward as a key feature.
- Otherwise, family should be able to borrow against future earnings to finance family consumption while both spouses’ post-migration human capital investments are made.
Empirical Analyses

• Baker and Benjamin (1997) – earnings patterns consistent with FIH
• Worswick (1996, 1999) – labour supply, weak support for FIH
  • Lin (2012) – labour supply and consumption – support for FIH
• Cobb-Clark and Crossley (2004) - Australia, earnings not consistent with FIH
• Basilio, Bauer and Sinning (2009) – Germany, earnings not consistent with FIH
• Kim and Varanasi (2010) – US matched CPS longitudinal data, empirical support for the FIH

• Duleep and Dowhan (2002) - US longitudinal Social Security data (matched to the 1994 CPS data), empirical support for the FIH
  • Evidence that immigrant wives are less likely to make human capital investments shortly after arrival in US relative to their husbands.
Our Approach (in this paper...)

- update the analysis of Baker and Benjamin (1997) for Canada using recent longitudinal data.
- investigate the sensitivity of our findings to issues such as unobserved heterogeneity/sample attrition which will be due in part to return migration.

- Baker and Benjamin only employed two Survey of Consumer Finances cross-sectional surveys
- their findings may be sensitive to both the survey years used and the existence of non-random out-migration from Canada.
Methodology

• Follow Baker and Benjamin – reduced form models with controls for each spouse’s characteristics.

\[ Y_{it} = X_{it} \alpha + \beta_1 F_{Bi} + \beta_2 HFB_i + \delta_1 YSM_{it} + \delta_2 YSM^2_{it} \]

\[ + \gamma_1 HYSM_{it} + \gamma_2 HYSM^2_{it} + \varepsilon_{it} \]

• Expect hours work to grow more with own YSM for husbands than wives

• Expect wife’s hours of work to be negatively related to husband’s YSM but not vice versa for husband’s hours
Wage Equation/School Enrolment

• In this paper, we estimate with just the own YSM effects
• Expect wage assimilation to be stronger for husband than for wife under FIH

• Estimate same model as hours model for incidence of (Part-time/full-time) school enrolment
• Expect school enrollment shortly after arrival to be higher for husbands than for wives under FIH
• Expect assimilation into schooling for wife with Husband’s YSM.
Data Sources and Sample Specification

- Canada – Survey of Labour and Income Dynamics SLID (Panel 5, 2005-2010).
- Detailed information on:
  - hours of work, hourly wage, school attendance
  - education, country of birth, year of arrival, etc.

- Married or common law couples (aged 16-64)
Table 1

<table>
<thead>
<tr>
<th></th>
<th>Immigrant wives</th>
<th>Canadian born wives</th>
<th>Immigrant husbands</th>
<th>Canadian born husbands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln (hourly wage)</td>
<td>2.82 (.50)</td>
<td>2.93 (.49)</td>
<td>3.16 (.53)</td>
<td>3.21 (.48)</td>
</tr>
<tr>
<td>Annual paid hours of work</td>
<td>1145.15 (963.82)</td>
<td>1269.37 (914.69)</td>
<td>1816.44 (956.86)</td>
<td>1865.94 (964.55)</td>
</tr>
<tr>
<td>Attending school</td>
<td>0.057 (0.23)</td>
<td>0.051 (0.22)</td>
<td>0.044 (.20)</td>
<td>0.038 (0.19)</td>
</tr>
<tr>
<td>Years since migration</td>
<td>19.51 (12.84)</td>
<td>N.A.</td>
<td>22.11 (13.38)</td>
<td>N.A.</td>
</tr>
<tr>
<td>Sample size</td>
<td>4,291</td>
<td>27,165</td>
<td>4,221</td>
<td>27,079</td>
</tr>
</tbody>
</table>
Hours of Work Findings

- Wives:
  - immigrant wife indicator: 548 fewer annual hours of work
  - Immigrant husband indicator: 269 more hours of work
  - increasing own years-since-migration
  - husband’s YSM variables are not stat. significant (pattern similar to findings of Baker and Benjamin, 1997).

- Fixed effects estimation leads to similar point estimates but more of the effects are now not stat. significant

- plan to re-estimate using earlier SLID panels.
Hourly Wage Rate findings

- Both immigrant husbands and immigrant wives are at over a 30 percent hourly wage disadvantage in the first year after arrival.
- Immigrant husbands: positive (but modest) and concave relationship with YSM.
- Immigrant wives, coefficients on the YSM variables near zero.
- consistent with FIH.
- Fixed effects estimation yields similar YSM results
- Heckman type selection model yields similar results
School Enrolment Findings

• immigrant wife 5.5 percent more likely to attend school
• coefficient on the immigrant husband indicator is not statistically significant.
• even higher probabilities of attending school for immigrant wives from the earlier arrival cohorts.
• arrival cohort effects for the wives of immigrant husbands work in opposite direction.
• wife’s school attendance is decreasing in the immigrant wife’s YSM and increasing in the immigrant husband’s YSM.
  • latter result consistent with FIH: the wife is less likely to invest in her own career just after her immigrant husband has arrived.
  • former result (along with other estimates) indicates greater human capital investments being made by immigrant wives (than by NB wives) and difference is largest in the first years in Canada.
Concluding Remarks

- The preliminary evidence indicates that there are importance differences in the wage rates, labour supply and schooling decisions between immigrant husbands and immigrant wives.
- Support for the Family Investment Hypothesis (FIH) is mixed.
- Immigrant wives are not found to experience statistically significant wage assimilation, while immigrant husbands do (both in the cross-sectional analysis and in the fixed effects analysis).
- Consistent with the idea that it is the immigrant husband’s career development that is the immigrant family’s priority.
- However, the labour supply findings are less clearly consistent with the FIH.
• Clearer evidence in favour of the FIH is present in our analysis of the schooling decisions of immigrant wives and husbands.
• Immigrant husbands are more likely to attend school with more time in Canada but there is no relationship with the years-since-migration of their immigrant wives.
• In contrast, immigrant wives are less likely to attend school the longer they reside in Canada but are more likely to attend school the longer their husbands have resided in Canada.
• Could be driven by the FIH if the immigrant wives married to recently arrived immigrant husbands are not going to school in order to work and support their husbands who are making post-migration investments in education.
Next Steps/Caveats

• These findings are preliminary
• We intend to carry out more work on this topic exploring alternative specifications and with the addition of the earlier SLID panels to test for robustness of our results.
  • Follow Baker and Benjamin (1997) and look at differences across immigrant wife / immigrant husband couples and immigrant wife / native born husband couples.

• Using more panels will allow us to explore the sensitivity of the results to period effects which may be important in determining wage rates, labour supply and schooling decisions.