



Prepared for the 2026 HILDA Conference

INTERGENERATIONAL TRANSMISSION OF EDUCATIONAL (DIS)ADVANTAGE AND WAGE OUTCOMES

*Differences Between Migrants and Australian-born
Individuals*

Lenah Ankliss and Prof. Irma Mooi-Reci

School of Social and Political Sciences, Faculty of Arts, The University of Melbourne



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MOTIVATION



MOVING UP



WITHOUT LOSING



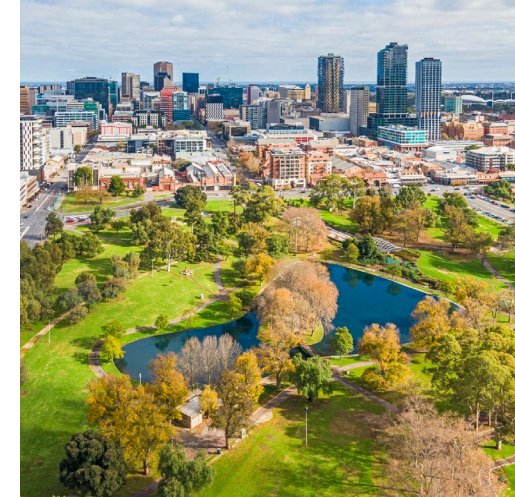
YOUR WAY



THE ETHICAL COSTS OF
UPWARD MOBILITY



JENNIFER M. MORTON



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RESEARCH LITERATURE INTERGENERATIONAL TRANSMISSION

The role of families in reinforcing intergenerational advantage and disadvantage:

- Various studies found that **parental educational levels are among the strongest predictors of children's educational attainment** and development

(Cave et al., 2022; Hällsten & Yaish, 2021; Meekes et al., 2015; Pezzuti et al., 2025).

- **Parental characteristics shape cognitive outcomes** (e.g., mathematical reasoning) and **non-cognitive outcomes** (e.g., interpersonal skills), increasing chances of higher academic achievement and tertiary education completion

(Anger & Schnitzlein, 2016; Bernardi, 2014; Cano et al., 2019; Cano, 2022; Jæger & Breen, 2016; Kalil et al., 2012; Pezzuti et al., 2025).

- Other mechanisms, include:
 - **Wealth transfers** (Pfeffer & Killewald, 2018)
 - **Cultural and social capital** (Burger et al., 2025; Dohmen et al., 2012)
 - **Social networks** (Loury, 2006; McPherson et al., 2001; Mooi-Reci et al., 2022)
 - **Work-related values** (e.g., work ethic, time preferences, and risk attitudes) (Dohmen et al., 2012)
 - **Environmental factors** (e.g., residential location and neighborhood quality, that shape school access and access to aspirational role models) (Bukodi & Goldthorpe, 2018; Chetty et al., 2014; Cobb-Clark et al., 2012)

RESEARCH LITERATURE INTERGENERATIONAL TRANSMISSION

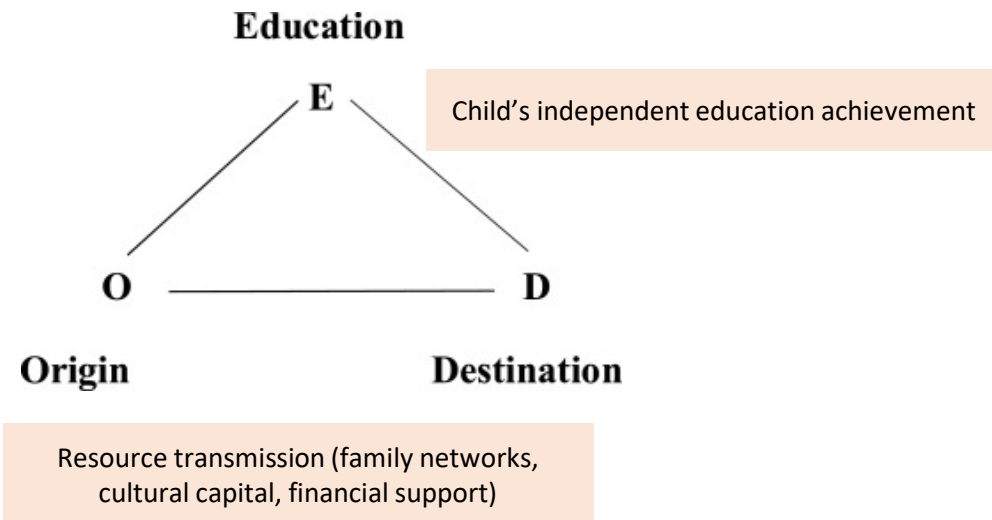
Education is an Equalizer:

- Some studies view **education is as a key equalizing force** that can mitigate the influence of social origin on life outcomes
(Bernardi & Ballarino, 2016; Breen & Jonsson, 2007; David, 1978; Hout, 1988).
- **Empirical evidence** from the U.S. and Sweden also finds that the influence of parental status diminishes as individuals progress through education, becoming negligible for those who attain tertiary qualifications
(Breen & Jonsson, 2007; Smeeding, 2016).
- **Higher education in itself may also reproduce inequalities**, emerging through institutional prestige, field of study, or postgraduate qualifications (Torche, 2011; Zhou, 2019; Oh & Kim, 2020).

RESEARCH LITERATURE INTERGENERATIONAL TRANSMISSION

Origin – Education – Destination (OED) Triangle

- Conceptualises how Origin (O) influences the Destination (D) both directly and indirectly through Education (E).
 - **Interdependent** → parental background shape children's outcomes, thereby reducing intergenerational mobility.
 - **Independent** → with education weakening the influence of social origin and more strongly determining labor market outcomes, mobility is higher, and education functions as a more effective equalizer (Bukodi & Goldthorpe, 2018).



Does this relationship differ by migration status?
How does parental status impact earnings?

RESEARCH LITERATURE MECHANISMS BEHIND THE OED TRIANGLE

Concept	Definition	How this could affect migrant migrants:
Human Capital Theory	Education is a key equalizing force that can mitigate the influence of social origin on life outcomes	Similar for migrants; education is rewarded but returns may be less due to factors such as credential devaluation (Becker, 1964; Cobb-Clark, 2004)
Cumulative Disadvantage	Compounding effect which amplifies disadvantages experienced early in life, which amplifies disparities across the life course	Weaker for migrants; migration disrupts transmission of this advantage (Cobb-Clark, 2004)
Cumulative Advantage	Compounding effect of advantages experienced early in life, which amplifies advantages across the life course	Stronger for migrants; low parental education compounds with migration-specific disadvantages (legal barriers, discrimination, limited networks (Crul & Vermeulen, 2000; Feliciano, 2005; Heath, et al., 2008)
Compensatory disadvantages	Individuals from disadvantaged social origins must exert greater effort to achieve higher credentials compared to those with more advantaged backgrounds	Stronger for migrants; less inherited resources and have to offset more disadvantage from their starting point (Gabay-Egozi & Yaish, 2019)
Compensatory advantage	A specific mechanism which protects from setbacks, e.g., Financial resources, institutional knowledge and elite networks can shield children from set-backs	Weaker for migrants; less inherited resources and more likely to be disadvantaged from their starting point (Lucas, 2001)
Glass floor effect	Families with greater resources can shield their children from failure	Weaker for migrants; less inherited resources and more likely to be disadvantaged from their starting point (Lucas, 2001)
Immigrant Paradox	Work harder to compensate for disadvantage's, outperforming others	May be present; strong work ethic and attitude offsets disadvantages associated with the migration process (Basarkod, et al., 2022; Feliciano & Lanuza, 2017)

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RESEARCH LITERATURE MIGRATION

Existing research attributes migrant disadvantage to **visa category, country of origin, skill level, and English proficiency**; however, findings, in the Australian context, are contradictory:

→ Some **longitudinal studies show wage gaps persisting even after adjusting for education**

e.g., Breunig et al., 2013; To et al., 2017

→ Whilst other studies have found **convergence over time**

e.g., Islam & Parasnis, 2016; Kifle et al., 2019; Varela & Breunig, 2024

RESEARCH QUESTIONS

1

Do **intergenerational educational advantages** translate into wage outcomes **differently** for **first-generation migrants** compared with **Australian-born** individuals?

2

Do **patterns of intergenerational wage transmission** persist, diminish or **intensify** across successive generations?

3

Does the **relationship between educational mobility trajectories and wages** vary for **migrants**, and if so, what does this reveal about **labor market stratification mechanisms**?

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RESEARCH GAPS

- 1 Combines **intergenerational and migration research** traditions to **illuminate how inequality is institutionally structured** and **intergenerationally** reproduced.
- 2 Examines how **institutional contexts** (different ways of credential recognition, welfare systems) **mediate the relationship between parental advantage** and **children's economic outcomes**.
- 3 Provides empirical evidence on whether **migration disrupts** or **reinforces typical patterns of inequality reproduction**.

HYPOTHESES

Whole Analytical Sample: To test if migrants face structural constraints converting credentials into wage returns

H1.1 Among **multigenerational graduates** (*both child and at least one parent has a bachelors degree*), having **at least one migrant parent** is associated with a larger wage penalty relative to those with Australian-born parents, all else equal.

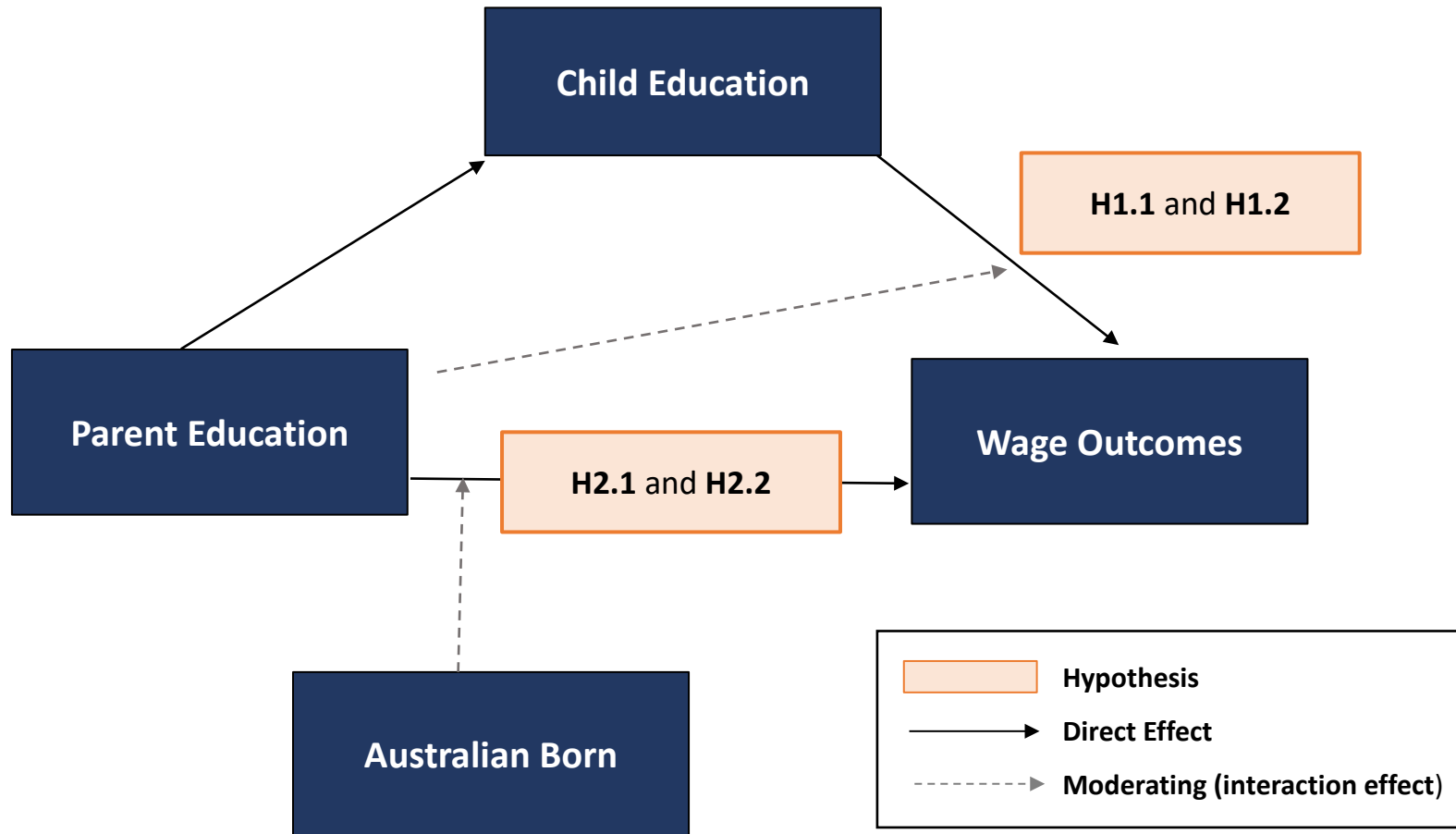
H1.2 Among **multigenerational non-graduates** (*neither child or any parents achieved a bachelors degree or higher*), having **at least one migrant parent** is associated with a larger wage penalty relative to those with Australian-born parents, all else equal.

Conditioning by parent's place of birth: Isolating the second and third generation to test if labour market barriers lessen as migrants (generationally) accumulate local experience and familiarity:

H2.1 Among **multigenerational graduates**, the wage penalty of **having a migrant parent** will be lower if the respondent was **born in Australia** compared to overseas, all else equal.

H2.2 Among **multigenerational non-graduates**, the wage penalty of **having a migrant parent** will be lower if the respondent was **born in Australia** compared to overseas, all else equal.

THEORETICAL PATHWAY



METHODS: DATA & SAMPLE

DATASET

- **HILDA, General Release 2001–2023**
- The longitudinal design, combined with questions about family history and descendants, makes HILDA particularly suitable for examining intergenerational outcomes.

ANALYTICAL SAMPLE

- **61,810 person-year observations** from **5,689 unique individuals**, restricted to complete data on respondents' migration background, parental migration background, and wages
- To maximize sample size, all possible waves were included in the analysis

Table 1. Full Sample Data Availability by Variables, No Sample Restrictions

Variable	Total Observations	Unique Individuals
	<i>n</i> = 163,984	<i>n</i> = 22,778
Log hourly wage	163,837	22,778
Participant has a bachelor's degree	163,985	22,778
Participants place of birth	163,930	22,772
Participant's parent has bachelor's degree	132,807	19,164
Participant's parent is a migrant	61,810	5,689

Source: HILDA Panel 2001–2023.

METHODS: VARIABLES

DEPENDENT VARIABLE

- Log hourly wage, calculated from gross weekly wages and hours worked, adjusted to 2015 AUD using CPI.

INDEPENDENT VARIABLE

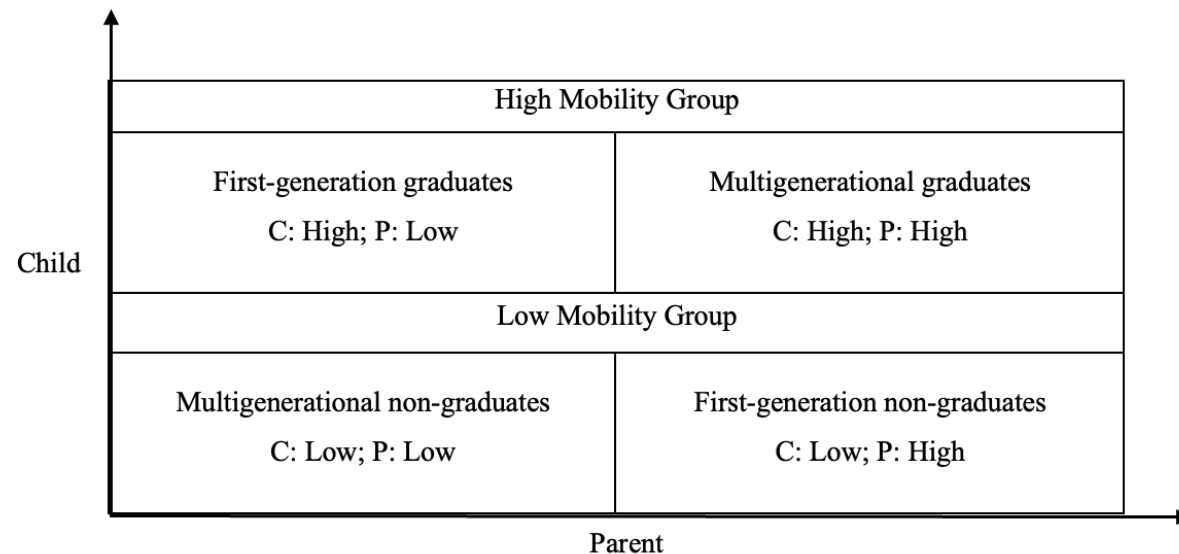
- **Intergenerational educational mobility:** 4-groups, operationalized as per next slide (educational attainment was recorded as a time-varying dichotomous variable at each interview wave (1 = bachelor's degree or higher; 0 = otherwise)).
- **Migration status:**
 - Respondents were classified as migrants if born outside Australia (1 = born overseas; 0 = born in Australia).
 - Parental migration background: parents were classified as migrants if at least one parent was born outside Australia (1 = at least one parent born overseas; 0 = both parents born in Australia).

CONTROLS

- Employment type, industry, firm size, age, gender, marital status, children, union membership, occupation, and place of residence

METHOD: PARENT-CHILD COMBINATIONS

Figure 3. Classification of Intergenerational Mobility Groups Based on Parent-Child Education Combinations.



Source: Authors.

1. **Multigenerational graduates:** Both respondent and at least one parent attained a bachelor's degree or higher (high education, high parental education)
2. **First-generation graduates:** Respondent attained a bachelor's degree or higher, but neither parent did (high education, low parental education)
3. **First-generation non-graduates:** At least one parent attained a bachelor's degree or higher, but respondent did not (low education, high parental education)
4. **Multigenerational non-graduates:** Neither respondent nor parents attained a bachelor's degree or higher (low education, low parental education)

METHODS: MODEL

- **Random-effects panel regression** with clustered robust standard errors at the individual level, estimated separately for migrants and Australian-born participants. This model was chosen as,
 - Allows between-group effects to be analysed (comparing the average wages of children with a migrant background with those Australian-born peers rather than within individual wage variations between the two groups)
 - Key independent variables, parents' and children's country of birth are time-invariant, would have been dropped with fixed-effects panel regression model
- **To test Hypotheses 1a and 1b**, random-effects models run separately for the high-mobility group (multigenerational graduates versus first-generation graduates) and the low-mobility group (first-generation non-graduates versus multigenerational non-graduates). For the high-mobility group, the model is specified as:

$$\log(wage) = \beta_0 + \beta_1 Parcob + \beta_2 (Parcob_{it} \times Multigen High_i) + \beta_3 (x'_{it}) + \alpha_i + e_{it}$$

- **To test Hypotheses 2a and 2b**, the same models are re-estimated, but this time conditional on whether the respondent was born in Australia or overseas

RESULTS: Whole analytical sample (H1.1 and H1.2)

High Mobility Group

- **Positive**, individuals who are multigenerational grad from **Australian-born parents are associated with a wage premium** ($\beta = 0.140, p < 0.01$), ~15% higher hourly earnings compared to first-generation graduates
- **Premium is smaller for respondents with at least one migrant parent**, advantage reduced by $\beta = -0.071$ log points or ~6.9% lower hourly wages for **migrants** in the high mobility group
- **H1.1 is supported.**

Effects on Log Wages for All Respondents within the Mobility High Group

Selected Variables	Coefficient	Std. Error
Intergenerational education mobility		
Multigenerational graduates	0.140***	(0.029)
Parent migration background		
At least one parent is a migrant	0.035	(0.025)
Mobility $\times$ migration interaction		
Multigenerational graduates $\times$ parent is a migrant	-0.071*	(0.042)
Constant	2.230***	(0.136)
Adjusted R ²	0.158	

Notes. $n = 13,943$. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Low Mobility Group

- **Positive**, individuals who are first-gen non-grads **are associated with a wage premium** ($\beta = 0.194, p < 0.01$), ~21.4% higher hourly earnings compared to multigenerational non-graduates
- **Premium is smaller for respondents with at least one migrant parent**, advantage reduced by $\beta = -0.065$ log points or ~6.3% lower hourly wages for **migrants** in the high mobility group
- **H1.2 is supported.**

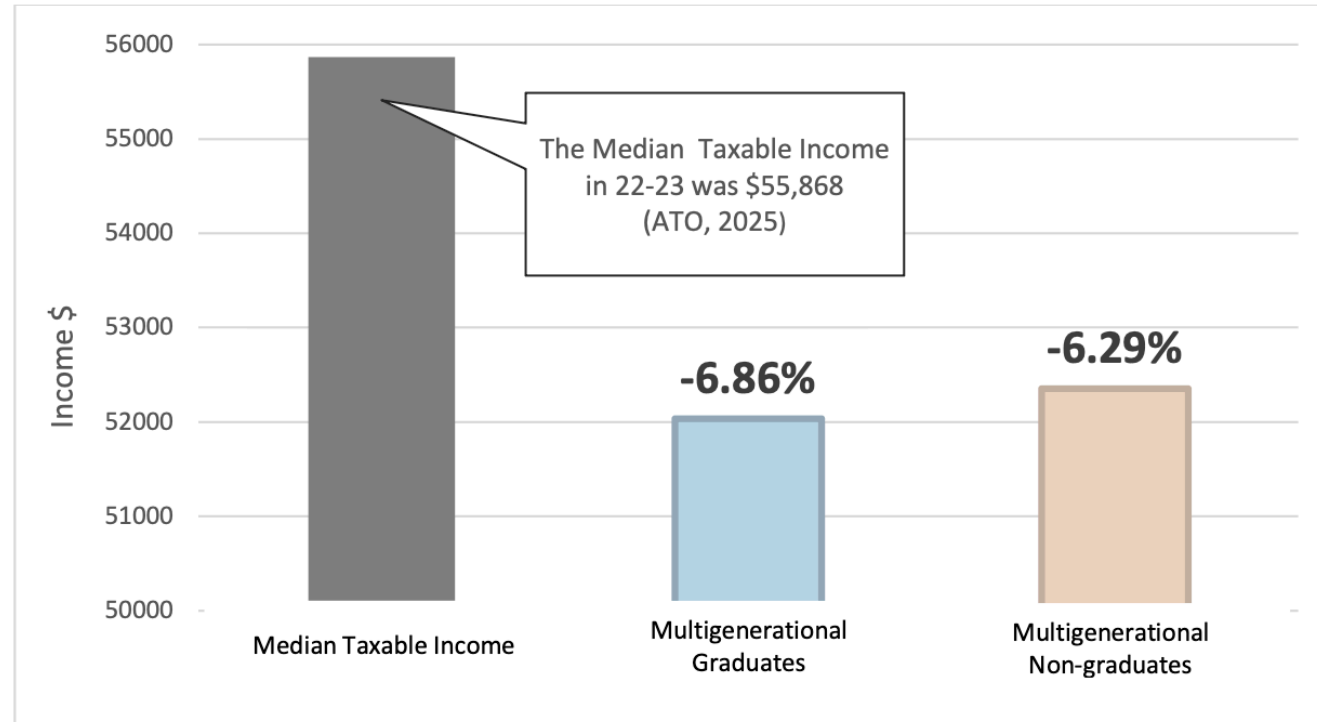
Effects on Log Wages for All Respondents within the Mobility Low group

Selected Variables	Coefficient	Std. Error
Intergenerational education mobility		
First-generation non-graduates	0.194***	(0.025)
Parent migration background		
At least one parent is a migrant	0.023	(0.016)
Mobility $\times$ migration interaction		
First-generation non-graduates $\times$ parent is a migrant	-0.065*	(0.039)
Constant	2.089***	(0.043)
Adjusted R ²	0.158	

Notes. $n = 26,594$. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

RESULTS: H1.1 and H1.2

Income Wage Penalty Compared to the 22-23 Median Taxable Income for Migrants



RESULTS: Conditioning by Place of Birth (High Mobility Category, H2.1)

Australian-born Respondents

- Multigenerational graduate families with Australian parents earn ~14.6% higher wages than individuals otherwise ($\beta = 0.136$, $p < 0.01$).
- Difference in wage earnings between the multigenerational graduate and first-generation graduate categories among Australian-born respondents is **7.7% lower when they have at least one migrant parent ($\beta = -0.080$, $p = 0.13$) and is not significant.**
- Model fit *improves* when restricted to Australian-born respondents (explaining 41.8% of wage variation within individuals and 7.95% between individuals, $R^2 = 0.186$ vs. 0.161 full sample) — suggests the null result reflects a genuine absence of effect when conditioning by birth, not the wrong model
- Having at least one migrant parent is also associated with a **12.6% wage premium** relative to Australian-born parents, among Australian-born respondents ($\beta = 0.118$, $p < 0.01$) — evidence of an immigrant paradox
- But this premium isn't large enough to offset the broader migration penalty found in H1.1/H1.2
- Suggests second-generation migrants' "extra effort" doesn't fully compensate for the cumulative disadvantage of a migrant parent

Effects on Log Wages for Australian-born respondents within the Mobility High category

Selected Variables	Coefficient	Std. Error
Intergenerational education mobility		
Multigenerational graduates	0.136***	(0.028)
Parent migration background		
At least one parent migrant	0.118***	(0.031)
Mobility $\times$ migration interaction		
Multigenerational graduates $\times$ parent migrant	-0.080	(0.053)
Constant	2.269***	(0.140)
Adjusted R ²	0.183	

Notes. $n = 10,500$. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

RESULTS: Conditioning by Place of Birth (High Mobility Category, H2.1)

Migrant-born respondents

- Main effect positive but **not significant**: multigenerational graduates with Australian-born parents earn ~44.5% higher wages than first-generation graduates, among overseas-born respondents ($\beta = 0.368$, $p > 0.05$)
- Interaction term suggests the premium is 23% smaller for overseas-born respondents with migrant parents ($\beta = -0.262$, $p > 0.05$) - also **not significant**
- Neither effect reaches significance in this subsample, this likely reflecting the much smaller overseas-born, high-mobility sample size
- **H2.1 remains unsupported**

Effects on Log Wages for migrant-born respondents within the Mobility High category

Selected Variables	Coefficient	Std. Error
Intergenerational education mobility		
Multigenerational graduates	0.368	(0.314)
Parent migration background		
At least one parent migrant	0.048	(0.221)
Mobility $\times$ migration interaction		
Multigenerational graduates $\times$ parent is a migrant	-0.262	(0.317)
Constant	0.000	(.)
Adjusted R ²	0.105	

Notes. $n = 3,443$. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

RESULTS: Conditioning by Place of Birth (Low Mobility Category, H2.2)

Australian-born Respondents

- Positive, first-generation non-graduates with Australian-born parents earn ~21.4% more than multigenerational non-graduates, among Australian-born respondents ($\beta = 0.194$, $p < 0.01$), providing evidence for the **glass floor effect**
 - This provides evidence for the **glass floor effect and compensatory disadvantage**, whereby parental education buffers against the negative labour-market consequences of low educational attainment among children
- Interaction term slightly weaker for those with at least one migrant parent ($\beta = -0.045$, $p = 0.13$) - **not statistically significant**

Effects on Log Wages for Australian-born respondents within the Mobility Low category

Selected Variable	Coefficient	Std. Error
Intergenerational education mobility		
First-Generation non-graduates	0.194***	(0.024)
Parent migration background		
At least one parent migrant	0.126***	(0.020)
Mobility $\times$ migration interaction		
First-generation non-graduates x parent migrant	-0.045	(0.049)
Constant	2.062***	(0.044)
Adjusted R ²	0.167	

Notes. $n = 21,816$. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

RESULTS: Conditioning by Place of Birth (Low Mobility Category, H2.2)

Migrant-born respondents

- Positive but **not significant**: first-generation non-graduates with Australian-born parents earn ~50.2% more than multigenerational non-graduates, among overseas-born respondents ($\beta = 0.407$, $p > 0.05$)
- Advantage reduced by 25.2% with at least one migrant parent ($\beta = -0.290$, $p > 0.05$) - also **not significant**
- The "glass floor" effect found in the Australian-born subsample does **not** extend significantly to overseas-born non-graduates
- **H2.2 is unsupported**

Effects on Log Wages for migrant-born respondents within the Mobility Low category

Selected Variables	Coefficient	Std. Error
Intergenerational education mobility		
First-generation non-graduates	0.407	(0.289)
Parent migration background		
At least one parent migrant	0.042	(0.160)
Mobility $\times$ migration Interaction		
First-generation non-graduates x parent is a migrant	-0.290	(0.292)
Constant	2.127***	(0.223)
Adjusted R ²	0.149	

Notes. $n = 4,777$. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Hypotheses Outcomes

H1.1 & H1.2 (Whole sample) — Supported.

- A migrant parent is associated with a smaller wage premium in both the high-mobility (~6.9%) and low-mobility (~6.3%) groups, relative to those with Australian-born parents

H2.1 & H2.2 (conditioning by place of birth) — Unsupported.

- Directionally consistent (smaller premiums for migrants and children of migrants), but none of these associations reach significance once conditioning on the respondent's place of birth
- The only statistically significant effect: first-generation non-graduates who are Australian-born with Australian-born parents, suggesting a buffering effect tied to having an educated parent, not to migration status per se

CONCLUSION

- Children of migrants face a **persistent wage penalty, regardless of their own educational attainment**, or their parents
- Parental migration background **weakens the economic returns to tertiary education**: the "multigenerational graduate" advantage shrinks when a parent is a migrant
- **No associates indicating systematic wage convergence** by the second or third generation, contradicting classical assimilation theory
 - Thus, Migrant wage penalties likely reflect **persistent structural barriers in the Australian Labour Market** (credential devaluation, network exclusion, signalling failures)

Future applications: Studies/policy designed around the considerations that inequality is often institutionally structured and intergenerationally reproduced, rather than the onus on the individual (i.e., even with immigration paradox, migrants are still penalised)

THANK YOU

Lenah Ankliss : lka251@nyu.edu

Professor Irma Mooi-Reci: irma.mooi@unimelb.edu.au