Where Your Parents Were Sent: Immigrant Concentration and Second-Generation Outcomes in Denmark

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Abstract

A Somali family assigned to a small Danish municipality in 1992 could not have known that their children's adult employment prospects would differ by 7 percentage points depending on which municipality received them. Between 1986 and 1998, Denmark dispersed approximately 80,000 refugees across municipalities, creating lasting variation in immigrant concentration. Their children—now aged 25–40—are the first cohort old enough for adult outcome measurement. Using Statistics Denmark data covering 100 municipalities, I document that a one-standard-deviation increase in non-Western immigrant concentration is associated with 3.3 percentage point higher second-generation employment and 2.7 percentage point higher tertiary education attainment. A placebo on Danish-origin residents shows a small, insignificant association, consistent with community-specific mechanisms. These cross-sectional associations challenge "ethnic enclave trap" narratives, though the descriptive design cannot isolate causal neighborhood effects from sorting.

JEL Codes: J15, J61, O15, R23
Keywords: refugee dispersal, second generation, intergenerational mobility, neighborhood effects, Denmark

1. Introduction

Where children grow up shapes who they become as adults. Chetty and Hendren (2018) showed that each additional year of childhood exposure to a better neighborhood improves adult earnings, with effects that compound over the full span of childhood. The Moving to Opportunity experiment found that young children who moved to lower-poverty neighborhoods earned 31% more as adults (Chetty et al., 2016). Yet the fundamental question of how neighborhood context operates—and whether it functions differently for the children of immigrants—remains unresolved.

This paper studies how the local concentration of non-Western immigrants relates to second-generation adult outcomes in Denmark. Between 1986 and 1998, the Danish Refugee Council assigned approximately 80,000 refugees to municipalities across the country, with allocation proportional to municipal population (Damm, 2009). This dispersal created lasting variation in immigrant concentration across municipalities. The children born to these refugees are now 25–40 years old, creating the first opportunity to measure comprehensive adult outcomes for the second generation.

I construct a municipality-level dataset linking immigrant population stocks in 2008 (the first year of Denmark's current municipal boundaries) to second-generation education and employment outcomes through 2023. The treatment variable is the non-Western immigrant share of total municipal population, which reflects the cumulative history of refugee dispersal plus subsequent immigration flows. Using cross-sectional regressions with region fixed effects and heteroskedasticity-robust standard errors across 100 municipalities, I estimate the association between immigrant concentration and descendant outcomes.

The main finding is striking in both magnitude and direction. A one-standard-deviation increase in immigrant share (3.1 percentage points) is associated with a 3.3 percentage point increase in the non-Western descendant employment rate (SDE = 0.35) and a 2.7 percentage point increase in tertiary education attainment (SDE = 0.39). Municipalities in the top tercile of immigrant concentration exhibit descendant employment rates 6.7 percentage points higher than those in the bottom tercile.

The positive direction challenges the "ethnic enclave trap" hypothesis (Cutler and Glaeser, 1997; Borjas, 1995), which predicts that residential segregation of immigrants hinders economic integration. Instead, the associations are consistent with ethnic network theories emphasizing information transmission, labor market referrals, and institutional knowledge within immigrant communities (Munshi, 2003; Beaman, 2012). Damm (2009) found positive effects of co-ethnic network size on first-generation refugee employment in Denmark; the present descriptive evidence is consistent with these network benefits extending to the second generation.

These results are cross-sectional associations, not causal estimates. The 2008 immigrant share reflects both the original dispersal and subsequent endogenous migration and sorting. Several robustness checks probe this concern without resolving it definitively. First, a placebo test examines whether immigrant concentration predicts Danish-origin employment rates. The coefficient is positive but statistically insignificant (22.3, $p = 0.10$), providing suggestive—though not conclusive—evidence that the relationship is not purely driven by local labor market conditions. Second, results survive excluding the five largest cities and using population weights. Third, in a subsample of 44 municipalities with historical data, the dispersal-era change in immigrant share is not separately significant after controlling for pre-dispersal levels—indicating that the cross-sectional relationship partly reflects pre-existing patterns rather than dispersal-induced variation alone.

This paper contributes to two literatures. First, it adds a second-generation perspective to the refugee dispersal literature. While Damm (2009) studied first-generation employment and Damm and Dustmann (2014) studied adolescent crime, no paper has documented comprehensive adult outcomes for the children of dispersed refugees—a gap created by the simple passage of time. Second, it provides descriptive evidence relevant to the policy debate over immigrant residential concentration. The positive association between concentration and descendant outcomes challenges the presumption that dispersal policies improve integration, though the cross-sectional design cannot establish this conclusively.

The rest of the paper proceeds as follows. Section 2 describes the institutional background of Denmark's refugee dispersal policy. Section 3 presents the data construction. Section 4 describes the empirical strategy. Section 5 presents results. Section 6 discusses mechanisms and limitations.

2. Institutional Background and Policy Setting

Denmark's refugee dispersal policy (1986–1998) was administered by the Danish Refugee Council (*Dansk Flygtningehjælp*). Upon receiving a positive asylum decision, refugees were assigned to one of Denmark's municipalities according to an allocation formula based primarily on municipal population. The Council's placement officers observed only a small set of characteristics: nationality, age, marital status, and family size (Damm, 2009).

The policy created substantial variation in refugee concentration across municipalities. Copenhagen and other urban areas received more refugees in absolute terms (consistent with population-proportional allocation), but the quasi-random component generated meaningful variation in refugee intensity even among similar-sized municipalities. Over the 12-year dispersal period, approximately 76,700 refugees were assigned, with the largest nationality

groups coming from Iran, Iraq, Somalia, and the former Yugoslavia (Damm and Dustmann, 2014).

The quasi-random nature of this assignment has been extensively validated in prior work. Damm (2009) demonstrated that conditional on nationality, initial placement is uncorrelated with subsequent employment outcomes, and Damm and Dustmann (2014) used the dispersal as an instrument for neighborhood composition in their study of immigrant youth crime. The Danish case is particularly clean compared to other refugee dispersal programs (e.g., Sweden's "Whole of Sweden" policy) because the Danish system was centrally administered by a single agency with a transparent allocation formula.

Two institutional features affect the interpretation of long-run effects. First, after 1999, Denmark's Integration Act imposed a three-year residency requirement on new refugees, restricting secondary migration. Refugees who arrived before 1999 faced no such restriction and could relocate freely. This means that by 2008, the observed immigrant population reflects both the initial quasi-random assignment and subsequent migration decisions. Second, Denmark's 2007 municipal reform merged approximately 275 municipalities into 98, which means that the pre-reform and post-reform geographic units are not directly comparable.

The second generation—children born in Denmark to immigrant parents—have grown up in the Danish education system, which is universal and free through university. Denmark ranks among the most generous welfare states in the OECD, with extensive childcare, healthcare, and income support. The policy question is whether, despite these universal institutions, the specific municipality to which parents were assigned affects their children's adult outcomes.

3. Data

3.1 Sources

All data come from Statistics Denmark's StatBank, a publicly accessible database of Danish administrative statistics. I use five tables:

- **FOLK1C**: Population stocks by municipality, ancestry (Danish origin, immigrants, descendants), and quarter. Used to construct the treatment variable (non-Western immigrant share in 2008Q1).

- **RAS200**: Employment rates by municipality, ancestry (including non-Western descendants specifically), age group, and year. Available annually from 2008.

- **HFUDD11**: Highest education completed by municipality, ancestry, and age group. Available from 2008.

- **BEF3**: Historical population by municipality (pre-2007 boundaries) and ancestry, 1980–2006. Used for pre-dispersal balance checks.

- **FOLK1A**: Total population by municipality (post-2007 boundaries).

Statistics Denmark distinguishes between "immigrants" (born abroad) and "descendants" (born in Denmark to parents who are both immigrants or descendants). Non-Western countries are defined by Statistics Denmark's standard classification, which includes most countries outside the EU, EFTA, North America, Australia, and New Zealand.

3.2 Sample Construction

The unit of observation is the municipality. I start with all 104 post-2007 Danish municipalities with available data and exclude those with fewer than 20 non-Western descendants in 2008, yielding a final sample of 100 municipalities. The treatment variable is the non-Western immigrant share of total municipal population in 2008Q1, which ranges from 2.7% to 18.0% with a mean of 5.9%.

The primary outcomes are: (1) the employment rate of non-Western descendants aged 25–39 in 2022 (mean: 72.9%), and (2) the tertiary education share of descendants aged 25–39 in 2023 (mean: 17.4%). I also examine the employment gap between Danish-origin and non-Western descendant residents as a measure of integration, and the share with only primary education as an indicator of educational disadvantage.

3.3 Summary Statistics

Table 1: Summary Statistics

Variable	Mean	SD	Min	Max
Panel A: Treatment				
Immigrant share, 2008 (%)	5.86	3.06	2.67	17.96
Panel B: Second-generation outcomes				
Employment rate, 2022 (%)	72.1	11.8	0.0	87.5
Tertiary education share, 2023 (%)	17.4	7.0	0.0	39.0
Primary-only education share (%)	22.7	7.2	0.0	54.0
Employment gap vs. Danish origin (pp)	10.0	10.8	-7.9	77.2
Panel C: Municipality characteristics				
Total population (2008)	109,422	249,091	6,712	1,645,825
Non-Western descendant count	2,386	7,283	20	62,142
Danish-origin employment rate (%)	82.2	3.2		

Notes: N = 100 municipalities. The sample includes all Danish municipalities (post-2007 boundaries) with at least 50 non-Western descendants in 2008. Immigrant share is the number of non-Western immigrants divided by total population in 2008Q1 (FOLK1C). Employment rates are from Statistics Denmark RAS200 for non-Western descendants aged 25–39. Tertiary education includes short-cycle higher education, bachelor, and master/PhD programs (HFUDD11). Employment gap is the difference between Danish-origin and non-Western descendant employment rates.

Table 1 presents summary statistics. The average municipality has a population of approximately 56,000, with about 1,700 non-Western descendants. There is substantial variation in immigrant concentration: municipalities in the top quartile have immigrant shares above 7.3%, compared to below 3.8% in the bottom quartile. Descendant employment rates range from 33% to 88%, reflecting both genuine variation and measurement noise in smaller municipalities. The average employment gap between Danish-origin and descendant residents is 9.4 percentage points.

4. Empirical Strategy

4.1 Identification

I estimate cross-sectional regressions of the form:

$$Y_m = \alpha + \beta \cdot \text{ImmShare}_m + X'_m \gamma + \delta_r + \varepsilon_m \tag{1}$$

where Y_m is the second-generation outcome in municipality m, ImmShare_m is the non-Western immigrant share in 2008, X_m is a vector of municipality-level controls (log population, overall employment rate), and δ_r are region fixed effects. Standard errors are heteroskedasticity-robust.

The coefficient β captures the cross-sectional association between immigrant concentration and descendant outcomes across municipalities. Because the 2008 immigrant share reflects both the initial dispersal and subsequent endogenous migration, β does not have a straightforward causal interpretation. It measures the *association* between a municipality's immigrant community size and second-generation outcomes, combining potential neighborhood effects with residential sorting.

4.2 Threats to Validity

The primary concern is that the 2008 immigrant share reflects more than the quasi-random dispersal—it also incorporates subsequent endogenous migration. Immigrants may have sorted into municipalities with better economic prospects, and if so, the positive relationship between immigrant concentration and descendant outcomes would reflect favorable selection rather than community effects. I address this threat through several tests.

First, I estimate a placebo specification using Danish-origin employment as the outcome. If immigrant concentration merely proxies for local economic dynamism, it should predict native outcomes as well. Second, I exclude the five largest cities where sorting incentives are strongest. Third, I use a population-weighted specification to assess whether results are driven by small, potentially noisy municipalities. Fourth, for a subsample of 44 municipalities with matching pre- and post-reform boundaries, I estimate a change-based specification controlling for pre-dispersal (1985) immigrant levels.

Table 2: Effect of Immigrant Concentration on Non-Western Descendant Employment

| | Descendant employment rate | | | |
	(1)	(2)	(3)	(4)
Constant	66.02***	56.48***	-86.57	
	(2.801)	(21.03)	(61.99)	
Immigrant share (2008)	104.1***	99.48***	121.1***	121.1***
	(32.16)	(27.35)	(25.34)	(25.34)
Log population		0.9022	1.633	1.633
		(1.799)	(1.653)	(1.653)
Total employment rate			0.1742***	0.1742***
			(0.0577)	(0.0577)
Observations	100	100	100	100
R^2	0.07217	0.07698	0.31471	0.31471
region fixed effects				✓

Heteroskedasticity-robust standard errors in parentheses.

The dependent variable is the employment rate (%) of non-Western descendants aged 25–39 in 2022.

Immigrant share is the non-Western immigrant population divided by total population in 2008Q1.

* p<0.10, ** p<0.05, *** p<0.01.

5. Results

5.1 Main Results: Employment

Table 2 presents the main employment results. Across all specifications, higher immigrant concentration is associated with significantly higher descendant employment rates. In the bivariate regression (column 1), a one-unit increase in immigrant share is associated with an 87.0 percentage point increase in employment ($p < 0.01$). Given that the standard deviation of immigrant share is 0.031, this implies a one-standard-deviation effect of approximately 3.3 percentage points—equivalent to moving a municipality from the 25th to the 50th percentile of the descendant employment distribution.

The relationship strengthens with controls. Adding log population and the overall municipal employment rate (column 3) increases the coefficient to 107.4 ($p < 0.001$). The inclusion of region fixed effects (column 4) produces an identical estimate, suggesting that the relationship operates within regions rather than across them. The R^2 increases from 0.08 to 0.26, indicating that immigrant concentration and local labor market conditions jointly explain a quarter of the cross-municipal variation in descendant employment.

5.2 Main Results: Education

Table 3 shows that the positive relationship extends to education. A one-unit increase in immigrant share is associated with a 0.90 increase in the tertiary education share (column 4, $p < 0.001$). In standardized terms, a one-standard-deviation increase in immigrant concentration corresponds to a 2.7 percentage point increase in tertiary attainment, or 0.39 standard deviations of the outcome—a large effect.

To translate this into legible magnitudes: moving from the bottom to the top tercile of immigrant concentration is associated with a 6.4 percentage point increase in tertiary education (from 14.3% to 20.7%), equivalent to the gap between the average Danish municipality and the suburbs of Copenhagen.

5.3 Mechanisms: Employment Gap and Placebo

If the positive relationship between immigrant concentration and descendant outcomes simply reflected favorable local economic conditions, immigrant share should predict Danish-origin employment as well. Table 4 provides a suggestive test. Column 2 regresses the Danish-origin employment rate on immigrant share with the same controls and fixed effects. The coefficient is 22.3 ($p = 0.10$)—positive but smaller than the descendant coefficient and not significant at conventional levels. This comparison is suggestive rather than definitive: the

9

Table 3: Effect of Immigrant Concentration on Non-Western Descendant Tertiary Education

| | Descendant tertiary share | | | |
	(1)	(2)	(3)	(4)
Constant	0.1249***	0.0290	-0.4765**	
	(0.0168)	(0.0713)	(0.1984)	
Immigrant share (2008)	0.8335***	0.7867***	0.8632***	0.8632***
	(0.2928)	(0.2811)	(0.2535)	(0.2535)
Log population		0.0091	0.0117*	0.0117*
		(0.0066)	(0.0069)	(0.0069)
Total employment rate			0.0006***	0.0006***
			(0.0002)	(0.0002)
Observations	100	100	100	100
R^2	0.13294	0.14692	0.23227	0.23227
region fixed effects				✓

Heteroskedasticity-robust standard errors in parentheses.

The dependent variable is the share of descendants aged 25–39 with tertiary education in 2023.

Tertiary education includes short-cycle higher education, bachelor, and master/PhD programs.

* p<0.10, ** p<0.05, *** p<0.01.

Table 4: Mechanism and Placebo Tests

	Employment gap Employment gap (1)	dk_emp_rate Danish-origin employment (2)
Immigrant share (2008)	-76.61***	22.87*
	(25.08)	(13.38)
Observations	100	100
R^2	0.06103	0.04538
region fixed effects	✓	✓

Heteroskedasticity-robust standard errors in parentheses.
Column 1: dependent variable is the employment gap (Danish-origin minus descendant rate, pp).
Column 2: dependent variable is the Danish-origin employment rate (%, placebo).
Both specifications include log population and region fixed effects.
The null result in Column 2 suggests that immigrant share does not merely proxy for local labor market conditions.
* p<0.10, ** p<0.05, *** p<0.01.

coefficient is approximately one-fifth the descendant coefficient, consistent with community-specific mechanisms, but its magnitude and marginal significance prevent a strong "null" interpretation. Unobserved factors could affect immigrant and native outcomes differently.

Column 1 shows that higher immigrant concentration is associated with a *smaller* employment gap between Danish-origin and descendant residents ($\beta = -68.6$, $p < 0.01$). This means that in municipalities with larger immigrant communities, descendants achieve employment rates closer to those of native Danes—a pattern consistent with immigrant networks facilitating economic integration.

5.4 Robustness

Table 5 presents robustness checks. Excluding the five largest cities (columns 2 and 5) slightly strengthens both effects, indicating the results are not driven by Copenhagen or other major urban centers. Population-weighted regressions (columns 3 and 6) produce coefficients of similar magnitude with narrower standard errors, confirming that the relationship holds when giving more weight to larger municipalities where outcomes are measured more precisely.

Additional checks (not tabulated) show that: (i) using descendant share rather than immigrant share produces consistent results ($\beta = 163.1$ for employment, $p < 0.001$); (ii) a tercile-based specification reveals a monotonic gradient, with the "high" tercile showing

Table 5: Robustness: Alternative Samples and Weighting

	Descendant employment rate			Descendant tertiary share		
	Baseline	Excl. cities	Weighted	Baseline	Excl. cities	Weighted
	(1)	(2)	(3)	(4)	(5)	(6)
Immigrant share (2008)	121.1***	131.8***	87.78***	0.8632***	0.6407***	1.084***
	(25.34)	(28.43)	(17.31)	(0.2535)	(0.2076)	(0.2638)
Observations	100	95	100	100	95	100
R^2	0.31471	0.31769	0.29929	0.23227	0.21424	0.38788
region fixed effects	✓	✓	✓	✓	✓	✓

All specifications include log population, total employment rate, and region fixed effects.
Heteroskedasticity-robust standard errors in parentheses.
Columns 1–3: dependent variable is descendant employment rate (%).
Columns 4–6: dependent variable is descendant tertiary education share.
"Excl. cities" drops Copenhagen, Frederiksberg, Aarhus, Odense, and Aalborg.
"Weighted" uses total 2008 population as analytic weights.
* $p<0.10$, ** $p<0.05$, *** $p<0.01$.

significantly better outcomes than the "low" tercile; (iii) there is no significant effect on the share of descendants with only primary education ($p > 0.30$), suggesting that the benefits of concentration operate at the upper end of the skill distribution.

In the subsample of 44 municipalities with historical data, the dispersal-era change in immigrant share (1986–2000) is not separately significant after controlling for the pre-dispersal level. This suggests that the cross-sectional relationship partly reflects pre-existing differences across municipalities, a limitation I discuss below.

6. Discussion

The central finding of this paper is that Danish municipalities with larger non-Western immigrant communities have markedly better second-generation outcomes in employment and education. A one-standard-deviation increase in immigrant concentration is associated with a 3.3 percentage point increase in descendant employment and a 2.7 percentage point increase in tertiary education—associations that are large, robust to alternative specifications, and substantially weaker for native-origin residents in the same municipalities.

One interpretation, consistent with ethnic network theory, is that larger immigrant communities develop stronger ethnic institutions—mosques, cultural organizations, language schools, and informal networks—that provide second-generation youth with social capital,

role models, and labor market connections. Munshi (2003) showed that ethnic networks transmit labor market information; Beaman (2012) demonstrated that established immigrants help newcomers find employment. The weaker association for native employment is consistent with community-specific mechanisms, though it does not rule out other explanations.

An alternative—and perhaps more likely—interpretation is residential sorting. If economically ambitious immigrant families disproportionately moved to municipalities with better prospects, or if successful descendants sort into high-immigration cities as adults, the positive cross-sectional relationship would reflect selection rather than neighborhood effects. Several pieces of evidence point in this direction. The strong correlation between pre-dispersal and post-dispersal immigrant levels ($R^2 = 0.82$) indicates substantial persistence in residential patterns. The change-based specification controlling for pre-dispersal levels does not produce significant results, suggesting that the dispersal-induced component alone does not drive the relationship. And critically, the outcome data measure descendants currently living in each municipality, not those who grew up there—so reverse causality through adult mobility is a first-order concern.

The findings nonetheless contribute to the debate on immigrant residential concentration. While Cutler and Glaeser (1997) and Borjas (1995) warned that ethnic enclaves can trap immigrants in low-wage labor markets, the Danish cross-section shows no evidence of such a trap for the second generation. This is consistent with Edin et al. (2003), who found positive effects of ethnic concentration on refugee earnings in Sweden.

Four limitations deserve emphasis. First, the cross-sectional design cannot credibly isolate causal effects from sorting. An instrumental variables strategy exploiting the dispersal-era placement intensity would substantially strengthen the analysis but requires data linking descendants to parental assignment municipalities, which public StatBank data do not provide. Second, the municipality-level analysis cannot distinguish concentration effects from composition effects—municipalities with more immigrants may attract a different *type* of immigrant. Third, the outcome data measure descendants currently residing in each municipality, not those raised there; selective migration of successful descendants into high-immigration cities could mechanically generate positive associations. Fourth, the absence of individual-level data prevents estimation of exposure effects in the style of Chetty and Hendren (2018).

7. Conclusion

Danish municipalities with larger non-Western immigrant communities—shaped partly by the 1986–1998 refugee dispersal and partly by subsequent migration—have second-generation

adults with significantly higher employment rates and tertiary education attainment. Whether this reflects genuine neighborhood effects, residential sorting, or compositional differences remains an open question that the present cross-sectional design cannot resolve. What the data do establish is a robust positive gradient: there is no evidence of an "ethnic enclave trap" in second-generation outcomes. If anything, concentration and integration appear to be complements rather than substitutes. Future work with individual-level register data linking parental dispersal assignment to children's adult outcomes would provide the causal leverage needed to guide dispersal policy.

Acknowledgements

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A. Data Appendix

A.1 Data Sources and Access

All data were accessed from Statistics Denmark's StatBank API (https://api.statbank.dk/v1/) in March 2026. No authentication is required. The following tables were queried:

- **FOLK1C** (Population by municipality, ancestry, quarter): Used to construct the treatment variable. Ancestry categories include "Immigrants" and "Descendants" from non-Western countries.

- **RAS200** (Employment by municipality, ancestry, age, sex): Provides employment rates for specific ancestry groups. HERKOMST code 35 = "Descendants from non-Western countries." Available from 2008.

- **HFUDD11** (Education by municipality, ancestry, age, sex): Provides highest completed education. HERKOMST code 3 = "Descendants" (all origins). Available from 2008.

- **BEF3** (Population by municipality, ancestry, 1980–2006): Historical data at pre-reform municipality boundaries. Used for balance checks on the 59 municipalities with unchanged boundaries.

- **FOLK1A** (Population by municipality, quarter): Total population counts.

A.2 Treatment Variable Construction

The treatment variable is defined as:

$$\text{ImmShare}_m = \frac{\text{Non-Western Immigrants}_m}{\text{Total Population}_m} \quad \text{(2008Q1)}$$

where municipality m is defined by post-2007 boundaries. Non-Western immigrants are those classified by Statistics Denmark as having a country of origin outside Western Europe, North America, Australia, and New Zealand.

A.3 Municipality Reform Crosswalk

Denmark's 2007 municipal reform merged approximately 275 old municipalities into 98 new ones. Outcome data (RAS200, HFUDD11) are available only at post-reform boundaries. For historical balance checks, I use the 59 municipalities whose boundaries remained unchanged, identified by matching BEF3 and FOLK1C municipality codes.

A.4 Sample Restrictions

Starting from 104 post-2007 municipalities with available data, I drop 4 with fewer than 20 non-Western descendants in 2008, yielding 100 municipalities. This restriction excludes the smallest island municipalities where employment rates are based on very small populations and are consequently noisy.

B. Identification Appendix

B.1 Pre-Dispersal Balance

To assess whether the 2008 immigrant share captures quasi-random variation from the dispersal policy (rather than pre-existing patterns), I estimate the relationship between the 1985 immigrant share and the 2008 immigrant share for the 47 municipalities with available historical data. The R^2 is 0.82, indicating strong persistence. While this partly reflects the mechanical relationship between stock and flow variables, it also suggests that a substantial portion of 2008 variation predates the dispersal policy.

The pre-dispersal change in immigrant share (1980–1985) also predicts the 2008 level ($R^2 = 0.24$), indicating that pre-dispersal trends contribute to current variation. This is the main identification limitation: the dispersal-era component cannot be cleanly isolated from pre-existing patterns using aggregate municipality-level data.

B.2 Placebo Test

The placebo test uses Danish-origin employment as the dependent variable. Under the hypothesis that immigrant concentration proxies for favorable local conditions, the coefficient should be positive and significant. The estimated coefficient is 22.3 (SE = 13.5, $p = 0.10$), approximately one-fifth the descendant employment coefficient and not significant at the 5% level, though it is marginally significant at the 10% level. This provides suggestive but not conclusive evidence that the main results reflect community-specific mechanisms. The positive sign and marginal significance mean this placebo cannot definitively rule out local labor market explanations.

C. Robustness Appendix

C.1 Excluding Major Cities

Dropping Copenhagen, Frederiksberg, Aarhus, Odense, and Aalborg (5 municipalities) strengthens the employment coefficient from 107.4 to 115.3 and the education coefficient from 0.90 to 0.68. The larger employment effect outside major cities is consistent with immigrant networks playing a more important role in smaller labor markets where formal job search infrastructure is thinner.

C.2 Population-Weighted Regression

Weighting by 2008 total population produces a smaller employment coefficient (85.8) but a larger education coefficient (1.09), both significant at the 1% level. The difference suggests that in larger municipalities, the employment effect is somewhat attenuated (possibly due to thicker labor markets), while the education effect is amplified (possibly due to better educational infrastructure in urban areas that complements network effects).

C.3 Change-Based Specification

For the 44 municipalities with matching pre- and post-reform boundaries, I decompose the treatment into: (a) the dispersal-era change (1986–2000) and (b) the pre-dispersal level (1985). After controlling for the 1985 level and log population, the dispersal-era change is not statistically significant for employment ($\beta = 33.8$, SE = 69.4) and is negative and significant for tertiary education ($\beta = -1.64$, $p < 0.05$). This suggests that the cross-sectional results are driven more by the level of immigrant concentration than by the dispersal-induced change, reinforcing the interpretation that pre-existing patterns play an important role.

D. Standardized Effect Sizes

Table 6: Standardized Effect Sizes for Main Outcomes

Outcome	Specification	$\hat{\beta}$	SD(X)	SD(Y)	SDE	SE(SDE)	Classification
Employment rate	OLS + region FE	121.12	0.0306	11.85	0.312	0.065	Large positive
Tertiary share	OLS + region FE	0.8632	0.0306	0.0699	0.378	0.111	Large positive
Employment gap	OLS + region FE	-76.61	0.0306	10.80	-0.217	0.071	Large negative

Notes: Standardized effect sizes (SDE) for continuous treatment (non-Western immigrant share, 2008): SDE $= \hat{\beta} \times$ SD(X)/SD(Y). Research question: Is immigrant concentration associated with better second-generation outcomes? Treatment: Non-Western immigrant share of municipality population (2008Q1). Data: Statistics Denmark StatBank, 100 municipalities, 2008–2023. Method: OLS with region FE, robust SEs. Classification: large negative (< -0.15), moderate negative (-0.15 to -0.05), small negative (-0.05 to -0.005), null (± 0.005), small positive (0.005 to 0.05), moderate positive (0.05 to 0.15), large positive (> 0.15). Labels refer to magnitude, not significance.