Intergenerational Social Mobility Among the Second Generation in Europe

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Abstract.

This article investigates social mobility trajectories among the second generation immigrant compared to their native counterparts in European countries. The destiny of the so-called second generation is, we argue, the true yardstick of immigrant incorporation in European societies. In doing so we bring together two largely disconnected literatures, namely the study of ethnic penalties by immigration scholars and the study of relative social mobility by stratification scholars. We use data from 5 rounds of the European Social Survey (2008-2016) for the 7 European countries that exhibit a sizeable second generation immigrant population, namely Belgium, Switzerland, Denmark, France, Great Britain, the Netherlands and Sweden. In terms of methods, we rely on log-linear and log-multiplicative moels for the study of relative mobility, and multinomial logistic models for the study of ethnic penalties. Two main findings stand out clearly: first, we find that class of origins matters the same for the socioeconomic destination of both natives and second generation immigrants, contradicting hypothesis of an "perverse openness" among the latter. Second, we find no evidence of ethnic penalties, as natives and immigrants of comparable social origins exhibit similar socioeconomic achievement. Thus, the poorer the socioeconomic standings of natives and second generation immigrants largely reflect their poorer social origins but not truncated opportunities based on immigrant status.

Keywords: immigration; assimilation; social mobility; social reproduction; social inequality.

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1 Introduction

2 Social mobility among the second generation: the litmus test of immigrant incorporation

In spite of legal-institutional commitments to equal opportunity in many Western countries whose labor markets are dependent on immigrant labor, research suggests that foreign credentials (Zeng and Xie 2004), poorer access to social capital (Aguilera and Massey 2004), lower linguistic skills (Shields and Price 2002), discrimination (Hainmueller and Hangartner 2013) and other causes aggregate to produce lasting socioeconomic inequality between foreign-born and natives. Such a disadvantage is part of the "immigrant bargain" - the willingness to relocate and work potentially undesirable jobs in order to safeguard better prospects for their children than what would have been possible in the origin country (Alba and Foner 2015, chapter 3).

The true yardstick of immigrant incorporation, then, lies in the destiny of the so-called second generation - the children of immigrants who were born, socialized and schooled in the country of destination (Crul and Vermeulen 2003). Members of the second generation should be seen as successfully incorporating in their country of destination if their immigrant origins have, *ceteris paribus*, little to no influence on their opportunities to accomplish their potential and desires as individuals (Alba and Nee 2003). Large, yet disconnected literatures have investigated this question with regards to multiple dimensions of incorporation in Western Europe and the United States in recent years (Drouhot and Nee 2019). Some researchers have focused on the second generation's educational attainment, others on occupational attainment and hiring patterns, while yet others have looked at social networks, intermarriage and acculturation dynamics in the realm of language, religiosity and values (see *ibid* for a review).

While this fragmentation reflects distinct subfields and specializations among migration researchers, it yields an ambiguous picture on the salience of immigrant origins in shaping the life chances of the second generation. A common finding among researchers of education, for example, is that the children of immigrants have high aspirations for educational success (Salikutluk 2016, Jonsson and Rudolphi 2011) and perform relatively well at school given the socioeconomic status of their parents (Tucci et al. 2013, Heath et al. 2008). Yet research on labor market attainment across various countries suggests that ethnic inequality and discrimination on phenotypical and religious grounds are widespread (Algan 2010, Pichler 2011, Heath et al. 2008, Tucci 2013, Adida et al. 2016, Lancee 2019), and potentially blocking their aspirations for socioeconomic advancement. How these contrasting dynamics - which we review in detail in the next section aggregate to shape the fate of the second generation remains, thus far, elusive.

[Another paragraph - or possibly a set of other sentences in the paragraph above - on difficulty

in measuring education and income mobility for immigrants (when done well leads to different stories on mobility and advantage, e.g. Kasinitz et al. 2008 VS Feliciano and Lanuza 2017), as well as questioning whether any of them capture social class really well. Lean on Weeden and Grusky and others on professions here. Perhaps literautre on big classes if possible.]

In this paper, we adopt a new perspective on incorporation by investigating intergenerational social mobility among the second generation across several national contexts. Social mobility research has a long tradition in sociology but has been largely ignored by migration scholars, who have instead studied socioeconomic integration by comparing immigrants and natives on specific outcomes (see Heath and Li 2016 for a notable exception). Yet, social mobility trajectories reflect the joint influence of multiple stratification processes occurring in different institutional domains such as schools, neighborhoods, labor markets, and public policy. While these all contribute to shape the life chances of the second generation, they are typically studied in isolation by migration scholars embedded in separate epistemic communities. Our reasoning is that intergenerational social mobility trajectories crystallize a balance in the relative influence of these various processes, and thus allow researchers to pass a more holistic and durable judgement on the general direction of incorporation among members of the second generation. We consider mobility trajectories to constitute the best operationalization of Alba and Nee's seminal definition of assimilation into the mainstream, "that part of the society within which ethnic and racial origins have at most minor impacts on life chances and opportunities" (Alba and Nee 2003:12). In this spirit, we regard differences in absolute levels of intergenerational mobility¹ between natives and immigrants as the focal point of variegated dynamics of exclusion and inclusion occurring as the second generation comes of age, and thus, the true litmus test of immigrant incorporation in the long run.

¹Briefly explain difference between relative and absolute mobility here.

3 Structural Incorporation: Current State of Knowledge

4 Derived Hypotheses

Three distinct hypotheses on the structural attainment on the second generation can be derived.

First, the *social reproduction* hypothesis. In Western liberal societies where equal rights are guaranteed by citizenship regardless of ethnic, racial and religious origins and costs to discrimination are non-trivial due to the credible commitments of state institutions to equal opportunity (Alba and Nee 2003), class remains the principal force at work in the production of inequality between native and immigrants. As such, we observe patterns of social mobility that differ between countries but not between natives and second generation immigrants within countries. This hypothesis is represented in panel A of figure 1. As shown, it its canonical version the *social reproduction* hypothesis implies that effect of social origins on destination (i.e. the slope) is the same for the native and the immigrant population. In other words, class shoud matters the same regardless of nativity. Yet, an additional requirement of this hypothesis is that natives and immigrants of same class origins should have similar socioeconomic achievement.

An alternative hypothesis states that *second-generation advantage* exist with respect to mobility. Because first-generation immigrant parents are positively selected on unobservable (grit, determination, cultural frames of social success, e.g. Kasinitz et al. 2008) as well as observable traits (high rank in the educational distribution within the countries of origin (e.g. Ichou 2013, Feliciano and Lanuza 2017), the children of immigrants do better than what would be expected given their social class, and better than natives of comparable social origins. Thus, patterns of intergenerational social mobility should differ among natives and immigrants as the second generation might have better changes of upward mobility than what would be expected given their social origins. As shown in panel B of figure 1, this hypothesis does speak of the strength of the origin-destination association for the two groups, but of an advantage of second generation immigrants over natives at any class for origin. Different associations would of course result into different nativity gaps for children of different origins but the hypothesis holds the same as long as an immigrant advantage exist.

The *native advantage* hypothesis claims the exact opposite: In spite of higher aspiration for status attainment, the children of immigrants from outside Europe who are markedly different in virtue of their phenotype or religion suffer from social closure imposed by natives, whose social positions is materially and culturally threatened by the children of immigrants. As such, and in spite of legal barriers to discrimination, opportunity hoarding from natives in access to schooling and jobs result in a pattern of blocked mobility among the children of immigrants (Scheffer 2001). Moreover, widespread patterns of discrimination translate in the decreasing significance of social origins in structuring the mobility patterns of the second generation, who are likely to experience stagnation if they come from the bottom or downward mobility if they come from the middle or top of the social ladder. Panel C of figure 1 convey these ideas. As shown, the native advantage comes from two simultaneous sources, namely the lower socioeconomic achievement of second generations with respect to natives of the same class origins and a perverse openness for immigrants that results in the largest achievement gaps at the top.



Fig 1 Stylized hypotheses

5 Analytic Strategy

We address both notions of social mobility, namely the net association between origin and destination (i.e. the "slope") and the absolute attainment of children conditional on their social origins. Consequently, our analytic strategy develops in two complementary stages. First, we use log-linear models to compare the margins-free association between class of origin and class of destination by nativity and across countries. In particular, we fit several model specification informed on theoretical basis to describe these associations. Equation 1 describes a saturated log-linear model for the four-ways contingency table resulting from the cross-tabulation of origin (O), class of destination (D), native/immigrant status (N) and country (C).

$$\log F_{ijkl} = \lambda_0 + \lambda_i^O + \lambda_j^D + \lambda_k^N + \lambda_l^C$$

$$+ \lambda_{ij}^{OD} + \lambda_{ik}^{ON} + \lambda_{il}^{OC} + \lambda_{jk}^{DN} + \lambda_{jl}^{DC} + \lambda_{kl}^{GN}$$

$$+ \lambda_{ijk}^{ODN} + \lambda_{ijl}^{ODC} + \lambda_{ikl}^{ONC} + \lambda_{jkl}^{DNC}$$

$$+ \lambda_{ijkl}^{ODNC}$$
(1)

here F_{ijkl} denotes the expected frequency in the ijklth cell of the table, where $\{i = 1, ..., I\}$ indexes class of origin, $\{j = 1, ..., J\}$ indexes class of destination, $\{k = 1, ..., K\}$ indexes nativity status and $\{l = 1, ..., L\}$ indexes countries. Our parameters of interest are those capturing the baseline net origin-destination association (λ_{ij}^{OD}) , differences in the origin-destination association by nativity (λ_{ijk}^{ODN}) and country (λ_{ijl}^{ODC}) and nativity-country idiosyncratic association between class of origin and class of destination (λ_{ijkl}^{ODNC}) . To provide a parsimonious characterization of the patterns of social mobility among natives and second generation immigrants across European countries we test several theory-driven model specifications against the saturated model. In particular, we try variants of well-known models such as the "quasi-perfect mobility" model, the "symmetry" model and the Unidiff. We also provide results using the inductive model-freed method proposed by Bucca and Urbina (2019) based on Lasso regulations applied upon the saturated model. The predicted performance of all models is compared via a standard battery of goodness of fit statistics, as well as with an out-of-sample cross-validaton procedure (details in Appendix A.1).

Next, we investigate differences in class attainment between native and second-generation im-

migrants via multinomial logistic regression models. This part of the analysis addresses an additional piece of the mobility process, namely whether there are class attainment gaps between natives and second generation immigrants of comparable social origins. More formally, let us express the odds of attaining a given class destination d as a function of one's nativity (N), class of origin (O) and country of residence (C). The particular formulation in 2 allows for an interaction between nativity and class of original and, for the sake simplicity, an additive effect of country is assumed.

$$\log \frac{\mathbb{P}(Y=d)}{\mathbb{P}(Y=D)} = \alpha_d + \beta_d N + \sum_{i=1}^{k-1} (\gamma_d O + \delta_d O * N) + \sum_{j=1}^{q-1} \lambda_d^C C$$
(2)

It follows from this formulation that any two individuals of the same social origins and country of residence, the chances of attaining a given class d may differ depending on their nativity status, potentially to a different extent compared to individuals of other social origins. Parameters β_d and δ_d capture this possible dependence.

Because this model is heavy parametrized (70 parameters), as a robustness check we reestimate the model using regularization techniques in order to prevent over-fitting.

6 Data and Measures

We use data from the European Social Survey (hereafter ESS), a cross-national cross-sectional survey of more than thirty European countries conducted every two years since 2001. The survey measures key dimensions of the social structure in Europe, as well as cultural aspects of these diverse populations, such as attitudes, beliefs and behaviour patterns. The ESS is well-suited for the purpose of the present study as it contains harmonized information on the occupation and

nativity status of respondents as well as of the respondents' father.

Our analytic sample consists of 5 rounds of the survey (4-8, 2008-2016) for the 7 European countries that exhibit a sizeable second generation immigrant population, namely Belgium, Switzerland, Denmark, France, Great Britain, the Netherlands and Sweden. We exclude rounds 1 to 3 because the occupational grouping is incompatible with that used in later rounds.

	2G	Natives
Belgium (BE)	528	4361
Switzerland (CH)	792	3175
Denmark (DE)	870	7235
France (FR)	721	4510
Great Britain (GB)	553	4994
Netherlands (NL)	393	4827
Sweden (SE)	534	4310

Table 1 Composition of analytic sample by country and nativity

The main variables in our analyses are nativity and social class. We define as natives those individuals born in the survey country to two parents also born in the same country. By contrast, we defined as second generation immigrants (2G) those individuals born in the survey country to at least one foreign parent. Table 1 details the distribution of the analytic sample by country and nativity.

As for social class, given the relatively small sample size, we use a highly aggregated class scheme consisting of 5 categories: "Higher administrators and Professionals", "Technical occupations", "Service occupations", "Blue-collar occupations" and "Farmers". This scheme is derived from ISCO-coded occupations applied to the respondent's occupation and to the occupation of the father when the respondent was 14.

7 Results

	AIC	BIC	LR Chisq	Poisson Dev	Df
m0: [O][D][N][C]	7481.17	7542.90	5772.62	32953.40	334.00
m1: [ONC][DNC]	4966.78	5452.87	3038.22	32856.43	224.00
m2: [OD][N][C]	4767.78	4891.23	3027.22	32394.34	318.00
m3: [ODN][C]	4628.38	4844.43	2839.83	32607.52	294.00
m4: [ODC][N]	2871.98	3550.98	843.43	32121.59	174.00
m5: m1 + [DN][DC]	3233.33	3873.75	1224.78	32396.19	184.00
m6: m1 + [DNC]	3255.59	4011.75	1187.04	32448.79	154.00
m7: m1 + [SN][SC]	2314.89	3109.63	226.34	32206.42	144.00
m8: m1 + [SNC]	2368.78	3394.99	160.23	32323.19	84.00
m9: Unidiff [N]	2318.52	2870.20	355.97	32161.74	207.00
m10: Unidiff [C]	2292.60	2863.58	320.05	32160.39	202.00
m11: Unidiff [N][C]	2293.40	2868.23	318.85	32158.46	201.00
m12: Unidiff [NC]	2302.84	2900.82	316.28	32162.55	195.00
m13: Lasso	0.00	0.00	0.00	31754.22	265.00

Table 2 Log-linear and log-multiplicative models



Fig 2 Origin-destination association by nativity and country. Log odd-ratio estimates from Unidiff model



Fig 3 Probability of destination by class of origins for natives and 2G immigrants

Social origins affects the destination of natives and G2 immigrants with similar strength. For the most part, we find similar class attainment for natives and G2 immigrants of comparable social origins. Taken together, evidence generally favors the social reproduction hypothesis. Class background, more than immigrant background, drives the structural incorporation of the second generation in Europe.

8 Discussion

9 References

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A Appendix

A.1 Cross-Validation Procedure

We use a repeated k-fold cross-validation with 5 folds and 10 repetitions to evaluate the predictive performance of the models introduced above. More specifically, we divide the data into 5 random partitions, 4/5 of the which are used as "training set", while the remaining 1/5 is used as "testing set". In the 'training set" we create the contingency tables for our analysis and fit each of the log-linear and log-multiplicative models described in Section 5.

In a second step we compare predictions yielded by these models to the observed counts in the contingency tables derived from the "testing set". As a cross-validation error metric we use the Poisson Deviance, a proper loss function for Poisson distributed outcomes. We iterate the process 5 times so that all partitions of the data serve as testing set once. This procedure is repeated 10 times so as to prevent the possibility that the randomness of the data partition affect the results. At the end of the process we average out the cross-validation error metrics computed at each iteration (50 in total), obtaining an overall cross-validation error for each model (reported in column "Poisson Dev." of Table 2).

A.2 Robustness checks



Fig A2 Distribution of cell frequencies by nativity and class scheme



Fig A3 Origin-destination association by nativity and country. Lasso-based log odd-ratio estimates



Fig A4 Log ratios probability of destination by class of origin among natives and 2G immigrants



Fig A5 Probability of destination by class of origins for natives and 2G immigrants. Lasso-based estimates.