Welfare states and immigrant poverty: Germany, Sweden, and the United Kingdom in comparative perspective

Christel Kesler
Columbia University, USA

Abstract

This article examines immigrant poverty across three institutionally distinct European states: Germany, Sweden, and the United Kingdom. Focusing on 33 immigrant groups and controlling for sending country in addition to human capital and family characteristics, the analysis explores host country variation in (1) immigrant/native-born *poverty gaps* and (2) the underlying *poverty levels* at which these gaps occur. Findings reveal the largest poverty gaps in Sweden and demonstrate that this is due to immigrants' comparatively severe labor market disadvantages. However, underlying poverty levels are also lowest in Sweden because of a two-pronged policy strategy of enabling work (particularly among women, immigrant and native-born alike) and reducing poverty through income support. Thus, immigrants in Sweden live at lower levels of poverty than their immigrant counterparts elsewhere, despite facing higher levels of inequality vis-à-vis native-born Swedes. The conclusion considers implications of poverty gaps and poverty levels, especially for the children of immigrants.

Introduction

This article examines the roles of market, state, and family in shaping immigrant poverty. This involves tracing how labor market outcomes of immigrants, analyzed in much previous research, are mediated by institutions of state and family. In other words, how are the fates of immigrants in host country labor markets related to risks of falling into poverty?

Corresponding Author:
Christel Kesler, Barnard College, Columbia University, 3009 Broadway, New York, NY 10027, USA.
Email: ckesler@barnard.edu

Labor market outcomes are but one determinant of economic well-being in advanced capitalist societies, and yet studies of immigrant incorporation often focus exclusively on them; in this article I contribute to filling this void. Whereas labor market outcomes can be analyzed without taking characteristics of other family members (such as a spouse's or parents' earnings) into account, poverty is a family-level concept. This shapes methodological considerations, but also gives the concept of poverty additional substantive import: immigrant poverty shapes the contexts in which immigrants' *children* come of age.

I focus on relative poverty, both before and after the state redistributes income through taxes and transfers. I begin with a review of processes generating poverty, formulating hypotheses for the subsequent analysis. I consider overall levels of poverty and potential differences in immigrant and native-born poverty rates. I then introduce the data and methods used in the empirical analysis. Results are presented in two stages. I first address whether immigrants are more likely to be in poverty than native-born persons with similar characteristics, and how this varies cross-nationally. I then assess whether immigrant/native-born poverty gaps occur at high or low overall levels of poverty, and how this varies cross-nationally. We can thus observe whether cross-national variation in immigrant poverty rates is attributable to immigrant-specific disadvantages or to general cross-national contours of poverty.

Immigrant poverty in comparative perspective

Poverty alleviation has been a key goal of modern welfare states. Nonetheless, major cross-national differences exist in the incidence of poverty. Explaining cross-national trends in poverty is more complicated than documenting them, but recent work has found convincing evidence that both labor market regulation and welfare-state generosity reduce poverty (Brady, 2009; Cantillon, 1997; Hout and DiPrete, 2006; Kenworthy, 1999; Moller et al., 2003; Smeeding et al., 2001). Generous welfare states are notable because of low poverty rates, but also minimal differences between key sub-groups, such as men and women (Casper et al., 1994; Christopher et al., 2002; Rainwater and Smeeding, 2003). Group poverty differences are important, because they shape public attitudes about poverty (Waldfogel, 2001). Because of immigration's high political salience in Europe, it is important to understand how well states minimize immigrant/native-born poverty gaps.

Here, I examine relative poverty, in which the poverty threshold is a percentage of median income, adjusted for household size. Following others, I consider two kinds of relative poverty. The first, sometimes called "market-generated" poverty, is based on market income before taxes and transfers. The second, "state-mediated" poverty, is based on disposable income after taxes and transfers (Brady, 2003, 2005). Market-generated poverty is counterfactual, since no market operates free of its social and political context, and families make market choices (e.g. to work or not to work) in response to tax and transfer policies (Brady, 2009: 37–40). Nevertheless, a comparison of the two kinds of poverty is useful for illustrating mechanisms. As I describe below, available data permit a comparison of market-generated poverty in Sweden and the UK, and state-mediated poverty in Sweden and Germany, and the discussion of expected findings reflects this.

General contours of poverty

Immigrants likely face many of the same institutional influences on poverty as non-immigrants. I begin with key examples of general contours of poverty, the baselines against which immigrant-specific disadvantages must be assessed. Then, I turn to a discussion of immigrant-specific disadvantages within the welfare state and labor market institutions of host countries.

The three case countries have different levels of gross inequality in individual hourly wages which, though mediated by hours worked, patterns of partnership and family formation, as well as welfare states, still affect poverty rates. Sweden, the most equal, posts a ratio of 90th to 10th percentile wages of around 2.25 in the early 2000s. The figures for Germany and the UK are higher at 3.0 and 3.5 (OECD,

2003: 44). Several institutional mechanisms likely underlie wage inequalities, but perhaps most critical is collective bargaining. Whereas over 90% of workers in Sweden are covered by collective agreements, the figure in Germany is under 70%, and in the UK just over 30% (OECD, 2004: 146). We would expect wage inequality to translate into higher market-generated poverty rates in the UK than in Sweden among those at the bottom of the wage distribution. We would therefore expect education, a major determinant of position in the wage distribution, to have a stronger negative effect on poverty in the UK. We would expect a similar pattern in the Sweden/Germany comparison of state-mediated poverty, albeit muted, since the difference in wage inequality is less extreme and redistribution decreases market-generated inequalities.

These countries also have different patterns of labor force attachment, especially among women. Traditional welfare-state scholarship focuses on de-commodification, the ability of individuals and families to maintain their standard of living independent of their relationship to the market (Esping-Andersen, 1990). Critical welfare-state scholars identify access to work as another key dimension of variation, particularly consequential for women (Orloff, 1993). Household non-employment is closely linked to poverty (Morrisens, 2006), and dual-earning couples are also protected against poverty compared to traditional breadwinner families. Sweden is an international leader in promoting women's, especially mothers', labor force participation (Gornick and Meyers, 2003), which reduces poverty risks there, compared to Germany and the UK. This should be most dramatic for market-generated poverty, but should also be observed for state-mediated poverty.

The most direct effect of the welfare state on poverty involves income redistribution. This of course pertains only to state-mediated poverty. The universalistic Swedish welfare state, unlike others, gives individuals access to benefits regardless of life circumstances. This stands in contrast to Germany's corporatist, conservative welfare state, which favors male breadwinner households with extensive prior labor force attachment. We might therefore expect those in disadvantageous positions (e.g. with non-traditional family structures) to experience lower poverty rates in Sweden than in Germany.[1]

Immigrant disadvantages and poverty

Immigrants benefit disproportionately from certain poverty-reducing institutions, because of immigrant/native-born differences in individual and family characteristics. For example, immigrants are often at the bottom of the earnings distribution and benefit disproportionately from wage compression. Reitz (1998) and colleagues (Reitz et al., 1999) have shown how this matters for immigrant earnings across a range of countries. Similarly, universalistic welfare states will disproportionately benefit newcomers without prior work history. But there are also reasons to expect immigrant-specific poverty risks, even given identical individual and family characteristics. These reasons are related to the market, state, and family processes that shape poverty.

As much previous research has shown, many immigrants face under-employment and over-representation in the lowest status, poorest paid jobs (Heath and Cheung, 2007; Kogan, 2007; Van Tubergen, 2006). We would expect these inequalities to translate into differences in poverty. There is some evidence that immigrant employment disadvantages are less pronounced in liberal welfare states with flexible labor markets, such as the UK (Kogan, 2006), and that employment disadvantages are particularly severe in social democratic regimes such as Sweden (Kesler, 2006; Kogan, 2003), due in part to lack of low-skilled jobs. Cross-national differences in wage inequality may outweigh this, but existing studies of immigrant poverty across European countries suggest that the immigrant/native gap may be large in Sweden, though it is unclear whether this is due to composition effects of immigrants' origin countries (Lelkes and Zólyomi, 2011). A study comparing immigrant poverty in Sweden and Denmark, both social democratic, found that the gap with natives was even larger in Denmark, due in large part to compositional differences in immigrant populations (Blume et al., 2007).

Poverty gaps between native-born and immigrant *couples* may be particularly extreme, because the effects of individual employment disadvantage are magnified in endogamous partnerships, compared to

single householders. Intermarried immigrant/native-born couples should face less disadvantage than endogamous immigrant couples, because the native-born spouse does not face labor market barriers, and because immigrants who intermarry may be a self-select and socially and economically better integrated group. Obucina's (2013) analysis of poverty dynamics among immigrants in Sweden highlights the importance of having a native-born spouse or parent in the household.

Finally, immigrants may have limited access to income transfers, so we might expect inequalities in poverty even beyond labor market outcomes and family circumstances. Foreign citizens have more legally limited access to social assistance in Germany than in Sweden (Groenendijk et al., 2000). We might expect, however, that immigrants' disadvantage will wane more over time in Germany than in Sweden, because one's history of labor market attachment has relatively more importance in the German system. The universalistic Swedish system should minimize poverty differences between relative newcomers and more longstanding immigrants.

Migration flows

Immigrants are not randomly assigned to host countries, and variation in immigrants' own characteristics is perhaps the most obvious explanation for observed cross-national differences. Most analyses, including mine, control for important *observable* characteristics, such as country of origin, education, and family characteristics. Nonetheless, immigrants' *unobservable* characteristics can also vary.

One obvious cause of differences in immigrants' unobservable characteristics is the policy regimes that shape migration. Historically, the three host countries in this analysis have very different patterns of migration. In the early post-war period, Britain received large waves of post-colonial migrants, subject to relatively open migration. However, beginning in the 1960s, and continuing through to the early 2000s, Britain had among the most restrictive immigration in Europe, and its liberalization in recent years has pertained mostly to high-skilled migrants (Layton-Henry, 2004). Empirical research has shown that there is huge diversity in terms of education and employment outcomes *among* migrant groups in Britain (Cheung and Heath, 2007; Modood and Berthoud, 1997).

Much post-war migration to Germany was the result of guest worker programs, and though the programs ceased formal operation in the early 1970s, migration from many of these same source countries (especially Turkey and the former Yugoslavia) has continued, albeit under family unification and humanitarian auspices (Martin, 2004). Guest worker migration occurred specifically to fill low-skilled jobs, which is generally found to be reflected in the educational and occupational outcomes of migrants (Kalter and Granato, 2007).

Though Sweden experienced labor migration in the early post-war decades, more than either other country, migration to Sweden since the 1970s has been on humanitarian grounds, with large waves arriving from the former Yugoslavia and the Middle East. Humanitarian migrants often have relatively high levels of formal education, but face marked disadvantage in the labor market (Jonsson, 2007; Wiesbrock, 2011).

In addition to historical patterns that may affect the migrants' selectivity, Borjas (1987) has stressed the relationship between income inequality and selectivity. The assertion is that higher inequality attracts positively selected migrants along unmeasured dimensions such as "ambition." Levels of inequality across the three countries suggest that migrants to the UK from a given origin country would be most positively selected and those to Sweden most negatively selected, with Germany in an intermediate position. We should see selectivity in terms of *observed* independent variables as well (e.g. immigrants to the UK should have higher levels of education), but if immigrants to unequal countries are more "ambitious," we would expect better outcomes even after we control for observed characteristics.

Like most conventional datasets, those I use in this article identify neither the auspices of migration nor characteristics such as "ambition." However, by examining a wide range of migrant groups, including post-colonial groups, former guest worker groups, those from other European Union countries not

subject to migration controls in recent years, and likely humanitarian migrants, I am able to illustrate the broad contours of cross-national variation in immigrant poverty.

Data and methods

In this analysis, I examine poverty rates using logistic regression models. Of particular interest is whether immigrants from the same origins fare differently across host societies, net of key social and demographic controls.

Data sources

The analysis uses British Labour Force Surveys (BLFS), the German Mikrozensus (MZ), and Swedish Longitudinal Individual Data (LINDA). These are nationally representative datasets, with sample sizes large enough to compare immigrant groups by country of origin.[2]

Each quarter, the BLFS interviews 0.2% of the population of Great Britain and 0.3% of Northern Ireland. The sampling frame is the Postcode Address File in Great Britain and the Valuation List in Northern Ireland. A given household remains in the BLFS sample for five consecutive quarters. To increase sample size without including repeat observations, I select each household's first quarter of participation, and pool data from Fall 1996 to Fall 2004. Interviews are face-to-face with at least one adult household member, though information is gathered on all household members. Interviewers speak only English, but carry survey descriptions in nine languages, and arrange for interpreters as needed. Response rates range from 80 to 85% (Office for National Statistics, 2003).

The MZ is an annual household survey. It includes approximately 1% of all households, though the scientific use files are anonymized 70% sub-samples (ZUMA-Files). Key information, such as an indicator of migrant status among German citizens, is collected only from a 45% random sub-sample of the original, so net coverage is 0.3% for each survey year. The MZ is a single-stage cluster sample (a cluster contains approximately nine residences), using as sampling frames the census of the population for western Germany and the population register for eastern Germany. Interviews are generally conducted in person; in a minority of randomly selected cases, interviewers administer written surveys. The survey instrument is in German. A single adult may provide information on other household members. Each year, three-quarters of households from the previous year remain in the sample, but we cannot track which households. To attain a larger sample size without including households more than once, I pool data from 1996 and 2000. Participation in the MZ is legally mandatory, except for specific questions, on which non-response reaches 10% (Lechert and Schmidt, 2000; Lehnert et al., 2003).

LINDA links data from Swedish population, tax, and employment registers by individual identity numbers, which are chosen via a simple random sample. The entire household of each sampled individual is included in the dataset. LINDA includes a large over-sample of immigrants; 20% of immigrants and 3.3% of the native-born population are included. Sample weights correct for the oversampling of immigrants (Edin and Fredriksson, 2000). Everyone sampled is included, since the information is drawn from registers. Information on filing tax forms, a primary source of LINDA data, is available in 14 languages (Skatteverket, 2013). I use only 2002 LINDA data.[3]

Income and poverty measures

An individual is considered in poverty if his/her adjusted share of household income (household income divided by the square root of household size) is less than half the median.[4] Separate calculations are conducted for market income and disposable income.[5] There are many ways of calculating poverty thresholds and adjusting income shares for household size (Atkinson et al., 1995; Buhmann et al., 1988). As Gottschalk and Smeeding (1997) have demonstrated, such choices affect poverty levels more than cross-national differences.[6]

The analysis is limited to households in which the head of the household and his/her spouse (if present) are aged 25 to 59. All members of households satisfying this criterion, including children, are included in the analysis. Issues of poverty are different in pensioner and student households, so the focus on households headed by the working-aged population is common (Moller et al., 2003). However, unlike most other studies, I exclude households in which the head or spouse is 60 or older (i.e. likely pensioner households) from calculations of the poverty threshold. I do this out of necessity: the British data contain no information on pension income.[7]

I have harmonized income information across datasets to the greatest extent possible. Unfortunately, only Swedish data contain pre- and post-tax/transfer income information. The BLFS only contains information on market income, while the German MZ only contains information on net (post-tax/transfer) income.

The BLFS contains information on wage and salary income from first and second jobs, which can be aggregated to calculate market income at the family level. The primary effect of market income other than earnings on working-aged families is to increase the incomes of high-end earners – which has no effect on the poverty threshold defined as a proportion of median income. Another limitation of the BLFS is that self-employed workers are not asked to report earnings, so I exclude families with self-employed workers from market poverty analyses.[8]

The German MZ asks respondents to report individual net income, from all sources, for each family member. Previous research suggests that the single-question format elicits responses that revert to the mean (Micklewright and Schnepf, 2010), so poverty is likely underestimated. This strengthens the findings, because Sweden has lower poverty, so cross-national differences are probably understated. Income responses in the MZ are categorical, but detailed. I recode the responses to each category's midpoint, and then aggregate to the family level.[9]

Swedish data come from tax registers and are very detailed. To make the Swedish market poverty figures as comparable as possible to the British ones, I exclude non-earnings market income from the calculations. I also exclude families with self-employment income from market poverty analyses, for the sake of comparability with the British data.[10]

Independent variables

Age. I control for the age of the family's head, if he or she is single, or the average age of the two partners. The variable is centered at 25, so that the baseline effect refers to a family within the age range of the data. Age squared is also included.

Education. I include two education variables: the education of the family's head, and if a spouse or partner is present, his or her education also. I have coded these variables so that the first reflects women's education, and the second reflects men's education, regardless of family structure. I use UNESCO's ISCED-97 schema (UNESCO, 1997). The categories are (1) primary; (2) lower secondary; (3) upper secondary; (4) post-secondary, non-tertiary; (5) tertiary (no advanced research qualification); and (6) tertiary (advanced research qualification). Category 6 is small and combined with category 5. ISCED codes are directly available in LINDA (Statistiska centralbyrån, 2000); coding procedures for the BLFS and MZ are based on external documentation (OECD, 1999). The excluded category is ISCED 1.[11]

Family structure. I distinguish six family structures: couples with and without children under 18, single men with and without children under 18, and single women with and without children under 18. Couples without minor children are the baseline category.

Immigrant origins. The origins variable distinguishes immigrant families with 33 specific national origins (i.e. in which the head and/or spouse are of the given national origin) from baseline native-born families.[12] An "immigrant family" is one in which at least one partner is foreign-born.[13] Each immigrant

group can be identified in at least two of the three receiving countries. The origin countries include some within the pre-2004 "EU-15" (Austria, the UK, France, Germany, Greece, Italy, the Netherlands, Portugal, and Spain); other highly developed countries (Australia, Canada, Japan, and the US); countries in eastern Europe (Poland, Romania, the former Yugoslavia, and the former Soviet Union); and less-developed countries outside of Europe or on Europe's periphery (Algeria, Bangladesh, China, Colombia, Egypt, India, Iran, Iraq, Morocco, Pakistan, the Philippines, Somalia, Sri Lanka, Turkey, Uganda, and Vietnam). I also include a heterogeneous category of "other" immigrants, which comprises around 45% of immigrants to the three countries.[14]

Immigrant family type. Given that I already include a family structure variable and an origins variable, "immigrant family type" consists of three categories: a family headed by an endogamous immigrant couple, a family headed by an intermarried immigrant/native-born couple, and a family headed by a single immigrant householder. Note that immigrant family type effects are constrained to be the same across origins groups to keep comparison manageable.

Years since migration. For foreign-born heads and spouses, I include variables for years since migration, coded 0 for native-born heads and spouses.[15] One reflects women's years since migration, and the other reflects men's years since migration, regardless of family structure. I also include a squared term for each. These variables estimate the extent to which there is assimilation out of poverty for immigrant families.

Labor force attachment. Although data constraints prevent me from exploring the effects of employment outcomes on poverty in detail, I include in select models a simple indicator of a household's degree of labor force attachment: whether the head and/or spouse are non-employed, which I define as either formally unemployed or out of the labor force. I code the household non-employment variable 0 if a single householder or both members of a couple-headed household are working and 1 if the head and/or spouse are non-employed.[16]

Models

I predict market-generated or state-mediated poverty separately by country.[17] This model takes the basic logistic form

$$ln[p_i/(1 - p_i)] = a + \bm{b}\bm{x} + e$$

where p_i is the probability of poverty for the ith individual, $\bm{x}$ is a vector of explanatory variables, and $\bm{b}$ is a vector of parameters to be estimated. Note that, though the unit of analysis is the individual, all variables refer to household characteristics and are therefore identical for individuals within a single household. Standard errors are adjusted accordingly.

Results

I begin with descriptive statistics of the variables in the analysis. I then discuss multivariate results, focusing first on immigrant-specific risks of poverty, and then on general patterns of poverty and their effect on immigrants.

Descriptive statistics

Table 1 presents descriptive statistics for key variables in the analysis. To simplify presentation for this table only, I use the dichotomy of native-born versus immigrant family members. Sample sizes and select descriptive statistics by immigrants' countries of origin and destination are in the online appendix.

Table 1. Descriptive statistics by family's immigrant status.

	Members of native-born families			Members of immigrant families		
	Sweden	Germany	UK	Sweden	Germany	UK
Age of head/average age of head & spouse	41.8	41.4	40.0	41.7	40.3	39.6
Education (female head/spouse)						
% primary	2.1	4.6	23.1	11.9	17.8	27.4
% lower secondary	8.9	12.9	39.4	12.2	32.2	22.9
% upper secondary	51.8	57.1	14.1	43.8	32.2	17.1
% post-secondary, non-tertiary	4.8	14.7	10.3	3.9	9.0	8.6
% tertiary	32.5	10.8	13.0	28.2	8.8	24.0
Education (male head/spouse)						
% primary	4.7	4.4	18.1	9.1	12.9	21.1
% lower secondary	12.3	6.6	24.6	12.4	24.3	15.5
% upper secondary	51.1	52.5	30.0	46.0	40.7	22.8
% post-secondary, non-tertiary	8.7	18.3	9.1	5.9	9.8	6.7
% tertiary	23.1	18.3	18.2	26.6	12.2	33.8
Family structure						
% couple, no children	16.1	27.8	20.3	15.2	22.4	16.3
% couple with children	47.4	50.1	47.1	55.7	63.4	55.0
% single man, no children	14.5	8.7	8.0	9.4	5.5	7.0
% single man with children	2.0	0.8	1.5	1.3	0.6	1.0
% single woman, no children	11.0	7.0	7.0	7.8	3.9	6.6
% single woman with children	9.0	5.6	16.3	10.7	4.2	14.1
Labor force attachment						
% head and/or spouse non-employed	6.3	33.6	31.7	20.6	53.0	47.7
% in market-generated poverty	14.0		29.5	32.5		39.9
% in state-mediated poverty	3.9	6.8		10.3	14.7	
Immigrant family type						
% both partners immigrant				36.6	62.3	32.3
% native-born/immigrant couple				34.2	23.5	39.1
% immigrant single				29.2	14.2	28.6
Avg. years since migration (female head/spouse)				16.9	15.1	18.0
Avg. years since migration (male head/spouse)				17.8	17.0	20.1
N	505,770	125,391	320,339	403,598	47,373	47,074

Nativity-based differences in education have a unique profile in each country. In Germany, members of immigrant families are considerably less likely than members of native-born families to have medium to high levels of education, and are highly over-represented at the low end of the educational spectrum. In Sweden, we see that there is more educational polarization among members of immigrant families, with under-representation in the middle of the educational spectrum, particularly among immigrant men. In the UK, there is similar under-representation in the middle of the educational spectrum for members of immigrant families. In short, only in Germany do immigrant families have unambiguously lower levels of education than natives, which is consistent with the history of guest worker programs. Interestingly, immigrants to Sweden do not have lower levels of education when directly compared to their immigrant counterparts in the UK; in fact, a far larger proportion in the UK than in Sweden is found at the lowest level of education. This calls into question the idea that the UK, because of its more restrictive migration policies or higher level of income inequality, attracts more skilled migrants. Nonetheless, migrants to Sweden face greater disadvantage vis-à-vis their native-born counterparts, because native levels of education are far higher in Sweden than in the UK.

Detailed figures in the online appendix suggest that some post-colonial groups in the UK (e.g. Bangladeshis and Pakistanis) are particularly educationally disadvantaged compared to their Swedish counterparts, while other groups are more educationally similar in the two countries, consistent with the idea that post-colonial migrant streams have been least selective. Still, there is little evidence that higher inequality or more selective migration policies have resulted in more selective flows of migrants to the UK, compared to Sweden. With a few exceptions, immigrants in Germany have lower levels of education than their counterparts in the other two host countries, even controlling for country of origin.

Turning to the next set of variables in Table 1, we see that membership in an immigrant family also has family structure correlates in all three countries. In particular, immigrant families are more likely to have children and to be headed by a couple rather than a single adult. Importantly, we see proportionally fewer single-mother families among immigrants than natives in Germany and the UK, but the opposite in Sweden. Thus, if being in a couple-headed household means lower levels of poverty, this will disproportionately benefit immigrant families. On the other hand, if children are associated with higher rates of poverty, this will disproportionately harm immigrant families.

There are also several interesting patterns with respect to labor force attachment. First, in all three countries, immigrant families are more likely to experience non-employment. This is a relatively unsurprising result of previously documented barriers that immigrants face in the labor market, combined with lower rates of labor force participation, particularly among women. (Interested readers can see variation across origin countries in the online appendix.) The relative difference between immigrant and native-born families is largest in Sweden, but only because native-born families are less likely to be non-employed in Sweden. In Sweden, immigrant households are more than three times more likely than native-born households to experience non-employment. In Germany and the UK, the difference is smaller. However, immigrant *and* native-born families in Sweden are far less likely to experience non-employment compared to their counterparts elsewhere. This is largely because women in Sweden, native-born and immigrant alike, are more likely to be working.

The final variables in this table are specific to immigrants: immigrant family type and years since migration. Intermarriage rates vary widely across specific immigrant groups, and specific groups vary in relative size across countries, so I do not wish to focus too much attention here on differences across host countries. My focus in this article is not on causes of or even cross-national variations in rates of intermarriage, but on intermarriage as a buffer for immigrant poverty. (Interested readers can find intermarriage rates by country of origin in the online appendix.) With that in mind, nearly a quarter of those in ''immigrant'' families in Germany reap potential benefits of a native-born head or spouse. The figures for Sweden and the UK are even higher: 34% and 39%. Finally, at the bottom of Table 1, we see that immigrant men have generally been in their host countries longer than immigrant women, probably a reflection of migration in which a man migrates first, and then sends for remaining family members. In addition, we see that immigrants in the UK have been there for slightly longer on average than their counterparts in Sweden or Germany, reflecting the UK's somewhat longer history of immigration.

Immigrant-specific risks of poverty

The remaining results use a more complex multivariate framework to examine cross-national differences in poverty, which is important because, as we have just seen, family characteristics vary in significant ways between immigrant and native-born populations and across host countries. I begin with a discussion of immigrant-specific risks of poverty, and then contextualize these risks by considering the more general contours of poverty in the three societies.

Figure 1 illustrates country of origin effects on poverty for the three host countries, controlling for all independent variables, except labor force attachment.[18] Interested readers can find results from the logistic regression models on which the calculations in this figure are based in Table 2 and online appendix Table A2. Figure 1 displays marginal (average partial) effects of each country of origin in terms of
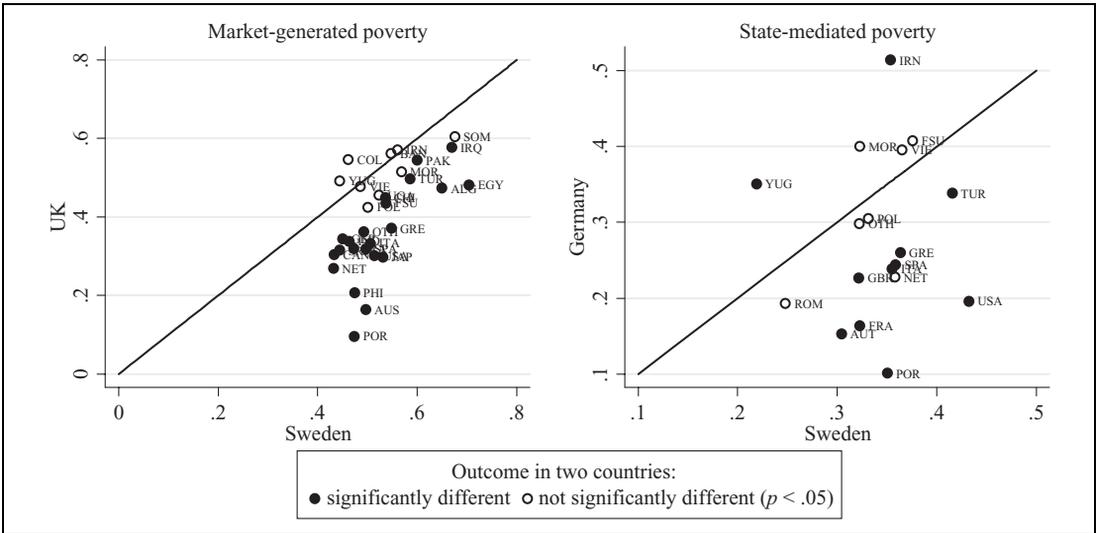
Figure 1. Marginal effects of immigrant origin on probability of poverty. Plotted points are marginal effects of each country of origin (vs. the native-born baseline) in terms of predicted probabilities. Positive values mean higher poverty in immigrant families. A statistically significant difference in differences between host countries (determined by a Wald chi-square test) is indicated by a filled data point. Data points above the identity line ($y = x$) indicate that a given group experiences less of a poverty gap with natives in Sweden.

Notes: Country codes: ALG = Algeria, AUS = Australia, AUT = Austria, BAN = Bangladesh, CAN = Canada, CHI = China, COL = Colombia, EGY = Egypt, FRA = France, FSU = Former Soviet Union, GBR = United Kingdom, GER = Germany, GRE = Greece, IND = India, IRN = Iran, IRQ = Iraq, ITA = Italy, JAP = Japan, MOR = Morocco, NET = Netherlands, PAK = Pakistan, PHI = Philippines, POL = Poland, POR = Portugal, ROM = Romania, SOM = Somalia, SPA = Spain, SRI = Sri Lanka, TUR = Turkey, UGA = Uganda, USA = United States, VIE = Vietnam, YUG = Former Yugoslavia, OTH = Other immigrant.

predicted probabilities. Model coefficients for Germany, Sweden, or the UK are used to predict poverty probabilities of hypothetical groups of immigrants and natives, assuming these two groups have distributions of characteristics that are the same as the Swedish sample as a whole. These are average partial effects, because the underlying probabilities are first calculated and then averaged (rather than calculated based on the means of covariates) (Wooldridge, 2010). The differences between these two hypothetical groups' poverty probabilities are plotted here; positive values indicate that immigrant families have a higher poverty risk than identical native-born families. The statistical significance of the difference in differences between host countries (determined by a Wald chi-square test) is indicated by a filled data point. The lines in each half of the figure are lines of identity ($y = x$). Data points above this line indicate that a given group does relatively better in Sweden (i.e. experiences less of a poverty gap with natives), while points below it indicate that the group does relatively worse in Sweden. The effects in these figures refer to a couple in which both partners are foreign-born and have been in the host country less than one year, versus a couple in which both partners are native-born.

We see a very wide range of poverty outcomes across different immigrant groups, but for all groups, we see higher poverty rates than for native-born families, in all three countries. There is some variation across groups in terms of whether poverty rates are lower in one country versus another, but in general, poverty gaps between immigrants and the native-born are larger in Sweden. For example, looking at the Sweden/UK comparison of market-generated poverty in the left half of this figure, an immigrant family from Portugal ("POR") has lower chances of poverty (relative to the native-born) in the UK than in

Table 2. Selected effects of demographic and human capital characteristics on log odds of poverty, by country.

	Market-generated		State-mediated		UK vs. Sweden	Germany vs. Sweden	SM vs. MG, Sweden
	Sweden	UK	Sweden	Germany			
Immigrant family type							
Native-born/immigrant couple	−1.675***	−1.358***	−1.333***	−1.364***	0.317***	−0.032	0.342***
Immigrant single	−1.755***	−1.416***	−1.523***	−1.616***	0.339***	−0.092	0.232***
Years since migration (women)	−0.074***	−0.044***	−0.098***	−0.082***	0.030***	0.015	−0.023***
Years since migration squared (women)	0.0010***	0.0004***	0.0013***	0.0012***	−0.0006***	−0.0002	0.0004***
Years since migration (men)	−0.045***	−0.039***	−0.044***	−0.103***	0.006	−0.060***	0.001
Years since migration squared (men)	0.0005***	0.0003***	0.0003***	0.0021***	−0.0001	0.0018***	−0.0002***
Age	−0.080***	−0.102***	−0.094***	−0.096***	−0.022***	−0.002	−0.014***
Age squared	0.0021***	0.0032***	0.0019***	0.0025***	0.0011***	0.0006***	−0.0003
Education (women)							
Lower secondary	−0.173***	−1.033***	0.174***	−0.251***	−0.860***	−0.424***	0.346***
Upper secondary	−0.812***	−1.368***	−0.227***	−0.725***	−0.556***	−0.498***	0.586***
Post-secondary non-tertiary	−0.551***	−2.095***	0.113*	−1.225***	−1.545***	−1.337***	0.663***
tertiary	−1.436***	−2.366***	−0.444***	−1.404***	−0.930***	−0.960***	0.992***
Education (men)							
Lower secondary	−0.065*	−0.876***	0.118**	0.037	−0.811***	−0.081	0.183***
Upper secondary	−0.469***	−1.130***	−0.346***	−0.382***	−0.661***	−0.035	0.123**
Post-secondary non-tertiary	−0.569***	−1.747***	−0.443***	−0.838***	−1.178***	−0.394***	0.125
tertiary	−0.706***	−1.858***	−0.506***	−1.501***	−1.152***	−0.995***	0.200***
Family structure							
Couple w/ children	0.560***	0.949***	0.298***	0.767***	0.389***	0.469***	−0.262***
Single man, no children	1.206***	0.810***	1.702***	1.920***	−0.396***	0.218**	0.496***
Single man w/ children	1.372***	1.882***	2.229***	2.111***	0.510***	−0.117	0.857***
Single woman, no children	1.786***	0.955***	1.505***	2.083***	−0.830***	0.577***	−0.280***
Single woman w/ children	2.944***	3.103***	2.005***	2.919***	0.159***	0.914***	−0.939***
Constant	−1.578***	−0.025	−3.124***	−2.249***	1.553***	0.875***	−1.546***

***$p < 0.01$, **$p < 0.05$, *$p < 0.1$, based on t-tests for coefficients and Wald chi-square tests for cross-national differences. Additional coefficients for this model are in Online Appendix Table A2.

Sweden, and this difference is statistically significant. In the UK, the difference in poverty risk between Portuguese and native-born families is around 10 percentage points, whereas in Sweden, it is around 45 percentage points. This basic pattern holds for the vast majority of immigrant families from other countries. So the cross-national pattern here is quite clearly that nativity-based *inequality* in poverty rates is larger in Sweden than in the UK.

The right-hand panel of Figure 1 displays differences in origin effects on state-mediated poverty in Germany versus Sweden. The cross-national pattern in the figure is also quite clear: immigrants do significantly better in terms of poverty in Germany than in Sweden, relative to the native-born in each country. There are two statistically significant exceptions; families with origins in Yugoslavia and Iran have lower relative poverty rates in Sweden. Furthermore, immigrant families from several other countries fare equivalently in the two countries. Nonetheless, the vast majority of immigrant groups fare relatively better (i.e. face smaller gaps relative to the native-born poverty baseline) in Germany. Note that even

immigrants from Turkey, well-known to be quite disadvantaged in Germany, actually face a smaller poverty gap in Germany than in Sweden. The poverty gap between Turkish and native-born families is under 35 percentage points in Germany, but over 40 percentage points in Sweden – a concerning poverty gap in either country, but nonetheless larger in Sweden.

Therefore, the evidence here suggests, quite unambiguously, that immigrant-specific disadvantages in terms of poverty are larger in Sweden than in either of the other two countries. Several factors may explain this pattern. As noted in the literature review above, immigrants to Sweden have generally been shown to face larger barriers in the labor market than their counterparts in the other countries. Though it is not extremely surprising that this affects market-generated poverty, the fact that the pattern is still so marked for state-mediated poverty suggests that the strong Swedish welfare state is not enough to counteract the penalties that immigrants face in the Swedish labor market.

As we saw above in the descriptive statistics, at least a quarter of individuals in immigrant families have access to the potentially poverty-reducing effects of a native-born head or spouse, who likely has advantages in the labor market. I consider here whether immigrant family type is associated with poverty, and how any cross-national differences in the effects of family type modify our conclusions about immigrant poverty in a cross-national context. The effects at the top of Table 2 represent the difference between various immigrant family types and the baseline, a family in which the head and spouse are foreign-born. The first thing to note is that immigrant families in which one partner is native-born have significantly lower poverty rates in all three countries than immigrant families in which both partners are foreign-born. The magnitude of these effects is large and goes a long way toward reversing the baseline immigrant disadvantages we observed in Figure 1. In other words, having a native-born partner is a very good buffer against poverty for immigrants.

We also observe that single immigrant householders face a less severe poverty disadvantage than families in which immigrants are partnered with each other. In fact, these coefficients are similar in magnitude to those for immigrant/native-born couples. So the additional poverty risk that immigrants face by partnering with each other is similar when compared either to single immigrants or to couple-headed families in which one partner is native-born. This supports the idea that immigrant disadvantage is concentrated when immigrants partner with each other. That is, family-level outcomes are not a direct outgrowth of individual-level outcomes in the labor market and as such, deserve attention in their own right.

The cross-national patterns that we observed above in Figure 1 are generally not altered when we look at these other immigrant family types. Family type effects are somewhat larger in Sweden than in the UK, but the magnitude of the difference is quite small compared to the magnitude of cross-national differences in Figure 1. Differences between Germany and Sweden in the magnitude of the immigrant family type effects are statistically indistinguishable. So the conclusion above, that gaps in poverty rates between immigrant and native-born families are larger in Sweden than in the other two countries, holds even when we look at other immigrant family types.

The comparison of immigrant family type effects in Sweden before and after redistribution shows that inequalities *among* immigrant family types decrease in the process of income redistribution. The more advantaged immigrant family types lose ground relative to their counterparts in less advantaged immigrant family types. That is, immigrant families who have some native-born members are less likely to fall into poverty in the first place and therefore less likely to benefit from redistribution than are more disadvantaged families with two immigrant spouses.

In findings thus far, foreign-born household heads and their spouses were assumed to be newcomers, to have just arrived in their host countries. As Figure 2 shows, immigrants who have been in the host country longer climb out of poverty, so immigrant/native-born poverty gaps are less extreme than previously presented among those who are less recent arrivals. This is true for men's and women's years since migration, and it is true in all three host countries.

But the more important question for this analysis is whether exit out of poverty is more rapid in some countries than in others, thereby changing the cross-national patterns. Immigrant families do seem to exit market-generated poverty more quickly in Sweden than in the other two countries if a
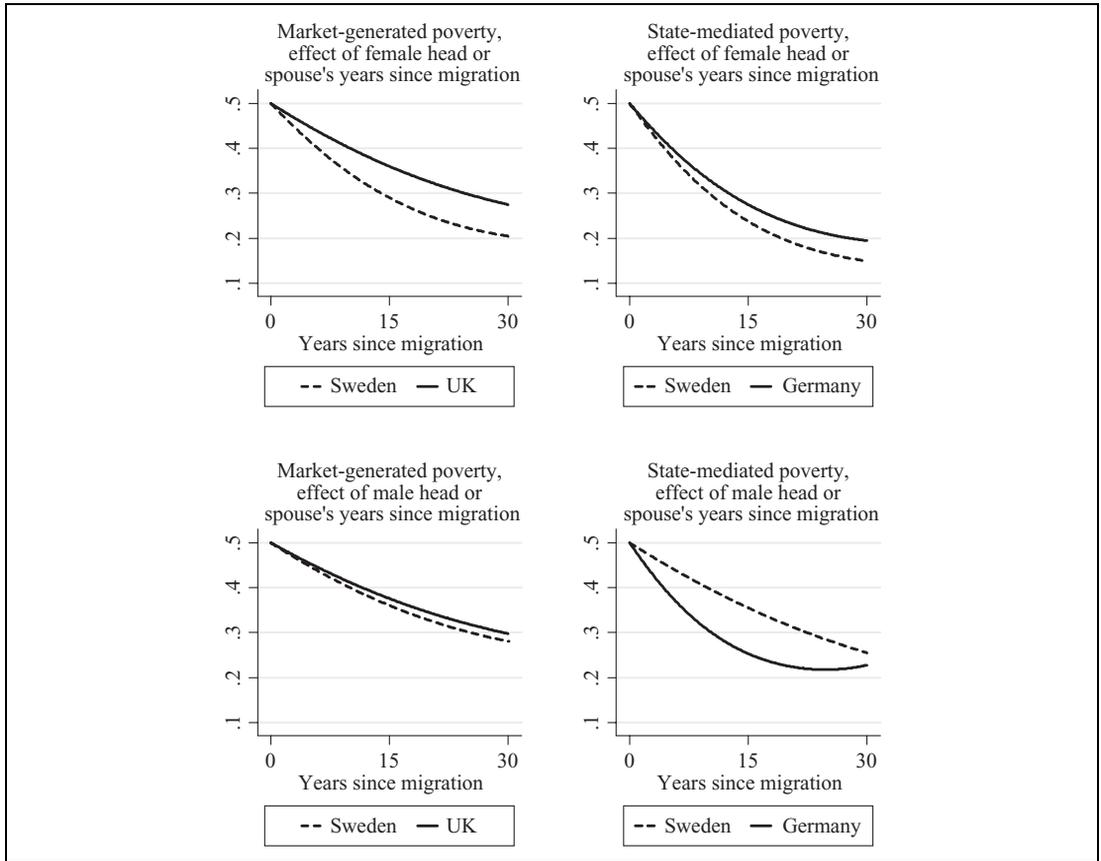
Figure 2. Variation in predicted probability of poverty among immigrant families, by years since migration. Predicted probabilities are fixed at .5 for years since migration = 0, and changes therefore pertain to a hypothetical immigrant family who begins with a .5 probability of poverty.

female family head or spouse has been in the country for a longer period of time. Note, however, that the cross-national differences in rates of assimilation are really quite small compared to the magnitude of cross-national differences in Figure 1, so the overall pattern still holds, even among very long-settled immigrant families. In the comparison of male family heads' or spouses' years since migration, we see a different cross-national pattern. Here, there is only a very minor difference between Sweden and the UK, and the difference between Germany and Sweden is in the opposite direction, such that immigrant families rise out of poverty more quickly in Germany than in Sweden as an immigrant man is in the country longer. This pattern for men is consistent with the expected effect, elaborated earlier, that immigrant poverty disadvantages would wane more quickly in Germany than in Sweden, given the importance of work history in the German welfare system. It is unclear why this would pertain to immigrant men and not to immigrant women, though it is somewhat consistent with the male breadwinner model which is more prominent in Germany. In a breadwinner system, an immigrant man's years in the country is a better indicator of prior labor force attachment than an immigrant woman's, and so it is men's years since migration that would be expected to have a larger effect on poverty in Germany than in Sweden, though this explanation remains speculative.[19]

Overall, the story of immigrant-specific risks of poverty in a cross-national perspective is one of larger gaps in poverty between immigrant and native-born families in Sweden than in Germany or the UK. Although immigrant families' poverty rates vary considerably, depending on country of

Table 3. Predicted probabilities of poverty for families with various profiles.

| | Market-generated | | | | State-mediated | | | |
| | Sweden | | UK | | Sweden | | Germany | |
	Prob.	SE	Prob.	SE	Prob.	SE	Prob.	SE
Couples								
Both tertiary education, no kids	.0116	.0004	.0063	.0003	.0063	.0003	.0024	.0003
Both primary education, no kids	.0908	.0037	.3035	.0062	.0161	.0011	.0418	.0033
Both primary, kids	.1487	.0052	.5295	.0065	.0215	.0015	.0858	.0059
Single women								
Tertiary education, no kids	.1241	.0027	.0961	.0034	.0451	.0015	.0791	.0058
Primary education, no kids	.3732	.0077	.7171	.0067	.0685	.0031	.2592	.0141
Primary education, kids	.6548	.0071	.9066	.0023	.1082	.0043	.4468	.0189

Predicted probabilities in this table are calculated by setting age to 40 and the country of birth variable to native-born. All other variables are specified in the table or set to the default value for native-born families.

origin, immigrant family type, and years since migration, these cross-national patterns are quite robust.

General risks of poverty

Differences in poverty rates across groups within a country are clearly important: they are an indicator of material inequalities within a given country. But differences between groups, such as between immigrant and native-born families, must be considered in combination with the question of whether this inequality exists in a context of high or low native-born poverty. In this section, I address this question by looking at patterns of poverty among native-born families. Immigrants have higher poverty, but it is important to ask – compared to what? This matters for the interpretation of both within-country group differences and cross-national patterns.

As prior literature and descriptive statistics above have established, Sweden has the lowest poverty rate of the three countries. But clearly, some sub-groups are more at risk than others, and given immigrant families' unique characteristics, such as their greater likelihood to have children, etc. discussed above, some cross-national differences have a disparate impact on immigrant families. I focus here on variables that have the largest but also most cross-nationally variant effects on poverty: education and family structure. Table 2 displays coefficients related to such general determinants of poverty, and Table 3 shows several illustrative predicted probabilities of poverty based on these coefficients, setting age to 40 and the country of birth variable to native-born. Because the predicted probabilities are for native-born families, years since migration and immigrant family type coefficients do not pertain and are set to the default constant value. Note that education and family structure effects are constrained to be the same for native and immigrant families within a given country, such that predicted probabilities for immigrants (which I discuss more below) are based on the same coefficients.

I begin by looking at those families least at risk of poverty: those with no children and headed by the highly educated. The most important thing to note for families with this profile is that cross-national differences are minimal. In fact, among couple-headed families with no children we see that poverty figures are, if anything, somewhat higher in Sweden than in the other two countries – but uniformly very low. Among single women with higher education and no children, poverty is also lower in the UK than in Sweden, but somewhat higher in Germany than in Sweden. The point is that poverty is quite low for these human-capital-rich families, similarly so in Sweden and elsewhere.

But when we turn to figures for families headed by adults with low levels of education, we see a considerably different picture. Not surprisingly, poverty rates are substantially higher in all three countries than they were for highly educated families, but more importantly, extreme cross-national differences emerge. Poverty gaps by education are much larger in Germany and the UK than they are in Sweden, so for families with low levels of education, Sweden is an unambiguously more advantageous country of residence in terms of poverty risk. We see particularly high rates of poverty among single women in the UK and Germany. Well over 50% of single women with low education are in market-generated poverty in the UK, even without children, and one-quarter of single women with low education and no children are in poverty in Germany, *even after* taxation and transfers.

Cross-national patterns in the effects of children on probabilities of poverty are also unambiguous. Families with children have higher poverty rates everywhere and regardless of whether one or two parents are present, but this is significantly less so in Sweden than in Germany or the UK. Among families with children and with low levels of education, cross-national gaps generally widen even further than in previous comparisons, with Sweden posting comparatively low poverty rates. This finding has a disparate impact on immigrant families, since they are more likely to have children than native-born families. Note that there are large cross-national differences in the poverty risks of families with children before *and* after taxes/transfers, so this is not only a function of child-friendly redistribution policies, but also of women's higher chances of being in the labor market in Sweden, even with young children at home (Casper et al., 1994).

These findings show that families with children and/or headed by adults with low levels of education are better off in Sweden than elsewhere, while families with no children and/or headed by adults with high levels of education face similarly low risks of poverty in all three countries. Immigrants disproportionately fall into the higher-poverty-risk categories, and in this way, they benefit from Sweden's poverty-reducing institutions, even though immigrant/native-born gaps in poverty are larger in Sweden.

These cross-national differences in patterns of native-born inequality also affect interpretation of cross-national differences in origin effects on poverty, discussed above. For immigrant families with relatively advantageous characteristics, such as higher education, immigrant-specific disadvantages in Sweden translate into higher absolute poverty rates in Sweden, albeit at a very low level of poverty. But for immigrant families with less advantageous characteristics, immigrant-specific disadvantage is more than made up for by the lower native-born poverty baseline in Sweden.

Figures 3 and 4 illustrate these patterns vividly. These are predicted probabilities of poverty for each immigrant group (rather than differences between immigrants and the native-born, as in Figure 1). Like the predicted probabilities in Table 3, they are based on coefficients in Table 2. Age is set to 40, immigrant family type is set to foreign-born head and spouse and the years since migration variables are set to 0, with other variables (education and family structure) varying across the different panels of the figures. The statistical significance of cross-national differences is indicated by filled data points. The lines are identity lines ($y = x$); data points above them indicate that the immigrant group faces higher poverty in Germany or the UK while data points below the line indicate that the group faces higher poverty in Sweden. We can contrast families at high risk of poverty (couples with primary education and children, leftmost panel) with families at low risk of poverty (couples with tertiary education and no children, rightmost panel) in these figures. Cross-national differences for families at high risk of poverty, in the leftmost panels, are consistent in direction; the majority of immigrant groups with this profile do better in Sweden than in Germany or the UK, as evidenced by the fact that predicted probabilities are above the identity line. Looking at the families at low risk of poverty in the rightmost panels, note that cross-national differences are also consistent in direction, and here without a single exception. These families do uniformly better in Germany and the UK than in Sweden. We can conclude from these figures among families at high risk of poverty that the larger differences in poverty between immigrant and native-born families in Sweden that we saw in Figure 1 are in many ways overshadowed by the very large differences in the native-born baseline of poverty. Sweden might have more inequality in poverty, but a low overall poverty rate makes that inequality arguably less salient.
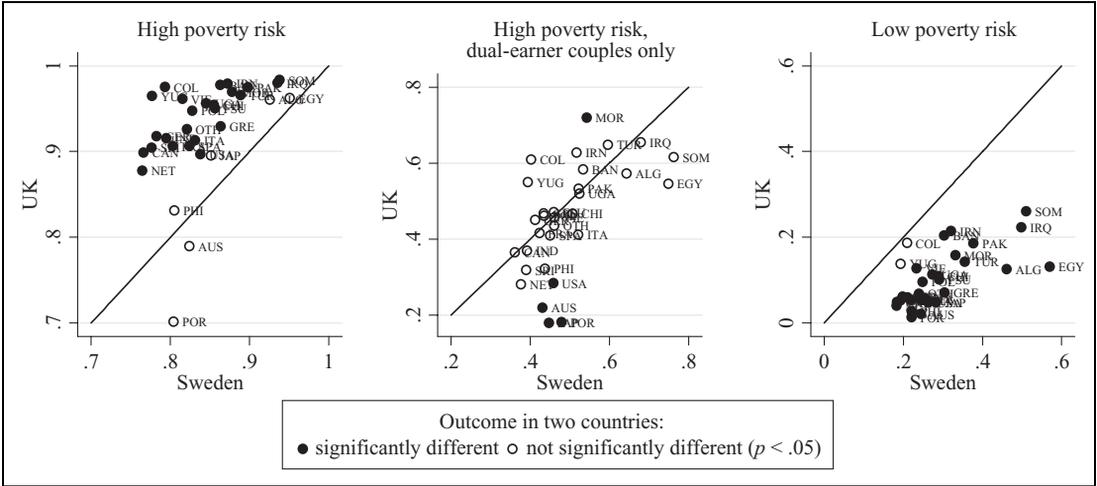
Figure 3. Predicted probabilities of market-generated poverty. Plotted points are predicted probabilities of poverty for the given group. Data points above the identity line ($y = x$) indicate that a given group experiences lower poverty in Sweden. Figures control for age (40), immigrant family type (foreign-born head and spouse), and years since migration (0). Families at low poverty risk are couples with no children and tertiary education. Families at high poverty risk are couples with children and primary education. The second panel controls for labor force attachment and displays poverty probabilities for dual-earner couples. See notes to Figure 1 for country codes.
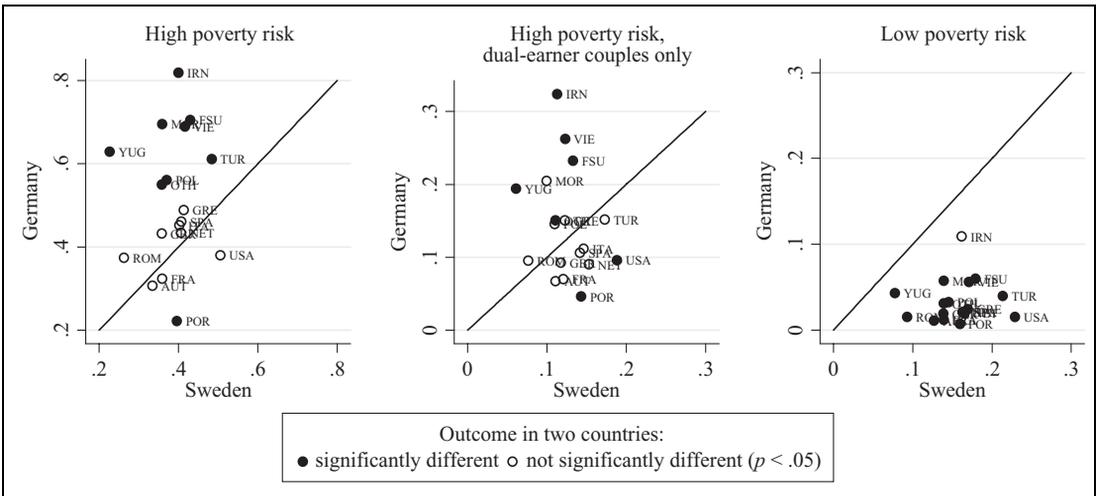

Figure 4. Predicted probabilities of state-mediated poverty.
Note: Country codes: ALG = Algeria, AUS = Australia, AUT = Austria, BAN = Bangladesh, CAN = Canada, CHI = China, COL = Colombia, EGY = Egypt, FRA = France, FSU = Former Soviet Union, GBR = United Kingdom, GER = Germany, GRE = Greece, IND = India, IRN = Iran, IRQ = Iraq, ITA = Italy, JAP = Japan, MOR = Morocco, NET = Netherlands, PAK = Pakistan, PHI = Philippines, POL = Poland, POR = Portugal, ROM = Romania, SOM = Somalia, SPA = Spain, SRI = Sri Lanka, TUR = Turkey, UGA = Uganda, USA = United States, VIE = Vietnam, YUG = Former Yugoslavia, OTH = Other immigrant.

The middle panel of Figures 3 and 4 contains figures based on a model that includes a control for labor market attachment (whether the head and/or spouse is non-employed). The predicted probabilities in this middle panel are based on dual-earner couples (in which both partners are employed), but still refer to couples with children and low education, and therefore at relatively high risk of poverty. What we see is that Sweden, even for families at high risk of poverty, looks less favorable once we control for labor market attachment. The interpretation of this is that labor force attachment, and in particular women's higher rates of employment in Sweden, explains *why* families who are otherwise at high risk of poverty, due to low levels of education and the presence of children, fare better in Sweden. In other words, if the proportion of dual-earner couples were the same in Sweden as in the UK or Germany, immigrant families' rates of poverty would look indistinguishable in the cross-national comparisons. However, the figures for families irrespective of labor market attachment are those in the leftmost panel of the figures, and Sweden looks, on the whole, like the more beneficial context for immigrants with this demographic profile at high poverty risk.

Summary and conclusion

This article analyzes immigrant poverty in cross-national perspective. Findings suggest that immigrant and native-born families have more divergent poverty risks in Sweden than is the case in Germany or the UK. This is true before taxation and transfers, a not surprising result of immigrants' apparently overall greater labor market disadvantages in Sweden. More surprising is that it is still true after the state redistributes income. Even the very effective Swedish welfare state cannot totally make up for the severe disadvantages that immigrants face in the Swedish labor market.

There is an important caveat, however. Poverty rates are similarly low in all countries for relatively advantaged native-born families, such as those with high human capital. But relatively disadvantaged native-born families, such as those with low human capital or with children, fare much better in Sweden, before and after income redistribution. This means that immigrant families with disadvantageous characteristics are better off in Sweden, despite higher immigrant-specific risks of poverty.

The data harmonized for and used in the analysis in this article date from the late 1990s and early 2000s. Interested readers might wonder about developments in poverty rates since then. Recent studies drawing on EU-SILC (Statistics on Income and Living Conditions) data can provide us with a slightly more contemporary picture (though small sample sizes in the SILC data prevent the kind of nuanced analysis by immigrants' countries of origin that I provide in this article). For example, Cantillon (2011) documents and provides possible explanations for the general stasis in working-aged state-mediated poverty rates in EU countries over the decade leading up to the recent economic crisis, despite general economic growth and growth in employment rates specifically. She finds "an overall standstill since the mid-1990s insofar as financial poverty within the working-age populations is concerned" (437) and attributes this to the fact that "social investment state" policies that promote employment over direct income transfers have most benefited families least at risk of poverty. Nonetheless, she concedes that Scandinavian countries that have always relied on employment-facilitating policies (along with strong redistribution) are those that continue to post the lowest poverty rates (445). Findings in de Graaf-Zijl and Nolan (2011) and Vandenbroucke and Vleminckx (2011) corroborate the basic finding of stasis in state-mediated poverty rates. However, stasis can be viewed as a relatively positive outcome, given that underlying market-generated inequality has been on the rise in some contexts. For evidence of this in Germany, see Fuchs-Schündeln et al. (2010). An analysis of immigrant/native poverty gaps across EU countries based on SILC data from 2004 to 2007 illustrates the same basic patterns I show in this article (larger immigrant/native gaps in Sweden with a lower native poverty baseline), albeit without differentiation by immigrants' specific countries of origin – and therefore with potentially confounding compositional effects (Lelkes and Zólyomi, 2011). In short, based on a read of the literature, we have no good reason to expect dramatically different results from those presented in this article in more recent years, though it remains an empirical question.

The perhaps most significant long-term effects of immigrant poverty involve the coming of age of the immigrant second generation. First generation immigrants face disadvantages in the labor markets of all three of these host societies. They are more likely to face non-employment, undesirable occupations, and low wages than are native-born adults, as has been shown in a wide range of previous studies of immigrant socioeconomic incorporation. On the whole, the labor market situation for immigrants in Sweden is worse than that in the other two countries, relative to the opportunities that native-born individuals have, and this is largely reflected in immigrant poverty rates in Sweden: they are higher than native-born poverty rates and this gap is larger than in the UK or Germany. And yet, the children of immigrants are *much* less likely to grow up in poverty in Sweden than they are in the other two countries. While large inequalities in poverty risks may exist in Sweden, the ceiling on poverty is very low for all families after the strong Swedish welfare state redistributes income and mediates market inequalities. So we see a reflection of market inequalities in poverty *inequalities*, but poverty inequalities are rendered materially less significant by the low poverty ceiling. Exactly how the various economic disadvantages of the immigrant first generation translate into disadvantages in the second generation is a process worthy of future research, but a generous and redistributive welfare state certainly has the potential to alter the extent to which the children of immigrants bear the material burden of their parents' labor market challenges.

Funding

Notes

1. As Brady and Burraway (2012) have shown, welfare-state universalism, far more than benefits that target single mothers, reduces single-mother poverty. Of the three countries, Sweden actually has the benefits that are *least* targeted to single mothers.
2. I thank Statistiska centralbyrån (SCB) in Örebro, Sweden and the Zentrum für Umfragen, Methoden und Analysen (ZUMA) in Mannheim, Germany for allowing me to work with LINDA and the MZ, respectively, on site. The Luxembourg Income Study (LIS), the definitive data source for cross-national studies of poverty, has no standardized definitions for country of birth/immigrant status and sample sizes are too small to study immigrants by detailed country of origin. LIS has been used to study immigrant/minority poverty (Morrisens, 2006; Smeeding et al., 2009), but it is difficult to disentangle whether observed cross-national differences are due to differences in the composition of or definition of immigrant populations. In particular, the British data classify persons based on ethnicity only, and have no information about country of birth, which is common in many British studies of minority poverty (Platt, 2007).
3. One persistent difficulty in research on immigrants is undocumented migration. The sampling frames for the UK and western Germany are based on housing, rather than a register, so undocumented migrants are theoretically included. In Sweden and eastern Germany, undocumented migrants would not be in the population registers and would not be included. Migration to eastern Germany is relatively low, so this presents only a minor problem. In the Swedish case, it is a cause for concern, but would, if anything, strengthen the claims of the article, since undocumented migrants are likely to face even higher poverty rates relative to native-born Swedish families than documented migrants.
4. Households with zero income (which only occurs with market income) are included in the analysis and are considered in poverty.
   I use the terms family and household interchangeably, to refer either to single householders or to related persons who live together and presumably pool income. There are a small number of

extended-family households (i.e. with more than two generations) in the British and German data, which, for reasons of comparability (the Swedish data only include non-extended households), are separated out into non-extended households and subject to the sample restrictions by head/spouse age. An individual can have three possible positions within a non-extended household: male head/spouse, female head/spouse, or child (minor or adult) of the head and/or spouse.

5. The disposable income figures in this analysis, like those in most other analyses of poverty, cannot account for indirect taxation (e.g. sales tax, etc.), given available data sources. As Beramendi and Rueda (2007) demonstrate, indirect taxation is indeed higher in countries like Sweden with social democratic welfare states and corporatist labor market institutions; the average effective tax rate on consumption is lower and similar in Germany and the UK. Since flat-rate taxation has a regressive effect on income inequality, the findings about state-mediated poverty in this article might be somewhat altered if indirect taxation could be taken into account.

6. An absolute poverty line, adjusted to a consumer price index, has been the target of many critiques (Brady, 2003; Burtless and Smeeding, 2001; Ruggles, 1990), and a relative poverty line such as I use here facilitates cross-national and over-time comparisons.

7. Excluding pensioner-aged households unsurprisingly results in a higher poverty threshold than would otherwise be the case. In Sweden, 50% of median market income calculated on non-pensioner-aged households is approximately 60% of median market income calculated on all households (and I suspect it would be similar in the UK). For disposable income, the difference is negligible and the decision therefore inconsequential (50% of median disposable income for non-pensioner-aged households is around 51% of median income for all households in both Sweden and Germany), because pensioner-aged households are only slightly more likely than other households to fall into poverty after taxes and transfers.

8. Given what we know about self-employed immigrants, at least in the UK (Modood and Berthoud, 1997), this likely produces overestimates of family income and possibly underestimates of poverty, because self-employed immigrants are over-represented at the low and high end of the earnings distribution. Their over-representation at the low end of the distribution would increase poverty rates, while their over-representation at the high end would have no effect on either poverty rates or the poverty threshold (which is calculated with median rather than mean income).

9. The top category is DM 35,000 per month, which in any imaginable circumstance puts a family above the poverty line. It is unnecessary to recode these values because they do not affect the calculation of median income and the poverty threshold.

10. As expected, non-earnings market income (e.g. investment income) overwhelmingly affects families who are already well above the poverty line, so the fact that such income is excluded from British figures is largely unproblematic. Market poverty rates in Sweden can also be calculated separately by whether the family has self-employed workers, and results are inconsistent across immigrant groups: for some groups, the self-employed post higher poverty rates, and for others, lower poverty rates. Therefore, excluding self-employed families from the market poverty analysis, as I am forced to because of the UK data limitations, should not *systematically* bias the cross-national conclusions.

11. Cases for which educational information is missing are dropped from the analysis. This is around 5% of cases for Germany and the UK, and around 2% of cases for Sweden.

12. When two partners are both foreign-born, but not from the same country of origin, I code the couple according to the woman's country of origin. This greatly simplifies the analysis, and does not greatly alter the findings, because the vast majority of immigrant/immigrant couples *are* both from the same country.

13. Note that I cannot consistently identify the native-born adult children of immigrants in these three datasets; when they head their own households, the households are categorized as native. Though this group would be a fascinating focus for future research using other data sources, its inclusion in the native-born reference group is unlikely to affect results much, because of its relatively small size relative to natives who are not the children of immigrants.

14. Within the "other" category are several large groups of immigrants, such as Finnish migrants to Sweden and Irish migrants to Britain. "Other" migrants are included in all analyses, but contribute little to the explicit cross-national comparisons, because the group is not comparable across countries.

15. The choice of fixed value here is arbitrary, given the inclusion of dummy variables that distinguish between immigrant and native-born families.

16. It is not possible to include a dummy variable differentiating totally non-employed from breadwinner households, because total non-employment predicts market poverty almost perfectly.

17. Because I had to work with German and Swedish data in secure facilities, it was not possible to work with all datasets at one time. This is why there was no choice but to run models separately by country.

18. Interested readers can note that the correlation between the (net) performance of groups in Sweden and the UK is .59, and in Sweden and Germany is only .07. This implies that immigrants' performance in the labor market is quite related to their countries of origin, but that their experience with the welfare states in their host countries is quite unrelated to their countries of origin.

19. Though it is too complex to empirically examine here, given data limitations, it must be recognized that return migration can significantly influence such effects of years since migration. As Dustmann and Weiss (2007) have demonstrated for the UK, return migrants are likely to be those whose accumulated skills are better remunerated in the home versus host country. This could imply that relatively successful migrants stay, thus over-estimating the years since migration effect. It is not clear how this might vary across the three host countries in this analysis, but is worthy of future research on immigrant poverty and well-being. Dustmann and Weiss show that, for the UK at least, return migration pertains far more to migrants from other wealthy industrialized countries than to migrants from third-world countries.

Supplemental Material

The online data supplements are available at http://asj.sagepub.com/content/by/supplemental-data.

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Author biography

Christel Kesler is an assistant professor of sociology at Barnard College, Columbia University. She holds a PhD in Sociology from the University of California, Berkeley, and conducted postdoctoral research as a Prize Research Fellow at Nuffield College, University of Oxford. Her research focuses on cross-national comparisons of social inequality, and particularly on the experiences of international migrants in European societies.