

Lumpe, Claudia

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Public beliefs in social mobility and high-skilled migration

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Public Beliefs in Social Mobility and High-Skilled Migration

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Claudia Lumpe¹

Public Beliefs in Social Mobility and High-Skilled Migration

Abstract

This paper investigates how beliefs of the destination country's population in social mobility may influence the location choice of high-skilled migrants. We pool macro data from the IAB brain drain dataset with population survey data from the ISSP for the period 1987-2010 to identify the effect of public beliefs in social mobility on the share of high-skilled immigrants (stocks) in the main OECD immigration countries. The empirical results suggest that countries with higher "American Dream" beliefs, i.e., with stronger beliefs that climbing the social ladder can be realized by own hard work, attracted a higher proportion of high-skilled immigrants over time. This pattern even holds against the fact that existing social mobility in these countries is relatively lower.

JEL Classification: F22

Keywords: Immigration; public beliefs; social mobility; social status

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1 Introduction

Population surveys confirm that US Americans persistently believe in the so called “American Dream”, i.e., that own hard work can guarantee a better life in terms of higher income and social mobility. These collective beliefs have been passed from generation to generation irrespective of the real possibilities to climb the social ladder. In fact, existing social mobility in the United States is considerably lower than public beliefs would suggest. On the contrary, Europeans believe to a far lesser extent that economic success stems from own hard work and is rather driven by luck and connections – although existing social mobility is on average higher in Europe than in the United States (cf. Stiglitz, 2012). These country-specific differences in beliefs in social mobility have been well described by, e.g., Alesina et al. (2001) and Bénabou and Tirole (2006a), most specifically to explain why Europe has a more extensive welfare state than the United States. Their research shows that public beliefs influence the voting behavior of individuals and consequently, play a decisive role in shaping a country’s policies.

However, we have still limited knowledge about whether these public beliefs in social mobility can have a direct effect on the behavior of individuals beyond national borders. More precisely, do public beliefs that vary over destination countries act as a pull factor for potential migrants – and thereof especially for high-skilled migrants? In this paper, we argue that public beliefs in social mobility of the US American type, i.e., strong “American Dream” beliefs, can lead to a comparably higher social status of high-skilled migrants which makes the destination country in turn more attractive for high-skilled migrants. A higher social status results from the fact that the public appreciates economic success in a positive way due to the belief that the high-skilled migrant must have worked hard to attain a high income. Vice versa, in destination countries with weak “American Dream” beliefs, the public is more likely to discriminate economic success because they believe that high income is relatively more attributable to exogenous factors and not necessarily to an individual’s effort.

The aim of this paper is thus to provide a first comprehensive empirical analysis of the impact of country-specific public beliefs in social mobility on the self-selection of high-skilled migrants into different destination countries. This analysis offers valuable new insights into the reasons for the striking country-specific differ-

ences in the attractiveness for high-skilled migrants that have been observed over the last decades. Germany, for example, as the largest economy in Europe, seems to have considerable problems in attracting qualified labor both at a sufficient scale and for permanent stay. On the contrary, Germany is currently attracting overwhelmingly low-skilled immigration and thus faces an adverse self-selection of migrants. High-skilled migrants prefer to migrate to other countries, especially to the United States, Canada, and the United Kingdom (cf. Peri, 2005; Geis et al., 2011; OECD, 2013). However, answering the question who attracts the most talented to sustain further growth and why is crucial, as most OECD immigration countries face demographic change, and internal solutions for the reduction in the supply of skilled labour is limited (see, e.g., Fertig et al., 2009).

The analysis of driving factors for the self-selection of high-skilled migrants is a major strand in the existing migration literature. Our study broadens the scope in several ways. We go beyond classical migration theory that explains the self-selection of migrants mainly by existing differentials in the returns to skills, different income distributions between destination and source country, and migration costs (see, e.g., Borjas, 1987; Chiswick, 1999). Related empirical studies like, e.g., the study of Grogger and Hanson (2011) reveal that high-skilled individuals are more likely to emigrate and choose host countries with higher skill premia. There exist several further explaining factors for the self-selection of migrants. Cultural ties like the same language will foster migration between specific country-pairs (see, e.g., Isphording and Otten, 2013; Chiswick and Miller, 2015). Networks favor especially low-skilled immigration due to lower assimilation costs (cf. Bauer et al., 2007; Pedersen et al., 2008; Beine et al., 2011). Borjas (1999a) shows that welfare systems have magnetic effects, while Geis et al. (2013) indicate that labor-market institutions like employment protection and unionization determine the self-selection of migrants. Additionally, immigration policy is shaping the number of immigrants and their skill composition (cf. Bjerre et al., 2015).

Public beliefs in social mobility have – to the best of our knowledge – not been explicitly modeled nor measured yet. Nevertheless, there exist some descriptive studies and empirical analyses that focus on public attitudes in the migration context. Relatively well studied are public attitudes towards immigrants, their variation over different destination countries, and the determinants why natives favor immigration more or less (see, e.g., Bauer, 2000; Mayda, 2006; O’Rourke and

Sinnott, 2006; Card et al., 2012). Furthermore, there exists only one empirical study from Gorinas and Pytliková (2017) that links these country-specific public attitudes towards immigrants to inflows of migrants into OECD countries. They find that natives' hostility, particularly natives' propensity to discriminate on the labor market, reduces the number of immigrants. Gorinas and Pytliková (2017) still use the widespread definition of public attitudes towards immigrants, but do not distinguish between different skill levels of immigrants.

Based on an approach developed by Piketty (1998), Lumpe et al. (2016) are first in modeling public beliefs as an explaining factor for the self-selection of high-skilled migrants into different destination countries. In particular, they show that public beliefs about the migrants' provision of work effort play a crucial role for the social status that high-skilled migrants may attain in their host countries. In their model, high-skilled migrants do not base their choice of their destination exclusively on labor-market opportunities, but also on their perception of attaining social status and social recognition in their host country. As a result of country-specific public beliefs that affect their social status, a self-selection of high-skilled migrants can even be observed with otherwise identical labor-market opportunities.

Existing research in various contexts prevails that the status motif of individuals affects their behavior decisively (see, e.g., Piketty, 1998; Bénabou and Tirole, 2006b). For the migration context, Bloom and Stark (1985) also show that concerns for ranking, i.e., the relative position in a reference group, leads to relative deprivation which in turn drives the propensity to migrate.

Our paper will enlarge the existing literature about the status motif of migrants. Still in line with Lumpe et al. (2016), we will explore how public beliefs drive the social status of high-skilled migrants and consequently, their self-selection into different destination countries. Following Alesina et al. (2001) and Bénabou and Tirole (2006a), we will, however, use a different definition of public beliefs, namely "American Dream" beliefs. Our contribution is that we are first in exploring public beliefs in social mobility as a pull factor for high-skilled migration. Thereby, we reveal on the one hand new implications for public beliefs in social mobility. On the other hand, we explore more profoundly the role of the social status motif of high-skilled migrants and especially how their social status can be driven by beliefs of the destination country's population.

We carry out a stepwise approach and run a pooled OLS first. Our results

suggest that public beliefs in social mobility have the potential to give a new explanation why some destination countries are more attractive for high-skilled migrants than others. The findings confirm a positive and highly significant correlation between public beliefs in social mobility and the share of high-skilled migrants over total migrants in our sample of OECD destination countries. We do not observe gender-specific differences, even not against the background of a far higher increase in the number of female compared to male high-skilled migrants over time. In our second specification we add country-pair and time fixed effects to the estimation model. Now, a positive and highly significant correlation only exists if we exclude the United Kingdom from our sample. The United Kingdom showed by far the highest increase in the share of high-skilled migrants between 1990 and 2010 while beliefs in social mobility remained quite unchanged at a high level – the highest among all European countries in our sample. In a third and last step we run a cross-country estimation to analyze how the effect of public beliefs in social mobility on high-skilled migration changes over time. The results reveal a positive and significant correlation for the years 1990 and 2010 but an insignificant correlation for the year 1995 when the end of the Cold War changed the structure of migration substantially.

The paper is structured as follows. In the next section, we provide the theoretical framework and the empirical specification to identify the effect of public beliefs in social mobility on the location choice of high-skilled migrants. Section 3 describes our datasets. Section 4 presents our empirical results as well as our robustness checks. Section 5 summarizes our key findings and concludes.

2 Theory and empirical strategy

In this section, we derive our empirical specification from a theoretical model of international migration. Our model is based on the human capital model of Sjastaad (1962) applied by, e.g., Grogger and Hanson (2011), Ortega and Peri (2013), and Gorinas and Pytliková (2017). We focus explicitly on high-skilled migration and extend the theoretical framework – following Lumpe et al. (2016) – by a social status motif of high-skilled migrants.

2.1 Model of international migration

We study the location choice of high-skilled migrants across a multitude of destination countries $d \in D$. Individual i , born and educated in source country $s \in S$, decides where to migrate. We assume that i has high skills h , and has correspondingly received tertiary education in his or her country of birth. Each individual chooses a destination country d that maximizes his or her utility U_{isd}^h . We assume a linear utility function of the following type:

$$\max_d U_{isd}^h = \alpha [W_{id}^h + R_{id}^h - C_{isd}^h] + \varepsilon_{isd}^h, \quad (1)$$

with marginal utility $\alpha > 0$. The utility of a high-skilled migrant moving from s to d increases with the wage W_{id}^h and the social status resp. social recognition R_{id}^h a migrant obtains in the destination country. Bilateral migration costs C_{isd}^h may vary by source and destination country-pair, and enter the utility function negatively. Thus, referring to Lumpe et al. (2016), we assume that high-skilled migrants are not exclusively interested in income, but also in social status which represents a non-monetary component of utility.¹ More precisely, the social status of individual i depends on how i is perceived by the society in the respective destination country. This perception is based on inherent beliefs which consequently form the social status of the individual. The term ε_{isd}^h covers unobserved components of individual utility coherent with each choice and follows an i.i.d. extreme value distribution. This means that we assume independence of alternative locations² for our sample that is limited to OECD countries only. The migrants' decision over alternative locations only depends on the characteristics of these alternatives.

Choosing between two destinations, say d and k , depends then, similar to Grogger and Hanson (2011), on the sign of

$$\Delta^{dk} = [W_{id}^h + R_{id}^h - C_{isd}^h] - [W_{ik}^h + R_{ik}^h - C_{isk}^h]. \quad (2)$$

¹In adding social status to the utility function we go beyond the studies of Grogger and Hanson (2011), Ortega and Peri (2013), and Gorinas and Pytliková (2017) which focus solely on income and costs. For reasons of simplicity and as we consider public beliefs in social mobility, we assume a linear utility function and deviate at this point from Lumpe et al. (2016) whose function of expected utility in the destination country is inverse u-shaped due to a quadratic cost function. Moreover, in their model, high-skilled migrants maximize expected utility over effort.

²See the model of choice behavior of McFadden (1974).

High-skilled migrants will prefer to migrate to destination d if $\Delta^{dk} > 0$. This is the case if “American Dream” beliefs in d are ceteris paribus stronger and lead to a higher social status of high-skilled migrants: $R_{id}^h > R_{ik}^h$.

2.2 Empirical specification

We measure the effect of destination-country-specific public beliefs in social mobility on high-skilled migration in a stepwise approach to judge a potential bias of coefficients that may result from unobserved heterogeneity. We neglect the panel structure first and run a linear regression (OLS) as follows:

$$\begin{aligned}
 Y_{sdt} = & \alpha + \beta Belief_{dt-1} + \gamma GDP_{dst-1} + \delta Pop65_{st-1} + \eta PolRights_{st-1} \\
 & + \theta CivLiberties_{st-1} + \zeta Tertiary_{st-1} + \lambda FreeMig_{sdt-1} + X'_{sd}\rho \\
 & + \sum_{t=2}^T \mu_t T_t + \varepsilon_{sdt},
 \end{aligned} \tag{3}$$

with source countries $s = 1, \dots, 194$, destination countries $d = 1, \dots, 9$, and years $t = 1, 2, 3$. Our dependent variable Y_{sdt} is the share of high-skilled immigrants M^h over total immigrants M^j (stocks) born in source country s and residing in destination country d at time t , i.e., $(M_{sd}^h/M_{sd}^j)_t$. We consider three years of observation: 1990, 1995, and 2010. The corresponding data is taken from the IAB brain-drain dataset (see Bruecker et al., 2013).

The main explanatory variable, $Belief_{dt-1}$, measures public beliefs in social mobility in d at time $t-1$ on the basis of the survey question “How important you think is hard work for getting ahead in life?” from the International Social Survey Programme (ISSP). Respondents could answer on a scale between 1 and 5 with decreasing importance: 1 “Essential”, 2 “Very important”, 3 “Fairly important”, 4 “Not very important” or 5 “Not important at all”.³ From this discrete variable we generate our continuous belief variable. Therefore, we generate a dummy variable first which we code 1 if respondents ticked 1 or 2 and 0 otherwise. Both answers express a clear approval that upward social mobility can be influenced by own hard work, i.e., respondents then belief in an idea like the “American Dream”. In the second step, we generate country means that indicate the percentage share of

³We omit two further possible answers “Don’t know” and “Not answered” that represent only 1.6 % of all responses from our sample.

respondents in each destination country who ticked 1 or 2 in each survey year. Thereby, we apply sample weights that were included in the dataset for a better representation of age, gender, ethnics, region, urbanity, education, etc..⁴ Different country means represent then the variation of our belief variable. The interpretation is as follows: the estimated coefficient β should be significantly positive if high-skilled migrants are more attracted by countries with stronger “American Dream” beliefs which are expressed by a higher country mean. We use a time lagged variable in order to avoid endogeneity, as public beliefs can have an impact on migration and vice versa.⁵

Besides public beliefs, there exist other factors that might influence high-skilled migration as well.⁶ We include the difference of GDP per capita between destination and source country in order to control for the income maximization incentive of migrants (cf. Borjas, 1999b, relying on Roy, 1951). We do not control for the unemployment rate in the destination and source country, as harmonized data from the International Labour Organization (ILO) that would allow for a cross-country comparison is not available for the whole period considered. Due to the lack of data, we also do not control for immigration policies in the destination countries.⁷

⁴We calculate an aggregated mean for East and West Germany together because immigrant stocks for Germany are also aggregated in the migration dataset.

⁵For the most recent year in the dataset, 2010, endogeneity can not be ruled out completely for the United States and Germany. Record date of the American Community Survey for migration stocks is July 1, 2010 and ISSP-data about public beliefs have been gathered in the same year between March, 18 and August, 14. Thus, migration stocks were recorded in the last third of the ISSP period and the time lag has been kept at least partly. For Germany, the Mikrozensus published migration stocks as of December 31, 2009. However, according to information given by the authors of the IAB brain drain dataset, the Mikrozensus 2009 has been taken as a proxy for 2010 as the difference is minimal. Due to these facts and because we use stocks and not inflows, we keep the observations in our sample.

⁶We gather the data for the control variables from various sources, thereof especially from the World Bank (2016a) (see Tab. A1 for all data sources and summary statistics).

⁷The measure of Mayda (2010) that has been applied by, e.g., Ortega and Peri (2009), is not suitable for studying migration stocks, as it only captures changes in immigration policy without information on initial policy levels. The more current studies by Beine et al. (2015) and Beine et al. (2016) allow for a cross-country comparison, but only for a very limited number of destination countries with regard to our sample (five destination countries for the years 1999 and 2008 and three destination countries between 1990 and 2008).

We control for different source country characteristics, thereof first the population share older or equal to the age of 65 as a push factor for emigration. Especially in developing countries with high population growth rates, this share is low compared to the share of the working age population which tend to emigrate if employment opportunities are limited (cf. Hatton and Williamson, 2003). We further add two factors that might limit the freedom to emigrate: a lack of political rights and a lack of civil liberties expressed by a high Freedom House index (cf. Freedom House, 2016). As a last source country characteristic, we include the share of tertiary educated as a measure for the degree of development of the source country and its labor market that might have a positive impact on high-skilled migration.

On the country-pair level we control for the freedom of movement of workers (predominantly within the European Union) with a dummy variable equal to 1 if country-pairs allow for a free flow of labor and 0 if not. We can not control for the impact of ethnic networks due to the fact that we use migration stocks as dependent variable.

We further control for time-invariant bilateral ties between countries that might facilitate migration between a specific country-pair ($X'_{sd}\eta$), i.e., a common official language, a colonial relation in the past, a common border, the distance between major cities, and religious proximity (cf. Mayer and Zignago, 2011; Melitz and Toubal, 2014).

Finally, we control for time effects by including two year dummies ($\sum_{t=2}^T \mu_t T_t$) for 1995 and 2010 in the regression model while we define 1990 as reference year. Standard errors ε_{sdt} are clustered at the country-pair level sd .

In our second specification, we add successively country-pair fixed effects κ_{sd} and year fixed effects π_t to our pooled estimation from (3):

$$Y_{sdt} = \alpha + \beta Belief_{dt-1} + \gamma GDP_{dst-1} + \delta Pop65_{st-1} + \zeta Tertiary_{st-1} + \lambda FreeMig_{sdt-1} + \kappa_{sd} + \pi_t + \varepsilon_{sdt}, \quad (4)$$

with $s = 1, \dots, 195$, $d = 1, \dots, 9$, and $t = 1, 2, 3$. By definition, we do not consider time-invariant variables that are included in the vector $X'_{sd}\eta$ as well as political rights and civil liberties in the source countries as both variables hardly changed over time. Alternatively to country-pair fixed effects, we run the same estimation

with destination and source country fixed effects. To guarantee the comparability of our results, we cluster standard errors in all models at the country-pair level.

In the third and last specification, we estimate the effect of public beliefs in social mobility on the share of high-skilled migrants for each of the three considered years 1990, 1995, and 2010 separately. These cross-country estimations allow us to derive conclusions on the development of the effect over time. The regression model corresponds to equation (3) without time dummies. Standard errors are clustered by destination country. For the reason of comparability we keep the numbers of destination countries constant at nine. In an additional analysis we add eight destination countries for which data on public beliefs is only available for one of the three considered years.

3 Data

For our purpose of evaluating the effect of public beliefs in social mobility on high-skilled migration, we combine a panel-dataset on international migration with survey data on public beliefs in the main OECD immigration countries.

3.1 International migration

We use the IAB brain-drain dataset from Bruecker et al. (2013) to cover worldwide migration of high-skilled individuals between source and destination countries. The panel dataset on the macro level contains stocks of immigrants in 20 OECD countries from 195 source countries from 1980 to 2010 in 5 years intervals.⁸ More precisely, the data includes the total numbers of foreign-born individuals aged 25 years and older for each of the 20 OECD destination countries, by year, gender, country of origin, and educational level. For Germany as the only exception, the concept of citizenship has been applied. The dataset distinguishes between three levels of educational attainment: i) low-skilled individuals (lower secondary, primary, or no schooling), ii) medium-skilled individuals (high-school leaving certificate or equiv-

⁸The 20 destination countries are also source countries which leads to the fact that our sample of country-pairs includes 194 source countries for each of the nine or 17 destination countries.

alent), and iii) high-skilled individuals (above high-school leaving certificate or equivalent). Our analysis will focus on high-skilled migrants, as we are especially interested how they select themselves into different destination countries.

For the purpose of comparability over the considered time period, East and West Germany as well as North and South Yemen are aggregated in the data. In the case of a collapse of states, i.e., of the Soviet Union, the Socialist Federal Republic of Yugoslavia, and Czechoslovakia, the data contains exclusively the post-secession countries for which the authors calculated pre-secession stocks. This applies analogously for colonies which gained independency.

The brain-drain dataset is based on national censuses which are carried out every 10 years, or in some countries every five years. The data includes imputations for the fifth year inbetween for those destination countries with a census every ten years. The year 2010 has also been imputed in most countries as census data was not yet available at the time of data collection.⁹ It is well understood that instead of using migrant stocks, we would ideally use annual inflows of high-skilled migrants to analyze how these short-term fluctuations respond to changes in the destination countries' public beliefs. However, this very specific data is – to the best of our knowledge – not available on a cross-country level for the considered period.

All 20 destination countries in the dataset belong to the main OECD immigration countries worldwide with the highest per capita incomes, thereof 15 European countries (Austria, Denmark, Finland, France, Germany, Greece, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom), the United States, Canada, Chile, Australia, and New Zealand. Thus, the existing data reflects migration within developed OECD countries as well as migration from less developed to developed countries.

As the corresponding (time-lagged) attitude data is only available for 17 out of these 20 destination countries (i.e., not for Luxembourg, Greece, and Ireland) and only for the three years 1990, 1995, and 2010, we restrict our sample for the additional analysis in the cross-section estimation to this scope. All other estimations contain an even smaller subsample of nine out of 17 destination countries, because we consider only those destination countries for which we have at least two years

⁹See the Methodology Report by Bruecker et al. (2013) for a detailed description of the imputation procedure.

of observation (i.e., Australia, Austria, Germany, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States).

In our sample of nine (17) destination countries we consequently have 4,462 (6,014) numbers of observation – each for the share of male high-skilled migrants and for the share of female high-skilled migrants.¹⁰ For the share of all high-skilled migrants we pool the data for both gender which doubles the number of observations (8,924 for the sample of nine countries and 12,028 for the sample of 17 countries).¹¹

Descriptive statistics show that over all nine destination countries and the three considered years, the median share of all high-skilled migrants is 31.6 %, and the mean share is 34.6 % (cf. Tab. A3). The mean share for females is in all three years lower than the mean share for males, but increased to a much larger extent since 1990 (15.6 vs. 9.7 percentage points). This means that especially women who migrated are considerably higher educated.

Total migrant stocks over all nine destination countries doubled from 25.1 million in 1990 to 50.9 million in 2010 while high-skilled migrant stocks nearly tripled from 7.9 million to 20.7 million in the same period (cf. Tab. A4).¹² Thus, the data reflects the findings of Docquier and Rapoport (2012) of rising absolute numbers, and of a rising skill level of international migrants. In our sample of 17 countries, we observe a rising share of high-skilled over total migrant stocks (all migrants) in almost all countries (see Tab. 1), with the highest share for Canada in 2010 (68.2 %) followed by Australia (54.3 %), the United Kingdom (49.0 %), and the United States (42.4 %).¹³ In comparison, we observe the lowest shares for France (22.6 %), Austria (16.7 %), Germany (21.8 %), and Switzerland (21.9 %) in 2010.

¹⁰For nine (17) destination countries we have 23 (31) observations in the three considered years which we multiply with the number of 194 source countries.

¹¹The density function of the share of high-skilled over total migrant stocks (all migrants) is bell-shaped with a skewness to the right. Nearly 20 % of the observations represent a share of zero whereas in only 3 % of the observations migrants are exclusively high-skilled (cf. Fig. A2).

¹²This development holds quite equally for the sample of 17 destination countries: total migrant stocks more than doubled from 26.1 million in 1990 to 63.4 million in 2010, while high-skilled migrant stocks tripled from 8.0 million to 23.7 million.

¹³Only exception is New Zealand with a very volatile share that decreased from 44.7 % in 1990 to 41.7 % in 2010 (-3.0 %), but still shows a profound increase if we compare 2010 to 1980 (+17.1 %).

Table 1: Share high-skilled over total migrants

	1990	1995	2010	Change 1990-2010
Canada	41.9 %	46.6 %	68.2 %	26.2 %
<i>Australia</i>	36.6 %	42.1 %	54.3 %	17.7 %
<i>United Kingdom</i>	20.3 %	26.0 %	49.0 %	28.7 %
<i>United States</i>	39.4 %	39.4 %	42.4 %	3.0 %
<i>New Zealand</i>	44.7 %	33.2 %	41.7 %	-3.0 %
<i>Norway</i>	25.1 %	27.0 %	36.7 %	11.6 %
<i>Sweden</i>	16.7 %	20.5 %	33.2 %	16.5 %
Spain	19.8 %	21.0 %	26.0 %	6.2 %
Netherlands	13.6 %	17.3 %	25.7 %	12.1 %
Finland	16.0 %	21.2 %	25.4 %	9.4 %
Denmark	18.4 %	21.9 %	24.8 %	6.4 %
Chile	18.0 %	20.0 %	24.6 %	6.6 %
Portugal	18.1 %	19.7 %	24.1 %	6.0 %
France	9.7 %	11.9 %	22.6 %	12.9 %
<i>Switzerland</i>	15.6 %	19.0 %	21.9 %	6.4 %
<i>Germany</i>	10.5 %	16.4 %	21.8 %	11.3 %
<i>Austria</i>	9.6 %	12.5 %	16.6 %	7.0 %

Notes: Mean shares on the basis of the sum of absolute numbers for high-skilled and total migrants (all migrants) over all country-pairs (17 destination countries, 194 source countries), in descending order for 2010, sample of nine destination countries in italics, change in percentage points, Source: IAB Brain Drain Data

We can state that countries that are most (least) attractive for high-skilled migrants in 2010 were also able to attract higher (lower) shares of high-skilled migrants in former decades. Furthermore, we also observe in the most attractive countries a 'V-shape' in terms of educational attainment that has been similarly described by Peri (2005): higher shares of both low- and high-skilled migrants versus lower shares of medium-skilled migrants.¹⁴ The only exception is the United Kingdom that caught up considerably in terms of attractiveness for high-skilled migrants and shows the highest increase in the share of high-skilled over total migrant stocks in percentage points between 1990 and 2010 (+ 28.7 %).

¹⁴Note that Peri (2005) uses a slightly different definition for the 'V-shape', i.e., shares of foreign-borns in the three different skill groups (low, medium, high), and that his study includes the years 1990-2000 on the basis of the European Labor Force Survey for the European countries and the IPUMS for the United States.

3.2 Public beliefs in social mobility

Data reflecting public beliefs in social mobility is gathered from the International Social Survey Programme (ISSP). In four waves of the ISSP a representative sample of the population in each destination country has been asked repeatedly via a questionnaire. For our purposes we focus on the question: “How important you think is hard work for getting ahead in life?” which serves as a proxy for country-specific public beliefs in social mobility. The question was asked in three out of four waves: in 1987, 1992, and 2009. We selected only those OECD immigration countries for which we have skill data of immigrants available in our migration dataset (in total 17 countries, thereof seven countries in 1987, nine countries in 1992, and 16 countries in 2009).¹⁵

Descriptive statistics reflect the rising number of participating countries in the survey over time with 9,274 respondents (22 %) in 1987, 13,268 (31 %) in 1992 and 20,279 (47 %) in 2009 with 42,821 respondents in total (cf. Tab. A5). Over all 17 destination countries, the mean of all country-specific percentage shares of respondents who ticked 1 or 2 (which represents the mean of our belief variable) stayed quite stable at 0.74 in 1987, 0.75 in 1992, and 0.74 in 2009. However, the mean over all nine destination countries that are included in our pooled estimation increased from 0.75 in 1987 and 1992 up to 0.80 in 2009 (see Tab. 2).

¹⁵We select the ISSP instead of the World Value Survey (WVS) that has been carried out together with the European Value Survey (EVS) because i) the ISSP covers a higher number of destination countries and ii) because the formulation of the question is more explicit with regard to our purposes. The question of the WVS/ EVS is a relative question on a scale from 1 to 10 measuring whether a better life stems from hard work or from luck and connections: “Now I’d like you to tell me your views on various issues. How would you place your views on this scale? (1) In the long run, hard work usually brings a better life. (10) Hard work doesn’t generally bring success – it’s more a matter of luck and connections.”

Table 2: Public beliefs in social mobility

Destination country	1987	1992	2009
<i>United States</i>	0.90	0.88	0.96
<i>New Zealand</i>		0.84	0.90
<i>Australia</i>	0.83	0.80	0.88
Portugal			0.87
<i>United Kingdom</i>	0.84	0.84	0.85
Canada		0.78	
<i>Norway</i>		0.71	0.81
<i>Sweden</i>		0.66	0.76
<i>Germany</i>	0.60	0.59	0.71
Chile			0.70
Spain			0.68
<i>Austria</i>	0.66	0.67	0.67
<i>Switzerland</i>	0.65		0.67
Netherlands	0.67		
Finland			0.64
France			0.55
Denmark			0.44
Mean 9 countries	0.75	0.75	0.80
Mean 17 countries	0.74	0.75	0.74

Notes: Weighted country averages, percentage shares of respondents who ticked 1 "Essential" or 2 "Very important" on the survey question "How important you think is hard work for getting ahead in life?", in descending order for 2009, sample of nine destination countries in italics, Source: ISSP Social Inequality I (1987), II (1992), IV (2009)

We observe the strongest "American Dream" beliefs in the United States and in New Zealand, and the lowest "American Dream" beliefs in France and Denmark. The order of countries stays quite stable over time, i.e., the populations in the United States, New Zealand, Australia, Canada, and the United Kingdom have always stronger "American Dream" beliefs than those in Germany, Austria, Switzerland, France, and Denmark.

Overall, this means that the cross-country variation is much higher than the variation over time, i.e., public beliefs in social mobility appear to be quite persistent and thus, seem to have been passed from generation to generation.

4 Empirical results

4.1 Pooled estimates

In Tab. 3 we present the results from our first specification (see equation (3)) in two steps. In columns (1) to (3) we show the pure effect of beliefs in social mobility on the share of high-skilled over total migrants. Therefore, we run two regressions with the same sample of both gender: a first regression which displays the coefficient for all high-skilled migrants (1) and a second regression which displays the coefficient for males (2) and the difference between the female and the male coefficient (3). In columns (4) to (6) we add the difference in GDP per capita between destination and source country, source country characteristics, time-variant and time-invariant factors on the country-pair level as well as the two time dummies. In each specification, standard errors are clustered on the country-pair level, i.e., we have 1.746 clusters as we observe high-skilled migration from 194 source into nine destination countries – with two to three observations per cluster.

Our results from column (1) to (6) suggest that there exists a positive and highly significant correlation between beliefs in social mobility and high-skilled migration. Adding the control variables does not change this main result. An increase of one percentage point in the average share of the destination country’s population who state an agreement to the analyzed ISSP survey question is correlated with a 1.0 percentage point higher share of high-skilled migrants over total migrants that migrate from s to d (see columns (4) to (6)). This means that destination countries with stronger “American Dream” beliefs are more attractive for high-skilled migrants. Given the cross-country comparison in Tab. 2 which shows that beliefs in social mobility in, e.g., Germany and the United States, differ around 25 percentage points in 2009, the measured effect is considerable.

Thereby, the belief coefficient for female high-skilled migrants is not significantly different from the coefficient for male high-skilled migrants. This finding might suggest that male and female migrants are tied movers (see, e.g., Mincer, 1978).

Table 3: Pooled estimates

	(1) $(\frac{M^h}{M^J})_{all}$ sd	(2) $(\frac{M^h}{M^J})_m$ sd	(3) $(\frac{M^h}{M^J})_{\Delta f}$ sd	(4) $(\frac{M^h}{M^J})_{all}$ sd	(5) $(\frac{M^h}{M^J})_m$ sd	(6) $(\frac{M^h}{M^J})_{\Delta f}$ sd
<i>Belief_{dt-1}</i>	1.243*** (0.047)	1.255*** (0.052)	-0.025 (0.037)	0.963*** (0.055)	0.993*** (0.063)	-0.060 (0.042)
<i>GDP_{dst-1}</i>				-0.063 (0.050)	-0.046 (0.056)	-0.034 (0.047)
<i>Pop65_{st-1}</i>				-0.020 (0.019)	-0.028 (0.021)	0.017 (0.012)
<i>PolRights_{st-1}</i>				0.003 (0.004)	-0.005 (0.005)	0.016*** (0.004)
<i>CivLibert_{st-1}</i>				0.010 (0.006)	0.020** (0.007)	-0.020*** (0.005)
<i>Tertiary_{st-1}</i>				0.208*** (0.034)	0.174*** (0.039)	0.068* (0.027)
<i>FreeMig_{sd}</i>				0.036 (0.020)	0.042 (0.022)	-0.012 (0.015)
<i>Comlang_{sd}</i>				0.117*** (0.017)	0.127*** (0.018)	-0.021 (0.012)
<i>Colony_{sd}</i>				-0.127*** (0.020)	-0.146*** (0.022)	0.038*** (0.011)
<i>Distance_{sd}</i>				0.075*** (0.014)	0.081*** (0.015)	-0.012 (0.011)
<i>Contiguity_{sd}</i>				-0.012 (0.037)	0.0018 (0.042)	-0.028 (0.022)
<i>Relprox_{sd}</i>				-0.105** (0.038)	-0.079 (0.044)	-0.053* (0.023)
<i>Year_1995</i>				0.031*** (0.007)	0.006 (0.009)	0.049*** (0.007)
<i>Year_2010</i>				0.054*** (0.010)	0.029* (0.012)	0.051*** (0.010)
Observations	5,542	5,542		5,542	5,542	
Adjusted R ²	0.267	0.276		0.326	0.340	

Notes: Pooled OLS over all three years, nine destination countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The control variables of our pooled regression (cf. columns (4) to (6) of Tab. 3) show no significant effect of the difference in GDP per capita between destination and source countries. The coefficient is even slightly negative. Concerning the age of the source country's population, we observe that high-skilled migrants stem from populations with a lower share of inhabitants at the age or older than 65, which might act as a push factor for emigration. However, the respective coefficients are insignificant. Political rights in the source countries also do not show any significant effect on high-skilled migration. In contrast, we observe that the share of male high-skilled migrants is higher if civil liberties in the source countries are weaker. The coefficient is significant for male, but not for female high-skilled migrants. The rate of school enrollment in tertiary education in the source countries is – as expected – an influencing factor for the share of high-skilled migrants

in the destination countries; the correlation is positive and significant for male and female high-skilled migrants with a significantly higher coefficient for women.

On the country-pair level, our regression shows that bilateral agreements on free labor migration have no significant impact on the share of high-skilled migrants. In contrast, a commonly spoken language favors high-skilled migration. Colonial ties seems to have no importance for high-skilled migrants. Quite the opposite is the case: high-skilled migrants are especially moving from source countries without colonial relationship to the chosen destination country. In addition, there is strong evidence that high-skilled migrants can overcome large distances between source and destination countries and do not predominantly choose destination countries that share a common border with their home country. Furthermore, we find a negative effect of religious proximity between countries which is only significant for female, but not for male high-skilled migrants.

Overall, our results on the country-pair level suggest that direct migration costs and networks play much less of a role for high-skilled migrants – especially compared to low-skilled migrants who, e.g., overcome smaller distances and stem to a much larger extent from former colonies (see section 4.4 and Tab. 10). These findings support the argument that high-skilled migrants are relatively free in their decision to migrate and in their choice of location.

Finally, the positive and mainly highly significant coefficients of the year dummies indicate a rising share of high-skilled migrants between 1990 and 2010 after controlling for the observable factors that are included in our regression. This result confirms the finding of Docquier and Rapoport (2012) who show that the skill level of international migrants increased over the last decades.

4.2 Fixed effects estimates

The results of our pooled estimation with country-pair and time fixed effects (see equation (4)) show that beliefs in social mobility are still positively correlated with the share of high-skilled migrants if we add country-pair fixed effects in a first step, but the relatively low coefficients of around 0.1 are not significant.

Table 4: Fixed effects estimates

	(1) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(2) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(3) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$	(4) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(5) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(6) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$
<i>Belief_{dt-1}</i>	0.134 (0.093)	0.118 (0.123)	0.0318 (0.108)	-0.215 (0.127)	-0.264 (0.165)	0.0981 (0.117)
<i>GDP_{dst-1}</i>	1.019*** (0.100)	0.912*** (0.130)	0.215* (0.107)	0.338** (0.107)	0.261 (0.144)	0.154 (0.133)
<i>Pop65_{st-1}</i>	0.072* (0.036)	0.057 (0.046)	0.029 (0.038)	0.038 (0.034)	0.026 (0.045)	0.023 (0.039)
<i>Tertiary_{st-1}</i>	0.226*** (0.036)	0.189*** (0.046)	0.074 (0.039)	0.040 (0.041)	0.008 (0.052)	0.062 (0.045)
<i>FreeMig_{sd-1}</i>	0.023 (0.015)	0.018 (0.020)	0.012 (0.016)	0.011 (0.014)	0.007 (0.019)	0.008 (0.016)
Country-pair FE	Yes		Yes	Yes		Yes
Time FE	No		No	Yes		Yes
Observations	6,632		6,632	6,632		6,632
Adjusted R ²	0.704		0.744	0.712		0.755

Notes: Pooled OLS over all three years with country-pair and time fixed effects, nine destination countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

If we additionally include time fixed effects, the coefficients even turn out to be negative, but are again insignificant (cf. Tab. 4).

We analyze which destination country drives our results and find that especially the United Kingdom has a dominating impact. Excluding the United Kingdom from our sample changes our results substantially. Now, we observe a positive and highly significant correlation between beliefs in social mobility and high-skilled migration – if we control for country-pair fixed effects alone or as well for time fixed effects (cf. Tab. 5). In the latter case, the coefficient of our belief variable is around 0.9, and thus comparable to our pooled estimation without fixed effects. These findings can be explained by the fact that the United Kingdom was facing the highest increase in the share of high-skilled migrants, while beliefs in social mobility were relatively persisting (but still on the highest level among all European destination countries, see Tab. 1 and 2). Consequently, other factors were driving the rising attractiveness of the United Kingdom for high-skilled migrants, e.g., the opening of the labor market to Eastern European countries.

**Table 5: Fixed effects estimates
without the United Kingdom**

	(1) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(2) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(3) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$	(4) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(5) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(6) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$
<i>Belief_{dt-1}</i>	0.589*** (0.079)	0.581*** (0.110)	0.016 (0.117)	0.868*** (0.094)	0.860*** (0.139)	0.015 (0.141)
<i>GDP_{dst-1}</i>	0.554*** (0.082)	0.419*** (0.115)	0.270* (0.127)	0.189* (0.094)	0.090 (0.136)	0.198 (0.147)
<i>Pop65_{st-1}</i>	0.048 (0.029)	0.033 (0.039)	0.030 (0.043)	0.021 (0.028)	0.008 (0.038)	0.025 (0.044)
<i>Tertiary_{st-1}</i>	0.107*** (0.029)	0.073 (0.038)	0.068 (0.045)	0.028 (0.034)	0.003 (0.045)	0.050 (0.051)
<i>FreeMig_{sd-1}</i>	0.025 (0.014)	0.020 (0.019)	0.009 (0.019)	0.003 (0.013)	0.000 (0.018)	0.006 (0.019)
Country-pair FE	Yes	Yes		Yes	Yes	
Time FE	No	No		Yes	Yes	
Observations	5,770	5,770		5,770	5,770	
Adjusted R ²	0.728	0.783		0.735	0.794	

Notes: Pooled OLS over all three years with country-pair and time fixed effects, eight destination countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Regarding our control variables, we observe – contrary to the results of our pooled estimation – a positive and significant correlation for the difference in GDP per capita between destination and source country which now confirms the income maximization incentive of migrants (see, e.g., Grogger and Hanson, 2011). The rate of tertiary school enrollment in the source country shows again a positive and significant correlation with the share of high-skilled migrants in the destination country if we control for country-pair fixed effects. If we further include time fixed effects, the coefficients are no longer significant.

Alternatively to country-pair fixed effects, we add destination or source country fixed effects to our regression. Running the regression with destination country and time fixed effects shows similar results to our regression with country-pair fixed effects. With source country and time fixed effects, we observe in all cases that beliefs in social mobility are positively and significantly correlated with high-skilled immigration. The belief coefficients are highest among all considered specifications and range between 1.2 and 1.4 (cf. A6 to A9).

4.3 Cross-country estimates

We carry out cross-country estimations for the years 1990, 1995, and 2010 separately to analyze how the effects of the pooled estimation change over time. Therefore, we consider in a first step all nine destination countries from our pooled estimation. In a second step, we compare these results with cross-country estimations that include all 17 destination countries from our sample. We cluster standard errors by destination country in all estimations.

Tab. 6 documents the results per year for our sample of nine destination countries in columns (1)-(3) and for our sample of 17 destination countries in columns (4)-(6). As we do not observe gender-specific differences, we only display here the results for the share of all high-skilled migrants.

Table 6: Cross-country estimates

	(1) $(\frac{M_{sd}^h}{M_{sd}^J})_{1990,all}$	(2) $(\frac{M_{sd}^h}{M_{sd}^J})_{1995,all}$	(3) $(\frac{M_{sd}^h}{M_{sd}^J})_{2010,all}$	(4) $(\frac{M_{sd}^h}{M_{sd}^J})_{1990,all}$	(5) $(\frac{M_{sd}^h}{M_{sd}^J})_{1995,all}$	(6) $(\frac{M_{sd}^h}{M_{sd}^J})_{2010,all}$
<i>Belief_{dt-1}</i>	1.254** (0.264)	0.564 (0.297)	1.126** (0.300)	1.289** (0.252)	0.624 (0.296)	0.602** (0.191)
<i>GDP_{sdt-1}</i>	0.006 (0.164)	0.0005 (0.111)	-0.180 (0.110)	0.013 (0.149)	-0.015 (0.110)	0.005 (0.094)
<i>Pop65_{st-1}</i>	-0.028 (0.072)	0.011 (0.047)	-0.020 (0.026)	-0.016 (0.062)	0.010 (0.042)	-0.010 (0.020)
<i>PolRights_{st-1}</i>	0.015 (0.006)	0.002 (0.005)	-0.005 (0.007)	0.014* (0.005)	-0.0004 (0.005)	-0.003 (0.005)
<i>CivLibert_{st-1}</i>	-0.015 (0.007)	0.019 (0.011)	0.025* (0.011)	-0.013 (0.006)	0.024* (0.010)	0.021* (0.007)
<i>Tertiary_{st-1}</i>	0.201* (0.062)	0.284* (0.095)	0.176*** (0.033)	0.169* (0.060)	0.308* (0.093)	0.216*** (0.038)
<i>FreeMig_{sdt-1}</i>	0.020 (0.069)	0.007 (0.045)	0.019 (0.047)	0.034 (0.054)	-0.014 (0.042)	0.054 (0.032)
<i>Comlang_{sd}</i>	0.122** (0.024)	0.167** (0.038)	0.082* (0.026)	0.122*** (0.019)	0.189*** (0.034)	0.113** (0.033)
<i>Colony_{sd}</i>	-0.201** (0.036)	-0.168** (0.047)	-0.032 (0.034)	-0.186** (0.033)	-0.203** (0.047)	-0.029 (0.030)
<i>Distance_{sd}</i>	0.122 (0.050)	0.105 (0.055)	0.015 (0.062)	0.117* (0.044)	0.095 (0.056)	0.053 (0.051)
<i>Contiguity_{sd}</i>	0.016 (0.097)	0.049 (0.054)	-0.120 (0.062)	0.0004 (0.085)	0.032 (0.061)	-0.117** (0.038)
<i>Relprox_{sd}</i>	-0.078 (0.068)	-0.084 (0.139)	-0.110 (0.088)	-0.069 (0.061)	-0.042 (0.144)	-0.067 (0.061)
Observations	1,366	2,004	2,172	1,594	2,252	3,598
Adjusted R ²	0.462	0.224	0.300	0.481	0.241	0.212

Notes: Cross-country estimates (OLS) for 1990, 1995 and 2010, nine destination countries (1)-(3) vs. 17 destination countries (4)-(6), share of all high-skilled migrants, robust standard errors clustered by destination country in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Columns (1)-(3) show that even for our sample of nine destination countries the number of observations is not constant as we pool countries with two to three

years of observations. Therefore, complete comparability is not given and we are very careful in interpreting the results.

In 1990, beliefs in social mobility are positively and significantly correlated with the share of high-skilled over total migrants; the coefficient is relatively high at 1.3, i.e., 0.3 percentage points higher than in the pooled regression.

This picture changes considerably in 1995. The coefficient of our belief variable is considerably lower at around 0.6, and no longer significant. This finding might be explained by the end of the Cold War. The breakdown of the communist regimes in Eastern Europe can be seen as an external shock that caused increasing migration flows from Eastern to Western European countries. In this period, the structure of migration changed substantially.

In the most current year 2010, we observe again a positive and significant correlation between beliefs in social mobility and the share of high-skilled over total migrants. The coefficient equals in absolute terms the level of 1990. Overall, this means that beliefs in social mobility regained importance in 2010.

Broadening the scope to 17 destination countries (columns (4)-(6)) changes these results only for the year 2010. Now, the coefficient of our belief variable is still significant but lower in absolute terms (at 0.6). This is due to the fact that we add especially destination countries with relatively lower shares of high-skilled migrants, and at the same time relatively weaker “American Dream” beliefs (cf. Tab. 1 and 2). This applies to six out of eight additional destination countries (Spain, Chile, Netherlands, Finland, France, and Denmark). Canada is reflecting the opposite concerning both variables whereas Portugal shows relatively stronger “American Dream” beliefs while the share of high-skilled migrants is relatively low. Except for the Netherlands and Canada (for which we observe beliefs in social mobility only in 1987 or 1992), all remaining countries enter the regression in 2010.

4.4 Robustness checks

We carried out two robustness checks. First, we split the sample according to the economic development of our 194 source countries in order to check if our results change if we exclude, e.g., developed or developing countries from our sample. We adopt the income classification of the World Bank (2016b) as a proxy for the

economic development of a country. The World Bank measures income by using gross national income (GNI) per capita and distinguishes four groupings: low, lower-middle, upper-middle, and high. As a sample split into these four groups would reduce the number of observations per group significantly, we exclude only those source countries that were grouped as high income countries in the respective year from our sample (52 countries in total). This exclusion does not change our results significantly (see Tab. 7 for the pooled estimates and Tab. 8 and 9 for the fixed effects estimates with and without the United Kingdom).

Table 7: Robustness check source countries:
Pooled estimates

	(1) $(\frac{M_{sd}^h}{M_{sd}^J})_{all}$	(2) $(\frac{M_{sd}^h}{M_{sd}^J})_m$	(3) $(\frac{M_{sd}^h}{M_{sd}^J})_{\Delta f}$	(4) $(\frac{M_{sd}^h}{M_{sd}^J})_{all}$	(5) $(\frac{M_{sd}^h}{M_{sd}^J})_m$	(6) $(\frac{M_{sd}^h}{M_{sd}^J})_{\Delta f}$
<i>Belief_{dt-1}</i>	1.289*** (0.050)	1.309*** (0.057)	-0.039 (0.041)	0.961*** (0.057)	0.986*** (0.065)	-0.051 (0.045)
<i>GDP_{dst-1}</i>				0.120 (0.077)	0.122 (0.090)	-0.005 (0.067)
<i>Pop65_{st-1}</i>				-0.026 (0.021)	-0.040 (0.023)	0.028* (0.013)
<i>PolRights_{st-1}</i>				0.0002 (0.005)	-0.008 (0.005)	0.017*** (0.004)
<i>CivLibert_{st-1}</i>				0.015* (0.006)	0.026*** (0.007)	-0.021*** (0.005)
<i>Tertiary_{st-1}</i>				0.287*** (0.043)	0.253*** (0.048)	0.067* (0.029)
<i>FreeMig_{sdst-1}</i>				0.022 (0.026)	0.013 (0.028)	0.019 (0.019)
<i>Comlang_{sd}</i>				0.133*** (0.019)	0.145*** (0.020)	-0.025 (0.014)
<i>Colony_{sd}</i>				-0.120*** (0.024)	-0.139*** (0.026)	0.038** (0.012)
<i>Distance_{sd}</i>				0.092*** (0.015)	0.102*** (0.017)	-0.019 (0.012)
<i>Contiguity_{sd}</i>				-0.070 (0.065)	-0.056 (0.080)	-0.029 (0.037)
<i>Relprox_{sd}</i>				-0.114** (0.044)	-0.097 (0.050)	-0.035 (0.026)
<i>Year_1995</i>				0.037*** (0.008)	0.014 (0.010)	0.047*** (0.008)
<i>Year_2010</i>				0.041** (0.013)	0.019 (0.015)	0.044*** (0.011)
Observations	4,712	4,712		4,712	4,712	
Adjusted R ²	0.277	0.287		0.341	0.356	

Notes: Pooled OLS over all three years, nine destination countries, without high income source countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 8: Robustness check source countries:
Fixed effects estimates

	(1) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(2) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(3) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$	(4) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(5) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(6) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$
<i>Belief</i> _{dt-1}	-0.098 (0.116)	-0.111 (0.152)	0.026 (0.133)	-0.142 (0.150)	-0.221 (0.199)	0.157 (0.137)
<i>GDP</i> _{dst-1}	1.334*** (0.122)	1.207*** (0.161)	0.255 (0.137)	0.711*** (0.165)	0.565* (0.230)	0.294 (0.224)
<i>Pop</i> _{65st-1}	0.148** (0.056)	0.133 (0.075)	0.031 (0.071)	0.114* (0.056)	0.102 (0.075)	0.026 (0.072)
<i>Tertiary</i> _{st-1}	0.143** (0.055)	0.111 (0.072)	0.064 (0.068)	0.050 (0.063)	0.008 (0.081)	0.084 (0.077)
<i>FreeMig</i> _{dst-1}	-0.018 (0.031)	-0.057 (0.036)	0.078* (0.032)	0.010 (0.031)	-0.028 (0.037)	0.077* (0.033)
Country-pair FE	Yes	Yes		Yes	Yes	
Time FE	No	No		Yes	Yes	
Observations	5,146	5,146		5,146	5,146	
Adjusted R ²	0.707	0.741		0.709	0.745	

Notes: Pooled OLS over all three years with country-pair and time fixed effects, nine destination countries, without high income source countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 9: Robustness check source countries:
Fixed effects estimates without the United Kingdom

	(1) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(2) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(3) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$	(4) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(5) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(6) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$
<i>Belief</i> _{dt-1}	0.448*** (0.100)	0.458*** (0.134)	-0.020 (0.147)	0.947*** (0.111)	0.913*** (0.168)	0.068 (0.165)
<i>GDP</i> _{dst-1}	0.743*** (0.105)	0.573*** (0.145)	0.341* (0.168)	0.389** (0.151)	0.187 (0.220)	0.404 (0.242)
<i>Pop</i> _{65st-1}	0.130** (0.048)	0.116 (0.067)	0.027 (0.081)	0.087 (0.047)	0.073 (0.067)	0.027 (0.081)
<i>Tertiary</i> _{st-1}	0.029 (0.044)	-0.002 (0.062)	0.062 (0.080)	0.023 (0.052)	-0.016 (0.071)	0.079 (0.087)
<i>FreeMig</i> _{dst-1}	-0.029 (0.021)	-0.066* (0.031)	0.073 (0.040)	-0.017 (0.022)	-0.052 (0.034)	0.069 (0.041)
Country-pair FE	Yes	Yes		Yes	Yes	
Time FE	No	No		Yes	Yes	
Observations	4,482	4,482		4,482	4,482	
Adjusted R ²	0.724	0.771		0.730	0.780	

Notes: Pooled OLS over all three years with country-pair and time fixed effects, eight destination countries, without high income source countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

In the second robustness check, we use the share of low-skilled instead of high-skilled over total migrants as independent variable (cf. Tab. 10 for the pooled estimates and Tab. 11 and 12 for the fixed effects estimates with and without the United Kingdom). Stocks of low-skilled migrants are also included in the IAB brain drain dataset. As a consequence of the rising share of high-skilled migrants, their share is decreasing over time. The objective is to analyze differences in the location choice of migrants according to their skill level.

The results are manifold: the pooled estimation for all nine destination countries shows a slightly negative and significant coefficient (-0.1) of our belief variable for the pure effect of public beliefs in social mobility on high-skilled migration (cf. Tab. 10). After adding the control variables, the coefficient becomes insignificant and is slightly positive for male and slightly negative for female high-skilled migrants.¹⁶

We observe a positive correlation for both gender if we add country-pair fixed effects (cf. Tab. 11). Thereby, only the coefficient for male low-skilled migrants is significant (at the 0.05 level). If we add time fixed effects, the correlation becomes positive and highly significant for both. The respective coefficient ranges at 1.2 for males and at 0.9 for females, i.e., male low-skilled migrants sort to a larger extent into destination countries with stronger “American Dream” beliefs. This picture turns if we exclude the United Kingdom from our sample (cf. Tab. 12). Now, the correlation is negative and only significant at the 0.05 level for females if we include country-pair fixed effects. If we additionally include time fixed effects, the coefficients are positive and significant for both gender.

¹⁶Excluding the UK from the pooled estimation for low-skilled migrants leads to an even negative and highly significant coefficient of our belief variable of -0.4. Doing the same exercise in the pooled estimation for high-skilled migrants slightly increases the positive and highly significant coefficient to 1.0.

Table 10: Robustness check share low-skilled migrants:
Pooled estimates

	(1) $(\frac{M^l_{sd}}{M^J_{sd}})_{all}$	(2) $(\frac{M^l_{sd}}{M^J_{sd}})_m$	(3) $(\frac{M^l_{sd}}{M^J_{sd}})\Delta f$	(4) $(\frac{M^l_{sd}}{M^J_{sd}})_{all}$	(5) $(\frac{M^l_{sd}}{M^J_{sd}})_m$	(6) $(\frac{M^l_{sd}}{M^J_{sd}})\Delta f$
<i>Belief_{dt-1}</i>	-0.147** (0.048)	-0.113* (0.047)	-0.068 (0.034)	0.011 (0.058)	0.031 (0.058)	-0.038 (0.041)
<i>GDP_{dst-1}</i>				-0.034 (0.043)	-0.034 (0.041)	-0.0004 (0.025)
<i>Pop65_{st-1}</i>				0.054** (0.018)	0.054** (0.017)	0.001 (0.009)
<i>PolRights_{st-1}</i>				-0.001 (0.005)	-0.004 (0.004)	-0.005 (0.003)
<i>CivLibert_{st-1}</i>				0.008 (0.006)	0.005 (0.006)	0.008 (0.004)
<i>Tertiary_{st-1}</i>				-0.067* (0.029)	-0.039 (0.028)	-0.054** (0.019)
<i>FreeMig_{sdt-1}</i>				-0.029 (0.022)	-0.022 (0.020)	-0.015 (0.013)
<i>Comlang_{sd}</i>				-0.017 (0.014)	-0.019 (0.014)	0.004 (0.010)
<i>Colony_{sd}</i>				0.211*** (0.022)	0.214*** (0.023)	-0.006 (0.009)
<i>Distance_{sd}</i>				-0.100*** (0.013)	-0.095*** (0.013)	-0.001 (0.008)
<i>Contiguity_{sd}</i>				-0.020 (0.048)	-0.050 (0.050)	0.052* (0.022)
<i>Relprox_{sd}</i>				-0.197*** (0.037)	-0.209*** (0.036)	0.025 (0.025)
<i>Year_1995</i>				0.021* (0.008)	0.030*** (0.008)	-0.019** (0.007)
<i>Year_2010</i>				-0.039*** (0.010)	-0.031** (0.010)	-0.016* (0.007)
Observations	5,542	5,542		5,542	5,542	
Adjusted R ²	0.005	0.013		0.121	0.128	

Notes: Pooled OLS over all three years, nine destination countries, share low-skilled over total migrants (all migrants, male migrants and the difference between female and male migrants), robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11: Robustness check share low-skilled migrants:
Fixed effects estimates

	(1) $(\frac{M^l_{sd}}{M^J_{sd}})_{all}$	(2) $(\frac{M^l_{sd}}{M^J_{sd}})_m$	(3) $(\frac{M^l_{sd}}{M^J_{sd}})\Delta f$	(4) $(\frac{M^l_{sd}}{M^J_{sd}})_{all}$	(5) $(\frac{M^l_{sd}}{M^J_{sd}})_m$	(6) $(\frac{M^l_{sd}}{M^J_{sd}})\Delta f$
<i>Belief_{dt-1}</i>	0.134 (0.087)	0.227* (0.108)	-0.187 (0.104)	1.081*** (0.133)	1.229*** (0.148)	-0.296* (0.115)
<i>GDP_{dst-1}</i>	-0.272** (0.087)	-0.319** (0.106)	0.094 (0.087)	-0.021 (0.105)	-0.007 (0.126)	-0.027 (0.109)
<i>Pop65_{st-1}</i>	-0.200*** (0.035)	-0.181*** (0.042)	-0.038 (0.033)	-0.205*** (0.034)	-0.184*** (0.040)	-0.043 (0.033)
<i>Tertiary_{st-1}</i>	-0.174*** (0.034)	-0.170*** (0.041)	-0.010 (0.036)	-0.060 (0.038)	-0.037 (0.046)	-0.046 (0.042)
<i>FreeMig_{sd-1}</i>	0.044** (0.014)	0.062*** (0.017)	-0.037* (0.015)	0.026 (0.014)	0.045** (0.017)	-0.038** (0.015)
Country-pair FE	Yes	Yes		Yes	Yes	
Time FE	No	No		Yes	Yes	
Observations	6,632	6,632		6,632	6,632	
Adjusted R ²	0.607	0.616		0.632	0.651	

Notes: Pooled OLS over all three years with country-pair and time fixed effects, nine destination countries, share low-skilled over total migrants (all migrants, male migrants and the difference between female and male migrants), robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 12: Robustness check share low-skilled migrants:
Fixed effects estimates without the United Kingdom

	(1) $(\frac{M^l_{sd}}{M^J_{sd}})_{all}$	(2) $(\frac{M^l_{sd}}{M^J_{sd}})_m$	(3) $(\frac{M^l_{sd}}{M^J_{sd}})\Delta f$	(4) $(\frac{M^l_{sd}}{M^J_{sd}})_{all}$	(5) $(\frac{M^l_{sd}}{M^J_{sd}})_m$	(6) $(\frac{M^l_{sd}}{M^J_{sd}})\Delta f$
<i>Belief_{dt-1}</i>	-0.155 (0.085)	-0.047 (0.106)	-0.217 (0.111)	0.613*** (0.143)	0.769*** (0.155)	-0.312* (0.140)
<i>GDP_{dst-1}</i>	0.061 (0.084)	0.018 (0.102)	0.085 (0.100)	0.056 (0.104)	0.075 (0.126)	-0.037 (0.120)
<i>Pop65_{st-1}</i>	-0.210*** (0.0354)	-0.192*** (0.042)	-0.037 (0.037)	-0.222*** (0.036)	-0.200*** (0.042)	-0.043 (0.038)
<i>Tertiary_{st-1}</i>	-0.091** (0.031)	-0.095* (0.039)	0.008 (0.041)	-0.056 (0.037)	-0.042 (0.046)	-0.028 (0.047)
<i>FreeMig_{sd-1}</i>	0.049*** (0.014)	0.068*** (0.017)	-0.037* (0.017)	0.029* (0.015)	0.049** (0.017)	-0.039* (0.017)
Country-pair FE	Yes	Yes		Yes	Yes	
Time FE	No	No		Yes	Yes	
Observations	5,770	5,770		5,770	5,770	
Adjusted R ²	0.554	0.576		0.570	0.599	

Notes: Pooled OLS over all three years with country-pair and time fixed effects, eight destination countries, share low-skilled over total migrants (all migrants, male migrants and the difference between female and male migrants), robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

These results give an indication that – without considering the United Kingdom – low-skilled migrants sort to a lesser extent into destination countries with stronger “American Dream” beliefs than high-skilled migrants. The belief coefficient for the share of all low-skilled migrants ranges at 0.6 whereas the respective coefficient for high-skilled migrants ranges at 0.9. We would argue that low-skilled migrants are more constrained in their migration and location decision and would base their location choice therefore less on “softer” factors like beliefs in social mobility. Furthermore, low-skilled migrants are – due to their lower skill level – on average less “well-equipped” to get ahead in life than high-skilled migrants. Knowing this can make the investment of own effort in order to attain social status relatively less attractive for low-skilled migrants. For high-skilled migrants, skills and effort can reinforce each other relatively more, and thus can lead to better future prospects (see, e.g., Lumpe et al. (2016)).

5 Conclusions

This paper stands for a first empirical evaluation of the link between country-specific beliefs in social mobility and high-skilled migration. The results of our pooled estimations suggest that there exists a positive and highly significant correlation both for male and female high-skilled migrants. This means that we observe higher shares of high-skilled migrants in countries with stronger “American Dream” beliefs. Gender-specific differences are not observable.

According to the cross-country estimations the effect is measurable in the years 1990 and 2010. In 1995, when the end of the Cold War changed the structure of migration substantially, the effect was replaced by other factors that were driving the location choice of high-skilled migrants.

The United Kingdom turns out to be an outlier. Among all destination countries in our sample, the United Kingdom recorded the highest increase in percentage points in the share of high-skilled migrants between 1990 and 2010, although beliefs in social mobility remained relatively unchanged. However, the beliefs still range on the highest level among all European countries in our sample. This fact leads to the result that – once adding country-pair and time fixed effects to our pooled estimation – a positive and highly significant correlation between beliefs in social mobility and high-skilled migration can only be confirmed if we exclude the

United Kingdom from our sample.

Our results are robust with respect to the exclusion of high income source countries from our sample. Still without consideration of the United Kingdom, we further observe that high-skilled migrants respond more strongly to “American Dream” beliefs than low-skilled migrants, and thus select themselves to a larger extent into destination countries, where these beliefs are higher and consequently can guarantee them a higher social status.

To conclude, we can derive from our results that beliefs in social mobility have the potential to influence the decision of high-skilled migrants where to migrate. We like to argue that public beliefs in social mobility act as an “image” or as a signal of the respective destination country to potential high-skilled immigrants. Thereby, we do not expect that beliefs in social mobility trigger immigration on a very short term, but our findings clearly demonstrate that destination countries with stronger “American Dream” beliefs can attract more high-skilled migrants over time.

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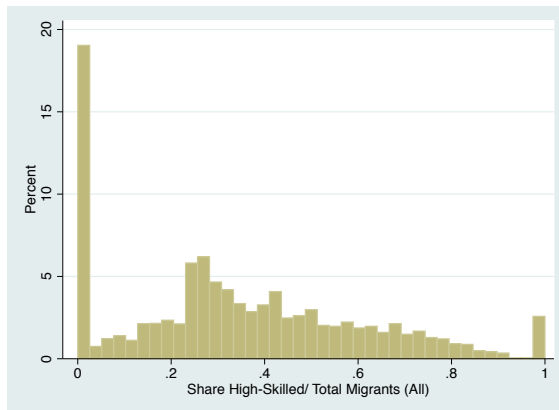
Appendix

Table A1: Descriptive statistics, definitions and sources of variables

Variables	Definition	Obs.	Mean	Std. Dev.	Min	Max
$(M_{sd}^h/M_{sd}^j)_{all}$	High-skilled / total immigrants (all) (%) sd, t	8,924	0.35	0.26	0	1
$(M_{sd}^h/M_{sd}^j)_m$	High-skilled / total immigrants (male) (%) sd, t	4,462	0.37	0.27	0	1
$(M_{sd}^h/M_{sd}^j)_f$	High-skilled / total immigrants (female) (%) sd, t	4,462	0.33	0.25	0	1
$Belief_{dt-1}$	Beliefs in social mobility (%) d, t-1	23	0.77	0.11	0.59	0.96
GDP_{dst-1}	GDP p.c., PPP (constant 2005 int. \$) d-s, t-1	3,835	20,222	13,372	-47,144*	46,813
$Pop65_{st-1}$	Population ages 65 and above (% of total) s, t-1	549	0.07	0.05	0.04	0.22
$PolRights_{st-1}$	Political rights (numerical rating) s, t-1	524	3.97	2.20	1	7
$CivLibert_{st-1}$	Civil liberties (numerical rating) s, t-1	524	3.87	1.87	1	7
$Tertiary_{st-1}$	Tertiary school enrollment (%) s, t-1	486	0.22	0.22	0	1
$FreeMig_{sdt-1}$	Free labor migration (dummy variable) sd, t-1	4,462	0.06	0.23	0	1
$Comlang_{sd}$	Common official language (dummy variable), sd	1,710	0.16	0.37	0	1
$Colony_{sd}$	Colonial past (dummy variable), sd	1,710	0.05	0.22	0	1
$Contiguity_{sd}$	Common Border (dummy variable), sd	1,710	0.02	0.13	0	1
$Distance_{sd}$	Weighted distance between biggest cities (pop-wt,km), sd	1,701	8,177	4,800	241	19,539
$Relprox_{sd}$	Religious proximity (continuous measure), sd	1,575	0.13	0.15	0	0.8

Notes: Sample of nine destination countries, over all three years (1990, 1995, 2010). * The lowest (even negative) difference in GDP per capita between destination and source country occurs for high-skilled migrants from the United Arab Emirates to New Zealand, the United Kingdom, or Sweden. Sources: IAB Brain drain dataset for immigrant stocks, ISSP Social Inequality I (1987), II (1992), IV (2009) for beliefs in social mobility, Word Development Indicators (WDI) of the World Bank for GDP, population age, and tertiary school enrollment, Freedom House for political rights and civil liberties, OECD and Eurofound for free labor migration agreements, CEPII, Mayer and Zignago (2011) for common official language, colonial past, contiguity, and distance, CEPII, Melitz and Toubal (2014) for religious proximity

Figure A2: Density function
share high-skilled over total migrants



Notes: Sample of nine destination countries, over all three years (1990, 1995, 2010), all high-skilled migrants, Source: IAB Brain Drain Data

Table A3: Share high-skilled over total migrants (mean values)

	<i>9 countries</i>			<i>17 countries</i>		
	All	Male	Female	All	Male	Female
1990	28.4 %	32.4 %	24.3 %	26.1 %	29.6 %	22.6 %
1995	32.0 %	33.8 %	30.1 %	34.3 %	36.4 %	32.2 %
2010	41.0 %	42.1 %	39.9 %	35.2 %	35.9 %	34.5 %
Three years	34.6 %	36.7 %	32.5 %	32.9 %	34.6 %	31.2 %

Notes: Mean values over all shares of high-skilled over total migrants in the sample of nine vs. 17 destination countries, separately for 1990, 1995, 2010, and over all three years, according to gender, Source: IAB Brain Drain Data

Table A4: High-skilled and total migrants (in absolute numbers)

	M^h	M^j	M^h/M^j
1990	7,9	25,1	31.4 %
1995	9,7	29,0	33.5 %
2010	20,7	50,9	40.6 %
Three years	38,3	105,1	36.4 %

Notes: Nine destination countries, high-skilled migrants and total migrants on the basis of the sum of absolute numbers over all country-pairs (in millions), separately for 1990, 1995, 2010, and over all three years, all migrants, Source: IAB Brain Drain Data

Table A5: Frequencies ISSP survey question
“How important you think is hard work for getting ahead in life?”

	1987	1992	2009	Total
Essential (1)	2,574 (27.8 %)	3,686 (27.8 %)	5,622 (27.7 %)	11,882 (27.7 %)
Very important (2)	4,319 (46.6 %)	6,062 (45.7 %)	9,057 (44.7 %)	19,438 (45.4 %)
Fairly important (3)	1,960 (21.1 %)	2,860 (21.6 %)	4,486 (22.1 %)	9,306 (21.7 %)
Not very important (4)	339 (3.7 %)	557 (4.2 %)	913 (4.5 %)	1,809 (4.2 %)
Not important at all (5)	82 (0.9 %)	103 (0.8 %)	201 (1.0 %)	386 (0.9 %)
Total	9,274 (100 %)	13,268 (100 %)	20,279 (100 %)	42,821 (100 %)

Source: ISSP Social Inequality I (1987), II (1992), IV (2009)

Table A6: Fixed effects estimates (destination country)

	(1) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(2) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(3) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$	(4) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(5) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(6) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$
<i>Belief</i> _{dt-1}	0.806*** (0.075)	0.692*** (0.085)	0.228** (0.082)	-0.167 (0.113)	-0.196 (0.125)	0.059 (0.089)
<i>GDP</i> _{dst-1}	0.007 (0.041)	0.006 (0.044)	0.001 (0.040)	-0.081 (0.042)	-0.070 (0.046)	-0.023 (0.042)
<i>Pop65</i> _{st-1}	-0.068*** (0.014)	-0.076*** (0.015)	0.016 (0.010)	-0.060*** (0.014)	-0.068*** (0.015)	0.018 (0.010)
<i>Tertiary</i> _{st-1}	0.238*** (0.026)	0.199*** (0.029)	0.078*** (0.021)	0.164*** (0.027)	0.134*** (0.031)	0.059* (0.023)
<i>FreeMig</i> _{sd-1}	0.053*** (0.016)	0.071*** (0.017)	-0.036*** (0.010)	0.039* (0.015)	0.059*** (0.017)	-0.040*** (0.010)
Destination country FE	Yes		Yes	Yes	Yes	
Time FE	No		No	Yes	Yes	
Observations	6,632		6,632	6,632		6,632
Adjusted R ²	0.414		0.433	0.430		0.449

Notes: Pooled OLS over all three years with destination country and time fixed effects, nine destination countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A7: Fixed effects estimates without the United Kingdom (destination country)

	(1) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(2) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(3) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$	(4) $(\frac{M^h_{sd}}{M^j_{sd}})_{all}$	(5) $(\frac{M^h_{sd}}{M^j_{sd}})_m$	(6) $(\frac{M^h_{sd}}{M^j_{sd}})\Delta f$
<i>Belief</i> _{dt-1}	0.863*** (0.077)	0.744*** (0.088)	0.239** (0.086)	0.856*** (0.096)	0.857*** (0.115)	-0.003 (0.105)
<i>GDP</i> _{dst-1}	-0.047 (0.045)	-0.042 (0.049)	-0.011 (0.046)	-0.086 (0.046)	-0.069 (0.051)	-0.033 (0.048)
<i>Pop65</i> _{st-1}	-0.062*** (0.016)	-0.069*** (0.017)	0.014 (0.011)	-0.060*** (0.016)	-0.068*** (0.017)	0.016 (0.011)
<i>Tertiary</i> _{st-1}	0.187*** (0.028)	0.149*** (0.032)	0.076** (0.025)	0.159*** (0.030)	0.131*** (0.034)	0.057* (0.026)
<i>FreeMig</i> _{sd-1}	0.054** (0.018)	0.074*** (0.019)	-0.038*** (0.011)	0.047** (0.018)	0.068*** (0.019)	-0.042*** (0.011)
Destination country FE	Yes		Yes	Yes	Yes	
Time FE	No		No	Yes	Yes	
Observations	5,770		5,770	5,770		5,770
Adjusted R ²	0.434		0.453	0.440		0.460

Notes: Pooled OLS over all three years with destination country and time fixed effects, eight destination countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A8: Fixed effects estimates (source country)

	(1) $(\frac{M^h}{M^f}_{sd})_{all}$	(2) $(\frac{M^h}{M^f}_{sd})_m$	(3) $(\frac{M^h}{M^f}_{sd})_{\Delta f}$	(4) $(\frac{M^h}{M^f}_{sd})_{all}$	(5) $(\frac{M^h}{M^f}_{sd})_m$	(6) $(\frac{M^h}{M^f}_{sd})_{\Delta f}$
<i>Belief</i> _{dt-1}	1.211*** (0.041)	1.236*** (0.047)	-0.049 (0.035)	1.197*** (0.042)	1.227*** (0.049)	-0.060 (0.036)
<i>GDP</i> _{dst-1}	0.200*** (0.061)	0.224** (0.074)	-0.048 (0.059)	0.135* (0.067)	0.182* (0.081)	-0.094 (0.065)
<i>Pop65</i> _{st-1}	0.077* (0.036)	0.042 (0.040)	0.070* (0.028)	0.044 (0.035)	0.027 (0.040)	0.034 (0.030)
<i>Tertiary</i> _{st-1}	0.086** (0.033)	0.038 (0.037)	0.097*** (0.029)	-0.008 (0.038)	-0.021 (0.042)	0.027 (0.032)
<i>FreeMig</i> _{dst-1}	0.037** (0.013)	0.028 (0.015)	0.018 (0.012)	0.036** (0.013)	0.029 (0.015)	0.014 (0.012)
Source country FE	Yes		Yes	Yes		Yes
Time FE	No		No	Yes		Yes
Observations	6,632	6,632		6,632	6,632	
Adjusted R ²	0.364	0.368		0.366	0.372	

Notes: Pooled OLS over all three years with source country and time fixed effects, nine destination countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A9: Fixed effects estimates without the United Kingdom (source country)

	(1) $(\frac{M^h}{M^f}_{sd})_{all}$	(2) $(\frac{M^h}{M^f}_{sd})_m$	(3) $(\frac{M^h}{M^f}_{sd})_{\Delta f}$	(4) $(\frac{M^h}{M^f}_{sd})_{all}$	(5) $(\frac{M^h}{M^f}_{sd})_m$	(6) $(\frac{M^h}{M^f}_{sd})_{\Delta f}$
<i>Belief</i> _{dt-1}	1.373*** (0.046)	1.406*** (0.053)	-0.066 (0.041)	1.368*** (0.047)	1.409*** (0.054)	-0.082* (0.042)
<i>GDP</i> _{dst-1}	-0.066 (0.065)	-0.055 (0.079)	-0.022 (0.064)	-0.070 (0.071)	-0.040 (0.085)	-0.0607 (0.068)
<i>Pop65</i> _{st-1}	0.036 (0.028)	-0.003 (0.032)	0.077* (0.032)	0.022 (0.028)	0.004 (0.033)	0.037 (0.034)
<i>Tertiary</i> _{st-1}	-0.029 (0.028)	-0.076* (0.033)	0.095** (0.033)	-0.044 (0.032)	-0.051 (0.038)	0.016 (0.035)
<i>FreeMig</i> _{dst-1}	0.080*** (0.016)	0.073*** (0.019)	0.016 (0.014)	0.077*** (0.016)	0.072*** (0.019)	0.010 (0.014)
Source country FE	Yes		Yes	Yes		Yes
Time FE	No		No	Yes		Yes
Observations	5,770	5,770		5,770	5,770	
Adjusted R ²	0.402	0.406		0.403	0.408	

Notes: Pooled OLS over all three years with source country and time fixed effects, eight destination countries, share of all high-skilled migrants, male high-skilled migrants and the difference between female and male high-skilled migrants, robust standard errors clustered at the country-pair level in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$