

Do potential migrants internalise migrant rights in OECD host societies?

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Abstract

This paper analyses how countries' provision of migrant rights affects potential migrants' destination choice. Combining data on bilateral migration desires from over 140 origin countries and data on migrant rights in 38 mainly OECD destination countries over the period 2007-2014, we find that potential migrants tend to favor destinations that are more open to the inclusion of immigrants into their society. In particular, better access to and conditions on the labour market, as well as access to nationality and to permanent residency significantly increase the perceived attractiveness of a destination country. These results are robust across different specifications and hold for subsamples of origin countries as well as of destinations. Moreover, some results vary across types of respondents. Educational opportunities for migrants, for instance, affect the migration desires of individuals aged 15 to 24 years, but less so of individuals in other age groups.

Keywords: Migration desires, Migrants' destination choice, Migrant rights, Quality of institutions

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1 Introduction

Immigration has shaped the debates during many recent elections, including the Brexit campaign, the 2017 presidential elections in the United States and national elections in Austria, France, Germany and Italy (among others). In order to design effective policies regulating immigration flows, understanding the determinants of prospective immigrants' decision is key. Particularly relevant in this regard is the impact of different types of policies on the attractiveness of destination countries and the ensuing migration flows. The objective of this paper is to provide a better understanding of how institutional policies regulating immigrants' integration and rights influence migrants' destination choice.

An important literature focuses on the possible determinants of international migration, both on the actual flows and on the desired movements of people, relying on theory-based pseudo-gravity models (for a survey, see Beine et al., 2016). This literature discusses the role of several key factors such as expected relative incomes (see e.g. Docquier et al., 2014; Grogger and Hanson, 2011) as well as non-economic and historical determinants such as geographical distance, colonial ties and cultural proximity. Moreover, the presence of large networks at destination have been shown to facilitate the movement of new immigrants from the same origin country, both in terms of actual flows (Beine et al., 2011) and desired moves (Bertoli and Ruysen, 2018). Furthermore, migratory flows are influenced by push factors like climate change, natural disasters and conflicts in countries of origin (Beine and Parsons, 2015; Cattaneo and Peri, 2016). Finally, conditions of access/entry to destination countries regulating the observed migration flows are found to be important determinants: Bertoli and Moraga (2013) look at the role of bilateral immigration policies and show that the introduction of a travel visa requirement reduces direct bilateral flows by 40 to 47 percent.¹

The role of the institutional setting at origin and destination in shaping migration flows has so far been addressed in rather general terms (see Baudassé et al., 2018 for a recent review of the link between immigration and institutions). Existing studies focus on the

¹For a comprehensive overview of the literature on the economics of international migration and the effectiveness of immigration policies in shaping migration patterns in particular, see Hatton (2014).

impact of broad institutional indicators such as economic freedom (Ashby, 2010; Nejad and Young, 2016), the quality of governance (Ariu et al., 2016; Bergh et al., 2015) and the generosity of the welfare system (De Giorgi and Pellizzari, 2009; Pedersen et al., 2008) on observed migration flows. Moreover, labour market institutions such as employment protection (Bazillier and Moullan, 2012; Geis et al., 2013), trade union density and power (Cigagna and Sulis, 2015; Migali, 2018) and minimum wages (Cigagna and Sulis, 2015; Giulietti, 2014) have been considered as potential determinants of location choice.

Surprisingly, the impact of the institutional setup shaping immigrants' integration and rights has received rather limited attention. The current paper aims to fill this gap in the literature by combining a unique micro level dataset on stated emigration desires in 145 countries worldwide, provided by the Gallup World Poll (GWP) survey, with various sub-indicators of the Migrant Integration Policy Index (MIPEX). These indicators, available between 2007 and 2014, cover a wide range of policies and rights explicitly pertaining to the integration of immigrants. The granularity provided by these indicators is an advantage compared to more general measures describing the institutional framework or governance indicators affecting the overall population. Specifically, MIPEX provides information on the rights entitled to migrants in the following integration dimensions: labour market access and mobility, permanent residence, naturalisation, family reunification, political participation and education. It is available for up to 38 countries, including a large set of the main destination countries for worldwide migration, which together represent 74% of aspiring immigrants. The MIPEX indicators are not available for four of the top 15 destinations, i.e. Saudi Arabia, Russia, South Africa and United Arab Emirates. Yet, while these excluded countries together account for 10% of the expressed desired destinations, each of them constitutes the preferred destination for less than 3% of aspiring migrants worldwide. These four countries also differ from those in our sample in terms of desired immigration patterns. They attract aspiring immigrants with different skill levels and from a smaller number of origin countries compared to other similarly popular destinations. This implies that our results are supportive of an impact of migrant rights on the attractiveness of destinations that have relatively diversified origins of migrants and a mixed composition of the migrant population in terms of skill levels.

The literature on migration desires is small but growing (Becerra, 2012; Carling, 2002; Creighton, 2013; Drinkwater and Ingram, 2009; Dustmann and Okatenko, 2014; Jónsson,

2008; Van Dalen et al., 2005a,b) and characterised by an ongoing discussion on whether migration desires actually signal a person’s migration plans as opposed to pure wishful thinking (Manchin et al., 2014; Van Dalen and Henkens, 2008). The desires to migrate that we define in this paper are, however, stricter than mere migration considerations as used by e.g. Creighton (2013). Whereas the latter considers whether the respondent has thought about moving outside the locality or community where he or she lives in the future, the GWP use a stronger formulation which directly asks for the likely response under ideal conditions (Manchin et al., 2014). Hence, analysing the effect of institutional settings, besides traditional determinants of migration such as economic prospects, distance, networks and common historical links, on emigration *desires* rather than on *observed* flows yields several specific insights. First, any actual migration movement of individuals is based on expectations and desires. As such, an analysis of what drives the migration desire in itself may significantly contribute to our understanding of global migration patterns. In that respect, Bertoli and Ruysen (2018) show that there is a strong correlation between desired migration choices and actual flows. Second, the choice set of potential desired destinations is unconstrained: a respondent desiring to move abroad can state any country as preferred destination without limitation, even if he does not have the means to actually move. Third, observed migratory movements are strongly affected by restrictions induced by immigration policies. While a respondent may be willing and able to afford to move to his or her desired destination, he or she might not be allowed to do so due to legal restrictions. In other words, the use of desired migration flows allows to neutralise the role of out-selection factors (i.e. external factors affecting the possibility for migrants to realise their desired choices, either in terms of emigration or in terms of chosen destination, e.g. immigration policies) and to better identify the effect of self-selection factors (i.e. factors affecting the choices of the prospective migrants in terms of desire to leave or in terms of preferred destination, e.g. income at origin or migrant entitlements and rights at destination). Finally, the data on migration desires provide a direct estimate of the number of aspiring stayers, i.e. people choosing to stay in their country as their optimal choice. This number is often cumbersome to compute in data on actual moves.

To empirically analyse the choice of aspiring migrants among the 38 alternative mostly OECD destination countries², we compute the bilateral share of aspiring migrants (i.e. the

²Our sample does not cover all OECD countries and includes also five non-OECD countries, following

ratio of those expressing a desire to emigrate from a specific origin country to a particular destination country over those who desire to stay) and estimate a gravity model using the Pseudo Poisson Maximum Likelihood estimator (PPML) to account for the high occurrence of zeros in our dependent variable. The model includes origin-year fixed effects (FE) capturing all the origin-specific factors as well as destination FE capturing time-invariant factors that are specific to a destination. Our evidence indicates that immigrants tend to favour countries with more generous regulations specific to them in terms of labour market access, access to permanent residence as well as easier access to the nationality of the host country.

First, we discuss the potential reverse causality stemming from the fact that laws and institutions could react to (past or expected) migration flows. Second, to mitigate the concern of omitted variable bias, we supplement the benchmark specification with a proxy for visa restrictions. Third, we run a two-stage estimation procedure to address the issue of multi-lateral resistance to migration. Fourth, we run a placebo test, re-estimating our benchmark model on the subsample of Schengen countries because individuals originating from these countries have similar rights to migrants, especially in terms of labor market access. We also run our estimations by changing the sample of destination countries considered to test the robustness of dropping important destinations (such as the United States of America), more rarely mentioned destinations (such as the new member states of the European Union) or origin countries with a tradition of emigration towards non-OECD countries. In addition, we also run regressions keeping in the sample only origin countries for which the main destination is also available in MIPEX and regression in which we focus only on countries for which data is available throughout the entire period 2007-2014. Fifth, we run our estimations using a more demanding dyadic (origin-destination) fixed effects structure in order to address additional potential omitted variable bias. Finally, we also estimate the impact of migrant rights when they are all added simultaneously. Our main results are robust across these different specifications.

Interestingly, the Gallup data allow to account for a heterogeneous impact of the various MIPEX indicators on migration desires by re-estimating our benchmark model on different subsamples of respondents, i.e. for low versus high skilled, men versus women, working

the availability of the MIPEX indicator. The non-included OECD countries are Chile, Israel and Mexico. The five non-OECD countries included in our sample are Bulgaria, Croatia, Cyprus, Malta and Romania. We also re-estimate our benchmark specification excluding non-OECD destinations from the choice set and results are very robust (results available upon request).

age versus young, respondents with or without children and respondents with or without a partner. We find that labour market mobility seems to be slightly more important for men than for women, although it remains the most significant and important indicator for the latter. Access to education opportunities are particularly important for individuals aged 15 to 24, who might benefit from educational opportunities at destination.

The paper is organised as follows. Section 2 provides a brief literature review. Section 3 presents our key data while section 4 discusses the econometric specification and the measurement of key variables used in the empirical analysis. Section 5 presents the benchmark results as well as the results of a number of robustness tests and those obtained from allowing for a heterogeneous response of policies across categories of respondents. Section 6 concludes.

2 Literature Review

Most of the existing literature has focused on the general institutional setting of the origin and destination countries, affecting both migrants and non-migrants. Ashby (2010), for instance, finds a positive impact of the economic freedom differential between the origin and destination country on migration flows whereas the effect of political freedom is less robust. Nejad and Young (2016) show that it is the economic freedom in destination countries that acts as a pull factor for migrants. Using six governance indicators based on the Worldwide Governance Indicators (Kaufmann et al., 2009), Ariu et al. (2016) find that net inflows of high skilled emigration are driven by the quality of governance in both the origin and destination countries. For low-skilled individuals however, they do not find a significant effect of institutions in the destination countries. Similarly, Bergh et al. (2015) use an updated version of the Worldwide Governance Indicators to proxy political and economic institutions which include government effectiveness, control of corruption, regulatory quality, rule of law, political stability, and voice and accountability. Institutional quality is found to be an important push factor at origin whereas institutions at destination play a limited role: only effective bureaucracy and control of corruption affect immigration. Fitzgerald et al. (2014) focus on the political environment faced by immigrants in destination countries. They find that more favourable citizenship policies, as measured by three dimensions of the conditions for naturalisation (dual citizenship, residency requirement and blood-based

versus soil-based citizenship regime), are strongly and positively correlated to migration flows, whereas political support for far right parties is negatively associated to bilateral migration flows.

The role of labour market institutions has also received some attention. Using micro-data, Geis et al. (2013) find that employment protection in France, Germany, the United Kingdom, and the United States has a positive impact on immigration and the decision of immigrants to stay. Migali (2018) finds that a higher trade union density is associated with lower Intra-EU migration whereas unemployment protection legislation has no clear effect. Bazillier and Moullan (2010) and Bazillier and Moullan (2012) show that a high employment protection differential between the origin and destination countries is associated with low migration flows. Giulietti (2014) exploits the between-states variation in minimum wages in the United States in 1996-1997 and 2007-2009 to study its impact on immigration. He shows that a higher minimum wage tends to attract low-skilled workers but does not affect the inflows of illegal and high skilled immigrants. Cigagna and Sulis (2015) analyse the effect of unemployment and labour institutions such as employment protection legislation, coverage of unemployment benefits, minimum wages, union power and tax wedge on migration flows for a sample of 15 OECD countries over the period 1980-2006. The authors find strong and negative effects of unemployment, employment protection and migration policy on flows and positive effects for minimum wages, unemployment benefits and union power.

A few studies have so far relied on the Gallup World Polls to investigate the patterns and determinants of migration desires, without using the information about the preferred destination (see e.g. Dustmann and Okatenko, 2014; Esipova et al., 2011; Manchin and Orazbayev, 2018). Alternatively, Docquier et al. (2015), Docquier and Machado (2016) and Delogu et al. (2018) have used the origin-specific proportion of the individuals who aspire to move to each foreign destination in their analyses of the short- and long-run efficiency gains of a removal of the legal restrictions to migration, assuming that the answers to the hypothetical questions in the Gallup World Polls are informative about the scale of liberalised migration flows.

Other papers have focused on the dyadic dimension of the Gallup data to shed light on some interesting patterns of international migration. Docquier et al. (2014) empirically analyse the country-specific and dyadic factors governing the size and the composition of the bilateral pool of aspiring migrants, as well as the probability that these desires are

realised. Dao et al. (2018) also make use of the origin-specific shares of individuals aspiring to migrate abroad as well as realisation rates by education level to disentangle the effects of both microeconomic and macroeconomic drivers of the migration transition curve, i.e. the inverted-U shaped relationship between emigration rates and economic development. Bertoli and Ruysen (2018) empirically investigate to what extent the destination choice of aspiring migrants is influenced by the presence of distance-one connections, i.e. a friend or a relative, in potential destination countries. Separate conditional logit regressions for each of the 147 countries of origin reveal that distance-one connections can alter the ranking of most pairs of destinations. Ruysen and Salomone (2018) track both women’s migration desires as well as preparations they have already made to migrate within the next 12 months and disentangle how gender discrimination fosters or impedes female migration across countries. Gubert and Senne (2016) consider information on individuals’ plans to move within the next 12 months to explore the relative attractiveness of EU-countries as potential destinations. None of these studies, however, explicitly controls for institutions at destination. Our paper adds to this particular strand of the literature by explicitly linking migration desires with migrant rights at destination.

3 Data

In order to analyse the impact of migrant rights on the attractiveness of destination countries, we combine data on migration desires from the Gallup World Polls with data from the Migrant Integration Policy Index (MIPEX).

3.1 Migration desires - Gallup World Polls

Gallup conducts surveys in more than 160 countries, hence covering 99 per cent of the world’s population aged 15 and over. In each country, at least 1,000 randomly selected persons are interviewed either through face-to-face interviews or through phone calls in countries where at least 80 percent of the population has a telephone land-line (Gallup, 2018).³ The sample of individuals interviewed is representative of the resident population older than 15 years,

³In some large countries such as China, India and Russia as well as in major cities or areas of special interest, over-samples are collected resulting in larger total numbers of respondents.

covering the entire country including rural areas.⁴ Gallup World Poll survey data is probably the most comprehensive source of data on migration desires. Two relevant questions on migration desires are asked. The first question is: “Ideally, if you had the opportunity, would you like to move permanently to another country, or would you prefer to continue living in this country?”. If respondents reply positively, a follow-up question asks about the desired destination country: “To which country would you like to move?”.

An appealing feature of the data is that it provides a large set of personal characteristics of the respondents such as gender, age, family structure and education. Although the data is cross-sectional, its annual structure between 2007 and 2015 allows to account for the time variation in migration desires. On average, around 20% of respondents express a desire to migrate (see Docquier et al., 2014, for an early description of the Gallup data). Interestingly, preferred migration destinations are more concentrated than observed bilateral flows. Destinations for which MIPLEX data is also available account for 74% of the total desired destinations. Table 1 summarises, for the top 10, top 20 and top 30 destinations, the number of times a country within the group is mentioned by respondents. The number of countries within the group for which MIPLEX data is available is also provided. Moreover, Table 1 shows the relative importance of these destinations among total responses in the form of the share of these destinations among all the countries mentioned. More precisely, the top 10 destinations account for 67% of all migration desires and are mentioned more than 162,000 times by respondents. The ranking of the destinations for which MIPLEX data is available (and that hence can be included in our sample) is provided in the Online Appendix Table A.1. Furthermore, Online Appendix Table A.2 provides a list of origin countries included in our benchmark model, and the years in which interviews took place.

⁴That is with the exception of areas where the safety of the interviewing staff is threatened, scarcely populated islands in some countries, and areas that interviewers can reach only by foot, animal, or small boat (Gallup, 2018).

Table 1: Concentration of destinations

Summary statistics GWP and MIPEX			
Sample of GWP dest.	# Mention in GWP	in MIPEX	Share dest.
Top 10	162,406	8	67%
Top 20	195,282	13	81%
Top 30	209,503	19	87%
in MIPEX	179,852	38	74%

Notes: The table shows for each sample of destinations appearing in the Gallup World Polls (and MIPEX in the final row) the number of respondents in the GWP mentioning one of these countries as their preferred destination (column 2), how many of these countries also appear in the MIPEX database (column 3), and the share of respondents reported in column 2 mentioning one of the countries in this set as preferred destination (column 4).

Note that 63% of possible bilateral desired flows are zeroes. Relying on Poisson Pseudo-Maximum Likelihood (PPML) estimators, as is now standard in the literature (see Beine et al., 2016), allows to account for the potential issues arising from the high proportion of zeroes in the dependent variable (Santos Silva and Tenreyro, 2006).

3.2 MIPEX

The Migrant Integration Policy Index (MIPEX) provides various measures of rights which migrants are entitled to in different integration areas. It is constituted of 167 policy indicators, coded by a consortium of national experts, that cover multiple dimensions including, among others, eligibility criteria, access rules and extension of right. We use 6 broad policy areas of interest, including ‘Labour Market Mobility’ (i.e. immigrants’ access to jobs and job training as well as labour market conditions), ‘Family Reunion’ (i.e. who is eligible to bring family members, which family members can be sponsored, and under what conditions), ‘Education’ (i.e. access to education for immigrant youth as well as opportunities for intercultural education), ‘Political Participation’ (i.e. electoral rights, political liberties and the presence of immigrant consultative bodies), ‘Permanent Residence’ (i.e. eligibility criteria and possibility of revocation), and ‘Access to Nationality’ (i.e. eligibility criteria and possibility of dual citizenship).⁵ It is worth noting that these indicators do not capture immigration legislation per se, i.e. the conditions for legal entry in a specific country. They

⁵Note that the Education indicator is only available as of 2010.

rather define the living and working conditions that immigrants can expect to have access to, conditional on living in the country. This also justifies why we reason in terms of “migrant rights” rather than “integration policies”: we do not analyse the impact of specific policies implemented but rather that of the general framework of living conditions provided to immigrants.

Each of the six policy areas is divided into sub-categories, each one containing several questions (sub-indicators) related to a specific right for immigrants in the host country. The sub-indicator can take three different values 0, 50 or 100, where the highest value translates into the full right, a value of 50 stands for conditional or partial application, whereas 0 reflects the most limited access to that right. Hence, the higher the value of the indicator, the easier immigrants have access to the specific right. The value of each indicator is constructed as the average of values of all its subindicators. Some examples of sub-indicators are provided in Table 2. Online Appendix Table A.3 provides an overview of the sub-indicators in each of the dimensions covered.

MIPEX covers all EU25 Member States, Canada, Norway and Switzerland between 2007 and 2014.⁶ Indicators for Australia, Bulgaria, Japan, South Korea, New Zealand, Romania, Turkey and the USA are available as of 2010. Finally, Croatia is covered from 2012 and Iceland from 2013 onwards. As discussed previously, the 38 MIPEX countries account on average for about 74% of desired destinations.⁷ However, for some important desired destination countries such as Saudi Arabia, United Arab Emirates, South Africa and Russia, MIPEX is unavailable (see Online Appendix Table A.4 for a list of the main destinations in the Gallup World Poll data for which MIPEX is unavailable). These four countries however differ from those in our sample in terms of desired immigration patterns. They attract aspiring immigrants from a smaller number of origin countries compared to other similarly popular destinations. The skill distribution of these aspiring immigrants is also different: Saudi Arabia, South Africa and the United Arab Emirates top the ranking of main destination countries that attract a relatively higher proportion of less educated among aspiring immigrants. Russia is on the other extreme of the rank and is relatively more attractive

⁶The data is available at <http://http://www.mipex.eu>; retrieved in January 2018.

⁷This figure ranges between 71% in 2014 and 77% in 2007. These yearly differences are at least partially explained by the sample composition: over time, additional countries which had a lower propensity to mention a preferred destination that is part of the MIPEX sample were added to the Gallup survey (see Online Appendix Table A.2).

for high-skilled immigrants. This implies that our results hold for destinations that have relatively diversified origins of migrants and a mixed composition of the migrant population in terms of skill levels. They must thus be interpreted in light of the sample composition of the countries for which we have data, that nevertheless represent a large majority of the stated desired destinations.

Table 2: MIPEX: Examples of Questions

Policy area	Sub-indicator	Potential sub-indicator values		
		100	50	0
Labour Market Mobility	Immediate access to labour market: What categories of foreign residents have equal access to employment as nationals? A. Permanent residents B. Residents on temporary work permits (excl. seasonal) within period of 1 year C. Residents on family reunion permits	All of them	A and [C or certain categ. of B]	Only A or None
Family Reunion for Foreign Citizens	Residence requirement for ordinary legal residents (sponsor)	No residence requirement	1 year	>1 year
Permanent Residence	Eligibility: Required time of habitual residence	<5 years	5 years	>5 years

Notes: The table presents examples of sub-indicators for various policy areas covered by MIPEX, along with the potential values these sub-indicators can take.

3.3 Additional Controls

Our estimations account for the traditional determinants of migration flows discussed in the existing literature (see e.g. Beine et al., 2016). GDP per capita at destination is used as a proxy for migrants’ wage at destination. Yearly data on GDP per capita (in PPP, constant 2011 international \$)⁸ is taken from the World Development Indicators (WDI). Destination country size is proxied by the size of the destination population for which yearly data is provided by the WDI. Cultural and historical links are proxied by dyadic dummy variables for a common official language, shared colonial history and a measure of geodesic distance taken from CEPII (see Mayer and Zignago, 2011). The diaspora size is proxied by the

⁸“An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States” (World Bank, 2019).

migrant stock of the same origin in the year 2001, taken from the OECD DIOC-E database.⁹

4 The model

In order to analyse the impact of migrant rights on migration desires, we estimate the following model:

$$\ln\left(\frac{M_{ijt}}{M_{iit}}\right) = \alpha + \gamma_{it} + \gamma_j + \beta_1 \ln(MIPEX_{jt-1}) + \beta_2 \ln(Pop_{jt}) \quad (1)$$

$$+ \beta_3 \ln(GDPpc_{jt}) + \beta_4 \ln(Netw_{ij2001}) + \sum_z \beta_z controls_{ij} + \epsilon_{ijt},$$

where i and j denote the country of origin and destination respectively. The dependent variable, $\ln(M_{ijt}/M_{iit})$, is the log-ratio of individuals with permanent migration desires from i to j over individuals desiring to remain in country i .¹⁰ The number of desiring permanent migrants is adjusted as follows in order to correct for the absence of a valid destination among some respondents:

$$M_{ijt} = Desire_{ijt} / \sum_{j \neq i} Desire_{ijt} * Yes_{it} / TotRespondents_{it}. \quad (2)$$

The first term of the right-hand side provides the share of individuals who want to move from country i to country j in year t ($Desire_{ijt}$ over the sum of all individuals who stated a desire to emigrate and a destination, $\sum_{j \neq i} Desire_{ijt}$). This first term is multiplied by the ratio of individuals who have replied positively to the question on migration desires (Yes_{it}) over the total number of respondents to the same question ($TotRespondents_{it}$). This adjustment allows to account for the desire to emigrate of some individuals who replied positively to the question on migration desire but did not provide a (valid) destination. Specifically, this concerns the following cases: the respondent did not provide any destination (while expressing a desire to leave), the respondent mentioned an unspecified group, such as “other

⁹See <https://www.oecd.org/els/mig/dioc.htm>.

¹⁰This equation is micro-founded following the commonly used Random Utility Model from which the dependent variable, the ratio $\ln\left(\frac{M_{ijt}}{M_{iit}}\right)$, is directly derived (see for instance Beine et al., 2016). An appealing feature of the Gallup data is that it provides a direct estimate of M_{iit} , while with data on actual moves, the latter often has to be estimated. In Online Appendix B.2, we show that our benchmark results also hold when we use migrant stocks, M_{ijt} , as dependent variable.

country” or “island state”, instead of an existing country. The number of stayers (i.e. individuals who do not express a desire to emigrate) is given by

$$M_{it} = No_{it}/TotRespondents_{it}, \quad (3)$$

and is expressed as the share of respondents who do not desire to emigrate. Note that, as both the numerator and the denominator of equation (1) account for the number of respondents in country i at time t , the standard formula used in the literature would be recovered if all individuals who express a desire to emigrate would have also provided a destination (i.e. $\sum_{j \neq i} Desire_{ijt} = Yes_{it}$).

The specification includes origin-time FE, γ_{it} , and destination FE, γ_j . Our main variable of interest, the (one-year) lagged MIPEX indicator ($MIPEX_{jt-1}$), alternatively reflects the 6 broad policy areas described above: Labour Market Mobility ($LabMob_{jt-1}$), Family Reunion ($FamReun_{jt-1}$), Permanent Residence ($PermResid_{jt-1}$), Access to Nationality ($Nation_{jt-1}$), Political Participation ($Polpart_{jt-1}$), and Education ($Educ_{jt-1}$).¹¹ As additional controls, we also account for other time-varying destination characteristics, such as the log of the population at destination (Pop_{jt}) and the log of the GDP per capita at destination ($GDPpc_{jt}$), as well as bilateral variables, such as networks ($Netw_{ij2001}$)¹² and controls for geographic and cultural proximity (i.e. distance between countries, common language, past colonial links and whether both countries are part of the Schengen area). Equation (1) is estimated using Poisson Pseudo-Maximum Likelihood (PPML) estimators, which allow to account for the large amount of zero flows.

¹¹In our baseline specification, we lag the indicator by one year in order to make sure that a migration desire was not expressed before a change in the migrant’s right in the same year. The impossibility to know exactly at which moment a given migrant right evolves within the year leads us to assume that the indicator value is valid throughout the whole year. Hence, we assume that the desire to emigrate is based on the indicator value at the end of the previous year. A robustness check using contemporaneous indicators and migration desires presented in Table B.1 shows that results are qualitatively unaffected.

¹²The network (i.e. diaspora size) is proxied by the log of the stock of migrants from the same origin in each destination in the year 2001, taken from the OECD DIOC-E database.

5 Results

5.1 Benchmark results

If prospective migrants are fully rational and internalise migrant rights at destination, we expect that more generous institutional frameworks make countries more attractive, and hence the main coefficient of interest, β_1 , is expected to be positive.

Table 3 reports the benchmark results. Focusing on the estimate of β_1 , i.e. the estimated impact of a category of migrant rights, we find that two categories in particular affect the migration desires. Access to the labour market for migrants and possibilities of acquiring the nationality of the destination country tend to increase the attractiveness of the destination for aspiring migrants. Moreover, the easiness of getting Permanent Residence and Education for migrant youth is found to have a positive impact, albeit in a less significant way. Immigrants' access to the labour market tends to exert the highest impact, confirming the importance of economic prospects for potential migrants. Given that the Gallup survey involves questions about a *permanent* move, it makes sense that prospects of getting permanent residence and the nationality play a role in the way migrants form their optimal choice of location.¹³

Table 3 shows that all the remaining coefficients exhibit the expected sign. Migration desires between two countries significantly increase with GDP per capita at destination, with a shared official language, a common colonial history and the size of the existing national diaspora at the destination. Geographic distance decreases migration desires between two countries whereas the size of the destination country and joint membership within the Schengen area do not significantly affect them. The latter can probably be explained by the fact that individuals within the Schengen area have a rather easy access to countries within the free-mobility zone and thus can easily realise their desire. Interestingly, the six different

¹³It should be emphasized that the significant results of specific policies, such as the ones related to the labour market access, are not driven by the fact that these policies exhibit more variation in our sample compared to the other policies. For example, as highlighted in Online Appendix Table A.5, the proportion of observations that are subject to a variation in the rights in terms of labour market amounts to 18%. In contrast, with 24% of observations subject to a variation, the rights in terms of family reunification exhibit the highest number of changes in our sample. Still, these rights are not found to affect attractiveness of desired destinations across all the results reported in this paper. The same result applies to the comparison of education policies and acquisition of nationality. While these rights varied with similar frequencies (13% of changes for both), acquisition of nationality is found to raise attractiveness in a much more significant way.

MIPEX indicators are associated with a positive coefficient (i.e. $\beta_1 > 0$). Higher Labour Market Mobility, Access to Nationality, Permanent Residence and Education for migrant youth are associated with significantly higher migration desires from country i to country j at time t .

Table 3: Benchmark estimations

	MIPEX indicator					
	LabMob	FamReun	PermResid	Nation	PolPart	Educ
$\ln(\text{GDPpc}_{jt})$	2.774*** (6.38)	2.926*** (7.21)	2.822*** (6.51)	3.037*** (6.41)	2.832*** (6.57)	2.602*** (4.67)
$\ln(\text{Pop}_{jt})$	1.194 (1.26)	0.683 (0.73)	0.619 (0.67)	1.141 (1.18)	0.464 (0.51)	3.222** (2.17)
$\ln(\text{Dist}_{ij})$	-0.533*** (-8.03)	-0.535*** (-8.05)	-0.535*** (-8.02)	-0.534*** (-8.04)	-0.535*** (-8.06)	-0.553*** (-8.46)
Commlang_{ij}	0.881*** (9.13)	0.881*** (9.08)	0.881*** (9.09)	0.883*** (9.13)	0.883*** (9.13)	0.844*** (8.96)
Schengen2010_{ij}	-0.135 (-1.09)	-0.139 (-1.12)	-0.137 (-1.11)	-0.139 (-1.13)	-0.140 (-1.13)	-0.119 (-0.96)
Colony_{ij}	0.509*** (4.87)	0.511*** (4.87)	0.510*** (4.86)	0.510*** (4.88)	0.511*** (4.89)	0.523*** (5.41)
$\ln(\text{Netw}_{ij2001})$	0.177*** (11.20)	0.177*** (11.18)	0.177*** (11.19)	0.177*** (11.21)	0.177*** (11.20)	0.174*** (11.03)
$\ln(\text{MIPEX}_{jt-1})$	1.015*** (4.31)	0.306 (1.63)	0.753** (2.25)	0.489*** (4.21)	0.016 (0.17)	0.554* (1.89)
Observations	32492	32492	32492	32492	32492	23369
Orig-time FE	YES	YES	YES	YES	YES	YES
Dest. FE	YES	YES	YES	YES	YES	YES

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of origin.

5.2 Robustness

In this section, we check the robustness of our results to different specifications, thereby addressing several endogeneity concerns and other threats to identification. Section 5.2.1 addresses the issue of omitted variable bias by supplementing the benchmark specification with a proxy for visa restrictions. Section 5.2.2 proposes an alternative procedure to deal with the issue of multilateral resistance to migration. In section 5.2.3, we provide a Placebo test on the subsample of within-Schengen area bilateral corridors, where aspiring migrants have similar rights as native citizens. In section 5.2.4, we introduce the various types of migrant

rights simultaneously. In section 5.2.5, we change the sample of countries considered.

5.2.1 Threat to identification: endogeneity

Our benchmark estimations support a positive impact of some categories of migrant rights on the attractiveness of the destinations for aspiring migrants. Nevertheless, these estimations are subject to some endogeneity concerns due to a potential feedback effect of past or future attractiveness on the policies that are implemented by the destination countries. For instance, if a country tends to be highly attractive (as measured by a high proportion of migrants wishing to migrate to this country), it might prefer to design policies protecting the native workers, resulting in a relatively more difficult access for migrants to the domestic labour market. If this is the case, our PPML estimates of the impact of these policies (β_1) might be biased. Note that the direction of the bias depends on the specific direction of the feedback effect. In the previous example, to the extent that this feedback effect exists in this particular form, β_1 will be underestimated in absolute terms. The sign and amplitude of these potential biases for β_1 are also likely to depend on the specific categories of migrant rights.

Nevertheless, endogeneity issues associated to reverse causality are mitigated by the use of a dyadic framework to the extent that it is difficult to imagine how the increase of perceived attractiveness in one specific origin country could induce the government to alter its general policy. Of course, in the specific case of a high concentration of immigrants from a given origin (such as the Mexicans in the United States or the Turks in Germany), this cannot completely be ruled out. However, even in that case, the feedback effects would be driven by a few observations. Note also that in model (1), we use one-year lagged policy indicators, which rules out contemporaneous feedback effects from attractiveness to policy.

Another concern is the potential interaction with immigration policies. Migrant rights might also be correlated with the tightness of migration policies. The direction of the correlation is not *a priori* clear (see e.g. Rayp et al., 2017; Razin et al., 2011; Ruhs, 2012). One might think that migration policies and migrant rights are positively correlated, indicating a general openness to migrants. On the other hand, there might exist a trade-off between migration policies and migrant rights. More rights to migrants might be compensated by more restrictive migration policies. In both cases, this correlation might be an additional source of endogeneity. The search for an ideal instrument to account for this issue in an IV

estimation strategy is not easy as it is difficult to think of a factor affecting migrant rights without being correlated with immigration policies or attractiveness of the country. To circumvent this issue, we follow an alternative strategy and introduce a proxy for immigration restrictions to mitigate the endogeneity bias due to the omission of such a variable. We use the data on bilateral visa requirements from the DEMIG project to proxy for possible mobility constraints that a destination country imposes on a specific origin.¹⁴

Table 4: Estimations controlling for visa restrictions

	MIPEX indicator					
	LabMob	FamReun	PermResid	Nation	PolPart	Educ
VISA _{ijt-1}	-0.233*** (-2.73)	-0.234*** (-2.78)	-0.234*** (-2.75)	-0.236*** (-2.79)	-0.235*** (-2.78)	-0.237** (-2.56)
ln(GDPpc _{jt})	2.734*** (5.30)	2.849*** (5.84)	2.722*** (5.18)	2.976*** (5.23)	2.791*** (5.36)	3.781*** (4.29)
ln(Pop _{jt})	-0.187 (-0.15)	-0.540 (-0.46)	-0.576 (-0.49)	-0.219 (-0.18)	-0.587 (-0.49)	0.340 (0.14)
ln(Dist _{ij})	-0.507*** (-7.35)	-0.508*** (-7.37)	-0.508*** (-7.35)	-0.508*** (-7.37)	-0.508*** (-7.38)	-0.528*** (-7.84)
ln(Commlang _{ij})	0.851*** (8.84)	0.851*** (8.81)	0.851*** (8.82)	0.852*** (8.85)	0.852*** (8.85)	0.801*** (9.21)
Schengen2010 _{ij}	-0.075 (-0.58)	-0.078 (-0.60)	-0.076 (-0.59)	-0.078 (-0.61)	-0.079 (-0.61)	-0.027 (-0.21)
Colony _{ij}	0.500*** (4.38)	0.501*** (4.37)	0.500*** (4.37)	0.500*** (4.37)	0.501*** (4.38)	0.511*** (4.98)
ln(Netw _{ij2001})	0.185*** (11.03)	0.185*** (11.02)	0.185*** (11.02)	0.185*** (11.04)	0.185*** (11.03)	0.183*** (11.01)
ln(MIPEX _{jt-1})	0.573** (2.15)	0.157 (0.78)	0.541 (1.43)	0.245** (2.51)	0.013 (0.11)	0.269 (0.87)
Observations	26987	26987	26987	26987	26987	18027

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of origin.

Table 4 shows the results from an estimation in which we supplement the covariates in equation (1) with the lagged bilateral visa restriction (VISA_{ijt-1}). The visa dummy captur-

¹⁴The visa restrictions have been collected within the DEMIG project at Oxford University. They were collected manually from the International Air Transport Association manuals capturing each year the bilateral requirements in terms of tourist visas within any pair of countries in the world. They are coded as bilateral dummies v_{ijt} , taking a value of 1 if a visa is needed to travel from origin i to the destination j at time t , and 0 otherwise. These data have been recently used by Czaika and de Haas (2017) and Czaika and Neumayer (2017) among others.

ing the existence of a bilateral restriction to migration turns out to be significantly negative, suggesting that migration desires of respondents internalize the mobility restrictions. Our main benchmark results are all robust to the inclusion of this proxy for immigration policy. In particular, the migrants' rights that turn out to influence desires (labour mobility and acquisition of nationality) in the benchmark are found to have the same effect in this extended specification. Furthermore, the variation in the estimated coefficients is due almost exclusively to the variation in the sample due to missing visa restrictions data.¹⁵ To sum up, our results are found to be robust to the inclusion of an indicator of immigration policy to mitigate the bias due to the previous omission of such a policy.

5.2.2 Accounting for Multilateral resistance to migration

One additional threat to identification of the impact of migrant rights is the failure to fully account for multilateral resistance to migration¹⁶ (MRM; Bertoli and Moraga, 2013). In our benchmark estimations, we introduce two types of fixed effects. Origin-time fixed effects allow to fully control for outward MRM. Nevertheless, while we control for destination fixed effects, we cannot control for inward MRM because migrant rights are varying across destinations and over time, which prevents the inclusion of the appropriate set of destination-time fixed effects. This problem is of course not specific to this paper and has been a source of concern for the academic research in international economics.

To deal with this issue, we follow the strategy proposed by Head and Mayer (2014) in the context of gravity models applied to trade relationships.¹⁷ We use a two-step estimation in order to estimate the impact of migrant rights while accounting for inward and outward MRM. The first step involves the estimation of equation (4)¹⁸:

$$\ln\left(\frac{M_{ijt}}{M_{iit}}\right) = \alpha + \gamma_{it} + \gamma_{jt} + \beta_4 \ln(Netw_{ij2001}) + \sum_z \beta_z controls_{ij} + \epsilon_{ijt}. \quad (4)$$

¹⁵The benchmark estimations (i.e. without the control for visa restrictions) run on the same sample are not reported here to save space but are available upon request. The variation of estimated coefficients due to the inclusion of $VISA_{ijt-1}$ is -0.039 and +0.002 for the rights in terms of mobility and nationality respectively.

¹⁶The term multilateral resistance to migration captures the influence exerted by other destinations on a specific bilateral migration flow, such as the effect of wages in Germany on migration from the Netherlands to the United States.

¹⁷See in particular section 3.7 of Head and Mayer (2014).

¹⁸We cluster the standard errors at the origin level.

The second step involves the estimation of equation (5) with the estimated destination-time fixed effects ($\hat{\gamma}_{jt}$) from equation (4) as the dependent variable:

$$\hat{\gamma}_{jt} = \delta_1 \ln(MIPEX_{jt-1}) + \delta_2 \ln(Pop_{jt}) + \delta_3 \ln(GDPpc_{jt}). \quad (5)$$

While this procedure yields an inefficient estimate, the point estimates of δ_1 can be compared to the ones of β_1 to gauge the impact of inward MRM. Table 5 gives the results of the procedure. Like in the benchmark case, we consider each policy separately to mitigate the effects of multicollinearity. Overall, the 2-step procedure confirms the positive impact of the rights in terms of labour mobility on the attractiveness of destinations. The point estimate of δ_1 is comparable to the one in the benchmark estimations (β_1). The estimations show that the positive impact of integration rights in the labour market is robust to the inclusion of MRM terms. The same holds for the migrants' rights in terms of acquisition of nationality. In contrast, the results with respect to education policies and permanent residence are not found to be robust.

Table 5: Second stage of the two-stage estimation procedure

	MIPEX indicator					
	LabMob	FamReun	PermResid	Nation	PolPart	Educ
$\ln(GDPpc_{jt})$	2.151*** (5.75)	2.612*** (5.50)	2.606*** (5.58)	1.971*** (4.17)	1.547*** (2.99)	1.973*** (3.86)
$\ln(Pop_{jt})$	0.823*** (7.96)	0.887*** (7.99)	0.891*** (7.76)	0.802*** (7.32)	0.870*** (8.96)	0.868*** (9.31)
$\ln(MIPEX_{jt-1})$	1.039** (2.68)	0.154 (0.30)	-0.026 (-0.04)	0.881*** (3.53)	0.600*** (3.26)	0.461 (1.65)
Observations	265	265	265	265	265	183

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of destination.

5.2.3 Placebo test

A second source of endogeneity bias might arise if our variables of interest were subject to measurement error. To test for this concern, we conduct a placebo test using only a sample of countries belonging to the free mobility zone induced by the Schengen area. The rationale is the following. One of the important effects of the Schengen agreement is to facilitate the access of foreign workers to the labour market of countries belonging to that area. This takes at least two specific forms: (1) free mobility across countries with no or limited border

control and (2) no requirement of getting a specific work permit in order to work in the destination country. This implies that the impact of the migrants' rights linked to the labor market and the permanent residence should be neutralised in this sample.

Table 6 reports the estimates of β_1 for the various categories of migrant rights for a sample of origin and destination countries that belong to the Schengen area. Interestingly, the results confirm that migrant rights, and in particular those concerning Labour Market Mobility and Nationality, are no longer significantly correlated with migration desires.

Table 6: Estimations within Schengen area only

	MIPEx indicator					
	LabMob	FamReun	PermResid	Nation	PolPart	Educ
$\ln(\text{GDPpc}_{jt})$	3.557*** (3.99)	3.478*** (3.82)	3.529*** (3.94)	3.657*** (3.69)	3.540*** (3.76)	1.990 (1.61)
$\ln(\text{Pop}_{jt})$	1.762 (1.14)	1.594 (1.06)	1.659 (1.08)	1.733 (1.05)	1.562 (1.02)	2.899 (1.30)
$\ln(\text{Dist}_{ij})$	-0.573*** (-2.84)	-0.575*** (-2.85)	-0.574*** (-2.84)	-0.574*** (-2.84)	-0.574*** (-2.84)	-0.607*** (-2.99)
Commlang_{ij}	-0.133 (-0.67)	-0.135 (-0.68)	-0.135 (-0.68)	-0.135 (-0.68)	-0.135 (-0.68)	-0.257 (-1.28)
Colony_{ij}	0.289 (1.43)	0.292 (1.44)	0.292 (1.44)	0.292 (1.44)	0.292 (1.44)	0.243 (1.23)
$\ln(\text{Netw}_{ij2001})$	0.164*** (5.13)	0.164*** (5.13)	0.164*** (5.13)	0.164*** (5.13)	0.164*** (5.13)	0.155*** (4.75)
$\ln(\text{MIPEx}_{jt-1})$	0.212 (0.56)	-0.326 (-1.11)	0.457 (0.73)	0.073 (0.43)	-0.107 (-0.66)	-0.353 (-0.48)
Observations	3546	3546	3546	3546	3546	2372

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of origin.

5.2.4 Estimations including the various migrant rights simultaneously

In the benchmark estimations, the impact of each dimension of migrant rights has been estimated separately. This was done to mitigate the impact of multicollinearity due to the significant correlation between the different dimensions of migrant rights captured by the MIPEx indicators. While this procedure allows to get more efficient estimators of their impact, it might nevertheless be desirable to see whether our main result survives the joint inclusion of the policies. Table 7 provides results for two estimations, with (column 1) and without (column 2) rights in terms of migrant youth education, as the inclusion of

this dimension reduces the sample size. The results suggest that the two most attractive policies are the ones related to labour mobility and acquisition of nationality, in line with the benchmark results.

Table 7: Joint estimation of the various migrant rights

	(1)	(2)
$\ln(\text{GDPpc}_{jt})$	2.569*** (4.41)	2.891*** (6.46)
$\ln(\text{Pop}_{jt})$	5.096*** (3.13)	1.668* (1.72)
$\ln(\text{Dist}_{ij})$	-0.552*** (-8.45)	-0.533*** (-8.00)
CommLang_{ij}	0.845*** (8.98)	0.881*** (9.11)
Schengen2010_{ij}	-0.112 (-0.90)	-0.134 (-1.08)
Colony_{ij}	0.519*** (5.33)	0.509*** (4.85)
$\ln(\text{Netw}_{ij2001})$	0.174*** (11.09)	0.177*** (11.22)
$\ln(\text{LabMob}_{jt-1})$	1.762*** (4.99)	0.881*** (3.65)
$\ln(\text{FamReun}_{jt-1})$	-0.046 (-0.12)	-0.105 (-0.44)
$\ln(\text{PermResid}_{jt-1})$	0.003 (0.00)	0.326 (0.83)
$\ln(\text{Nation}_{jt-1})$	0.849*** (3.72)	0.453*** (3.95)
$\ln(\text{PolPart}_{jt-1})$	-0.285* (-1.94)	-0.224* (-1.81)
$\ln(\text{Educ}_{jt-1})$	0.199 (0.59)	
Observations	23369	32492

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of origin.

5.2.5 Different country samples

In this section, we use different samples of destination countries to address considerations linked to the unbalanced nature of our dataset. Some countries have implemented explicit

migrant rights much later and are less likely to be favored destinations for aspiring migrants. It is therefore important to see whether our estimates are not driven by countries that are quite different from the main destinations. In these regressions, we use the benchmark values for the dependent variables, excluding specific destination countries or groups of countries from the sample. We also conduct robustness checks excluding some origin countries in order to account for possible issues related to the incomplete coverage of the MIPEX indicators in terms of destination countries and Gallup in terms of origin country-year pairs.

Results are provided in Table 8. In column 2, we exclude the United States, which is the main desired destination and accounts for almost 25% of expressed desired destinations. In column 3, we exclude the post-2004 EU enlargement countries which have a rather different institutional history (i.e. they are mainly former communist countries) and tend to be less attractive. The results remain quantitatively and qualitatively very robust. In column 4, we exclude the origin countries for which the main destination country is not covered in MIPEX.¹⁹ In column 5, we provide estimations limited to the subsample of countries for which MIPEX data is available as of 2007. These robustness checks in which we restrict the sample of origin countries also yield very robust results.

Table 8: Robustness: Different country samples

	Benchmark	Excl. USA	Excl. EEU	Main not MIPEX	MIPEX in 2007
$\ln(\text{LabMob}_{jt-1})$	1.015*** (4.31)	1.014*** (4.06)	1.015*** (4.21)	0.923*** (3.65)	1.064*** (4.00)
$\ln(\text{FamReun}_{jt-1})$	0.306 (1.63)	0.343* (1.77)	0.296 (1.59)	0.199 (0.97)	0.323 (1.54)
$\ln(\text{PermResid}_{jt-1})$	0.753** (2.25)	0.821** (2.33)	0.779** (2.29)	0.624* (1.69)	0.938** (2.42)
$\ln(\text{Nation}_{jt-1})$	0.489*** (4.21)	0.423*** (3.52)	0.538*** (4.36)	0.393*** (3.44)	0.433*** (3.29)
$\ln(\text{PolPart}_{jt-1})$	0.016 (0.17)	-0.002 (-0.02)	0.259 (1.02)	0.021 (0.20)	-0.059 (-0.53)
Observations	32492	31852	21334	26199	25338
$\ln(\text{Educ}_{jt-1})$	0.554* (1.89)	0.657** (2.27)	0.570* (1.92)	0.541* (1.65)	0.506 (1.63)
Observations	23369	22729	15472	18868	16354

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of origin.

¹⁹We also run the regressions excluding countries with a share of desired destinations with available MIPEX data below 50%. Results are very robust and can be obtained upon request.

5.3 Dyadic fixed effects

In this section, we run a set of estimations including origin-time and dyadic (i.e. origin-destination) fixed effects (FE). Hence, compared to the benchmark equation (1), equation (6) no longer includes destination FE and time-invariant dyadic control variables. One advantage of this specification is that dyadic FE (γ_{ij}) will better capture the effect of dyadic time-invariant factors, compared to a limited set of observable variables. It therefore minimises the risk of omitted variables, a third potential source of endogeneity bias. A drawback is that this estimation is computationally more demanding and that the estimation program drops all the dyads for which no individual in origin country i mentions a desire to move to country j . The estimated equation takes the following form:

$$\ln\left(\frac{M_{ijt}}{M_{iit}}\right) = \alpha + \gamma_{it} + \gamma_{ij} + \beta_1 \ln(MIPEX_{jt-1}) + \beta_2 \ln(Pop_{jt}) + \beta_3 \ln(GDPpc_{jt}) + \epsilon_{ijt}. \quad (6)$$

Identification now relies on the within-dyad variation. Although this fixed-effects structure is quite demanding, Table 9 confirms our main result: more extensive migrant rights tend to be correlated with higher migration desires. Labour Market Mobility remains the indicator with the highest coefficient, whereas the coefficient of Family Reunion and Education become more statistically significant.²⁰

Table 9: Estimations with dyadic and origin-time FE

	MIPEX indicator					
	LabMob	FamReun	PermResid	Nation	PolPart	Educ
$\ln(GDPpc_{jt})$	2.581*** (5.37)	2.742*** (5.93)	2.626*** (5.47)	2.776*** (5.48)	2.599*** (5.57)	2.206*** (3.83)
$\ln(Pop_{jt})$	0.688 (1.01)	0.349 (0.52)	0.240 (0.36)	0.552 (0.80)	-0.008 (-0.01)	2.460** (1.99)
$\ln(MIPEX_{jt-1})$	0.840*** (4.86)	0.460*** (3.91)	0.782*** (3.47)	0.356*** (3.50)	-0.093 (-1.00)	0.823*** (4.30)
Observations	18994	18994	18994	18994	18994	12867

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of origin.

²⁰We ran the benchmark estimation (i.e. with origin-time and destination FE) on the same subsample as the one used with the dyadic structure. The results (available upon request) remain highly consistent with the benchmark estimations. Hence, we can exclude that results are driven by a sample composition effect. The dyadic FE rather allow to capture dimensions not accounted for in the benchmark regressions.

5.4 Heterogenous response across categories of respondents

The rich structure of the data provided by the Gallup World poll surveys allows to investigate whether there is heterogeneity in the way aspiring migrants with different characteristics account for specific migrant rights in forming their optimal choice of location. For each set of regressions, we recalculate the dependent variable defined in equation (1) on the subsample of individuals with some particular characteristics.²¹

Table 10 shows results for highly skilled individuals (i.e. with at least some tertiary education), by family structure (in partnership or with children) and by gender (men versus women). Labour Market Mobility is highly significant in all cases. Its coefficient is higher than in the benchmark estimations for high skilled workers ($1.28 > 1.02$) and it is also higher for men than for women ($1.15 > 0.87$). Permanent Residence is more significant for high skilled individuals than in the benchmark estimations but loses significance in some samples. Access to Nationality is consistently significant in all the estimations but the coefficient is higher for men than for women ($0.56 > 0.42$).

The importance of the different dimensions of migrant rights can also be analysed for individuals in different age groups. Table 11 reveals that the Labour Market Mobility and Access to Nationality indicators are highly significant with similar coefficients across all age groups. Interestingly, for individuals aged 15 to 24 years who can personally benefit from educational opportunities at destination, Permanent Residence loses significance whereas Education access for immigrant youth is positively and significantly associated with higher migration desires.

²¹Note that when we run regressions on subsamples of the population depending on certain individual characteristics, some observations are dropped because nobody in that particular subgroup of the respondents in an origin country indicated a desire to migrate to a MIPEX destination (in which case the entire origin-year gets dropped).

Table 10: Estimations on different subsamples of individuals

	Benchmark	HS only	Partner	Child	Men	Women
$\ln(\text{LabMob}_{jt-1})$	1.015*** (4.31)	1.283*** (5.27)	0.907*** (3.54)	1.029*** (4.28)	1.153*** (4.66)	0.871*** (3.37)
$\ln(\text{FamReun}_{jt-1})$	0.306 (1.63)	0.392** (2.46)	0.220 (1.01)	0.182 (0.79)	0.291 (1.63)	0.301 (1.39)
$\ln(\text{PermResid}_{jt-1})$	0.753** (2.25)	0.905*** (3.02)	0.714* (1.92)	0.548 (1.48)	0.811** (2.36)	0.650* (1.80)
$\ln(\text{Nation}_{jt-1})$	4.89*** (4.21)	0.594*** (4.56)	0.535*** (4.12)	0.553*** (4.39)	0.564*** (4.29)	0.418*** (3.51)
$\ln(\text{PolPart}_{jt-1})$	0.016 (0.17)	0.073 (0.69)	-0.056 (-0.52)	0.118 (0.91)	-0.016 (-0.17)	0.022 (0.18)
Observations	32492	32288	32321	32492	32398	32408
$\ln(\text{Educ}_{jt-1})$	0.554* (1.89)	0.553** (2.22)	0.412 (1.20)	0.638** (2.14)	0.599** (2.04)	0.536* (1.71)
Observations	23369	23333	23226	23369	23331	23369

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of origin.

Table 11: Estimations by age structure

	Benchmark	15-24	25+	29+	25-64
$\ln(\text{LabMob}_{jt-1})$	1.015*** (4.31)	1.053*** (3.74)	0.978*** (4.02)	0.854*** (3.54)	0.994*** (4.21)
$\ln(\text{FamReun}_{jt-1})$	0.306 (1.63)	0.260 (0.98)	0.271 (1.41)	0.278 (1.34)	0.192 (0.93)
$\ln(\text{PermResid}_{jt-1})$	0.753** (2.25)	0.650 (1.35)	0.745** (2.25)	0.775** (2.21)	0.683** (2.01)
$\ln(\text{Nation}_{jt-1})$	0.489*** (4.21)	0.478*** (2.98)	0.494*** (3.94)	0.478*** (3.59)	0.474*** (3.81)
$\ln(\text{PolPart}_{jt-1})$	0.016 (0.17)	-0.049 (-0.28)	0.042 (0.43)	0.062 (0.63)	0.014 (0.15)
Observations	32492	31528	32492	32464	32492
$\ln(\text{Educ}_{jt-1})$	0.554* (1.89)	0.831** (2.37)	0.502 (1.51)	0.631* (1.81)	0.547* (1.68)
Observations	23369	22731	23369	23369	23369

Notes: t statistics in brackets; ***, **, * denote significance at the 1, 5 and 10% level, respectively. Standard errors are clustered by countries of origin.

6 Conclusion

In this paper, we analyse the effect of migrant rights on the destination choice of potential migrants by combining data on migration desires from the Gallup World Poll surveys and migrant rights from MIPEX. The advantage of focusing on desired rather than on observed flows lies in the unconstrained nature of the choice set of potential desired destinations. A respondent desiring to move abroad can state any country as preferred destination without any limitation, even if he does not have the means to actually move. Moreover, observed migratory movements are strongly affected by restrictions induced by immigration policies, for which consistent and complete data is still missing.

We empirically estimate the choice of aspiring immigrants among the 38 alternative destinations for which we have MIPEX data during the period 2007-2014. Controlling for traditional determinants of migration such as economic prospects, distance, networks and common historical links, our evidence indicates that immigrants tend to favour countries with more generous regulations for labour market entry, for permanent residence as well as easier access to the nationality of the host country. These results are robust across different specifications and different subsamples. In particular, the importance of migrant rights is maintained when we use different estimation strategies, such as a two-stage estimation procedure or a dyadic fixed effect structure. Results also hold when we add a proxy for visa restrictions to the benchmark estimation or when we estimate a regression including simultaneously multiple migrant right measures. The positive and highly significant coefficients are preserved when altering the choice set by dropping the United States or the new member states of the European Union. In addition, the results remain valid when we keep in the sample only origin countries for which the main destination is also available in MIPEX or when we focus only on countries for which data is available over the entire period 2007-2014.

Interestingly, the data allow to account for a heterogeneous impact of the various MIPEX indicators on migration desires by re-estimating our benchmark model on various subsamples of respondents, i.e. for low versus high skilled, men versus women, working age versus young, respondents with or without children and respondents with or without a partner. We find that labour market mobility seems to be slightly more important for men than for women, although it also remains the most significant and important indicator for women. Migrant rights linked to education are particularly important for individuals aged 15 to 24 years, who might benefit from educational opportunities at destination.

Our results suggest that migrant rights significantly affect the attractiveness of destination countries for aspiring migrants. This result holds even though we control for traditional socio-economic determinants of migration flows. The role of migrant rights, taken in a very broad sense, in the management of migration flows should therefore not be underestimated.

Nevertheless, while we extensively tested the robustness of our results across different subsamples of destination countries, the fact that our benchmark sample excludes four of the top 15 destination countries in terms of desired migration forms a potential caveat to our findings. Due to the unavailability of the MIPEX indicators for Saudi Arabia, Russia, South Africa and the United Arab Emirates, we could not include these countries in our sample. It is difficult to assess, however, how this affects our general findings. It could be argued that the unavailability of MIPEX indicators might reflect relatively lower levels of migrant rights, suggesting that our results provide an upper bound of the impact of migrant rights on the attractiveness of potential destinations to aspiring migrants. Yet, there are several reasons to believe that this omission does not severely affect our results. First, while these four countries constitute the preferred destination for about 10% of aspiring migrants in the GWP, none of them separately represents more than 3% of migration intentions. This suggests that the inclusion of any of these destination countries is unlikely to affect the results of our analysis. Second, a single MIPEX data point is available for Russia for the year 2014. It indicates a score for migrant rights in terms of labour mobility similar to that of the new EU Eastern European countries (and even higher than that of Ireland for instance). The robustness of our results to the exclusion of these Eastern European countries from the choice set suggests that excluding Russia as a potential destination probably also affects our results only negligibly. Finally, it should be emphasized that the immigration patterns of the four aforementioned countries differ from those observed in our sample along several dimensions: potential migrants in the four excluded countries stem from a much more concentrated set of origin countries, and their skill distribution is less balanced. Therefore, it could be argued that our findings are informative for the impact observed in countries hosting migrants from diversified origins and skill levels.

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