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# Government ideology and international migration\*

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## Abstract

We provide the first empirical evidence that government ideology affects the choice of migration destinations. As ruling political parties differ in their discourse, policies, and positions on migration, the ideology differential between the host and home country governments can shape the relative generosity of the welfare system, the degree of tolerance towards out-groups, and the restrictiveness of migration policies, all acting as important drivers of international migration. Using data on bilateral migration and government ideology for OECD countries between 1990 and 2016, we show that migration flows increase when the government at the destination becomes more left-wing relative to the government at the origin, particularly when both countries are members of the European Economic Area.

*Keywords:* Government ideology; international migration; migration choice; OECD countries  
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## 1. Introduction

Which countries do migrants move to? Migration patterns have long been a fertile area of research in social sciences, but the determinants of migration flows have become of particular interest today because of a rapid increase in transnational population movements. By one estimate, the number of international migrants reached 272 million in 2019, a 23 percent increase since 2010.<sup>1</sup> About 54 percent of worldwide migrants reside in OECD countries (OECD, 2019). In recent years, the availability of comprehensive

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<sup>1</sup>See United Nations data available at <https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp>.

data on bilateral population movements has made it possible to explore systematically the determinants of international migration using gravity models of migration (see, e.g., Lewer and Van den Berg, 2008; Mayda, 2010; Bertoli and Moraga, 2013; Caragliu et al., 2013; Beine and Parsons, 2015; Beine et al., 2019).

Numerous factors push migrants away from their home countries and pull them towards potential host countries, in particular differences in income or in the supply of public goods and promise of human capital accumulation (Beine et al., 2011; Verdugo, 2016); environmental shocks including epidemics and natural disasters (Beine and Parsons, 2015); migration costs such as geographic and linguistic distances (Adsera and Pytlikova, 2015); population control and migration policies (Czaika and Parsons, 2017; Helbling and Leblang, 2019); and the presence of migration networks and other uncertainty-reducing infrastructures (Clark et al., 2007; Beine et al., 2019). While the extant empirical research on migration has incorporated a wide range of economic considerations, political and ideological factors have been largely absent from the debate on where immigrants decide to settle. Three exceptions are the works of Bracco et al. (2018), Efthyvoulou et al. (2021), and Pickard et al. (2022) on internal migration. Bracco et al. (2018) demonstrate that the election of a mayor from the anti-immigration party Lega Nord in Italy led to a reduction in the inflows of immigrants to the same municipality. Efthyvoulou et al. (2021) and Pickard et al. (2022), using evidence from the United Kingdom, show that political alignment to the district of residence contributes to individuals' sense of "fitting in" and shapes population movements within the country. We add to this debate by showing how considerations about the political landscape of the host country with regards to that of the home country affect the choice of migration destinations *across borders*.<sup>2</sup>

Attitudes towards immigration form central themes in political campaigns, and national governments differ significantly in their discourse, policies, and positions on migration (Howard and Howard, 2009; Janoski, 2010; Helbling, 2014; Abou-Chadi, 2016). We discuss and evaluate a non-exhaustive number of potential explanations for how government ideology affects international migration, which are grounded on the policies and attitudes generally associated with left-wing and right-wing parties: the generosity of the welfare system, the level of social tolerance towards newcomers, and the restrictiveness of migration policies. Because of key differences across these dimensions, we expect immigrants to be more attracted to countries with a left-wing government, particularly if this

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<sup>2</sup>In a similar vein, Helbling and Leblang (2019) find that migrants are less likely to move to countries where citizens have expressed support for radical right-wing political parties.

government is assessed as more left-wing compared with the government in the origin country. This ideology differential allows them to form expectations about their role, rights, and benefits in a new society, as well as the relative degree of discriminatory attitudes and prejudice, using the political ideology of the government in their home country as a benchmark (Weldon, 2006).<sup>3</sup>

Against this background, we undertake a comprehensive analysis of the effect of government ideology on migration patterns in OECD countries over the period 1990–2016. More precisely, we examine whether the ideology differential between the government of the destination and the government of the origin (as captured by immigrants' country of nationality) shapes their bilateral migration flows. We leverage variations in governments' left–right political leaning that is derived from the incumbent parties' manifesto at the time of general elections, and we combine this information with annual dyadic data on migration flows from the OECD's International Migration Database.<sup>4</sup> We employ augmented gravity equations that include well-known determinants of migration flows, year fixed effects, and origin–destination pair fixed effects. The inclusion of pair fixed effects absorbs all pair-specific time-invariant factors that are correlated with relative ideology and controls for the potential endogeneity of the latter (Yotov et al., 2016). Thus, identification in our setting comes from changes in relative ideology within a specific origin–destination pair. To lend further credibility to our results and to tackle the possibility of omitted variable bias, we examine the sensitivity of our estimates to augmenting the gravity model with extra controls, including measures of migrant networks and migration policies, and to adding multilateral-resistance terms (destination–year or origin–year fixed effects), which can account for all country-specific time-varying factors affecting emigration and immigration decisions (Bertoli and Moraga, 2013; Beine et al., 2016). Reverse causality is not a major problem in our analysis as we rely on migration flows at the bilateral level, which are only a small fraction of the total size of the labour markets (see also Beine et al., 2019). Nevertheless, to further address such concerns, we look at the dynamics of migration flows around the period of a left-wing administration and present evidence that the effects emerge only after a government change.

Our empirical analysis reveals that population movements increase when the government in the host country becomes more left-wing relative to the government in the origin country. The estimated effect of the relationship

<sup>3</sup>In fact, individuals project the party identification related to the party system of the home country on the party system of the destination country and compare them in terms of “party families” (Strijbis, 2014).

<sup>4</sup>See <https://stats.oecd.org/Index.aspx?DataSetCode=MIG>.

between relative ideology and migration patterns is not only statistically significant but also economically meaningful. On average, according to our baseline model, bilateral migration flows increase by about 7 percent for a one-standard-deviation increase in relative ideology. We also show that the effects are stronger when the receiving countries have a relatively more generous welfare state compared with the origins and when they display relatively lower values of traditional morality, with the latter serving as a proxy for the degree of social (in)tolerance towards out-groups. Finally, we demonstrate that our results are mostly driven by member states of the European Economic Area (EEA). The presence of a free migration regime and their similarities in norms, institutions, and party systems likely make immigrants more responsive to changes in the political landscape of the prospective host countries.

## 2. Why government ideology matters

The location choices made by immigrants when they decide to move to a new country are influenced by a range of socio-economic and political considerations. We explore the role of ideological factors, and we ask to what extent the political landscapes of the home and host countries contribute to explaining where immigrants decide to settle. As political parties take positions on immigration and choose policies consistent with the preferences of their partisans (Potrafke, 2017; Bove et al., 2021b), we expect the political ideology of the destination government and its difference from that of the origin government to provide information about the resources available to newcomers in the host society, the type of migration legislations, and the degree of social tolerance towards them.

First, migrants are a mobile form of labour and usually move to areas with high wages and high employment probabilities. Yet, the generosity of the welfare system and the availability of social benefits can also act as a magnet, particularly for low-skilled immigrants who are the net beneficiaries rather than net contributors to the welfare state (Razin and Wahba, 2015). Generous welfare programmes might attract people who otherwise would not have migrated to a particular country, and thus can shape the migration location choices (Borjas, 1999; De Giorgi and Pellizzari, 2009; Razin and Wahba, 2015; Agersnap et al., 2020). As left-wing governments tend to favour a generous welfare state, they are more likely than right-wing governments to allocate resources to welfare-related policies and push for increased social spending, in line with the interests and preferences of their core political constituencies (Bove et al., 2017). To illustrate, in 2002, Denmark introduced a welfare scheme that reduced benefits by up to 50 percent for immigrants from outside the European Union (EU) and the four

members of the European Free Trade Association, as a new government supported by a far-right party came into power (Agersnap et al., 2020). In 2012, following the election of a centre-left government, this welfare scheme was repealed, and then re-instituted in 2015 after the return of a centre-right government; as shown by Agersnap et al. (2020), this scheme reduced the net flow of immigrants by almost 5,000 people per year. If the welfare-generosity mechanism is at play, and left-wing governments do favour increased budget allocations to social benefits, potential welfare recipients are more likely to move to high-benefit countries when a left-wing party is in office.

Second, the decision to migrate is influenced by less discernible aspects of the so-called “context of reception”, the range of material and moral resources that are made available by the government and the receiving communities to newcomers (Portes and Rumbaut, 2006; White and Johnson, 2016). In particular, the social and institutional context shapes the salience of ethnic differences and the degree of social tolerance towards foreign-born populations (Weldon, 2006). In recent decades, migration flows have increased host countries’ pressures to “articulate a coherent national identity in the face of immigrant-related diversity and to define avenues for inclusion for these now-permanent populations” (Goodman, 2012, p. 663). This pressure can generate social tensions, and foreign residents are often confronted with episodes of discrimination and intolerance, and negative public discourse (Hainmueller and Hangartner, 2013; Strijbis, 2014). Even in advanced democracies, where principles of tolerance towards out-groups and minorities are enshrined in the constitution, newcomers often face prejudice and intolerance from native populations.

Crucially, the politics of the receiving community can shape expectations regarding the type of treatment immigrants will receive (Menjivar, 1997). For one, the agenda of left-wing parties often favours common cultural heritages and values (Helbling, 2014), and left-wing politicians are more likely than their counterparts to take into account their constituencies’ preferences by committing to protect and promote minority interests, such as combating discrimination and xenophobia (Just, 2019). For example, anti-immigrant political campaigns and appeals for immigration restrictions are likely to deter immigrants. Former US president Donald Trump’s anti-immigration rhetoric, and the introduction of a travel ban in 2017, which placed restrictions on travel to the US for citizens of seven countries, created an unwelcoming image of the country also for foreign citizens not directly targeted by the ban (Reardon, 2017). This stands in sharp contrast to the rhetoric of his predecessor. Since the beginning of his presidency, Barack Obama argued in favour of a more comprehensive approach to immigration, including a more clear-cut pathway to citizenship. Interestingly, partisan divisions over immigration are widening in the wake

of large population movements.<sup>5</sup> Yet, the extent to which public sentiments are on balance positive or negative towards immigrants, or the actual position of each government towards newcomers, is often difficult to ascertain. In the absence of first-hand experience of the receiving context, immigrants often rely on heuristic or information shortcuts about the political climate in the host society (Lupia, 1994; Just, 2019). The ideology of the incumbent party in the destination country, and the ideology differential between host and home country governments, provide an important signal about the level of tolerance towards out-groups and whether the host society has a more welcoming civic culture than the home society.

Third, the ideological orientation of governing parties can determine the restrictiveness of migration policies (Abou-Chadi, 2016), which, in turn, can drive immigrants' location choices (Ortega and Peri, 2013; Helbling and Leblang, 2019). On the one side of the political spectrum, conservative incumbents have more pronounced anti-immigrant positions and they often go into coalitions with radical right parties; the latter have at times demanded profound changes in migration policies and new measures impeding naturalization of immigrants and sometimes their deportation (Givens, 2007). On the other side of the political spectrum, left-wing parties usually display a more liberal ideology, use more universal frames when addressing issues of immigration, and are often associated with measures to open access to citizenship for new immigrants and allow membership apart from ethnic elements (Helbling, 2014; Abou-Chadi, 2016).<sup>6</sup>

Yet, given the ability to work and reside in any country within the EEA – and because the majority of OECD countries are EEA members – we expect the migration-policy mechanism to be less relevant in our context. At the same time, restricting the analysis to EEA dyads should render the substantive impact of government ideology on bilateral migration flows much stronger. On the one hand, cross-border population movements under a free migration regime are more likely to be responsive to changes in the political environment of the host and home countries. On the other hand, the similarities in societal norms, customs, and institutions within the EEA

<sup>5</sup>For example, in a recent poll, about 78 percent of Republicans claimed that large numbers of immigrants and refugees coming into the United States represent a “critical threat” to the nation’s vital interests. In comparison, only 19 percent of Democrats had similar views. See the article by S. Clement and D. Balz, “Partisan divisions over immigration widen after a year of turmoil at border”, in *The Washington Post* on 9 September 2019, [https://www.washingtonpost.com/politics/partisan-divisions-over-immigration-widen-after-a-year-of-turmoil-at-border/2019/09/09/2b4e6482-cfdf-11e9-8c1c-7c8ee785b855\\_story.html](https://www.washingtonpost.com/politics/partisan-divisions-over-immigration-widen-after-a-year-of-turmoil-at-border/2019/09/09/2b4e6482-cfdf-11e9-8c1c-7c8ee785b855_story.html).

<sup>6</sup>Evidently, left-wing politicians also see immigration as a field to promote their own political platforms and serve a less nationalistically minded voter clientele. In fact, the politics of integration have mainly been the domain of left parties interested in attracting immigrant voters (Givens, 2007).

can increase citizens' information about the political environment of other member states, thus amplifying the importance of relative ideology.

### 3. Empirical design

#### 3.1. Sample and main variables

We obtain data on annual bilateral migration flows from the OECD International Migration Database. The dataset covers 36 origin and 35 destination OECD countries (Lithuania appears only as origin) over the period 1990–2016. Specifically, the dataset contains 1,126 origin-to-destination corridors and 19,464 corridor–year observations, and is quite unbalanced, especially in the 1990s: while 21 percent of all possible corridor–year observations are missing for the period 2000–2016, the proportion of missing observations for the period 1990–1999 is 73 percent. The missing values are also unequally distributed across destination countries, which, as noted by Beine et al. (2019), reflects differences in the size and quality of data collection.<sup>7</sup> Table A.1 in the Online Appendix provides summary statistics of bilateral migration flows for each OECD country in this dataset, both as origin and as destination, whereas Figure A.1 presents the top origin for each destination using a Sankey diagram.

The migration dataset is harmonized in the sense that it relies on the same criterion to identify immigrants for all countries; that is, the nationality of the foreign population moving to a destination. As such, it does not suffer from the comparability problems that often arise when combining data from different sources that use different criteria to record bilateral migration flows. Even though, in most of the cases, nationality and country of (previous) residence will probably coincide, using the nationality criterion has the limitation of not fully accounting for the macro-economic conditions or the political climate of the last origin of immigrants, which can be important for their decision to emigrate at a certain point in time. However, by using this criterion, we can analyse the migration patterns of OECD nationals moving to other OECD countries, and thus mitigate the possibility that our results are affected by the behaviour of refugees (or asylum seekers) who use OECD countries as migration routes. Combined with the fact that most of the OECD countries are members of the EEA, this allows us to explicitly focus on ideology-induced migration effects, because migration flows within EEA countries (and under a free migration regime) are expected to react quickly to changes in the current political environment.

<sup>7</sup>In short, there is a large proportion of missing values in Turkey, and also in relatively small destination countries, such as Greece, Ireland, and Portugal.

The key explanatory variable in our analysis is the ideology differential between migrants' destination country  $j$  and origin country  $i$  – as captured by their country of nationality – in year  $t$  (*Relative ideology* $_{ij,t}$ ). This is calculated by subtracting the value of government ideology at the origin from the value of government ideology at the destination, with ideology taking higher values for more left-wing governments. To capture ideology, we employ a continuous measure of left–right political leaning that is derived from the incumbent party's manifesto at the time of general elections (Manifesto Project; Volkens et al., 2019). In the case of coalitions, it accounts for the policy preferences of all coalition parties, as well as the portion of the year that each party participates in the government.<sup>8</sup> This implies that, for each destination (and origin) country, the value of this measure changes over time when there is a general election – and thus new manifestos are published and new governments are elected – or when there are changes in the composition of government between two elections (for instance, when a party leaves a coalition government). The corresponding dataset is available until the year 2014 and is constructed using the frequency of positive and negative mentions of different issues, as captured by 26 content analytical variables. For instance, more positive mentions of welfare state expansion, labour groups, and protectionism make a government more left-wing, whereas, more positive mentions of political authority, traditional morality, and economic orthodoxy make a government more right-wing.

As an alternative measure of ideology, we employ a binary indicator from the Database of Political Institutions (DPI; Beck et al., 2001), which records the left–right orientation of the party heading the executive branch. More precisely, this variable takes value 1 for governments headed by a left-wing party (e.g., a party defined as socialist, social democratic, or left-wing), and 0 for governments headed by a right-wing party (e.g., a party defined as conservative, Christian democratic, or right-wing).<sup>9</sup> By construction, this variable changes over time only when there is a change in the political orientation of the government from left to right, and vice versa, due to the election of a new chief executive. While this indicator does not account for parties' manifesto positions (which can vary across governments with the same political colour), it comes with the advantage that it is less prone to reverse causality, as the dichotomous classification of

<sup>8</sup>If the coalition has published a manifesto, it codes the coalition manifesto, and if the coalition has not published a manifesto, it considers the manifestos of the individual parties that have been part of the coalition (Volkens et al., 2019).

<sup>9</sup>To create this binary measure, we include the (small number of) centrist governments in the left-wing category. The correlation coefficient between our manifesto- and DPI-based measures of relative ideology is 0.49.

parties into “left-wing” and “right-wing” is constant over time. Furthermore, the DPI measure is available until the year 2016, allowing us to cover the full period for which migration data are available.<sup>10</sup> As before, we construct a country-pair-specific measure of the ideology differential by subtracting the value of the DPI indicator at the origin from its value at the destination (*Relative ideology*  $(DPI)_{ij,t}$ ).

Combining the migration data with the manifesto-based data of government ideology results in a sample consisting of 13,925 corridor-year observations for 33 origin and 32 destination OECD countries (to be referred to as the “full sample”).<sup>11</sup> However, to estimate gravity models of international migration, we also require data on wages, business cycles, employment rates, and migrant networks (in addition to data on potential confounding factors, such as migration policies), and comparable measures of all these features across countries are mostly available since 2000. As such, the main sample used in our analysis (to be referred to as the “baseline sample”) is restricted to the period 2000–2014/16, which, as also mentioned above, is better balanced across country pairs and years in terms of bilateral migration flows. Nevertheless, in Section 4.1, we show that our inferences do not change when we employ simple “uncontrolled” specifications based on the full sample that includes the 1990s.

In our estimation setting, we exploit changes in relative ideology within a specific migration corridor. Despite not covering a very long time period, our ideology measures vary considerably over time: for instance, using the baseline sample, we can see that there is at least one change in the variable *Relative ideology* $_{ij,t}$  for 99 percent of the country pairs, and at least one change in the variable *Relative ideology*  $(DPI)_{ij,t}$  for 86 percent of the country pairs. Performing a simple within-dyad analysis using the DPI measure suggests that migration flows are about 36 percent higher for a left-destination right-origin pair than for a right-destination left-origin pair. Similarly, focusing on ideology at the destination, we can see that migration flows are about 22 percent higher when the receiving country is classified as left-wing. This provides some first evidence that government ideology plays an important role in shaping migration patterns across OECD countries. In the following sections, we turn to a more systematic analysis of this relationship, take a number of approaches to address concerns of omitted

<sup>10</sup>Note that running regressions based on the common sample does not change our inferences.

<sup>11</sup>For three countries (Chile, Korea, and Mexico), there are no data on government ideology from the Manifesto Project. Hence, the countries considered in our analysis as origins and/or destinations are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

variable bias and reverse causality, and examine some of the underlying mechanisms.

Table A.2 in the Online Appendix provides a full description of all variables used in the analysis, together with the corresponding data sources. Descriptive statistics for these variables are given in Table A.3.

### 3.2. Estimation strategy

To examine the impact of relative ideology on migration flows, we embed our key independent variable into a micro-founded gravity model of international migration. The theoretical underpinning of this model is derived from the income maximization framework (Borjas, 1987; Grogger and Hanson, 2011; Beine et al., 2011, 2019). One of the key strengths of this framework is that it allows us to generate predictions about the main determinants of international migration that are in line with the recent macro-economic literature and can be readily estimated (Anderson, 2011). In particular, following the recent work of Beine et al. (2019), we control for relative business cycles and relative employment rates to account for the fact that economic agents form expectations of future employment based on information provided by the current state of the economy. The main difference in our approach is the expectation that (in addition to macro-economic factors) governments' political ideology will also play a significant role for migrants' destination choices. More formally, our model specification takes the following form:

$$\begin{aligned} \text{Migration flows}_{ij,t} = & \alpha \text{Relative ideology}_{ij,t} + \beta_1 X_t^i + \beta_2 X_t^j + \beta_3 Y_{ij,t} \\ & + \gamma_t + \gamma_{ij} + \varepsilon_{ij,t}. \end{aligned} \quad (1)$$

Here,  $\text{Migration flows}_{ij,t}$  represents the directional flows of migrants between two countries (directed dyads), measured by the number of migrants flowing from a country of origin  $i$  to a destination country  $j$  at time  $t$  (in logarithm);<sup>12</sup>  $\text{Relative ideology}_{ij,t}$  is the ideology differential between the two countries, as defined in Section 3.1;  $X_t^i$  and  $X_t^j$  are vectors containing time-varying variables in the origin and destination countries;  $Y_{ij,t}$  is a vector of pair-specific variables that vary over time;  $\gamma_t$  and  $\gamma_{ij}$  represent year and dyad fixed effects, respectively; and  $\varepsilon_{ij,t}$  is an error term clustered at the directed dyad level. Our parameter of interest,  $\alpha$ , measures the effect of relative ideology on bilateral migration flows, with a positive value providing support for the argument that population movements increase when the government at the destination becomes more left-wing relative to the government at the origin.

<sup>12</sup>We add a value of 1 before taking the logarithm to avoid taking the logarithm of 0.

Note that  $X_t^i$  and  $X_t^j$  include variables measuring expectations regarding future incomes in the two countries. These are captured by the expected income conditional on being employed (the average wage level, in logarithm) and the expected probability of being employed in a given country, which depends on the current level of employment in the economy (employment rate) and its current cyclical state (real GDP growth).<sup>13</sup>  $Y_{ij,t}$  includes three variables capturing factors that might favour mobility of people between the two countries: a dummy variable for a joint membership to the Schengen Agreement at time  $t$ ; a dummy variable for a joint membership to the EU at time  $t$ ; and the size of the existing diaspora, as captured by the bilateral stock of migrants (in logarithm).<sup>14</sup> The inclusion of year fixed effects in our specification controls for shocks in migration flows that are common to all countries, whereas the inclusion of dyad fixed effects captures pull and push factors that are pair-specific and time-invariant, including bilateral migration policies (that do not change over time), the transport costs of moving, and the costs of collecting information about remote locations (Lucas, 2001). The inclusion of dyad fixed effects also implies that identification in our setting comes from changes in relative ideology within dyads over time.

As noted in the gravity model literature, controlling for multilateral resistances (by adding time-varying directional fixed effects in a gravity model) can account for all factors affecting emigration decisions and the choice of a particular destination over other alternatives (Anderson, 2011; Beine et al., 2019).<sup>15</sup> However, in the presence of both destination-year and origin-year fixed effects, the gravity model can no longer estimate the impact of variables that capture differences of monadic (country-specific) variables, such as our variable of interest (Head and Mayer, 2014). As such, equation (1) represents a reduced-form version of a structural model of international migration. However, to assess the possibility of

<sup>13</sup>As argued by Beine et al. (2019), the current level of the employment rate integrates the impact of past business cycles and some structural effects from the labour market, whereas the current business cycle provides information that is more forward-looking in terms of future employment rates.

<sup>14</sup>The bilateral stock of migrants captures the existing stock of migrants from country  $i$  living in country  $j$ . The data are taken from the updated version of Özden et al. (2011) and are available for the years 1990, 1995, 2000, 2005, 2010, and 2015. Thus, our measure reflects the value in the beginning year to which a flow corresponds (e.g., for the years 2000–2004, we use the value in 2000).

<sup>15</sup>Specifically, destination-year fixed effects capture all the factors that determine the overall immigration rate for a country  $j$  and the identification comes from the differential immigration rates from all possible source countries; whereas origin-year fixed effects capture all the factors that determine the overall emigration rate from a country  $i$ , and the identification comes from the differential emigration rates to specific destination countries.

omitted variable bias, we also estimate alternative versions of the baseline model, where we replace *Relative ideology* with one of its two components (ideology at the destination and ideology at the origin) and augment the model with either origin–year or destination–year fixed effects.

Because of the low frequency of zeros in migration flows (3.4 percent of the non-missing observations), equation (1) is estimated using traditional panel data techniques rather than methods that are designed to deal with the existence of a large proportion of zeros in the dependent variable. Nevertheless, our results persist when we employ such methods (see Section 4.4).

## 4. Empirical findings

### 4.1. Main results

Table 1 reports the results obtained from estimating equation (1). To examine the sensitivity of the estimate of *Relative ideology* to the inclusion of control variables, we adopt an incremental strategy. In particular, we start from a simple specification that includes our key explanatory variable and dyad fixed effects, and we then add year fixed effects and the control variables in a progressive manner. Columns 1 and 2 report the estimates for the full sample, whereas Columns 3–9 report the estimates for the baseline sample. At a first point, we can see that both long-run and short-run economic factors exert an influence on bilateral migration flows: an increase in the average wage at the destination and a decrease in the current employment rate at the origin lead to a significant increase in the number of migrants moving from the origin to the destination country. In line with Beine et al. (2019), we can also see that the EU and the Schengen Agreement play a significant role for the international mobility of workers between the members states. Turning now to our key explanatory variable, we find strong evidence that bilateral migration flows increase when the government in the destination country becomes more left-wing relative to the government in the origin country: the estimates of *Relative ideology* are positive and statistically significant at the 1 percent level throughout. Substantively, the estimate in Column 9 implies that a one-standard-deviation increase in the ideology differential will lead to a 7 percent increase in migration flows.<sup>16</sup> This is a quite large effect if one considers the large number of immigrants within OECD countries.

To explore whether the results in Table 1 can be attributed to changes in the political landscape at both the host and the home countries, we replace

<sup>16</sup>The estimate of relative ideology does not change when the economic variables are lagged by one year. Furthermore, the estimate remains statistically significant when the standard errors are clustered at the destination–year and origin–year levels (two-way clustering).

**Table 1.** Migration flows and relative ideology: main results

	Migration flows								
	Full sample			Baseline sample					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Relative ideology	0.363*** (0.069)	0.289*** (0.060)	0.403*** (0.080)	0.393*** (0.080)	0.361*** (0.078)	0.359*** (0.078)	0.347*** (0.077)	0.342*** (0.077)	0.331*** (0.077)
Real GDP growth [dest.]				-0.003 (0.005)	-0.004 (0.005)	-0.003 (0.005)	-0.002 (0.005)	0.001 (0.005)	0.002 (0.005)
Real GDP growth [origin]				-0.011*** (0.004)	-0.007* (0.004)	-0.008** (0.004)	-0.007* (0.004)	-0.004 (0.004)	-0.005 (0.004)
Employment rate [dest.]				0.005 (0.006)	0.005 (0.006)	-0.000 (0.007)	-0.004 (0.007)	-0.007 (0.007)	-0.007 (0.007)
Employment rate [origin]				-0.023*** (0.008)	-0.023*** (0.008)	-0.021** (0.008)	-0.023*** (0.008)	-0.025*** (0.008)	-0.025*** (0.008)
Average wage [dest.]						1.167*** (0.300)	1.143*** (0.306)	1.110*** (0.304)	1.170*** (0.301)
Average wage [origin]						-0.208 (0.271)	-0.446* (0.270)	-0.475* (0.269)	-0.543** (0.265)
EU members							0.398*** (0.095)	0.341*** (0.092)	0.295*** (0.093)
Schengen members								0.128** (0.060)	0.109* (0.061)
Dyadic stock								0.149*** (0.057)	0.149*** (0.057)
Year FEs		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dyad FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.893	0.906	0.910	0.911	0.911	0.911	0.912	0.912	0.913
Number of dyads	925	925	821	821	821	821	821	821	821
Observations	13,925	13,925	9,111	9,111	9,111	9,111	9,111	9,111	9,111

Notes: Standard errors are clustered at the dyad level and reported in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively.

14 *Government ideology and international migration***Table 2.** Migration flows and ideology at destination and origin

	Migration flows					
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology [dest.]	0.507*** (0.121)	0.496*** (0.121)	0.495*** (0.121)	0.486*** (0.120)		
Ideology [orig.]	-0.301*** (0.099)	-0.163* (0.092)			-0.304*** (0.079)	-0.164** (0.077)
Real GDP growth [dest.]		0.001 (0.005)		-0.000 (0.005)		
Real GDP growth [origin]		-0.005 (0.004)				-0.005* (0.003)
Employment rate [dest.]		-0.008 (0.007)		-0.004 (0.007)		
Employment rate [origin]		-0.027*** (0.009)				-0.026*** (0.006)
Average wage [dest.]		1.169*** (0.302)		1.107*** (0.274)		
Average wage [origin]		-0.554** (0.265)				-0.632*** (0.216)
EU members		0.302*** (0.093)		0.003 (0.103)		0.429*** (0.098)
Schengen members		0.113* (0.061)		0.103 (0.078)		0.095* (0.055)
Dyadic stock		0.147*** (0.056)		0.128** (0.055)		0.169*** (0.053)
Origin × Year FEs			Yes	Yes		
Destination × Year FEs					Yes	Yes
Year FEs	Yes	Yes				
Dyad FEs	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.911	0.913	0.918	0.918	0.953	0.955
Number of dyads	821	821	821	821	821	821
Observations	9,111	9,111	9,111	9,111	9,111	9,111

Notes: Standard errors are clustered at the dyad level and reported in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively.

*Relative ideology* in equation (1) with its two components: ideology at the destination and ideology at the origin. Columns 1 and 2 in Table 2 show the corresponding results before and after introducing the control variables. The estimates of the two variables have the expected sign and both appear to be statistically significant at conventional levels. However, ideology at the origin seems to exert a weaker and statistically less robust effect on bilateral migration flows once the control variables are added. This suggests that, while pre-migration experiences and the ideology of the home country's government can play some role for migration decision-making (Just, 2019),

the political landscape of prospective host countries and the differences with the political environment of the country of origin are what matter the most. To further assess the sensitivity of our results, we replace the vector of origin-specific time-varying variables,  $X_t^i$ , with origin-year fixed effects. In this way, we are able to capture all (observed and unobserved) factors at the origin that might confound the relationship between migration flows and ideology at the destination, and account for the multilateral resistance to migration. As shown in Columns 3 and 4 of Table 2, the inclusion of origin-year fixed effects leaves the estimate of ideology at the destination unchanged. Similarly, replacing the vector of destination-specific time-varying variables,  $X_t^j$ , with destination-year fixed effects has little effect on the estimate of ideology at the origin (see Columns 5 and 6).<sup>17</sup>

## 4.2. Endogeneity issues

Potential endogeneity concerns can arise with the estimation of equation (1). If the ideology differential between two countries is influenced by unobserved bilateral factors that are also relevant for migration flows, then omitted variable bias would prevent the identification of a plausibly causal effect. Similarly, if parties' left-right positions (or the electoral outcomes) are partly determined by past migration flows, reverse causality can confound the relationship between the two variables.

**4.2.1. Omitted variable bias.** Two important factors are often omitted when estimating gravity models of international migration, which might lead to biased estimates (Beine et al., 2016, 2019). These factors are migrant networks (i.e., diasporas at the destination, which can drive further migration inward due to lower migration costs) and unilateral migration policies (i.e., migration policies that are implemented with respect to all partner countries, and that can be correlated with the political colour of the government). In equation (1), we account for the effect of migrant networks by controlling for the size of the bilateral migration stock at the start of a migration period (based on five-year migration periods). In the Online Appendix, we also show that our results persist when we consider (lagged)

<sup>17</sup>We have also experimented with using a two-step estimation approach (Head and Mayer, 2014), where, in the first step, the full set of fixed effects (destination-year, origin-year, and origin-destination) is included in the gravity regression, and then, in the second step, the fitted values of the destination-year (origin-year) fixed effects are regressed on the country-year variables, which could not be included in the first step; namely, ideology, real GDP growth, employment rate, and average wage at the destination (origin). The results obtained from the second-step regressions are in line with our previous findings; once again, we find a positive and statistically significant effect of destination ideology and a negative but statistically less robust effect of origin ideology.

bilateral migration stocks with annual frequency (available for a subset of observations) and when we estimate a dynamic panel data model. National migration policies are not expected to have a strong influence on migration flows in our context, as there is free labour mobility within the majority of OECD countries (as EEA members). Nevertheless, in the Online Appendix, we show that the inferences on our relative ideology measure do not change when we control for unilateral migration policies based on the Determinants of International Migration (DEMIG) Policy Database (de Haas et al., 2014).

The results presented throughout Section 4 are also quite reassuring as regards to biases arising from the potential omission of unobserved characteristics. First, our relative ideology estimates in Table 1 do not seem to be sensitive to the inclusion of the key determinants of international migration, suggesting that the impact of unobservables must be relatively large, compared with observables, to invalidate our findings.<sup>18</sup> Second, as illustrated in Table 2, our results are robust to controlling for multilateral resistance to migration through the inclusion of origin–year or destination–year fixed effects, which can arguably capture a big part of omitted factors (Beine and Parsons, 2015; Beine et al., 2019). Finally, our relative ideology estimates persist when we introduce to the model of equation (1) a number of additional destination- and origin-specific variables (see Section 4.4).

**4.2.2. Reverse causality.** Another concern is whether there is a reverse causal relationship from international migration to the ideological positions of parties (and thus of elected governments), especially when it comes to the destination countries. An important reason why this concern is less severe in our context is that we rely on bilateral migration flows. As stressed by Beine et al. (2019), the bilateral nature of this type of analysis makes concerns about reverse causality much less serious than in a unilateral analysis of migration, because migration flows at the bilateral level are quite modest relative to the total size of migration flows at the destination. However, to ensure that reverse causality is not a major problem in our analysis, we adopt two complementary approaches. First, we check whether our results persist when we replace the manifesto-based measure of relative ideology with the DPI one. As noted in Section 3.1, the DPI measure is dichotomous (parties are classified into “right-wing” and “left-wing”, and this classification does not change over time), and thus it is less prone to

<sup>18</sup>To assess the extent to which unobservables can affect our results, we follow Altonji et al. (2005) in calculating how strong selection on unobservables would have to be in order to explain the observed relationship between migration flows and relative ideology. By comparing the estimates in Columns 3 and 9 of Table 1, we find that the impact of unobserved factors would have to be at least 4.6 times stronger, compared with observed factors, in order to explain away the effect of relative ideology. Such a strong role of unobserved heterogeneity seems very unlikely.

endogeneity; for example, when parties adjust their positions in response to changing patterns of migration or public opinion trends. Second, we look at the dynamics of migration flows around the period of a left-wing government at the destination; that is, two years before the start and two years after the end of a left-wing administration. Significant pre-left and post-left effects would potentially cast doubt on our interpretation that bilateral migration flows increase only when a left-wing party is in office.

Columns 1–4 of Table 3 present the results when relative ideology and ideology at the destination are based on the DPI measure. The evidence obtained is in line with our previous findings. For instance, the estimate in Column 4 suggests that migration flows are 25 percent higher when the government at the destination is classified as left-wing rather than right-wing. Column 5 reports the results when we augment the specification of Column 4 with the pre-left and post-left variables. The pre-left variable enters the specification with a negative sign and fails to reach statistical significance, suggesting that our findings cannot be explained by changing migration patterns in the years preceding a left-wing administration. Even though the estimate of the post-left variable turns out to be statistically significant, its magnitude is much smaller than that of ideology, which may well reflect adjustment effects; that is, when there is a change from left to right, it may take one to two years for migration flows to return back to the previous (lower) levels for right-wing governments.<sup>19</sup>

To shed further light on the timing of the effects, we replace our ideology (at the destination) variable with six time indicators capturing years 1 and 2, years 3 and 4, and years 4+ before and after a change to a left-wing government. Figure 1 depicts the estimates of these indicators. Taking the year of government change (at the destination) as the baseline, the figure shows that bilateral migration flows increase only after the government change, and persist throughout the term of a left-wing administration. In addition, the absence of significant effects in all the years before a left-wing government takes office indicates, once again, that the change in the political colour of the government cannot be explained by pre-existing migration patterns. Finally, the fact that migration flows seem to react immediately after a government change mitigates the possibility that our results are driven by changes in government policies that take time to implement, such as the introduction of new bilateral (dyad-specific) migration agreements or restrictions between governments with the same or different political colour.

<sup>19</sup>This test is motivated by recent studies on the impact of political alignment on foreign aid allocation (see, e.g., Dreher et al., 2019; Anaxagorou et al., 2020). As stressed in these studies, a statistically significant estimate of the post-treatment dummy would not necessarily invalidate a causal interpretation, as this might capture adjustment effects in the first post-treatment years.

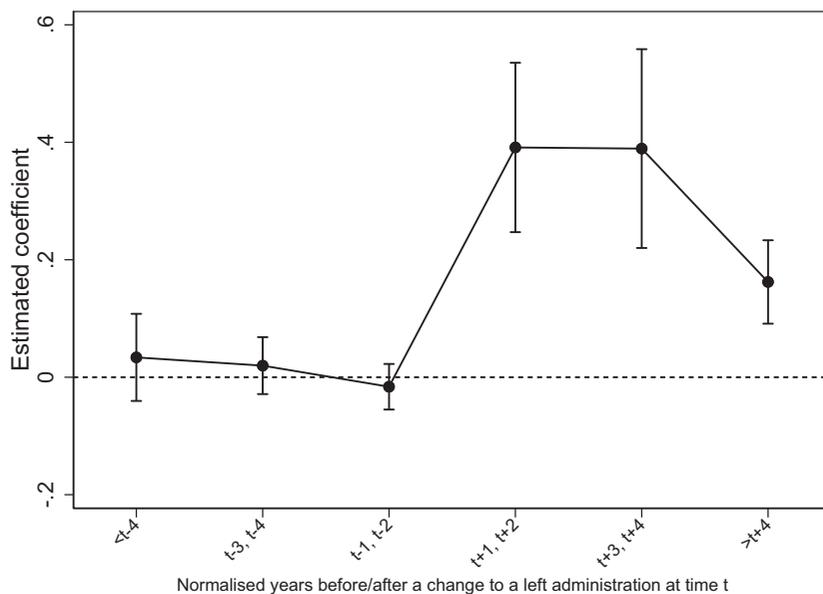
**Table 3.** Migration flows and relative ideology: binary ideology measure

	Migration flows				
	(1)	(2)	(3)	(4)	(5)
Relative ideology (DPI)	0.154*** (0.031)	0.152*** (0.031)			
Ideology (DPI) [dest.]			0.240*** (0.049)	0.251*** (0.049)	0.277*** (0.054)
Pre-left (2 years) [dest.]					-0.024 (0.020)
Post-left (2 years) [dest.]					0.119*** (0.033)
Real GDP growth [dest.]		0.011** (0.005)		0.009* (0.005)	0.011** (0.005)
Real GDP growth [origin]		0.002 (0.006)		0.002 (0.006)	0.002 (0.006)
Employment rate [dest.]		-0.002 (0.007)		-0.003 (0.007)	-0.001 (0.007)
Employment rate [origin]		-0.030*** (0.008)		-0.031*** (0.008)	-0.031*** (0.008)
Average wage [dest.]		0.243 (0.266)		0.232 (0.262)	0.135 (0.256)
Average wage [origin]		-0.906*** (0.306)		-0.894*** (0.307)	-0.887*** (0.306)
EU members		0.282*** (0.108)		0.303*** (0.107)	0.301*** (0.108)
Schengen members		0.260*** (0.077)		0.280*** (0.077)	0.287*** (0.077)
Dyadic stock		0.112** (0.055)		0.119** (0.053)	0.110** (0.053)
Year FEs	Yes	Yes	Yes	Yes	Yes
Dyad FEs	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.903	0.906	0.904	0.906	0.906
Number of dyads	832	832	832	832	832
Observations	9,663	9,663	9,663	9,663	9,663

Notes: Pre-left captures the two years before the start of a left-wing administration, whereas post-left captures the two years after the end of a left-wing administration. Standard errors are clustered at the dyad level and reported in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively.

### 4.3. Potential mechanisms and further insights

As discussed in Section 2, the ideology-induced migration effects are expected to be more prevalent for countries that are members of the EEA. This is because, under a free migration regime, prospective migrants are more responsive to short-run fluctuations, and can react quickly to changes in the current political climate when making emigration and immigration

**Figure 1.** Timing of effects for destination countries

Notes: This graph shows the fluctuations in bilateral migration flows before and after a change to a left-wing administration in the destination country. Dots represent point estimates taking the year of government change  $t$  as the baseline. Vertical lines signify 95 percent confidence intervals. Dashed horizontal line indicates estimate of 0.

decisions. Furthermore, the presence of institutional and cultural similarities across EEA countries can increase citizens' information about the political environment of other societies and make government ideology more likely to act as a pull (and push) migration factor. To investigate the empirical validity of this argument, we restrict the sample to include pairs of countries that are both members of the EEA (plus Switzerland), and re-run the regression of equation (1). The results are displayed in Table 4, with Column 1 reporting the estimates for all dyads and Column 6 reporting the estimates for EEA dyads. Comparing these two columns, we can see that the observed relationship between relative ideology and migration flows is almost exclusively driven by the EEA dyads. This confirms that EEA nationals moving to politically similar EEA countries, and under a free migration regime, attach a much higher weight to changes in government policy positions and migration rhetoric.

One of the potential mechanisms behind the ideology-induced migration effects is the generosity of the welfare state. Left-wing governments tend to favour increased budget allocations to social benefits (Bove et al., 2017), which, in a free-migration regime, can act as a magnet for low-skilled migrants who are often the net beneficiaries of a generous welfare

**Table 4.** Migration flows and relative ideology: all dyads versus EEA dyads

	Migration flows									
	All dyads					EEA dyads				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Relative ideology	0.331*** (0.077)	0.300*** (0.077)	0.278*** (0.083)	0.296*** (0.081)	0.223** (0.090)	0.696*** (0.179)	0.653*** (0.179)	0.627*** (0.212)	0.608*** (0.200)	0.509** (0.254)
Real GDP growth [dest.]	0.002 (0.005)	0.010* (0.005)	0.007 (0.005)	0.002 (0.005)	0.007 (0.005)	-0.002 (0.006)	0.010 (0.006)	0.007 (0.007)	-0.001 (0.006)	0.007 (0.006)
Real GDP growth [origin]	-0.005 (0.004)	-0.007 (0.005)	-0.004 (0.005)	-0.005 (0.004)	-0.005 (0.005)	-0.007 (0.005)	-0.012** (0.005)	-0.009 (0.007)	-0.007 (0.005)	-0.009 (0.007)
Employment rate [dest.]	-0.007 (0.007)	-0.010 (0.007)	-0.005 (0.008)	-0.005 (0.007)	-0.002 (0.008)	-0.008 (0.009)	-0.016* (0.009)	-0.011 (0.011)	-0.006 (0.009)	-0.007 (0.011)
Employment rate [origin]	-0.025*** (0.008)	-0.024*** (0.008)	-0.031*** (0.009)	-0.025*** (0.008)	-0.031*** (0.009)	-0.028** (0.011)	-0.024** (0.011)	-0.033*** (0.012)	-0.028*** (0.011)	-0.033*** (0.012)
Average wage [dest.]	1.170*** (0.301)	0.878*** (0.317)	1.067*** (0.329)	1.103*** (0.303)	0.976*** (0.331)	1.026*** (0.374)	0.704* (0.397)	0.972** (0.427)	0.944** (0.376)	0.853** (0.431)
Average wage [origin]	-0.543** (0.265)	-0.561** (0.276)	-0.493* (0.280)	-0.567** (0.265)	-0.509* (0.279)	-0.790** (0.337)	-0.743** (0.339)	-0.630* (0.353)	-0.861** (0.337)	-0.702** (0.354)
EU members	0.295*** (0.093)	0.281*** (0.096)	0.241** (0.098)	0.297*** (0.094)	0.242** (0.098)	0.242** (0.098)	0.242** (0.098)	0.242** (0.098)	0.242** (0.098)	0.242** (0.098)
Schengen members	0.109* (0.061)	0.101* (0.060)	0.126** (0.064)	0.107* (0.061)	0.123* (0.064)	0.008 (0.067)	0.003 (0.066)	-0.002 (0.070)	-0.005 (0.068)	-0.017 (0.072)
Dyadic stock	0.149*** (0.057)	0.138** (0.056)	0.132** (0.055)	0.152*** (0.056)	0.133** (0.055)	-0.018 (0.049)	-0.021 (0.048)	-0.032 (0.051)	-0.015 (0.048)	-0.029 (0.050)
Social expenditure growth [dest.]		0.010*** (0.002)					0.015*** (0.002)			
Social expenditure growth [origin]		-0.003 (0.002)					-0.005** (0.003)			

**Table 4.** Continued

	All dyads			Migration flows			EEA dyads			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Unempl. benefits growth [dest.]			0.002 <sup>***</sup> (0.000)		0.002 <sup>***</sup> (0.000)			0.002 <sup>***</sup> (0.001)		0.002 <sup>***</sup> (0.001)
Unempl. benefits growth [origin]			-0.001 (0.000)		-0.001 (0.000)			-0.001 <sup>*</sup> (0.001)		-0.001 <sup>**</sup> (0.001)
Traditional morality [dest.]				-0.022 <sup>***</sup> (0.007)					-0.047 <sup>***</sup> (0.013)	
Traditional morality [origin]				-0.008 (0.009)					-0.016 (0.018)	
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dyad FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.913	0.913	0.912	0.913	0.913	0.902	0.903	0.902	0.903	0.902
Number of dyads	821	821	764	821	764	552	552	506	552	506
Observations	9,111	9,022	8,337	9,111	8,337	5,694	5,671	5,114	5,694	5,114

Notes: Standard errors are clustered at the dyad level and reported in parentheses. <sup>\*\*\*</sup>, <sup>\*\*</sup>, <sup>\*</sup> and <sup>\*</sup> denote significance at the 1, 5, and 10 percent levels, respectively.

## 22 *Government ideology and international migration*

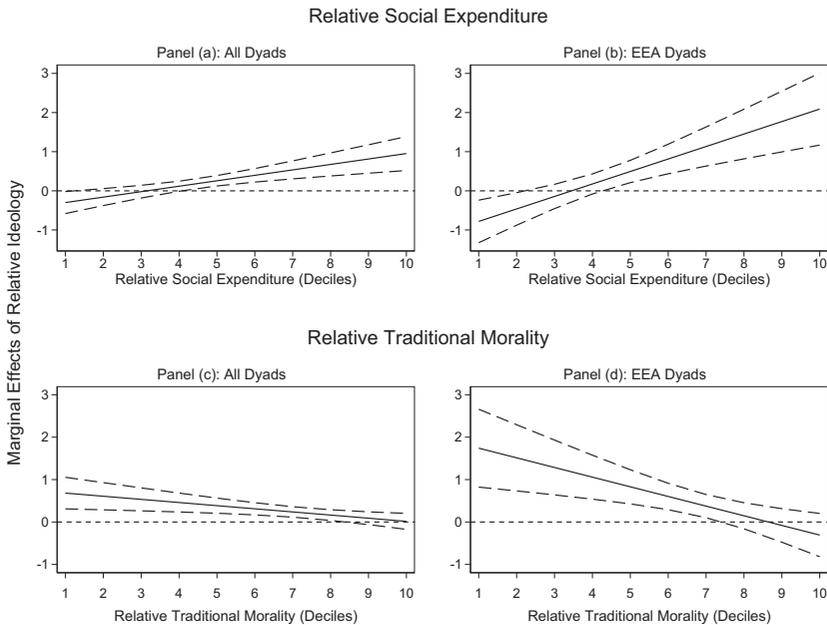
state (Razin and Wahba, 2015). Another possible mechanism is the extent of social tolerance. Because citizens' tolerance for ethnic minorities or appreciation for foreign cultures is strongly related to the degree to which the dominant ethnic tradition is institutionalized (Weldon, 2006), governments' increased support for traditional or religious moral values (i.e., when a right-wing party is in office) can act as a deterrent for prospective immigrants.

To explore whether these two mechanisms can partly explain our results, we augment the specifications of Columns 1 and 6 in Table 4 with the following variables at both the destination and the origin: annual growth of social expenditure (as captured by total expenditure in four social policy areas as a percentage of GDP),<sup>20</sup> annual growth of unemployment benefits (as captured by expenditure in unemployment benefits as a percentage of GDP, representing a key social policy area that might attract low-skilled migrants), and governments' support for traditional morality (as captured by the frequency of positive mentions of traditional morality, which is one of the 26 components of the manifesto-based ideology measure).<sup>21</sup> Columns 2–4 and 7–9 present the corresponding results. We can see that higher growth of the welfare state at the destination works effectively as a pull migration factor, while lower growth of the welfare state at the origin acts as a push migration factor. At the same time, increased government support for traditional values in a destination country seems to deter people from moving to that country. We can also see that these effects are more pronounced when we focus on EEA dyads, in line with the arguments presented above. More importantly, the results confirm that the welfare-generosity and social-tolerance mechanisms account for a large part of the observed ideology effects: the estimate of *Relative ideology* is about one-third smaller in size and becomes statistically less significant when the variables for unemployment benefits and traditional morality are introduced to the model jointly (see Columns 5 and 10).

Based on the aforementioned mechanisms, one would expect stronger effects for potential migrants who are more sensitive to government

<sup>20</sup>Data on social expenditure are obtained from the OECD Social Expenditure Database, which groups social spending into nine policy areas depending on their social purpose. Our measure includes spending in four of these areas (health, family, active labour market programmes, and unemployment benefits), as the other five areas (old age, survivors, incapacity-related benefits, housing, and others) do not exhibit a significant effect on migration flows. Using growth rates (rather than levels) allows us to focus on short-run fluctuations in welfare spending, which are more closely related to the political colour of government. This is also consistent with evidence in the literature that social expenditure grows at higher pace when left-wing parties are in office (Bove et al., 2017).

<sup>21</sup>Positive mentions of traditional morality include support for the role of religious institutions in state and society, and maintenance and stability of the traditional family as a value.

**Figure 2.** Potential mechanisms: relative social expenditure and relative traditional morality

*Notes:* This graph shows the conditional effects of relative ideology at different decile groups of relative social expenditure and relative traditional morality for all dyads (panels (a) and (c)) and for EEA dyads (panels (b) and (d)). Relative social expenditure is calculated by subtracting the yearly average value of social expenditure (as a percentage of GDP) at the origin from the corresponding value at the destination, with social expenditure including spending in four policy areas: health, family, active labour market programmes and unemployment benefits. Relative traditional morality is calculated by subtracting the yearly average value of traditional morality at the origin from the corresponding value at the destination. All other covariates are held constant at their means. Dashed lines signify 95 percent confidence intervals. Dashed horizontal line at 0 marks marginal effect of 0.

ideology; that is, those who move to another country in order to benefit from a better welfare system or those who are attracted to a more socially inclusive environment.<sup>22</sup> To test for this, we estimate an augmented version of equation (1) that includes the interaction term between relative ideology and a non-time-varying measure of the social expenditure differential between migrants' destination and origin countries – with the latter constructed by subtracting the yearly average value of social expenditure (as a percentage of GDP) at the origin from the corresponding value at the destination, and splitting the difference into decile groups.<sup>23</sup> Similarly, we

<sup>22</sup>For instance, an environment that is more likely to support modern family composition and the separation of church and state.

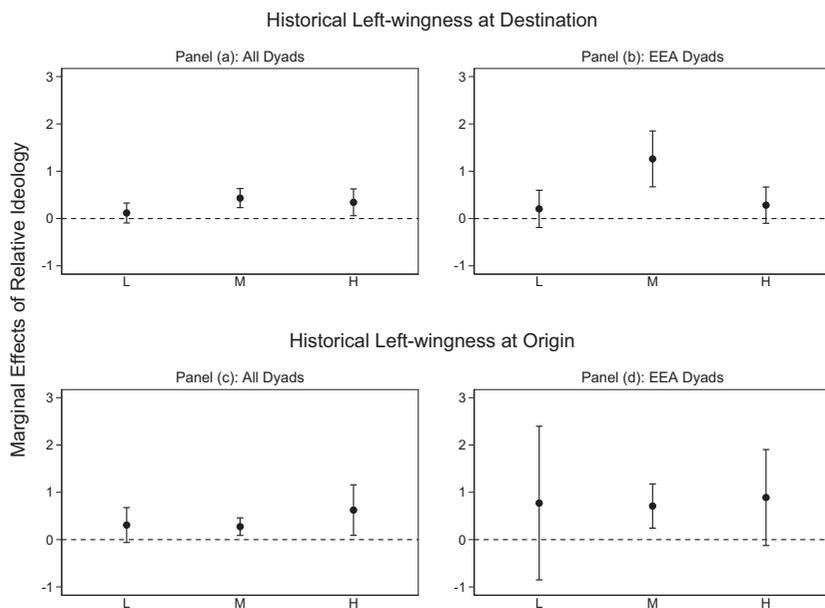
<sup>23</sup>Using deciles makes the results less sensitive to the distribution of the variable and the existence of outliers, and allows us to make better comparisons across different conditioning factors.

estimate a model that interacts relative ideology with a non-time-varying measure of the traditional morality differential (in decile groups). Figure 2 shows the margins of the variable *Relative ideology* over the respective values of *Relative social expenditure* and *Relative traditional morality*, for both the sample of all dyads (panels (a) and (c)) and the sample of EEA dyads (panels (b) and (d)). The evidence obtained suggests that the extent to which relative ideology affects bilateral migration flows is highly conditional upon differences in social expenditure and traditional morality between migrants' host and home countries. Specifically, changes in government ideology play a more important role for migration patterns when the receiving countries have a relatively more generous welfare state compared with the origins and when they display relatively lower values of traditional morality.<sup>24</sup> However, when migrants move to countries with a relatively less generous welfare state or higher values of traditional morality, the effects are dampened, vanish, or even change direction, which possibly reflects the fact that migration decisions in this case are motivated by non-government-related factors, such as family ties or education/training opportunities. Consistent with our previous findings, we can also see that the conditionality of the effects is far more pronounced when we focus on EEA dyads.<sup>25</sup>

Finally, a potential source of heterogeneity in the observed effects is the historical “left-wingness” of the home and prospective host countries. One can argue that historically right-wing destinations that have a short spell of left-wingness are not expected to spur large immigration inflows, as the spell might be short-lived. Similarly, a newly elected right-wing government in a historically left-wing destination might not cause immediate reductions in immigration flows, because of the lack of past information on how an ideological change in this country will affect policy and migration positions. To explore this argument, we exploit data on the DPI ideology measure for a long period of time (1980–2016) and create a categorical variable for historical left-wingness that splits the countries into three groups: those with high values (75 percent or more of the yearly observations correspond to left-wing governments), those with low values (25 percent or less of

<sup>24</sup>In the Online Appendix, we also provide some evidence that the ideology-induced migration effects are stronger for low-skilled migrants, in line with the welfare-generosity mechanism. This is based on data on bilateral migration stocks by migrants' education level from the Database on Immigrants in OECD Countries (DIOC), which covers three periods and a subset of the OECD dyads considered in the main analysis (see discussion in Online Appendix B and Figure B.1).

<sup>25</sup>In the Online Appendix, we experiment with alternative specifications that include interactions with geographic distance and relative living standards (as captured by the GDP per capita differential). Even though there is some evidence that the effects are stronger when the destination countries are geographically close to the origins and when they have a relatively higher GDP per capita, the dependence on these factors appears to be rather weak (see Figure A.2).

**Figure 3.** Heterogeneous effects: historical left-wingness

*Notes:* This graph shows the conditional effects of relative ideology at different values of historical left-wingness, at both the destination and the origin, for all dyads (panels (a) and (c)) and for EEA dyads (panels (b) and (d)). L, M, and H indicate the three categories of historical left-wingness: low (25 percent or less of the country–year observations correspond to left-wing governments), medium (25–75 percent of the country–year observations correspond to left-wing governments), and high (75 percent or more of the country–year observations correspond to left-wing governments), respectively. All other covariates are held constant at their means. Vertical lines signify 95 percent confidence intervals. Dashed horizontal line marks marginal effect of 0.

the yearly observations correspond to left-wing governments), and those with middle values (i.e., the remaining countries).<sup>26</sup> We then estimate a modified version of the baseline model that interacts relative ideology with the aforementioned categorical variable, at both the destination and the origin. Figure 3 shows the margins of the variable *Relative ideology* over the respective three values of historical left-wingness. The estimates are positive across all specifications and categories, which points to a robust degree of homogeneity in the direction of effects. At the same time, we

<sup>26</sup>To construct the historical left-wingness variable, we treat centrist governments as left-wing and exclude countries with 20 or more missing observations in the DPI ideology measure over the period 1980–2016 (Czech Republic, Estonia, Lithuania, Slovakia, and Switzerland) – even though our inferences do not change if we keep these countries and assign them a middle value of historical left-wingness. According to this measure and the categories described above, five countries are defined as historically left-wing (Austria, Finland, Luxembourg, Poland, and Slovenia) and five countries are defined as historically right-wing (Belgium, Israel, Japan, Netherlands, and Turkey).

can see that the extent to which changes in government ideology matter for migration flows is shaped by the ideological history of the host countries: the effects are much stronger when the destination country is neither historically right-wing nor historically left-wing, especially when we focus on EEA dyads in panel (b) of Figure 3. This is also in line with the empirical literature on partisan cycles (see, e.g., Alesina and Roubini, 1992), showing that partisan effects on policies and outcomes are far more pronounced in countries with regular and clearly identifiable political changes from left to right, and vice versa.

#### 4.4. Robustness tests

The key finding that emerges from our analysis is that bilateral migration flows increase when the government at the destination becomes more left-wing relative to the government at the origin. To provide further support for this finding, we perform a series of robustness tests, which are reported in the Online Appendix.

In Table A.4, we check the sensitivity of our results to augmenting the baseline specification with a number of regressors, which can serve as additional determinants of bilateral migration flows. Specifically, we add the following variables at both the destination and the origin: the restrictiveness of unilateral migration policies based on two alternative specifications,<sup>27</sup> the size of the government (as captured by total government expenditure as a percentage of GDP), the size of the country (as captured by the country's total population, in logarithm), the expectations about the evolution of economic conditions (as captured by the yields on 10-year government bonds), the number of researchers (as a proxy for high-skilled labour), the quality of political institutions (as measured by the Polity score), the degree of economic integration with the rest of the world (as captured by the KOF index of economic globalization; Gygli et al., 2019), and the number of terrorist attacks against refugees (as a proxy for political violence). The effect of relative ideology remains positive, statistically significant, and stable in size across these specifications.

In Table A.5, we carry out checks to ensure that the migrant network effect does not distort our results. First, we replace the bilateral migration

<sup>27</sup>The DEMIG Policy Database tracks policy changes in migration laws for 45 countries in the period after World War II, and provides information on whether each policy represents a change towards more or less restrictiveness of the existing legal framework. It also mentions cases in which a policy measure does not introduce any changes in restrictiveness or when this cannot be assessed. Following Bove et al. (2021a), we exploit information on fundamental changes of existing policies (mid-level or major changes) and employ two alternative specifications of migration policy restrictiveness: a continuous one capturing the share of more restrictive policies introduced in a given country-year; and a binary one capturing whether at least one more restrictive policy was introduced in a given country-year.

stock variable from Özden et al. (2011) (measured based on five-year migration periods) with the corresponding variable from the OECD International Immigration Database (with annual frequency but available for a subset of our observations). Second, we estimate a dynamic panel data model that includes the lagged dependent variable among the controls, which allows us to capture persistence in migration flows and also potentially mean-reverting dynamics. Third, we exclude country pairs for which there is a relatively large network. More precisely, we follow Beine et al. (2019) and drop from our sample the dyads with the 1 percent and 5 percent highest growth in migrant networks over the full sample period, and those with the 1 percent and 5 percent highest values of migrant networks in the last available migration period – using the bilateral stock data of Özden et al. (2011). The results obtained from these tests are very similar to those presented in Table 1.<sup>28</sup>

As noted in Section 3.1, the fact that we focus on migration flows between OECD countries, coupled with the fact that our migration data rely on the nationality criterion to identify immigrants, mitigates the possibility that our results are influenced by the behaviour of refugees. However, to further address this concern, we check sensitivity to excluding the top three and top six OECD countries with the highest refugee population as origins.<sup>29</sup> The results of this exercise are reported in Table A.6 and are in line with our key results.

We also examine how the presence of zero values in the dependent variable affects our estimates. To do so, we estimate equation (1) using unscaled ordinary least squares (OLS), where the dependent variable is measured by the logarithm of bilateral migration flows before adding the value 1. As an alternative approach, we employ the Poisson pseudo-maximum likelihood (PPML) estimator developed by Silva and Tenreyro (2006). The latter allows us to include the zero values for the dependent variable, and rule out potential selection bias arising from country pairs with zero flows having a different population distribution compared with those that have positive flows (Beine and Parsons, 2015). The PPML has also been shown to perform better in the presence of heteroscedasticity, which often plagues migration data (Silva and Tenreyro, 2006). This choice requires us to estimate the model in levels (rather than logarithms) and to include

<sup>28</sup>Our results are also robust to dropping each country in our sample (as destination or origin) one by one.

<sup>29</sup>Data on refugee population by country or territory of origin are obtained from the Quality of Government OECD Dataset (Teorell et al., 2021). Based on average values of the available data since 1990, the top three OECD countries with the highest refugee population are Turkey, Poland, and Mexico, and the next three are Chile, Slovenia, and Hungary. Note, however, that Mexico and Chile are not included in our baseline sample (see footnote 11).

origin–year fixed effects among the regressors to capture heterogeneity in the propensity to migrate (Beine et al., 2016). Table A.7 shows the estimates of unscaled OLS and PPML regressions when origin–year dummies are included, focusing as such on the effects of ideology at the destination. Once again, the results do not change our inferences.

We finally assess robustness to three alternative specifications. First, to further address reverse causality concerns, we replace the (manifesto-based) ideology differential with its one-year and two-year lags. The lagged variables return statistically significant estimates, which, as expected, are relatively smaller than those of the contemporaneous measure (see Table A.8). Second, to further address the possibility of measurement errors in the way we capture government ideology, we employ a third relative ideology variable based on information from the updated version of Potrafke (2009).<sup>30</sup> Using this variable and running the same regression set-up as before does not change our results (see Table A.9). Third, to account for the possibility that the relationship between government ideology and international migration has weakened in more recent years, we split the (baseline) sample period into two subperiods, 2000–2006 and 2007–2014, and run the same analysis as before. The estimates of *Relative ideology* are remarkably similar across the two subperiods, suggesting that the observed relationship persists over time (see Table A.10).

## 5. Conclusions

Whereas existing studies on migration have introduced a wide range of factors that drive migration flows, they mostly focus on economic considerations, and we still lack a systematic analysis of how the political landscape of the host society with regards to that of the home country affects transnational population movements. We complement extant studies by introducing a broader perspective that captures the sensitivity of immigrants to the ideology differential between the governments of the two countries. In particular, we expect differences in government political orientation between host and home countries to provide important information about the relative generosity of the welfare system, the degree of social tolerance towards foreign-borns, and the restrictiveness of migration policies.

Using data for OECD countries between 1990 and 2016, and augmented gravity equations, we show that migration patterns are sensitive to the ideology differential between sending and destination countries, once we control for several important economic and demographic considerations. In particular, our results reveal that bilateral migration flows increase when

<sup>30</sup>Data for this index are not available for the EU members that acceded in 2004 or later, and thus we can only perform this test for a subset of our observations.

the government at the destination becomes more left-wing relative to the government at the origin. We also find that this ideology-induced effect is larger when the receiving countries have a relatively more generous welfare state compared with the origins and when they display relatively lower values of traditional morality, a proxy for the extent of social (in)tolerance towards out-groups. Finally, we demonstrate that our findings are mostly driven by EEA countries, where the presence of a free migration regime combined with a better exposure to the political system of the potential destinations – due to similarities in norms and institutions, among others – can make cross-border migration flows more susceptible to changes in the current political environment.

The primary aim of our empirical analysis is to assess the overall effect of government ideology on migration patterns. Plausibly, not all individuals are affected by the same mechanisms, and, as a matter of fact, the same individual might be pulled or pushed by more than one driver. We explore a number of potential explanations, yet the list is inherently non-exhaustive and additional competing mechanisms are likely to be at play. Future research should go in the direction of combining information on migrants' nationality, skills, employment status, and country of previous residence, and constructing comprehensive bilateral migration datasets across these dimensions and all possible destination–origin dyads. This will allow us to disentangle some of the transmission mechanisms and uncover new ones, and also account for the option value of migrating while estimating structural models of international migration (see Caliendo et al., 2021).

Taken together, our findings shed new light on the determinants of migration flows and highlight how governments' policy positions and their rhetoric around issues of tolerance and preferences for immigration can contribute to shaping the composition of contemporary societies, even in the absence of actual changes in states' migration policies. As the size of transnational population movements continues to grow rapidly worldwide, more attention should be paid to how host societies' social and political landscapes determine where immigrants decide to settle. By espousing anti-immigrant rhetoric and policies, ruling parties can worsen the context of reception in the country of destination, and thus forgo the economic benefits of having an increased range of skills, ideas, and innovative solutions that immigrants provide.

## Supporting information

Additional supporting information can be found online in the supporting information section at the end of the article.

### Online appendix Replication files

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