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## **Facing the challenge of globalization: the role of confidence in institutions**

**Francesco Sarracino\***, **Cesare F. A. Riillo\*\***

### **Abstract**

Un ampio dibattito sulle determinanti del sostegno delle persone alla globalizzazione ha concluso che è necessario fare leva sugli schemi di welfare per compensare coloro che perdono a causa della globalizzazione. Tuttavia, questa soluzione non è universalmente accettata e potrebbe non essere praticabile in tempi di vincoli di bilancio. In questo paper verifichiamo l'ipotesi che la fiducia nelle istituzioni migliori l'accettazione della globalizzazione da parte delle persone. Utilizziamo i microdati dell'Eurobarometro, dell'European Social Survey e dell'European Quality of Life Survey per studiare il caso del Lussemburgo, un'economia piccola e aperta, fortemente integrata nei mercati internazionali e in cui gli immigrati sono più della metà dei residenti totali. I dati indicano che la fiducia nelle istituzioni, e in particolare in quelle internazionali, aumenta l'accettazione della globalizzazione da parte delle persone. Tuttavia, proprio quando la globalizzazione è considerata come libera circolazione delle persone attraverso le frontiere, la fiducia nelle istituzioni internazionali gioca un ruolo importante. Questi risultati sono robusti per invertire la causalità.

**Parole chiave:** Globalizzazione; Migrazione; Istituzioni; Fiducia.

### **Abstract**

An extensive debate on the determinants of people's support for globalization concluded that it is necessary to leverage on welfare schemes to compensate those who lose from globalization. Yet, this solution is not universally accepted and it may not be viable in times of budget constraints. We test the hypothesis that confidence in institutions improves people's acceptance of globalization. We use micro data from the Eurobarometer, the European Social Survey and the European Quality of Life Survey to study the case of

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Luxembourg, a small and open economy, highly integrated in international markets and in which immigrants are more than half of the total residents. Figures indicate that confidence in institutions, and in particular in international ones, increases people's acceptance of globalization. However, when globalization is considered as free movement of people across borders, confidence in international institutions plays a major role. These results are robust to reverse causality.

**Keywords:** Globalization; Migration; Institutions; Confidence.

## **Introduction**

Globalization, intended as the “closer integration of the countries and people of the world [...] brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and people across borders” (Stiglitz, 2002a, p. 9) has always had its supporters and oppositors. The first ones see in globalization a source of progress and prosperity, whereas the second ones argue that globalization is at the origin of social, cultural, and environmental depletion, both within and across countries (Gunter and Hoeven, 2004). This debate gets particularly heated when globalization involves the abolition of barriers to the free movement of people, i.e. immigration. Moreover, while traditionally this debate focused on North-South immigration, it increasingly concerns also North-North immigration.

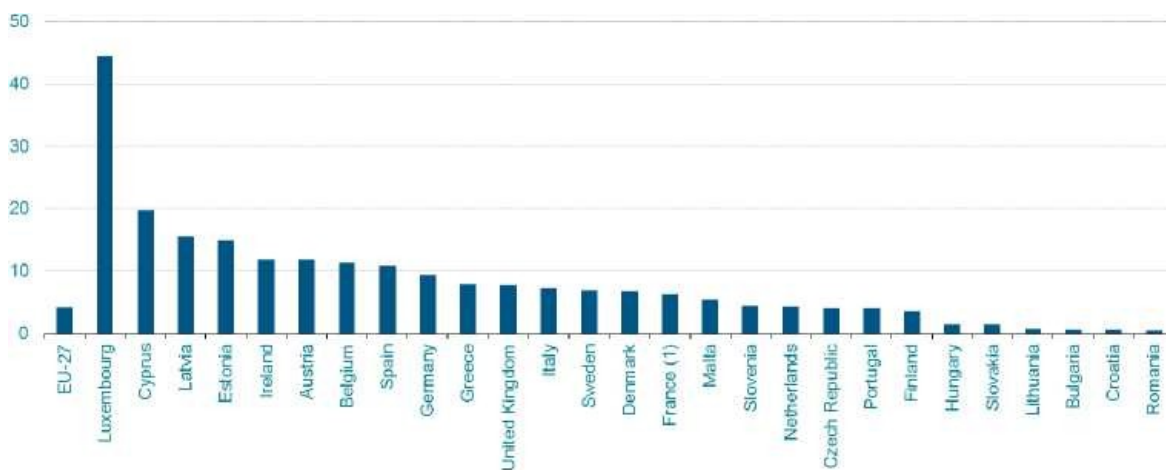
Several studies document that international migration would benefit national economies (see, for instance, Ottaviano and Peri, 2012). Some others emphasize the economic losses due to immigration restrictions by referring to the presence of “trillion-dollar bills” lying on the sidewalk and not being picked-up (Hamilton and Whalley, 1984; Clemens, 2011; Lundborg and Segerstrom, 2002; Benhabib and Jovanovi, 2012; Docquier et al., 2015). Yet, the abolition of the barriers to the free movement of people often meets fierce opposition. The available literature points mainly to the fears of wage reductions, identity and cultural losses, of

unemployment and rising inequalities as sources of opposition to the free movement of people (Stiglitz, 2002b; Borjas, 2003; Benvenisti et al., 2004; Ceobanu and Escandell, 2010). Virtually all these studies recommend to leverage on extensive welfare schemes to compensate those who lose from globalization (Scheve and Slaughter, 2001; Walter, 2010). However, there is still much to learn about the determinants of people's acceptance of globalization (Fitzgerald, 2012). In particular, there is evidence to believe that people react more to perceptions than to facts: if people perceive that immigrants are a threat, they will think so and decide accordingly even against evidence (De Martino et al., 2006; Tversky and Kahneman, 1981). Moreover, in times of economic crisis – when the feelings against immigration are more hostile, and budget constraints get tighter – redistribution policies are a less viable solution.

Our research concerns what governments can do to save globalization, and in particular the free movement of people, from its oppositors. We suggest that promoting confidence in institutions can complement redistributive policies to reduce the opposition to globalization or, to put it differently, to increase the number of winners from globalization. Hence, we contribute to the interdisciplinary literature on the determinants of people's acceptance of immigration and of free movement of goods and services, i.e. globalization. Additionally, we check which institutions are more likely to ease people's reactions to globalization. Specifically, our research question is whether people with high confidence in institutions are more likely to accept globalization than others. In answering this question, we also focus on the role of confidence in specific institutions, namely local, national and international ones.

We focus on Luxembourg, a small and open economy highly integrated in the international markets and with a very heterogeneous social fabric. There are at least two reasons supporting our choice. The first is that the determinants of people's acceptance of globalization are a relevant topic in highly heterogeneous social environments, such as Luxembourg, where immigrants coming from more than a hundred countries are nearly 45% of the resident population (STATEC, 2012). Using European Values Study data from 2008, Valentova and Berzosa (2012) report that first-generation immigrants represent approximately 37% of the

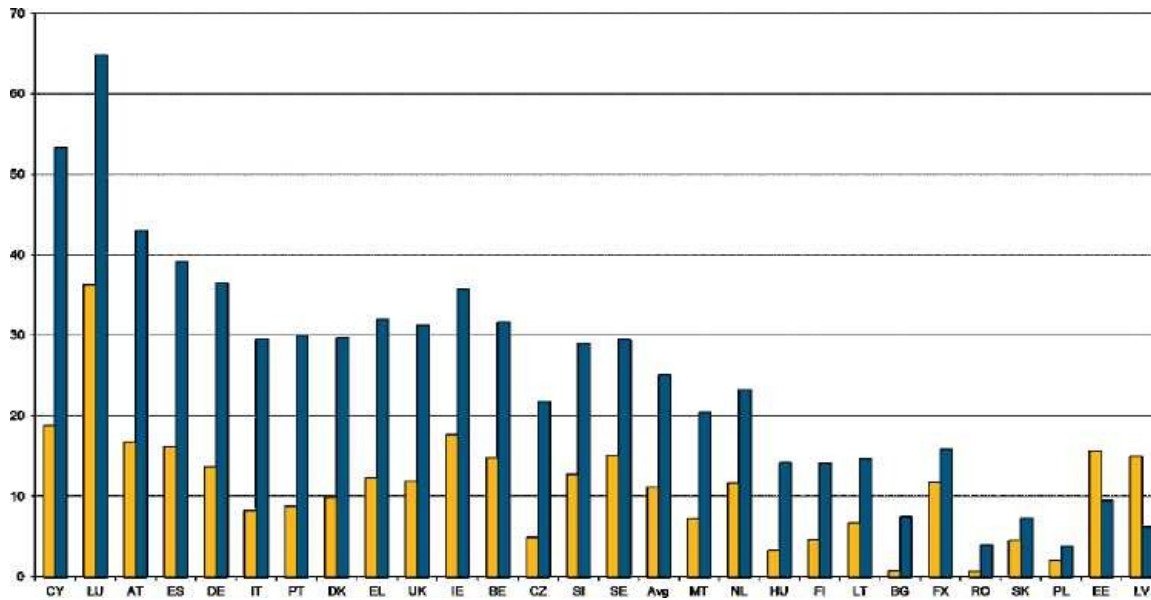
resident population in Luxembourg, while second-generation immigrants account for a further 17%, and the remaining 46% are natives. Moreover, the high number of cross-border workers (about 33% of the national workforce) which every day crosses the national borders to work in Luxembourg put further pressure on the economic fabric of the country. Thus, Luxembourg offers a unique combination in terms of high share of immigrants with highly heterogeneous ethnic origins to study people's openness to globalization (see Figure 1). Moreover, Luxembourg is an interesting case of study because, as Mayda and Rodrik (2005) note, people are more prone to accept free trade than the free movement of people, and Luxembourg is an immigration success story (Fetzer, 2011).



**Figure 1. Share of non-nationals in the resident population, 1 January 2013.** Source: authors' own elaboration, Eurostat data.

The second reason is that many social phenomena taking place in Luxembourg will likely affect also other European countries in the coming years (see Figure 2). For instance, Eurostat expects that by 2061 the majority of EU countries will significantly increase the share of non-nationals on their resident population (Lanzieri, 2011)<sup>1</sup>. These figures suggest that Luxembourg anticipates many of the challenges that will soon become crucial in many other European countries.

<sup>1</sup> In six other European countries – namely, Cyprus, Austria, Germany, Great Britain, Ireland, and Belgium – people with an immigration background will account for more than 30% of the resident population.



**Figure 2: Share of foreign background persons in the EU Member States in 2011 and projected in 2061.** Source: Lanzieri (2011).

Hence, the analysis of the case of Luxembourg can contribute to a better understanding of the determinants of the acceptance of globalization in relation to its effects on the national economy.

The paper is organized as follows. Section 2 reviews the relevant literature, points out our contribution and formulates our research hypothesis. Section 3 illustrates the data adopted to address our research issues. We then present our results along with the methods used to reach them in section 4. We report the results from our tests on reverse causality in section 4.1, and we explore the role of various institutions in section 4.2. Section 5 summarizes our main findings and illustrates the possible implications of this study to promote people's acceptance of globalization.

## 1. Literature review

### 1.1 The correlates of people's openness to Globalization

International trade theories provide a first reference to explain the attitude towards globalization, and in particular towards the free movement of people across

borders. A trivial interpretation suggests that an increase in the number of immigrants increases the labor supply and reduces wages, thus feeding nationals' opposition to immigration. A more nuanced view points out that the above mentioned mechanism does not have homogeneous effects within a society. For instance, according to the factor-endowments model, opening the labor market to immigrants benefits the owners of the factors with which the economy is relatively better endowed. A typical example concerns human capital: in a country with prevalently high skilled labor force, high skilled workers are less adverse to low skilled immigrants than to high skilled ones (Mayda and Rodrik, 2005; O'Rourke and Sinnott, 2006; Mayda, 2006). The reason is that a country rich in human capital has a comparative advantage in investing in sectors employing high skilled personnel. Hence, high skilled workers can reasonably expect an increase in employability and wages. This is also why high skilled workers should be more open to the immigration of low skilled immigrants. On the contrary, low skilled nationals will face a higher downward pressure on their salaries and employability which will make them more hostile towards immigrants and globalization. Obviously, in periods of economic slowdown, such as the one following the crisis of 2008, this hostility increases.

The sector-specific factor model extends the factor-endowment one to account for the fact that investments and skills can not be easily re-allocated among economic sectors, and that not all economic sectors are equally exposed to international competition. According to the sector-specific model, individuals working in sectors facing international competition are more adverse to globalization than individuals working in sectors that are more protected, such as public employees (Scheve and Slaughter, 2001, 2007).

Coser (1956) proposed an alternative view using a model based on competition among groups of people: when people belonging to a given group get in contact with outsiders, the new-comers are perceived as a threat to the sustainability of local resources and to the original values of the group. This interpretation – known as competition theory – suggests that the stronger the flow of immigration, the more people in the host country will develop aversion towards immigration (Coser, 1956; Quillian, 1995; Meuleman et al., 2009).



However, it is also plausible that, under specific conditions, contacts among people from different groups might result in mutual enrichment rather than rivalry. This view informs the so-called intergroup contact theory which posits that contacts among groups promote tolerance, reduce prejudice among people, and aversion towards immigrants (e.g. Allport, 1954; Pettigrew, 1998). The more are the opportunities for people from different groups to meet, the lower is the probability of developing aversion to new-comers (Schlueter and Wagner, 2008; Schlueter et al., 2008; Schlueter and Scheepers, 2010; Savelkoul et al., 2010).

Empirical research based on survey data provided further details about the correlates of the acceptance of immigrants. Hainmueller and Hiscox (2007) find that women are more opposed to immigrants than men, while age has a small and often statistically insignificant effect (Krieger, 2004; Nannestad, 2004). However, elderly and women are more favourable to immigration in municipalities with lower birth-rates (Ivlevs, 2012). Educated respondents are more supportive of globalisation (e.g. Scheve and Slaughter, 2001; Savelkoul et al., 2010). This result is often seen as supporting the predictions of the endowments model, but the relationship between education and openness is more complex. For example, while it is true that education correlates with lower prejudice towards immigrants, people's preferences are similar in both active and inactive educated respondents (Hainmueller and Hiscox, 2007). Religiosity (O'Rourke and Sinnott, 2001; Bohman and Hjerm, 2014), human values (Davidov et al., 2008), occupational status (Hillman, 2002) and migratory background (Von Der Ruhr and Daniels, 2003; Callens et al., 2014) have been found to correlate with the acceptance of immigration. Political orientation is another factor shaping people's attitudes towards immigration, and globalization more in general: Mayda and Rodrik (2005) document that right-wing respondents are more supportive of free trade than left-wing ones, but less open to the free movement of people.

Besides individual characteristics, some studies have emphasised the role of the local context in shaping the attitudes towards globalization (Malchow-Moller et al., 2009; Rustenbach, 2010). For instance, Borjas (1999b) shows that a flourishing economy contributes to more positive perceptions about the impact of immigration in host countries. However, it is not only the state of the economy that matters: also

the skills and the size of incoming workforce compared with those of natives contribute to shaping the feelings towards immigration (Borjas, 1999a). Finally, O'Rourke and Sinnott (2006) show that non-economic factors may drive the objections to the free movement of people. This finding points out that traditional redistributive policies may fall short of their objectives. Welfare schemes are meant to compensate people for their losses, but they are insufficient when the opposition to globalization has non-economic roots, such as cultural ones. To address this issue, we focus on the role of confidence in institutions, a neglected issue in previous studies on the non-economic drivers of globalization. The rationale is that people who trust institutions feel reassured about the possibility of cooperation and collective action against the risk of losses due to international migration or delocalization. Thus, we regard confidence in institutions as a complement to redistributive policies against the opposition to globalization.

## 1.2 The role of confidence in institutions, well-being and exposure to media

Confidence in institutions is commonly considered a form of vertical social capital which is a concept encompassing “networks together with shared norms, values and understandings that facilitate co-operation within or among groups” (OECD, 2001). In particular, confidence in institutions refers to the connections between people and their institutions (Woolcock and Narayan, 2000). The list of institutions usually considered comprises various forms of institutions such as political parties, the judicial system, the police, the media, as well as national and international bodies such as governments and parliaments. The role of confidence in institutions – and in general of social capital – for the acceptance of globalization and, in particular, of the free movement of people, received scarce attention in the literature, and the few, available empirical studies provided mixed results. Schiff (2002) introduced the concept of social capital to explain why people in rich countries are more willing to accept free trade than free migration. According to standard international trade theory, people should be indifferent between free trade and free migration because in both ways the result is factor price equalization. However, according to Schiff (2002), people are less open to free migration because of the effects that this phenomenon has on the disruption of social capital in the countries of origin and of destination. This prediction finds partial empirical

support in the work by Mayda and Rodrik (2005) who show that people with stronger attachment to local communities, such as their neighborhood, are less supportive of economic openness. More recently, Spilker et al. (2012) put the social capital hypothesis to a test. The authors argue that social capital makes people more likely to support economic openness. The reason is that social capital is at the same time a personal endowment, and an “informal safety net” to which to resort in case of need. For instance, people who trust others – trust is a commonly used indicator of social capital – are more open, cooperative, and less adverse to uncertainty than others. At the same time, social capital can also help people to cope with adverse situations. For example, if someone loses its job, he/she may count on the help of the family and/or of acquaintances to find a new job and overcome the adversity. Spilker et al. (2012) test these mechanisms using data from Switzerland in 2007 and from the U.S. in 1996. Their results partially confirm their hypothesis: generalized trust has a positive effect on public opinion of economic globalization, while social contacts, as measured by associational activity and meetings with neighbours, do not play any significant role.

In present study, we extend the argument put forward by Spilker et al. (2012) and we posit that confidence in institutions, i.e. vertical social capital, along with trust in others, i.e. horizontal social capital, contribute to improving people’s attitudes towards economic openness. Our idea is that people who trust their institutions (the government, the judicial system, the police, etc.) are more confident about the enforcement of their rights, the efficacy of collective action, and the fairness of their societies. This, in turn, should contribute to people’s self-confidence and openness towards uncertainty.

Additionally, as reported by Spilker et al. (2012) it is plausible that both social capital and people’s preferences for globalization are related to personality traits (see also Delhey and Newton, 2003). To account for this potential effect, we focus also on respondents’ well-being. The first reason is that people’s well-being correlates significantly with personality traits and, as we cannot directly control for the latter, a measure of well-being can help capturing such source of unobserved heterogeneity. The second reason is that happier people are more friendly and collaborative (Bateman and Organ, 1983; Judge et al., 2001), tend to have

healthier lives (Danner et al., 2001), are more productive (Proto et al., 2010; Edmans, 2012), have better relationships with others (George and Brief, 1992; Pavot and Diener, 1993; Wright and Cropanzano, 2000), which are all aspects that can improve people's attitudes towards economic openness and the uncertainty related to opening their markets to immigrants.

Finally, we focus on media exposure to account for the fact that ideology is among the origins of the objections to globalization, and in particular to the free movement of people (O'Rourke and Sinnott, 2006). Previous studies mainly focused on the role of TV watching because of data availability. In particular the literature seems to agree that exposure to TV advertisement has a strong influence on people's perception of danger (Kwak et al., 2002), fear (Doob and Macdonald, 1979), and feelings of inadequacy (Bruni and Stanca, 2006). Hence, those who spend more time using media may develop hostile attitudes towards economic openness and immigrants (Gadarian, 2010). This effect can be reinforced by the erosive power that media, and in particular TV watching, can have on social capital and well-being (Mutz and Reeves, 2005; Frey et al., 2007; Bruni and Stanca, 2008; Pénard et al., 2013; Sabatini and Sarracino, 2017).

### 1.3 The present study

This work contributes to the debate on the acceptance of globalization – intended as the free movement of people, goods and services across countries – testing the hypothesis that people who trust institutions are also more open towards globalization. We do so while accounting for the mechanisms identified by previous studies and, in particular, for the role of trust in others, life satisfaction and exposure to media. Moreover, we check the role played by national, international, local and legal institutions.

## 2. Data

To the best of our knowledge, three data sets provide information on confidence in institutions, exposure to media, subjective well-being and trust in others in

Luxembourg: the Eurobarometer (EB), the European Social Survey (ESS), and the European Quality of Life Survey (EQLS). The former provides a limited number of variables suitable for the purposes of present work, but it allows us to analyze a recent period of time (2012-2015). The ESS and the EQLS are rich sources of micro data on people's behaviours, beliefs and values. The former was administered in Luxembourg in 2002 and 2004, whereas the EQLS has been administered every four years since 2007. However, only the wave of 2011 provides useful information for the purposes of present study. The joint use of the EB, ESS and EQLS is ideal to test our hypothesis because the three datasets provide a variety of measures of acceptance of globalization, collected on different samples and years (for a summary, see table 1).

Dataset	Measure of globalization	
EB (2012-2015)	Globalization is an opportunity for economic growth	Immigrants contribute a lot to the country
ESS (2002, 2004)		Immigrants are good for the economy
EQLS (2011)		Immigrants are a strain on the welfare system

**Table 1: Summary of the wordings available in the three datasets used for the analysis.** The joint use of three datasets allow us to test the reliability of our findings using various measures of globalization, and to check the robustness of our findings using data from different samples and years.

## 2.1 Eurobarometer 2012-2015

Eurobarometer is a collection of cross-national surveys coordinated by the European Commission to regularly monitor public opinion in the European Union (EU) member states. Surveys are usually organized around a standard module providing information about attitudes towards European unification, institutions and policies, measurement of socio-political orientations, along with individual and household level socio-demographic variables. Additionally, each survey consists of a special module covering topics such as agriculture, education, natural

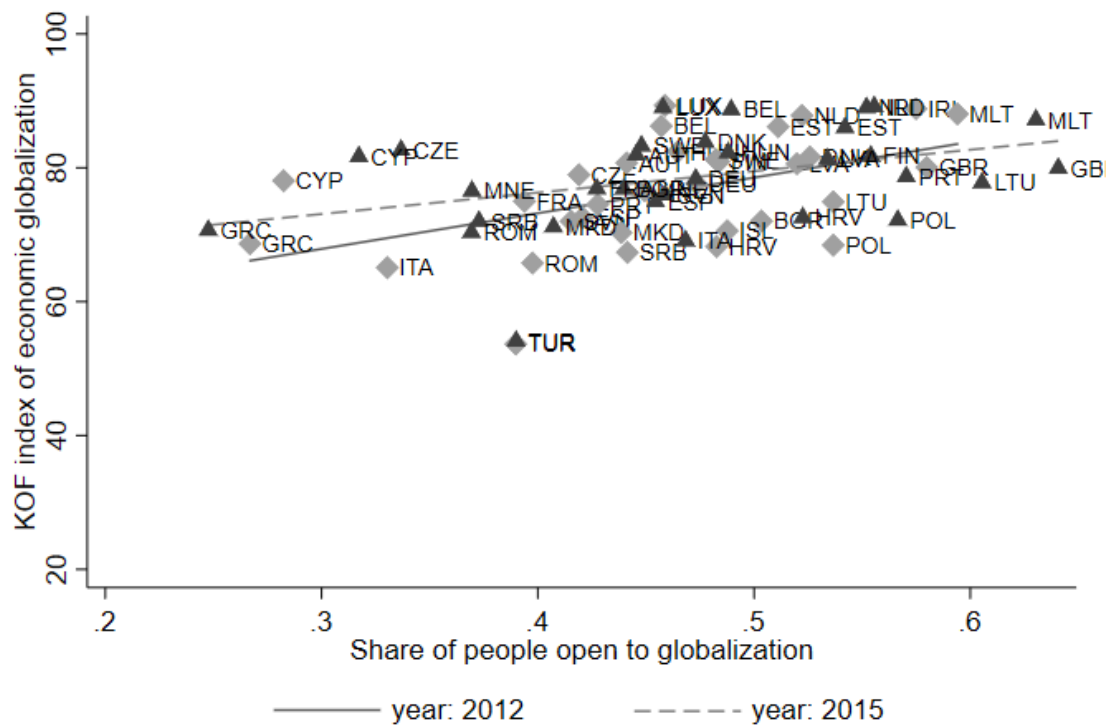
environment and resources, public health, public safety and crime, science and technology.

The surveys 77.3 (May, 2012), 79.3 (May, 2013), 81.2 (January, 2014), 81.4 (May, 2014), and 84.3 (November, 2015) provide nationally representative figures about the residents aged 15 years or more living in the 28 countries of the European Union. These surveys cover four special topics: 1. Europe 2020; 2. the financial and economic crisis; 3. European citizenship; 4. European values. In particular, they include a question asking to what extent the respondent agrees or disagrees with the following statement: “Globalisation is an opportunity for economic growth”. Answers are coded on a four points scale in which 1 stands for ‘totally agree’ and 4 stands for ‘totally disagree’. We reverted the coding of the answers, so that higher scores correspond to stronger agreement. This question is relevant because it asks explicitly the respondent’s opinion about the role of globalization for the economy. Figure 3 shows that the association between our survey measure of globalization correlates meaningfully (on average 40% across the years 2012-2015) with the KOF index of economic globalization<sup>2</sup>.

The second question is about the role of immigrants for the economy. The wording is as follows: “To what extent do you agree or disagree with each of the following statements? Immigrants contribute a lot to the country”. Also in this case we recoded the answers (which are on a four points scale) so that higher scores stand for stronger agreement. This variable captures the part of globalization that is related to the free movement of people and, as such, it allows us to test the robustness of our findings using an alternative wording. This variable correlates at 43% (significant at 1%) with the share of people that consider globalization an opportunity, and at -34% (significant at 1%) with the share of people who don’t consider globalization an opportunity. Moreover, the wording of this question is very close to the one used in the ESS and in the EQLS. It is therefore possible to check the robustness of our findings across surveys.

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<sup>2</sup> The KOF index of globalization is produced by the KOF Swiss Economic Institute at UTH Zurich University.



**Figure 3: Association between the share of people seeing globalization as an opportunity and the KOF index of economic globalization for the years 2012 and 2015.** Source: authors' own elaboration of KOB and EB data.

## 2.2 European Social Survey, 2002-2004

The European Social Survey is a collection of internationally comparable surveys run consistently every two years in various European countries since 2002. To date, it consists of 10 waves covering the period 2002-2020. The ESS is particularly suitable to monitor the interaction between institutions and people's attitudes, along with people's beliefs and behaviours. Each wave of the ESS provides nationally representative samples of countries' populations and it provides, among others, information about a proxy of acceptance of globalization. However, in Luxembourg the survey has been administered only in 2002 and 2004. In total the sample includes 3187 respondents of which 1552 were surveyed in 2002 and 1635 in 2004.

We measure people's openness to the free movement of people – our proxy of globalization – using the answers to the following question: “Would you say it is generally bad or good for country's economy that people come to live here from other countries?”. Answers range on a scale from 0 ('bad') to 10 ('good'). The wording of the question refers specifically to our concept of globalization because it asks the respondent to evaluate how good or bad are immigrants for the national economy, and not about respondent's acceptance of immigrants. In other words, it is plausible that a respondent answers positively to this question even if he or she might not want to have immigrants as neighbours. Figure [kof-ess] in Appendix 6 shows the country level association between the KOF index of economic globalization and our proxy. The two measures of globalization are strongly associated both in 2002 and 2004.

### 2.3 EQLS, 2011

The EQLS provides answers based on a question similar to the one asked in the ESS. In particular, interviewers ask respondents' to position themselves on a scale from one to ten where low scores indicate the agreement with the sentence: “Immigrants are a strain on our welfare”, and high scores indicate agreement with the statement: “Immigrants contribute to our welfare”. Hence, it has the same limitations of the question available in the ESS, but it allows us to test our hypothesis on a different and more recent sample than the ESS. Moreover, the EQLS allows us to distinguish the role of a different set of institutions for the acceptance of globalization (see section 7 for more details).

Eurofund, the European Foundation for the Improvement of Living and Working Conditions, carries out the European Quality of Life Survey (EQLS). This is a collection of surveys administered regularly every four years since 2003. The surveys examine objective and subjective aspects of people's lives, including issues such as employment, income, education, housing, health, work-life balance and well-being. In 2003 the survey covered 27 European countries, and in 2016 it included all 28 European Union member states.



EQLS collects nationally representative, harmonized data across countries. This permits to track key trends in the quality of people's lives over time. The national samples include about 1000 respondents randomly drawn from the adult population living in private households. Respondents are selected using multi-stage, stratified, random sampling in each country. Interviews are conducted face-to-face using computer-assisted personal interviewing (CAPI).

## 2.4 Explanatory and control variables

Our main explanatory variable is confidence in institutions. Each considered survey includes a battery of questions asking respondents how much they trust institutions. The list of institutions and the wordings are fairly similar<sup>3</sup>. For each dataset, we build an index of confidence in institutions in which higher scores indicate more confidence in institutions.

The relationship between confidence in institutions and acceptance of globalization can be mediated by respondent's specific socio-demographic, economic and cultural conditions. For example, people that are more exposed to media might have stronger opinion about institutions and about the risks of opening markets and borders than less exposed people. Similarly, poor people, less educated and/or interested in politics, or older people may have different views about the reliability of institutions. To account for such possibilities, we include a set of individual level control variables to account for respondent's age, gender, education, occupation, marital status, and household size (when not available, we include the number of children in the household). Additionally, we include a battery of variables to account for respondent's income<sup>4</sup> (in the Eurobarometer we replaced income with respondent's ability to pay the bills), life satisfaction (the scale and wording of this item differs across surveys), exposure to media (for EB and EQLS data, we included the frequency of internet use; for ESS, we included the time spent watching TV), and political interest (the EB directly asks about

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<sup>3</sup> For a detailed list of institutions and the wordings, see Appendix B.

<sup>4</sup> As it is often the case with survey data, many respondents of the ESS refused to provide information about their household income. To prevent the loss of observations available for our analysis, we imputed income using multiple imputation and expectation-maximization algorithm. As for the EQLS, Eurofund provides a dataset with imputed missing data on income.

respondent's interest in politics; the ESS asks respondent's to position themselves on a left to right scale; the EQLS asks whether the respondent attended a meeting of a trade union, a political party or political action group). We control for respondent's life satisfaction because it correlates meaningfully with unobserved traits – such as generosity, openness, and altruism – which can confound the relationship between confidence in institutions and the acceptance of globalization. In addition, the ESS and the EQLS allow us to account also for respondent's trust in others and reported health: the former is commonly used as a measure of respondent's network of relationships with others: people who trust others more, may be more confident that they will not lose from globalization. We also control for self-reported health because it is possible that people with worst health can perceive themselves as more fragile and therefore exposed to the uncertainties of economic openness<sup>5</sup>.

### 3. The role of confidence in institutions

To test our hypothesis we use ordered probit regressions which allows us to account for the categorical nature of the dependent variables (10-points scale in case of ESS and EQLS, and 4-points scale in case of Eurobarometer). As the dependent variables have varying number of categories, we write our model for a generic case in which the dependent variable has  $n$  categories:

$$Acceptance_i = \begin{cases} 0 & \text{if } y_i \leq 0, \\ 1 & \text{if } 0 < y_i \leq c_1, \\ 2 & \text{if } c_1 < y_i \leq c_2, \\ \vdots & \\ n & \text{if } c_n < y_i. \end{cases} \quad (1)$$

where  $y_i$  represents an ordered dependent variable,  $c_i$  are unknown parameters to be estimated;  $0 < c_1 < c_2 < \dots < c_n$ ; the index  $i$  stands for individuals; and  $Acceptance_i$  is modelled as follows:

$$Acceptance_i = \alpha + \beta_1 \cdot confidence_i + \Theta \cdot \mathbf{X}_i + \varepsilon_i, \varepsilon_i \sim N(0, 1) \quad (2)$$

<sup>5</sup> For more details about the list of explanatory and control variables for each dataset, see tables 6, 7, and 8 in Appendix A.

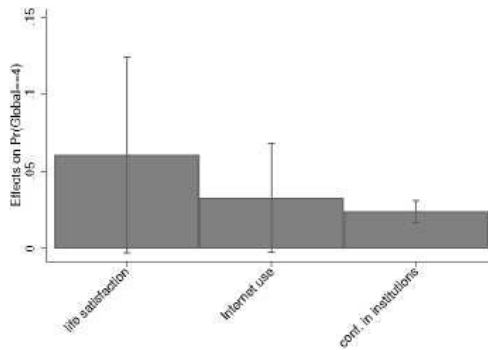
where  $X_i$  is the vector of individual level control variables mentioned in section 3, and  $confidence_i$  is the index of confidence in institutions. Estimates use sampling weights and robust standard errors. If data cover multiple waves, i.e. for EB and ESS, we also include a set of dummy variables for each wave, except the first one which acts as reference category.

Results show that, *ceteris paribus*, people who trust institutions are also open to globalization. Figure 4 shows the marginal effects of confidence in institutions, life satisfaction and exposure to media on the probability that respondents see globalization as an opportunity (panel 4a), that immigrants contribute to country's economy (panel 4b), and that immigrants are good for country's economy (panels 4c and 4d)<sup>6</sup>. The coefficients of confidence in institutions are always positive and statistically significant. On the contrary, the results for life satisfaction and exposure to media, two correlates identified in earlier literature, are rather mixed. Exposure to media, as measured with internet use, and life satisfaction have positive but not significant coefficients on the probability that globalization is an opportunity (EB data). However, the more respondents use internet the less they tend to see immigrants as good for the economy (EB and EQLS data). The same holds for the frequency of TV watching (ESS data). In these cases, the coefficients are weakly or not statistically significant. Respondents with higher subjective well-being tend to agree more with the view that immigrants are good for national economy (ESS and EQLS data), but this does not hold in case of EB data. In the latter case, the coefficient of life satisfaction is negative and statistically not significant. The complete set of results is available in tables 9, 10, 11 and 12 in Appendix C. The remaining control variables indicate that the most consistent correlate of acceptance of globalization, across all considered surveys, is education: higher educated people, measured as either the number of years in education or the level of education, are on average more open to globalization. Unemployed people, on the contrary, tend to be more adverse to globalization. This result, however, is not consistent across surveys. In the case of ESS data, we did not find a statistically significant association between political orientation and the acceptance of

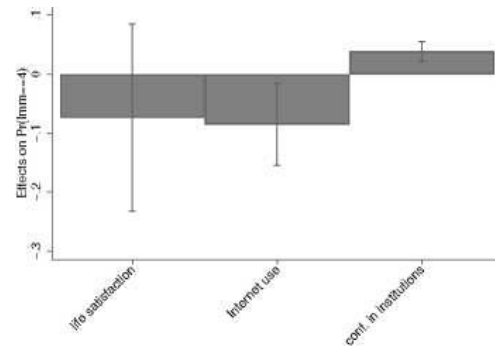
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<sup>6</sup> Marginal effects are computed after the ordered probit model of equation 2 which includes a battery of socio-demographic control variables, uses robust standard errors and sampling weights.

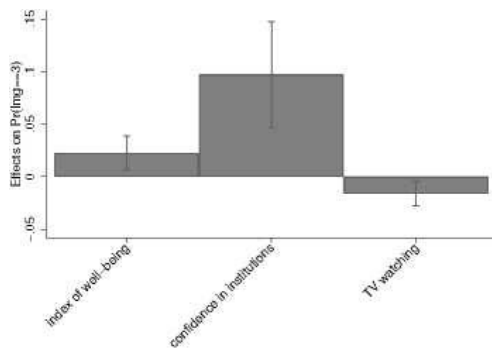
immigrants, while we observed a positive and significant coefficient for income. This result however is not confirmed in the EB (in which income is not available and we used difficulty in paying bills as a proxy for material conditions) and in the EQLS.



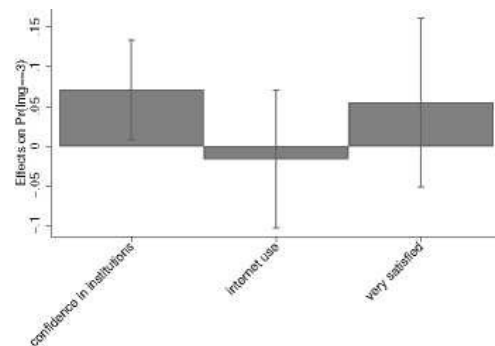
(a) Globalization is an opportunity (EB, 2012-2015)



(b) Immigrants contribute a lot to country's economy (EB, 2012-2015)



(c) Immigration is good for country's economy (ESS, 2002-04)



(d) Immigration is good for country's economy (EQLS, 2011)

**Figure 4: Marginal effects of confidence in institutions, life satisfaction, and exposure to media on the probability that respondents see globalization positively.** Estimates after ordered probit regressions using sample weights and robust standard errors. Note: 90% confidence intervals. Marginal effects are computed on the probability of choosing the highest possible category of the dependent variable. Source: authors' own elaboration.

### 3.1 Test of causality

Results indicate that, independently from the chosen measure of globalization, wording, scale of answers, and samples, confidence in institution is a significant

correlate of acceptance of globalization. This result holds after accounting for a variety of individual level control variables which account for possible sources of individual heterogeneity. However, the list of control variables does not prevent possible bias due to reverse causality: it is plausible that people who see globalization more positively are also those who have more confidence in institutions. To address this issue, we repeat our analysis using Two-Stages Least Squares (2SLS) and instrumented variables.

The idea is to identify suitable instruments that exogenously alter the endogenous variable (in our case, confidence in institutions) to study how such an (exogenously induced) alteration affect the dependent variable. The problem is that suitable instruments are difficult to find, in particular in case of subjective variables. Hence, we resort to the method of generated instruments as proposed by Lewbel (2012).

The basic idea behind the method of generated instruments is that it is possible to achieve identification by having regressors that are uncorrelated with the product of heteroskedastic errors, which is a feature common to many models where an unobserved common factor may induce error correlations. Formally, the 2SLS model is as follows:

First stage:

$$Confidence_i = \alpha_1 + \Theta \cdot X_i + \mu_i \quad (3)$$

Second stage:

$$Acceptance_i = \alpha_2 + \pi \cdot \widehat{Confidence_i} + \Theta \cdot X_i + \eta_i \quad (4)$$

Lewbel (2012) showed that if the errors in the first-stage regression are heteroskedastic, then it is possible to use a combination of the errors from the first stage, and  $n$  demeaned independent variables to generate valid instruments. We use the instruments in a 2SLS model even if our dependent variables are not continuous. Angrist (2001) showed that the coefficients estimated with a linear 2SLS are equal to the marginal effects produced by non linear instrumental variable models, even in presence of categorical dependent variables. Moreover, we adopt OLS in the first step because this regression method produces residuals that

are uncorrelated with fitted values and covariates, thus providing valid instrumental variables (Angrist and Pischke, 2009).

Dataset	F-stat	p-value
Eurobarometer	2.12	0.00
European Social Survey	3.12	0.00
European Quality of Life Survey	1.62	0.03

**Table 2: Breusch-Pagan Test of heteroskedasticity.** **Note:** Breusch-Pagan / Cook-Weisberg test for heteroskedasticity.  $H_0$ : constant variance. **Source:** authors' own elaboration.

Table 2 reports the results from the Breusch-Pagan Test of heteroskedasticity after Eq. 3. Figures shows that we can reject the null that the errors are homoskedastic: the p-values are always significant, which suggests that we can reject the null that the variance of the errors is constant. Under such conditions, Lewbel (2012) shows that given a vector  $Z$  of observed variables such that:

$$E(Z'\varepsilon) = 0$$

$$\text{Cov}(Z, \varepsilon_2^2) \neq 0$$

$$\text{Cov}(Z, \varepsilon_1 \varepsilon_2) = 0$$

then  $[Z - E(Z)] \cdot \varepsilon_i$  can be plugged in Eq. 3 as valid instruments.

Table 3 reports the results of the 2SLS regressions with generated instruments. The complete set of results is available in Tables 13, 14 and 15 in Appendix D. Coefficients in the first row confirm the results from the ordered probit regressions: people with higher confidence in institutions are also more open to globalization than others. The size of the coefficients varies across datasets probably as a consequence of the different wordings and scales of answers. The Hansen J statistics of overidentifying restrictions are above 30 for EB and ESS data, 22.87 in case of EQLS data, and they are not statistically significant. Such figures suggest that we cannot reject the null that the instruments are valid, i.e. they are uncorrelated with the error term, and that the excluded instruments are correctly excluded from the estimated equation.

	Eurobarometer Globalization Immigrants		ESS	EQLS
conf. in institutions	0.0763** (2.24)	0.154** (2.12)	1.074** (2.42)	0.0312** (2.09)
socio-demographic controls	yes	yes	yes	yes
income	yes	yes	yes	yes
political interest	yes	yes	yes	yes
trust in others	n.a.	n.a.	yes	yes
media exposure	yes	yes	yes	yes
life satisfaction	yes	yes	yes	yes
Observations	1473	977	904	396
RMSE	0.690	0.765	2.289	2.087
Hansen J stat.	31.62	34.22	31.95	22.87
p-values	0.206	0.103	0.662	0.528

**Table 3: People with high confidence in institutions are more open towards globalization.** Instrumented estimates using Lewbel method. Note: *t* statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . The complete set of results is available in tables 13, 14, and 15 in Appendix D. Source: authors' own elaboration.

### 3.2 The role of different institutions

The three datasets used in this analysis allow us to observe also respondents' confidence in various kind of institutions: international, such as the European Parliament or the United Nations; national - i.e. the national Government and Parliament; legal, such as the police or the judicial system; and local, i.e. local authorities. Table 2 shows synthetically which information is available in each of the considered datasets<sup>7</sup>. This distinction is important for present work because it allows us to deepen our understanding of the mechanisms linking confidence in institutions to the acceptance of globalization. Is it the generic role of functioning institutions that makes people more confident towards the challenges posed by globalization, or is it rather the result of institutions working at specific levels of action (global vs. local; legal rather than representative or executive)? Answering this question allows us to pin-point the level of institutional action that most probably influences people's acceptance of globalization.

<sup>7</sup> Appendix B reports the detailed list of institutions available by dataset.

On one hand, one may expect that an effective judicial system assisted by well functioning police can reassure people about the respect and enforcement of the law, i.e. to protect people against crime and violence. On the other hand, it is possible that other institutions play a major role. For instance, it is possible that people consider global institutions (or at least communitarian ones) the best players to address the global challenges posed by globalization. Alternatively, one may expect that people trust more national institutions because they are close and yet not too local to be ineffective when dealing with global challenges. Vice-versa, it is also plausible that local institutions, those that are closer to people, are better placed to address people's needs and requests. In present section we test these hypothesis to tell which institutional level is more relevant for the acceptance of globalization.

Empirically, we repeat the estimates of equations 2 and 4. The main difference is that we replace confidence in institutions with confidence in specific institutions. The considered institutional levels change depending on data availability, as illustrated in Table 4.

Institutional level	Datasets		
	EB (2012-2015)	ESS (2002, 2004)	EQLS (2011)
National	✓	✓	✓
International	✓	✓	
Legal		✓	✓
Local	✓		✓

**Table 4: Institutional forms available in the Eurobarometer, European Social Survey, and the European Quality of Life Survey.**

Figure 5 shows that confidence in international institutions is positively and statistically significantly associated with the respondents' opinion that globalization is an opportunity. Results are mixed when we consider respondents' opinion about whether immigrants are a resource for national economy. EB and ESS data indicate that the main correlate of acceptance of immigration as a resource is confidence in national institutions, while confidence in international institutions



plays a minor role. EQLS data, which does not provide information about confidence in international institutions, adds that the main correlate is confidence in local institutions. Such variability in the results may be partly associated to features of the surveys: not all questionnaires provide respondent's confidence about the same institutions; the order of the institutions in the questionnaire is not consistent across surveys; the position of the question about confidence in institutions differs across surveys. In the EB and ESS the questions are rather at the beginning of the questionnaire, whereas they are located in the middle of the questionnaire of the EQLS. Moreover, the EB asks the questions right after the questions about nationality; the ESS includes the questions after the section on media use and trust in others, while the EQLS places the questions after asking about work-life balance, religious feelings and participation, and socio-economic status. Hence, various survey-related issues may contribute to explain the discrepancy in the results. Additionally, it is possible that the discrepancies may be also explained by the different nature of the questions asked: on one hand, the acceptance of globalization, and on the other the acceptance of immigration. Although the measures based on these two sets of variables are consistent with macro indicators of globalization, the free movement of people across borders may evoke more concerns than the question about globalization. National institutions may be seen as the main responsible to face such concerns.

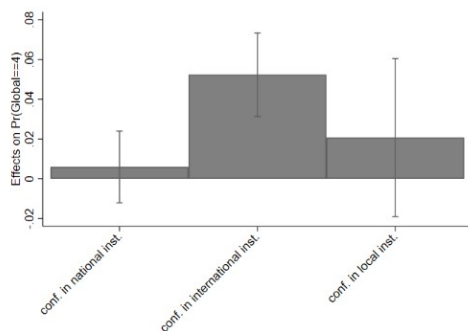
In sum, despite the various differences among datasets, it seems safe to conclude that available results converge in pointing to international and national institutions as catalysts for the acceptance of globalization. Does this result hold also after accounting for possible sources of endogeneity? The answer to this question is in Table 5, which reports the results of 2SLS regressions using EB data and in which confidence in institutions has been replaced by confidence in national, international and local institutions<sup>8</sup>. After instrumenting we found that an increase in confidence in international institutions increases the probability that respondents see globalization as an opportunity. Other institutional levels attract positive coefficients as well, but they are not statistically significant. However, when considering

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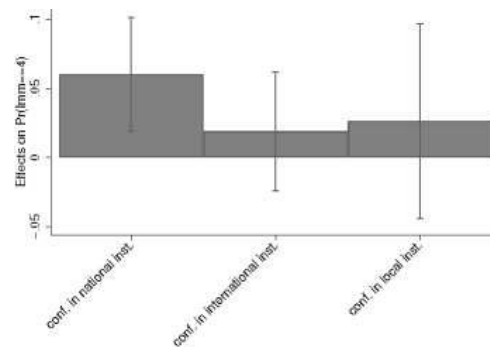
<sup>8</sup> Except the difference in the main independent variables, the results in Table 5 come from the same specification of equation 4 in which we use the Lewbel method to generate a vector of instrumental variables. The complete set of results is available in table 16 in Appendix D.

respondents' opinion that immigrants contribute a lot to the economy, the only significant coefficient corresponds to confidence in national institutions. In both cases, the test of overidentification provides J statistics that are large and not statistically significant, which suggests that we cannot reject the null that the instruments are valid.

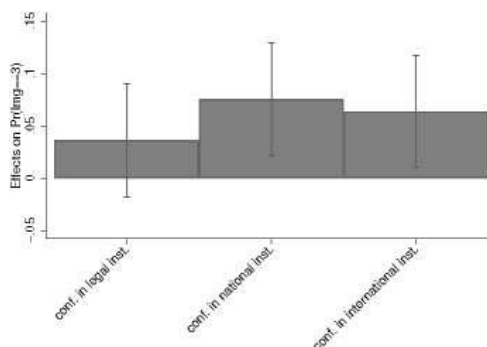
In summary, the 2SLS confirms the discrepancy identified with the ordered probit estimates: when considering globalization in general, people seem to rely more on international institutions; when considering globalization as the free movement of people, it seems that people expect more from national institutions.



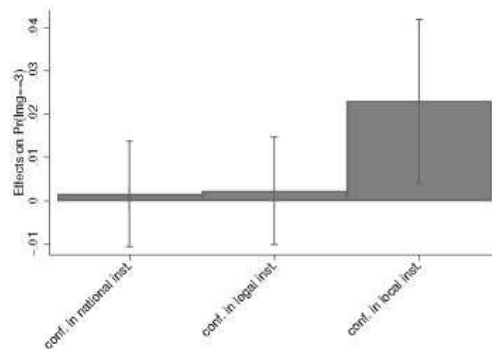
(a) Globalization is an opportunity (EB, 2012-2015).



(b) Immigrants contribute a lot to country's economy (EB, 2012-2015).



(c) Immigration is bad/good for the economy (ESS, 2002 - 2004).



(d) Immigrants are a strain on welfare system (EQLS, 2011).

**Figure 5: High confidence in international institutions is a strong correlate of acceptance of globalization.** Marginal effects of confidence in various kinds of

institutions on the probability that respondents see globalization positively. Estimates after ordered probit regressions using sample weights and robust standard errors. Note: 90% confidence intervals. Marginal effects are computed on the probability of choosing the highest possible category of the dependent variable. Source: authors' own elaboration.

	Globalization is an opportunity	Immigrants contribute a lot to the economy
conf. in national institutions	0.0170 (0.46)	0.147** (2.85)
conf. in international institutions	0.228*** (6.24)	0.0548 (1.03)
conf. in local institutions	0.0709 (0.85)	0.0885 (0.97)
socio-demographic controls	yes	yes
ability to pay bills	yes	yes
political interest	yes	yes
internet use	yes	yes
life satisfaction	yes	yes
year dummies	yes	yes
Observations	1068	867
RMSE	0.668	0.753
Hansen J stat.	86.25	79.31
p-values	0.198	0.315

**Table 5: Institutional forms and acceptance of globalization: robustness check using generated instruments.** Note: *t* statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . The complete set of results is available in table 16 in Appendix D. Source: authors' own elaboration.

## Conclusions

Globalization, intended as the free movement of people, goods and services across borders, has always had its supporters and oppositors. This is probably because globalization tends to create winners and losers. Historically, whenever the losers outnumbered the winners, globalization left space to nationalisms and, eventually, wars. The current wave of nationalism and populism arising in various countries has some aspects in common with previous crises and it raises the

attention towards an evergreen question: “what can be done to increase the number of winners from globalization?” Previous studies, almost invariably, argued in favour of adopting generous welfare schemes to compensate those who lose from globalization. In present work we argue that something else can be done in addition to investing in welfare schemes: caring for people’s confidence in institutions. If people feel reassured that properly working institutions will protect them from the negative effects of globalization, than they will be more open and willing to accept the challenges of globalization. This is particularly important for those who have less resources to face such challenges. As previous studies noticed, providing purely economic incentives is not enough to ensure that people will comply with the expected behaviour. Perceptions play an important role in determining people’s preferences and choices. If people perceive that they are losers, they will oppose globalization, thus making any redistributive effort vane (Prendergast, 2008; Imas, 2014; Ariely et al., 2009). Previous studies neglected that confidence in institutions plays an important role for the acceptance of globalization. Our argument is that people who trust institutions – such as national parliaments, judicial systems, police or international institutions, such as the European Parliament or the United Nations – feel reassured against the risk of losses due to international migration or delocalization. Thus, confidence in institutions can be regarded as a complement to redistributive policies to reduce the opposition to globalization.

To test our hypothesis, we use individual level data from three publicly available surveys: the Eurobarometer, the European Social Survey and the European Quality of Life Survey. These datasets offer the unique opportunity to observe people’s acceptance of globalization using two sets of measures, and to test the robustness of our findings to different sample frames and years of the surveys. Moreover, they allow us to distinguish the role of different institutions: national, international, local, and legal ones. We focus on the case of Luxembourg, a small and open economy which, in many aspects, anticipates some of the social trends and challenges that other European countries will face in the near future, and in particular the increasing share of the immigrant population. Moreover, Luxembourg is characterized by a generous welfare state, as measured by the share of social expenditures on gross domestic product (OECD, 2019).

Our estimates indicate that confidence in institutions correlates with a positive view of globalization, either measured directly or indirectly. The direct measure is based on a question asking respondents whether globalization is an opportunity. The indirect measure uses the answers to questions asking whether immigrants are a resource for the national economy. Both measures correlate meaningfully with macro indicators of economic globalization. Unfortunately, we did not find any suitable instrument to address possible reverse causality. However, Two-Stages Least Squares using the method of generated instruments provide results that are consistent with our finding.

Institutions are not the same when dealing with the challenges of globalization. Which kind of institution is the best catalyst of the acceptance of globalization? We found that different institutions matter for different aspects of globalization. When thinking about immigrants, people tend to rely more on national institutions (the Government and the Parliament), whereas when considering globalization in general people rely more on international institutions (the European Parliament and the United Nations). This is probably a sensible distinction: when thinking about the free movement of people, and in particular of people relocating within national boundaries, people may consider that well functioning national institutions are best suited to manage the process. On the contrary, when thinking about globalization in general, international institutions can be perceived as the most important player. However, this is only a speculation as the available data do not allow us to test what people have in mind when considering our two measures of globalization.

Confidence in institutions is part of an individual's soft skills. As it derives from the relationship between individual and institutions, it is difficult to build and easy to destroy. In fact, available research documents that confidence in institutions is declining over time in most developed countries (Sarracino and Mikucka, 2017). A discussion on how to build and maintain people's confidence in institutions is beyond the scope of present paper. However, we suggest three ways through which it is possible to build confidence in institutions: first, through a transparent, vertical dialogue between institutions and citizens; second, by ensuring that institutions deliver what they promise or, at least, are held accountable for their

actions; third, through the educational system, in schools, by teaching students the value of cooperation and of collective actions, aspects too often neglected in modern curricula.

Some limits of the empirical strategy adopted in this paper recommend prudence in interpreting the results. The first, and probably most relevant, limit concerns the adopted measures of acceptance of globalization. Although we are interested in the acceptance of free movements of goods and people across borders, the available data mainly refer to the acceptance of migrants. Only in one dataset we are able to directly observe people's view of globalization as an opportunity for economic growth (Eurobarometer, 2012-2015). In the remaining two datasets, we could only rely on respondents' opinions about whether immigrants are good for the economy (European Social Survey, 2002 and 2004) or pose a strain on the welfare system (European Quality of Life Survey, 2011). A second limit has to do with possible reverse causality. It is possible that people's prejudice towards globalization drives their confidence in institutions, or that the way globalization is managed shapes people's confidence. We tried to address the issue of reverse causality econometrically using the method of generated instruments and 2SLS suggested by Lewbel in 2012. Our findings support a causal interpretation running from confidence towards acceptance of globalization as hypothesized at the beginning of the study. However, this does not exclude the possibility of a feedback. Unfortunately, the data available for present study do not allow us to test the dynamic relation between our two variables of interest. Moreover, the method of generated instruments relies on statistically valid instruments that are, by construction, correlated with the endogenous variable. However, the validity of such instruments is not supported by any economic or social theory. A third limit of our analysis is that the considered period ends in 2015, shortly before the turmoil of Brexit and rising populisms and nationalisms affecting various European countries in recent years. The focus on Luxembourg is the reason for not expanding further the analysis. Luxembourg has a small and highly integrated economy in international markets with one of the most diverse population in Europe and with the highest share of immigrant residents from various cultures, ethnicities and religions. These features make Luxembourg a positive example to study how confidence in institutions can contribute to the acceptance of globalization and, especially, of immigrants.

## Appendix A - Descriptive statistics

Table 6 Descriptive statistics on Luxembourg. Source: Eurobarometer data.

variable	mean	sd	min	max	obs
Globalization is an opportunity	2.677	0.801	1	4	1612
Immigrants contribute a lot	2.955	0.857	1	4	1097
Age	51.19	18.32	15	98	1851
Woman	0.462	0.499	0	1	1851
Self-employed	0.0492	0.216	0	1	1851
Employed	0.418	0.493	0	1	1851
Not working	0.533	0.499	0	1	1851
Education: up to 15 years	0.112	0.316	0	1	1835
Education: 16-19 years	0.338	0.473	0	1	1835
Education: 20 years and older	0.457	0.498	0	1	1835
Education: still studying	0.0752	0.264	0	1	1835
Education: no full-time education	0.0180	0.133	0	1	1835
Marital status: single	0.167	0.373	0	1	1851
Marital status: with partner	0.653	0.476	0	1	1851
Marital status: divorced/separated	0.0762	0.265	0	1	1851
Marital status: widow	0.101	0.301	0	1	1851
Marital status: other	0.00270	0.0519	0	1	1851
no children	0.869	0.338	0	1	1851
one child	0.0983	0.298	0	1	1851
two children	0.0308	0.173	0	1	1851
three or more children	0.00216	0.0464	0	1	1851
Interest in politics: slight	0.417	0.493	0	1	1851
Interest in politics: moderate	0.239	0.426	0	1	1851
Interest in politics: strong	0.135	0.341	0	1	1851
Difficulty paying bills: most of the time	0.0559	0.230	0	1	1825
Difficulty paying bills: from time to time	0.151	0.358	0	1	1825
Difficulty paying bills: almost never/never	0.793	0.405	0	1	1825
Life satisfaction: not at all	0.0119	0.108	0	1	1848
Life satisfaction: not very satisfied	0.0406	0.197	0	1	1848
Life satisfaction: fairly satisfied	0.544	0.498	0	1	1848
Life satisfaction: very satisfied	0.403	0.491	0	1	1848
Internet use	0.738	0.440	0	1	1708
Confidence in institutions	2.613	1.672	0	5	1822
Confidence in national institutions	1.129	0.891	0	2	1754
Confidence in international institutions	0.915	0.842	0	2	1732
Confidence in local authorities	0.752	0.432	0	1	1406
Year			2012	2015	1851

Table 7 Descriptive statistics on Luxembourg. Source: European Social Survey data.

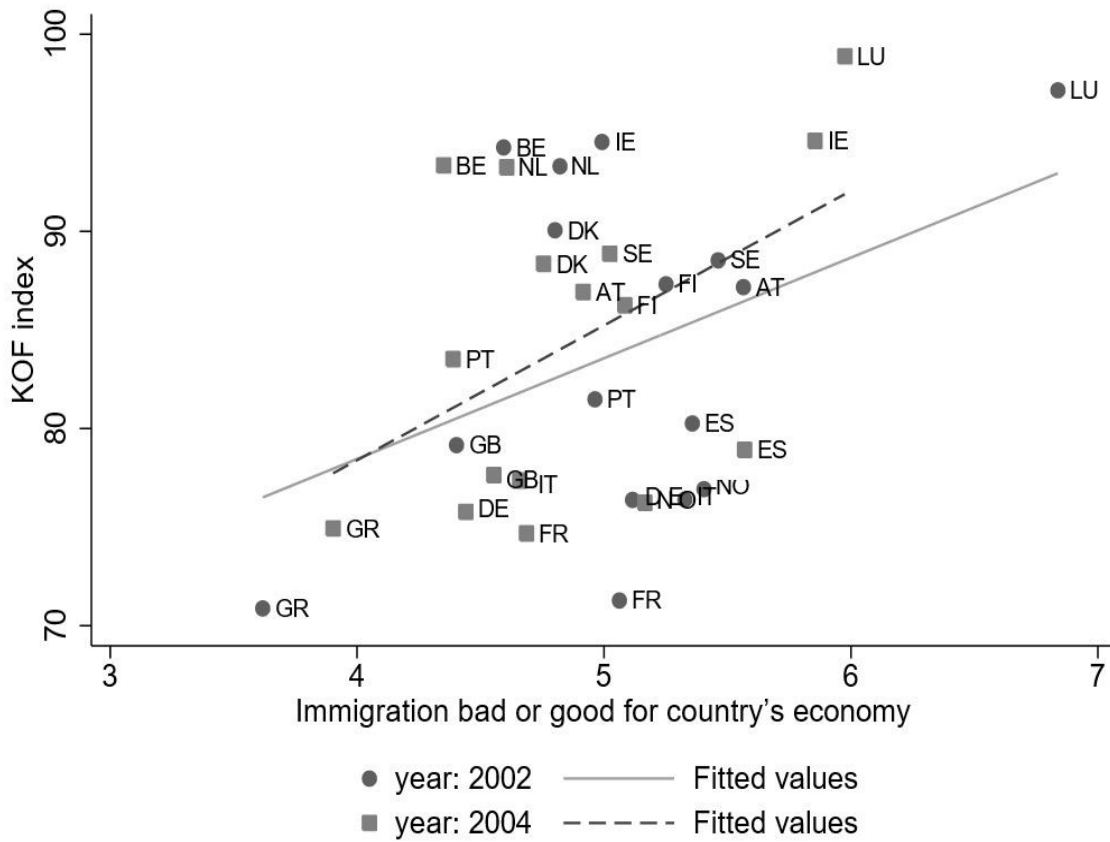
variable	mean	sd	min	max	obs	missing
Immigration bad or good for country's economy	6.309	2.516	0	10	1494	0.0726
Age	45.48	18.98	15	110	1584	0.0168
Woman	0.500	0.500	0	1	1611	0
Employed	0.845	0.362	0	1	1194	0.259
Highest level of education achieved			0	6	1590	0.01
Marital status: married	0.526	0.500	0	1	1602	0.00559
Marital status: separated	0.00936	0.0963	0	1	1602	0.00559
Marital status: divorced	0.0518	0.222	0	1	1602	0.00559
Marital status: widowed	0.0824	0.275	0	1	1602	0.00559
Household size: 2	0.258	0.438	0	1	1608	0.00186
Household size: 3	0.218	0.413	0	1	1608	0.00186
Household size: 4	0.242	0.428	0	1	1608	0.00186
Household size: 5	0.0964	0.295	0	1	1608	0.00186
Household size: 6	0.0317	0.175	0	1	1608	0.00186
Household size: 7 or more	0.0168	0.129	0	1	1608	0.00186
Self-reported health: bad	0.0720	0.259	0	1	1611	0
Self-reported health: fair	0.264	0.441	0	1	1611	0
Self-reported health: good	0.394	0.489	0	1	1611	0
Self-reported health: very good	0.263	0.440	0	1	1611	0
Household income	10.54	0.674	6.761	12.85	1276	0.208
Confidence in institutions	0.650	0.477	0	1	1521	0.0559
Confidence in international institutions	0.337	0.473	0	1	1435	0.109
Confidence in national institutions	0.344	0.475	0	1	1486	0.0776
Confidence in legal institutions	0.621	0.485	0	1	1560	0.0317
Life satisfaction	8.03	1.91	0	10	1608	0
Index of trust in others	5.254	1.804	0	10	1611	0
Political orientation: left	0.0112	0.105	0	1	1341	0.168
Political orientation: 2	0.0380	0.191	0	1	1341	0.168
Political orientation: 3	0.0716	0.258	0	1	1341	0.168
Political orientation: 4	0.0880	0.283	0	1	1341	0.168
Political orientation: 5	0.432	0.496	0	1	1341	0.168
Political orientation: 6	0.0895	0.286	0	1	1341	0.168
Political orientation: 7	0.0917	0.289	0	1	1341	0.168
Political orientation: 8	0.0746	0.263	0	1	1341	0.168
Political orientation: 9	0.0239	0.153	0	1	1341	0.168
Political orientation: right	0.0462	0.210	0	1	1341	0.168
Time spent watching TV	4.114	2.103	0	7	1608	0
ESS round			1	2	1611	0



Table 8 Descriptive statistics on Luxembourg. Source: European Quality of Life Survey Data

variable	mean	sd	min	max	obs
Immigrants are a strain on welfare system	1.908	0.659	1	3	611
Age	51.62	17.16	18	92	641
Woman	0.559	0.497	0	1	641
Marital status: separated/divorced and not living with partner	0.122	0.328	0	1	638
Marital status: widowed and not living with partner	0.133	0.340	0	1	638
Marital status: never married and not living with partner	0.129	0.335	0	1	638
Unemployed	0.0140	0.118	0	1	641
Unable to work	0.0109	0.104	0	1	641
Retired	0.340	0.474	0	1	641
Homemaker	0.0905	0.287	0	1	641
Student	0.0281	0.165	0	1	641
Other occupation	0.0203	0.141	0	1	641
Education: upper or post secondary	0.457	0.499	0	1	623
Education: tertiary	0.228	0.420	0	1	623
Equivalised monthly household income (in logarithm)	7.732	0.486	5.639	9.513	425
Trust in others: fair	0.641	0.480	0	1	637
Trust in others: high	0.424	0.495	0	1	637
Self-reported health: fair	0.94	0.24	0	1	641
Self-reported health: good	0.22	0.41	0	1	641
Confidence in institutions	11.96	4.169	1	20	629
Confidence in legal institutions	12.34	3.894	1	20	638
Confidence in local institutions	6.398	2.207	1	10	623
Use the Internet: every day	0.264	0.441	0	1	641
Use the Internet: once a week	0.0374	0.190	0	1	641
Use the Internet: one-three times a month	0.00624	0.0788	0	1	641
Use the Internet: less often	0.134	0.341	0	1	641
Use the Internet: never	0.559	0.497	0	1	641
Life satisfaction: so and so	0.515	0.500	0	1	641
Life satisfaction: very	0.395	0.489	0	1	641
Political participation	0.18	0.38	0	1	640

Figure 6: Association between perception of immigration and the KOF index of economic globalization.



## **Appendix B - List of Institutions and wordings**

### **B.1 Eurobarometer**

“I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it”

- the United Nations;
- the European Parliament;
- the national Parliament;
- the national Government;
- local authorities.

### **B.2 European Social Survey**

“Please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust”

- the United Nations;
- the European Parliament;
- the national Parliament;
- the legal system;
- police.

### **B.3 European Quality of Life Survey**

“Please tell me how much you personally trust each of the following institutions. Please tell me on a scale of 1 to 10, where 1 means that you do not trust at all, and 10 means that you trust completely.”

- the national Parliament;
- the national Government;
- the legal system;
- police;
- local (municipal) authorities.

## Appendix C - Ordered probit estimates

Table 9: Correlates of people's opinion that globalization is an opportunity (Eurobarometer data). Ordered probit estimates with robust standard errors.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age	0.00872 <sup>*</sup> (2.05)	0.00581 (1.45)	0.00651 (1.62)	0.00348 (0.87)	0.00431 (1.08)	0.00318 (0.80)	0.00725 <sup>*</sup> (1.73)	0.00566 (1.36)
Woman	-0.116 (-1.32)	-0.0337 (-0.40)	-0.0331 (-0.39)	0.0227 (0.27)	-0.0232 (-0.27)	0.0148 (0.17)	-0.0108 (-0.13)	-0.000428 (-0.01)
Self-employed	0.135 (0.71)	0.0316 (0.19)	0.0199 (0.12)	-0.0109 (-0.07)	0.0309 (0.19)	-0.0222 (-0.14)	0.0238 (0.15)	-0.0294 (-0.18)
Not working	-0.206 (-1.58)	-0.230 <sup>*</sup> (-1.88)	-0.227 <sup>*</sup> (-1.83)	-0.206 <sup>*</sup> (-1.72)	-0.171 (-1.44)	-0.203 (-1.70)	-0.253 <sup>*</sup> (-1.97)	-0.222 <sup>*</sup> (-1.85)
Education: 16-19 years	-0.587 <sup>*</sup> (-2.51)	-0.431 <sup>*</sup> (-2.31)	-0.435 <sup>*</sup> (-2.34)	-0.503 <sup>**</sup> (-2.61)	-0.495 <sup>**</sup> (-2.65)	-0.485 <sup>**</sup> (-2.58)	-0.451 <sup>*</sup> (-2.35)	-0.523 <sup>**</sup> (-2.67)
Education: 20 years and older	-0.144 (-0.76)	-0.150 (-0.88)	-0.168 (-0.96)	-0.288 (-1.61)	-0.269 (-1.53)	-0.253 (-1.43)	-0.205 (-1.15)	-0.323 <sup>*</sup> (-1.75)
Education: still studying	1.128 <sup>***</sup> (3.96)	0.868 <sup>***</sup> (3.62)	0.860 <sup>***</sup> (3.57)	0.717 <sup>**</sup> (2.82)	0.693 <sup>**</sup> (2.83)	0.735 <sup>**</sup> (3.00)	0.875 <sup>***</sup> (3.45)	0.765 <sup>**</sup> (2.83)
Education: no full-time education	-0.119 (-0.29)	0.0169 (0.04)	0.0175 (0.04)	-0.272 (-0.73)	-0.151 (-0.39)	-0.225 (-0.59)	-0.0504 (-0.13)	-0.241 (-0.63)
Marital status: with partner	0.274 (1.60)	0.141 (1.05)	0.138 (1.04)	0.211 (1.56)	0.146 (1.12)	0.216 <sup>*</sup> (1.65)	0.142 (1.04)	0.201 (1.47)
Marital status: divorced/separated	0.509 <sup>*</sup> (2.29)	0.345 <sup>*</sup> (1.93)	0.344 <sup>*</sup> (1.93)	0.523 <sup>**</sup> (2.88)	0.404 <sup>*</sup> (2.25)	0.537 <sup>**</sup> (2.95)	0.341 <sup>*</sup> (1.93)	0.448 <sup>*</sup> (2.44)
Marital status: widow	0.678 <sup>*</sup> (2.54)	0.593 <sup>**</sup> (2.63)	0.595 <sup>**</sup> (2.66)	0.769 <sup>**</sup> (3.23)	0.638 <sup>**</sup> (2.77)	0.744 <sup>**</sup> (3.20)	0.658 <sup>**</sup> (2.84)	0.729 <sup>**</sup> (3.05)
Marital status: other	0.417 (1.03)	0.0414 (0.12)	0.0535 (0.15)	-0.400 (-1.03)	0.0474 (0.12)	-0.355 (-0.94)	-0.131 (-0.35)	-0.354 (-0.92)
one child	0.367 <sup>**</sup> (2.76)	0.304 <sup>*</sup> (2.49)	0.298 <sup>*</sup> (2.46)	0.191 (1.58)	0.241 <sup>*</sup> (2.00)	0.204 <sup>*</sup> (1.71)	0.277 <sup>*</sup> (2.29)	0.227 <sup>*</sup> (1.87)
two children	0.00191 (0.01)	-0.0801 (-0.42)	-0.0840 (-0.44)	-0.129 (-0.64)	-0.113 (-0.56)	-0.109 (-0.54)	-0.111 (-0.59)	-0.187 (-0.93)
three or more children	-0.503 (-0.84)	-0.697 (-1.04)	-0.677 (-1.03)	-0.764 (-1.42)	-0.655 (-1.13)	-0.731 (-1.36)	-0.762 (-1.17)	-0.706 (-1.26)
Interest in politics: slight	0.275 <sup>*</sup> (1.67)	0.123 (0.99)	0.117 (0.95)	0.0644 (0.51)	0.116 (0.94)	0.0688 (0.55)	0.0967 (0.77)	0.109 (0.87)
Interest in politics: moderate	0.252 (1.17)	0.00402 (0.03)	-0.00328 (-0.02)	-0.0953 (-0.69)	-0.0212 (-0.15)	-0.0880 (-0.63)	-0.0300 (-0.22)	-0.0688 (-0.49)
Interest in politics: strongly	0.103 (0.48)	-0.0699 (-0.42)	-0.0725 (-0.44)	-0.237 (-1.34)	-0.148 (-0.86)	-0.207 (-1.18)	-0.124 (-0.75)	-0.217 (-1.21)
Difficulty paying bills: from time to time	0.496 <sup>*</sup> (1.71)	0.0286 (0.14)	0.0501 (0.25)	-0.153 (-0.74)	-0.0202 (-0.10)	-0.0960 (-0.48)	-0.0557 (-0.26)	-0.128 (-0.58)
Difficulty paying bills: Almost never/never	0.533 <sup>*</sup> (1.88)	0.00433 (0.02)	0.0136 (0.07)	-0.112 (-0.57)	-0.0193 (-0.10)	-0.0450 (-0.24)	-0.105 (-0.53)	-0.147 (-0.69)
year: 2014	0.282 (1.52)	0.0322 (0.26)	0.0239 (0.20)	0.232 <sup>*</sup> (1.71)	0.0847 (0.68)	0.246 <sup>*</sup> (1.79)	0.0284 (0.24)	0.0921 (0.74)
year: 2015	0.253 (1.35)	0.0333 (0.24)	0.0253 (0.18)	0.123 (0.86)	0.0386 (0.27)	0.136 (0.94)	0.0245 (0.18)	0.0377 (0.27)
Life satisfaction: not very		1.995 <sup>**</sup> (3.25)	1.955 <sup>**</sup> (3.23)	1.957 <sup>***</sup> (3.33)	1.978 <sup>**</sup> (3.28)	1.917 <sup>**</sup> (3.22)	2.005 <sup>***</sup> (3.39)	2.061 <sup>***</sup> (3.40)
Life satisfaction: fairly		1.951 <sup>**</sup> (3.28)	1.907 <sup>**</sup> (3.25)	1.783 <sup>**</sup> (3.09)	1.815 <sup>**</sup> (3.12)	1.826 <sup>**</sup> (3.15)	1.850 <sup>**</sup> (3.20)	1.806 <sup>**</sup> (3.05)
Life satisfaction: very		2.185 <sup>***</sup> (3.65)	2.141 <sup>***</sup> (3.63)	1.963 <sup>***</sup> (3.39)	2.018 <sup>***</sup> (3.45)	2.010 <sup>***</sup> (3.44)	2.081 <sup>***</sup> (3.57)	1.989 <sup>***</sup> (3.35)
Internet use			0.0739 (0.61)	0.0859 (0.68)	0.0899 (0.74)	0.0801 (0.64)	0.0787 (0.64)	0.113 (0.92)
Confidence in national institutions				0.106 (1.05)	0.393 <sup>***</sup> (4.26)			
Confidence in international institutions				0.525 <sup>***</sup> (4.81)		0.615 <sup>***</sup> (5.78)		
Confidence in local authorities				0.184			0.332 <sup>**</sup>	

				(1.47)				(2.96)	0.833 <sup>***</sup>
Confidence in institutions									(5.89)
				6 <sup>1</sup>	0				
/									
cut1	-0.255 (-0.39)	0.670 (1.02)	0.703 (1.07)	0.667 (1.03)	0.611 (0.93)	0.646 (1.00)	0.770 (1.19)	0.805 (1.22)	
cut2	0.954 (1.50)	1.943 <sup>**</sup> (2.93)	1.976 <sup>**</sup> (2.97)	1.994 <sup>**</sup> (3.08)	1.906 <sup>**</sup> (2.89)	1.966 <sup>**</sup> (3.00)	2.057 <sup>**</sup> (3.16)	2.129 <sup>**</sup> (3.20)	
cut3	2.620 <sup>***</sup> (4.12)	3.623 <sup>***</sup> (5.45)	3.656 <sup>***</sup> (5.47)	3.728 <sup>***</sup> (5.71)	3.610 <sup>***</sup> (5.45)	3.695 <sup>***</sup> (5.61)	3.748 <sup>***</sup> (5.72)	3.866 <sup>***</sup> (5.76)	
Observations	1068	1068	1068	1068	1068	1068	1068	1068	
Pseudo R <sup>2</sup>	0.101	0.129	0.129	0.152	0.139	0.150	0.135	0.152	
<b>Note:</b> t statistics in parentheses. *p < 0. 1, **p < 0.05, ***p < 0.001									

Table 10: Correlates of people's opinion that immigrants contribute a lot (Eurobarometer data). Ordered probit estimates with robust standard errors.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Immigrants contribute a lot Age	0.0114 <sup>*</sup> (2.27)	0.0112 <sup>*</sup> (2.18)	0.00927 <sup>*</sup> (1.93)	0.00848 <sup>*</sup> (1.80)	0.00774 (1.64)	0.00856 <sup>*</sup> (1.78)	0.0103 <sup>*</sup> (2.11)	0.00894 <sup>*</sup> (1.98)
Woman	-0.00744 (-0.07)	-0.0500 (-0.47)	-0.0458 (-0.43)	-0.0412 (-0.40)	-0.0515 (-0.49)	-0.0307 (-0.29)	-0.0288 (-0.28)	-0.0388 (-0.38)
Self-employed	0.0134 (0.04)	0.0664 (0.21)	0.104 (0.33)	0.0879 (0.28)	0.0897 (0.29)	0.0892 (0.29)	0.0974 (0.31)	0.0359 (0.12)
Not working	-0.544 <sup>***</sup> (-3.81)	-0.502 <sup>***</sup> (-3.52)	-0.513 <sup>***</sup> (-3.60)	-0.477 <sup>***</sup> (-3.48)	-0.460 <sup>***</sup> (-3.34)	-0.510 <sup>***</sup> (-3.60)	-0.532 <sup>***</sup> (-3.70)	-0.494 <sup>***</sup> (-3.82)
Education: 16-19 years	0.166 (0.84)	0.0396 (0.21)	0.0781 (0.42)	0.0421 (0.23)	0.0359 (0.20)	0.0636 (0.35)	0.0797 (0.43)	0.0620 (0.34)
Education: 20 years and older	0.388 <sup>*</sup> (2.04)	0.335 <sup>*</sup> (1.79)	0.403 <sup>*</sup> (2.14)	0.332 <sup>*</sup> (1.82)	0.330 <sup>*</sup> (1.81)	0.383 <sup>*</sup> (2.05)	0.390 <sup>*</sup> (2.09)	0.322 <sup>*</sup> (1.76)
Education: still studying	0.897 <sup>**</sup> (2.82)	0.933 <sup>**</sup> (2.89)	0.986 <sup>**</sup> (3.03)	0.855 <sup>**</sup> (2.71)	0.831 <sup>**</sup> (2.61)	0.951 <sup>**</sup> (2.95)	0.995 <sup>**</sup> (3.10)	0.896 <sup>**</sup> (2.96)
Education: no full-time education	-0.129 (-0.20)	-0.274 (-0.39)	-0.267 (-0.39)	-0.430 (-0.63)	-0.376 (-0.57)	-0.283 (-0.41)	-0.388 (-0.55)	-0.463 (-0.71)
Marital status: with partner	-0.478 <sup>*</sup> (-2.45)	-0.316 <sup>*</sup> (-1.71)	-0.298 <sup>*</sup> (-1.65)	-0.323 <sup>*</sup> (-1.80)	-0.316 <sup>*</sup> (-1.76)	-0.294 (-1.64)	-0.316 <sup>*</sup> (-1.75)	-0.268 <sup>*</sup> (-1.66)
Marital status: divorced/separated	-0.792 <sup>**</sup> (-2.89)	-0.577 <sup>*</sup> (-2.24)	-0.588 <sup>*</sup> (-2.25)	-0.597 <sup>*</sup> (-2.35)	-0.589 <sup>*</sup> (-2.31)	-0.577 <sup>*</sup> (-2.21)	-0.603 <sup>*</sup> (-2.34)	-0.552 <sup>*</sup> (-2.27)
Marital status: widow	-0.458 <sup>*</sup> (-1.68)	-0.287 (-1.08)	-0.294 (-1.11)	-0.290 (-1.10)	-0.305 (-1.15)	-0.278 (-1.05)	-0.270 (-1.02)	-0.235 (-0.92)
Marital status: other	-9.635 <sup>***</sup> (-17.98)	-7.836 <sup>***</sup> (-18.20)	-7.815 <sup>***</sup> (-18.33)	-7.889 <sup>***</sup> (-17.86)	-7.824 <sup>***</sup> (-17.87)	-7.974 <sup>***</sup> (-18.63)	-7.707 <sup>***</sup> (-17.59)	-8.132 <sup>***</sup> (-17.99)
one child	-0.0881 (-0.66)	-0.0629 (-0.47)	-0.0627 (-0.47)	-0.0850 (-0.63)	-0.0875 (-0.65)	-0.0628 (-0.47)	-0.0640 (-0.48)	-0.0825 (-0.62)
two children	-0.175 (-0.74)	-0.116 (-0.50)	-0.113 (-0.49)	-0.158 (-0.70)	-0.151 (-0.66)	-0.116 (-0.50)	-0.134 (-0.59)	-0.226 (-1.01)
three or more children	-0.385 (-0.68)	-0.355 (-0.62)	-0.420 (-0.66)	-0.427 (-0.80)	-0.385 (-0.75)	-0.426 (-0.77)	-0.487 (-0.76)	-0.419 (-0.93)
Interest in politics: slight	-0.348 <sup>*</sup> (-2.35)	-0.227 <sup>*</sup> (-1.71)	-0.217 <sup>*</sup> (-1.67)	-0.229 <sup>*</sup> (-1.78)	-0.215 <sup>*</sup> (-1.69)	-0.238 <sup>*</sup> (-1.82)	-0.241 <sup>*</sup> (-1.84)	-0.231 <sup>*</sup> (-1.82)
Interest in politics: moderate	-0.442 <sup>*</sup> (-2.49)	-0.261 <sup>*</sup> (-1.83)	-0.248 <sup>*</sup> (-1.77)	-0.244 <sup>*</sup> (-1.71)	-0.237 <sup>*</sup> (-1.67)	-0.265 <sup>*</sup> (-1.87)	-0.259 <sup>*</sup> (-1.85)	-0.276 <sup>*</sup> (-1.98)
Interest in politics: strongly	0.131 (0.58)	0.260 (1.23)	0.265 (1.28)	0.221 (1.08)	0.229 (1.13)	0.252 (1.22)	0.242 (1.17)	0.213 (1.04)
Difficulty paying bills: from time to time	-0.644 <sup>*</sup> (-1.76)	-0.162 (-0.64)	-0.181 (-0.72)	-0.208 (-0.84)	-0.192 (-0.78)	-0.168 (-0.67)	-0.212 (-0.85)	-0.142 (-0.57)
Difficulty paying bills: Almost never/never	-0.666 <sup>*</sup> (-1.94)	-0.202 (-0.86)	-0.197 (-0.86)	-0.245 (-1.10)	-0.222 (-0.99)	-0.216 (-0.94)	-0.244 (-1.07)	-0.213 (-0.97)
year: 2014	-0.130 (-0.82)	-0.00291 (-0.02)	0.0205 (0.14)	0.0919 (0.62)	0.102 (0.71)	0.178 (1.15)	0.0194 (0.14)	0.0931 (0.67)
year: 2015	-0.198 (-1.34)	-0.0604 (-0.47)	-0.0426 (-0.33)	-0.00998 (-0.08)	-0.0157 (-0.12)	0.0223 (0.17)	-0.0272 (-0.21)	0.000686 (0.01)
Life satisfaction: not very		-2.011 <sup>***</sup> (-3.36)	-1.897 <sup>**</sup> (-3.26)	-1.999 <sup>***</sup> (-3.36)	-1.976 <sup>***</sup> (-3.37)	-1.952 <sup>***</sup> (-3.36)	-1.955 <sup>**</sup> (-3.26)	-2.067 <sup>***</sup> (-3.53)
Life satisfaction: fairly		-1.503 <sup>**</sup> (-2.61)	-1.393 <sup>*</sup> (-2.49)	-1.608 <sup>**</sup> (-2.81)	-1.556 <sup>**</sup> (-2.78)	-1.481 <sup>**</sup> (-2.66)	-1.523 <sup>**</sup> (-2.63)	-1.713 <sup>**</sup> (-3.04)
Life satisfaction: very		-1.496 <sup>*</sup> (-2.55)	-1.391 <sup>*</sup> (-2.45)	-1.621 <sup>**</sup> (-2.79)	-1.573 <sup>**</sup> (-2.77)	-1.488 <sup>**</sup> (-2.63)	-1.517 <sup>**</sup> (-2.58)	-1.734 <sup>**</sup> (-3.04)
Internet use			-0.207 (-1.59)	-0.196 (-1.52)	-0.197 (-1.55)	0.224 <sup>*</sup> (1.71)	-0.203 (-1.55)	-0.182 (-1.44)
Confidence in national institutions				0.334 <sup>**</sup> (2.68)	0.384 <sup>***</sup> (3.79)			
Confidence in international institutions				0.00198 (0.02)		0.252 <sup>*</sup> (2.34)		
Confidence in local authorities				0.166 (1.39)			0.298 <sup>*</sup> (2.54)	
Confidence in institutions								0.752 <sup>***</sup> (4.61)

/	-2.571 ***	-3.350 ***	-3.408 ***	-3.468 ***	-3.519 ***	-3.430 ***	-3.341 ***	-3.341 ***
cut1	(-4.32)	(-5.34)	(-5.53)	(-5.49)	(-5.67)	(-5.55)	(-5.27)	(-5.36)
cut2	-1.532 **	-2.306 ***	-2.364 ***	-2.397 ***	-2.454 ***	-2.379 ***	-2.281 ***	-2.242 ***
	(-2.64)	(-3.73)	(-3.92)	(-3.90)	(-4.06)	(-3.93)	(-3.67)	(-3.68)
cut3	-0.257	-1.004 *	-1.058 *	-1.069 *	-1.128 *	-1.068 *	-0.968	-0.902
	(-0.44)	(-1.65)	(-1.79)	(-1.76)	(-1.89)	(-1.80)	(-1.58)	(-1.50)
Observations	867	867	867	867	867	867	867	867
Pseudo $R^2$	0.081	0.099	0.101	0.112	0.110	0.103	0.105	0.119

**Note:**  $t$  statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

Table 11: Correlates of people's perception that immigration is bad or good for the economy in Luxembourg (European Social Survey data). Ordered probit estimates with robust standard errors.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Woman	0.0120 <sup>***</sup> (3.43)	0.0135 <sup>***</sup> (4.02)	0.0139 <sup>***</sup> (4.11)	0.0108 <sup>***</sup> (3.12)	0.0116 <sup>***</sup> (3.32)	0.0112 <sup>***</sup> (3.16)	0.0109 <sup>***</sup> (3.08)	0.00922 <sup>***</sup> (2.60)
Employed	0.282 <sup>***</sup> (3.73)	0.306 <sup>***</sup> (4.14)	0.300 <sup>***</sup> (4.06)	0.285 <sup>***</sup> (3.80)	0.274 <sup>***</sup> (3.65)	0.295 <sup>***</sup> (3.89)	0.297 <sup>***</sup> (3.94)	0.293 <sup>***</sup> (3.80)
Education: lower secondary education	-0.0962 <sup>***</sup> (-0.89)	-0.109 <sup>***</sup> (-1.02)	-0.129 <sup>***</sup> (-1.22)	-0.0824 <sup>***</sup> (-0.76)	-0.0926 <sup>***</sup> (-0.86)	-0.0778 <sup>***</sup> (-0.71)	-0.0878 <sup>***</sup> (-0.80)	-0.0714 <sup>***</sup> (-0.64)
Education: upper secondary education	0.204 <sup>***</sup> (1.49)	0.153 <sup>***</sup> (1.13)	0.137 <sup>***</sup> (1.01)	0.213 <sup>***</sup> (1.56)	0.213 <sup>***</sup> (1.55)	0.170 <sup>***</sup> (1.24)	0.132 <sup>***</sup> (0.96)	0.131 <sup>***</sup> (0.93)
Education: post-secondary non-tertiary ed.	0.312 <sup>***</sup> (2.83)	0.310 <sup>***</sup> (2.87)	0.283 <sup>***</sup> (2.59)	0.323 <sup>***</sup> (2.93)	0.323 <sup>***</sup> (2.94)	0.301 <sup>***</sup> (2.71)	0.278 <sup>***</sup> (2.49)	0.331 <sup>***</sup> (2.92)
Education: tertiary education	0.139 <sup>***</sup> (0.66)	0.159 <sup>***</sup> (0.77)	0.130 <sup>***</sup> (0.63)	0.157 <sup>***</sup> (0.73)	0.168 <sup>***</sup> (0.79)	0.145 <sup>***</sup> (0.68)	0.144 <sup>***</sup> (0.68)	0.140 <sup>***</sup> (0.64)
Education: other	0.396 <sup>***</sup> (3.10)	0.520 <sup>***</sup> (4.35)	0.449 <sup>***</sup> (3.64)	0.441 <sup>***</sup> (3.58)	0.440 <sup>***</sup> (3.57)	0.388 <sup>***</sup> (3.00)	0.354 <sup>***</sup> (2.73)	0.381 <sup>***</sup> (2.89)
Marital status: married	0.624 <sup>***</sup> (1.90)	0.581 <sup>***</sup> (1.86)	0.560 <sup>***</sup> (1.79)	0.647 <sup>***</sup> (1.97)	0.649 <sup>***</sup> (2.00)	0.643 <sup>***</sup> (2.03)	0.605 <sup>***</sup> (1.87)	0.670 <sup>***</sup> (2.06)
Marital status: separated	-0.00593 <sup>***</sup> (-0.05)	-0.0100 <sup>***</sup> (-0.08)	-0.0410 <sup>***</sup> (-0.34)	-0.00994 <sup>***</sup> (-0.08)	-0.0119 <sup>***</sup> (-0.10)	-0.00674 <sup>***</sup> (-0.05)	-0.0193 <sup>***</sup> (-0.16)	0.0226 <sup>***</sup> (0.18)
Marital status: divorced	0.0516 <sup>***</sup> (0.15)	0.0354 <sup>***</sup> (0.10)	0.0197 <sup>***</sup> (0.06)	0.0640 <sup>***</sup> (0.19)	0.0485 <sup>***</sup> (0.14)	0.0299 <sup>***</sup> (0.08)	-0.00274 <sup>***</sup> (-0.01)	0.0788 <sup>***</sup> (0.22)
Marital status: widowed	-0.374 <sup>***</sup> (-2.10)	-0.436 <sup>***</sup> (-2.39)	-0.435 <sup>***</sup> (-2.41)	-0.330 <sup>***</sup> (-1.85)	-0.356 <sup>***</sup> (-2.00)	-0.374 <sup>***</sup> (-2.07)	-0.371 <sup>***</sup> (-2.05)	-0.303 <sup>***</sup> (-1.63)
Household size: 2	-0.0828 <sup>***</sup> (-0.39)	-0.129 <sup>***</sup> (-0.63)	-0.134 <sup>***</sup> (-0.65)	-0.0739 <sup>***</sup> (-0.35)	-0.0902 <sup>***</sup> (-0.43)	-0.0609 <sup>***</sup> (-0.28)	-0.0333 <sup>***</sup> (-0.16)	0.0192 <sup>***</sup> (0.09)
Household size: 3	-0.0571 <sup>***</sup> (-0.42)	0.0137 <sup>***</sup> (0.10)	-0.0185 <sup>***</sup> (-0.14)	-0.0533 <sup>***</sup> (-0.39)	-0.0584 <sup>***</sup> (-0.43)	-0.0521 <sup>***</sup> (-0.38)	-0.0534 <sup>***</sup> (-0.38)	-0.000109 <sup>***</sup> (-0.00)
Household size: 4	-0.0146 <sup>***</sup> (-0.10)	0.0581 <sup>***</sup> (0.41)	0.0172 <sup>***</sup> (0.12)	-0.00604 <sup>***</sup> (-0.04)	-0.00545 <sup>***</sup> (-0.04)	-0.0274 <sup>***</sup> (-0.19)	0.00454 <sup>***</sup> (0.03)	0.0240 <sup>***</sup> (0.16)
Household size: 5	-0.0149 <sup>***</sup> (-0.10)	0.0369 <sup>***</sup> (0.26)	-0.00143 <sup>***</sup> (-0.01)	0.000969 <sup>***</sup> (0.01)	-0.00788 <sup>***</sup> (-0.06)	-0.0191 <sup>***</sup> (-0.13)	0.0339 <sup>***</sup> (0.23)	0.0421 <sup>***</sup> (0.27)
Household size: 6	-0.123 <sup>***</sup> (-0.71)	-0.0126 <sup>***</sup> (-0.07)	-0.0664 <sup>***</sup> (-0.39)	-0.118 <sup>***</sup> (-0.68)	-0.104 <sup>***</sup> (-0.60)	-0.128 <sup>***</sup> (-0.73)	-0.0984 <sup>***</sup> (-0.55)	-0.0817 <sup>***</sup> (-0.45)
Household size: 7 or more	0.296 <sup>***</sup> (1.21)	0.313 <sup>***</sup> (1.28)	0.270 <sup>***</sup> (1.12)	0.329 <sup>***</sup> (1.35)	0.338 <sup>***</sup> (1.41)	0.273 <sup>***</sup> (1.11)	0.299 <sup>***</sup> (1.21)	0.414 <sup>***</sup> (1.63)
Self-reported health: bad	0.325 <sup>***</sup> (0.61)	0.265 <sup>***</sup> (0.52)	0.190 <sup>***</sup> (0.37)	0.347 <sup>***</sup> (0.66)	0.351 <sup>***</sup> (0.67)	0.308 <sup>***</sup> (0.58)	0.365 <sup>***</sup> (0.67)	0.116 <sup>***</sup> (0.22)
Self-reported health: fair	0.0138 <sup>***</sup> (0.05)	0.0160 <sup>***</sup> (0.06)	0.0000667 <sup>***</sup> (0.00)	0.00740 <sup>***</sup> (0.03)	0.0257 <sup>***</sup> (0.10)	-0.00485 <sup>***</sup> (-0.02)	0.00511 <sup>***</sup> (0.02)	0.0569 <sup>***</sup> (0.21)
Self-reported health: good	-0.246 <sup>***</sup> (-1.06)	-0.110 <sup>***</sup> (-0.44)	-0.139 <sup>***</sup> (-0.55)	-0.235 <sup>***</sup> (-1.03)	-0.217 <sup>***</sup> (-0.88)	-0.253 <sup>***</sup> (-1.08)	-0.314 <sup>***</sup> (-1.27)	-0.236 <sup>***</sup> (-0.92)
Self-reported health: very good	-0.101 <sup>***</sup> (-0.44)	0.0649 <sup>***</sup> (0.26)	0.0287 <sup>***</sup> (0.11)	-0.0911 <sup>***</sup> (-0.40)	-0.0706 <sup>***</sup> (-0.29)	-0.108 <sup>***</sup> (-0.46)	-0.194 <sup>***</sup> (-0.79)	-0.125 <sup>***</sup> (-0.49)
Household income	-0.0991 <sup>***</sup> (-0.41)	0.143 <sup>***</sup> (0.56)	0.0998 <sup>***</sup> (0.39)	-0.0805 <sup>***</sup> (-0.34)	-0.0566 <sup>***</sup> (-0.22)	-0.101 <sup>***</sup> (-0.41)	-0.168 <sup>***</sup> (-0.65)	-0.112 <sup>***</sup> (-0.42)
Index of well-being	0.103 <sup>***</sup> (1.73)		0.135 <sup>***</sup> (2.29)	0.103 <sup>***</sup> (1.73)	0.106 <sup>***</sup> (1.78)	0.103 <sup>***</sup> (1.74)	0.0917 <sup>***</sup> (1.53)	0.0976 <sup>***</sup> (1.60)
Index of social trust	0.0553 <sup>***</sup> (2.15)			0.0521 <sup>***</sup> (2.04)	0.0549 <sup>***</sup> (2.14)	0.0596 <sup>***</sup> (2.32)	0.0699 <sup>***</sup> (2.72)	0.0615 <sup>***</sup> (2.32)
Confidence in institutions	0.0835 <sup>***</sup> (3.73)			0.0872 <sup>***</sup> (3.88)	0.0839 <sup>***</sup> (3.73)	0.0849 <sup>***</sup> (3.74)	0.0902 <sup>***</sup> (4.02)	0.0923 <sup>***</sup> (4.03)
Confidence in legal institutions	0.233 <sup>***</sup> (2.90)			0.224 <sup>***</sup> (2.82)	0.235 <sup>***</sup> (2.93)			
Confidence in national institutions	-0.0290 <sup>***</sup> (-1.40)				-0.0291 <sup>***</sup> (-1.39)	-0.0309 <sup>***</sup> (-1.50)	-0.0327 <sup>***</sup> (-1.56)	-0.0345 <sup>***</sup> (-1.63)
Confidence in international institutions	-0.0302 <sup>***</sup> (-1.58)					-0.0350 <sup>***</sup> (-1.81)	-0.0333 <sup>***</sup> (-1.69)	-0.0343 <sup>***</sup> (-1.72)
ESS round	-0.298 <sup>***</sup> (-4.08)	-0.306 <sup>***</sup> (-4.23)	-0.303 <sup>***</sup> (-4.18)	-0.300 <sup>***</sup> (-4.14)	-0.294 <sup>***</sup> (-4.04)	-0.287 <sup>***</sup> (-3.92)	-0.314 <sup>***</sup> (-4.22)	-0.298 <sup>***</sup> (-3.95)
Observations	904	904	904	904	904	881	861	
Pseudo R <sup>2</sup>	0.039	0.025	0.027	0.038	0.039	0.040	0.041	0.043

Note: *t* statistics in parentheses. \**p* < 0.1, \*\**p* < 0.05, \*\*\**p* < 0.001



Table 12: Correlates of people's perception that immigrants are a strain on the welfare system in Luxembourg (European Quality of Life Survey data). Ordered probit estimates with robust standard errors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age	-0.00138 (-0.20)	-0.000852 (-0.14)	0.000230 (0.04)	-0.000666 (-0.10)	-0.00107 (-0.15)	-0.00167 (-0.24)	-0.000882 (-0.13)	-0.00117 (-0.17)
Woman	-0.0828 (-0.59)	0.00886 (0.06)	-0.0197 (-0.14)	-0.0587 (-0.42)	-0.0492 (-0.35)	-0.0597 (-0.43)	-0.0486 (-0.35)	-0.0927 (-0.66)
Marital status: separated/divorced and not living with partner	0.275 (1.36)	0.128 (0.63)	0.137 (0.69)	0.200 (0.99)	0.293 (1.46)	0.265 (1.34)	0.277 (1.36)	0.254 (1.27)
Marital status: widowed and not living with partner	0.0953 (0.41)	0.0868 (0.39)	0.0945 (0.41)	0.103 (0.46)	0.0879 (0.39)	0.0924 (0.41)	0.0914 (0.41)	0.0984 (0.42)
Marital status: never married and not living with partner	-0.0800 (-0.43)	-0.0302 (-0.16)	-0.0561 (-0.30)	-0.0539 (-0.28)	-0.0336 (-0.18)	-0.0443 (-0.23)	-0.0504 (-0.27)	-0.0891 (-0.47)
Unemployed	-0.247 (-0.40)	-0.387 (-0.63)	-0.571 (-0.90)	-0.507 (-0.79)	-0.360 (-0.57)	-0.411 (-0.64)	-0.391 (-0.61)	-0.275 (-0.45)
Unable to work	0.103 (0.18)	0.107 (0.20)	0.116 (0.21)	0.101 (0.19)	0.163 (0.29)	0.0591 (0.11)	0.170 (0.30)	0.0949 (0.17)
Retired	0.0802 (0.38)	0.0929 (0.45)	0.0968 (0.47)	0.0313 (0.15)	0.0429 (0.20)	0.0360 (0.17)	0.0386 (0.18)	0.0852 (0.41)
Homemaker	-0.200 (-0.75)	-0.239 (-0.97)	-0.292 (-1.14)	-0.266 (-1.01)	-0.280 (-1.08)	-0.277 (-1.06)	-0.270 (-1.03)	-0.191 (-0.71)
Student	0.421 (0.70)	0.554 (0.88)	0.333 (0.55)	0.265 (0.44)	0.335 (0.56)	0.311 (0.50)	0.314 (0.53)	0.429 (0.70)
Other occupation	-0.301 (-1.04)	-0.135 (-0.58)	-0.285 (-1.13)	-0.290 (-1.16)	-0.342 (-1.38)	-0.374 (-1.55)	-0.346 (-1.39)	-0.274 (-0.95)
Education: upper or post secondary	-0.00442 (-0.03)	-0.0763 (-0.49)	-0.0324 (-0.20)	-0.0409 (-0.25)	0.00857 (0.05)	-0.00728 (-0.04)	-0.000824 (-0.01)	-0.0163 (-0.10)
Education: tertiary	0.666*** (3.31)	0.526** (2.93)	0.642** (3.26)	0.620** (3.08)	0.629** (3.11)	0.607** (3.00)	0.638** (3.16)	0.672** (3.36)
Equivalised monthly household income (real 2010 euro, log)	-0.315* (-1.83)		-0.249 (-1.47)	-0.242 (-1.43)	-0.297* (-1.72)	-0.282 (-1.62)	-0.285* (-1.70)	-0.306* (-1.77)
Trust in others: fair	0.181 (1.34)	0.107 (0.81)	0.106 (0.80)	0.163 (1.19)	0.172 (1.27)	0.165 (1.23)	0.164 (1.20)	0.186 (1.39)
Trust in others: high	0.137 (1.01)	0.212 (1.61)	0.221* (1.67)	0.245* (1.81)	0.154 (1.15)	0.176 (1.31)	0.175 (1.30)	0.159 (1.19)
Self-reported health: fair	0.118 (0.41)	0.0625 (0.22)	0.115 (0.40)	0.120 (0.43)	0.137 (0.47)	0.0950 (0.32)	0.153 (0.53)	0.118 (0.42)
Self-reported health: good	-0.141 (-0.86)	-0.0532 (-0.34)	-0.0656 (-0.42)	-0.117 (-0.72)	-0.136 (-0.83)	-0.155 (-0.96)	-0.113 (-0.69)	-0.139 (-0.84)
Confidence in national institutions	0.00727 (0.28)					0.0385* (2.10)		
Confidence in legal institutions	0.00793 (0.30)						0.0345* (1.77)	
Confidence in local institutions	0.0961* (2.39)							0.108** (3.23)
confidence in institutions					0.0198* (2.21)			
Use the Internet: every day	0.125 (0.62)			0.0783 (0.40)	0.105 (0.54)	0.106 (0.54)	0.108 (0.55)	0.110 (0.54)
Use the Internet: once a week	-0.0369 (-0.12)			-0.0310 (-0.10)	0.0568 (0.19)	0.0418 (0.14)	0.0412 (0.14)	-0.0754 (-0.24)
Use the Internet: one-three times a month	5.584*** (14.68)			5.494*** (15.80)	5.307*** (14.56)	5.347*** (14.50)	5.325*** (14.48)	5.569*** (14.81)
Use the Internet: less often	-0.116 (-0.61)			-0.194 (-1.00)	-0.151 (-0.79)	-0.166 (-0.86)	-0.144 (-0.77)	-0.130 (-0.67)
Life satisfaction: so and so	-0.126 (-0.62)			-0.0231 (-0.11)	-0.0874 (-0.41)	-0.0846 (-0.40)	-0.0772 (-0.36)	-0.114 (-0.57)
Life satisfaction: very	0.152 (0.68)			0.256 (1.18)	0.198 (0.87)	0.210 (0.94)	0.196 (0.85)	0.162 (0.76)
Political participation	0.0352 (0.22)							
cut1	-2.009 (-1.52)	-0.423 (-0.88)	-2.233* (-1.73)	-2.149* (-1.67)	-2.022 (-1.56)	-2.124 (-1.62)	-2.059 (-1.60)	-2.031 (-1.55)
cut2	-0.265 (-0.20)	1.254** (2.59)	-0.549 (-0.43)	-0.443 (-0.35)	-0.300 (-0.23)	-0.404 (-0.31)	-0.343 (-0.27)	-0.288 (-0.22)
Observations	382	382	382	382	382	382	382	382
Pseudo R <sup>2</sup>	0.070	0.038	0.042	0.052	0.060	0.060	0.057	0.069

Note: t statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

## Appendix D - Tables of regressions with instrumental variables

Table 13: Accounting for possible sources on endogeneity between confidence in institutions and two measures of acceptance of globalization. Two-stages least squares with generated instruments and robust standard errors. Eurobarometer data.

	Globalization is an opportunity		Immigrants contribute a lot	
Confidence in institutions	0.0763**	(2.24)	0.154**	(2.12)
Age	0.00199	(0.87)	0.00819**	(2.54)
Woman	-0.0111	(-0.24)	-0.0398	(-0.60)
Self-employed	0.0485	(0.54)	-0.0382	(-0.24)
Not working	-0.166**	(-2.49)	-0.365***	(-3.95)
Education: 16-19 years	-0.297**	(-2.89)	0.00196	(0.02)
Education: 20 years and older	-0.195**	(-1.99)	0.178	(1.44)
Education: still studying	0.469**	(3.11)	0.535**	(2.51)
Education: No full-time education	-0.0624	(-0.31)	-0.250	(-0.63)
Marital status: with partner	0.112	(1.46)	-0.147	(-1.31)
Marital status: divorced/separated	0.219**	(2.15)	-0.322**	(-1.96)
Marital status: widow	0.402**	(3.18)	-0.206	(-1.17)
Marital status: other	-0.0540	(-0.22)	-0.366	(-0.31)
one child	0.0714	(1.05)	0.0372	(0.41)
two children	-0.109	(-0.96)	-0.196	(-1.26)
three or more children	-0.472	(-1.20)	0.0257	(0.06)
Interest in politics: slight	0.00188	(0.03)	-0.0539	(-0.60)
Interest in politics: moderate	-0.0276	(-0.39)	-0.110	(-1.11)
Interest in politics: strong	-0.0948	(-0.98)	0.188	(1.50)
Difficult paying bills: from time to time	0.0632	(0.54)	-0.188	(-1.19)
Difficult paying bills: Almost never/never	0.0494	(0.42)	-0.176	(-1.21)
Year: 2014	0.0664	(0.86)	0.110	(0.90)
Year: 2015	0.0180	(0.23)	0.0153	(0.17)
Life satisfaction: not very	1.111***	(4.84)	-1.215***	(-4.44)
Life satisfaction: fairly	0.962***	(4.15)	-0.951***	(-3.53)
Life satisfaction: very	1.086***	(4.62)	-0.970***	(-3.50)
Internet use	0.0288	(0.45)	-0.0846	(-1.00)
Constant	1.385***	(6.07)	3.556***	(17.32)
Observations	1473		977	
RMSE	0.690		0.765	
Hansen J statistic	31.62		34.22	
p-values	0.206		0.103	

**Note:** *t* statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

Table 14: Accounting for possible sources on endogeneity between confidence in institutions and the opinion that immigrants are food or bad for country's economy. Two-stages least squares with generated instruments and robust standard errors. European Social Survey data.

	Immigration bad or good for country's economy	
Confidence in institutions	1.074**	(2.42)
Age	0.0271**	(3.05)
Woman	0.529**	(2.62)
Employed	-0.268	(-0.91)
Education: lower secondary education	0.638*	(1.76)
Education: upper secondary education	0.657**	(2.24)
Education: post-secondary non-tertiary education	0.239	(0.46)
Education: tertiary education	0.810**	(2.48)
Education: other	1.271**	(2.08)
Marital status: married	0.117	(0.39)
Marital status: separated	1.185	(0.94)
Marital status: divorced	-0.882**	(-2.08)
Marital status: widowed	0.293	(0.54)
Household size: 2	0.0278	(0.08)
Household size: 3	0.247	(0.63)
Household size: 4	0.0496	(0.13)
Household size: 5	-0.305	(-0.67)
Household size: 6	0.917	(1.39)
Household size: 7 or more	-0.530	(-0.30)
Self-reported health: bad	0.0374	(0.04)
Self-reported health: fair	-0.760	(-0.95)
Self-reported health: good	-0.280	(-0.34)
Self-reported health: very good	-0.218	(-0.26)
Household income	0.244	(1.59)
Index of well-being	0.0950	(1.28)
Index of trust in others	0.184**	(3.13)
Political orientation: left	-1.530	(-1.43)
Political orientation: 2	-0.812	(-1.22)
Political orientation: 3	-0.502	(-0.76)
Political orientation: 4	-0.278	(-0.44)
Political orientation: 5	-0.893	(-1.50)
Political orientation: 6	-0.276	(-0.43)
Political orientation: 7	-0.534	(-0.82)
Political orientation: 8	-1.045	(-1.55)
Political orientation: 9	-2.179**	(-2.44)
Political orientation: right	-1.672*	(-1.81)
Time spent watching TV	-0.0768	(-1.51)
ESS round: 2	-0.714***	(-3.98)
Constant	1.302	(0.68)
Observations	904	
RMSE	2.289	
Hansen J statistic	31.95	
p-value	660.662	

**Note:** *t* statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

Table 15: Accounting for possible sources on endogeneity between confidence in institutions and the opinion that immigrants are a strain on the welfare system. Two-stages least squares with generated instruments and robust standard errors. European Quality of Life Survey data.

	Immigrants are a strain on our welfare system	
Confidence in institutions	0.0312**	(2.09)
Age	0.00587	(0.48)
Woman	-0.0788	(-0.30)
Marital status: separated/divorced and not living with partner	0.194	(0.51)
Marital status: widowed and not living with partner	-0.0793	(-0.19)
Marital status: never married and not living with partner	-0.261	(-0.84)
Unemployed	-0.875	(-0.67)
Unable to work	0.539	(0.52)
Retired	-0.227	(-0.56)
Homemaker	-0.716	(-1.42)
Student	0.859	(0.76)
Other occupation	-1.030**	(-2.49)
Education: upper or post secondary	0.135	(0.43)
Education: tertiary	1.168**	(3.12)
Equivalised monthly household income (real 2010 euro, log)	-0.552*	(-1.76)
Trust in others: fair	0.468*	(1.84)
Trust in others: high	0.290	(1.16)
Self-reported health: fair	-0.0755	(-0.14)
Self-reported health: good	-0.289	(-0.99)
Use the Internet: once a week	-0.0136	(-0.03)
Use the Internet: one-three times a month	2.552***	(4.57)
Use the Internet: less often	-0.644	(-1.42)
Life satisfaction: so and so	-0.126	(-0.33)
Life satisfaction: very	0.259	(0.63)
Political participation	-0.0709	(-0.24)
Observations	396	
RMSE	2.087	
Hansen J statistic	22.87	
p-value	0.528	

**Note:** *t* statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

Table 16: Accounting for possible sources on endogeneity between confidence in various institutions and two measures of acceptance of globalization. Two-stages least squares with generated instruments and robust standard errors. Eurobarometer data.

	(1)		(2)	
	Globalization is an opportunity	Immigrants contribute a lot		
Confidence in national institutions	0.0170	(0.46)	0.147**	(2.85)
Confidence in international institutions	0.228***	(6.24)	0.0548	(1.03)
Confidence in local authorities	0.0709	(0.85)	0.0885	(0.97)
Age	0.00267	(1.08)	0.00615*	(1.87)
Woman	0.0125	(0.24)	-0.0224	(-0.31)
Self-employed	-0.0204	(-0.20)	-0.00257	(-0.01)
Not working	-0.154**	(-2.15)	-0.343***	(-3.56)
Education: 16-19 years	-0.321**	(-2.81)	0.0286	(0.21)
Education: 20 years and older	-0.187*	(-1.70)	0.231*	(1.76)
Education: still studying	0.454**	(2.81)	0.608**	(2.76)
Education: No full-time education	-0.211	(-0.94)	-0.284	(-0.62)
Marital status: single	0.127	(1.56)	-0.204*	(-1.80)
Marital status: with partner	0.310**	(2.84)	-0.401**	(-2.35)
Marital status: divorced/separated	0.439**	(3.06)	-0.170	(-0.95)
Marital status: widow	-0.300	(-1.23)	-2.289***	(-8.95)
one child	0.128*	(1.76)	-0.0362	(-0.39)
two children	-0.0829	(-0.68)	-0.107	(-0.68)
three or more children	-0.455	(-1.27)	-0.279	(-0.80)
Interest in politics: slight	0.0467	(0.63)	-0.148*	(-1.71)
Interest in politics: moderate	-0.0846	(-1.02)	-0.167*	(-1.71)
Interest in politics: strong	-0.154	(-1.42)	0.145	(1.16)
Difficulty paying bills: from time to time	-0.129	(-1.04)	-0.0965	(-0.58)
Difficulty paying bills: almost never/never	-0.116	(-0.95)	-0.122	(-0.81)
Year: 2014	0.135	(1.64)	0.115	(1.19)
Life satisfaction: not very	1.041***	(4.46)	-1.158***	(-4.25)
Life satisfaction: fairly	0.917***	(3.88)	-0.889***	(-3.64)
Life satisfaction: very	1.023***	(4.33)	-0.904***	(-3.56)
Internet use	0.0343	(0.46)	-0.121	(-1.39)
Observations	1068		867	
RMSE	0.668		0.753	
Hansen J statistic	86.25		79.31	
p-value	0.198		0.315	

Note: *t* statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

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## References

Allport, G. W. (1954). The historical background of modern social psychology. *Handbook of social psychology*, 1:3–56.

Angrist, J. D. (2001). Estimation of limited dependent variable models with dummy endogenous regressors: simple strategies for empirical practice. *Journal of business & economic statistics*, 19(1):2-28.

Angrist, J. D. and Pischke, J.-S. (2009). *Mostly harmless econometrics: An empiricist's companion*. Princeton university press.

Ariely, D., Bracha, A., and Meier, S. (2009). Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *American Economic Review*, 99(1):544-55.

Bateman, T. and Organ, D. (1983). Job satisfaction and the good soldier: the relation between affect and employee “citizenship”. *Academy of Management Journal*, 26:587 - 595.

Benhabib, J. and Jovanovic, B. (2012). Optimal migration: a world perspective. *International Economic Review*, 53(2):321-348.

Benvenisti, E., Nolte, G., and Barak-Erez, D. (2004). *The welfare state, globalization, and international law*. Springer, Berlin and New York.

Bohman, A. and Hjerm, M. (2014). How the religious context affects the relationship between religiosity and attitudes towards immigration. *Ethnic and Racial Studies*, 37(6):937–957.

Borjas, G. J. (1999a). Economic research on the determinants of immigration: lessons for the European Union. World Bank Technical Paper 438, World Bank Publications.

Borjas, G. J. (1999b). Immigration and welfare magnets. *Journal of labor economics*, 17(4):607-637.

Borjas, G. J. (2003). The labor demand curve is downward sloping: Reexamining the impact of immigration on the labor market. *National Bureau of Economic Research*, (9755).

Bruni, L. and Stanca, L. (2006). Income aspirations, television and happiness: Evidence from the World Values Survey. *Kyklos*, 59(2):209-225.

Bruni, L. and Stanca, L. (2008). Watching alone: Relational goods, television and happiness. *Journal of Economic Behavior & Organization*, 65(3):506-528.

Callens, M.-S., Valentova, M., and Meuleman, B. (2014). Do attitudes towards the integration of immigrants change over time? a comparative study of natives, second-generation immigrants and foreign-born residents in luxembourg. *Journal of International Migration and Integration*, 15(1):135-157.

Ceobanu, A. M. and Escandell, X. (2010). Comparative analyses of public attitudes toward immigrants and immigration using multinational survey data: A review of theories and research. *Annual Review of Sociology*, 36:309-328.

Clemens, M. A. (2011). Economics and emigration: Trillion-dollar bills on the sidewalk? *The Journal of Economic Perspectives*, 25(3):83-106.

Coser, L. (1956). The social functions of conflict. *New York*.

Danner, D. D., Snowdon, D. A., and Friesen, W. V. (2001). Positive emotions in early life and longevity: findings from the nun study. *Journal of personality and social psychology*, 80(5):804.

Davidov, E., Meuleman, B., Billiet, J., and Schmidt, P. (2008). Values and support for immigration: A cross-country comparison. *European Sociological Review*, 24(5):583-599.

De Martino, B., Kumaran, D., Seymour, B., and Dolan, R. J. (2006). Frames, biases, and rational decision-making in the human brain. *Science*, 313(5787):684-687.

Delhey, J. and Newton, K. (2003). Who trusts? The origins of social trust in seven societies. *European Societies*, 5(2):93-137.



Docquier, F., Machado, J., and Sekkat, K. (2015). Efficiency gains from liberalizing labor mobility. *The Scandinavian journal of economics*, 117(2):303-346.

Doob, A. N. and Macdonald, G. E. (1979). Television viewing and fear of victimization: Is the relationship causal? *Journal of Personality and Social Psychology*, 37(2):170.

Edmans, A. (2012). The link between employee satisfaction and firm value, with implications for corporate social responsibility. *The Academy of Management Perspectives*, 26(4):1-19.

Fetzer, J. S. (2011). *Luxembourg as an Immigration Success Story: The Grand Duchy in Pan-European Perspective*. Lexington Books, Lanham, MD.

Fitzgerald, J. (2012). Social engagement and immigration attitudes: Panel survey evidence from Germany. *International Migration Review*, 46(4):941-970.

Frey, B. S., Benesch, C., and Stutzer, A. (2007). Does watching TV make us happy? *Journal of Economic Psychology*, 28(3):283-313.

Gadarian, S. K. (2010). The politics of threat: How terrorism news shapes foreign policy attitudes. *The Journal of Politics*, 72(02):469-483.

George, J. and Brief, A. (1992). Feeling good - doing good: a conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological Bulletin*, 2(112):310 - 329.

Gunter, G. B. and Hoeven, R. (2004). The social dimension of globalization: A review of the literature. *International Labour Review*, 143(1-2):7-43.

Hainmueller, J. and Hiscox, M. J. (2007). Educated preferences: Explaining attitudes toward immigration in Europe. *International Organization*, 61(2):399- 442.

Hamilton, B. and Whalley, J. (1984). Efficiency and distributional implications of global restrictions on labour mobility: Calculations and policy implications. *Journal of Development Economics*, 14(1):61-75.

Hillman, A. L. (2002). Immigration and intergenerational transfers. In Siebert, H., editor, *Economic policy for aging societies*, pages 213-226. Springer, Berlin.

Imas, A. (2014). Working for the “warm glow”: On the benefits and limits of prosocial incentives. *Journal of Public Economics*, 114:14-18.

Ivlevs, A. (2012). Ageing, local birth rates and attitudes towards immigration: Evidence from a transition economy. *Regional Studies*, 46(7):947-959.

Judge, T., Thoreson, C., Bono, J., and Patton, G. (2001). The job satisfaction - job performance relationship: a qualitative and quantitative review. *Psychological Bulletin*, 127:376 - 407.

Krieger, T. (2004). Fertility rates and skill distribution in Razin and Sadka's migration-pension model: A note. *Journal of Population Economics*, 17(1):177-182.

Kwak, H., Zinkhan, G. M., and Dominick, J. R. (2002). The moderating role of gender and compulsive buying tendencies in the cultivation effects of TV show and TV advertising: A cross cultural study between the United States and South Korea. *Media Psychology*, 4(1):77-111.

Lanzieri, G. (2011). Fewer, older and multicultural?: Projections of the EU populations by foreign/national background. *Eurostat Methodologies and Working Papers*, (12). <http://ec.europa.eu/eurostat/documents/3888793/5850217/KS-RA-11-019-EN.PDF/0345b180-b869-4cb0-907b-d755b699a369>.

Lewbel, A. (2012). Using heteroscedasticity to identify and estimate mismeasured and endogenous regressor models. *Journal of Business & Economic Statistics*, 30(1):67-80.

Lundborg, P. and Segerstrom, P. S. (2002). The growth and welfare effects of international mass migration. *Journal of International Economics*, 56(1):177- 204.

Malchow-Møller, N., Munch, J. R., Schroll, S., and Skaksen, J. R. (2009). Explaining cross-country differences in attitudes towards immigration in the EU- 15. *Social Indicators Research*, 91(3):371-390.

Mayda, A. M. (2006). Who is against immigration? A cross-country investigation of

individual attitudes toward immigrants. *The Review of Economics and Statistics*, 88(3):510-530.

Mayda, A. M. and Rodrik, D. (2005). Why are some people (and countries) more protectionist than others? *European Economic Review*, 49(6):1393-1430.

Meuleman, B., Davidov, E., and Billiet, J. (2009). Changing attitudes toward immigration in Europe, 2002-2007: A dynamic group conflict theory approach. *Social Science Research*, 38(2):352-365.

Mutz, D. C. and Reeves, B. (2005). The new videomalaise: Effects of televised incivility on political trust. *American Political Science Review*, 99(01):1-15.

Nannestad, P. (2004). Immigration as a challenge to the Danish welfare state? *European Journal of Political Economy*, 20(3):755-767.

OECD (2001). *The well-being of Nations: the role of human and social capital*. Office of Economic Cooperation and Development (OECD), Paris.

OECD (2019). The OECD SOCX Manual - 2019 edition - A guide to the OECD Social Expenditure Database.

O'Rourke, K. H. and Sinnott, R. (2001). What determines attitudes towards protection? Some cross-country evidence. In Collins, S. and Rodrik, D., editors, *Brookings Trade Forum 2001*, pages 157-206. Brookings Institute Press, Washington, D.C.

O'Rourke, K. H. and Sinnott, R. (2006). The determinants of individual attitudes towards immigration. *European Journal of Political Economy*, 22(4):838-861.

Ottaviano, G. I. and Peri, G. (2012). Rethinking the effect of immigration on wages. *Journal of the European economic association*, 10(1):152-197.

Pavot, W. and Diener, E. (1993). Review of the satisfaction with life scale. *Psychological assessment*, 5:2.

Pénard, T., Poussing, N., and Suire, R. (2013). Does the internet make people happier? *The Journal of Socio-Economics*, 46:105 – 116.

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual review of psychology*, 49(1):65-85.

Prendergast, C. (2008). Intrinsic motivation and incentives. *American Economic Review*, 98(2):201-05.

Proto, E., Sgroi, D., and Oswald, A. (2010). Are happiness and productivity lower among University students with newly-divorced parents? *Warwick economic research papers*, (937).

Quillian, L. (1995). Prejudice as a response to perceived group threat: Population composition and anti-immigrant and racial prejudice in Europe. *American sociological review*, pages 586-611.

Rustenbach, E. (2010). Sources of negative attitudes toward immigrants in Europe: A multi-level analysis. *International Migration Review*, 44(1):53-77.

Sabatini, F., & Sarracino, F. (2017). Online networks and subjective well being. *Kyklos*, 70(3), 456-480.

Sarracino, F. and Mikucka, M. (2017). Social capital in Europe from 1990 to 2012: Trends and convergence. *Social Indicators Research*, 131(1):407–432.

Savelkoul, M., Scheepers, P., Tolsma, J., and Hagendoorn, L. (2010). Anti-muslim attitudes in the netherlands: Tests of contradictory hypotheses derived from ethnic competition theory and intergroup contact theory. *European Sociological Review*, 27(6):741-758.

Scheve, K. F. and Slaughter, M. J. (2001). Labor market competition and individual preferences over immigration policy. *Review of Economics and Statistics*, 83(1):133-145.

Scheve, K. F. and Slaughter, M. J. (2007). A new deal for globalization. *Foreign affairs*, pages 34-47.

Schiff, M. (2002). Love thy neighbor: trade, migration, and social capital. *European Journal of Political Economy*, 18(1):87-107.

Schlueter, E. and Scheepers, P. (2010). The relationship between outgroup size and anti-outgroup attitudes: A theoretical synthesis and empirical test of group threat-and intergroup contact theory. *Social Science Research*, 39(2):285-295.

Schlueter, E., Schmidt, P., and Wagner, U. (2008). Disentangling the causal relations of perceived group threat and outgroup derogation: cross-national evidence from German and Russian panel surveys. *European Sociological Review*, 24(5):567-581.

Schlueter, E. and Wagner, U. (2008). Regional differences matter examining the dual influence of the regional size of the immigrant population on derogation of immigrants in Europe. *International Journal of Comparative Sociology*, 49(2-3):153-173.

Spilker, G., Schaffer, L., and Bernauer, T. (2012). Does social capital increase public support for economic globalisation? *European Journal of Political Research*, 51(6):756-784.

STATEC (2012). La population par nationalite (1). Recensement de la population 2011. Premiers resultats n. 04. <http://www.statistiques.public.lu/catalogue-publications/RP2011-premiers-resultats/2012/04-12.pdf>.

Stiglitz, J. (2002a). *Globalization and its discontents*. London: Allen Lane.

Stiglitz, J. E. (2002b). Employment, social justice and societal well-being. *International Labour Review*, 141:9.

Tversky, A. and Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481):453-458.

Valentova, M. and Berzosa, G. (2012). Attitudes toward immigrants in Luxembourg. do contacts matter? *International review of sociology*, 22(2):341-363.

Von Der Ruhr, M. and Daniels, J. P. (2003). The relationship between religious affiliation, region, race, and attitudes toward globalization. *Faith and economics*, 42:133 - 145.

Walter, S. (2010). Globalization and the welfare state: Testing the microfoundations of the compensation hypothesis. *International Studies Quarterly*, 54:403-426.

Woolcock, M. and Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The world bank research observer*, 15(2):225-249.

Wright, T. and Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology*, 5:84-94.