



Gutenberg School of Management and Economics  
& Research Unit “Interdisciplinary Public Policy”

Discussion Paper Series

*Depression of the deprived or eroding  
enthusiasm of the elites:*

*What has shifted the support for globalization?*

Philipp Harms and Jakob Schwab

November 3, 2019

Discussion paper number 1912

## Contact details

Philipp Harms  
Chair of International Economics  
Johannes Gutenberg University Mainz  
Jakob-Welder-Weg 4 55128  
Mainz Germany

[philipp.harms@uni-mainz.de](mailto:philipp.harms@uni-mainz.de)

Jakob Schwab  
Post Doctoral Researcher  
German Development Institute  
Tulpenfeld 6, 53113  
Bonn, Germany

[jakob.schwab@die-gdi.de](mailto:jakob.schwab@die-gdi.de)

All discussion papers can be downloaded from <http://wiwi.uni-mainz.de/DP>

**Depression of the deprived or eroding enthusiasm of the elites:  
What has shifted the support for globalization?**

Philipp Harms (Johannes Gutenberg University Mainz) and  
Jakob Schwab (German Development Institute)<sup>1</sup>

This version: November 3, 2019

Abstract:

We use the 2003 and 2013 waves of the International Survey Program (ISSP) in order to explore the change in people's attitudes that may be behind the recent backlash against globalization. We show that the average support for international trade has decreased in many – albeit not all – countries, and we demonstrate that these changes are related to the depth and length of the global financial crisis of 2008/09 as well as the evolution of income inequality. Moreover, our results document a declining support for international trade of those individuals who are likely to benefit from globalization: the young, high-skilled and well-off. We show that this “eroding enthusiasm of the elites” is empirically relevant even if we control for individuals' increasing exposure to international labor-market competition.

**Keywords:** Globalization, Protectionism, Attitudes, Survey Studies

1. Introduction

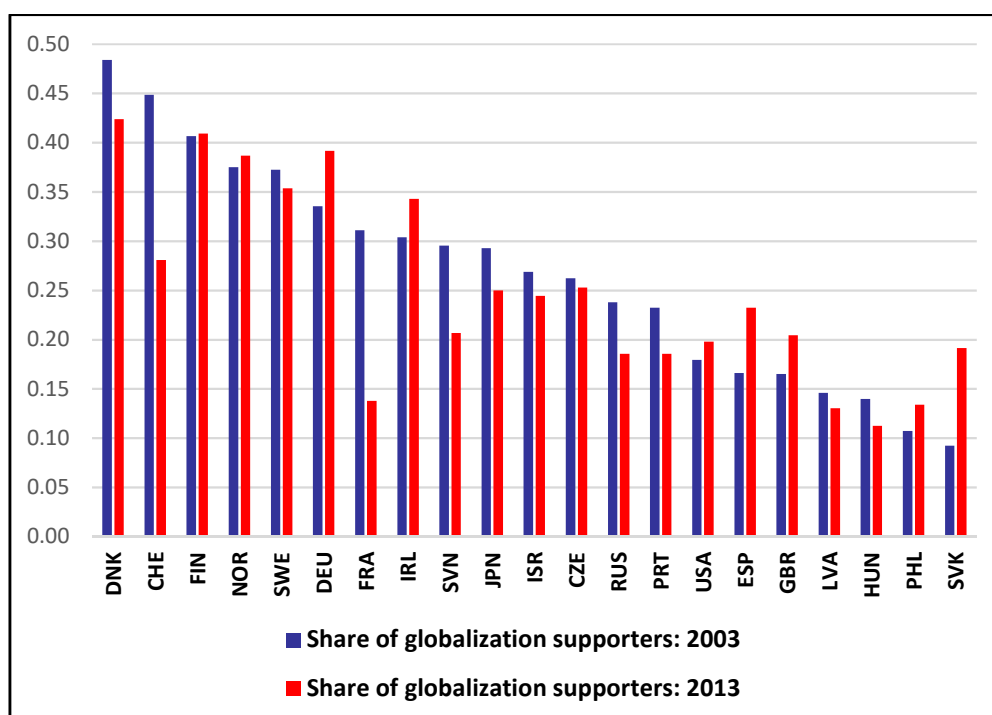
In recent years, globalization has got under strain: while the vote to leave the European Union will remove Britain from the world's biggest common market, the Trump administration's mantra to put “America first” has ignited a trade war between the US, Europe and China. These developments will almost certainly reduce the international exchange of goods, services and assets, and accelerate a development that has already started during the global financial crisis. However, while the great trade

---

<sup>1</sup> Philipp Harms: [philipp.harms@uni-mainz.de](mailto:philipp.harms@uni-mainz.de); Jakob Schwab: [Jakob.Schwab@die-gdi.de](mailto:Jakob.Schwab@die-gdi.de). We received very helpful comments from seminar participants at Johannes Gutenberg University Mainz, participants of the EWPM4 workshop in Kraków, as well as participants of the conference “The Political Economy of International Conflict and Cooperation” in Konstanz. Special thanks go to Mark Ruszel and Marius Orthey for excellent research assistance. Of course, we alone are responsible for all remaining errors.

collapse of 2008/09 could be explained by a decline in investment activity as well as a breakdown of global financial markets (Baldwin 2012, Chor and Manova 2012, Bems et al. 2013, OECD 2016), the new protectionism is associated with the growing success of political parties and candidates who integrate the fight against globalization into their agendas. Put differently, the anti-globalist backlash does not happen *despite* nations' objectives, it seems to reflect the desire and the ambitions of large parts of countries' constituencies. This, of course, spurs international conflict and makes it increasingly difficult to engage in any form of cooperation.

The goal of our paper is to explain these developments and to identify the forces that have affected (and possibly changed) attitudes towards globalization in different countries. Using data from the International Social Survey Program – a large international survey that elicits individuals' view on international trade – we compare the responses given in the context of the 2003-wave to the responses of the 2013 wave. These two waves are separated by ten years, during which many countries underwent severe recessions, often associated with substantial drops in income, large increases in unemployment and widening inequality.



**Figure 1:** Percentage of ISSP respondents who disagree or strongly disagree with the statement “[My country] should limit the import of foreign products in order to protect its national economy.” Source: 2003 and 2013 waves of the International Social Survey Programme (ISSP).

Figure 1 illustrates that, in fact, the average support for international trade changed quite substantially in many countries. The size of the bars indicates the percentage of ISSP respondents who strongly disapproved or disapproved with the statement “[My country] should limit the import of foreign products in order to protect its national economy” in 2003 and 2013, respectively. Apparently, the support for international trade has decreased in twelve out of 21 countries, while it has increased in the nine other countries. As we will show in the following section, the average support for international trade can be decomposed into three components: a component that reflects the “*collective experience*” of *all* respondents in a given country, a component that reflects the “*group-specific experience*” of those respondents who are categorized by certain socio-economic characteristics – e.g. a given educational attainment or age –, and a “*composition effect*”, which reflects changing relative shares of the different groups. With respect to the collective experience of different countries’ residents, we conjecture that the experience of the global financial crisis and of the European debt crisis illustrated the perils of international interdependence, and that the change of individuals’ attitudes is influenced by the severity of these crises in their respective country. Moreover, and following up on the recent discussion about the distributional consequences of globalization (see, e.g. Kanbur 2015, Autor et al. 2016, Pavcnik 2017, Lang et al. 2018, Dorn et al. 2018), we expect the group-specific component to reflect a widening difference in attitudes between the “winners” and “losers” from globalization.

Interestingly, this is not what we find. While our results document that country-specific changes in the average support for international trade are linked to the depth and length of the 2008/09 recession and evolution of income inequality, our findings contradict the standard narrative that the increasing sentiment against globalization reflects the anger of those groups whose wages and jobs were negatively affected by international competition. By contrast, it is rather the *eroding enthusiasm of the elites* than the *depression of the deprived*, which contributed to the declining support for international trade: in 2013, youth, education and income were less likely to make individuals respond explicitly in favor of international trade than in 2003. Of course, a young individual with a university degree and a leading position in his company was still less opposed against international competition than an elderly person without a formal education. However, the difference has shrunk substantially between 2003 and 2013. While this declining discrepancy still allows for the possibility that the losers from

globalization have become more positive about international trade, our results demonstrate that this is not the case: instead, those individuals who have benefitted most from the advance of globalization seem to have lost their enthusiasm for the very basis of their prosperity. We demonstrate that this effect is still discernible if we account for the fact that firms' offshoring activities have made even high-skilled workers increasingly vulnerable to international competition: while offshoring – or the threat of it – clearly reduces individuals' enthusiasm for international trade, the “eroding enthusiasm of the elites” reflects a tendency that cannot be easily associated with distributional interests.

Our paper is related to a growing literature that uses survey and election data to understand how the distributional effects of globalization affect individual attitudes and political outcomes: Mayda and Rodrik (2005), Jäkel and Smolka (2017) as well as Egger and Fischer (2019) demonstrate that individuals' replies to the question whether they appreciate or oppose international goods trade are very much in line with their distributional interests<sup>2</sup>. In a similar spirit, Scheve and Slaughter (2004), Kaya and Walker (2012) as well as Harms and Schwab (2019) analyze the empirical determinants of people's attitudes towards foreign direct investment and demonstrate that those individuals who are more likely to benefit from the presence of multinational enterprises are more likely to utter a attitude towards these companies. Finally, focusing on the role of international production, Owen and Johnston (2017) and Egger and Fischer (2019) show that the perceived risk that one's job is offshored also influences attitudes towards international trade, independent of individuals' skill level.

A closely related strand of literature relates voting and election outcomes at the regional level to the respective regions' exposure to low-wage competition, especially from China (Autor et al. 2016a, 2016b; Colantone and Stanig 2018a, 2018b; Dippel et al. 2015; Malgouyres 2017). The general thread running through these studies is that an industrial structure that renders a region more vulnerable to the “China shock” increases the success of right-wing and populist parties at the polls, or the likelihood that a majority of inhabitants vote in favor of leaving the European Union. Moreover, while Becker et al. (2017) do not find an economically significant influence of globalization on regional Brexit outcomes, their more recent study (Alabrese et al.

---

<sup>2</sup> More recently, Braml and Felbermayr 2018 analyzed individuals' attitudes on the Transatlantic Trade and Investment Partnership (TTIP) and highlighted the importance of ideology.

2019) combines regional and individual-level data and confirms the notion that those individuals who were less likely to benefit from globalization were more likely to vote in favor of Brexit.

While we follow the first strand of literature mentioned above in analyzing survey data that reveal individuals' attitudes towards globalization, the innovative contribution of our paper is its dynamic perspective, i.e. our approach to determine how attitudes towards trade have evolved over time, how they have been affected by countries' economic performance in a crisis-ridden decade, and how the marginal effects of potential determinants have changed between 2003 and 2013.

The rest of the paper is structured as follows: In Section 2, we theoretically decompose the changing support for international trade at the country level into different components. Section 3 describes our data set. In Section 4, we consider how much of the changing support for international trade between 2003 and 2013 was country-specific, and whether country-specific developments can be linked to the countries' economic performance. In Section 5, we focus on the marginal effects of respondents' socio-economic characteristics. After documenting a significant change in the marginal effects of various socio-economic characteristics between 2003 and 2013, we explore in Section 6 whether the declining enthusiasm of highly skilled individuals can be explained by these individuals' increasing exposure to labor market competition through offshoring. Section 7 tests the robustness of our results with respect to various changes in sample and specification, while Section 8 summarizes our results and offers some conclusions.

## 2. Decomposing the average support for globalization

While changes in the *average* support for globalization is the most relevant magnitude when it comes to explaining protectionist policies and rhetorics in different countries, it is important to identify the forces that may drive such changes.<sup>3</sup> To illustrate these forces, we present the following simple model: assume that the support for

---

<sup>3</sup> While we are aware that actual policies do not necessarily reflect the preferences of the median voter, but are heavily influenced by interest groups, we argue that actual decision-makers will find it hard to persistently deviate from the majority position in their actions and statements.

globalization of an individual  $i$  at time  $t$  is denoted by the variable  $y_{it}$ , and that it can be described by the following expression:

$$(1) \quad y_{it} = \beta_{ct} d_c + \gamma_{jt} x_j + \varepsilon_{it}$$

In equation (1),  $d_c$  is a dummy variable that is one if individual  $i$  is a resident of country  $c$  at time  $t$ , and zero otherwise, while  $x_j$  reflects some socio-economic characteristic of individual  $i$ , e.g. a certain type of educational attainment or membership in a certain age group. To simplify matters, our model assumes that there is only one socio-economic variable – say, educational attainment – that distinguishes individuals. The coefficients  $\beta_{ct}$  and  $\gamma_{jt}$  represent the *marginal effect* of the two variables on the individual's support for international trade. Importantly, we allow these coefficients to change over time. Finally,  $\varepsilon_{it}$  is an idiosyncratic component, which cannot be related to observables. We assume that the mean of this component across all residents of a country equals zero.

For the sake of simplicity, we assume that the number of individuals living in country  $c$  does not vary over time and that it is given by  $N_c$ . Moreover, there are  $M_c$  groups – e.g. defined by their members' educational attainment – that individuals can be assigned to. Finally, the number of individuals assigned to group  $j$  in country  $c$  at time  $t$  is given by  $n_{jct}$ . Given these assumptions, we can write the average support for international trade in country  $c$  at time  $t$  as

$$(2) \quad \bar{y}_{ct} = \beta_{ct} d_c + \frac{1}{N_c} \sum_{j=1}^{M_c} n_{jct} \gamma_{jt} x_j$$

The change of  $\bar{y}_{ct}$  between period  $t-1$  and period  $t$  is then given by

$$(3) \quad \bar{y}_{ct} - \bar{y}_{c(t-1)} = (\beta_{ct} - \beta_{c(t-1)}) d_c + \frac{1}{N_c} \sum_{j=1}^{M_c} (\gamma_{jt} - \gamma_{j(t-1)}) n_{jct} x_j + \frac{1}{N_c} \sum_{j=1}^{M_c} (n_{jct} - n_{jc(t-1)}) \gamma_{j(t-1)} x_j$$

The first term on the right hand-side reflects what we call “*collective experience*”, i.e. a changing perception of international trade that can be observed for *all* residents of a



country, and that may stem from the country-specific economic performance between  $t-1$  and  $t$ . The second term reflects the “*group-specific experience*” and may result in members of the same group assessing international trade differently at two different points in time. Finally, the last term relates the change of the average attitude towards trade due to a changing *composition* of the population.

In what follows, we will estimate variants of equation (1) in order to evaluate the empirical relevance and direction of “collective experience” and “group-specific experience” effects.<sup>4</sup>

### 3. Data

Our data on respondents’ attitudes towards international trade and their socio-economic characteristics are based on the International Social Survey Programme (ISSP). The ISSP organizes national surveys in a broad cross-section of countries, eliciting information on a large set of socially relevant topics. The data we use is from the ISSP National Identity II and III modules of 2003 and 2013. The surveys were conducted in 35 and 33 countries in either wave, respectively, but the country coverage is not identical across the two waves. In order to meaningfully analyze the change in attitudes, we concentrate in our analysis on those 24 countries in which surveys were conducted in both waves. Not all relevant survey items were used in all countries (Korea, South Africa), and for some countries no comparable macroeconomic data was available (Taiwan and the Arab Part of Israel), such that we also excluded these countries from the analysis. All observations where respondents picked “Can’t choose”, “NA”, “refused” as answers in variables of interest, were also dropped, such that we remain with 37,158 observations from 21 countries in our sample. 17,107 observations are from the 2003 wave, 20,051 from the 2013 wave. The number of observations from a single country in a given year is, on average, 884, and ranges from 328 (Japan in 2013) to 1468 (Germany in 2013). The sample covers developed and emerging economies. A list of all countries in the sample is provided in Table A1 in Appendix A.

---

<sup>4</sup> While equation (1) does not allow assessing the relevance of the “composition effect” sketched above, one of our robustness tests in Section 7 will consider whether changes in the size of different groups – e.g. an increasing number of individuals with a university degree – matters for our results at the individual level.

The indicator that we use in order to measure individuals' views on international trade is based on the answer to the following question:

“How much do you agree or disagree with the following statement?: ‘[My country] should limit the import of foreign products in order to protect its national economy.’”

Respondents were asked to answer on a scale from “Agree strongly” (=1) to “Disagree strongly” (=5). We capture this answer in the variable *IMP\_PHIL*, which takes a value of 1 if a respondent disagrees or strongly disagrees with the statement (i.e. if he or she gives the answer 4 or 5). Over the entire sample, this applies to roughly 40% of the population. Note that we interpret the intermediate answer 3 (“Neither agree nor disagree”) as indicating that a respondent is not fully supportive of international trade. We will later relax this assumption and explore how the alternative interpretation of indifference as being “mildly supportive” affects our results.

In addition to the information about attitudes towards international trade, the ISSP survey elicits a wide range of data on the respondents' socioeconomic background. This allows relating individuals' attitudes towards international trade to their personal characteristics. In our baseline estimations, we include information on gender, age, education, income, and employment status as our main explanatory variables at the individual level. *Male* is a gender dummy, while *Age* reflects respondents' age at the time of the survey they were involved in.<sup>5</sup> For education, we take the highest *Degree* of a person, ranging from 1=“no formal education” to 5=“university degree completed”. We proxy for the position in firm hierarchies by creating a dummy that reflects whether a respondent supervises others at work (*WrkSup*), which possibly reflects informal qualification. The relative income position of a person in his or her country (*RelIncome*) is also included, computed as the respondent's annual income relative to the sample average in his or her respective country and year. Moreover, it is conceivable that the attitude towards international trade is predominantly driven by individuals' attitudes towards just about everything that is foreign. To account for this possibility, we use the response to the following

---

<sup>5</sup> We also experimented with specifications that included both *Age* and *Age squared*. However, *Age squared* did not have a significant effect, so we eventually decided to restrict our attention to the linear influence of *Age*.

statement: “Generally speaking, [your country] is a better country than most other countries”, as a control variable. Again, responses vary on a scale from 1, “agree strongly”, to 5, “disagree strongly”, and a higher value should proxy for a less nationalist, more cosmopolitan attitude. This is the variable *Cosmopol*. More detailed descriptions and the sources of all variables we use can be found in Table A2 in Appendix A. Summary Statistics are provided in Table A3.

#### 4. Attitudes towards trade: The role of individual and country-specific factors

Following up on the simple conceptual framework from Section 2, we start by estimating variants of the following regression equation:

$$(4) \quad IMP\_PHIL_{ict} = \sum_{c=1}^C \beta_c d_c + \sum_{c=1}^C \delta_c \xi_{2013} d_c + \sum_{j=1}^J \gamma_j x_{j,ict} + \varepsilon_{ict}$$

As described above,  $IMP\_PHIL_{ict}$  is a binary variable that takes a value of one if individual  $i$  who is a resident of country  $c$  reveals a positive attitude towards foreign imports at time  $t$ , with  $t = 2003, 2013$ . The variable  $d_c$  is a dummy that equals one if individual  $i$  is resident of country  $c$ . To capture the possibility that the marginal effect of residence varies over time – reflecting “collective experience” – we also interact this variable with a dummy  $\xi_{2013}$ , which equals one for all observations of the 2013 ISSP wave, and zero for all observations of the 2003 wave. Note that, for the time being, we assume that marginal effects of the socio-economic characteristics  $x_{j,ict}$  (age, gender, education, professional status etc.) do not vary over time.<sup>6</sup> Finally,  $\varepsilon_{ict}$  is the standard error term, which we cluster at the country level in all estimations in order to account for common shocks within countries. Note that, despite its combination of a cross-sectional and a time-series dimension, our data set does *not* exhibit a panel structure, since individuals are not tracked over time. We are thus dealing with *repeated cross sections*, and we cannot explicitly address individual-specific unobserved

---

<sup>6</sup> We use de-meaned individual variables  $x_{k,ict}$  in our estimations in order to facilitate an interpretation of the country-specific intercepts  $d_c$  as country-specific average answers.

heterogeneity. However, we have no reason to believe that the ISSP did not randomly select survey respondents in the two waves.

Variables	(1) IMP_PHIL	Variables (cont'd)	(1) IMP_PHIL
Male	0.062*** (0.008)	PHL	0.117*** (0.003)
Age	-0.001*** (0.000)	PHL2013	0.050*** (0.002)
Degree	0.043*** (0.007)	ISR	0.243*** (0.004)
WrkSup	0.028*** (0.006)	ISR2013	-0.011*** (0.002)
RelIncome	0.020*** (0.005)	JPN	0.328*** (0.004)
Cosmopol	0.041*** (0.003)	JPN2013	-0.011*** (0.004)
DEU	0.370*** (0.007)	ESP	0.224*** (0.010)
DEU2013	-0.021 (0.014)	ESP2013	0.021*** (0.006)
GBR	0.171*** (0.003)	LVA	0.116*** (0.004)
GBR2013	0.041*** (0.003)	LVA2013	-0.022*** (0.002)
USA	0.173*** (0.004)	SVK	0.076*** (0.002)
USA2013	0.030*** (0.003)	SVK2013	0.127*** (0.003)
HUN	0.175*** (0.006)	FRA	0.294*** (0.002)
HUN2013	-0.047*** (0.004)	FRA2013	-0.184*** (0.002)
IRL	0.315*** (0.002)	PRT	0.285*** (0.009)
IRL2013	-0.005 (0.007)	PRT2013	-0.072*** (0.004)
NOR	0.367*** (0.002)	DNK	0.479*** (0.002)
NOR2013	0.011*** (0.002)	DNK2013	-0.092*** (0.005)
SWE	0.372*** (0.001)	CHE	0.426*** (0.002)
SWE2013	-0.030*** (0.004)	CHE2013	-0.188*** (0.006)
CZE	0.279*** (0.004)	FIN	0.425*** (0.002)
CZE2013	-0.011*** (0.001)	FIN2013	-0.022*** (0.004)
SVN	0.305*** (0.004)		
SVN2013	-0.120*** (0.005)	Observations	37158
RUS	0.204*** (0.005)	Countries	21
RUS2013	-0.001 (0.006)	R <sup>2</sup>	0.344

**Notes:** This table shows the results of estimating Equation (4) using ISSP survey data. Regressors are individual characteristics, dummies for respondents' country of origin, as well as interactive terms that multiply the country-of-origin dummies with a dummy variable that equals one (zero) in the 2013 (2003) waves. Cluster robust standard errors at the country level are reported in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

**Table 1:** Determinants of individuals' attitudes towards free trade. Marginal effect of country dummies allowed to change over time

The results of estimating equation (4) are displayed in Table 1. The coefficients and standard errors suggest that the effects of socio-economic characteristics are consistent with expectations:<sup>7</sup> a lower *Age*, higher education (*Degree*), a more successful career (*WrkSup*), as well as individual prosperity (*RelIncome*) induce respondents to support international trade since all these features enable individuals to reap the benefits of globalization.<sup>8</sup> On top of these preconditions for economic success, a generally open attitude towards other countries (*Cosmopol*) also raises the likelihood that an individual welcomes foreign goods imports.<sup>9</sup> Moreover, Table 1 shows that, in most economies, the average attitude towards international trade changed significantly between 2003 and 2013. More specifically, we observe that the average support for international trade decreased in twelve out of 21 countries, while it increased in six countries – interestingly, including the United Kingdom and the United States – and did not exhibit significant changes in three countries. Note that these results differ from the magnitudes displayed Figure 1 in a subtle, but important way: while Figure 1 showed the joint effect of “collective experience”, “group-specific experience” and of a changing composition, the interactive country-year terms in equation (4) isolate the “collective experience” effect.

Are these differences linked to countries’ economic performance between 2003 and 2013 – especially, to how hard the respective economies were hit by the global financial crisis (GFC) of 2008/09? To explore this question, we replaced the time-dependent country dummies by time-invariant dummies and added a variable (*Crisis*-

---

<sup>7</sup> The somewhat odd result that an individual’s gender seems to matter for her or his attitude towards globalization was already found by Mayda and Rodrik (2005) as well as Jäkel and Smolka (2017) and Harms and Schwab (2019).

<sup>8</sup> Note that the overwhelming majority of the countries in our sample are high-income or upper-middle income countries with a human-capital endowment far above the global average. The logic of the Stolper-Samuelson theorem thus implies that individuals with a high educational attainment benefit from increasing trade openness.

<sup>9</sup> Of course, a higher value of *Cosmopol* does not necessary reveal a less nationalist attitude, but may simply reflect objective facts – i.e. a more favorable economic, social and political environment prevailing in the respondent’s country. To isolate the effect of “pure” nationalism, we ran a robustness test replacing *Cosmopol* by the residual from a regression of that variable on a whole range of country-specific variables (inequality, economic growth, per-capita income, corruption, social globalization, urbanization, migrant stock). Using this residual – i.e. the idiosyncratic component of an individual’s attitude towards the rest of the world – did not change any of the above and subsequent findings. These results are available upon request.

*Experience*) that reflects various aspects of countries' economic performance in the crisis-ridden years 2003 to 2013.<sup>10</sup> We thus estimated variants of the following equation:

$$(5) \quad IMP\_PHIL_{ict} = \sum_{c=1}^C \beta_c d_c + \sum_{c=1}^C \eta_c Crisis-Experience_c \cdot \xi_{2013} + \sum_{j=1}^J \gamma_j x_{j,ict} + \varepsilon_{ict}$$

The first specific variable we substitute for *Crisis-Experience* in equation (5) is the growth rate of an economy's real GDP per capita (PPP-adjusted) in the year 2009 (*CrisisGrowth*). We conjecture that residents of countries that experienced greater hardship during the GFC became more skeptical about globalization. Such an effect would be reflected by a significantly positive coefficient of *CrisisGrowth*. The results displayed in column (1) of Table 2 suggests that, indeed, a higher (lower) GDP growth rate significantly raised (reduced) support for globalization. The second variable we use to capture countries' experience during the global financial crisis is the change in a country's stock market index between its peak (usually June 2008) and its trough (usually March 2009). We expect larger collapses to drag down the support for globalization, i.e. a positive sign of the variable *StockMarket*. The results displayed in column (2) support this hypothesis. The third variable we used for Crisis-Experience in equation (5) was the change in a country's unemployment rate between 2008 and 2009. Column (3) of Table 2 documents that the coefficient of *CrisisUnemp* has the expected negative sign, but that the effect is not statistically significant. By contrast, the duration of the crisis (*CrisisDuration*) has a significantly negative effect (column 4): This variable reflects the number of years that it took countries to return to their pre-crisis level of real GDP per capita after the slump in 2009. While *CrisisDuration* is low for those economies that experienced only short recessions, its maximal value of five is obtained for those countries that had not yet fully recovered in 2013. Column (5) of Table 2 displays the results of replacing Crisis-Experience by the average growth rate of real GDP per capita between 2003 and 2013, while column (6) considers the increase of government debt (relative to GDP, in percentage points). Neither the coefficient of *GDPGrowth* nor the coefficient of *ChangeDebt* are significantly different

---

<sup>10</sup> Note that we include one "*Crisis-Experience*" variable at a time, instead of including them all simultaneously. The reason is that, with 21 countries, the de-facto number of observations underlying these regressions is rather small.

from zero. By contrast, the change of a country's Gini coefficient between 2003 and 2013 (*ChangeGini*, in percentage points) has a significantly negative effect on the support for international trade.<sup>11</sup>

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	IMP_PHIL	IMP_PHIL	IMP_PHIL	IMP_PHIL	IMP_PHIL	IMP_PHIL	IMP_PHIL
Male	0.060*** (0.007)	0.060*** (0.007)	0.060*** (0.007)	0.060*** (0.007)	0.060*** (-0.007)	0.060*** (0.007)	0.061*** (0.007)
Age	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Degree	0.041*** (0.007)	0.041*** (0.007)	0.040*** (0.007)	0.042*** (0.007)	0.039*** (-0.007)	0.040*** (0.006)	0.042*** (0.007)
WrkSup	0.028*** (0.008)	0.028*** (0.008)	0.029*** (0.008)	0.027*** (0.008)	0.030*** (-0.008)	0.030*** (0.009)	0.030*** (0.008)
RelIncome	0.021*** (0.005)	0.021*** (0.005)	0.022*** (0.005)	0.021*** (0.005)	0.022*** (-0.005)	0.022*** (0.005)	0.021*** (0.005)
Cosmopol	0.041*** (0.004)	0.040*** (0.004)	0.041*** (0.004)	0.040*** (0.004)	0.041*** (-0.004)	0.041*** (0.004)	0.041*** (0.004)
CrisisGrowth	0.005* (0.003)						
StockMarket		0.001* (0.000)					
CrisisUnempl			-0.005 (0.004)				
CrisisDuration				-0.009** (0.004)			
GDPGrowth					-0.000 (0.008)		
ChangeDebt						-0.000 (0.000)	

<sup>11</sup> Further *Crisis-Experience* variables we experimented with include the increase in immigration, the change in trade openness, private consumption and public consumption, as well as the rise of the CPI. None of these country-specific variables turned out to be significant.

ChangeGini -0.030\*\*  
(0.014)

Country Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	37158	37158	37158	37158	37158	37158	37158
Countries	21	21	21	21	21	21	21
R <sup>2</sup>	0.339		0.338	0.339	0.338	0.338	0.340

Notes: This table shows the results from estimating Equation (5) using ISSP survey data. Regressors are individual characteristics, dummies for respondents' country of origin (coefficients not displayed), as well as different variables on country specific experiences during the financial crisis of 2008/2009 (Columns 1-4), and changes of country specific variables between 2003 and 2013 (Columns 5-7). Cluster robust standard errors on the country level are reported in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

**Table 2:** Determinants of individuals' attitudes towards free trade. Inclusion of various aspects of countries' economic performance between 2003 and 2013.

### 5. Time-variant marginal effects of individual characteristics

So far, our analysis was based on the notion that the influence of individual characteristics on respondents' support for international trade did not change between 2003 and 2013 – i.e. that the marginal effects of age, education etc., did not change, and that individuals' attitudes were not affected by “group-specific experience”.

To explore whether this idea is correct, we continue by interacting both the country dummies and the individual-specific variables with the time dummy  $\xi_{2013}$ , i.e. we estimate the following equation:

$$(6) \quad IMP\_PHIL_{ict} = \sum_{c=1}^C \beta_c d_c + \sum_{c=1}^C \delta_c \xi_{2013} d_c + \sum_{j=1}^J \gamma_j x_{j,ict} + \sum_{j=1}^J \phi_j \xi_{2013} x_{j,ict} + \varepsilon_{ict}$$

The coefficients displayed in Table 3 document that, indeed, the marginal effects of most individual characteristics changed substantially between 2003 and 2013.

Given the widely accepted narrative that the anti-globalist backlash of recent years was predominantly driven by the harsh consequences of globalization for low-skilled workers in many industrialized countries, the results displayed by Table 3 are rather surprising. If this explanation were correct, the marginal effects of those



variables that reflect individuals' ability to reap the benefits of globalization – youth, education, work status, income – would have increased. Instead, we observe a *decline* in marginal effects. In 2003, the likelihood of a university-graduate (*Degree* = 5) supporting trade in was 24.5 percent higher than for an (otherwise identical) individual without any formal education (*Degree* = 0). In 2013, this difference has shrunk to 19 percent.

Variables	(1)	
	IMP_PHIL	
Male	0.066***	(0.009)
Male2013	-0.010	(0.011)
Age	-0.001***	(0.000)
Age2013	-0.000	(0.000)
Degree	0.049***	(0.007)
Degree2013	-0.011*	(0.006)
WrkSup	0.037***	(0.009)
WrkSup2013	-0.021**	(0.009)
RelIncome	0.031***	(0.007)
RelIncome2013	-0.017*	(0.008)
Cosmopol	0.045***	(0.005)
Cosmopol2013	-0.009**	(0.004)
Country-Year Dummies	Yes	
Observations	37158	
Countries	21	
R <sup>2</sup>	0.345	

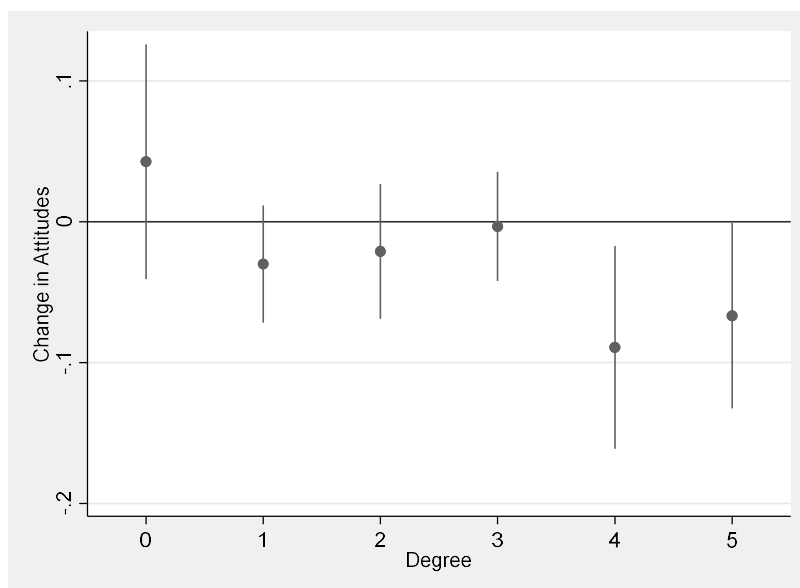
**Notes:** This table shows the results from estimating Equation (6) using ISSP survey data. Regressors are individual characteristics, both isolated and interacted with a dummy variable that equals one (zero) in the 2013 (2003) waves. Regressions also include dummies for respondents' country of origin, as well as interactive terms that multiply the country-of-origin dummies with a dummy variable that equals one (zero) in the 2013 (2003) waves. Cluster robust standard errors on the country level are reported in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

**Table 3:** Determinants of individuals' attitudes towards free trade. Time-variant marginal effects of country dummies and of individual characteristics.

If we add the fact that, usually, individuals with a higher degree are more likely to work in leading positions and to adopt a more cosmopolitan attitude, the change between

2003 and 2013 becomes even more pronounced: In 2003, the likelihood that a university graduate in a leading position with an open attitude towards the rest of the world supported free trade was 46 percentage points higher than the likelihood of support coming from an individual without any formal education and leadership experience, but with a rather nationalist perspective. In 2013, this difference had shrunk to 35 percent.

These results allow for different interpretations: for example, it is possible that the shrinking difference between high-skilled and low-skilled respondents is due to low-skilled individuals learning to live with globalization and becoming more positive about international trade. However, Figure 2 does not support this conjecture. The plots show the estimated coefficient of the year-2013 dummy for each level of *Degree* separately. For the different levels of education, the point estimates reflect the average change in IMP\_PHIL between 2003 and 2013, controlling for all other individual characteristics and the country of the respondent. The plot illustrates that the likelihood of actively supporting trade decreased for the higher levels of educational attainment, while the support of the lower-skilled did not change significantly.



**Notes:** This figure shows the estimated coefficients of interactive terms that multiply a dummy for the year 2013 with dummies for respondents' educational attainment, respectively. Regressions control for other individual characteristics and include potentially time-variant country dummies. The figure also shows 95% confidence intervals based on robust standard errors clustered at the country level.

**Figure 2:** Changes in individual support for international trade between 2003 and 2013 by educational attainment.

The marginal effect of *Degree* on IMP\_PHIL may have decreased because individuals with a higher educational attainment have become more critical about globalization. Or it may have decreased because this group is less inclined to explicitly support international trade without, however, actively opposing it.

		(1)
Variables	IMP_PHOB	
Male	-0.056***	(0.010)
Male2013	0.007	(0.011)
Age	0.002***	(0.000)
Age2013	-0.000	(0.000)
Degree	-0.048***	(0.007)
Degree2013	0.008	(0.007)
WrkSup	-0.024**	(0.010)
WrkSup2013	0.010	(0.011)
RelIncome	-0.033***	(0.009)
RelIncome2013	0.017	(0.011)
Cosmopol	-0.058***	(0.006)
Cosmopol2013	0.010	(0.007)
Country-Year Dummies	Yes	
Observations	37158	
Countries	21	
R <sup>2</sup>	0.568	

**Notes:** This table shows the results from estimating Equation (6) using ISSP survey data and IMP\_PHOB as a dependent variable. Regressors are individual characteristics, both isolated and interacted with a dummy variable that equals one (zero) in the 2013 (2003) waves. Regressions also include dummies for respondents' country of origin, as well as interactive terms that multiply the country-of-origin dummies with a dummy variable that equals one (zero) in the 2013 (2003) waves. Cluster robust standard errors on the country level are reported in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

**Table 4:** Determinants of individuals' attitudes towards free trade, using explicit rejection of trade as dependent variable.

To find out which interpretation is supported by the data, we re-defined our dependent variable: While *IMP\_PHIL* identified those respondents who (strongly) *disagreed* with the statement on the desirability of limiting imports from abroad, *IMP\_PHOB* takes a value of one if a respondent *agrees* (or strongly *agrees*) with that statement, thus revealing an actively negative perception of international trade.<sup>12</sup> Table 4 presents the results of estimating equation (6), with *IMP\_PHOB* as a dependent variable. It shows that, while the direct effects of socio-economic characteristics comply with expectations, the change in dependent variable turns the interactive terms insignificant. Apparently, the young, rich and highly-educated have become less likely to actively stand in for globalization, but they have not become more likely to actively *oppose* trade.<sup>13</sup>

## 6. Eroding enthusiasm or emerging anxiety? The role of offshorability

Of course, skilled individuals' decreasing enthusiasm for international trade could be driven as much by emerging anxiety as by eroding enthusiasm: in times of offshoring and global tasks trade (Grossman and Rossi-Hansberg, 2008), a high skill level does not necessarily shelter an individual from foreign competition. It may thus be the growing awareness of being easily substitutable that may have made individuals re-assess their view on globalization. In fact, Egger and Fischer (2019) and Owen and Johnston (2017) demonstrate that the "offshorability" of an individual's occupation is an important determinant of her/his attitude towards international trade.<sup>14</sup>

In order to explore the possibility that this is the mechanism behind the results presented so far, we used information on respondents' occupation to include the

---

<sup>12</sup> The definition of *IMP\_PHOB* thus implicitly assumes that individuals selecting the answer "Neither agree nor disagree" express a (mildly) positive attitude towards international trade.

<sup>13</sup> A look at the descriptive statistics reveals that the share of high-skilled individuals (i.e. respondents with *Degree* equaling 4 or 5) who *agreed* or *strongly agreed* with the negative statement on international trade did not increase between 2003 and 2013, but that the share of high-skilled individuals who *disagreed* or *strongly disagreed* – i.e. who explicitly voiced their support for international trade – decreased from 38 to 33 percent. Note, finally, that the share of non-responses in the 2003 and 2013 waves amount to 3.73 percent and 2.95 percent, respectively, i.e. this part of the sample is rather small.

<sup>14</sup> Egger and Fischer (2019) use all available waves (1995, 2003, 2013) of the ISSP survey, while Owen and Johnston (2017) use the same waves (2003, 2013) as we do. However, neither of them considers the possibility of time-dependent marginal effects.

“degree of offshorability” of their job as a potential determinant of their attitude towards international trade. More specifically, we employ the measure of task “routineness” provided by Owen and Johnston (2017). Using the O\*Net data base, which contains information on job profiles by SOC classification, Owen and Johnston combine information on different job characteristics and compute a measure of “Routine Task Intensity” (*RTI*) as the difference  $\ln(Routineness) - \ln(Abstractness) - \ln(Manualness)$ .<sup>15</sup> This information is matched with the information on ISSP respondents’ occupation by ISCO classification. We follow Egger and Fischer (2019) in rescaling the variable to start from 0 (least offshorable) to enhance the interpretability of its interactions. Generally, a higher value of *RTI* reflects a higher likelihood that an occupation can be delegated to another country. We include this measure both directly, and interacted with the  $\xi_{2013}$  dummy. This specification is meant to capture the possibility that, due to the growing importance of international production, the perceived probability that a given task may actually be offshored, has increased over time.

The results displayed in column 1 of Table 5 indicate that higher values of *RTI* do, in fact, reduce respondents’ support for international trade, thus confirming the findings of Egger and Fischer (2019). Column 2 suggests that this effect was particularly pronounced in the 2013 wave of the ISSP, thus supporting our conjecture that the awareness of occupations’ offshorability – or of the de-facto offshorability of these occupations – has increased over time, thus lowering the appeal of globalization. However, the inclusion of *RTI* does not alter the findings presented above: while the direct effect of *Degree* is positive, the interaction term with the year-2013 dummy keeps being negative, suggesting that the high-skilled have become less supportive of globalization, even if we control for the perceived risk of being harmed by firms’ offshoring activities.

---

<sup>15</sup> See Acemoglu and Autor (2011) for details of the job characteristics included in the *RTI*-Index.

	(1)		(2)	
	IMP_PHIL		IMP_PHIL	
Male	0.066***	(0.009)	0.066***	(0.009)
Male2013	-0.011	(0.011)	-0.011	(0.011)
Age	-0.001***	(0.000)	-0.001***	(0.000)
Age2013	-0.000	(0.000)	-0.000	(0.000)
Degree	0.047***	(0.007)	0.048***	(0.007)
Degree2013	-0.011*	(0.006)	-0.014**	(0.006)
WrkSup	0.035***	(0.008)	0.037***	(0.008)
WrkSup2013	-0.021**	(0.009)	-0.024**	(0.009)
RelIncome	0.031***	(0.007)	0.031***	(0.007)
RelIncome2013	-0.017*	(0.008)	-0.018**	(0.008)
Cosmopol	0.045***	(0.005)	0.045***	(0.005)
Cosmopol2013	-0.010**	(0.004)	-0.010**	(0.004)
RTI	-0.015*	(0.009)	-0.003	(0.009)
RTI2013			-0.021*	(0.010)
Country-Year Dummies	Yes		Yes	
Observations	37158		37158	
Countries	21		21	
R <sup>2</sup>	0.345		0.345	

**Notes:** This table shows the results from estimating Equation (6) using ISSP survey data. Regressors are individual characteristics, both isolated and interacted with a dummy variable that equals one (zero) in the 2013 (2003) waves. Regressions also include dummies for respondents' country of origin, as well as interactive terms that multiply the country-of-origin dummies with a dummy variable that equals one (zero) in the 2013 (2003) waves. Cluster robust standard errors on the country level are reported in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

**Table 5:** Determinants of individuals' attitudes towards free trade, accounting for Routine Task Intensity (RTI).

## 7. Robustness tests

This section reports the results of various regressions that we ran to explore whether our findings are robust with respect to modifications in sample and specification.

We started by exploring whether a coarser approach to classifying individuals' educational attainment affected our findings. To this end, we differentiated between the “high-skilled” respondents, for which Degree assumes values of 4 or 5, and all other skill groups (*HighSkill*). The first column of Table 6 illustrates that the effects identified so far – in particular, the “eroding enthusiasm of the elites” – does not disappear once we deviate from the original (fine) categorization of educational attainments.

In a next step, we checked whether the “eroding enthusiasm of the elites” can be attributed to an increasing share of individuals with higher education. In fact, we do observe that, in some countries – notably, Germany – the average degree of respondents has increased between 2003 and 2013.<sup>16</sup> While the simple model presented in Section 2 was based on the assumption that the influence of “*group-specific experience*” and the “*composition effect*” could be clearly disentangled, one might argue that changes in the relative size of different groups – e.g. a rising share of university graduates – shift the marginal effect of, e.g., higher educational attainment: if “everyone” holds a university degree, the gains from globalization accruing to the individual degree-holder are lower.<sup>17</sup> To test whether the eroding enthusiasm of the elites is driven by a growing abundance of high-skilled workers, we interacted *Degree* with the change of countries' human capital endowments. To assess the evolution of national human capital we used the change in the average years of schooling, as reported by Barro and Lee (2013) (*HumanCapitalChange*) and the change in the national average of *Degree* (*DegreeChange*). As documented by columns (2) and (3) of Table 6, the marginal effect of *Degree* is still declining, even if we account for

---

<sup>16</sup> In the case of Germany, the increasing average educational attainment is also driven by a re-classification of individuals who successfully completed a vocational training: while these individuals were assigned a *Degree*-value of 3 in the 2003 wave, they were assigned a *Degree*-value of 4 in the 2013 wave. For other countries, the change in average educational attainment as reported by the ISSP is much less dramatic, and we did not detect re-classifications as in the case of Germany.

<sup>17</sup> Note that, appealing as it sounds at first glance, this argument is not firmly grounded in economic theory: in the Heckscher-Ohlin model of a small open economy that is not completely specialized, a change in factor endowments does not affect factor prices. Once we depart from this scenario, allowing, e.g., for specialization, a large economy, or sector-specific factors, raising the supply of one factor of production is likely to reduce its remuneration. However, to make the claim that high-skilled individuals' gains from globalization decrease in the general supply of high-skilled labor, we have to argue that the size of factor-supply-induced changes in factor prices depends on the country's factor endowment – an argument that is hard to make without imposing further structure on preferences, technology etc.

changing factor endowments. In an alternative robustness test, we ran the benchmark regression as defined by equation (6), but dropped Germany. The results displayed in column (4) of Table 6 indicate that the “eroding enthusiasm of the elites” can still be observed in the reduced sample.

In a next step, we ran several “placebo tests”: it should be a matter of concern if the effect observed in the past regressions could also be observed for dependent variables that have little to do with international trade. To test whether this is the case, we ran the regression specified by equation (6), but replacing the dependent variable by other responses from the ISSP: first, we define a dummy variable which assumes a value of one if respondents (strongly) disagree with the statement “Foreigners should not be allowed to buy land in [Country]”. As documented in column (5) of Table 6, the linear effects are as expected, but the “eroding enthusiasm” effect can only be observed for *Cosmopol*. The second variable we use as an alternative regressand equals one if respondents (strongly) disagree with the statement “Immigrants take jobs away from people born in [Country]”. Again, the direct effect of most regressors are as expected, but the interactive terms are not significantly different from zero, indicating that the marginal effects did not vary over time (see column (6) of Table 6). The third alternative to our *IMP\_PHIL*-variable is a dummy that equals one if respondents (strongly) disagree with the statement “International Organizations take away too much power from [COUNTRY]”. Column (7) of Table 6 demonstrates that respondents with a higher educational attainment, superior work status, higher relative income, and a more open attitude towards other countries are more likely to object. Between 2003 and 2013, the marginal effect only changes for *RelIncome* and *WrkSup*. By contrast, the influence of *Degree* remains constant over time. This suggests that our original findings capture a development that cannot be observed in the same way for all other globalization-related variables.

In a final set of robustness tests, we included additional control variables – a dummy for respondents holding the citizenship of their country of residence, a dummy for unemployed respondents, and a dummy reflecting union membership. While all of these variables had the expected influence, none of them exhibited a time-varying marginal effect, and the “eroding enthusiasm of the elites” – in particular, the decreasing



marginal effect of Degree between 2003 and 2013 – could be observed for all extended specifications.<sup>18</sup>

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	IMP_PHIL	IMP_PHIL	IMP_PHIL	IMP_PHIL	FLAND_PHIL	IM_NOJOBTHREAT	INTORG_PHIL
Male	0.064*** (0.009)	0.066*** (0.009)	0.066*** (0.009)	0.067*** (0.009)	0.014 (0.009)	-0.015 (0.011)	0.019** (0.008)
Male2013	-0.010 (0.011)	-0.011 (0.011)	-0.012 (0.011)	-0.011 (0.011)	-0.013 (0.011)	0.002 (0.009)	-0.004 (0.009)
Age	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.003*** (0.000)	-0.001 (0.001)	-0.001*** (0.000)
Age2013	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.001*** (0.000)	-0.000 (0.000)	0.000 (0.000)
HighSkill	0.118*** (0.019)						
HighSkill2013	-0.036* (0.018)						
Degree		0.049*** (0.007)	0.049*** (0.007)	0.048*** (0.007)	0.038*** (0.006)	0.065*** (0.006)	0.039*** (0.005)
Degree2013		-0.016** (0.007)	-0.024** (0.009)	-0.011* (0.006)	-0.003 (0.007)	-0.011 (0.007)	-0.005 (0.005)
WrkSup	0.043*** (0.009)	0.037*** (0.009)	0.037*** (0.009)	0.039*** (0.009)	0.019** (0.009)	0.014 (0.011)	0.032*** (0.011)
WrkSup2013	-0.022** (0.009)	-0.023** (0.009)	-0.023** (0.009)	-0.021** (0.009)	-0.001 (0.012)	-0.002 (0.016)	-0.026* (0.013)
RelIncome	0.037*** (0.008)	0.031*** (0.007)	0.031*** (0.007)	0.030*** (0.007)	0.019** (0.007)	0.014** (0.007)	0.020*** (0.006)
RelIncome2013	-0.020* (0.010)	-0.018** (0.008)	-0.017* (0.008)	-0.018** (0.008)	-0.014 (0.008)	-0.001 (0.008)	-0.015** (0.007)
Cosmopol	0.047*** (0.005)	0.045*** (0.005)	0.045*** (0.005)	0.046*** (0.005)	0.061*** (0.005)	0.052*** (0.006)	0.042*** (0.005)
Cosmopol2013	-0.010** (0.004)	-0.010** (0.004)	-0.010** (0.004)	-0.012*** (0.004)	-0.024*** (0.006)	-0.010 (0.007)	-0.007 (0.005)
Degree X HumanCapitalChange		0.030 (0.018)					
Degree X DegreeChange			0.034** (0.016)				
Country-Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<sup>18</sup> The results of these regressions are available upon request.

Observations	37158	37158	37158	34748	36111	36347	34041
Countries	21	21	21	20	21	21	21
R <sup>2</sup>	0.342	0.345	0.346	0.340	0.498	0.490	0.290

**Notes:** This table shows the results from estimating Equation (6) using ISSP survey data. Regressors are individual characteristics, both isolated and interacted with a dummy variable that equals one (zero) in the 2013 (2003) waves. Regressions also include dummies for respondents' country of origin, as well as interactive terms that multiply the country-of-origin dummies with a dummy variable that equals one (zero) in the 2013 (2003) waves. *HighSkill* is a binary variable for a Degree of 4 or higher (above secondary schooling). The interaction terms in Columns 2 and 3 interact the individuals' *Degree* with country specific changes between 2003 and 2013 in Human Capital (2) or average *Degree* (3). The estimation in Column 4 drops all observations from Germany. Columns 5-7 make use of regressands that represent different attitudes than the ones analyzed before as placebo. Cluster robust standard errors on the country level are reported in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

**Table 6:** Robustness tests, varying the set of regressors and dependent variables

## 8. Summary and conclusions

In this paper, we have explored whether individuals' attitudes towards international trade changed between 2003 and 2013 – and if so, why. We have documented that the average support for globalization declined in many, but not all countries, and that these differences were linked to various aspects of countries' economic performance between 2003 and 2013 – most notably, their experience during the global financial crisis. Moreover, we have shown that the discrepancy between high-skilled and low-skilled individuals in their support for international trade has shrunk between 2003 and 2013. While this result could be driven by low-skilled individuals becoming more positive about globalization, our results indicate that it is rather due to high-skilled individuals' declining enthusiasm for international trade. We also demonstrate that this decline is not due to skilled individuals' growing concern about the offshorability of their occupations, and that our findings are robust to various changes in sample or specification.

This leaves us with a puzzling result: Apparently, the shrinking support for globalization is not only due to the *depression of the deprived* – i.e. the worries of those people who are likely to be harmed by international trade – but also by an *eroding enthusiasm of the elites*. This effect does not disappear once if we control for economic forces potentially reducing high-skilled individuals' benefits from globalization – e.g. an intensifying offshoring of tasks or a growing numbers of skilled individuals – and points at forces that cannot be reduced to purely material interests. In fact, to gain a deeper

understanding of what drives this development – complacency, “Zeitgeist”, etc. – one has to reach out beyond purely economic analysis.

In terms of policy conclusions, our paper offers the following take-aways: of course, to preserve the massive gains in prosperity that globalization has generated in recent decades, one has to make sure that these gains are shared by large parts of the population. But it may be equally important to raise awareness of what is at stake.

## 8. References

- Acemoglu, D., & Autor, D. (2011): “Skills, tasks and technologies: Implications for employment and earnings”, *Handbook of labor economics*, Vol. 4, 1043-1171.
- Alabrese, E., S.O. Becker, T. Fetzer and D. Novy (2019): “Who voted for Brexit? Individual and regional data combined”, *European Journal of Political Economy* 56, 132 – 150.
- Autor, D., D. Dorn and G.H. Hanson (2016): „The China Shock: Learning from Labor-Market Adjustment to Large Changes in Trade”, *Annual Review of Economics* 8, 205–40.
- Autor, D.H., D. Dorn, G.H. Hanson, and K. Majlesi (2016a): “Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure”, *NBER Working Paper* 22637.
- Autor, D.H., D. Dorn, G.H. Hanson, and K. Majlesi (2016b): “A note on the effect of rising trade exposure on the 2016 presidential election”, Working Paper, available at [http://www.kavehmajlesi.com/uploads/7/2/8/9/7289299/appendix\\_trumpvote\\_v5.pdf](http://www.kavehmajlesi.com/uploads/7/2/8/9/7289299/appendix_trumpvote_v5.pdf).
- Baldwin, R. (ed.) (2011): *The Great Trade Collapse: Causes, Consequences and Prospects*, VoxEU.org Books.
- Barro, R. and J.-W. Lee (2013), "A New Data Set of Educational Attainment in the World, 1950-2010." *Journal of Development Economics*, Vol 104, 184-198.
- Becker, S.O., T. Fetzer, and D. Novy (2017): “Who voted for Brexit? A comprehensive district-level analysis”, *Economic Policy* 32, 601-650.
- Bems, R., R.C. Johnson, and K.-M. Yi (2013): “The Great Trade Collapse”, *Annual Review of Economics* 5, 375 – 400.
- Braml, J. and G. Felbermayr (2018): “Understanding Free Trade Attitudes: Evidence from Europe”, *Beiträge zur Jahrestagung des Vereins für Socialpolitik 2018: Digitale Wirtschaft - Session: International Trade V, No. D18-V1*

- Chor, D. and K. Manova (2012): "Off the Cliff and Back: Credit Conditions and International Trade during the Global Financial Crisis", *Journal of International Economics* 87, 117-133.
- Colantone, I., and P. Stanig (2018a): "Global Competition and Brexit", *American Political Science Review* 112, 201-218.
- Colantone, I., and P. Stanig (2018b): "The Trade Origins of Nationalist Protectionism: Import Competition and Voting Behavior in Western Europe", *American Journal of Political Science* 62, 936-953.
- Dippel, C., R. Gold and S. Heblich (2015): "Globalization and Its (Dis)-Content: Trade Shocks and Voting Behavior". *NBER Working Paper* 21812.
- Dorn, F., C. Fuest and N. Potrafke (2018): "Globalization and Income Inequality Revisited", *CESifo Working Paper* No. 6859/2018.
- Harms, P. and J. Schwab (2019): "Like it or not? How the economic and institutional environment shapes individual attitudes towards multinational enterprises", *The World Economy* 42, 636 –679.
- Haugh, D., A. Kopoin, E. Rusticelli, D. Turner and R. Dutu (2016): "Cardiac Arrest or Dizzy Spell: Why is World Trade So Weak and What can Policy Do About It?" *OECD Economic Policy Papers* 18.
- Jäkel, I. C. and Smolka, M. (2017): "Trade policy preferences and factor abundance", *Journal of International Economics* 106, 1-19.
- Kanbur, R. (2015), Globalization and inequality, in A. B. Atkinson and F. Bourguignon, eds, *Handbook of income distribution*, Vol. 2, pp. 1845-81.
- Kaya, A. and Walker, J. T. (2012): "The legitimacy of foreign investors: Individual attitudes toward the impact of multinational enterprises", *Multinational Business Review* 20, 266-295.
- Lang, V. and M. Mendes Tavares (2018): "The Distribution of Gains from Globalization", *IMF Working Paper* 18/54.
- Malgouyres, Clément (2017): "Trade shocks and far-right voting: Evidence from French presidential elections". Working Paper, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2942173](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2942173).
- Mayda, A. M. and Rodrik, D. (2005): "Why are some people (and countries) more protectionist than others?", *European Economic Review* 49, 1393-1430.
- Owen, E. and N. P. Johnston (2017): "Occupation and the Political Economy of Trade: Job Routineness, Offshorability, and Protectionist Sentiment", *International Organization* 71, 665–699.
- Pavcnik, N. (2017): "The Impact of Trade on Inequality in Developing Countries", *NBER Working Paper* No. 23878.

Scheve, K. and Slaughter, M. J. (2004): "Economic insecurity and the globalization of production", *American Journal of Political Science* 48, 662-674.

Solt, F. (2019): "The Standardized World Income Inequality Database, Version 8", <https://doi.org/10.7910/DVN/LM4OWF>, Harvard Dataverse, V2.

## A. Appendix

Czech Republic	Philippines
Denmark	Portugal
Finland	Russian Federation
France	Slovak Republic
Germany	Slovenia
Hungary	Spain
Ireland	Sweden
Israel	Switzerland
Japan	United Kingdom
Latvia	United States
Norway	

**Table A1:** Countries included in the sample

Variable	Description
<i>Individual Level</i>	From ISSP National Identity Module Surveys I and II, if not indicated otherwise
IMP_PHIL	Dummy variable, = 1 if response to question of limiting imports is (mild) objection
IMP_PHOB	Dummy variable, = 1 if response to question of limiting imports is (mild) affirmation
Male	Dummy variable, = 1 if respondent is Male
Age	Age of respondent
Degree	Categorical variable for the highest degree of education, from "No formal qualification" (0) to "University degree completed" (5)
WrkSup	Dummy variable, = 1 if respondent supervises others at work
RelIncome	Income of respondent relative to average income in country in given period.
Cosmopol	Response to disagreement on patriotic statement, on a scale from 1 to 5

Routineness	Routine Task Intensity (RTI) Index characterizing respondent's job profile. Source: Owen and Johnston (2017), based on O*Net, rescaled to range from 0 to 4.608
<i>Country Level</i>	From World Bank World Economic Outlook database (WEO) if not indicated otherwise
CrisisGrowth	Growth rate of real GDP per capita (PPP-adjusted) in percent
StockMarket	Change of national stock market index from before-crisis peak (June 2008 for most countries) to crisis-trough (May 2009 for most countries). Source: <a href="http://www.investing.com">www.investing.com</a>
CrisisDuration	Number of years between 2008 and year in which pre-crisis level of per-capita GDP was reached. Maximum: 5 (= 2013 – 2008)
CrisisUnempl	Change in unemployment rate (percentage points)
GDPGrowth	Average growth rate of real GDP per capita (PPP adjusted) between 2003 and 2013
ChangeDebt	Change of government gross debt relative to GDP (percentage points) between 2003 and 2013
ChangeGini	Change in Gini coefficient of disposable income between 2003 and 2013. Source: SWIID database (Solt 2019)

**Table A2:** Data Sources and Definitions

Variable	Obs	Mean	Std. Dev.	Min	Max
IMP_PHIL	37,158	0.2702244	0.4440816	0	1
IMP_PHOB	37,158	0.507347	0.4999527	0	1
Male	37,158	0.4766134	0.4994595	0	1
	2003 17,107	0.4892149	0.4998983	0	1
	2013 20,051	0.4658621	0.4988457	0	1
Age	37,158	47.13017	16.45683	15	85
	2003 17,107	45.97498	15.83306	15	85
	2013 20,051	48.11575	16.90902	15	85
Degree	37,158	3.167151	1.394907	0	5
	2003 17,107	2.9281	1.420103	0	5
	2013 20,051	3.371104	1.339774	0	5
WrkSup	37,158	0.2458152	0.4305753	0	1
	2003 17,107	0.2552172	0.435996	0	1
	2013 20,051	0.2377936	0.4257427	0	1
RelIncome	37,158	1.016662	0.9951596	0	36.63017

	2003	17,107	1.018145	0.8762738	0.0018254	30.42361
	2013	20,051	1.015396	1.086373	0	36.63017
Cosmopol		37,158	2.655552	1.104181	1	5
	2003	17,107	2.693693	1.116842	1	5
	2013	20,051	2.623011	1.092238	1	5
RTI		33,951	2.132353	0.5848347	0	4.60847
	2003	15,170	2.133057	0.5850168	0	4.60847
	2013	18,781	2.131784	0.5847026	0	4.60847
CrisisGrowth		21	-5.257619	2.787768	-13.25	-0.61
StockMarket		21	-49.31571	10.766	-68.25	-28.5
CrisisUnemployment		21	2.530476	2.293054	0.07	9.83
CrisisDuration		21	3.952381	1.359272	1	5
GDPGrowth		21	1.461429	1.409916	-0.36	4.22
ChangeDebt		21	54.43286	87.18785	-53.67	301
ChangeGini		21	0.5714286	1.377368	-1.7	3.6

**Table A3:** Summary Statistics