

# How Durable are Social Norms? Immigrant Trust and Generosity in 132 Countries

John F. Helliwell<sup>1,2</sup> · Shun Wang<sup>3</sup> · Jinwen Xu<sup>4</sup>

Accepted: 27 June 2015 / Published online: 9 July 2015  
© Springer Science+Business Media Dordrecht 2015

**Abstract** This paper estimates the global prevalence of social trust and generosity among immigrants. We combine individual and national level data from immigrants and native-born respondents in more than 130 countries, using seven waves of the Gallup World Poll (2005–2012). We find that migrants tend to make social trust assessments that mainly reflect conditions in the country where they now live, but they also reveal a significant influence from their countries of origin. The latter effect is one-third as important as the effect of local conditions. We also find that the altruistic behavior of migrants, as measured by the frequency of their donations in their new countries, is strongly determined by social norms in their new countries, while also retaining some effect of the levels of generosity found in their birth countries. To show that the durability of social norms is not simply due to a failure to recognize new circumstances, we demonstrate that there are no footprint effects for immigrants' confidence in political institutions. Taken together, these findings support the notion that social norms are deeply rooted in long-standing cultures, yet are nonetheless subject to adaptation when there are major changes in the surrounding circumstances and environment.

---

✉ Shun Wang  
swang@kdis.ac.kr

John F. Helliwell  
johnfhelliwell@gmail.com

Jinwen Xu  
xujinwen512@hotmail.com

<sup>1</sup> Vancouver School of Economics, University of British Columbia, 997-1873, East Mall, Vancouver, BC, Canada

<sup>2</sup> Canadian Institute for Advanced Research (CIFAR), 180 Dundas W, Toronto, ON, Canada

<sup>3</sup> Korea Development Institute (KDI) School of Public Policy and Management, 263 Nansejong-ro, Sejong, Korea

<sup>4</sup> Department of Economics, Concordia University, 1455 de Maisonneuve Blvd. West, H 1155, Montreal, QC, Canada

**Keywords** Social norms · Immigration · Social trust · Generosity · Footprint effect · Institutional trust

## 1 Introduction

The nature and quality of social norms are important determinants of how individuals behave and how well societies work. Social norms determine how readily, and how happily, people pay taxes, return lost wallets, trust neighbours and strangers, co-operate with others on and off the job, and respect the environment. But there is still relatively little known about the extent to which social norms are malleable, and how they change in the face of population migration.

There are theories and evidence supporting two quite different perspectives on the sources and persistence of social norms. On the one hand a cultural perspective stresses that social norms are a durable trait transmitted from one generation to the next through parenting activities and other aspects of early socialization. Alternatively, an experiential perspective emphasizes that such norms are mainly based on experience in the environment in which one lives. Analyzing the attitudes of immigrants is an effective way to examine the relative importance of the two perspectives, as the experiential perspective predicts that immigrants' attitudes will be highly affected by their current surroundings in the destination country, while the cultural perspective predicts that immigrants' social norms will be highly correlated with those prevalent in their birth countries. In this paper we examine the global footprints of two important social norms, i.e. social trust<sup>1</sup> and generosity to show the relative importance of culture and experience in each case.

Most previous studies of the footprint of imported trust have related to migrants to a single country, with some more recent use of a number of European countries as alternative destinations. Those studies are subject to the problem of lack of generality. To be of broader relevance, judgments about the relative importance of imported trust need to be assessed using data drawn from a fuller range of source and destination countries.

We might expect to find migration footprint effects for generosity, just as has been done for social trust. But would the footprint be likely to be higher or lower in the case of generosity? In contrast to the large number of studies on the footprint effects of social trust, there is no corresponding research base for generosity. Our research aims to partially fill this gap.

Current evidence seems to support that institutional trust differs significantly from social norms in ways that make it less likely to have a significant carry-over from conditions in the immigrant's country of birth. Whether these patterns hold for the global sample is not yet known. Thus there is room for using global samples to test footprint effects for institutional trust and to compare them with those for social trust and generosity.

We expect social norms to have larger footprints than those associated with judgments about institutions that are expected to differ from one country to the next. If we find that immigrants and the native-born share the same judgments about the quality of institutions in the destination country, then we can thereby argue with greater conviction that the footprints of social norms like social trust and generosity are not simply due to failure to

---

<sup>1</sup> What we refer to in this paper as social trust is sometimes alternatively described as general trust, generalized trust, or interpersonal trust.

notice the current environment, since rapid adjustment will have already been witnessed for the case of local and national institutions.

We test the relative importance of culture versus experience by examining the immigration footprints for social trust, for generosity and for confidence in specific national institutions making use of a fully global sample involving migrants to more than 130 countries. These data from the Gallup World Poll enable us to establish the generality of footprint effects for two social norms, and to see whether footprint effects are, as expected, much smaller or non-existent for measures of institutional trust.<sup>2</sup>

We find significant footprint effects from their birth countries in the case of social norms—social trust and generosity, although on average immigrants largely come to share the social norms of their new countries. Moreover, the footprint effect is larger for social trust than for generosity. To see whether the social norms themselves are durable, and not just that all opinions adapt slowly to new circumstances, we also assess the judgments that immigrants form about the quality of the public institutions in their new countries. We find no evidence of footprint effects in these cases, thus increasing our confidence that social norms are indeed different.

The remainder of the paper is organized as follows. We first give a detailed literature review in Sect. 2. We then describe our data and estimation methods in Sect. 3. We present our results for social trust, and continue with our comparable results for generosity, and then contrast our footprint results for social trust and generosity with our results for confidence in domestic institutions in Sect. 4. We summarize our conclusions in Sect. 5.

## 2 Literature Review

In this section we review previous studies of the cultural versus experiential determinants of social trust, generosity, and institutional trust respectively.

### 2.1 Social Trust

It has long been held that social trust is essential to the success of group ventures, and especially to democratic governance. The important roles of social trust in the economy and society are shown by the empirical linkages between social trust and a variety of outcomes ranging from economic growth (Helliwell and Putnam 1995; Fukuyama 1995; Knack and Keefer 1997; Tabellini 2010; Algan and Cahuc 2010, 2014; Guiso et al. 2006), government efficiency (La Porta et al. 1997; Bjørnskov 2003, 2010, 2011), health outcomes (Kawachi et al. 2008), and happiness (Helliwell and Putnam 2004; Bjørnskov 2008; Chang 2009; Helliwell and Wang 2011) to deaths from traffic fatalities and suicides (Helliwell and Wang 2011; Nagler 2013).

Social trust has been found to be transmitted from one generation to the next in many countries (Algan and Cahuc 2010; Bjørnskov 2012; Dohmen et al. 2012; Guiso et al. 2006; Rainer and Siedler 2009; Rice and Feldman 1997). The reasons for the stability are hypothesized to be based on parental socialization during childhood (Fernández 2011). For example, beliefs in the trustworthiness of strangers are largely formed in early childhood

---

<sup>2</sup> All of these analyses are based on the binary immigration status (either an immigrant or non-immigrant). Unfortunately, years of migration are not known from the Gallup data. Therefore we are estimating an average effect for all the migrants (among them some may arrive many years ago while others may just come within the last year).

and remain relatively stable over the life course, at least in the absence of major negative shocks (Dohmen et al. 2012; Katz and Rotter 1969; Tabellini 2008). But other studies also find that the current environment plays an important role in shaping an individual's social norms (Dinesen 2012a; Nannestad et al. 2014). Studies on the determinants of social trust confirm the importance of the social characteristics of the communities in which an individual is currently living (Alesina and La Ferrara 2002; Bjørnskov 2007; Glaeser et al. 2000; Helliwell and Wang 2011; Kosfeld et al. 2005).

The cultural perspective, wherein trust is part of an enduring political culture, implies that the trust footprint of migration would be long-lasting, as suggested in Almond and Verba (1963), Putnam (1993) and Uslaner (2002). A series of papers all find a strong correlation between the social trust of Americans and national averages of answers to the same questions in their ancestral countries (Algan and Cahuc 2010; Bjørnskov 2012; Guiso et al. 2006; Rice and Feldman 1997; Uslaner 2008). Remarkably, Rice and Feldman (1997) find the correlations to be just as high for those whose grand-parents, rather than parents, were born in the ancestral country. A study on immigrants to Israel finds that those from the United States were more trusting of others than were those coming from Russia (Gitelman 1982).

Studies examining the relative importance of cultural and experiential impacts seem to yield different answers, based on different data samples. A group of studies find that the cultural impact is larger than the experiential impact. Uslaner (2008) uses individual-level US General Social Survey evidence to separate the effects of inherited trust from the effects of living among others from high-trust backgrounds. He finds some evidence for both, but concludes that the effects of inherited trust are greater than those of the current context of social trust. Dinesen (2013), by exploiting individual-level data for migrants to a number of European destination countries, finds support for both cultural and experiential perspectives, but a much larger effect from experience for immigrants from Western countries. Dinesen (2012b) finds similar results. A study of the source-country trust footprint of individual Canadian immigrants from many countries revealed a significant impact from source-country trust, but found the footprint to be smaller and less significant for those whose families had lived longer in Canada (Soroka et al. 2006). Similarly, Dinesen and Hooghe (2010) find that immigrants to Western Europe adapt more to local trust levels in the second generation than they do in the first generation after immigration.

Some others argue that experience is more important than culture. For example, Dinesen (2012a) examines the immigrants from three low-trust countries of origin (Turkey, Poland, and Italy) to high-trust countries in Northern Europe. He finds that the destination-country context has a large impact on social trust of immigrants, who show significantly higher levels of social trust than comparable respondents in their country of origin. Similarly, Nannestad et al. (2014) find that the institutions in destination countries rather than culture matter for social trust by analysing immigrants from several non-western countries to Denmark.

## 2.2 Generosity

Generosity, like social trust, is an important social norm (Leeds 1963; Siu et al. 2006). It varies among communities and nations, and has positive consequences for the communities where it prevails. Indeed prosocial behaviour has been argued to be an essential underpinning for the large-scale social cooperation that permitted early human groups to thrive (Wilson 1975). Individuals involved in prosocial conduct tend to be happier (Aknin et al. 2011, 2012, 2013; Dunn et al. 2008). International differences in generosity (as measured by the donation question in the Gallup World Poll) are large, and have been found to be

pervasively linked, both within and among societies, to average differences in subjective well-being (Aknin et al. 2013; Helliwell and Wang 2013).

Studies highlight the importance of social and contextual influences in cultivating generosity, especially during early adolescence, e.g. parental impacts (de Guzman and Carlo 2004; Eisenberg et al. 2006; Ljunge 2014), the role of peer groups (Carlo et al. 1999; de Guzman and Carlo 2004; Eisenberg et al. 2006; Krupka and Weber 2009; Siu et al. 2006), and the impacts of other environmental sources (Carlo et al. 2011; Eisenberg et al. 2006; Grusec et al. 2002). Ottoni-Wilhelm and Zhang (2011) argues that parents will intentionally transmit generosity to their children since they place importance on the child's identity including generosity.

No previous studies that we could find have studied the immigrant footprint effect for generosity.

### 2.3 Institutional Trust

Previous research on institutional trust has tended to show the importance of the local context as well as rapid adjustment to new circumstances, both types of result being in accordance with our expectations. Institutional trust is indeed important, both by providing support for government actions (Chanley et al. 2000), and as a source of happiness (Bartolini et al. 2013; Helliwell and Huang 2008, 2011). In terms of its determinants, studies have shown the importance of the current social and economic contexts: institutional trust is strongly affected by institutional and economic performance (Zmerli and Hooghe 2011). Chanley et al. (2000) find that political scandals, increasing public concerns about crime rates, and negative perceptions of economic conditions lead to declining trust in U.S. government. Stevenson and Wolfers (2011) find that countries having significantly increasing unemployment rates tend to have falling trust in national governments. Some other studies find that political corruption has a strong negative impact on institutional trust (Chang and Chu 2006; Morris and Klesner 2010).

There is some evidence that institutional trust judgments respond quickly to the current environment, and hence that, in this case, experience trumps culture. Mishler and Rose (2001) find that confidence in institutions is strongly affected by institutional performance and economic performance in post-communist societies, but find little support for cultural impact. Heineck and Süßmuth (2013) and Rainer and Siedler (2009) both find strong convergence of institutional trust in West and East Germany after reunification.<sup>3</sup>

But still there is some piece of evidence showing the footprint effect of institutional trust, e.g. Becker et al. (2011) finds that historical affiliation with the Habsburg Empire, a relatively well-functioning and respected bureaucracy in European history, increases current trust in courts and police.

## 3 Data and Methods

The data we use are from seven waves of the Gallup World Poll conducted in 2005–2012 in 160 countries. It is a repeated cross-sectional data set containing 941,201 observations. For the key variable social trust, we unfortunately have a smaller sample, about 200,000

---

<sup>3</sup> They also find that social trust does not converge: East Germans have a persistent level of low social trust even after 20 years of reunification. The pattern of contrasting social trust versus institutional trust is similar to ours, but they attribute the persistence of low trust in East Germany to negative economic conditions experienced by many East Germans in the post reunification period, rather than the cultural legacy.

observations. It is mainly surveyed in 2009–2010, with only a few countries in 2011–2012. The survey question is “Generally speaking, would you say that most people can be trusted or that you have to be careful in dealing with people?” This and similar questions have also been widely asked in recent decades in the World Value Surveys/European Value Surveys (WVS/EVS), various national social and Barometer surveys, to gauge the levels of social trust. Within and across nations, answers to the social trust question have been shown to be reliable estimates of trustworthiness, as measured by their strong positive correlation, at the national level, with the frequency with which money-bearing wallets were returned to their owners when dropped in major cities in 14 different countries (Knack 2001).

Generosity is derived from the question on charitable donations “Have you done any of the following in the past month? How about donated money to a charity?” The answer to the question is binary. Since richer people might be more likely to donate money, we adjust people’s response to the donation question for differences in household income by regressing the donation variable on log household income in a linear probability model. We take the residual of the regression as our measure of generosity.

We also examine the footprint effect of institutional trust, several variables regarding the perception of government and society, such as confidence in judicial system and courts, confidence in police, confidence in national government, perceived corruption in government, perceived corruption in business, whether respondents trust their assets and property to be safe at all times if starting a business, whether respondents trust the government to allow their new businesses to thrive. The responses to those questions are all binary with

**Table 1** Summary statistics (immigrants only)

Variable	Number of obs.	Mean	S. D.	Min	Max
Social trust	7990	0.230	0.421	0	1
Generosity	28,001	0.039	0.469	−0.529	1.222
Confidence in judicial system and courts	27,349	0.604	0.489	0	1
Confidence in police	25,739	0.694	0.461	0	1
Confidence in national government	24,190	0.565	0.496	0	1
Corruption in government	24,731	0.658	0.474	0	1
Corruption in business	28,498	0.648	0.477	0	1
Trust: property is safe at all times	19,981	0.674	0.469	0	1
Trust: government allows their business make money	18,775	0.623	0.485	0	1
Age	42,190	41.368	16.745	15	99
Female	42,445	0.500	0.500	0	1
Married or in a common-law relationship (reference: single)	42,099	0.642	0.479	0	1
Separated, divorced, or widowed (reference: single)	42,099	0.115	0.319	0	1
Tertiary education	39,653	0.235	0.424	0	1
Net household income (\$)	32,578	25,778	33,058	0	4,548,485
Social support	35,091	0.829	0.377	0	1

The maximum value of “Net household income” is an extreme value. The second highest income is \$500,000, which is much smaller than the maximum value

values 0 or 1. We summarize all the variables derived from survey questions in Appendix Table 8.

The set of control variables includes age, gender, marital status, educational attainment, the natural logarithm of net household income, and social support. Social support is a binary response to “If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?” The summary statistics of those variables for immigrants are shown in Table 1. There are in total 43,305 immigrant respondents, but only 28,907 of them answer the question about their country of origin. For those immigrants with country of origin, we are able to construct measures for the countries of birth.

Since we also want to see whether immigrants have higher or lower social trust compared to non-immigrants, we run regressions for all respondents. The summary statistics of social trust and those independent variables for both immigrants and non-immigrants are presented in Table 2.

To examine the footprint effects of social trust and to compare trust levels of immigrants and non-immigrants, we estimate the following equation:

$$Y_{ij} = \alpha_0 + \alpha_1 RT_j + \alpha_2 ST_i + \alpha_3 IM_{ij} + X_{ij}\theta + u_{ij} \tag{1}$$

The dependent variable  $Y_{ij}$  is the individual level of social trust of respondent  $i$  in country  $j$ .  $RT_j$  is the average social trust in the country where the respondent currently lives.  $ST_i$  is the average social trust in the respondent’s birth country. For non-immigrants, the values in their birth countries are the same as in their countries of current residence. The national-level social trust in the 132 countries is shown in Appendix Table 9. We can see the percentage of respondents answering “yes” to the trust question “Generally speaking, would you say that most people can be trusted or that you have to be careful in dealing with people?” varies a lot across countries, from 6.7 % in Lebanon, the lowest, to 63.0 % in Denmark, the highest.  $IM_{ij}$  is a dummy variable for immigrants. The vector  $X_{ij}$  has all other personal and demographic information including age, age squared, gender, marital status, educational attainment, the natural logarithm of net household income, and social support.  $u_{ij}$  is the error term.

**Table 2** Summary statistics (both immigrants and non-immigrants)

Variable	Number of obs.	Mean	S. D.	Min	Max
Social trust	198,219	0.238	0.426	0	1
Immigrant dummy	778,832	0.053	0.225	0	1
Age	934,254	38.505	17.060	13	99
Female	941,139	0.511	0.500	0	1
Married or in a common law relationship (reference: single)	912,875	0.574	0.494	0	1
Separated, divorced, or widowed (reference: single)	912,875	0.099	0.299	0	1
Tertiary education	849,774	0.103	0.303	0	1
Net household income (\$)	709,407	14,868	22,632	0	4,548,485
Social support	840,039	0.807	0.395	0	1
Generosity	645,620	0.000	0.440	-0.598	1.222

The maximum value of “Net household income” is an extreme value. The second highest income is \$1,648,529, which is much smaller than the maximum value

We then confirm the footprint effect of social trust in the regressions for immigrants only. We also investigate the footprint effect of generosity and a set of variables measuring trust in institutions, such as confidence in judicial system and courts, confidence in police, confidence in national government, perceived corruption in government, perceived corruption in business, whether respondents trust their assets and property to be safe at all times if starting a business, whether respondents trust the government to allow their new businesses to thrive, for immigrants only. The equation we estimate for this purpose is:

$$Y_{ij} = \beta_0 + \beta_1 RT_j + \beta_2 ST_i + X_{ij}\delta + e_{ij} \quad (2)$$

The dependent variable  $Y_{ij}$  is the individual level of trust measure of immigrant  $i$  in country  $j$ .  $RT_j$  is the average trust in the country the respondent currently lives in.  $ST_i$  is the average trust in the source country for those immigrants. The vector  $X_{ij}$  has the same meaning as in Eq. (1) except that in this case the sample only includes immigrants.  $e_{ij}$  is the error term.

## 4 Results

### 4.1 The Footprint of Social Trust: Culture and Experience Both Matter

Table 3 shows our OLS regression results<sup>4</sup> using both immigrant and non-immigrant respondents following Eq. (1). In column (1) we include variables for age, gender, marital status, and education, and in column (2) we include two additional covariates, log household income and social support. The two columns give similar results, as both show that immigrants' judgements about how much other people can, in general, be trusted are significantly correlated with trust levels in their birth countries and in the countries where they now live.<sup>5</sup> The coefficients on imported trust are just under one-third as large as for trust in the current country of residence.<sup>6</sup> The larger coefficient on trust in the country of residence, as found by Voicu (2012) with European data, suggests that the experiential effect is larger than cultural effect in the global sample, and that migrants from a given country are more likely to have high levels of social trust if they have moved to a higher trust environment. But we shall show later that the footprint effect is larger for those moving from a lower to a higher trust environment than vice versa.

By including all respondents, rather than just immigrants, in our sample, we can see whether, on average, immigrants have either greater or less social trust than do those living in their countries of birth.<sup>7</sup> Tables 1 and 2 show that the average levels of social trust are similar for the global sample of immigrants (0.230) as for the entire group of respondents

<sup>4</sup> We also perform probit regressions to confirm that they produce essentially the same results. For simplicity and ease of interpretation, we show here only the OLS results.

<sup>5</sup> Immigrants are included in our calculations of national averages of social trust, generosity and institutional trust in current and origin countries. For a robustness check, we did regressions using national averages excluding immigrant respondents and found very similar results.

<sup>6</sup> This calculation uses the estimated coefficients in the Table, in order to show the relative sizes of the effects. Because of our use of a symmetric global sample, the distributions of imported and current-country trust are very similar, so that a comparison of standardized betas for imported (0.068) and current-country (0.235) gives essentially the same answer. But note that immigrants are a selected (but not randomly) sample of the population in their country of origin, we should be cautious to generalize the estimated correlations.

<sup>7</sup> Dinesen (Dinesen 2011a) shows that general trust refers to the same phenomenon for both natives and immigrants and thus we can safely compare levels, causes and consequences of trust for the two groups.



**Table 3** Footprint of social trust (all respondents)

	(1)	(2)
Trust in current country	0.776*** (0.052)	0.761*** (0.055)
Trust in country of origin	0.225*** (0.052)	0.244*** (0.055)
Migrant dummy	-0.022*** (0.008)	-0.014 (0.009)
Age	-0.002*** (0.001)	-0.002*** (0.001)
Age squared divided by 100	0.003*** (0.001)	0.002*** (0.001)
Female	-0.016*** (0.003)	-0.016*** (0.003)
Married or in a common-law relationship (ref.: single)	0.007* (0.004)	0.010** (0.004)
Separated, divorced, or widowed (ref.: single)	-0.007 (0.005)	-0.005 (0.006)
Tertiary education	0.036*** (0.007)	0.032*** (0.008)
Log of net household income		0.000 (0.001)
Social support		0.041*** (0.006)
Wave dummies	Yes	Yes
Number of obs.	193,625	164,774
Adjusted R-squared	0.094	0.101
Number of countries	132	131

Standard errors in parenthesis are clustered by country of residence; \*\*\*, \*\*, \* indicate significance levels of 1, 5, and 10 % respectively

(0.238). In column (1) of Table 3 the negative migrant coefficient shows that when we account for individual demography migrants are slightly less trusting than the native-born. However, the other columns show that this effect becomes smaller and insignificant when we allow for other determinants of social trust.<sup>8</sup> There is a research literature showing that people are far more likely to trust others when they have lived longer in their communities (Helliwell and Wang 2011; Putnam 2007), and will be less trusting where people from differing backgrounds have not had long to make the repeated personal connections that support interpersonal trust. Thus immigrants might, on average, have lower levels of social trust, since they have had less long to plant roots in their communities (de Vroome et al. 2013). Soroka et al. (2006, Table 5.3) found that immigrants to Canada had significantly lower social trust than other Canadians, even after adjusting for the quality of their social networks, education, and other key variables, but that this effect was entirely eliminated if account was taken of the footprint effect of the levels (on average lower) of social trust in their birth countries. Putnam (2007) found that social trust is lower in communities with

<sup>8</sup> That social trust among immigrants is no lower than among the native born reflects successful adaptation, since immigrants, especially recent ones, are presumably less likely to know their neighbours, which other research (e.g. Sturgis et al. 2011) has shown to be a strong predictor of social trust.

**Table 4** Footprint of social trust (immigrants only)

	(1)	(2)
Trust in current country	0.783*** (0.069)	0.777*** (0.073)
Trust in country of origin	0.233*** (0.058)	0.251*** (0.060)
Age	-0.002 (0.002)	-0.003 (0.003)
Age squared divided by 100	0.003 (0.002)	0.004 (0.003)
Female	-0.001 (0.013)	0.010 (0.015)
Married or in a common-law relationship (ref.: single)	-0.002 (0.016)	0.001 (0.019)
Separated, divorced, or widowed (ref.: single)	-0.018 (0.021)	-0.007 (0.023)
Tertiary education	0.041* (0.022)	0.058*** (0.021)
Log of net household income		-0.002 (0.006)
Social support		0.034* (0.018)
Wave dummies	Yes	Yes
Number of obs.	6664	5200
Adjusted R-squared	0.058	0.062
Number of countries	127	126

Standard errors in parenthesis are clustered by country of residence; \*\*\*, \*\*, \* indicate significance levels of 1, 5, and 10 % respectively

high percentages of immigrants. He was not able to adjust for immigrant footprint effects, so it is not easy to tell whether his finding is due to recent US immigrants coming from countries with lower average levels of social trust, as was found for Canada. Hooghe et al. (2009, Table 1) find social trust to be lower among immigrants than non-immigrants in Europe; it is not possible to tell whether and how much this result is due to an unmeasured footprint effect. Our global data show more symmetric migration among countries of differing trust levels, so that immigrant and other respondents have the same average levels of social trust whether or not we take account of the levels of social trust in their countries of birth.

In Table 4 we estimate the same models as in Table 3, but this time our sample includes only immigrants following Eq. (2). The results in Table 4 are largely consistent with those in Table 3, assuring us that the results in Table 3 are not materially affected by the inclusion of the much larger non-immigrant population. For migrants, and equally for the total population, higher education is a strong positive predictor of an individual's trust in others,<sup>9</sup> while the log of household income has no effect.

Across our whole global sample, those who have migrated from countries of lower trust to places of higher trust are about 20 % more numerous than those who have moved from

<sup>9</sup> The positive linkage between higher education and social trust seems to be quite general and robust, although the precise reasons remain speculative. See Helliwell and Putnam (2007).

higher-trust to lower-trust countries (3588 vs. 3076), as shown in Table 5. In that table we estimate our base model separately for these two groups of migrants in column (1) and (2) respectively. In column (3) we estimate the base model for all migrants but include a dummy for migrants from a lower-trust to a higher-trust country, and its interaction with trust in country of origin. Since including other these variables makes only a small difference to the coefficients on current-country and birth-country trust,<sup>10</sup> we use the simpler model in Table 5 to provide larger sample size.

The sum of coefficients on birth-country and current-country trust is higher in model (1) than in model (2) of Table 5. This is because the column (1) sample, covering those moving to higher-trust countries, has been selected to include those for whom current-country trust is higher than birth-country trust. The coefficients on both home-country trust and birth-country trust are higher for immigrants who have moved from a lower-trust to a higher-trust country. The coefficients on current-country trust are similar in the two cases, while for source-country trust the coefficient is much higher for migrants born in lower-trust countries. The test in column (3) shows the difference to be significant at the 5.4 % level. This suggests that people from low-trust environments remain more affected by the low trust in their country of origin than are migrants from higher-trust to lower-trust countries. This asymmetry, with migrants from high-trust environments being less likely to bring the high trust from the country of origin to the current country of residence,<sup>11</sup> suggests that social trust is harder to build than to destroy.

## 4.2 Generosity: Evidence of Footprints for Prosocial Behaviour

Since generosity and social trust are both important social norms, they are both likely to be learned in youth and possibly relearned when times change or people migrate to a new and different society. Thus we might expect that the migration footprint effects we find for social trust have some echo in the data for generosity. The Gallup World Poll asks respondents if they have given to a charity in the past 30 days. International averages vary a lot, from below 10 % in 15 countries to over two-thirds in eight countries.

When people move from one country to another, is their generosity in their new country of residence determined by the social norms where they now live, or is it also determined in part by the prevalence of generosity in their countries of origin? Table 6 estimates Eq. (2) using only immigrants, showing that migrants tend to adapt fairly fully to the norms of generosity in their new countries. However, as we expected, there is for all migrants taken together a significant footprint effect from the norms in their countries of origin.<sup>12</sup>

## 4.3 Trust in National and Local Institutions: Experience Trumps Culture

In this section we estimate the same model as in column (1) of Table 6 for various measures of institutional trust, to see if there is any footprint effect. Our main presumption

<sup>10</sup> As can be seen by comparing columns (1) and (2) in Table 4.

<sup>11</sup> This is different from Ljunge (2014) who find that, among immigrants to Europe, very high trust might be persistent even in low trusting environments through cultural transmission in the family, however the low trusting environments in Europe may not be very low, compared to many less developed countries included in our sample.

<sup>12</sup> We also tested to see if there was an asymmetry for the generosity footprint analogous to that shown in Table 5 for social trust. The generosity footprint is higher (but insignificantly so) for those moving from more generous to less generous countries. In this case, the slight asymmetry favours the idea that prosocial habits may be contagious, and hence easier to establish and maintain than social trust.

**Table 5** Footprint effects for two different groups of immigrants

	Migrants from lower-trust country to higher-trust country (1)	Migrants from higher-trust country to lower-trust country (2)	All migrants
Trust in current country	0.751*** (0.084)	0.677*** (0.158)	0.731*** (0.081)
Trust in country of origin	0.480*** (0.161)	0.197* (0.107)	0.183** (0.080)
Trust in country of origin × dummy for migrants from lower- to higher-trust country			0.287* (0.147)
Dummy for migrants from lower- to higher-trust country			−0.053* (0.030)
Age	0.000 (0.003)	−0.005 (0.003)	−0.002 (0.002)
Age squared divided by 100	0.000 (0.003)	0.006 (0.004)	0.003 (0.002)
Female	−0.019 (0.018)	0.017 (0.018)	−0.002 (0.013)
Married or in a common-law relationship (ref.: single)	−0.041** (0.020)	0.036 (0.023)	−0.003 (0.016)
Separated, divorced, or widowed (ref.: single)	−0.047* (0.027)	0.009 (0.034)	−0.019 (0.021)
Tertiary education	0.046** (0.023)	0.036 (0.029)	0.040* (0.021)
Wave dummies	Yes	Yes	Yes
Number of obs.	3588	3076	6664
Adjusted R-squared	0.071	0.042	0.059
Number of countries	109	115	127

Standard errors in parenthesis are clustered by country of residence; \*\*\*, \*\*, \* indicate significance levels of 1, 5, and 10 % respectively

is that the footprint from confidence in the same institutions in their birth country will be much smaller than was the case for social trust, and may well not exist. This is because institutions are more readily seen to differ among countries than is human nature. Social trust assessments are more likely to depend on judgements about human nature, while assessments about local institutions are likely to depend on their features more than on those of the corresponding institutions in the immigrant's country of birth. Our results in Table 7 support this presumption, as they consistently show strong effects from the current country but no footprint from similar judgments in the source country.

There may be other reasons, beyond a footprint effect, for immigrants and others to value institutions differently. For example, Maxwell (2010) finds evidence among migrants to Europe that confidence in political institutions is higher among first-generation immigrants than among the native-born, a result he attributes to optimism due to their choice to move to the new environment in hopes of improving their lives (de la Garza et al. 1996). There is some evidence of such an effect in our global sample. On average, immigrants are slightly more likely to trust all local institutions than are the native-born. When we allow for differing immigration shares, and compare immigrants' trust assessments with those of

**Table 6** Footprint of generosity among immigrants

	(1)	(2)
Generosity in current country	0.866*** (0.035)	0.881*** (0.036)
Generosity in country of origin	0.091*** (0.032)	0.079** (0.033)
Age	-0.001 (0.002)	-0.001 (0.002)
Age squared divided by 100	0.002 (0.002)	0.002 (0.002)
Female	0.021* (0.012)	0.019 (0.013)
Married or in a common-law relationship (ref.: single)	0.044** (0.017)	0.051*** (0.018)
Separated, divorced, or widowed (ref.: single)	0.045** (0.020)	0.051** (0.022)
Tertiary education	0.029*** (0.009)	0.017 (0.011)
Social support		0.032** (0.013)
Wave dummies	Yes	Yes
Number of obs.	18,559	16,053
Adjusted R-squared	0.106	0.119
Number of countries	144	144

Standard errors in parenthesis are clustered by country of residence; \*\*\*, \*\*, \* indicate significance levels of 1, 5, and 10 % respectively

the native-born in the same country, immigrants remain more trusting than the native-born for trust in the judicial system and trust in the national government.<sup>13</sup>

## 5 Conclusions

Data from large samples of migrant and non-migrant respondents to the Gallup World Poll have permitted us to establish some fairly general conclusions about the links between immigration and social norms. First, we have generalized earlier findings that migrants tend to make social trust assessments that mainly reflect conditions in the country where they now live, but nonetheless show a significant footprint effect from their countries of origin. For our sample of migrants to 132 different countries, the average size of the footprint effect is about one-third that of the effect of local conditions. We also found that the footprint effect seems to be smaller for those who move from higher-trust to lower-trust nations, suggesting that social trust may be harder to create than to destroy.

<sup>13</sup> The first estimate uses the whole global sample of respondents, allowing only for wave effects. The second includes fixed effects for each country, so that immigrant trust is being compared to that of native-born in the same country. The remaining significant coefficients are +0.037 (se = 0.008) for trust in the judicial system and +0.046 (se = 0.010) for trust in the national government.

**Table 7** No footprint effect for trust in institutions (immigrants only)

Dependent variable	Independent variable			Adj. R-s.q.	No. of obs.	No. of countries
	National value in current country	National value in source country	Tertiary education			
(1) Confidence in judicial system and courts	0.946*** (0.038)	0.015 (0.041)	0.031** (0.015)	0.149	15,181	132
(2) Confidence in police	0.923*** (0.048)	0.029 (0.045)	0.012 (0.010)	0.114	13,553	134
(3) Confidence in national government	0.958*** (0.052)	0.003 (0.046)	-0.021 (0.018)	0.118	11,939	125
(4) Corruption in government	1.019*** (0.026)	0.035 (0.033)	-0.045*** (0.014)	0.327	13,094	137
(5) Corruption in business	0.970*** (0.017)	0.040 (0.034)	-0.025 (0.018)	0.235	16,439	141
(6) Trust: property is safe at all times	0.957*** (0.034)	0.020 (0.027)	0.015* (0.008)	0.293	14,867	124
(7) Trust: government allows new businesses to thrive	0.952*** (0.030)	-0.016 (0.032)	0.017 (0.013)	0.217	13,707	124

Standard errors in parenthesis are clustered by country of residence; \*\*\*, \*\*, \* indicate significance levels of 1, 5, and 10 % respectively. Other demographic variables such as age, age squared, gender, married or in a common-law relationship, separated, divorced, or widowed, and wave dummies are included in all models but not shown in this table

Second, we found that for our global sample of migrants and non-migrants, their average levels of social trust are the same, after adjusting for footprint effects and each individual's own personal trust-supporting circumstances.

Third, we found that the altruistic behaviour of migrants, as measured by the frequency of their donations in their new countries, is strongly determined by social norms in their new countries, but also has significant footprint effects from their countries of origin. These results are the first to investigate footprint effects for the altruistic behaviour of immigrants.

Finally, we found, as expected, that confidence in local institutions of several types is influenced by the quality of these institutions (as measured by the assessments of others) and not at all by the quality of the same institutions in their countries of origin.

Our results appear to us to be mutually consistent. Taken together, they support the notion that social norms are deeply rooted in long-standing cultures yet are nonetheless subject to adaptation when there are major changes in the surrounding circumstances and environment. Migration provides a strong test, as it takes individuals brought up in one culture and transfers them to another. Although migrants tend to associate in their new countries with others from the same source country, we find nonetheless that two important social norms, as represented by social trust and generosity, adapt substantially to the prevailing norms in their new countries of residence. Nonetheless, the continuing importance of cultural and social norms established in earlier life is demonstrated by the significant footprint effects that we find for both social trust and generosity.

Our results showing no footprint effects for confidence in specific institutional features of immigrants' new countries confirm that our previous footprint results are not simply

evidence that people are slow to absorb the features of their new environment. When asked specific questions about the institutional features of their new countries, immigrants' answers reflect the characteristics of those institutions, with no footprint from the quality of the institutions in their countries of birth. Thus the footprint results for trust and generosity have strong claims to reflect broader social norms, just as we and others have argued.

**Acknowledgments** Helliwell and Xu's research is supported by the Canadian Institute for Advanced Research (CIFAR). Wang gratefully acknowledges financial support from the Korea Development Institute (KDI) School of Public Policy and Management. We thank the Gallup Organization for access to data from the Gallup World Poll, and we are also grateful for advice and comments from Christian Bjørnskov, Gale Muller, and Robert Putnam. Stata code used to transform the Gallup data and estimate the equations is available from the authors on request.

## Appendix

See Tables 8 and 9.

**Table 8** Variable definitions

Variable	Survey question
Social trust	Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? 1 for "yes" and 0 for "no"
Generosity	"Have you done any of the following in the past month? How about donated money to a charity?" 1 for "yes" and 0 for "no". We adjust people's response to this question for differences in household income by regressing the donation variable on log household income in a linear probability model. The residual is defined as "generosity"
Social support	If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not? 1 for "yes" and 0 for "no"
Confidence in judicial system and courts	Do you have confidence in each of the following, or not? How about Judicial system and courts?
Confidence in police	Do you have confidence in each of the following, or not? How about police? 1 for "yes" and 0 for "no"
Confidence in national government	Do you have confidence in each of the following, or not? How about National government? 1 for "yes" and 0 for "no".
Corruption in government	Is corruption widespread throughout the government in the country, or not? 1 for "yes" and 0 for "no"
Corruption in business	Is corruption widespread within businesses located in the country, or not? 1 for "yes" and 0 for "no"
Trust: property is safe at all times	If someone wants to start a business in the country, can they trust their assets and property to be safe at all times? 1 for "yes" and 0 for "no"
Trust: government allows their new businesses to thrive	If someone wants to start a business in the country, can they trust the government to allow their business make a lot of money? 1 for "yes" and 0 for "no"

**Table 9** Social trust in the 132 Countries

Country	Social trust	Country	Social trust	Country	Social trust	Country	Social trust
<b>Denmark</b>	<b>0.630</b>	Belgium	0.306	<b>Slovakia</b>	<b>0.212</b>	Serbia	0.142
<b>China</b>	<b>0.585</b>	Ireland	0.305	<b>Pakistan</b>	<b>0.208</b>	Paraguay	0.142
<b>Morocco</b>	<b>0.585</b>	Hong Kong	0.303	<b>Italy</b>	<b>0.207</b>	Mongolia	0.141
<b>Finland</b>	<b>0.585</b>	Rwanda	0.301	<b>India</b>	<b>0.207</b>	Philippines	0.139
<b>Sweden</b>	<b>0.563</b>	Austria	0.301	<b>Croatia</b>	<b>0.206</b>	Colombia	0.135
<b>Djibouti</b>	<b>0.547</b>	Vietnam	0.290	Montenegro	0.201	Cameroon	0.133
<b>Netherlands</b>	<b>0.469</b>	Afghanistan	0.281	Argentina	0.199	Hungary	0.133
<b>Switzerland</b>	<b>0.453</b>	Senegal	0.280	France	0.199	Costa Rica	0.132
<b>Mali</b>	<b>0.448</b>	Uruguay	0.278	Ghana	0.198	Nigeria	0.132
<b>Canada</b>	<b>0.419</b>	Poland	0.277	United Arab Emirates	0.193	Latvia	0.131
Somaliland	0.407	Mexico	0.276	Uganda	0.174	Ecuador	0.130
Niger	0.402	Turkmenistan	0.275	El Salvador	0.172	Honduras	0.128
Congo Kinshasa	0.390	Czech Republic	0.274	South Africa	0.169	Côte d'Ivoire	0.126
Burundi	0.383	Azerbaijan	0.274	Bosnia and Herzegovina	0.167	Moldova	0.126
Central African Republic	0.373	Israel	0.270	Greece	0.165	Albania	0.126
Saudi Arabia	0.371	Yemen	0.269	Georgia	0.162	Bolivia	0.124
United States	0.371	Singapore	0.268	Iraq	0.160	Liberia	0.117
Kyrgyzstan	0.358	Uzbekistan	0.266	Malta	0.159	Bangladesh	0.115
United Kingdom	0.358	Tanzania	0.264	Sierra Leone	0.159	Bahrain	0.115
Comoros	0.358	Burkina Faso	0.262	Algeria	0.158	Kuwait	0.115
Belarus	0.356	Luxembourg	0.261	Armenia	0.157	Nicaragua	0.113
Taiwan	0.355	South Korea	0.258	Guatemala	0.156	Malaysia	0.112
Kazakhstan	0.344	Lithuania	0.255	Sri Lanka	0.155	Macedonia	0.110
Estonia	0.340	Egypt	0.254	Nepal	0.155	<b>Cyprus</b>	<b>0.108</b>
Japan	0.339	Qatar	0.248	Chile	0.155	<b>Cambodia</b>	<b>0.105</b>
Malawi	0.334	Russia	0.247	Romania	0.155	<b>Peru</b>	<b>0.104</b>
Tajikistan	0.330	Portugal	0.242	Venezuela	0.152	<b>Kenya</b>	<b>0.096</b>
Germany	0.316	Indonesia	0.240	Slovenia	0.149	<b>Syria</b>	<b>0.096</b>
Zambia	0.315	<b>Thailand</b>	<b>0.236</b>	Zimbabwe	0.148	<b>Jordan</b>	<b>0.096</b>
Mauritania	0.313	<b>Spain</b>	<b>0.224</b>	Tunisia	0.148	<b>Palestine</b>	<b>0.088</b>
Sudan	0.310	<b>Bulgaria</b>	<b>0.223</b>	Dominican Republic	0.147	<b>Botswana</b>	<b>0.087</b>
Haiti	0.308	<b>Chad</b>	<b>0.216</b>	Kosovo	0.144	<b>Turkey</b>	<b>0.084</b>
Ukraine	0.307	<b>Panama</b>	<b>0.214</b>	Brazil	0.144	<b>Lebanon</b>	<b>0.067</b>

The value of social trust is the percentage of respondents answering “yes” to the survey question “Generally speaking, would you say that most people can be trusted or that you have to be careful in dealing with people?” The top 10, middle 10, and bottom 10 countries are marked in bold



## References

- Aknin, L. B., Barrington-Leigh, C. P., Dunn, E. W., Helliwell, J. F., Biswas-Diener, R., Kemeza, I., et al. (2013). Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *Journal of Personality and Social Psychology, 104*(4), 635–652.
- Aknin, L. B., Dunn, E. W., & Norton, M. I. (2011). Happiness runs in a circular motion: Evidence for a positive feedback loop between prosocial spending and happiness. *Journal of Happiness Studies, 13*(2), 347–355.
- Aknin, L. B., Hamlin, J. K., & Dunn, E. W. (2012). Giving leads to happiness in young children. *PLoS One, 7*(6), e39211.
- Alesina, A., & La Ferrara, E. (2002). Who trusts others? *Journal of Public Economics, 85*(2), 207–234.
- Algan, Y., & Cahuc, P. (2010). Inherited trust and growth. *American Economic Review, 100*(5), 2060–2092.
- Algan, Y., & Cahuc P. (2014). Trust, growth and well-being: New evidence and policy implications. In: P. Aghion & S. Durlauf (Eds.), *Handbook of economic growth* (Vol. 2, pp. 49–120). North Holland.
- Almond, G. A., & Verba, S. (1963). *The civic culture: Political attitudes and democracy in five nations*. Princeton: Princeton University Press.
- Bartolini, S., Bilancini, E., & Pugno, M. (2013). Did the decline in social connections depress American' happiness. *Social Indicators Research, 110*(3), 1033–1059.
- Becker, S. O., Boeckh, K., Hainz, C., & Woessmann L. (2011). The empire is dead, long live the empire! Long-run persistence of trust and corruption in the bureaucracy. *IZA discussion paper 5584*.
- Bjørnskov, C. (2003). The happy few: Cross-country evidence on social capital and life satisfaction. *Kyklos, 56*(1), 3–16.
- Bjørnskov, C. (2007). Determinants of generalized trust: A cross-country comparison. *Public Choice, 130*(1/2), 1–21.
- Bjørnskov, C. (2008). Social capital and happiness in the United States. *Applied Research in Quality of Life, 3*(1), 43–62.
- Bjørnskov, C. (2010). How does social trust lead to better governance? An attempt to separate electoral and bureaucratic mechanisms. *Public Choice, 144*(1–2), 323–346.
- Bjørnskov, C. (2011). Combating corruption: On the interplay between institutional quality and social trust. *Journal of Law and Economics, 54*(1), 135–159.
- Bjørnskov, C. (2012). Historical correlates of social trust, unpublished manuscript. Aarhus University.
- Carlo, G., Fabes, R. A., Laible, D., & Kupanoff, K. (1999). Early adolescence and prosocial/moral behavior II: The role of social and contextual influences. *The Journal of Early Adolescence, 19*(2), 133–147.
- Carlo, G., Mestre, M. V., Samper, P., Tur, A., & Armenta, B. E. (2011). The longitudinal relations among dimensions of parenting styles, sympathy, prosocial moral reasoning, and prosocial behaviors. *International Journal of Behavioral Development, 35*(2), 116–124.
- Chang, W. (2009). Social capital and subjective happiness in Taiwan. *International Journal of Social Economics, 36*(7/8), 844–868.
- Chang, E. C. C., & Chu, Y. (2006). Corruption and trust: Exceptionalism in Asian democracies? *The Journal of Politics, 68*(2), 259–271.
- Chanley, V. A., Rudolph, T. J., & Rahn, W. (2000). The origins and consequences of public trust in government: A time series analysis. *Public Opinion Quarterly, 64*(3), 239–256.
- de Guzman, M. R., & Carlo, G. (2004). Family, peer, and acculturative correlates of prosocial development among Latinos. *Great Plains Research, 14*(2), 185–202.
- de la Garza, R., Falcon, A., & Garcia, F. C. (1996). Will the real Americans please stand up: Anglo and Mexican–American support for American political values. *American Journal of Political Science, 40*(2), 335–351.
- de Vroome, T., Hooghe, M., & Marien, S. (2013). The origins of generalized and political trust among immigrant minorities and the majority population in the Netherlands. *European Sociological Review, doi:10.1093/esr/jct018*.
- Dinesen, P. T. (2011). A note on the measurement of generalized trust of immigrants and natives. *Social Indicators Research, 103*(1), 169–177.
- Dinesen, P. T. (2012a). Does generalized (dis)trust travel? Examining the impact of cultural heritage and destination-country environment on trust of immigrants. *Political Psychology, 33*(4), 495–511.
- Dinesen, P. T. (2012b). Parental transmission of trust or perceptions of institutional fairness: Generalized trust of non-western immigrants in a high-trust society. *Comparative Politics, 44*(3), 273–289.
- Dinesen, P. T. (2013). Where you come from or where you live? Examining the cultural and institutional explanation of generalized trust using migration as a natural experiment. *European Sociological Review, 29*(1), 114–128.

- Dinesen, P. T., & Hooghe, M. (2010). When in Rome, do as the Romans do: The acculturation of generalized trust among immigrants in Western Europe. *International Migration Review*, 44(3), 697–727.
- Dohmen, T., Falk, A., Huffman, D., & Sunde, U. (2012). The intergenerational transmission of risk and trust attitudes. *Review of Economic Studies*, 79(2), 645–677.
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, 319(5870), 1687–1688.
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In W. Damon, R. M. Lerner, & N. Eisenberg (Eds.), *Handbook of child psychology* (6 ed., Vol. 3, pp. 646–718), Social, emotional and personality development New Jersey: Wiley.
- Fernández, R. (2011). Does culture matter? In J. Benhabib, M. O. Jackson, & A. Bisin (Eds.), *Handbook of social economics* (Vol. 1A, pp. 481–508). North Holland.
- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. New York: Free Press.
- Gitelman, Z. (1982). *Becoming Israelis: Political resocialisation of soviet and american immigrants*. New York: Praeger.
- Glaeser, E. L., Laibson, D. I., Scheinkman, J. A., & Soutter, C. L. (2000). Measuring trust. *Quarterly Journal of Economics*, 115(3), 811–846.
- Grusec, J. E., Davidov, M., & Lundell, L. (2002). Prosocial and helping behavior. In P. K. Smith & C. H. Craig (Eds.), *Blackwell handbook of childhood social development* Malden (pp. 457–474). MA: Blackwell Publishers.
- Guiso, L., Sapienza, P., & Zingales, L. (2006). Does culture affect economic outcomes? *Journal of Economic Perspectives*, 20(2), 23–48.
- Heineck, G., & Süßmuth, B. (2013). A different look at Lenin's legacy: Social capital and risk taking in the two Germanies. *Journal of Comparative Economics*, 41(3), 789–803.
- Helliwell, J. F., & Huang, H. (2008). How's your government? International evidence linking good government and well-being. *British Journal of Political Science*, 38(4), 595–619.
- Helliwell, J. F., & Putnam, R. D. (1995). Economic growth and social capital in Italy. *Eastern Economic Journal*, 21(3), 295–307.
- Helliwell, J. F., & Putnam, R. D. (2004). The social context of well-being. *Philosophical Transactions of the Royal Society of London B*, 359(1449), 1435–1446.
- Helliwell, J. F., & Putnam, R. D. (2007). Education and social capital. *Eastern Economic Journal*, 33(1), 1–19.
- Helliwell, J. F., & Wang, S. (2011). Trust and wellbeing. *International Journal of Wellbeing*, 1(1), 42–78.
- Helliwell, J. F., & Wang, S. (2013). World happiness: Trends, explanations and distribution. In J. F. Helliwell, R. Layard, & J. D. Sachs (Eds.), *World happiness report 2013* (pp. 8–37). New York: United Nations Sustainable Development Research network.
- Hooghe, M., Reeskens, T., Stolle, D., & Trappers, A. (2009). Ethnic diversity and generalized trust in Europe: A cross-national multilevel study. *Comparative Political Studies*, 42(2), 198–223.
- Katz, H. A., & Rotter, J. B. (1969). Interpersonal trust scores of college students and their parents. *Child Development*, 40(2), 657–661.
- Kawachi, I., Subramanian, S. V., & Kim, D. (Eds.). (2008). *Social capital and health*. New York: Springer.
- Knack, S. (2001). Trust, associational life and economic performance. In J. F. Helliwell & A. Bonikowska (Eds.), *The contribution of human and social capital to sustained economic growth and well-being* (pp. 172–202). Ottawa: Human Resources Development Canada and OECD.
- Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *Quarterly Journal of Economics*, 112(4), 1251–1288.
- Kosfeld, M., Heinrichs, M., Zak, P., Fischbacher, U., & Fehr, E. (2005). Oxytocin increase trust in humans. *Nature*, 435(2), 673–676.
- Krupka, E., & Weber, R. A. (2009). The focusing and informational effects of norms on pro-social behavior. *Journal of Economic Psychology*, 30(3), 307–320.
- La Porta, R., López-de-Silanes, F., Schleifer, A., & Vishny, R. W. (1997). Trust in large organizations. *American Economic Review Papers and Proceedings*, 87(2), 333–338.
- Leeds, R. (1963). Altruism and the norm of giving. *Merrill-Palmer Quarterly of Behavior and Development*, 9(3), 229–240.
- Ljunge, M. (2014). Trust issues: Evidence on the intergenerational trust transmission among children of immigrants. *Journal of Economic Behavior and Organization*, 106, 175–196.
- Maxwell, R. (2010). Evaluating migrant integration: Political attitudes across generations in Europe. *International Migration Review*, 44(1), 25–52.
- Mishler, W., & Rose, R. (2001). What are the origins of political trust? Testing institutional and cultural theories in post-communist societies. *Comparative Political Studies*, 34(1), 30–62.

- Morris, S. D., & Klesner, J. L. (2010). Corruption and trust: Theoretical considerations and evidence from Mexico. *Comparative Political Studies*, 43(10), 1258–1285.
- Nagler, M. G. (2013). Does social capital promote safety on the roads? *Economic Inquiry*, 51(2), 1218–1231.
- Nannestad, P., Svendsen, G. T., Dinesen, P. T., & Sønderskov, K. M. (2014). Do institutions or culture determine the level of social trust? The natural experiment of migration from non-western to western countries. *Journal of Ethnic and Migration Studies*, 40(4), 544–565.
- Otoni-Wilhelm, M. & Zhang Y. (2011). What motives cause parents to transmit generosity? Unpublished manuscript.
- Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.
- Putnam, R. D. (2007). E pluribus unum: Diversity and community in the twenty-first century—The Johan Skytte Prize Lecture. *Scandinavian Political Studies*, 30(2), 137–174.
- Rainer, H., & Siedler, T. (2009). Does democracy foster trust? *Journal of Comparative Economics*, 37(2), 251–269.
- Rice, T. A., & Feldman, J. L. (1997). Civic culture and democracy from Europe to America. *The Journal of Politics*, 59(4), 1143–1172.
- Siu, A. M., Cheng, H. C., & Leung, M. C. (2006). Prosocial norms as a positive youth development construct: Conceptual bases and implications for curriculum development. *International Journal of Adolescent Medicine and Health*, 18(3), 451–457.
- Soroka, S. N., Helliwell, J. F., & Johnston, R. (2006). Measuring and modelling interpersonal trust. In F. M. Kay & R. Johnston (Eds.), *Social capital, diversity and the welfare state* (pp. 95–132). Vancouver: UBC Press.
- Stevenson, B., & Wolfers, J. (2011). Trust in public institutions over the business cycle. *American Economic Review*, 101(3), 281–287.
- Sturgis, P., Brunton-Smith, I., Read, S., & Allum, N. (2011). Does ethnic diversity erode trust? Putnam's 'Hunkering Down' thesis reconsidered. *British Journal of Political Science*, 41(1), 57–82.
- Tabellini, G. (2008). The scope of cooperation: Values and incentives. *Quarterly Journal of Economics*, 123(3), 905–950.
- Tabellini, G. (2010). Culture and institutions: Economic development in the regions of Europe. *Journal of the European Economic Association*, 8(4), 677–716.
- Uslaner, E. M. (2002). *The moral foundations of trust*. New York: Cambridge University Press.
- Uslaner, E. M. (2008). Where you stand depends upon where your grandparents sat: The inheritability of generalized trust. *Public Opinion Quarterly*, 72(4), 725–740.
- Voicu, B. (2012). Immigrants and social trust: Mind the cultural gap? Paper presented at the ESRC-EQUALSOC conference. Stockholm, September 24–26, 2012.
- Wilson, D. S. (1975). A theory of group selection. *Proceedings of the National Academy of Sciences of the United States of America*, 72(1), 143–146.
- Zmerli, S., & Hooghe, M. (Eds.). (2011). *Political trust: Why context matters*. Colchester: ECPR Press.