

Immigrants' trust

Abstract

The prevalence of migration across the world poses the question inasmuch migrants will assimilate to the way of life of the receiving country? Studies of immigrants show that immigrants usually assimilate via educational attainments and economic integration. Concerning culture, however, researchers do not agree and studies show mixed results: some ethnic groups preserve to a great extent their own culture, while other immigrants assimilate into the culture of the destination country. A central cultural aspect is social trust in other persons according to many researchers. Social trust is regarded by several researchers as a central factor for democracy, wealth, and good public administration. However, although both research streams – on immigration and on trust – are well-established, there are only a limited number of studies investigating immigrants' social trust globally. This paper examines which factors influence immigrants' trust levels on a global scale. Immigrants' level of trust is an important indicator of a successful integration, because it signals some form of understanding, acceptance, and feeling of comfort in the social context of the destination. The results show that the most important factor for immigrants' trust is the destination country's trust level. This indicates that immigrants assimilate to the destination's way of life. Furthermore, individual factors like education, trust in public authorities, and income increase immigrants' trust levels, but the influence of individual factors is modified by religious denomination. Overall, Muslim and Orthodox immigrants are less affected by individual factors than Protestants.

Keywords: trust, migration, segmented assimilation, integration, Muslim

INTERNATIONAL MASS MIGRATION is a prevalent social phenomenon since the 18th century (United Nations Population Division 2012, Dao et al. 2021, De Haas et al. 2019). During the last decades, immigration has become a controversial global topic. The reasons for political disputes are manifold, but often mentioned are cultural differences, perceived or real, between immigrants and natives (Sotiropoulos et al. 2023, Dennison and Geddes 2021, De Haas et al. 2019, Hadden 2017, Geurts et al. 2025).

Migration studies have tried to elucidate, if and how immigrants are culturally different. The results are mixed: partly, they conclude that immigrants integrate and adapt to the new culture surrounding them, but partly they conclude that immigrants preserve their original cultural values and norms.

This paper further examines whether immigrants are different or similar concerning one specific aspect of culture: general social trust in other persons. Several researchers consider trust to be an important cultural value, enabling cooperation among citizens. They argue that social trust is crucial for the successful establishment of good govern-

ance, economic development, and other public goods (for an overview see Nannestad 2008, Delaruelle et al. 2021). Because of the importance for a country's culture, I think that the question of immigrants' social trust is an interesting aspect of cultural integration. Which factors correlate positively or negatively with immigrants' trust?

The question this paper addresses is, which factors influence immigrants' general trust? I reason that immigrants' level of generalized trust is an important indicator of a successful integration. If immigrants show the same level of trust toward their fellow citizens, I regard it as an indicator of some degree of understanding, acceptance, and feeling of comfort in the social context. I think that successful cultural integration implies does not necessarily imply a positive attitude related to all aspects of the social context to the same degree, but enough to lead to a trusting attitude towards others.

In the following, I will present two different research fields that are relevant for the question of this paper. Firstly, one research field focuses on the question of how trust is formed in societies, not necessarily focusing on immigrants. From my point of view, it is relevant for this paper, because it informs about factors that also could be influential for immigrants.

Secondly, another research field focuses instead on the phenomenon of migration. It addresses various topics, ranging from how immigrants fare in terms of education, employment, and cultural habits. Being interested in immigrants' assimilation, I consider this field to be of interest for this article, although it is seldom concerned with the question of immigrants' trust.

In addition, I present, thirdly, the concept of Cultural World Regions (CWRs), which I will use to capture cultural traits of countries and regions. Finally, I present hypotheses, which summarize the evidence provided by migration, trust, and CWR concepts and research.

Social trust: the concept

Current understandings of social trust have been influenced by several theorists and theoretical traditions. Uslaner claims that social trust is a socialized moral norm (Uslaner 2002). Putnam understands social trust as being created by social cooperation and civic mindedness (Putnam 1993). Bourdieu regards social capital as being a form of personal asset based on the connectedness and network capability of individuals (Bourdieu 1999). Coleman and Hardin see social trust as being based on interaction experiences and the following rational expectations about trustworthiness (Coleman 1990, Hardin 2002).

The main difference lies between cognitive versus non-cognitive theories. Cognitive theories understand trust as being based on rather rationalistic calculations of another person's trustworthiness. This cognitive assessment is usually assumed to be based on former experiences. It comes in the form of knowledge of another person, cost-benefit analyses, and expectations of a tit-for-tat strategy (Coleman 1990, Hardin 2002).

Non-cognitive theories highlight the irrationality of trust instead. Trust is considered to be a "leap of faith" (Möllering 2006, referring to Simmel). In non-cognitive

theories, the crucial aspect of trust is the facilitation of human interaction and cooperation where monitoring is no longer possible (Offe 1999).

Despite the different understandings of trust, most agree that trust enables citizens to successfully create public goods such as democracy, welfare, economic growth, the upholding of the rule of law, and the prevention of corruption. Individuals are enabled to overcome collective action problems and to become more tolerant, engaged, volunteering, and community-oriented.

Research has shown that national trust levels remain relatively stable over time (for a discussion, see the overview by Nannestad 2008). I follow several researchers and will focus on the survey question about generalized trust in this article.

Trust research

Research of trust has been ongoing for decades, leading to recurrent results concerning some factors, which I will detail in the following. The presented factors are those that have been confirmed by several studies according to overviews (Nannestad 2008, Dinesen et al. 2020).

Inequality is reported to have a negative effect on generalized trust (Uslaner 2002, Zak & Knack 2002, Björnskov 2007). Likewise, there is evidence that ethnic diversity is negatively related to the creation of trust (Dinesen et al. 2020, Alesina & Ferrara 2002, Delhey & Newton 2005). The reason for both relationships is supposed to be twofold: Some level of identification between individuals is assumed to be relevant for the creation of trust. Identification makes empathy and a sense of community possible, which increases the possibility of trust. As most individuals more easily identify with socially similar persons, financial and ethnic differences may hamper identification with fellow citizens and, in turn, hamper the creation of trust.

Protestantism has been shown to be related to high levels of trust by several researchers (Uslaner 2002, Björnskov 2008, Delhey & Newton 2005). The reason why Protestantism is related to trust is, however, unclear.

Another reason for high levels of trust is supposed to be aspects of good governance and institutional trust (Farell & Knight 2003, Rothstein & Stolle 2002, Nannestad et al. 2014). Good governance and public institutions are reasoned to create structures that help to sanction betraying persons. ‘Good’ institutions are also supposed to provide an ideal by acting honestly, fair, transparent, accountable, and even-handed. By providing an ideal of trustworthiness, they encourage all to act according to the ideal of trustworthiness, leading to trust between individuals. Country studies have shown that this is especially the case for immigrants (Valcke et al. 2020, Pass et al. 2020, Rapp 2020).

A country’s level of wealth has been shown to be related to high trust levels (Zak & Knack 2002, Uslaner 2002). Usually, more wealthy countries have higher levels of trust than poorer countries.

By contrast with good governance and institutions, colonialism and communism are supposed to destroy trust between citizens (Mishler & Rose 1997, Björnskov 2008).

Both institutional systems create an environment of helplessness and cautiousness towards strangers, discouraging trust.

Migration research: do immigrants assimilate into their new country?

Research, especially, for the USA, provides a large pool of empirical information concerning how migrants shape their lives in receiving countries and how receiving countries may change (for overviews see Alba & Nee 2003; Zhou & Bankston III 2016). Theories have highlighted various dimensions: Macro factors are, for example, countries' socioeconomic structure and culture. Micro factors are immigrants' socio-economic background, status, educational background, and ethnicity. However, considerable controversies exist concerning to what extent immigration leads to homogeneous or heterogeneous outcomes for the receiving countries in the long run. Do immigrants blend into the existing culture, or do they preserve the cultural backgrounds of their origin countries?

Theoretical accounts which highlight homogeneity are classical assimilation theories and ideas of a 'melting pot' (for overviews see Alba & Nee 2003; Zhou & Bankston III 2016). Both theories assume that the receiving country's inhabitants and immigrants will eventually become similar in their way of life (Alba & Nee 2003).

Assimilation theories usually assume that immigrants acculturate to the core culture and assimilate to the social structure of the receiving country. Robert E. Park describes the process as based on immigrants' contacts and communications with inhabitants, which will eventually lead to immigrants' adaptation to the values, customs, habits, and socio-economic standards of the receiving country (Park 1928).

Milton M. Gordon (Gordon 1961) further developed and differentiated assimilation research, which opened the door for newer research to investigate heterogeneous outcomes and the variety of immigration patterns.

Evidence for assimilation theory is mixed (Zhou & Bankston III 2016), but several studies provide support (Gans 1994, Rapp 2020, Pass et al. 2020, Maxwell 2010, Dollmann 2021).

By contrast, theories of multiculturalism and segmented assimilation point to persisting heterogeneous outcomes between immigrants and natives (Alba & Nee 2003; Zhou & Bankston III 2016). Multiculturalism assumes that immigrant groups will form distinct ethnic and religious communities to uphold their specific culture in a new environment. There is some evidence showing the ongoing existence of ethnic neighbourhoods, social clubs, educational institutions, and business branches. In addition, religious preferences and practices prevail for several generations of immigrants in ethnic organisations. In sum, however, the evidence for multiculturalism is mixed (Zhou & Bankston III 2016).

Segmented assimilation assumes heterogeneous outcomes for receiving countries in a different way than multiculturalism (Portes & Zhou 1993). On one hand, the segmented assimilation approach highlights the ongoing relevance of the classical as-

simulation theory. On the other hand, segmented assimilation emphasizes variations and divergences, leading to heterogeneous outcomes (Zhou & Bankston III 2016). Min Zhou and associates find that ethnic groups differ concerning their assimilation patterns: For example, Asian immigrants assimilate in different ways than Latin-American immigrants. Asian immigrants usually are highly assimilated in socioeconomic terms (high education levels, well-paid middle-class occupations, living in suburbs), but they regularly maintain closed communities with ethnic schools, cultural clubs, and religious institutions (Zhou & Bankston III 2016). By contrast, Latin-Americans, especially darker skinned individuals, have difficulties to assimilating socio-economically. They often acculturate into the black Afro-American culture. These variations in class position and ethnicity lead to a segmented assimilation of immigrant groups into mainstream U.S. society.

Further evidence for heterogeneity and segmented assimilation comes from several studies. Helliwell and associates analyse levels of generalized trust for immigrants from 130 countries (Helliwell, Wang & XU 2016). Overall, they come to the conclusion that trust levels of immigrants fall between their origins and their new country.

Rice and Feldman provide evidence for value differences between U.S. natives and European immigrant groups (Italian, German, and Polish) (Rice & Feldman 1997). They found differences to U.S. natives even for second and third generations. For example, civic values and norms about family and marriage display striking similarities with the grandparents' original European national values. The approach leads not to a matching to American mainstream values.

The same result was found in another study. Nannestad and associates investigate Danish immigrants and found that immigrants do not preserve the lower trust levels of their origins, but show increased trust levels, falling between origin country and destination country (Nannestad et al. 2014).

More recent studies focused on trust in institutions, political engagement of immigrants, and life satisfaction. Thus, they are not directly addressing general trust, the dependent variable of this article. Nevertheless, they provide newer evidence concerning immigrants' integration in the receiving countries.

Valcke and associates provide evidence that immigrants' social belonging increase if they experience fair treatment by authorities and other people in the USA (Valcke et al. 2020). In a similar way, Niedlich and associates find that trust increases for immigrant pupils, if they are treated well in German schools (Niedlich et al. 2021). Spierings and Vermeulen show that immigrants have lower levels of trust in political institutions, lower levels of satisfaction with democracy, and act to a lesser degree politically in the Netherlands (Spierings & Vermeulen 2023). Rapp finds that immigrants have lower trust in the government and participate to lesser extent in political life in Switzerland (Rapp 2020). Interestingly, Pass and associates provide evidence that immigrants have lower levels of trust in the police the longer they lived in Australia (Pass et al. 2020).

Two studies investigated the relevance of the birth country: Dolman reports that political trust is lower for immigrants overall, but not for immigrants originating from authoritarian regimes in Germany (Dollmann 2021). Likewise, Berggren and associ-

ates provide evidence for the relevance of the birth country concerning immigrants' life satisfaction in 30 EU countries (Berggren et al. 2020).

Several studies focused especially on immigrants with Muslim backgrounds. Norris and Inglehart found that Muslim immigrants to some degree acculturate to norms about democracy, gender, sexuality, and religion in Western countries. However, Muslim immigrants remain less liberal than Western populations on average. Muslim immigrants have values, which fall between their origin countries values and Western values (Norris & Inglehart 2012).

Kretschmer investigates gender attitudes of immigrants, who are predominantly from Turkey in Germany (Kretschmer 2018). He, in addition to Norris and Inglehart, provides evidence that Muslim immigrants preserve their more conservative values regarding gender values. Even in the second generation, immigrants remain more conservative than their German counterparts. This is the case foremost for religiously active immigrants.

Bisin and associates find that Muslims integrate less fully than other immigrants into British society (Bisin et al. 2008). Most surprisingly, Muslims with higher incomes, higher educational degrees, and higher job positions identify more strongly with religious, Islamic norms. In other words, they are even lesser integrated than Muslims with a lower socio-economic status. This is in line with the theoretical idea of segmented assimilation: assimilation concerning education and employment but not concerning cultural values.

Asfari and Askar discover that Muslims preserve a distinct, Islamic culture in regard to identity and religion, despite having good employment and education status, in an exploratory small-scale study in the USA (Asfari & Askar 2020).

Geurts and associates discovered that religious Muslims perceive less integration than other minority groups in the Netherlands (Geurts et al. 2025). They attribute that to public debates about Islam as a problem for Dutch society.

In sum, most migration theories and studies suggest that immigrants assimilate, but that they vary concerning the dimensions and the depth of assimilation. Immigrants' cultural backgrounds and socio-economic success influence processes of acculturation.

In the following, the concept of CWRs is presented. I regard it as an interesting macro concept to capture the long historical paths and complex patterns of contemporary countries.

Cultural world regions (CWRs): a concept of cultures and modernization

I use the concept of cultural world regions (CWRs) to capture social traits on the macro level.

I regard that the concept of CWR is interesting out of several reasons: Firstly, it is a complex, historical, typological concept, which combines several macro dimensions. It includes the aspects ascertained in trust-related research but goes beyond these by including more dimensions (e.g., social movements, elite strategies, and family

structures). Thus, it is more including. Secondly, it provides information of historical developments, including pivotal windows of opportunity and path dependencies. Thirdly, it gives a balanced, Weberian view on culture, economy, and politics alike (Weber 2013 [1919-1920]). Fourthly, one could see it as a humble challenge to Przeworski's and Teune's claim that comparisons should be based on variables, not historic entities, such as regions and countries (Przeworski & Teune 1970). I reckon that it will be difficult in the foreseeable time to break down complex social entities into variables, because factors interplay with each other, providing windows of opportunities and path dependencies over long historical periods. In this sense, CWRs originate from a historical macro approach of sociology.

I mostly follow Göran Therborn's ideas concerning civilizations, which I rather call CWRs, because the term avoids connotations of strict long-term stability, homogeneity, and cultural conflicts (e.g., Huntington 1996, Therborn 2012). The concept provides an interesting viewpoint on the way social trust and cooperation in populations may have been influenced by historical developments, such as the establishment of religions, individual civil, economic, and political rights, and economic development.

CWRs are here defined as historically shaped, geographically large-scale, and culturally similar areas including several countries. Culturally, CWRs share a history of worldviews about social order, humanity, ethics, cosmology, and politics. Populations within CWRs share to some degree a way of living and patterns of behaviour (Therborn 2012).

There are five historically shaped CWRs according to Therborn: Sinic (China, Korea, Japan, and Vietnam), Indic (India, Sri Lanka, Bali, Java, Myanmar, Thailand, Laos, Cambodia, Nepal, and Tibet), Arabic (e.g., Saudi Arabia, Jordan, Turkey, Tunisia), European (e.g., Greece, Italy, Russia, Norway, Germany, France, Great Britain, USA, Australia), and, Sub-Saharan African.

I will further distinguish sub-variants. I will split the European civilization of Therborn's classification into a Post-Communist European CWR (e.g., Slovenia, Czech Republic, Russia) and a Western CWR (Greece, Italy, Norway, Germany, France, USA, Australia, Canada, and New Zealand). The split is due to the communist past in Eastern Europe, which Bjørnskov, Delhey, and Newton argue to decrease trust between citizens (Bjørnskov 2008, Delhey & Newton 2005).

Moreover, I will add a Latin American/Caribbean CWR due to the specific cultures that developed through the mixing of African, European, and Anglo-Saxon cultures.

Today, CWRs are not the same as their historical origins. CWRs were changed by historical developments in warfare, economy, politics, society, and technology. In this sense, they are enduring, but likewise flexibly in adapting to new circumstances. How adaptations were made and which aspects of historical cultures were kept depended largely on struggles and competition between groups, states, and other influential actors (Arnason 2001, Nielsen 2001).

Across the world, the Enlightenment, science, political revolutions, and the economy changed the historical institutions of CWRs. However, these developments had different impacts in CWRs. Therborn argues that there is a difference between those

CWRs that very early introduced these changes into their societies and those that made adaptations in later periods. The Western CWR changed first, while the remaining CWRs introduced changes later.

In the Western CWR, the influence of the Enlightenment and individualization has led to the emergence and popularity of new, non-religious, ideas concerning social and political organization. Based on the idea of all men's equal value as humans, enlightened thinking inspired the declaration of human rights and revolutions in France, Britain, and the USA. The British revolution established limitations for public authorities and introduced civil rights for citizens, while the French Revolution introduced democratic representation.

By comparison with other parts of the world, people in Western civilizations could early rely on legal citizen rights, civil and political freedoms, and political participation. In modern Western history, friendly societies, welfare associations, trade unions, employer associations, and cooperatives became well established. Social movements of free churches, teetotalers, workers, women, and LGBTQ individuals are further examples for ideologically organized mass interests in Western CWRs.

Furthermore, economic developments had an influence on how Western people experienced economic life: independent small-scale farming, manufacturing, free entrepreneurship and the market economy came with less hierarchy, control, and inequality than large-scale farming and statutory economic steering by authoritarian rulers. Europe and, partly, the Anglo-Saxon world had and have less inequality than other CWRs. Although modern thinking spread across the world via warfare and competition, it was most influential for Western CWR according to several authors (Eisenstadt 2001, Arnason 2001, Nielsen 2001).

In the predominantly Non-Western CWRs, the development was different. Colonizers and traditional authorities like kings and emperors usually were not elected. Later, even modern elites distinguished themselves from larger parts of the populations: in Africa and India, Western educated elites established their social spheres separately from the wider populations. In Africa, India, and partly in Latin America, modern political mass mobilization is not based on individual interests, but on ethnic, religious, or linguistic groupings. In East Asia, modern elites tried to preserve elite domination via suppression and control. Deference to seniority and rank is widespread in East and South-East Asian societies.

Often due to colonization, Non-Western CWRs experienced slave trade, large landowners in agriculture, and colonizers' interests in natural resources. These economic systems usually came with hierarchical, controlled, and unequal conditions.

Which expectations can one have concerning differences and similarities of social trust in CWRs? Populations in West Europe and Anglo-Saxon countries are historically more used to individual freedoms and social cooperation in movements, clubs, private societies, et cetera. In addition, they could enjoy cooperation between persons of equal status and less diverse wealth levels than populations in other CWRs. Levels of social trust could be argued to have been increased by such conditions. All other CWRs have historically been more subjected to inequality, authoritarian rule and

colonization and could, thus, be expected to have less trusting cultures among individuals and strangers.

Based on these considerations, I take a closer look into how different CWRs shaped social trust of both immigrants and original citizens.

In order to make a conservative assessment of the relevance of CWRs, I add several control variables, informed by previous trust research: inequality levels (share of national income of the top decile), ethnic fractionalization (a combination of racial and linguistic characteristics), Gross National Income, confidence in the police, confidence in civil services, postcolonialism, post-communism, and country-specific cultures (Protestantism).

In addition, I include variables based on migration studies and theories, which capture socio-economic position and cultural orientation of immigrants.

Hypotheses

Hypotheses 1: migration research factors

- 1a Individuals, including immigrants, with a higher education have higher levels of trust.
- 1b Individuals, including immigrants, with a higher income have higher levels of trust.
- 1c individuals, including immigrants, with a higher class position have higher levels of trust.
- 1d Individuals, including immigrants, who are employed, have higher levels of trust.
- 1e Muslims have lower levels of trust than individuals with another denomination or no denomination.

Hypotheses 2: trust research factors and CWRs

- 2a Immigrants have higher levels of trust
 - in countries with a high Gross National Income,
 - in Protestant countries,
 - in Western countries (West European and Anglo-Saxon countries), and
 - in countries with high levels of average social trust.
- 2b Immigrants have lower levels of trust:
 - in countries with high inequality levels (share of national income of the top decile),
 - in countries with a high degree of ethnic fractionalization (a combination of racial and linguistic characteristics),
 - in (post-) colonial countries, and
 - in (post-) communist countries.
- 2c Immigrants have higher social trust, if:
 - they have confidence in the police, and
 - they have confidence in the civil services,

2d Immigrants have lower social trust, if:

- they are Muslims, and
- they originate from a low trust country.

Age is included as a control variable.

Data and methods

For individual level variables, data are used from the World Values Survey, Wave 7 (2017-2022) (the data collection for wave 8 is ongoing). In addition, for economic aspects and ethnic fractionalization at country level, data are used from the Quality of Government Standard Dataset 2025. Previous research often focused on country specific studies in the OECD. It is interesting to explore, if factors of previous research are relevant on a global level. In addition, further factors are included, which have not been explored, such as historical legacies of world regions (CWRs).

Descriptive statistics and, partly, coding information of the variables is in the Appendix, Tables A1 and A2. The dependent variable is the question: 'Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? 1 = Most people can be trusted; 0 = Need to be very careful'. Because the dependent variable is binary, logistic regression is applied. However, one needs to keep in mind a certain insecurity of the concept "trust". Trust is a concept that is influenced by culture. Individuals' interpretations may differ, according to their understanding of what it means to trust other people. Despite this uncertainty, many studies have shown that national trust levels remain relatively stable (for a discussion see the overview of Nannestad 2008).

All metric variables were centered at the overall mean. Centering makes it meaningful to interpret the null point of the y-axis: at zero, all the variables can be interpreted as the average respondent. Grand mean centering does not affect estimation results (Hox 2010). The author used Stata 18 for the statistical analysis.

Multilevel analysis captures context effects on individuals than regular single-level regression. This is because, usually, individuals are influenced by the social context they live in. In other words, individuals differ not only due to individual level differences in income and education, but likewise due to the contextual differences of their countries' development level, historical legacies, and other aspects. Linear regressions do not properly take into account contextual aspects, while multilevel regressions do. Multilevel models are specifically designed to account for and analyse such differences. Multilevel models acknowledge that observations within groups (e.g., individuals in countries) may be more similar to each other than to observations in other groups. Ignoring this similarity would violate the assumption of independent observations, leading to biased standard errors. Multilevel analysis estimates directly level two variance, effects of level 2 variables, and gives more correct standard errors (Hox 2010). In addition, I use robust standard errors, which correct for heteroskedasticity and within-cluster correlation, giving more reliable standard errors.

The research strategy is as follows:

In a first step, I run multilevel logistic models for all respondents, including natives and immigrants. This establishes whether immigrants are different from natives concerning social trust (“Basic” model, 65625 respondents). An equation for the Basic model is in the appendix.

In a second step, I run a model with immigrants only. In the immigrant model, I include additional origin related variables, which are not in the Basic model (“Immigrant” model, 5731 respondents). The models are presented in Tables 1a and 1b.

In a third step, I calculate average probabilities and marginal effects for the immigrant model. They are presented in form of graphs with confidence intervals (graph 1-4). The graphs are based on the immigrant model shown in Table 1.

I am aware that the analysis can only provide descriptive results. The results cannot be interpreted as proving de facto causal relationships. Underlying processes of immigrant adaptation and integration are not directly analysed via regressions. Moreover, the data have problems of heteroskedasticity, which I address by using robust calculations via the Stata program. Nevertheless, I think that even a descriptive analysis provides interesting information about the empirical data concerning the social phenomenon of immigrant trust.

The contexts, the two-level units, are countries in this study. Ideally, at least 20-50 units should be available at level two (Hox 2010). The number of countries is 52 (47) with an average of 1262 (122) respondents. The model is specified in the appendix.

The results in Tables 1a and 1b are shown as odds ratios of individual trust. Odds ratios of 1 indicate that the outcome is not influenced by the independent variable. Odds ratios lower than 1 (e.g., 0.9) indicate a negative influence. Odds ratios greater than 1 (e.g., 1.2) indicate a positive influence.

Results

Table 1. Individual trust, odds ratios, multilevel logistic regression.

Variable	Basic Model	Immigrant Model
Immigrant	0.924	
Confidence in the Police	1.449***	1.583***
Confidence in the Civil Services	1.554***	1.697***
Work/Studies	1.105**	1.267**
Class, Base: Lowest Class		
Upper Class	1.505***	1.498
Upper Middle Class	1.242***	1.342***
Lower Middle Class	1.126**	1.132
Personal Income	1.063***	1.080***

Variable	Basic Model	Immigrant Model
Age, squared	1.000**	1.000
Tertiary	1.328***	1.462***
Catholic	0.969	0.823*
Protestant	1.053	0.912
Orthodox	0.875	0.678***
Jewish	1.217	0.696*
Muslim	0.921	0.583***
Hindu	0.952	0.682
Buddhist	1.051	0.925
Other	0.930	0.765**
Residence Trust Level, Base: Low trust		
Lower Middle	2.346***	2.440
Higher Middle	3.917***	4.753*
High Trust	7.422***	6.561**
Origin Trust Level, Base: Low trust		
Lower Middle		1.048
Higher Middle		1.123
High Trust Origin		1.831***
Inequality, Top Ten Share of Income	0.289*	0.209
Protestant Country	1.641***	1.093
Ethnic Fractionalization	0.911	0.881
(Post-)Colony	0.966	1.028
Gross National Income, logged	1.099	0.763***
(Post-)Communism	1.075	0.810
Latin America	1.282	0.752
East Europe	0.768*	0.807
Africa	0.977	0.302
Arabic Countries	1.016	0.696
Southeast Asia	0.946	0.735
Sinic/East Asian Countries	0.623***	0.791
Base: Western Countries		
_cons	0.034***	0.040***
var(_cons[country])	1.043***	1.000

Statistics	Basic Model	Immigrant Model
Variation Partition Coefficients	13%	0%
N	65625	5731
Loglikelihoods	-28338.30	-3140.55
Bayesian Information Criterium	57053.73	6583.98

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

As shown in Table 1, most or all of the variation in the data is due to individual or unexplained variation. Differences between countries account only for a minor share of variation. This is indicated by small Variation Partition Coefficients (VPC), which are 13% (Basic) and 0% (Immigrants). Thus, the variation between countries comprises only a minor share of the whole variance of trust, the rest is between individuals (87% to 100%). In other words, belonging to a country does not matter much for the trust of individuals, but rather individual characteristics. The VPC of the Basic model implies that the assumption of a clustering is meaningful. Country differences are not big, but still existent. Thus, clustering improves the Basic model in comparison to a simple OLW. This is not necessarily the case for the Immigrant model. Eventually, one could opt for an OLW. The Log Likelihood (LL) test and the Bayesian information criteria (BIC) rank the Immigrant model as better fitting. The results for both models show constants of general trust at 0.03/0.04. This indicates that the respondents tilt more towards being careful and not trusting in general in most countries.

Basic Model

Most surprisingly, immigration background is not significantly lowering individual trust (Table 1, Basic model). This can be interpreted as an optimistic result for immigrants' trust levels. The result is not in congruence with previous, more pessimistic findings.

By contrast to immigration background, the other individual level variables are mostly significant in both models. They influence trust in the way researchers found previously.

Many class positions that are higher than the lowest class (base) have significantly higher odds for general trust. This is also true for people, who have confidence in the police and the civil services. Additionally, persons with higher income, are working or studying, and have tertiary education have higher odds for general trust. Age is significant but has no large effect.

How do CWRs and country level variables affect trust? In the Basic model, individual trust is influenced by two CWRs: Living in East Europe or East Asia (Sinic) significantly lowers trust levels by comparison to Western countries (base), but not for all CWRs. This, partly, confirms the expectation that the historical legacy of the West with individual freedoms, more equality, and social cooperativeness has a positive effect on general trust.

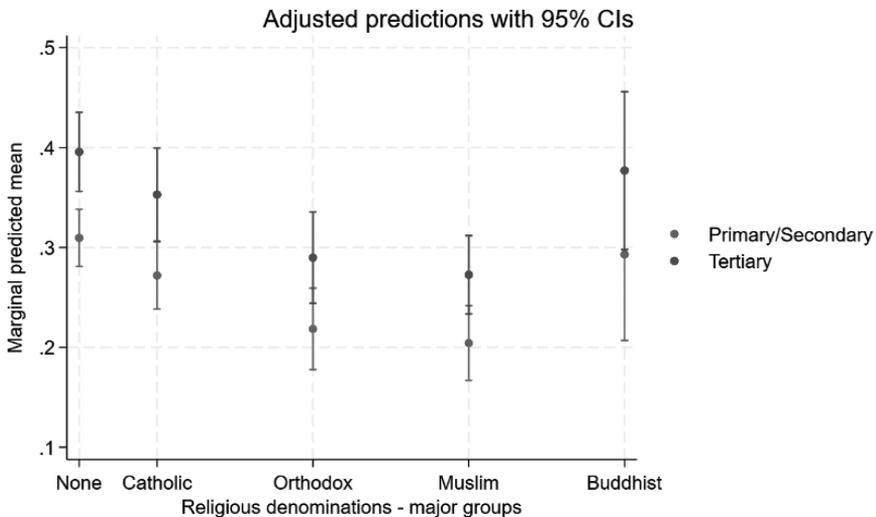
The other country variables are only partly significant. Protestant countries have significantly higher odds to have trusting populations. By contrast, inequality lowers a population’s trust. Post-/colonialism, post-/communism, and ethnic fractionalization are not significant, which is not according to previous studies.

Most notably, a country’s average level of trust influences individual trust considerably (base: low-trusting countries). Living in a high-trusting country increases the odds for an individual to be trusting by seven times. This is the highest effect in the Basic model.

Immigrant model

The results are, partly, different in the Immigrant model (Table 1, Immigrant model). The individual variables have similar effects. A difference is the relevance of some denominations. Being a Muslim, an Orthodox, a Jew, and having an unspecified Other denomination, lowers individual trust by comparison with having No denomination (base). Thus, considering that denominations are not significant in the Basic model, denominations are only relevant for the level of trust for immigrants.

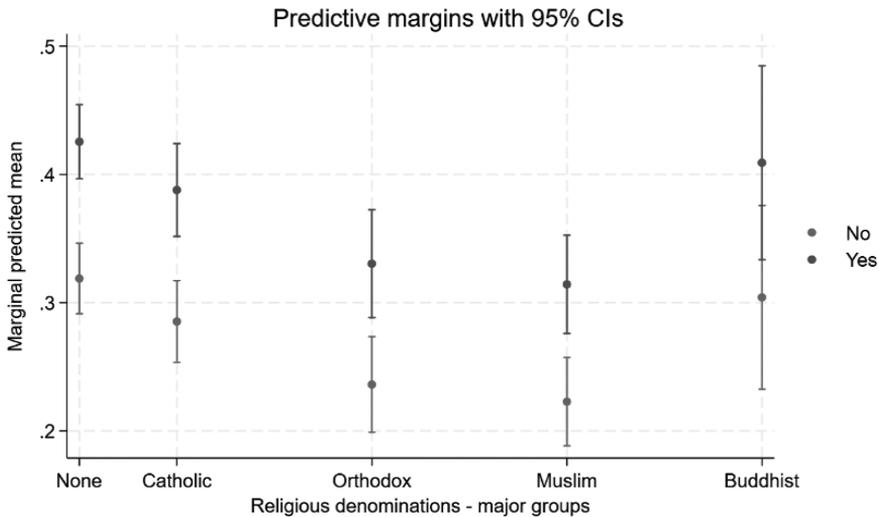
Graph 1 shows trust probabilities for different levels of education across denominations of immigrants. Interestingly, education significantly increases the trust levels for non-affiliated individuals and Catholics. Nevertheless, education has no significant effect for Orthodox, Muslimic, and Buddhist believers.



Graph 1 Immigrant trust: denomination and education levels

Graph 2 shows the effect for having confidence in the civil services on trust probabilities across denominations of immigrants. The effect is significant for most denominations, but not for Buddhists. Thus, confidence in the civil services is more relevant than education for immigrants' trust.

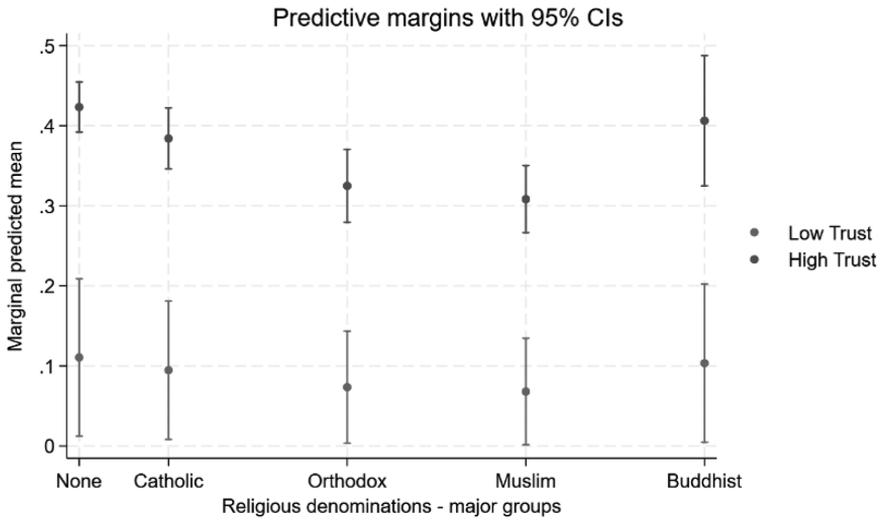
The findings for denominations strengthen former research findings concerning lower trust levels of Muslims.



Graph 2 Immigrant trust: denomination and confidence in the civil services

On the country level in the Immigrant Model, significant is a lowering effect of a country's wealth, which is hard to explain. The other country variables are not significant.

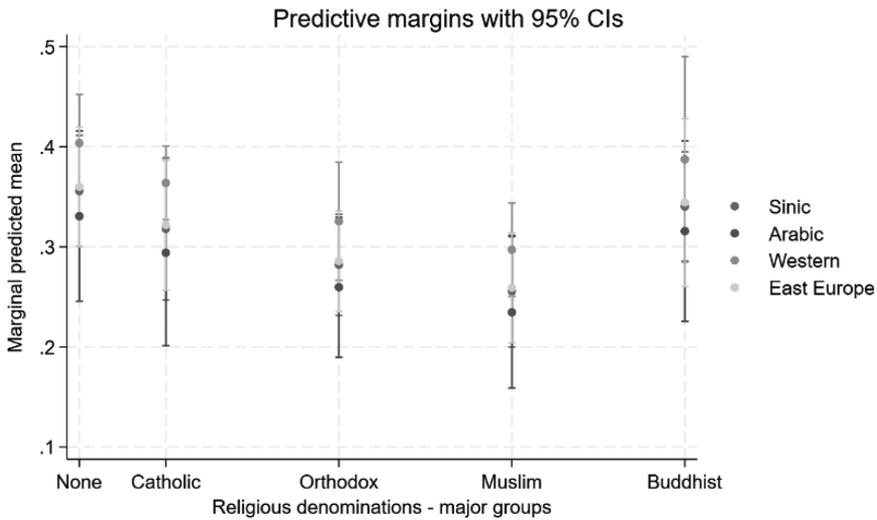
Living in and originating from countries with high average trust levels both positively affect immigrants' trust. Notably, the effect of the destination country is much stronger: Living in a high trust environment increases the odds for being trusting by six times. Originating from a high trust country increases trust by nearly two times. Thus, the new context appears to be more relevant for immigrants' trust level.



Graph 3 Immigrant trust: denomination and trust averages of residence context

Graph 3 shows the marginal effects of living in a high trust context across denominations. All displayed denominations have significantly higher probabilities for trust in high trust contexts, again, confirming the results from the analysis.

I was curious, if immigrants' trust levels are affected by the cultural context, they are living in. If a Muslim, for example, immigrated to an Arabic country, one could expect that this would have an increasing effect on his or hers trust level. The reason is that the cultural context would be congruent to the individual faith, eventually easing the ability to act and connect to the new home context. In a similar way, one could expect the same for other immigrant's: moving to a cultural context, which matches an immigrant's denomination, could increase trust to others. Nevertheless, this seems not to be the case, as shown in Table 1 and in Graph 4. Notably, for immigrants' trust levels, the destination CWRs are not significantly different from the Western CWR in the analysis.



Graph 4 Immigrant trust: denomination and CWRs

Likewise, Graph 4 shows that CWRs are not significantly different in their effects on trust across denominations. Interestingly, however, the probabilities for immigrants’ trust follow the same pattern across denominations and destination CWRs: all immigrants have higher trust probabilities in Western CWRs, irrespective of religious faith. In addition, the ordering of trust probabilities is the same for all denominations across CWRs: highest in the Western and lowest in the Arabic CWR. This suggests that the destination context is important, but that a match between denomination and cultural context is irrelevant for immigrants’ trust levels.

Conclusion

In sum, the results of this analysis support several of the findings of previous research: being a Muslim, having low education, low income, and low class position all lower the odds of trust (Zhou and Bankston III 2016). Confidence in the police and civil services as indicators of good governance has clearly a positive effect (Nannestad et al. 2014). Thus, the following hypotheses have been confirmed:

Hypotheses 1: migration research factors

- 1a Individuals, including immigrants, with a higher education have higher levels of trust.
- 1b Individuals, including immigrants, with a higher income have higher levels of trust.
- 1c individuals, including immigrants, with a higher class position have higher levels of trust.
- 1d Individuals, including immigrants, who are employed, have higher levels of trust.
- 1e Muslims have lower levels of trust than individuals with another or no denomination.

Hypotheses 2: trust research factors

2c Immigrants have higher social trust, if:

- they have confidence in the police
- they have confidence in the civil services

2d Immigrants have lower social trust, if they are Muslims.

In addition to previous studies, however, this analysis found the relevance of denominations surprising. Like Muslims, Catholics, and Orthodox Catholics have consistently low trust levels. Non-affiliated individuals, Jews, and Buddhists have similar or even higher trust levels than Protestants. Thus, the range of denominations is wider than previous studies, which focused on Muslims, stated. Denomination seems to be an underdeveloped dimension in the concept of segmented assimilation, which claims that different immigrant groups assimilate differently and selective (Portes and Zhou 1993).

By contrast to individual characteristics, factors on the country level are seldom supported: post/communism, post/colonialism, and ethnic fractionalization are not significant (e.g., Uslander 2002, Björnskov 2008, Dinesen et al. 2020). In the Basic model, Protestantism has the expected increasing effect, inequality has the expected lowering effect, but not in the Immigrant model. Non-Western CWRs are usually decreasing in comparison with the Western base, but they are mostly not significant. The author is especially disappointed by the irrelevance of CWRs, which obviously did not add any further information concerning the trust levels of immigrants.

This means that the following hypotheses are not confirmed:

Hypotheses 2: trust research factors and CWRs

2a Immigrants have higher levels of trust in countries:

- with a high Gross National Income,
- in Protestant countries, and
- in Western countries (West European and Anglo-Saxon countries).

2b Immigrants have lower levels of trust in countries:

- with high inequality levels (share of national income of the top tenth group),
- with a high degree of ethnic fractionalization (a combination of racial and linguistic characteristics),
- in (post-) colonial countries, and
- in (post-) communist countries.

Thus, country level aspects do not affect immigrants' trust levels with the exception of average trust levels, which have strong effects. The residence country average trust level is the single most important factor. Being in a high trust and not low trust context increases the odds for being trusting by 6 times, in comparison to having confidence in the civil services (1.7 times). The origin country average trust level, is likewise, very influential, but not as effectful as the residence country trust level. This could indicate that immigrants assimilate to the culture of the residence country, which should be investigated further. The following hypotheses are supported:

Hypotheses 2: trust research factors

2a Immigrants have higher levels of trust in countries with high levels of average social trust.

2d Immigrants have lower social trust, if they originate from a low trust country.

The strong impacts of average context trust levels can be interpreted as indicating that trust is predominantly a socio-cultural phenomenon. If the individuals and society surrounding a person are trusting, that person will start to trust as well. This is also the case for immigrants. This can be interpreted as an important indicator of a successful integration, because immigrants' trust signals some form of understanding, accepting, and feeling of comfort in the social context of the destination.

Author presentation

Ingrid Grosse is a Senior Lecturer in Sociology, most recently at Karlstad University. Her research interests include comparative studies of welfare systems and the sociological conditions shaping values. In recent years, her work has primarily focused on comparisons between different cultural and socio-economic world regions.

Contact: ingridgrosse71@gmail.com

References

- Alba, R. & Nee, V. (2009) *Remaking the American mainstream: Assimilation and contemporary immigration*. Harvard University Press.
- Alesina, A. & La Ferrara, E. (2002) Who trusts others? *Journal of public economics* 85(2): 207–234.
- Asfari, A. & Askar, A. (2020) Understanding Muslim assimilation in America: An exploratory assessment of first & second-generation Muslims using segmented assimilation theory. *Journal of Muslim Minority Affairs* 40(2): 217–234. <https://doi.org/10.1080/13602004.2020.1781467>
- Berggren, N., Bergh, A., Bjørnskov, C. & Tanaka, S. (2020) Migrants and life satisfaction: The role of the country of origin and the country of residence. *Kyklos* 73(3): 436–463.
- Bisin, A., Patacchini, E., Verdier, T. & Zenou, Y. (2008) Are Muslim immigrants different in terms of cultural integration? *Journal of the European Economic Association* 6(2-3), 445–456.
- Bisin, A., Patacchini, E., Verdier, T. & Zenou, Y. (2016) Ethnic identity and integration. *European Economic Review* 90: 146–164. <https://doi.org/10.1016/j.euroecorev.2016.01.006>
- Bjørnskov, C. (2006) The determinants of trust. *Public Choice* (130): 1–21.
- Bjørnskov, C. (2008) Social trust and fractionalization: A possible reinterpretation. *European Sociological Review* 24(3): 271–283.
- Coleman, J. S. (1994) *Foundations of social theory*. Harvard university press.
- Dao, T. H., Docquier, F., Maurel, M. & Schaus, P. (2021) Global migration in the twentieth and twenty-first centuries: the unstoppable force of demography. *Review of World Economics* 157(2): 417–449. <https://doi.org/10.1007/s10290-020-00402-1>
- De Haas, H., Castles, S. & Miller, M. J. (2019) *The age of migration: International population movements in the modern world*. Bloomsbury Publishing.
- Delaruelle, K., Walsh, S. D., Dierckens, M., Deforche, B., Kern, M. R., Currie, C., Maldonado, C. M., Cosma, A. & Stevens, G. W. (2021) Mental health in adolescents with a migration background in 29 European countries: the buffering role of social capital. *Journal of Youth and Adolescence* 50: 855–871.
- Delhey, J. & Newton, K. (2005) Predicting cross-national levels of social trust: Global pattern or nordic exceptionalism? *European Sociological Review* 21(4): 311–327. <https://doi.org/10.1093/esr/jci022>
- Dennison, J. & Geddes, A. (2021) Thinking globally about attitudes to immigration: Concerns about social conflict, economic competition and cultural threat. *The Political Quarterly*, 92(3): 541–551.
- Dinesen, P. T., Schaeffer, M., & Sonderskov, K. M. (2020). Ethnic diversity and social trust: A narrative and meta-analytical review. *Annual Review of Political Science* 23(23) 441–465. <https://doi.org/10.1146/annurev-polisci-052918-020708>
- Dinesen, P. T. & Sonderskov, K. M. (2012) Trust in a time of increasing diversity: On the relationship between ethnic heterogeneity and social trust in Denmark

- from 1979 until today. *Scandinavian Political Studies* 35(4): 273–294. <https://doi.org/10.1111/j.1467-9477.2012.00289.x>
- United Nations Population Division (2012) *Trends in total migrant stock: 2012 revision*. World Bank. <https://data.worldbank.org/indicator/SM.POP.TOTL>
- Dollmann, J. (2022) The political integration of immigrants: How pre-and post-migration contexts matter. *Journal of International Migration and Integration* 23(3): 1091–1125.
- Farrell, H. & Knight, J. (2003) Trust, institutions, and institutional change: Industrial districts and the social capital hypothesis. *Politics & Society* 31(4): 537–566. <https://doi.org/10.1177/0032329203256954>
- Fearon, J. D. (2003) Ethnic and cultural diversity by country. *Journal of Economic Growth* 8(2): 195–222. [https://doi.org/Doi 10.1023/A:1024419522867](https://doi.org/Doi%2010.1023/A:1024419522867)
- Gans, H. J. (1994) Symbolic ethnicity and symbolic religiosity - Towards a comparison of ethnic and religious acculturation. *Ethnic and Racial Studies* 17(4): 577–592. [https://doi.org/Doi 10.1080/01419870.1994.9993841](https://doi.org/Doi%2010.1080/01419870.1994.9993841)
- George Leckie, M., T., Steele, F. (2016) *LEMMA VLE Module 9. Single-level and multilevel models for ordinal responses - Stata Practical*. <http://www.bristol.ac.uk/cmm/learning/online-course/>
- Geurts, N., Glas, S., Sipma, T. & Spierings, N. (2024) How do minoritized migrant-background citizens perceive their political representation? An intracategorical perspective. *Ethnic and Racial Studies*: 1-26.
- Gordon, M. M. (1961). Assimilation in America - Theory and reality. *Daedalus* 90(2): 263–285. <Go to ISI>://WOS:A1961CCX1700004
- Hadden, T. (2017) Ethno-cultural diversity and human rights in an era of mass migration: Human rights issues in the balance between separate provision and integration for settled immigrant communities. In *Ethno-Cultural Diversity and Human Rights* (pp. 225–255). Brill Nijhoff.
- Hardin, R. (2002) *Trust and trustworthiness*. Russell Sage Foundation.
- Helliwell, J. F., Wang, S. & Xu, J. (2016) How durable are social norms? Immigrant trust and generosity in 132 countries. *Social Indicators Research* 128: 201–219.
- Hox, J. J. (2010) *Multilevel analysis: techniques and applications* (2nd ed.). Routledge.
- Inglehart, R. C., Haerper, A., Moreno, C., Welzel, K., Kizilova, J., Diez-Medrano, M., Lagos, P., Norris, E., Ponarin & Puranen, B. (2022) *World Values Survey: All rounds - country-pooled datafile* (Version 3.0.0). [https://doi.org/DOI: doi.org/10.14281/18241.18](https://doi.org/DOI:doi.org/10.14281/18241.18)
- Knack, S. & Zak, P. J. (2003) Building trust: public policy, interpersonal trust, and economic development. *Supreme court economic review* 10: 91–107.
- Kretschmer, D. (2018) Explaining differences in gender role attitudes among migrant and native adolescents in Germany: intergenerational transmission religiosity, and integration. *Journal of Ethnic and Migration Studies* 44(13): 2197–2218. <https://doi.org/10.1080/1369183x.2017.1388159>
- Maxwell, R. (2010) Evaluating migrant integration: Political attitudes across ge-

- nerations in Europe. *International Migration Review* 44(1): 25–52. <https://doi.org/10.1111/j.1747-7379.2009.00797.x>
- Möllering, G. (2006) *Trust: Reason, routine, reflexivity*. Elsevier.
- Nannestad, P. (2008) What have we learned about generalized trust, if anything? *Annual Review of Political Science* 11: 413–436.
- Nannestad, P., Svendsen, G. T., Dinesen, P. T. & Sonderskov, 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. <https://doi.org/10.1080/1369183x.2013.830499>
- Niedlich, S., Kallfaß, A., Pohle, S. & Bormann, I. (2021) A comprehensive view of trust in education: Conclusions from a systematic literature review. *Review of Education* 9(1): 124–158.
- Norris, P. & Inglehart, R. F. (2012) Muslim integration into western cultures: Between origins and destinations. *Political Studies* 60(2): 228–251. <https://doi.org/10.1111/j.1467-9248.2012.00951.x>
- Offe, C. (1999) How can we trust our fellow citizens. *Democracy and trust* 52: 42–87.
- Park, R. E. (1928) Human migration and the marginal man. *American journal of sociology* 33(6): 881–893.
- Pass, M. D., Madon, N. S., Murphy, K. & Sargeant, E. (2020) To trust or distrust? Unpacking ethnic minority immigrants' trust in police. *The British journal of criminology* 60(5): 1320–1341.
- Portes, A. & Zhou, M. (1993) The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy of Political and Social Science* 530: 74–96. <http://www.jstor.org/stable/1047678>
- Przeworski, A. & Teune, H. (1970) *The Logic of comparative social inquiry*. John Wiley and Sons.
- Putnam, R. D. (1992) *Making democracy work: Civic traditions in modern Italy*. Princeton university press.
- Rapp, C. (2020) National attachments and the immigrant participation gap. *Journal of Ethnic and Migration Studies* 46(13): 2818–2840.
- Rice, T. W. & Feldman, J. L. (1997) Civic culture and democracy from Europe to America. *Journal of Politics* 59(4): 1143–1172. <https://doi.org/10.2307/2998596>
- Rothstein, B. & Stolle, D. (2003) Social capital, impartiality and the welfare state: An institutional approach. In *Generating social capital: Civil society and institutions in comparative perspective* (pp. 191–209). Springer.
- Sotiropoulos, D., Kanellopoulos, K. & Yfanti, A. (2023) Literature review on the impact of the migration and refugees' waves on democratic attitudes and trust. *Working Paper 3.2 TRUEDEM: Trust in European Democracies Project* (www.TRUEDEM.eu).
- Spierings, N. & Vermeulen, F. (2024) Minding the political engagement gap: how discrimination and religion impact Dutch voters with an immigrant background. *Acta Politica* 59(3): 619–642.
- Teorell, J., Sundström, A., Holmberg, S., Rothstein, B., Alvarado Pachon, N., Mert

- Dalli, C., Lopez Valverde, R., Saidi Phiri, V & Gerber, L. (2025) *The quality of government standard dataset, version Jan25*. University of Gothenburg: The Quality of Government Institute, <https://www.gu.se/en/quality-government> doi:10.18157/qogstdjan25
- Therborn, G. (2012) *Världen: en inledning*. Liber.
- Uslaner, E. M. (2002) *The moral foundations of trust*. Cambridge University Press.
- Valcke, B., Van Hiel, A., Onraet, E. & Dierckx, K. (2020) Procedural fairness enacted by societal actors increases social trust and social acceptance among ethnic minority members through the promotion of sense of societal belonging. *Journal of Applied Social Psychology* 50(10): 573–587.
- Weber, M. (1988) *Gesammelte aufsätze zur soziologie undsozialpolitik*. Mohr Siebeck.
- Weber, M. (2002) *Wirtschaft und gesellschaft*. Mohr Siebeck.
- Welzel, C. (2013) *Freedom rising*. Cambridge University Press.
- Zhou, M. & Bankston III, C. L. (2016) *The rise of the new second generation*. Polity Press.

Appendix

Table A1. Variables Basic Model

Variables	Max	Min	Mean
Trust	1	0	0.2
Trust, country of residence average; Base: Low trust country	1	0	0.2
Lower middle trust country	1	0	0.3
Higher middle trust country	1	0	0.2
High trust country	1	0	0.3
Immigrant (1. & 2. Generation= Immigrant, Father immigrant or Mother immigrant)	1	0	0.1
Confidence in Police	1	0	0.6
Confidence in Civil Services	1	0	0.5
Work/Studies; Base: Pensioner/ Housewife/Unemployed	1	0	0.7
Age, squared and centered	-1696	6080	47
Class: Upper Class	1	0	0.02
Upper Middle Class	1	0	0.22
Lower Middle Class	1	0	0.4
Base: Working/Lower Class	1	0	0.36
Income, centered	5	-4	0
Tertiary Education. Base: Primary/Secondary	1	0	0.3
Denominations, dummies			
Base: None	1	0	0.2
Catholic	1	0	0.2
Protestant	1	0	0.1
Orthodox	1	0	0.1
Jewish	1	0	0.003
Muslim	1	0	0.3
Hindu	1	0	0.007
Buddhist	1	0	0.06
Other	1	0	0.04
Ethnic Fractionalization, centered	-0.5	0.4	0
(Post) Colony	1	0	0.6
Gross National Income, logged & centered GNI per capita, PPP (current international \$)	-1.9	1.8	0
(Post) Communism	1	0	0.16

Table A2. Variables Immigrant Model

Variables	Max	Min	Mean
Trust	1	0	0.3
Trust, country of residence average; Base: Low trust	1	0	0.3
Lower middle	1	0	0.2
Higher middle	1	0	0.2
High trust	1	0	0.6
Trust, country of origin average; Base: Low trust	1	0	0.5
Lower middle	1	0	0.5
Higher middle	1	0	0.4
High trust	1	0	0.4
Confidence in Police	1	0	0.7
Confidence in Civil Services	1	0	0.5
Work/Studies; Base: Pensioner/ Housewife/ Unemployed	1	0	0.6
Age, squared and centered	-2165	5432	1.7
Class: Upper Class	1	0	0.02
Upper Middle Class	1	0	0.28
Lower Middle Class	1	0	0.37
Base: Working/Lower Class	1	0	0.33
Income, centered	-4	5	0
Tertiary Education. Base: Primary/Secondary	1	0	0.5
Denominations, dummy, Base: None	1	0	0.14
Catholic	1	0	0.16
Protestant	1	0	0.1
Orthodox	1	0	0.1
Jewish	1	0	0.01
Muslim	1	0	0.18
Hindu	1	0	0.02
Buddhist	1	0	0.5
Other	1	0	0.06
Share of GDP of Top Tenth, centered	-0.2	0.2	0
Protestant country	1	0	0.4
Ethnic Fractionalization, centered	-0.5	0.4	0
(Post) Colony	1	0	0.4
Gross National Income, logged & centered GNI per capita, PPP (current international \$)	-1.7	1.8	0.8
(Post) Communism	1	0	0.12

Model specification:

Y_{ij} is a binary outcome (e.g., whether an individual i in cluster j has trust or not). The equation is for the Basic Model:

$$\begin{aligned} \text{Logit}(\Pr(Y_{ij}=1)) = & \\ & \beta_0 + \beta_1 \text{Immigration background}_{ij} + \beta_2 \text{Confidence in Police}_{ij} + \\ & \beta_3 \text{Confidence in Civil Services}_{ij} + \beta_4 \text{Work}_{ij} + \sum_k \chi_k \text{Class}_{ij} + \\ & \beta_5 \text{Income}_{ij} + \beta_6 \text{Age}_{ij}^2 + \beta_7 \text{Education}_{ij} + \\ & \sum_n \theta_n \text{Denomination}_{ij} + \sum_l \theta_l \text{Trustlevel Country}_{ij} + \\ & \beta_8 \text{Topten share of Income}_j + \beta_9 \text{Protestant country}_j + \\ & \beta_{10} \text{Ethnic}_j + \beta_{11} \text{Colony}_j + \\ & \beta_{12} \ln(\text{GNI}_j) + \beta_{13} \text{Communism}_j + \sum_r \phi_r \text{Region}_j + u_j \end{aligned}$$

where:

- $\text{logit}(p)=\ln(1-p)$ transforms the probability into log-odds.
- Y_{ij} is the binary dependent variable (trust).
- β_0 is the intercept.
- $\beta_1, \beta_2, \beta_3, \dots$ are coefficients for predictors.
- $\sum_l \theta_l \dots$ are coefficients for groups of predictors, summarized
- $u_j \sim N(0, \sigma_u^2)$ represents the random intercept for cluster j (countries).