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Trust and Income Among Immigrants in Europe

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ABSTRACT

Social trust, a key cultural trait influencing economic behavior, plays a critical yet understudied role in immigrant integration. This paper examines how trust, both as an individual disposition and as a culturally inherited norm, relates to the economic integration of immigrants in Europe, measured by household income. Using European Social Survey data from 2002 to 2022, we analyze first- and second-generation immigrants, incorporating both individual trust levels and average trust in countries of origin through an epidemiological approach. We find that trust is positively associated with income for both groups, but its source matters: for first-generation immigrants, country-of-origin trust is a stronger predictor, while for the second generation, individual trust dominates. Origin-based trust appears to facilitate labor market navigation for first-generation immigrants, though its influence diminishes over time. In contrast, second-generation immigrants benefit more from institutional familiarity and culturally embedded trust. Given the stability of social trust and its limited responsiveness to policy, the results point to a need for targeted integration strategies for immigrants from low-trust backgrounds.

1 | Introduction

It's a vice to trust everyone, and equally a vice to trust no one.

—Seneca the Younger

The role of culture in shaping economic behavior is a thriving area of research within economics.¹ Guiso et al. (2024) emphasize the concept of cultural embeddedness, highlighting how economic behavior is inherently situated within cultural and social norms. These norms influence not only individual decision-making but also broader economic outcomes, including productivity, institutional quality, and labor market dynamics.

One cultural attribute that has received particular attention is social trust—a general belief in the trustworthiness of others. Trust facilitates cooperation, lowers transaction costs, and

supports a range of economic interactions. Coleman (1990) characterizes trust as the willingness to place resources at another's disposal without legal enforcement, based on the expectation of reciprocity.² Insufficient trust may lead to missed opportunities, while excessive trust may expose individuals to exploitation. In line with this reasoning, Butler et al. (2016) identify a hump-shaped relationship between individual-level trust and income in Europe, suggesting that there is an optimal level of trust that maximizes individual economic returns.

In this paper, we broaden the perspective by asking how social trust, conceptualized both as an individual trait and as a culturally inherited norm, relates to the economic integration of immigrants in Europe. Given the significant immigration flows to Europe in recent decades, understanding how cultural traits like social trust influence immigrants' ability to secure economic self-sufficiency are of critical importance. More specifically, we analyze whether and how trust affects

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immigrants' incomes, thereby using income as a proxy for integration. We focus on both first- and second-generation immigrants, recognizing that integration unfolds across generations and that cultural traits are transmitted, adapted, or attenuated over time.

To this end, we employ two complementary methodological approaches. First, we follow the methodology of Butler et al. (2016) and examine the relationship between individual-level social trust and income using data from the European Social Survey (ESS), covering the period 2002–2022. Second, we apply the epidemiological approach (Fernández 2011), linking average social trust in immigrants' countries of origin, measured as close as possible to the migration year, to their income in the host country. A key advantage of the epidemiological approach is its ability to mitigate concerns of reverse causality.

By incorporating both measures of social trust, we examine whether it is individual-level trust, cultural embedded trust from the country of origin, or a combination of the two that shapes immigrants' income.³ These measures capture distinct but complementary mechanisms: individual trust reflects a person's present-day attitudes and behavioral orientation within the host society, whereas country-of-origin trust serves as a proxy for inherited cultural norms, potentially influencing not only the individual's internalized dispositions but also how they are perceived by others, for instance through statistical discrimination based on group-level reputations.

Our findings show that social trust is a meaningful and robust predictor of income for both immigrant groups, but the mechanisms differ. For first-generation immigrants, both measures of trust are positively associated with income: a one-standard-deviation increase in individual trust corresponds to a 5.2% of a standard deviation increase in income, while the corresponding number for country-of-origin trust is 6.5%. This indicates that both personal attitudes and culturally inherited norms play significant roles in economic integration, with the cultural background playing a somewhat larger role.

Among second-generation immigrants, the relative importance of the two trust measures shifts. Individual-level trust has a stronger income association: a one-standard-deviation increase is linked to a 7.3% of a standard deviation rise in income, while the effect of origin-country trust is smaller and attenuated, at 3.5%. This pattern suggests a transition from inherited to behavioral trust: as immigrants become more embedded in the host society, the economic relevance of inherited norms diminishes, while personally held trust becomes more strongly rewarded. Consistent with this view, we also show that the income effect of origin-country trust declines with length of stay in the host country for first-generation immigrants.⁴

These findings are highly robust. They remain statistically and substantively stable when controlling for a wide set of individual characteristics (including altruism, risk attitudes, and trustworthiness), structural conditions (such as co-ethnic network size, linguistic similarity, and cultural distance), and country-year and country-by-year fixed effects. The results are also upheld when extending the analysis to immigrants from outside Europe using trust data from the Integrated Values Survey

(IVS), confirming that the core relationships are not unique to European-origin immigrants or to one specific trust measure.

We also explore whether trust affects not just income levels (the intensive margin) but also labor market participation (the extensive margin). We find that social trust does not significantly predict whether immigrants are employed versus unemployed, but it does predict income among the employed, supporting the view that trust influences outcomes within the labor market through channels such as productivity, cooperation, and occupational sorting, rather than access to it.

This paper contributes to two main strands of literature. First, within the growing body of research on social trust and economic outcomes, we expand on the foundational work of Knack and Keefer (1997), Zak and Knack (2001), Beugelsdijk et al. (2004), Berggren et al. (2008), Algan and Cahuc (2010, 2014), and Bjørnskov (2012, 2018, 2022) by focusing on trust as an individual and cultural asset in the process of immigrant integration. Our use of standardized coefficients enables a direct comparison between different trust channels and across generations, revealing the dynamic nature of trust's economic returns.

Second, we contribute to the literature on culture and immigrant integration, which has increasingly highlighted the importance of norms, values, and attitudes in shaping integration trajectories. Bisin et al. (2011) find that strong ethnic identity hinders labor market outcomes, while Neuman (2018) emphasizes the importance of origin-country gender norms for female employment. Koopmans (2016) shows that cultural traits such as gender values and interethnic ties influence integration, and Aksoy et al. (2023) demonstrate that both host-country attitudes and local conditions matter. Most closely related to our work, Berggren et al. (2023) find that tolerance in the background culture predicts multiple integration outcomes, including income. Our paper builds on and extends this line of inquiry by identifying social trust as a central cultural determinant of immigrant economic integration.

By combining two trust measures, analyzing two immigrant generations, and drawing on two empirical frameworks, we present a comprehensive view of how trust, both inherited and personal, shapes the economic lives of immigrants in contemporary Europe. In doing so, we aim to contribute to a deeper understanding of the cultural underpinnings of integration and the mechanisms through which trust supports economic advancement.

2 | A Simple Theoretical Framework

Butler et al. (2016) provide a simple model of how social trust affects income. An investor with an endowment invests it with someone else. That other person can be honest or a cheater, and the investor does not know which. While an honest partner would return the promised share of the surplus, a cheating partner takes it all for themselves. Trust enters the scene by the investor having general trust beliefs (which vary between investors). The true expected income is then a hump-shaped function of these beliefs, with an optimum when the trust level correctly reflects the probabilities of partners being honest or

cheaters. They refer to this as “the right amount of trust.” When the trust level deviates from that which is merited by the facts, income goes down. The intuition is that if one underestimates true trustworthiness, one’s income is lowered since one is likely to miss out on lucrative investments; and if one overestimates it, one’s income is lowered since one is likely to be cheated. This mechanism is supported by ESS data showing highly trusting individuals are more likely to report having been cheated (see Butler et al. 2016).⁵

We adopt this model as a useful conceptual baseline, particularly because the notion of the “investor” can be interpreted broadly to include interactions with employers. We extend this framework by focusing on a specific subgroup in the labor market: immigrants.

Immigrants may face a range of challenges in navigating commercial or labor market interactions in a new institutional and cultural context. These can include limited language proficiency, unfamiliar educational credentials, weaker professional networks, and restricted access to financial or informational resources (Aldén and Hammarstedt 2016). Such barriers may affect income on both the extensive margin (e.g., by limiting entry into mutually beneficial arrangements) and the intensive margin (e.g., by reducing expected returns once agreements are made).

It is here that social trust becomes particularly relevant. As part of the framework proposed by Berry (1997), individual dispositions, such as trust, can influence the degree of integration achieved in the host society. Berggren et al. (2023) suggest that tolerance supports integration; in a similar vein, we expect social trust to facilitate economic integration through multiple channels. In this context, we focus on how social trust shapes income outcomes among immigrants.

We identify three primary mechanisms by which social trust may influence income:

1. Facilitation of market participation: Trust encourages openness toward others, increasing the likelihood of labor market engagement, informal cooperation, and the pursuit of economic opportunities (cf. Balliet and Van Lange 2013; Kim et al. 2022).
2. Enhanced workplace cooperation and productivity: Trust fosters reciprocal behavior and cooperative norms within firms or partnerships, which can improve productivity and thus earnings (cf. Bjørnskov and Méon 2015; Brown et al. 2015; Hauser et al. 2016).⁶
3. Signaling of cooperative disposition: Even when trust is not directly observable, individuals may signal cooperative attitudes through behavior associated with trust and also through their country of origin, thereby influencing others’ willingness to engage with them (cf. Balliet and Van Lange 2013; Kim et al. 2022).

We further refine these mechanisms by considering how the conversion of trust into income may differ between first- and second-generation immigrants, and how this depends on the type of trust involved: individual or inherited.

For first-generation immigrants, inherited norms formed in the country of origin may play a stronger role. Cultural dispositions toward trust can influence expectations, default behavior, and readiness to engage in cooperative arrangements. At the same time, individual trust, formed through both pre- and post-migration experience, may have a weaker link to economic outcomes, in part due to contextual frictions. For example, structural barriers or unfamiliarity with host-country institutions may limit the effectiveness of high individual trust in generating tangible returns.

In contrast, for second-generation immigrants, individual trust may matter more. Having grown up in the host society, they are more embedded in its institutional and cultural context. Their trust is more likely to reflect behavioral attitudes adapted to the local environment, and thus more likely to be rewarded in economic terms. Meanwhile, cultural norms inherited from their parents’ country of origin may still be present but exert weaker influence on their economic outcomes.

This distinction suggests that country-of-origin trust is a stronger predictor of income among first-generation immigrants, while individual-level trust is more influential among second-generation immigrants. Over time, as immigrants and their descendants become more integrated, the economic relevance of inherited norms may attenuate, and the ability to convert personal attitudes, like trust, into income may increase.

Thus, we argue that in general the social trust of immigrants should be positively related to their income. As Berry (1997, 10) notes, “a mutual accommodation is required for integration to be attained”, and social trust is fundamentally tied to fostering that reciprocal understanding on all sides.⁷

However, some refinements are in order. First, just as in the general model, there can be too much individual trust, which may lead to exploitation or reduced income. This possibility may be especially pronounced for those less familiar with the host-country context, making it particularly relevant for the first generation. We therefore expect individuals with the highest levels of social trust to experience a significant income penalty compared to those with lower trust levels.

Second, as noted above, it is helpful to distinguish between individual social trust and country-of-origin social trust. The former is shaped by life experience and host-country exposure; the latter by early-life socialization or cultural transmission.⁸ Both can influence economic outcomes but through different channels. Furthermore, because individual trust is not easily observed, others may rely on cultural averages as proxies, making origin-based trust salient in evaluations, particularly in settings where statistical discrimination is present.

Finally, while we emphasize variation across immigrant generations, additional heterogeneity is likely. Differences may arise between immigrants from culturally proximate versus distant countries, between those whose native language is similar to that of the host country versus those for whom it is not, and between immigrants with shorter versus longer durations of stay. Cultural and linguistic similarity may act as substitutes for social trust by lowering informational or interpretive barriers in

economic exchange. Conversely, the economic returns to social trust may attenuate with the length of stay, as immigrants gain institutional familiarity and integration progresses through other channels. We return to these distinctions in the empirical analysis.

3 | The Data and Empirical Approach

3.1 | The Data

This study uses individual-level data from the European Social Survey from respondents in 34 primarily European countries for the replication and temporal extension of Butler et al. (2016): Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the UK, and Ukraine. For the countries of origin, we use data from the ESS (and, for an extended analysis, the Integrated Values Survey (IVS); more on this below). The immigrant samples each consist of a bit more than 12,000 respondents.⁹ These data are from ESS rounds 1–10 (2002–2022).

The dependent variable is the natural logarithm of household total net annual income in euros. The question asked in the ESS is the following: “Using this card, please tell me which letter describes your household’s total income, after tax and compulsory deductions, from all sources? If you don’t know the exact figure, please give an estimate. Use the part of the card that you know best: weekly, monthly or annual income.” The letters denote deciles, which are calculated, for each country, as brackets for annual income, which is in euros or converted into euros. We take the middle value for each decile to denote the household total net income of the respondents.¹⁰ Note that this income measure encompasses all sources, including labor earnings and returns from capital and investments.

The main explanatory variable is social trust. We use the European Social Survey (ESS) for individual-level social trust and average social trust in the countries of origin of the immigrants who stem from the countries included in that survey. The ESS asks: “Using this card, generally speaking, would you say that most people can be trusted, or that you can’t be too careful in dealing with people? Please tell me on a score of 0 to 10, where 0 means you can’t be too careful and 10 means that most people can be trusted.”¹¹ When using the aggregate trust measure at the country level, the country average is used.¹²

We include a set of *control variables* as well. The choice follows Butler et al. (2016), but when conducting the analysis using country-of-origin social trust, we add two country-of-origin control variables (GDP per capita and the rule of law). The control variables—from the ESS unless otherwise noted—are: age and age squared; a dummy taking the value 1 if the respondent is male and 0 otherwise; a dummy taking the value 1 if the respondent is married and 0 otherwise; employment variables (being employed as the reference category, then being unemployed or being outside the labor force); years of education; a

dummy taking the value 1 if the respondent lives in a big city and 0 otherwise; a dummy taking the value 1 if the respondent lives in a small city and 0 otherwise; three variables that ensure that the trust measure is not capturing risk attitudes, altruism, or trustworthiness: the degree to which the respondent seeks adventure (an indicator of risk tolerance, scale from 1 to 6), the degree to which loyalty is important (an indicator of altruism, scale from 1 to 6), and the degree to which the respondent has responsibilities at work (an indicator of trustworthiness, a scale from 1 to 20)¹³; a dummy taking the value 1 if primary education is the highest education level of the respondent’s father and 0 otherwise; a dummy taking the value 1 if primary education is the highest education level of the respondent’s mother and 0 otherwise; a dummy taking the value 1 if primary education is the highest education level of the respondent’s partner and 0 otherwise; the number of people living regularly as members of the household; trust in the legal system (included like social trust: as dummy variables reflecting the 0–10 scale); a dummy taking the value 1 if the respondent indicated that their group is discriminated against based on nationality and 0 otherwise (from the ESS); co-ethnic network share (the share of respondents in the same immigrant category in the same host country from the same country of origin; from the ESS); linguistic similarity (a dummy taking the value 1 if the language of the country of origin belongs to the same language group as the host country and 0 otherwise; for details, see Section 4.4); cultural distance (an index of the cultural difference in terms of Hofstede’s six cultural dimensions between the country of origin and the host country; for details, see Section 4.4); length of stay (years; rounds 5–10 of the ESS); GDP per capita in thousands of dollars per year in 2011 constant prices, adjusted for purchasing power parity (from V-Dem; capturing the general material well-being of the country of origin to make sure country-of-origin social trust does not capture that; measured as close as possible to the year of migration of first-generation immigrants or to the year of migration of the parents of second-generation immigrants); the rule of law (from V-Dem; capturing the institutional quality of the country of origin to make sure country-of-origin social trust does not capture that; measured as close as possible to the year of migration of first-generation immigrants or to the year of migration of the parents of second-generation immigrants; scale: 0–1); in addition, country or country-by-year fixed effects are applied.

Descriptive statistics are presented in Tables A1–A4 in the Supporting Information. The distribution of respondents across the trust categories for first- and second-generation immigrants are shown in Figures A1 and A2.

3.2 | Empirical Approach

Our empirical strategy consists of two complementary components. First, following Butler et al. (2016), we examine the relationship between individual-level social trust and individual-level income. Second, drawing on the epidemiological approach pioneered by Fernández (2011), we relate average social trust in the country of origin to individual-level income. In both cases, we pool survey waves across countries, and unless otherwise specified, estimate models using ordinary least squares (OLS).

The first regression equation is:

$$y_{ic} = \sum_j \alpha_j Trust_{jic} + \beta X_{ic} + \delta C + \epsilon_{ic} \quad (1)$$

where y_{ic} is the natural logarithm of household total net income for individual i in country c , and $Trust_{jic}$ is a set of 10 dummies ($j=1, \dots, 10$) taking the value 1 if individual i in country c reports having the particular trust level and 0

otherwise (with individuals reporting the trust level 0 as the excluded group). This specification of trust is flexible, with no parametric assumptions. Next, X_{ic} is a vector denoting individual-level control variables, listed in Section 3.1, which are potentially related to the dependent variable. C represents country fixed effects (which control for culture, institutions and other stable, unobserved characteristics of country c), and ϵ_{ic} is the error term.

TABLE 1 | Individual-level trust and income, first-generation immigrants in Europe with the ESS sample as countries of origin.

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	OLS
Trust 1	-0.0186 (-0.45)	0.0128 (0.26)	-0.0215 (-0.51)	-0.0224 (-0.54)
Trust 2	0.101*** (2.98)	0.140*** (3.51)	0.0866** (2.49)	0.0980*** (2.90)
Trust 3	0.0826*** (2.60)	0.0894** (2.43)	0.0635* (1.93)	0.0796** (2.50)
Trust 4	0.0896*** (2.76)	0.0979*** (2.62)	0.0643* (1.91)	0.0854*** (2.63)
Trust 5	0.0708** (2.44)	0.0997*** (2.93)	0.0380 (1.26)	0.0665** (2.30)
Trust 6	0.129*** (4.22)	0.162*** (4.54)	0.0946*** (2.99)	0.123*** (4.02)
Trust 7	0.153*** (5.14)	0.189*** (5.46)	0.112*** (3.64)	0.147*** (4.94)
Trust 8	0.128*** (4.21)	0.170*** (4.81)	0.0811** (2.57)	0.122*** (4.02)
Trust 9	0.156*** (4.17)	0.166*** (3.85)	0.103*** (2.65)	0.153*** (4.08)
Trust 10	-0.0850* (-1.79)	-0.0710 (-1.24)	-0.151*** (-3.04)	-0.0872* (-1.83)
Country fixed effects	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes
Altruism, risk aversion, trustworthiness	Yes	Yes	Yes	Yes
Additional controls	No	Yes	No	No
Trust legal system (10 dum.)	No	No	Yes	No
Controlling for moderation	No	No	No	Yes
Observations	12,460	8483	12,030	12,460
R^2	0.661	0.673	0.661	0.662

Note: t statistics in parentheses, calculated using robust standard errors. Table A5 in the Supporting Information is an expanded version of the table, showing more point estimates.

* $p < 0.10$.

** $p < 0.05$.

*** $p < 0.01$.

The second regression equation follows the epidemiological method:

$$y_{ica} = \alpha Trust_a + \beta Z_a + \gamma X_{ica} + \delta C + \epsilon_{ica} \quad (2)$$

where y_{ica} is the natural logarithm of household total net income for individual i in country c who, in the case of first-generation immigrants, was born in country a , and who, in the case of second-generation immigrants, was born in country c with parents born in country a ($c \neq a$).¹⁴ $Trust_a$ is the average level of social trust in country of origin a . Z_a is a vector of control variables for country of origin a (GDP per capita and the rule of law), while X_{ic} is a vector denoting individual-level control variables. These are the same as in Equation (1). C represents country-of-residence-by-year fixed effects (which control for culture, institutions and other stable, unobserved characteristics of country c each year), and ϵ_{ic} is the error term. The robust standard errors are clustered at country of origin a to allow for arbitrary correlations of the error terms among immigrants originating from the same country. Note that this specification makes immigrants residing in the same country from different countries of origin with different levels of social trust the objects of comparison.

A methodological advantage of the epidemiological method is that one can quite convincingly rule out reverse causality, an otherwise vexing problem when studying the relationship between income and social trust. This is because individual outcomes in one country arguably cannot affect the culture of another country, especially not many years earlier.

The epidemiological method builds on certain assumptions, most notably that people who grow up in a certain culture are strongly and lastingly influenced by it themselves and that they also influence the beliefs and values of their children. This transmission can occur in the family (vertically) or through interaction with the surrounding society (horizontally), as theorized by Bisin and Verdier (2011). For our purposes, there is empirical support for the transmission of social trust from the culture in which one or one's parents grow up (see, e.g., Dohmen et al. 2012, and Ljunge 2014).¹⁵ Schilpzand (2024) also shows that for cooperative values, including social trust, the epidemiological method is suitable in that there are no indications of self-selection: the emigrants from a country are representative, in trust terms, of the population in the origin country.

We look at both first- and second-generation immigrants. First-generation immigrants provide a clearer connection to origin-country cultural norms because they have lived under those norms directly, but this connection is entangled with origin-country institutional experiences and potential migrant self-selection. Second-generation immigrants offer a cleaner test of cultural transmission absent the direct influence of origin-country factors, but their cultural signals may be weaker or more blended due to host-country assimilation and varied family transmission dynamics. By studying both, we learn about the power of background culture in shaping individual economic performance for those who migrated and the children of migrants. Is there an effect, such that a trusting culture brings with it financial rewards, and does it persist across generations? And how does its importance compare with that of individual social trust?

4 | Results

4.1 | First-Generation Immigrants

We begin by analyzing first-generation immigrants, who have migrated to their European host countries. We do this in two ways: first, by relating their individual social-trust levels to their incomes, mirroring the methodology of Butler et al. (2016)¹⁶; and second, by employing the epidemiological method, relating the average social-trust levels of their countries of origin to their incomes.

Table 1 presents the association between individual social trust and income among first-generation immigrants. The results reveal a clear positive pattern. Figure 1 displays the estimated coefficients alongside their 95% confidence intervals. While point estimates rise consistently across most of the trust distribution, the confidence bands overlap substantially, implying that differences between adjacent trust levels often fail conventional significance tests and limiting precise identification of the curve's shape. However, when testing whether the point estimates for trust levels 2–5 are *jointly* different, in a statistically significant way, from the point estimates for trust levels 6–9, an F-test shows that they are ($p < 0.01$), offering support for the important conclusion that high individual trust is more conducive to high income than low individual trust (excluding the extreme trust levels 1 and 10). The difference in means between the first interval (trust levels 2–5) and the second interval (trust levels 6–9) is $0.157 - 0.081 = 0.076$.

To assess the positive gradient between individual trust and income further, we estimated a pooled OLS model for the full ESS sample with interaction terms for first- and second-generation status (see Table A33 in the Supporting Information). First, the main effects for trust levels 2–9 are all positive and their confidence intervals lie strictly above zero, ruling out a null effect across this range and underscoring that immigrants with even modestly above-average trust earn more than their low-trust peers. Second, the point estimates exhibit a remarkably smooth, monotonic increase, from roughly 0.10 at trust = 2 to over 0.15 at trust = 9, rather than fluctuating randomly around zero. Such systematic ordering is unlikely under a truly null or erratic

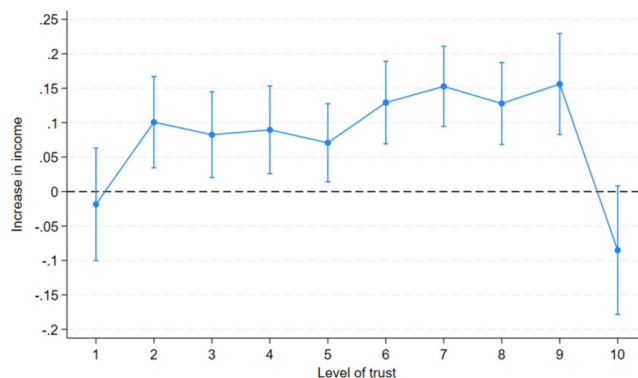


FIGURE 1 | The empirical relationship between individual social trust and income for first-generation immigrants with the ESS sample as countries of origin 2002–2022. *Notes:* The figure shows confidence intervals at the 95% level. [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

TABLE 2 | Country-of-origin trust and income, first-generation immigrants in Europe with the ESS sample as the countries of origin.

	(1)	(2)	(3)	(4)	(5)
	OLS	OLS	OLS	OLS	OLS
Average social trust in the country of origin	0.0798*** (7.50)	0.0797*** (8.96)	0.0807*** (7.35)	0.0787*** (7.42)	0.0661*** (4.85)
Country-of-residence-by-year fixed effects	Yes	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes	Yes
Altruism, risk aversion, trustworthiness	Yes	Yes	Yes	Yes	Yes
Additional individual controls	No	Yes	No	No	No
Trust legal system (10 dum.)	No	No	Yes	No	No
Controlling for moderation	No	No	No	Yes	No
Additional country-of-origin controls	No	No	No	No	Yes
Observations	12,309	8324	11,891	12,309	12,243
R ²	0.699	0.716	0.699	0.699	0.699

Note: *t* statistics in parentheses, calculated using robust standard errors clustered at the country of origin. Table A6 in the Supporting Information is an expanded version of the table, showing more point estimates.

* $p < 0.10$.

** $p < 0.05$.

*** $p < 0.01$.

relationship and instead concurs with a substantive positive association. Finally, F-tests reveal a statistically significant difference ($p = 0$) for first-generation immigrants in relation to the general population.

Table 2 presents the results from the epidemiological approach, linking income among first-generation immigrants to the average level of social trust in their country of origin. This measure captures culturally embedded trust norms that immigrants bring with them prior to exposure to the host-country context. The estimates are based on samples from European countries of origin included in the ESS.

Across all specifications, the estimated effect of country-of-origin social trust is positive and highly statistically significant. In column (1), a one-unit increase in average social trust is associated with approximately 8.0% higher income. Interpreted in standardized terms, a one standard-deviation increase in origin-country trust corresponds to a 6.5% of a standard deviation increase in income. These effect sizes remain stable when accounting for a broad range of controls, including personal characteristics (altruism, risk aversion, and trustworthiness), institutional trust in the legal system, and two macro-level factors (GDP per capita and rule of law).

These findings suggest that the trust norms prevailing in immigrants' countries of origin play a statistically and economically significant role in shaping their economic integration. Since this trust measure is defined at the country level and predates migration, it is unlikely to be influenced by immigrants' economic outcomes in the host country, reducing concerns about reverse causality. The robustness of the estimates across model variants further supports the interpretation that inherited social trust contributes to higher income among first-generation immigrants.

4.2 | Second-Generation Immigrants

We now turn to the relationship between individual social trust and income among second-generation immigrants, here defined as those having at least one foreign-born parent. As in the earlier analysis, this measure captures respondents' own current level of interpersonal trust, assessed through survey responses and operationalized using trust-level dummy variables. Table 3 presents the results from this analysis.

Table 2 shows a clear, positive gradient in income returns to trust up to level 7–8. Trust levels 2–5 are associated with modest but significant income premiums (7%–14%), while levels 6–8 yield the largest gains (17%–22%). Having a trust level of 10 is not significant but is associated with a very small trust payoff (in line with our theory). The consistency of these coefficients across all four columns, and the notably smaller standard errors compared to the first-generation sample, underscores both the precision and the robustness of the trust–income link in the second generation.

Figure 2 plots these coefficients. The confidence intervals overlap only minimally across adjacent trust levels, and the monotonic rise through level 8 is visually apparent. In combination, the precise point estimates and tighter bands lend strong support to a steadily increasing payoff to individual trust among second-generation immigrants. Lastly, an F-test reveals a statistically significant difference between the average point estimates for trust levels 2–5 (0.113) vs. point estimates for trust levels 6–9 (19.1), a difference of 0.078 ($p < 0.01$), further underscoring the conclusion of a positive association.

Further strengthening this conclusion, the pooled-sample regression (in Table A33 in the Supporting Information) shows that none of the interaction terms between trust dummies and

TABLE 3 | Individual-level trust and income, second-generation immigrants in Europe with the ESS sample as countries of origin.

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	OLS
Trust 1	0.0367 (0.93)	0.0503 (1.10)	0.0455 (1.15)	0.0323 (0.82)
Trust 2	0.0723** (2.14)	0.0394 (1.01)	0.0608* (1.76)	0.0687** (2.03)
Trust 3	0.122*** (4.02)	0.111*** (3.18)	0.107*** (3.44)	0.115*** (3.77)
Trust 4	0.141*** (4.65)	0.153*** (4.43)	0.122*** (3.94)	0.134*** (4.40)
Trust 5	0.115*** (4.12)	0.104*** (3.26)	0.0927*** (3.21)	0.108*** (3.84)
Trust 6	0.197*** (6.49)	0.177*** (5.10)	0.161*** (5.12)	0.186*** (6.11)
Trust 7	0.217*** (7.58)	0.203*** (6.22)	0.172*** (5.80)	0.207*** (7.20)
Trust 8	0.199*** (6.68)	0.204*** (6.05)	0.148*** (4.81)	0.189*** (6.33)
Trust 9	0.150*** (3.89)	0.152*** (3.59)	0.0942** (2.39)	0.144*** (3.72)
Trust 10	0.00907 (0.18)	0.0759 (1.29)	-0.0200 (-0.39)	0.00467 (0.09)
Country fixed effects	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes
Altruism, risk aversion, trustworthiness	Yes	Yes	Yes	Yes
Additional controls	No	Yes	No	No
Trust legal system (10 dum.)	No	No	Yes	No
Controlling for moderation	No	No	No	Yes
Observations	12,651	8053	12,524	12,651
R^2	0.670	0.717	0.670	0.670

Note: *t* statistics in parentheses, calculated using robust standard errors. Table A7 in the Supporting Information is an expanded version of the table, showing more point estimates.

* $p < 0.10$.

** $p < 0.05$.

*** $p < 0.01$.

the second-generation indicator differ significantly from the main effects for natives. All trust-by-second-generation coefficients are statistically indistinguishable from zero, and their confidence intervals overlap fully with the baseline trust effects for the native-born. This absence of divergence implies that, by the second generation, immigrants receive the same income returns to individual social trust as do natives, evidence of economic integration in how interpersonal trust translates into labor-market advantage. This is further confirmed by F-tests with *p* values way above conventional levels.

Table 4 presents the results from the epidemiological analysis of second-generation immigrants, linking income to the average level of social trust in the parental country or countries of origin. Here, in keeping with standard epidemiological analysis, second-generation immigrants are defined as those having two foreign-born parents. This trust measure reflects culturally transmitted norms inherited through family and upbringing, and is constructed as the mean of the father's and mother's origin-country trust levels, or a single average where both parents share the same origin.

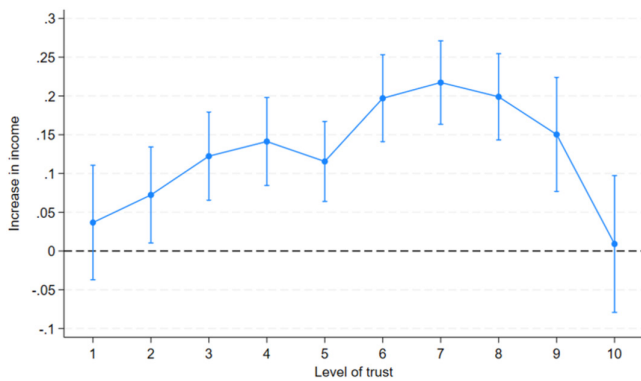


FIGURE 2 | The empirical relationship between individual-level trust and income, second-generation immigrants with the ESS sample as countries of origin. *Notes:* The figure shows confidence intervals at the 95% level. [Colour figure can be viewed at wileyonlinelibrary.com]

The estimates indicate a positive and statistically significant association between ancestral social trust and income. In column (1), a one-unit increase in average ancestral trust corresponds to a 5.1% increase in income. Expressed in standardized terms, a one standard-deviation increase in ancestral trust is associated with a 3.5% increase in income. These effects persist across all model specifications, including those that control for individual characteristics, institutional trust, and macro-level origin-country variables such as GDP per capita and rule of law.

Compared to first-generation immigrants, the estimated income return to ancestral trust is lower, consistent with the idea that the influence of inherited cultural norms attenuates over time and across generations. Nevertheless, the continued statistical and economic significance of these effects suggests that trust-based cultural background remains relevant for economic integration, even in the second generation.

These findings indicate that cultural transmission of social trust can have lasting economic effects beyond the first generation. While individual-level trust appears to play a more central role in shaping income outcomes for this group, the persistent association between ancestral trust and income highlights the continued influence of background norms, even among those born and raised in the host society.

4.3 | Comparison of Standardized Coefficients

Before turning to the extended analyses and robustness checks, Table 5 provides a comparative overview of the core results by presenting standardized coefficients from Tables 1–4. These standardized effects indicate the extent to which the natural logarithm of income increases, measured as a percentage of its standard deviation, in response to a one-standard-deviation increase in the relevant trust measure.¹⁷ Standardization is essential for comparability, as the underlying trust variables differ substantially in scale and distribution. In particular, the individual-level trust measure has a broader range and several times higher variance than the country-level trust measure. Comparing raw coefficients across models would therefore be misleading; standardized effects adjust

for these differences and allow for an interpretable comparison of effect sizes both within and across immigrant generations.

The results highlight that social trust contributes to economic integration for both first- and second-generation immigrants, though the relative importance of trust type varies by generation. Among first-generation immigrants, country-of-origin trust has a slightly larger standardized effect (6.5%) than individual trust (5.2%), suggesting that culturally inherited norms play a salient role early in the integration process. In contrast, second-generation immigrants show the reverse pattern: individual trust has a stronger standardized association with income (7.3%), while the effect of origin-country trust, though still statistically significant, is smaller (3.5%).

These differences suggest that as immigrants become more embedded in the host society, the economic returns to inherited cultural traits diminish, while those to individual attitudes and behaviors increase. Trust thus appears to operate through two complementary pathways—one shaped by background norms, the other by personal dispositions—with their relative importance shifting across generations. This pattern underscores the multifaceted role of trust in supporting economic integration and helps reconcile the different results observed across the various empirical approaches.

4.4 | Extended Analysis and Robustness Checks

We have extended the analysis in several directions to test the robustness of our main findings and to try to shed light on the underlying mechanisms. For an overview of these tests and the main results, see Table 6.

4.4.1 | Generalizability and Specification Robustness

First, we use data and countries of origin from the Integrated Values Survey (IVS) instead of the ESS.¹⁸ There are three advantages to this exercise: it extends the ancestries of immigrants to the whole world, thereby expanding the sample; it extends the analysis back in time with respect to the years of migration, since data are available from the early 1980s; and it provides a slightly different measure of social trust.¹⁹ *First-generation immigrants.* We begin with the link between the individual trust levels of first-generation immigrants, from the expanded countries of origin, and their income in Table A9 in the Supporting Information. The results are almost identical to those of Table 2, where the ESS is used. See Figure A3 for an illustration. When using the epidemiological method, as shown in Table A10, there is, also for this sample and the IVS trust measure, a strongly statistically significant and positive association between country-of-origin social trust and income. *Second-generation immigrants.* The analysis of individual-level social trust and income, in Table A11, confirms a hump-shaped relationship. See Figure A4 for an illustration. The epidemiological analysis, shown in Table A12, again finds that more trust in the background culture is beneficial for income. In all, this exercise shows that the baseline findings using the ESS also apply when using a richer set of

TABLE 4 | Country-of-origin trust and income, second-generation immigrants in Europe with the ESS sample as the countries of origin.

	(1)	(2)	(3)	(4)	(5)
	OLS	OLS	OLS	OLS	OLS
Average ancestral social trust	0.0510** (2.47)	0.0454** (2.31)	0.0478** (2.20)	0.0502** (2.40)	0.0982*** (3.36)
Country-of-residence-by-year fixed effects	Yes	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes	Yes
Altruism, risk aversion, trustworthiness	Yes	Yes	Yes	Yes	Yes
Additional individual controls	No	Yes	No	No	No
Trust legal system (10 dum.)	No	No	Yes	No	No
Controlling for moderation	No	No	No	Yes	No
Additional country-of-origin controls	No	No	No	No	Yes
Observations	3376	2180	3333	3376	3285
R^2	0.726	0.781	0.727	0.727	0.730

Note: t statistics in parentheses, calculated using robust standard errors clustered at the country of origin. By “average ancestral social trust” is meant that the data are from the country of origin of the father and the country of origin of the mother. If the parents come from the same country, the value is the country average. If they come from two different countries, the value is the average of the two country averages. Table A8 in the Supporting Information is an expanded version of the table, showing more point estimates.

* $p < 0.10$.

** $p < 0.05$.

*** $p < 0.01$.

TABLE 5 | Standardized coefficients within and between immigrant groups.

Immigrant group	Trust measure	Standardized effect on income	Based on
First-generation immigrants	Individual trust	5.2%	Table 1
	Country-of-origin trust	6.5%	Table 2
Second-generation immigrants	Individual trust	7.3%	Table 3
	Country-of-origin trust	3.5%	Table 4

Note: “Standardized effect on income” refers to the percentage change in the standard deviation of ln income associated with a one-standard-deviation increase in the respective trust variable. The calculations are based on the point estimates reported in column (1) of Tables 1–4 and the corresponding descriptive statistics for the trust and ln income variables.

origin countries and, in the case of the epidemiological analysis, a different social trust variable.

Second, to further explore whether individual or country-of-origin trust plays a greater role in shaping income, or whether both matter, but in different ways, we estimate models that include both measures simultaneously. Prior studies have documented a positive correlation between individual and country-level trust, but our interest lies in how each contributes to income variation when conditioned on the other. The resulting estimates can be interpreted as partial effects: the coefficient on individual trust reflects its association with income above and beyond the influence of cultural background, and vice versa. The results, shown in Table A13 and Figure A5 (first-generation immigrants) and Table A14 and Figure A6 (second-generation immigrants) in the Supporting Information, indicate that both measures retain explanatory power. Notably, the country-of-origin trust coefficients remain stable, underscoring the enduring influence of embedded cultural norms. At the same time, individual trust continues to matter, suggesting that personal

dispositions yield economic benefits even when controlling for inherited trust.

Third, we have added a squared trust term to Equation (2) to see whether this gives a better fit than the linear specification. We find that it does not: when re-estimating Tables 2 and 4 with the addition of a squared trust term, it is never statistically significant, and the R^2 is unchanged.²⁰ Results are shown in Tables A15 and A16 in the Supporting Information.

Fourth, to assess whether the definition of second-generation immigrants affects the results, we re-estimate Table 3 using the stricter sample (requiring both parents to be foreign-born), consistent with the epidemiological analysis. Table A17 in the Supporting Information presents the findings, and Figure A7 illustrates them across definitions. The estimated coefficients are highly similar across samples, especially for trust levels 4–8, where the association with income remains positive. While the broader sample yields more precise estimates, none of the coefficient differences are statistically significant (all

TABLE 6 | Overview of extended analyses and robustness checks.

Test	Description	Results	Tables/figures
Generalizability and specification robustness			
(1) Expand countries of origin	Replace ESS-based origin countries with those from the IVS to evaluate global generalizability.	Trust–income associations remain positive and significant, confirming robustness across non-European origins and an alternative trust measure.	Tables A9–A12 ; Figures A3–A4
(2) Including both types of trust	Include individual-level and country-of-origin trust jointly in income regressions to separate their independent contributions.	Both trust measures remain significant, with individual trust's nonlinearity reduced, indicating independent effects.	Tables A13–A14 ; Figures A5–A6
(3) Adding a quadratic term	Add a squared trust term to test for non-linear hump-shaped patterns in the trust–income relationship.	Squared term is never significant and model fit unchanged, supporting linear specification.	Tables A15–A16
(4) Second-generation definition	Compare stricter (two foreign-born parents) vs. broader (≥ 1 foreign-born parent) definitions of second generation to test definition sensitivity.	Patterns and coefficients are statistically indistinguishable, confirming robustness to definition choice.	Table A17 ; Figure A7
Robustness and moderating influences			
(5) Selection	Compare first-generation migrants' incomes to non-migrants from the same origin and relate the gap to home-country trust to assess selection bias.	Negative correlation implies migrants from high-trust countries earn less relative to non-migrants, indicating any selection bias would attenuate, not inflate, results.	Figures A8–A9
(6) Discrimination	Control for discrimination and interact it with origin-country trust to examine confounding and mitigation effects.	Discrimination penalty is significant for first generation at low trust but dissipates at high trust, while primary trust effects persist.	Tables A18–A19 ; Figure A10
(7) Co-ethnic network size	Control for co-ethnic network share to examine whether community size impacts trust effects; interact to examine moderation.	Network share is insignificant and does not alter trust coefficient, suggesting an independent trust effect. Positive interaction effect.	Table A20 ; Figure A11
(8) Linguistic similarity	Interact origin trust with a linguistic similarity dummy to test if shared language conditions trust returns.	No significant interaction, indicating linguistic proximity does not moderate the trust–income link.	Table A21
(9) Cultural distance	Interact origin trust with a Hofstede-based cultural distance index to test unfamiliarity effects.	Interaction is not significant, showing trust returns persist regardless of cultural distance.	Table A22
(10) Country-by-year fixed effects	Add country-by-year fixed effects to Butler-style regressions to control for time-varying national shocks.	Estimates attenuate slightly but remain consistent, indicating robustness to time-varying heterogeneity.	Tables A23–A24
Mechanisms and contextual variation			
(11) Length of stay	Include years since arrival and interact with origin trust to examine erosion of trust premium over time.	Each year increases income, while trust premium declines with longer residence.	Tables A25–A26 ; Figure A12
(12) High- vs. low-trust destinations	Re-estimate models separately for immigrants in high- versus low-trust host countries to assess context dependency.	Trust–income relationship is slightly stronger in high-trust host countries, but remains positive in both.	Figures A13–A14

(Continues)

TABLE 6 | (Continued)

Test	Description	Results	Tables/figures
(13) Trust distance	Replace origin trust with trust distance (host minus origin) to capture adaptation mismatch effects.	Greater trust distance correlates with lower income, suggesting similarity in trust norms facilitates earnings.	Tables A27–A28
(14) Labor-force status interactions	Interact origin trust with employment status and run separate regressions by employment category to assess heterogeneity.	Positive trust returns for both employed and non-employed, steeper and highly significant for the employed.	Table A29
(15) Extensive margin	Estimate LPM of employment on origin trust for those in the labor force to test effect on employment entry.	Coefficients are small and insignificant, indicating trust does not affect the probability of the unemployed becoming employed.	Table A30
(16) Separating origin of mothers vs. fathers	Use separate maternal and paternal origin-trust averages instead of a combined measure to test parental effects.	Trust effects are similar for both maternal and paternal origins, indicating no differential parental influence.	Tables A31–A32
(17) Pooled trust-immigrant interactions	Interact trust levels with first- and second-generation dummies in pooled regressions to compare slopes to natives.	First generation shows negative interactions at high trust; second generation aligns with natives.	Table A33; Figure A15

Note: The tables and figures are in the Supporting Information.

p -values > 0.40).²¹ We conclude that the substantive results are robust to how second-generation immigrants are defined.

4.4.2 | Robustness and Moderating Influences

Fifth, another concern is whether immigrants are truly representative of the cultural environment in which they were raised. Specifically, if the process of self-selection mirrors the observed association between income and social trust, one might suspect that individuals migrating from high-trust countries systematically earn more than those who remain, while migrants from low-trust countries systematically earn less. To investigate this possibility, we compare the incomes of first-generation migrants with those of non-migrants in each corresponding home country and then link these comparisons to that country's average level of social trust. Were this relationship positive—replicating the association between income and social trust in the main analysis—it would raise concerns about bias due to migrant selection. However, as shown in Figure A8 in the Supporting Information, the relationship is in fact negative, suggesting that if any bias is present, it pushes our estimates of social trust downward. Consequently, our findings do not appear to be driven by migrant selection.²²

Sixth, we assess whether discrimination explains or moderates the trust–income relationship. Using an ESS dummy variable of nationality-based discrimination experienced by respondents, we first add a control to the individual-level trust models (Tables 1 and 3).²³ Discrimination is associated with a significant income penalty for first-generation immigrants, but not for the second generation, while the trust coefficients remain largely unchanged (see Table A18 in the Supporting

Information). This suggests that trust supports income independently of perceived discrimination. We then extend this test to the epidemiological models by interacting country-of-origin trust with the discrimination variable (Table A19). The only significant interaction appears among first-generation immigrants from European origins: discrimination reduces income more strongly for those from low-trust countries, with the effect weakening quite quickly as trust increases (see Figure A10). This may reflect statistical discrimination, where group-level trust is used as a proxy for individual reliability, or greater vulnerability to exclusion among those from low-trust cultures. No such pattern appears for second-generation immigrants, reinforcing the idea that cultural signals fade with integration. Overall, the findings indicate that while discrimination affects some groups, it does not explain the broader trust–income relationship.

Seventh, to assess whether co-ethnic networks moderate the effect of home-country trust on income for first-generation immigrants, we construct a measure of network size using ESS data. This variable captures the proportion of ESS respondents in the host country who share the same country of origin. This approach aligns with the logic of Munshi (2003) and Battisti et al. (2022), although the operationalization remains necessarily coarse due to survey limitations. As illustrated in Table A20 and Figure A11 in the Supporting Information, network size interacts positively with country-of-origin trust for first-generation immigrants (it does not do so for second-generation immigrants). This suggests that co-ethnic networks do not crowd out trust in their influence on income; rather, they amplify its effect. However, without the interaction term, the size of the co-ethnic enclave per se has no statistically significant impact on income, whereas the trust variable remains

positively associated and robust. Nonetheless, more granular register-based data would be required to rigorously test the role of network effects.²⁴

Eighth, we test whether linguistic similarity between origin and destination countries moderates the effect of inherited trust on income. We construct a dummy variable equal to one when the immigrant (or their parents) comes from the same language group as the host country and interact it with country-of-origin trust.²⁵ Results are reported in Table A21, for first-generation immigrants. Trust remains a strong and significant predictor of income. Linguistic similarity, by contrast, shows no significant main or interaction effects, suggesting that the trust–income relationship is not conditioned by shared language. These findings indicate that inherited trust operates as a stable cultural trait, with economic relevance that is distinct from linguistic proximity or ease of communication.²⁶

Ninth, we examine whether cultural distance moderates the relationship between country-of-origin trust and income. Cultural distance is measured using a Kogut–Singh index based on Hofstede's six cultural dimensions.²⁷ As shown in Table A22, country-of-origin trust remains a strong and significant predictor of income across all specifications. The interaction with cultural distance is consistently insignificant, indicating that the trust–income relationship does not vary systematically with cultural proximity. While cultural similarity may matter in other domains, these results suggest that inherited trust influences economic outcomes independently.²⁸

Tenth, we re-estimate the baseline models from Tables 1 and 3 using country-by-year fixed effects to account for time-varying national shocks. Compared to the original specifications with country fixed effects, the point estimates are slightly smaller and less frequently significant, but confidence intervals overlap throughout (see Tables A23 and A24 in the Supporting Information). For example, the estimate for trust level 9 falls from 0.156 to 0.139. This pattern holds for both first- and second-generation immigrants, indicating that the inclusion of stricter fixed effects does not materially alter the results. The findings remain statistically consistent across specifications.

4.4.3 | Mechanisms and Contextual Variation

Eleventh, we examine whether the effect of inherited trust varies with first-generation immigrants' time in the host country. Using ESS rounds 5–10, which provide year-of-arrival data, we include length of stay (in years). Results are in Tables A25 and A26 in the Supporting Information. First, adding length of stay as a control confirms that each additional year is associated with a 0.28%–0.40% income gain, consistent with gradual integration. Crucially, the effect of country-of-origin trust remains strong and significant, suggesting that trust operates independently of time spent in the host society. Second, as clearly seen in Figure A12, interacting trust with length of stay reveals a consistent, negative interaction: the income return to inherited trust declines with longer residence. This erosion is gradual but notable, indicating that while trust offers an initial advantage,

its effect fades as immigrants become more embedded. For immigrants from low-trust countries, the length-of-stay coefficient reflects substantial income gains over time, reinforcing the interpretation of progressive integration.

Twelfth, the economic return to social trust may differ depending on whether immigrants reside in high- or low-trust countries. To test this, we split the sample by whether the host country's average trust level is above or below the median and re-estimate the baseline models for both generations. As shown in Figures A13 and A14 in the Supporting Information, the trust–income gradient is slightly steeper in high-trust countries. The findings suggest that trust may be more effectively rewarded in institutional environments where social trust is broadly shared.

Thirteenth, instead of using the average social trust in the country of origin (as in Tables 2 and 4), we examine trust defined as the difference between the host country's average trust and that of the origin country (or the parents' countries for second-generation immigrants). Results in Tables A27 and A28 in the Supporting Information show consistently negative coefficients: greater trust distance is associated with lower income. For first-generation immigrants, each unit by which the host country's trust exceeds that of the origin is linked to a roughly 7% income reduction; for second-generation immigrants, the effect is about 5%. Conversely, a negative trust distance, where the origin country has higher trust, is associated with higher income. This pattern indicates that immigrants from low-trust societies may struggle more in high-trust environments, where economic participation often depends on informal networks, mutual reliability, and trust-based institutions. By contrast, immigrants from high-trust countries arrive with greater familiarity with these norms, helping them navigate the host society more effectively. That is, a high-trust cultural background can facilitate smoother economic integration.

Fourteenth, while the ESS does not separate income sources, we can examine subsamples by labor market status. Since trust likely affects income through employment-related channels, such as job matching or entrepreneurship, *all* our regressions control for labor force status, with the employed as the reference group. As shown in Tables A5–A8 in the Supporting Information, being unemployed or outside the labor force is associated with large, negative, and significant income penalties. This setup means the main trust coefficient primarily reflects the employed. To explore heterogeneity, we interact country-of-origin trust with labor force status in the epidemiological models (Table A29). This approach treats trust as exogenous and is well-suited to testing how inherited norms interact with labor market participation. Although interaction terms are not statistically significant, the trust–income gradient is steeper for the employed, with flatter patterns among the unemployed and non-participants, suggesting trust pays off more clearly within the labor market.²⁹

Fifteenth, to see whether trust is beneficial at the extensive margin, we estimate a linear probability model where the dependent variable is a dummy for being employed, restricting the sample to individuals in the labor force (i.e., employed or unemployed). This avoids heterogeneity from groups outside the labor force, such as students or retirees, whose employment status is

typically unrelated to attitudinal traits like trust. Theoretically, trust may influence outcomes through job search, reliability, or productivity, mechanisms relevant only among active labor market participants. Thus, the relevant extensive margin is the likelihood of being employed versus unemployed within this group. As shown in Table A30, trust in the country of origin is not significantly associated with employment status for first-generation immigrants; coefficients are small and statistically insignificant across all specifications. This suggests that inherited trust does not affect the probability of labor market entry. Instead, trust operates at the intensive margin, affecting income levels among the employed, rather than the likelihood of employment itself.

Sixteenth, when parents of second-generation immigrants come from different countries, we have so far used the average of the average social trust of the two countries. But the data allow us to separate the influence of the average social trust of the mother's country of origin from the influence of the average social trust of the father's country of origin. When doing so, we do not find any statistically significant differences: the trust variable is of similar size and significant across maternal and paternal ancestries. See Tables A31 and A32 in the Supporting Information.

Lastly, we estimate a pooled model for the full 2002–2022 ESS sample, incorporating dummy variables for first- and second-generation immigrants and interacting these with individual trust levels. This allows for a direct comparison of the income–trust relationship across non-immigrants, first-generation immigrants, and second-generation immigrants. Results are presented in Table A33 and illustrated in Figure A15. Among non-immigrants, income increases steadily with trust up to level 8, after which the relationship flattens, consistent with the previously documented hump-shaped pattern (cf. Appendix B). For second-generation immigrants, the estimated trust–income profile closely tracks that of natives. None of the interaction terms between trust and second-generation status are statistically significant, and confidence intervals substantially overlap across trust levels. This suggests that, by the second generation, immigrants experience income returns to trust that are statistically and substantively similar to those of the native-born. Social trust is rewarded similarly across these two groups in shaping labor market outcomes. By contrast, the returns to trust are weaker for first-generation immigrants. Statistically significant differences relative to non-immigrants emerge at trust levels 5, 6, and 10, with the latter showing a sizable and robust divergence. Additional marginal differences appear at trust levels 7 and 8. Although the overall trust–income association remains positive, the attenuated returns suggest that individual trust is not as effectively rewarded among first-generation immigrants, particularly at higher trust levels. This pattern may reflect structural barriers, limited institutional familiarity, or difficulties in converting trust into economically rewarded behaviors in the host context.³⁰

5 | Concluding Remarks

Integration remains a central challenge for many European societies. Despite substantial policy efforts, immigrants often face persistent disadvantages in the labor market, including lower

employment rates and reduced earnings relative to natives. While structural and institutional factors are clearly important, our findings suggest that cultural traits, particularly social trust, play an independent role in shaping immigrants' economic integration.

This paper has examined how social trust, both as an individual disposition and as a culturally inherited norm, relates to immigrants' income in Europe. Using data from the European Social Survey (2002–2022), we find that trust is positively associated with income for both first- and second-generation immigrants, but that the source and strength of this association differ by generation. Among first-generation immigrants, country-of-origin trust is a stronger predictor of income, while for the second generation, individual-level trust, presumably shaped by greater exposure to host-country norms, has greater explanatory power. These findings hold across multiple model specifications, datasets, and robustness checks, including controls for selection, discrimination, linguistic proximity, and cultural distance.

The results highlight two distinct but complementary pathways through which trust contributes to economic integration. First-generation immigrants appear to benefit from the trust norms of their country of origin, norms that may facilitate navigation of new labor markets and build initial credibility in the absence of established networks or institutional familiarity. However, this effect weakens over time, consistent with adaptation to the host society and the declining relevance of inherited norms. In contrast, second-generation immigrants benefit more from personal trust, which is shaped within the institutional and cultural context of the host country and appears to be rewarded in similar ways to natives. That the trust–income gradient is nearly indistinguishable between second-generation immigrants and non-immigrants suggests a notable degree of cultural and economic integration by the second generation.

The findings also indicate that integration outcomes vary depending on immigrants' trust profiles. Those with low or very high levels of trust, and those from low-trust societies, tend to experience weaker economic outcomes. This mirrors related research (e.g., Berggren et al. 2023), which finds that cultural traits such as intolerance are also associated with weaker integration. Taken together, these results underscore the importance of cultural compatibility in facilitating immigrant success in host-country labor markets.

From a policy perspective, acknowledging the cultural dimension of integration is both necessary and challenging. Cultural traits such as social trust are relatively stable and not easily shaped by short-term interventions. While improving institutional quality, reducing inequality, or enhancing legal fairness may have long-term effects on trust formation (Berggren and Jordahl 2006; Bjørnskov 2007; Gustavsson and Jordahl 2008; Alesina and Giuliano 2015; Dinesen et al. 2020; Bergh and Öhrvall 2018; Berggren and Bjørnskov 2023; Martinangeli et al. 2024), such strategies are slow-moving and complex, especially when immigration itself can affect these very factors. Selective immigration policies that favor individuals from high-trust societies may be more immediately effective but raise practical and ethical concerns, particularly in refugee contexts.

An alternative strategy is to tailor integration policies more directly to the needs of low-trust groups. If trust facilitates employment outcomes primarily through mechanisms such as cooperation, reliability, and productivity, policies might focus on fostering these behaviors more explicitly, for example, through mentorship programs, job training that includes behavioral components, or initiatives that build cross-cultural understanding in workplaces.

We do not argue that culture is the sole or dominant determinant of economic integration. Institutional quality, education, wider aspects of discrimination than what we have been able to control for, and labor market dynamics are all critical. However, integrating cultural traits such as trust into the analytical framework can provide a fuller picture of why certain groups integrate more successfully than others and how policy can be refined accordingly. In this sense, culture is not a competing explanation but a complementary one—an often-overlooked dimension that helps explain persistent variation in economic outcomes among immigrants in Europe.

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Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Supporting Information

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

Endnotes

- ¹ Guiso et al. (2006: 23) define culture as “the customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation.”
- ² Algan (2018: 289) presents the OECD definition, which focuses more on the attitude side: “a person’s belief that another person or institution will act consistently with their expectations of positive behavior.”
- ³ There are studies of how individual social trust of immigrants relates to the average social trust in the countries of origin and how it changes over time. Ljunge (2014: 176) finds that, for an ESS sample of second-generation immigrants, “[t]rust expressed by children of immigrants is on average similar to the general population ... The paper presents evidence of significant cultural transmission of trust, which is strongest on the mother’s side. Individuals whose mothers have high trust ancestry express significantly higher trust than others.” Bergh and Öhrvall (2018) show that for emigrants from Sweden, trust is stable after migration, even though it decreases a little for individuals below 30 in settings with poor institutional quality. We take results like this to validate a key assumption underlying the epidemiological method, that of vertical transmission. Cf. Uslaner (2008), Algan and Cahuc (2010), Nannestad et al. (2014), Helliwell et al. (2016), and Dinesen and Sønderskov (2018).

- ⁴ For both immigrant groups, the highest level of individual trust (value 10) is associated with a marked drop in income relative to lower trust levels. This pattern likely reflects vulnerability to exploitation, as highly trusting individuals may be more susceptible to being misled or taken advantage of in unfamiliar institutional and social environments.
- ⁵ An alternative mechanism, suggested by a Reviewer, is that immigrants strategically signal trustworthiness, e.g., by displaying cooperative behavior or accepting lower incomes in the short term, to access opportunities in the host country. This mechanism is difficult to test using cross-sectional survey data. It would likely require detailed longitudinal data (e.g., register-based earnings trajectories) or experimental methods that can isolate signaling incentives. We view this as a promising avenue for future research.
- ⁶ Ek (2024) uses the epidemiological method to discern whether another cultural characteristic in the country of origin, autonomy, is productivity-enhancing for immigrant workers in Sweden, and he finds that it clearly is (with weaker albeit still positive results for trust in that case).
- ⁷ Cf. Penninx and Garcés-Masareñas (2016).
- ⁸ Nevertheless, there is a clear link between them: as shown by, e.g., Dohmen et al. (2012), Ljunge (2014), and Bergh and Öhrvall (2018), social trust in the background culture is a predictor of individual trust.
- ⁹ This sample size applies when second-generation immigrants are defined as having at least one foreign-born parent. In the epidemiological analysis, we apply a stricter definition, having two foreign-born parents, which reduces the sample to a bit more than 3000. For both first- and second-generation immigrants, the number of observations varies slightly across regressions depending on the inclusion of specific control variables.
- ¹⁰ Various surveys are employed to define the top bracket for each country. Following Butler et al. (2016), in most of the nations included in our research, the EU-SILC dataset is utilized; for Switzerland and Turkey, however, the data are retrieved from the Luxembourg Income Study and the Income and Living Condition Use Survey, respectively.
- ¹¹ In an extended analysis, we use the Integrated Values Surveys (IVS) for average social trust in 113 countries of origin. The IVS asks: “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?” The reply is dichotomous: either “most people can be trusted” or “need to be very careful”. The aggregate, country-level measure is the share that replies “most people can be trusted” is used multiplied by 10.
- ¹² Bjørnskov (2021) provides external validation of survey-based trust measures by comparing them to behavioral data on lost-wallet returns across 38 countries and 105 European regions. He finds a strong correspondence between self-reported social trust and the likelihood of returned wallets, suggesting that survey indicators capture variation in honest and cooperative behavior.
- ¹³ The measure is the sum of replies to two questions asked in the ESS, each on a scale from 0 to 10: “Please say how much the management at your work allows/allowed you: a) ... to decide how your own daily work is/was organized; b) ... to influence policy decisions about the activities of the organization.”
- ¹⁴ If the parents of a second-generation immigrants originate from different countries, the values used are the averages of the two countries of origin.
- ¹⁵ Moreover, previous research has documented the intergenerational transmission of a wide range of traits, values, and behaviors. Examples include religious beliefs (Bisin and Verdier 2000), female participation in the labor force (Fernández and Fogli 2009), work ethic (Bogt et al. 2005), environmental concerns (Grønhoj

and Thøgersen 2009), life satisfaction (Berggren et al. 2020), political ideology (Settle et al. 2009), and risk preferences (Dohmen et al. 2012).

¹⁶ In Appendix B, we replicate the hump-shaped relationship between individual social trust and income among the general population of Europeans reported by Butler et al. (2016) for the 2002–2011 period and demonstrate that this pattern persists when the analysis is extended through 2022.

¹⁷ For the individual-level trust models, we predicted ln income at the sample's average trust level and then again at a trust level one standard deviation above the mean. Because trust only takes whole-number values, we interpolated between the two adjacent dummy-variable coefficients to get predictions at those exact points. The difference between the two predicted ln incomes is the effect of raising trust by one standard deviation. Finally, we divided that difference by the standard deviation of ln income so the result is expressed in standard-deviation units.

¹⁸ For the analysis relating individual social trust to individual income, all data are still from the ESS, but the countries of origin are expanded to those of the IVS, beyond Europe. The baseline analysis above only contains immigrants from the 34 countries of the ESS. For the epidemiological analysis, the same expansion of countries to those of the IVS, beyond Europe, has been undertaken, and likewise, ESS data are still used—except for the measure of country-of-origin social trust, where the data are from the IVS.

¹⁹ However, three drawbacks are that there is a greater risk of discrimination against non-European immigrants, which could bias the results, that the greater heterogeneity of background countries entails more institutional and cultural differences in the countries of origin that may be hard to control for, and that the measure of social trust is different (due to the binary character of the survey question)—it is the share in a country stating that most people can be trusted, times 10.

²⁰ It is reasonable to expect a linear relationship at the country level since the trust measure is a country average ranging from 2.3 to 7.1 in our data. Thus, the low and high trust values that are linked, theoretically, to low incomes are not included. However, *even if* a country had an average trust level of 10, it is not probable that this would entail lower incomes than any lower average trust level, since people would correctly infer that others are trustworthy; the risk of being cheated would be more or less non-existent. This is different from an individual trust level of 10 in a setting where many others are, in fact, not trustworthy and willing to cheat.

²¹ We have also re-estimated the regressions in Table 4 using the broader sample in which second-generation immigrants are defined as having at least one foreign-born parent. This specification yields similar coefficients on country-of-origin trust but substantially smaller standard errors, reinforcing the robustness of the main finding: that country-of-origin trust is positively associated with income among second-generation immigrants in Europe. Results are available upon request.

²² Add to this (i) the granular analysis of this problem by Schilpzand (2024), which concludes that selection is not a problem for social trust and that the epidemiological method is valid for this variable; and (ii) that the distribution of trust levels within migrant groups (Figures A1 and A2 in the Supporting Information) largely mirrors the distribution among the general populations from the same ESS countries (Figure A9). This similarity suggests that extreme values, particularly very high or low-trusting individuals, are not disproportionately underrepresented in the migrant sample.

²³ While it may seem counterintuitive to consider nationality-based discrimination among second-generation immigrants, who are typically citizens of their birth country, the survey question asks whether one belongs to a group discriminated against *due to nationality*. In this context, respondents are likely referring to the nationality of their parents' country of origin. It is improbable, for

instance, that someone born in Sweden to Turkish parents would interpret the question as referring to discrimination for being Swedish.

²⁴ Due to problems with statistical power, we do not report findings for second-generation immigrants, but there is no statistically significant finding for the co-ethnic network share for this group, neither when included by itself nor in interactions.

²⁵ Linguistic similarity has been operationalized using a categorization of countries into broad language groups: Germanic, Slavic, Romance, Baltic (Latvia and Lithuania), and Finno-Ugric (Finland, Hungary, Estonia). Countries with substantial bilingual or bicultural alignment were assigned to multiple groups: Belgium was matched to both the Romance and Germanic groups, and Cyprus was matched to both Greece and Turkey.

²⁶ As a robustness check, we also estimated models with the linguistic similarity term alone. The results—available on request—remain small, positive, and insignificant, with no material impact on the trust coefficients. All conclusions for first-generation immigrants hold for second-generation immigrants as well.

²⁷ Cultural distance is measured using a Kogut–Singh index based on Hofstede's six cultural dimensions (2015): power distance, uncertainty avoidance, individualism, masculinity, long-term orientation, and indulgence. The index averages the squared differences between origin and host countries, weighted by the inverse variance of each dimension. Higher values indicate greater cultural dissimilarity. For details, see Kogut and Singh (1988) and Geert Hofstede (2025).

²⁸ As a robustness check, we included only the linear term for cultural distance; results (available on request) show it remains small and insignificant, while country-of-origin trust stays large and highly significant. Given stronger theoretical relevance and better statistical power, we focus this analysis on first-generation immigrants; cultural distance is likely less salient for the more integrated second generation.

²⁹ As a robustness check, we estimate separate models for those in and outside the labor force (available on request). Trust remains significant in both groups, with slightly higher coefficients among those in the labor force. This implies trust may also affect income beyond formal employment, possibly via informal earnings or pension-linked outcomes.

³⁰ While the full sample comprises over 245,000 individuals, the immigrant subsamples are substantially smaller (approximately 12,000 per group), which limits statistical power. Wide confidence intervals, particularly at higher trust levels, should therefore be interpreted with caution. The absence of statistical significance does not necessarily imply the absence of substantive differences.

References

- Aksoy, C. G., P. Poutvaara, and F. Shikora. 2023. "First Time Around: Local Conditions and Multi-Dimensional Integration of Refugees." *Journal of Urban Economics* 137, no. 9: 103588.
- Aldén, L., and M. Hammarstedt. 2016. "Discrimination in the Credit Market? Access to Financial Capital Among Self-Employed Immigrants." *Kyklos* 69, no. 1: 3–31.
- Alesina, A., and P. Giuliano. 2015. "Culture and Institutions." *Journal of Economic Literature* 53, no. 4: 898–944.
- Algan, Y. 2018. "Trust and Social Capital." In *For Good Measure: Advancing Research on Well-Being Metrics Beyond GDP*, edited by J. E. Stiglitz, J. Fitoussi, and M. Durand, 283–320. OECD Publishing.
- Algan, Y., and P. Cahuc. 2010. "Inherited Trust and Growth." *American Economic Review* 100, no. 5: 2060–2092.
- Algan, Y., and P. Cahuc. 2014. "Trust, Growth, and Well-Being: New Evidence and Policy Implications." In *Handbook of Economic Growth*, edited by P. Aghion and S. N. Durlauf, 49–120. Amsterdam: Elsevier.

- Balliet, D., and P. A. M. Van Lange. 2013. "Trust, Conflict, and Cooperation: A Meta-Analysis." *Psychological Bulletin* 139, no. 5: 1090–1112.
- Battisti, M., G. Peri, and A. Romiti. 2022. "Dynamic Effects of Co-Ethnic Networks on Immigrants' Economic Success." *Economic Journal* 132, no. 641: 58–88.
- Berggren, N., A. Bergh, C. Bjørnskov, and S. Tanaka. 2020. "Migrants and Life Satisfaction: The Role of the Country of Origin and the Country of Residence." *Kyklos* 73, no. 3: 436–463.
- Berggren, N., and C. Bjørnskov. 2023. "Does Globalization Suppress Social Trust?" *Journal of Economic Behavior & Organization* 214, no. 10: 443–458.
- Berggren, N., M. Elinder, and H. Jordahl. 2008. "Trust and Growth: A Shaky Relationship." *Empirical Economics* 35, no. 2: 251–274.
- Berggren, N., and H. Jordahl. 2006. "Free to Trust: Economic Freedom and Social Capital." *Kyklos* 59, no. 2: 141–169.
- Berggren, N., M. Ljunge, and T. Nilsson. 2023. "Immigrants from More Tolerant Cultures Integrate Deeper into Destination Countries." *Journal of Comparative Economics* 51, no. 4: 1095–1108.
- Bergh, A., and R. Öhrvall. 2018. "A Sticky Trait: Social Trust Among Swedish Expatriates in Countries with Varying Institutional Quality." *Journal of Comparative Economics* 46, no. 4: 1146–1157.
- Berry, J. W. 1997. "Immigration, Acculturation and Adaptation." *Applied Psychology: An International Review* 46, no. 1: 5–34.
- Beugelsdijk, S., H. L. F. de Groot, and A. B. T. M. van Schaik. 2004. "Trust and Economic Growth: A Robustness Analysis." *Oxford Economic Papers* 56, no. 1: 118–134.
- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou. 2011. "Ethnic Identity and Labor Market Outcomes of Immigrants in Europe." *Economic Policy* 26, no. 65: 57–92.
- Bisin, A., and T. Verdier. 2000. "Beyond the Melting Pot: Cultural Transmission, Marriage, and the Evolution of Ethnic and Religious Traits." *Quarterly Journal of Economics* 115, no. 3: 955–988.
- Bisin, A., and T. Verdier. 2011. "The Economics of Cultural Transmission and Socialization." In *Handbook of Social Economics*, edited by J. Benhabib, A. Bisin, and M. O. Jackson, 339–416. Elsevier.
- Bjørnskov, C. 2007. "Determinants of Generalized Trust: A Cross-Country Comparison." *Public Choice* 130, no. 1–2: 1–21.
- Bjørnskov, C. 2012. "How Does Social Trust Affect Economic Growth?" *Southern Economic Journal* 78, no. 4: 1346–1368.
- Bjørnskov, C. 2018. "Social Trust and Economic Growth." In *The Oxford Handbook of Social and Political Trust*, edited by E. M. Uslaner, 535–556. Oxford University Press.
- Bjørnskov, C. 2021. "Civic Honesty and Cultures of Trust." *Journal of Behavioral and Experimental Economics* 92, no. 6: 101693.
- Bjørnskov, C. 2022. "Social Trust and Patterns of Growth." *Southern Economic Journal* 89, no. 1: 216–237.
- Bjørnskov, C., and P.-G. Méon. 2015. "The Productivity of Trust." *World Development* 70, no. 6: 317–331.
- Bogt, T. T., Q. Raaijmakers, and F. van Wel. 2005. "Socialization and Development of the Work Ethic Among Adolescents and Young Adults." *Journal of Vocational Behavior* 66, no. 3: 420–437.
- Brown, S., D. Gray, J. McHardy, and K. Taylor. 2015. "Employee Trust and Workplace Performance." *Journal of Economic Behavior & Organization* 116, no. 8: 361–378.
- Butler, J. V., P. Giuliano, and L. Guiso. 2016. "The Right Amount of Trust." *Journal of the European Economic Association* 14, no. 5: 1155–1180.
- Coleman, J. 1990. *Foundations of Social Theory*. Belknap Press of Harvard University Press.
- Dinesen, P. T., M. Schaeffer, and K. M. Sønderskov. 2020. "Ethnic Diversity and Social Trust: A Narrative and Meta-Analytical Review." *Annual Review of Political Science* 23: 441–465.
- Dinesen, P. T., and K. M. Sønderskov. 2018. "Cultural Persistence or Experiential Adaptation? A Review of Studies Using Immigrants to Examine the Roots of Social Trust." In *The Oxford Handbook of Social and Political Trust*, edited by E. M. Uslaner, 205–230. Oxford University Press.
- Dohmen, T., A. Falk, D. Huffman, and U. Sunde. 2012. "The Intergenerational Transmission of Risk and Trust Attitudes." *Review of Economic Studies* 79, no. 2: 645–677.
- Ek, A. 2024. "Cultural Values and Productivity." *Journal of Political Economy* 132, no. 1: 295–335.
- Fernández, R. 2011. "Does Culture Matter?" In *Handbook of Social Economics*, edited by J. Benhabib, A. Bisin, and M. O. Jackson, 481–510. Elsevier.
- Fernández, R., and A. Fogli. 2009. "Culture: An Empirical Investigation of Beliefs, Work, and Fertility." *American Economic Journal: Macroeconomics* 1, no. 1: 146–177.
- Grønhøj, A., and J. Thøgersen. 2009. "Like Father, Like Son? Intergenerational Transmission of Values, Attitudes, and Behaviours in the Environmental Domain." *Journal of Environmental Psychology* 29, no. 4: 414–421.
- Hofstede G. 2025. "The 6-D Model of National Culture." <https://geert.hofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/>.
- Guiso, L., P. Sapienza, and L. Zingales. 2006. "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives* 20, no. 2: 23–48.
- Guiso, L., P. Sapienza, and L. Zingales. 2024. "Embedded Culture as a Source of Comparative Advantage." Finance Working Paper no. 1027/2024. European Corporate Governance Institute. Available at SSRN: <https://ssrn.com/abstract=5051648>.
- Gustavsson, M., and H. Jordahl. 2008. "Inequality and Trust in Sweden: Some Inequalities Are More Harmful than Others." *Journal of Public Economics* 92, no. 1–2: 348–365.
- Hauser, C., U. Perkmann, S. Puntischer, J. Walde, and G. Tappeiner. 2016. "Trust Works! Sources and Effects of Social Capital in the Workplace." *Social Indicators Research* 128, no. 2: 589–608.
- Helliwell, J. F., S. Wang, and J. Xu. 2016. "How Durable Are Social Norms? Immigrant Trust and Generosity in 132 Countries." *Social Indicators Research* 128, no. 1: 201–219.
- Kim, J., L. Putterman, and X. Zhang. 2022. "Trust, Beliefs and Cooperation: Excavating a Foundation of Strong Economies." *European Economic Review* 147, no. 8: 104166.
- Knack, S., and K. Keefer. 1997. "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation." *Quarterly Journal of Economics* 112, no. 4: 1251–1288.
- Kogut, B., and H. Singh. 1988. "The Effect of National Culture on the Choice of Entry Mode." *Journal of International Business Studies* 19, no. 3: 411–432.
- Koopmans, R. 2016. "Does Assimilation Work? Sociocultural Determinants of Labor Market Participation of European Muslims." *Journal of Ethnic and Migration Studies* 42, no. 2: 197–216.
- Ljunge, M. 2014. "Trust Issues: Evidence on the Intergenerational Trust Transmission Among Children of Immigrants." *Journal of Economic Behavior & Organization* 106, no. 10: 175–196.
- Martinangeli, A. F. M., M. Povitkina, S. Jagers, and B. Rothstein. 2024. "Institutional Quality Causes Generalized Trust: Experimental Evidence on Trusting Under the Shadow of Doubt." *American Journal of Political Science* 68, no. 3: 972–987.

- Munshi, K. 2003. "Networks in the Modern Economy: Mexican Migrants in the US Labor Market." *Quarterly Journal of Economics* 118, no. 2: 549–599.
- Nannestad, P., G. T. Svendsen, P. T. Dinesen, and K. M. Sønderskov. 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, no. 4: 544–565.
- Neuman, E. 2018. "Source Country Culture and Labor Market Assimilation of Immigrant Women in Sweden: Evidence from Longitudinal Data." *Review of Economics of the Household* 16, no. 3: 585–627.
- Penninx, R., and B. Garcés-Masareñas. 2016. "The Concept of Integration as an Analytical Tool and as a Policy Concept." In *Integration Processes and Policies in Europe*, edited by B. Garcés-Masareñas and R. Penninx, 11–30. Springer.
- Schilpzand, A. 2024. "Using Migrant Samples to Examine Cultural Values: Is the Epidemiological Approach Valid?" Working paper. University of Humanistic Studies. Available at SSRN: <https://ssrn.com/abstract=4939283>.
- Settle, J. E., C. T. Dawes, and J. H. Fowler. 2009. "The Heritability of Partisan Attachment." *Political Research Quarterly* 62, no. 3: 601–613.
- Uslaner, E. M. 2008. "Where You Stand Depends on Where Your Grandparents Sat: The Inheritability of Generalized Trust." *Public Opinion Quarterly* 72, no. 4: 725–740.
- Zak, P. J., and S. Knack. 2001. "Trust and Growth." *Economic Journal* 111, no. 470: 295–321.

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Additional supporting information can be found online in the Supporting Information section.