NET WORK LISER

Discussion Paper Series

IZA DP No. 18470 March 2026

High versus Low Skilled Migration, Corruption and Trade

Kusum Mundra
Rutgers University—Newark and IZA@LISER

Tianhao Liu
Rutgers University—Newark

IZA DP No. 18470 March 2026

High versus Low Skilled Migration, Corruption and Trade*

Abstract

This paper shows that immigrants not only have differential effects on trade based on their skill levels but that they play an additional role in facilitating bilateral trade if their origin country has a higher level of corruption and weaker institutions. Using immigrant stock across skill levels from 97 origin countries within the period 1991-95 and 2001-05, this paper employs a gravity econometric model to examine the effect of skilled versus unskilled immigrants while considering the level of home country corruption on the bilateral trade of 21 OECD host country. In one scenario where both OECD and non-OECD origin home countries are considered we find that immigrants across different skill categories significantly increase bilateral trade, though tertiary educated immigrants have a strong pro export effect and primary educated immigrants consistently promote imports with increasing home country corruption. When only non-OECD immigrant origin country is considered the significant marginal effect of immigration is only seen for imports, while the export effect disappears under the weaker institutional conditions. This paper shows that immigrants appear to "grease the wheels" of trade when their home countries are highly corrupt, but this positive effect is only sustained when the broader institutional environment remains relatively effective. Our findings hold across different robustness checks, including the use of different corruption measures, instrumental variable (2SLS) and alternative Poisson Pseudo-Maximum Likelihood (PPML) estimation.

JEL classification

F14, F22, D73, D8

Keywords

immigration, imports, exports, corruption, skill, gravity model

Corresponding author

Kusum Mundra
kmundra@newark.rutgers.edu

* Helpful comments were received from Chunbei Wang, conference participants at the American Association Meetings 2024, International Conference on Empirical Economics 2024, Southern Economic Association Meetings 2025.

1. Introduction

Pro-trade effect of immigration on bilateral trade between the immigrants' host and home countries is well established in the literature (Gould,1994; Dunlevy & Hutchinson, 1999; Rauch & Trindade, 2002; Mundra, 2005; Ottaviano et al., 2018). There is also increasing work showing that pro trade effect of immigrants on trade varies with immigrant occupation and education (Felbermayr & Toubal, 2012; Mundra, 2014). In this paper we focus on the effect of high skilled versus low skilled immigrants on the host country exports and imports, and how this effect of immigrant skills varies with the level of corruption in the immigrants' home country. Immigrants generally move from more corrupt and weaker institutions to less corrupt and stronger institutions and they might play a role of greasing the wheels to promote bilateral trade between their home and destination countries and this will vary with the skill levels of the immigrants (Collier, 2013; Dunlevy, 2006; Egger et al., 2020).

Many cross-country studies have established that high level of corruption signifies institutional failure and higher level of corruption lowers bilateral trade for a country (Anderson & Marcouiller, 2002; Boungou et al., 2024; Chalendard et al., 2022; Firth, 2023). We aim to examine whether having more immigrants in the host country helps in increasing home country trade with the destination countries in the presence of high corruption in the home country. Having a larger group of immigrants in the destination countries provides an access to immigrant networks with information on how to leverage the corruption to facilitate trade deals, connect sellers and buyers promoting bilateral trade with the home country of the immigrants.

We use the gravity econometric model framework and examine the effect of skilled versus unskilled immigrants on the OECD immigrant host country exports and imports with the immigrants' home country, and how this varies with the level of corruption in the immigrants' home country. Dunlevy (2006) finds that the pro-export effect of immigration is stronger for U.S. states when origin countries have higher corruption levels and greater language dissimilarity from English. Building on Dunlevy (2006) the first contribution of this paper, is that we examine the effect of immigrants across skill levels on both exports and imports and we extend to a larger dataset covering bilateral trade between OECD host countries and both OECD and non-OECD home countries.

Building on prior work on the immigration–trade nexus (Gould, 1994; Dunlevy & Hutchinson, 1999; Girma & Yu, 2002; Rauch & Trindade, 2002; Felbermayr & Toubal, 2012; Mundra, 2005), we draw on three channels through which immigrants can influence trade-namely, the informational channel, the preference channel, and institutional embeddedness and connectedness. These channels may operate differently depending on immigrants' skill levels. Specifically, we distinguish immigrant stocks into three education-based skill categories - primary, secondary, and tertiary educated to assess their heterogeneous effect across exports and imports. In our results, tertiary-educated immigrants exhibit a stronger pro-export effect. At the same time, those with primary education are positively associated with higher imports, reflecting differentiated channels through which skill-specific immigrants shape bilateral trade.

The second contribution of this paper is that we use two samples with different home countries in the analysis of exports and imports for OECD countries. First sample allows immigration flow between OECD countries to another so allows immigration stock from the OECD home countries (i.e., 21 OECD host, 97 home). The second sample only includes immigrants from non-OECD home countries to the OECD countries (i.e., 21 OECD host, 76 non-OECD home). Using two samples enables us to examine how the channels between immigration and trade varies depending on the characteristics of immigrants' countries of origin including the corruption level and the differences in the institutions. Although, OECD countries are typically grouped as advanced economies, there is still substantial variation in corruption levels within this group, which allows for meaningful investigation of institutional effects in both samples.

By examining both exports and imports, we gain distinct insights into how the information and preference channels operate. Specifically, Sample 1 reveals a robust pro-trade role of immigrants, particularly for high skilled migrants, who boost both exports and imports primarily through the information channel. Sample 2 shows that skilled migrants drive exports via the information channel, whereas unskilled migrants drive imports through the preference channel. Similarly, the influence of corruption is again concentrated on imports and institutional weaknesses in countries of non-OECD origin constrain migrants' capacity to enhance exports but not imports. Overall, across both samples, immigrants with tertiary education consistently exhibit a stronger effect on exports, while those with only primary education tend to promote imports more effectively. In sum, using two distinct samples not only increases

the robustness of our findings but also allows us to uncover heterogeneity in the trade-enhancing effects of immigration when we allow bilateral trading among OECD countries.

As part of our robustness checks, we draw data on our key variable of interest, corruption, from two distinct sources: Transparency International and the World Bank. The remaining section of this paper is organized as follows: Section 2 reviews the literature on immigration and trade and the role of corruption in immigration and trade nexus. Section 3 presents the empirical model and data, and section 4 reports the estimation results. The last section is the conclusion.

2. Literature Review

The trade-migration nexus becomes relevant as new immigrants to a host country typically tend to settle in a place with big immigrant populations and constitute immigrant networks as a form of social capital that promotes bilateral trade. Being aware of possible differences in factor supply such as cost differentials or product differentiation, immigrants possess advantages due to issues of mutually understood culture or trust (information channel) and thereby could lower the transaction costs of trade with their home countries related to language, culture, or institutions. Different demand patterns of the immigrant population than natives or the taste effect (preference channel) for the goods from the immigrants' homeland also explains the pro trade effects, especially with regards to finished goods. There is a greater positive pro trade effect of immigrants in the case of differentiated and finished goods than homogenous goods (Dunlevy & Hutchinson, 1999; Rauch & Trindade, 2002; Felbermayr & Toubal, 2012).

In addition to the type of good the immigrants' effect on trade varies with the skill level of the immigrants. Skilled immigrants carry better information about their country and use the information effectively or have more entrepreneurial zeal and more access to social capital (Mundra, 2005). Mundra (2014) examines the effect of immigration on trade while looking at various group of immigrant occupations and find that the share of professional immigrant has the largest effect on trade. On similar lines Felbermayr and Toubal (2012) disentangle the preference and the network effect of migration on trade for the high-skilled migrants and finds that information channel dominates the preference effect. In

a recent paper Egger et al. (2020) find that skilled migrants foster differentiated goods trade, and low skilled migrants mainly stimulate homogenous goods trade. Moreover, this effect is particularly strong when institutions in the host country are weak. This institutional view resonates with a study carried out by Dunlevy (2006) at the U.S. states level where the positive effect of immigration on trade is significantly higher for immigrant groups with higher level of corruption and language dissimilarity from English in their origin country.

The corruption-trade studies incorporate predominantly literature that assesses the quality of institutions on international trade flows (Esteve-Pérez et al., 2021). On the one hand, corruption signifies improper functioning of institutions and government failure hindering the effectiveness of contracts among parties and hence raising trade frictions and reducing international trade (Anderson & Marcouiller, 2002; Esteve-Pérez et al., 2021; Gil-Pareja et al., 2019; Méon & Sekkat, 2005). This line of reasoning reveals a "sand the wheels" effect of corruption, emphasizing the detrimental impact of corruption regardless of the institution qualities and implying that corruption could be even more costly when institutions are deficient (Méon & Sekkat, 2005). On the other hand, Méon & Weill (2010) put forward empirical evidence in favor of the beneficial effects of corruption when institutions are less effective, commonly known as "grease the wheels" hypothesis.

Comparing the "grease the wheels" with "sand the wheels" hypothesis, both hypotheses predict a detrimental effect of corruption in an effective institution; however, the difference lies in the expected impact of corruption in a defective institution. Specifically, in a defective institution, "sand the wheels" still predicts a detrimental effect of corruption while "grease the wheels" does not. In the case of an ineffective institution such as trade in a context with high bureaucracy and trade barriers, "grease the wheels" suggests that corruption could also help alleviate the distortions caused by inefficient bureaucratic institutions (Méon & Weill, 2010). It is here that bribes, and personal contacts might facilitate trade, especially through evasion in contexts with high tariff barriers. As Dutt and Traca (2010) show, although corruption generally taxes trade through extortion, it can also enhance trade under high tariffs via evasion. Their study even draws on country cases like the Philippines, where corrupt customs officials enabled misdeclaration and undervaluation to circumvent tariffs, thereby encouraging trade under otherwise stifling barriers (Dutt & Traca, 2010). This implies that corruption promotes international trade in cases where destination markets present barriers that exceed a certain threshold. For such countries, an increase

in corruption from relatively low levels could increase trade, while relatively high levels would reduce it (Gil-Pareja et al., 2019).

Corruption causes weak institutions and poor governance and is generally considered more harmful than helpful for business and trade. Though, corruption might be efficiency-enhancing in some cases (Dutta & Sobel, 2016; Méon & Weill, 2010; Pavlik et al., 2019). As the degree of corruption is negatively associated with economic development (Baughn et al., 2010; Husted, 1999; Mauro, 1995), immigrants typically come from relatively more corrupt countries and emigrate to less corrupt and more economic developed countries. Immigrants might also import the institutional and cultural characteristics that led to poor economic conditions in immigrants' home countries (Borjas, 2015; Collier, 2013). Immigrants become the suspects of importing these institutional and cultural characteristics from the home countries, rendering the host countries susceptible to increased corruption. This might be the case especially for high skilled immigrants who possess ties with their compatriots in their countries of origin, and they might help create a socially and economically familiar institutional environment in the host country (Shukla & Cantwell, 2018). In a weak institution where the immigrants' origin country's political system is more corrupt (Treisman, 2000), the role of immigrant networks in providing informal networks that promotes the bilateral trade might be more relevant.

2.1. Role of Corruption in Immigration and Trade Nexus

Immigrants possess valuable information about the market structure, consumer preferences, business ethics, and commercial codes, which decrease the costs of communication, negotiating and enforcing a contract (see (Gould, 1994; Dunlevy & Hutchinson, 1999; Girma & Yu, 2002; Rauch & Trindade, 2002; Felbermayr & Toubal, 2012; Mundra 2005). This channel is called the information channel: immigrants could "help overcome informal barriers to trade related to language, culture, or institutions, and they may facilitate the creation of business relationships, and they may make valuable information on foreign sales and sourcing opportunities more readily available (Felbermayr & Toubal, 2012)."

Second, immigrants could boost trade through the preference channel if they derive higher utility from goods produced in their host countries. Regarding skill-specific immigration, Felbermayr and

Toubal (2012) find that the information channel dominates the preference effect for the trade for high-skilled migrants, particularly imports. In other words, Felbermayr and Toubal (2012) and Mundra (2014) suggest that skilled immigrants are more likely to possess relevant information for international transactions, while their attachment to source country varieties is not strong.

In the immigration and trade nexus, this role of business networks is especially pronounced when immigrants originate from more corrupt and institutionally weaker countries and settle in less corrupt and more economically developed host countries. Under such asymmetry, immigrant networks provide trust, market information, and reduces transaction costs and help navigate complex bureaucratic and commercial environments (Dunlevy 2006, Docquier & Lodigiani, 2010). Granovetter (1985) points out that personal ties help generate trust and discourage malfeasance in transactions; this trust relationship through the ties reduces transaction costs. Although migrants' networks play a significant role in promoting cross-border investment, the magnitude of "business network" externalities vary with immigrant skill levels. Skilled migrants are more likely to participate in business networks that contribute to reducing transaction costs between the host and home countries. Skilled immigrants not only offer market information and referral services to the home country but also provide important information to foreign investors, which may otherwise be difficult or costly. In addition, immigrants also reduce communication barriers as they know their home country's language, culture, values, laws, and practices. They know the way of thinking of their compatriots, and they better understand who is well to trust or not to trust, being more aware of potential business partners and their impact is particularly significant in contexts with weak institutions, where formal enforcement mechanisms are lacking. In such settings, ethical ties between immigrants and their compatriots back home can serve as an informal channel for building trust. The co-ethnic ties provide community enforcement of sanctions to deter opportunism and violations of contracts. In other words, if a party acts opportunistically, then its reputation would suffer within that network (Docquier & Lodigiani, 2010).

Beyond the information channel that can be found from work by Rauch (1999) and Rauch & Trindade (2002) emphasizing reducing transaction costs by providing knowledge on market preferences and matching buyers and sellers, Shukla and Cantwell (2018) suggest a distinct channel: institutional embeddedness and connectedness. In more detail, rather than merely transmitting commercial knowledge, immigrants can act as bridges between the institutional environments of their origin and host countries.

This role can be especially pronounced among skilled migrants, who are often embedded in both formal and informal institutional structures. These migrants do not only provide informational benefits; they contribute to a deeper institutional affinity by embedding familiar institutional logics into the host country's business environment and by enabling cross-border flows of institutional knowledge and practices. In doing so, they reduce the "liability of foreignness" for home-country firms and stimulate bilateral investment and trade. These institutions can be formal like administrative procedures or local regulations but can also be informal such as norms and community-based practices. This role can be especially pronounced among skilled migrants, who are often embedded in both formal and informal institutional structures. For instance, migrants can influence these institutions by prompting host-country authorities to recognize official documents in their native language or support alternative financing mechanisms leading to institutional connectedness between immigrants' home countries and the host country (Shukla and Cantwell 2018).

Corruption is the "result of a complex system in which dominant networks of interest condition the output of processes through the deployment of heterogeneous resources, both human and non-human (Pianezzi & Grossi, 2020)." Skilled immigrants, in a weak institution context, could act as network actors and have the competence and the knowledge for corruption. When immigrants' home country is more corrupt or the corruption difference between immigrants' host and home countries is larger, immigrants' effect on trade varies with the skill level of the immigrants. In more detail, for exports from host countries to home countries, skilled immigrants, compared with unskilled immigrants, carry better information about their home country and use informal networks more effectively that promotes the exports to their home country. In this sense skilled immigrants, interacting with corruption in immigrants' home country, could bring a greater positive pro export effect than unskilled immigrants when their home country is more corrupt. For example, skilled immigrants will be potentially more connected within the home country government and institutions and have the resources to attenuate the effect of trade barriers and institutional hurdles. However, for the marginal effect of skill-specific immigration and corruption on imports, the result could be mixed. Different from unskilled immigrants, information channel dominates the preference effect for skilled immigrants (Felbermayr & Toubal, 2012, Egger et al., 2020).

3. Empirical Model and Data

3.1. Data and Sample

Skill-specific immigration stock data are available for the years 1990 and 2000 from Docquier et al. (2009) for OECD destination countries and Immigrants' skills are divided into primary, secondary and tertiary education groups. To align with the availability of immigration data, we construct two time periods in our dataset, where t = 1991 represents the average values over 1991–1995, and t = 2001 represents the average values over 2001–2005. Trade data on exports and imports is from United Nations Comtrade Database and we use average for the years 1991-95 for our first time period and 2001-05 for the second period.[1] All other data is for which years make sure its mentioned and what is *t* in the model. Either add here or where the model is presented on page 11. All time-varying control variables, including macroeconomic indicators such as GDP, population, and exchange rates, are averaged over the corresponding five-year periods. Time-invariant variables, such as geographical and historical controls, remain constant across periods.

Our sample consists of 21 OECD immigrant-receiving countries and the immigrant stock based on skill level from 97 origin countries.[2] Considering the potential heterogeneity of immigrant flow as explained in the previous section, we divide our sample into two subsamples: first sample allows immigration flow from one OECD country to another so allows immigration stock from the OECD home countries (i.e., 21 OECD host, 97 home) and the second sample only includes immigrants from non-OECD home countries (i.e., 21 OECD host, 76 non-OECD home). We follow Hirano and Imbens (2004) and Egger et al. (2020) and discard observations with a mass point at zero in either imports and skilled or unskilled immigration and so only non-zero trade values are included. [3]

[1] We average the trade data on exports and imports over 1991–95 and 2001–05 to align it with the immigration dataset from Docquier et al. (2009). Their dataset provides immigrant stocks by country of birth, education level, and gender for OECD destination countries in two years (1990 and 2000). Using period averages for trade allows consistency and comparability across the two corresponding time points.

[2] 21 OECD immigrant-receiving countries include Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States.

[3] In more detail, among our 4,032 observations of all possible bilateral trade flows between immigrant-receiving and origin countries, there are 141 missing values for bilateral export flows and 142 missing values for bilateral import flows. Most of

Our key variable of interest, corruption, is collected from two different sources. The first measure is the corruption perception index (CPI) from transparency international, and this data is collected for the year 1995 onwards and only 41 countries were ranked in the beginning. CPI covers most countries with a range from 0 (highly corrupt) to 10 (very clean). With the missing data, we use the 1995 CPI index for the period 1991-1995 and 2005 CPI index for the period 2001-2005. The second measure of corruption is the Control of Corruption Index (CCI) from The Worldwide Governance Indicators (WGI). CCI has a range of values from -2.5 (very bad governance) to 2.5 (very good governance) for around 200 countries and is available from the year 1996. In our sample, we use the 1996 CCI index for the period 1991-1995 and 2005 CCI index for the period 2001-2005[4]. For ease of interpretation and consistency across measures, we operationalize corruption such that higher values indicate higher levels of corruption, consistent with prior research linking corruption to lower levels of trade and cross-border economic activity (Esteve-Pérez et al., 2021; Gil-Pareja et al., 2019). Accordingly, we reverse the direction of both indices by multiplying the original CPI and CCI scores by -1. This transformation ensures that larger values correspond to greater corruption across both measures. We use these adjusted corruption indices in our regression analyses to facilitate comparison of coefficients and to assess the robustness and consistency of our results across corruption measures.

Moreover, to examine how immigrants may serve as bridges between the institutional environments of their origin and host countries, particularly under varying institutional conditions (i.e., the channel of institutional embeddedness and connectedness), we conduct additional analyses by splitting the sample based on median levels of government effectiveness (*gee*) and regulatory quality (*rqe*). Data on *gee* and *rqe* are obtained from the World Bank's Worldwide Governance Indicators. Other control variables include population and GDP are from Penn World Tables. All geographical variables are based on information from the GeoDist in the CEPII database. Trade agreement and membership indicator

these missing values are concentrated in the earliest period (1991–1995) and originate from gaps in the UN Comtrade Database. Only one import observation is missing in the later period of 2001–2005. To address this issue, we treat missing trade values as instances of no trade. We do robustness on the model using poisson maximum likelihood model.

[4] As a robustness check, we also used the average of CPI and CCI corruption indexes for the period 2001–2005 and found that the findings did not change.

variables are based on the information from European Union (EU) and North American Free Trade Agreement (NAFTA).

3.2. Trends and Descriptive Statistics

A preliminary look at the relationship between aggregate exports and skilled versus unskilled immigrants for high and low levels of home country corruption is given in Figures 1-8. We see that there with increasing immigrant stock, all levels of education and export (import) volume are positively correlated. However, there is more variation across corruption levels for skilled immigrant groups versus unskilled. We divide the countries into more corrupt if the level of corruption is above the median and less corrupt if below the median. These positive correlations seem to be stronger for immigrants from more corrupt home countries versus less corrupt countries. In other words, immigrants from a more corrupt home country seem to have a greater positive correlation with trade compared to less corrupt countries across goods and immigrant skill levels. This holds for both export and import across all levels of immigration. We find for both the samples the role of tertiary and secondary immigrants is stronger for both exports and imports compared to the immigrants with primary education. For both sample 1 (21 OECD host and 97 home countries) and sample 2 (21 OECD host and 76 non-OECD home countries), we find that the observed patterns persist. Notably, the results hold even within Sample 1, which includes OECD home countries, suggesting that variation in corruption levels exists even among OECD countries.

Table 1 (Panel A) presents the descriptive statistics for sample 1. The average log immigrant stock (LnIMM) is approximately 5.92, with substantial variation across skill levels and dyads. Corruption is measured using two indicators: the CCI, which ranges from -2.315 to 1.527 (mean = -0.145), and the CPI, ranging from -9.6 to -1.7 (mean = -4.913). Table 1 (Panel B) presents the descriptive statistics for Sample 2, which comprises 21 OECD host countries and 76 home countries. The average log immigrant stock (LnIMM) is approximately 5.47, reflecting relatively small immigrant communities, especially after excluding intra-OECD migration flows. In contrast with sample 1, the corruption indices (both CCI and CPI) exhibit narrower variation in Sample 2, reflecting the generally higher levels of corruption among non-OECD home countries. This pattern aligns with the lower mean values and reduced dispersion of governance indicators such as *gee* and *rqe* in Sample 2 compared to Sample 1. These trends collectively

indicate weaker institutional quality in the non-OECD home countries. Economic indicators such as GDP and population show substantial dispersion, consistent with the diverse economic sizes of the countries included. Additionally, geographic and historical dyadic variables (e.g., common language, colonial ties, distance) display expected variation, with binary indicators capturing membership affiliations and landlocked status. Overall, the descriptive statistics confirm the dispersion and richness of the dataset, supporting the robustness of the subsequent empirical analysis.

3.3. Empirical Analysis

We use the gravity econometric model framework given below to examine the effect of skilled versus unskilled immigrants on trade and how this varies with the level of corruption in the immigrants' home country.

Let

$$F_{ijt} = exp^{X_{ijt} \times u_{ijt}} (Y_{it})^{\beta_{11}} (Y_{jt})^{\beta_{12}} (POP_{it})^{\beta_{13}} (POP_{jt})^{\beta_{14}} (Xr_{ijt})^{\beta_{15}} (Distance_{ij})^{\beta_{16}} \quad (1)$$

where

$$X_{ijt} = \beta_1 LnM_{ijt} + \beta_2 Comlang\_off_{ij} + \beta_3 Corruption_{jt} + \beta_4 Colony_{ij} + \beta_5 Membership_{it} + \beta_6 Continent_j + \beta_7 Landlocked_j + \beta_8 Landlocked_i + \beta_9 Contig_{ij}$$

i denotes a host country, *j* denotes a home country,

To align with the availability of immigration data, we construct two time periods in our dataset, where $t = 1991$ for the averaged period 1991-1995 and 2001 for the averaged period 2001-2005, respectively. All the time-variant variables are averaged over the corresponding five-year periods and time-invariant variables remain constant across periods.

Using equation (1) our baseline regression model (2) is as follows:

$$LnF_{ijt} = \alpha + \beta' X + \beta_{10} lnY_{it} + \beta_{11} lnY_{jt} + \beta_{12} lnPOP_{it} + \beta_{13} lnPOP_{jt} + \beta_{14} LnXr_{ijt} + \beta_{15} LnDistance_{ij} + u_{ijt} \quad (2)$$

Where the matrix X consists of :

F_{ijt} denotes exports from the immigrants' host country i to immigrants' home country j in the export model and denotes the immigrants' host country i imports from immigrants' home country j.

M_{ijt} denotes the number of immigration stock from country j residing in country i.

Prim -immigrant stock with primary school education

Sec -immigrant stock with secondary school education

Ter -immigrant stock with tertiary school education

$Corruption_j$ is the corruption level of the home country j.

$Comlang\_off_{ij}$ is a dummy variable which takes the value of one if i and j use common official language

$Contig_{ij}$ equals to one if i and j share a common border

$Colony_{ij}$ is a dummy variable which takes the value of one if i and j are ever in colonial relationships;

$Landlocked_j$ and $Landlocked_i$ take the value of one for a landlocked home and host countries, respectively.

$Membership_{it}$ is the membership of the host country i at period t.

$Continent_j$ is a dummy variable which takes the value of one if home country j is from the following continents (Oceania, Europe, Asia, North America and Latin America and the base continent is Africa).

Y_{it} is the GDP of host country i,

Y_{jt} is the GDP of home country j

POP_{it} is the population of host country i

POP_{jt} is the population of home country j

Xr_{ijt} is the exchange rate between i and j in period t and

$Distance_{ij}$ is the distance between i and j.

To further examine how the effect of immigrants across skill levels on trade varies with the corruption levels we interact immigrant stock across skill levels with corruption in our baseline model as follows:

$$LnF_{ijt} = \alpha + \beta' X + \beta_{10} lnY_{it} + \beta_{11} lnY_{jt} + \beta_{12} lnPOP_{it} + \beta_{13} lnPOP_{jt} + \beta_{14} LnXr_{ijt} + \beta_{15} LnDistance_{ij} + \beta_{16} LnM_{ijt} \times Corruption_{jt} + u_{ijt} \quad (3)$$

Moreover, we conduct additional analyses by splitting the sample based on median levels of *gee* and *rqe*, which allows us to further investigate whether the institutional context influences the trade-facilitating role of immigrants across skill levels in the context of home country corruption. We estimate the baseline model using OLS with heteroskedasticity-robust standard errors. As robustness checks, we employ two-stage least squares (2SLS) to address potential endogeneity between immigration and trade and further implement a double-endogeneity specification to account for the possible endogeneity of corruption. In addition, we re-estimate the models using Poisson Pseudo-Maximum Likelihood (PPML) to account for zero trade flows and heteroskedasticity.

4. Estimation Results

4.1. Sample 1 Main Result

Tables 2-5 shows our results for export and import for the sample 1 which allows bilateral trade and immigration flows between the OECD countries and Tables 6-7 show the results for the sample 2 where trade and immigration flow is only between OECD and non-OECD countries. In these tables columns 1-2 shows the results for unskilled immigration stock (immigrants who received primary-level education); columns 3-6 present the results for skilled immigration stock (immigrants who received secondary-level and tertiary-level education, respectively). For all immigrant categories first, we estimate the baseline regression given by equation 2, before testing the interaction effects between immigration stock and corruption in equation 3.

For the sample 1, as shown in tables 2-5, the results of baseline regression models show that as expected the coefficient estimate of the immigration stock is positive and significant at the 1% level, suggesting that immigration stock is positively associated with the host country exports and imports with the immigrants' home country. In terms of the magnitude of this potential trade-promoting effect, the estimation results show a larger magnitude of immigrant stock with tertiary school than those with secondary or primary school. In more detail, across both the CPI and CCI measures of corruption, the coefficient of immigrant stock (LnIMM) on trade remains positive and statistically significant. For exports with primary-educated immigrants, LnIMM is positive and significant at the 1% level under both CCI (β

= 0.118) and CPI (β = 0.103). In the case of imports with primary-educated immigrants, the coefficient remains positive and highly significant at the 1% level under both CCI (β = 0.115) and CPI (β = 0.134). For secondary-educated immigrants in exports, LnIMM is positive and significant at the 1% level across both corruption indicators (β = 0.0844 in CCI models; β = 0.0587 in the CPI models). For secondary imports, lnIMM retains its positive effect and 1% significance under both specifications (β = 0.101 in CCI models; β = 0.118 in the CPI models). For tertiary-educated immigrants in exports, the estimated impact is again positive and significant at the 1% level across both corruption indicators (β = 0.136 in CCI models; β = 0.124 in the CPI models). For tertiary imports, lnIMM retains its positive effect and 1% significance under both specifications (β = 0.116 in CCI models; β = 0.139 in the CPI models). These patterns suggest that the pro-trade effect of immigration is robust across corruption measures and is particularly pronounced among tertiary-educated migrants.

In columns 2,4, and 6 in tables 2-5, the estimation results show that the coefficient estimate of the interaction term between immigration stock and home country corruption is positive, ranging between 0.0114 and 0.0524, significant at the 1%. For both corruption measures we find that both unskilled and skilled have additional trade promotion effect with changing levels of corruption for both exports and imports. In terms of the magnitude the interaction term with the immigration stock with secondary school education seems to have a larger magnitude, while this is not the case for the immigration stock with tertiary school education. This effect is greater for imports than exports, suggesting that like earlier findings even in the face of home country corruption immigrants have a greater pro-import effect than a pro-export effect. For imports, both the information channel and the preference channel appear to operate simultaneously (Gould 1994, Mundra 2005, Girma and Yu 2002). Through, the information channel immigrants reduce transaction costs by transmitting knowledge about market conditions, institutional frameworks, and business practices, thereby facilitating transactions from their home countries (Felbermayr & Toubal, 2012; Mundra, 2005). This informational advantage is further reinforced in contexts of high home-country corruption, where migrants' familiarity with informal norms and risk mitigation strategies becomes especially valuable. The preference channel, on the other hand, is driven by migrants' consumption attachment to goods from their country of origin, which strengthens import demand regardless of skill level. While the information channel is active for both exports and imports, the preference channel's effect is asymmetric, which offers a rationale for why the interaction between immigration and home-country corruption exhibits a greater magnitude for imports than for exports.

The effect of other variables is as expected in both sign and significance across Tables 2 to 5. Key economic variables, such as the logarithm of GDP for both home and host countries, are positively associated with trade flows and remain statistically significant at the 1% level across all model specifications. Geographic distance between countries is consistently negative and highly significant at the 1% level, which is in line with the gravity model of trade. The landlocked status of the home country has a strong negative effect at 1% significance level, while the landlocked status of the host country is also negatively associated with trade and often significant at the 1% or 5% level. Cultural and historical factors, such as official language and colonial ties, are generally positive and statistically significant at the 5% level.

4.2 Sample 2 Main Result

Tables 6-7 presents the results for baseline regression models for sample 2. Immigration stock, across skill levels is positively associated with the host country's exports or imports with the immigrants' home country. Similar to the findings for sample 1, the results of baseline regression models show a larger effect on exports for immigrants who are high skilled with tertiary education than those with secondary and primary level of schooling. In more detail, for exports with primary-educated immigrants, LnIMM is positive and significant at the 1% level under both CCI ($\beta = 0.124$) and CPI ($\beta = 0.107$). For tertiary-educated immigrants ($\beta = 0.145$ in CCI models; $\beta = 0.133$ in the CPI models).

In contrast to the export-enhancing role associated with skilled immigrants, we find that unskilled immigrants with only primary education have a stronger positive effect on imports from their home countries to their host countries. For imports with primary-educated immigrants, immigration effect is positive and significant at the 1% level under both CCI ($\beta = 0.111$) and CPI ($\beta = 0.136$). For tertiary-educated immigrants in imports, the estimated impact is again positive and significant at the 1% level across both corruption indicators ($\beta = 0.102$ in CCI models; $\beta = 0.121$ in the CPI models). This suggests that the preference channel is particularly relevant in explaining the import side of bilateral trade flows in our sample.

Regarding the interaction effect between skilled and unskilled immigration stocks and the level of corruption in immigrants' home countries, the results presented in Columns 2, 4, and 6 of Tables 6-7 show

important difference between exports and imports. Unlike the regression results for Sample 1, we observe a clear distinction in sample 2. Specifically, for imports, the coefficient of the interaction term between immigration stock and home-country corruption is positive and statistically significant across both corruption indices, indicating that immigration from more corrupt countries is associated with higher levels of imports. The coefficient estimates for the interaction terms range from 0.0130 to 0.0505. In contrast, we find no significant interaction effect for exports. This suggests that with higher levels of corruption immigrants may play divergent roles in facilitating trade.

One possible explanation for the difference between the two samples lies in the institutional context during much of the first period in our data. As Firth (2023) notes, following the introduction of the OECD Anti-Bribery Convention (ABC) in the 1990s, most OECD countries exhibited very limited enforcement against foreign bribery. This lax enforcement, combined with heightened intra-OECD political and economic cooperation, meant that OECD exporters were not substantially deterred from engaging with more corrupt markets, including non-OECD origins, while simultaneously expanding mutual trade within the OECD. This context overlaps with Sample 1 in our study, which includes both OECD and non-OECD origins. In such an environment, skilled migrants from both origin groups could leverage their informational advantages (information channel) to promote exports even when home-country corruption was high, which is consistent with our Sample 1 finding that corruption amplifies effects for both skill groups and for both exports and imports. In contrast, for Sample 2, limited to non-OECD origins reflects weaker home-country institutions and the absence of mutual OECD trade opportunities. This context helps explain why the corruption interaction in sample 2 is concentrated on imports, while the export effect disappears under weaker institutional conditions.

4.3 Marginal Effect

We calculate the marginal effect of immigration on trade using interaction models between immigrant stock and the corruption level in migrants' home countries for sample 1. The figure below presents these marginal effects across a range of CCI scores (from –2.3 to +1.5) for selected country pairs. For instance, in the UK-Pakistan dyad, the effect of immigrants from Pakistan to UK is positive for exports and increases with higher levels of corruption in Pakistan (as measured by the CCI), suggesting that immigrants may facilitate more export for UK with increased corruption. In contrast, for the UK-Australia

a declining marginal effect on trade as corruption increases is seen, potentially reflecting similarity between the UK and Australia and a diminished role for immigrants in bridging institutional gaps. Numerically, the UK-Australia dyad exhibits a relatively small difference in corruption scores across the two periods. For instance, the absolute value difference in the CCI between the UK and Australia was only about 0.10 in 1991 and 0.05 in 2001, suggesting similar institutional environments. In contrast, the UK-Pakistan dyad displays much wider corruption gaps - around 3.20 in 1991 and 2.95 in 2001. Similarly, in the USA–Mexico dyad, the trade-promoting effect of immigrants remains consistently positive and grows slightly as institutional quality deteriorates, reinforcing the notion that migrant networks from poorly governed countries may be particularly effective in facilitating trade. These patterns underscore that the migration–trade nexus is not uniform, but contingent on the institutional environment of the migrants' home countries.

In contrast, in the imports model from sample 1, the import estimates for the UK–Pakistan, UK–Australia, and USA–Mexico dyads are virtually identical across the entire CCI range. In all three cases, the marginal effect of immigrants on imports is positive and increases steadily as home-country corruption rises, suggesting that migrant networks from more corrupt origins may consistently play a role in facilitating imports regardless of the specific bilateral context. The absence of divergence between dyads indicates that, for imports, the migration–trade link is less sensitive to dyad-specific institutional factors than for exports, given the preference effect for home country goods always exists.

4.4 Level of Governance in the Home Country

To further examine whether the institutional context of immigrants' countries of origin shapes their trade-facilitating role in conjunction with corruption, we analyze heterogeneous effects across different levels of home-country governance. Specifically, we conduct additional analyses by splitting the sample according to the median values of two institutional indicators: government effectiveness (*gee*) and regulatory quality (*rqe*). Higher values of *gee* and *rqe* indicate better governance quality in immigrants' home countries[5]. Overall, this distribution suggests that countries in the above-median *gee* or *rqe* subsample generally exhibit lower levels of corruption, whereas those in the below-median group tend to

[5] The list of countries with values below and above the median for *gee* and *rqe* is provided in the Appendix.

have comparatively higher corruption. For example, the CPI measure, where higher values indicate greater corruption, has an overall mean of -4.913 (SD = 2.476), ranging from -9.6 (least corrupt) to -1.7 (most corrupt). When splitting the sample at the median value of *gee*, the above-median gee group has an average CPI of –6.422 (SD = 2.156), with values ranging from -9.6 to -2.5.

Tables 8–11 present the results of model estimations based on whether immigrants' home countries fall above or below the median level of governance. Specifically, Panel A reports results for countries with governance indicators above the median, while Panel B presents results for those below the median. Columns 1–6 display the outcomes from sample splits based on *gee,* and Columns 7–12 present the results based on *rqe*.

The results presented in Tables 8–11 indicate that immigration stock is positively associated with both exports and imports in both the samples. For both exports and imports in sample 1 the coefficient of the interaction term between immigration stock and home-country corruption is positive and statistically significant across all models when the home country governance indicators are above the median. This results' consistency across models and governance measures suggests that immigration from more corrupt countries is associated with higher levels of trade, particularly when those countries possess relatively stronger institutional environments (i.e., are better governed). In contrast, we find no statistically significant interaction effects in the subsamples including immigrants' home countries with below-median government indicators (i.e., poorly governed countries) except for secondary immigrants at 5% level on imports when we use CCI measure of corruption and below median level of *rqe*, see Table 9.

Overall, this analysis suggests that better governance in immigrants' home countries enhances the positive trade-facilitating role of immigration, even in the presence of high corruption levels. This pattern is consistent with our main findings. In other words, immigrants appear to "grease the wheels" of trade when their home countries are highly corrupt, but this positive effect is only sustained when the broader institutional environment remains relatively effective.

4.5 Further Robustness Check

We construct instrumental variables (IV) and estimate a two-stage least squares (2SLS) estimation

to address the potential endogeneity between immigration and trade. The effects of immigration stock on imports or exports may be endogenous due to omitted factors that simultaneously affect immigration stock and trade between immigrants' host and home country as well as the level of trade might affect the level of immigration and the skill level of the immigrants. To address the potential issue, we use the IV estimations and use two instruments for the immigration stock variable and corruption in our baseline model (equation 2).

The current stock of immigration is significantly correlated with the characteristics of immigrant's home country which impacts immigrants' decision to leave, so we use passport costs in immigrants' home country, dual citizenship regulation (i.e., whether immigrants' home country allow for a dual citizenship) as the instrumental variables for our sample. In addition to being significantly correlated to the immigration stock, our proposed instruments need to be uncorrelated to the error term in the main regressions. Our identifying assumption is that these instruments do not affect trade other than their effects on immigration stock.

There is a possibility that the level of corruption maybe endogenous to trade. This might be due to omitted variable or level of trade and openness of a country may influence how corrupt the country is. As a robustness check we estimate a double endogenous on the line of Mauro, (1995), Lee & Azfar (2008) and Aldieri et al.(2023). We introduce additional IVs for corruption, including the mortality rates of European settlers during the colonial period and ethnolinguistic fractionalization (i.e., the probability that two randomly selected individuals from a given country do not belong to the same ethnolinguistic group). These IVs are used in conjunction with the existing instruments for immigration stock. Consistent with the identifying assumptions for the immigration stock, the validity of these instruments for corruption lies in their strong correlation with institutional quality (e.g., corruption), while remaining exogenous to economic outcomes such as trade. This approach allows us to more rigorously assess the potential endogeneity of both immigration and corruption in influencing trade flows.

In the first-stage regression, the instruments are highly correlated with the independent variables. The F-statistic results confirm that we could reject the null of Stock and Yogo's (2005) weak instrument tests for a Wald test at the 5% level with the actual rejection rate of no more than 10%. Supposing we are willing to accept a rejection rate of at most 10%, we can reject the null hypothesis of weak instruments (Stock & Yogo, 2005). Our F-statistic exceeds 10, and this rule of thumb also suggests that our 2SLS

estimator is reliable for inference when there is one endogenous regressor (Stock et al., 2002). All the test results lend support to the use of our instruments. In the second-stage regression, we use the instrumented immigration stock from the first-stage regression as the independent variable.

The IV regression results support the robustness of our baseline results across immigrant skill levels and both samples. In the interaction models, the IV estimates in Sample 1 confirm significant pro-trade effects for both exports and imports across immigrant skill levels. In contrast, the results from Sample 2 validate only the pro-import effects, while the pro-export interaction terms remain insignificant except for the case of tertiary-educated immigrants interacting with CCI in the export model. The IV regression results are consistent with our main findings and suggest that the trade-enhancing role of immigrants is primarily driven through imports rather than exports, especially in institutionally weak environments.

As an additional robustness check, we re-estimated the IV models excluding the natural disaster variable as an instrument to address concerns that natural disasters may directly influence trade. The results remain largely unchanged. For the non-interaction models, the estimated coefficients on the instrumented immigration stock remain statistically significant and continue to pass the relevant identification tests. For the interaction models, the results are consistent with the baseline findings: in Sample 1, the interaction terms remain statistically significant, while in Sample 2, the interaction effects persist for imports but not for exports. Regarding instrument strength, the first-stage F-statistics do not improve meaningfully after removing the disaster instrument. For the CPI interaction models, the F-statistics remain relatively low and fail to meet conventional thresholds for strong instrument validity.

However, the IV models present certain limitations. Specifically, the instruments appear weak in several interaction models, particularly those involving CPI. Additionally, in some cases, the Hansen J statistic fails to confirm instrument validity, suggesting potential issues of overidentification, which call for cautious interpretation of the IV estimates especially in the interaction models.

Even if the extent of zero trade is only 3.5% for exports and 3.1% for imports, we conduct additional robustness check of our baseline findings by re-estimate our main specifications using Poisson Pseudo-Maximum Likelihood (PPML). This approach allows us to retain all zero trade flow observations

while also addressing potential heteroskedasticity that can bias log-linear OLS estimates (Correia et al., 2020; Herman, 2023). The PPML results largely corroborate our baseline findings, though with some inconsistencies across samples and corruption indices. In Sample 1, the estimated interaction terms between immigration stock and corruption indices remain statistically significant for both exports and imports, indicating that the pro-trade effects identified in the main models are robust to alternative estimation strategies. In Sample 2, however, the PPML estimates reveal greater heterogeneity. Specifically, the patterns differ across corruption measures: when corruption is measured by the CCI, the interaction effects remain significant for both exports and imports, even in the export models of Sample 2. In contrast, when using the CPI as the measure of corruption, the interaction terms are no longer statistically significant for either exports or imports in Sample 2. One possible explanation is the substantial amount of missing data related to the CPI variable (i.e., 1,239 out of 3,192 observations are missing in Sample 2), which may reduce the explanatory power of the models, as also reflected in the potential weak instrument issues in several interaction models involving CPI.

5. Conclusion

This paper investigates the impact of immigration stock on international trade, specifically exports and imports, with a focus on the skill level of immigrants and the corruption levels in their home countries. The baseline regression models reveal a positive and significant relationship between immigration stock and trade activities at both high and low skill levels, proxied by the level of education. Notably, immigrant stock with tertiary education exhibits a stronger trade-promoting effect than those with secondary or primary education. In contrast, immigrant stock with only primary education shows a more pronounced positive effect on imports from their home countries to host countries. These findings suggest that skilled immigrants play a more significant role in enhancing exports from the host country to their country of origin, whereas unskilled immigrants are more influential in facilitating imports.

When examining the interaction between immigration stock and the corruption level in the immigrants' home countries, a significant positive correlation emerges. For the sample including OECD home countries, this interaction is particularly notable for secondary education and shows a larger effect on imports than exports, indicating that higher corruption correlates with a stronger pro-import effect.

In contrast, for the sample excluding OECD home countries, the interaction effects are significant for imports but not for exports, suggesting that immigrants may play divergent roles in facilitating trade depending on the direction of trade flow, particularly when their countries of origin exhibit higher levels of corruption.

Furthermore, examining the institutional context of immigrants' home countries by splitting the sample based on median values of governance indicators, we find that better governance enhances the trade-facilitating role of immigration even in the presence of high corruption levels. In this sense, immigrants may "grease the wheels" of trade when their home countries are highly corrupt, but this positive effect is sustained only when the broader institutional environment of their home countries remains relatively effective, rather than fundamentally weak or defective. This distinction is particularly evident when comparing the two samples: the effect persists in the full sample of 21 OECD host countries and 97 immigrant-sending countries; However, it becomes less pronounced when we exclude OECD-origin migrants and focus solely on the 21 OECD hosts and 76 non-OECD sending countries. These results underscore the interplay between immigrants' skill levels, the institutional quality and corruption level of their countries of origin, shaping the extent to which immigration fosters bilateral trade flows between immigrant-receiving and origin countries.

References

Aldieri, L., Barra, C., Ruggiero, N., & Paolo Vinci, C. (2023). Corruption and firms' efficiency: International evidence using an instrumental variable approach. *Economia Politica*, 40(2), 731–759.

Anderson, J. E., & Marcouiller, D. (2002). Insecurity and the Pattern of Trade: An Empirical Investigation. *Review of Economics and Statistics*, 84(2), 342–352.

Baughn, C., Bodie, N. L., Buchanan, M. A., & Bixby, M. B. (2010). Bribery in international business transactions. *Journal of Business Ethics*, 92(1), 15-32.

Borjas, G. J. (2015). Immigration and globalization: A review essay. *Journal of Economic Literature*, 53(4), 961-974.

Boungou, W., Osei-Tutu, F., & Zongo, A. (2024). Intra-African trade and corruption: Evidence from sub-Saharan African countries. *The World Economy*, 47, 4038–4060.

Chalendard, C., Fernandes, A. M., Raballand, G., & Rijkers, B. (2022). Corruption in Customs*. The *Quarterly Journal of Economics*, 138(1), 575–636.

Collier, P. (2013). Exodus: How migration is changing our world. *New York: Oxford University Press*.

Correia S, Guimarães P, Zylkin T. (2020). Fast Poisson estimation with high-dimensional fixed effects. *The Stata Journal*, 20(1): 95-115

Docquier, F., & Lodigiani, E. (2010). Skilled Migration and Business Networks. *Open Economies Review*, 21(4), 565–588.

Docquier, F., Lowell, B. L., & Marfouk, A. (2009). A gendered assessment of highly skilled emigration. *Population and Development Review*, 35(2), 297-321.

Dunlevy, J. A., & Hutchinson, W. K. (1999). The impact of immigration on American import trade in the late nineteenth and early twentieth centuries. *The Journal of Economic History*, 59(4), 1043-1062.

Dunlevy, J. A. (2006). The influence of corruption and language on the protrade effect of immigrants: Evidence from the American States. *The Review of Economics and Statistics*, 88(1), 182-186.

Dutt, P., & Traca, D. (2010). Corruption and bilateral trade flows: extortion or evasion? *The Review of Economics and Statistics*, 92(4), 843–860. JSTOR.

Dutta, N., & Sobel, R. (2016). Does corruption ever help entrepreneurship? *Small Business Economics*, 47(1), 179-199.

Egger, P. H., Ehrlich, M. v., & Nelson, D. R. (2020). The trade effects of skilled versus unskilled migration. *Journal of Comparative Economics*, 48(2), 448-464.

Esteve-Pérez, S., Gil-Pareja, S., Llorca-Vivero, R. & Paniagua, J. (2021). Corruption and International Trade: A Re-assessment with Intra-National Flows. *Economics*, 15(1), 187-198.

Felbermayr, G. J., & Toubal, F. (2012). Revisiting the trade-migration nexus: Evidence from new OECD data. *World Development*, 40(5), 928-937.

Firth, J. (2023). When do anti-bribery laws affect international trade? *World Development*, 169, 106306.

Gil-Pareja, S., Llorca-Vivero, R., & Martínez-Serrano, J. A. (2019). Corruption and international trade: A comprehensive analysis with gravity. *Applied Economic Analysis*, 27(79), 3-20.

Girma, S., & Yu, Z. (2002). The link between immigration and trade: Evidence from the United Kingdom. *Weltwirtschaftliches Archiv*, 138(1), 115–130.

Gould, D. M. (1994). Immigrant links to the home country: Empirical implications for U.S. bilateral trade flows. *The Review of Economics and Statistics*, 76(2), 302-316.

Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91(3), 481–510.

Herman, P. (2023). Gravity estimation: best practices and useful approaches. Economics Working Paper Series, U.S. International Trade Commission

Hirano, K., & Imbens, G. (2004). *The propensity score with continuous treatments. Applied Bayesian modeling and causal inference from incomplete-data perspectives*. John Wiley & Sons, Ltd.

Husted, B. W. (1999). Wealth, Culture, and Corruption. *Journal of International Business Studies*, 30(2), 339–359.

Lee, Y., & Azfar, O. (2008). Corruption and trade regulations: An instrumental variable approach. *Applied Economics Letters*, 15(3), 231–234.

Mauro, P. (1995). Corruption and Growth*. *The Quarterly Journal of Economics*, 110(3), 681–712.

Méon, P.-G., & Sekkat, K. (2005). Does corruption grease or sand the wheels of growth? *Public Choice*, 122(1–2), 69–97.

Méon, P., & Weill, L. (2010). Is corruption an efficient grease? *World Development*, 38(3), 244-259.

Mundra, K. (2005). Immigration and international trade: A semiparametic empirical investigation. *The Journal of International Trade & Economic Development*, 14(1), 65-91.

Mundra K. (2014) “Immigration and Trade Creation for the United States: Role of Immigrant Occupation” *The International Trade Journal*, 28(4), 311-343.

Ottaviano, G. I. P., Peri, G., & Wright, G. C. (2018). Immigration, trade and productivity in services: Evidence from U.K. firms. *Journal of International Economics*, 112, 88-108.

Pavlik, J. B., Padilla, E. L., & Powell, B. (2019). Cultural Baggage: Do Immigrants Import Corruption? *Southern Economic Journal*, *85*(4), 1243–1261.

Pianezzi, D., & Grossi, G. (2020). Corruption in migration management: A network perspective. *International Review of Administrative Sciences*, 86(1), 152–168.

Rauch, J. E. (1999). Networks versus markets in international trade. *Journal of International Economics*, 48(1), 7-35.

Rauch, J. E., & Trindade, V. (2002). Ethnic Chinese networks in international trade. *The Review of Economics and Statistics*, 84(1), 116-130.

Shukla, P., & Cantwell, J. (2018). Migrants and multinational firms: The role of institutional affinity and connectedness in FDI. *Journal of World Business*, 53(6), 835-849.

Stock, J., & Yogo, M. (2005). Testing for Weak Instruments in Linear IV Regression. In D. W. K. Andrews (Ed.), Identification and Inference for Econometric Models (pp. 80–108). Cambridge University Press.

Stock, J., Yogo, M., & Wright, J. (2002). A Survey of Weak Instruments and Weak Identification in Generalized Method of Moments. *Journal of Business and Economic Statistics*, 20, 518–529.

Treisman, D. (2000). The causes of corruption: A cross-national study. *Journal of Public Economics*, 76(3), 399–457.

Table 1 Descriptive statistics independent variables

Acronyms	Description	Obs	Mean	SD	Min	Max
Panel A:	**Sample 1: 21 OECD Host, 97 Home countries**					
IMM:	Log immigrant Stock:					
Primary	immigrant Stock with primary school education	3630	10069.829	89984.002	0	4454822.7
Ln Primary	log immigrant Stock with primary school education	3521	6.016	2.593	0	15.309
Secondary	immigrant Stock with secondary school education	3630	4701.227	25133.828	0	1000863.7
Ln Secondary	log immigrant Stock with secondary school education	3487	5.806	2.461	0	13.816
Tertiary	immigrant Stock with tertiary school education	3630	7289.046	37661.667	0	919138.61
Ln Tertiary	log immigrant Stock with tertiary school education	3540	5.925	2.615	0	13.731
CPI_Home	CPI corruption index in the home country	2568	-4.913	2.476	-9.6	-1.7
CCI_home	CCI corruption index in the home country	3630	-.145	1.047	-2.315	1.527
GDP_home	Real GDP home country at chained PPPs (in millions. 2017US$)	3630	598899.61	1596153.542	5588.494	15028912
Ln GDP_home	log GDP home country	3630	11.789	1.728	8.628	16.525
GDP_host	Real GDP host country at chained PPPs (in millions. 2017US$)	3630	1483091.7	2869862.612	78461.156	15028912
Ln GDP_host	log GDP host country	3630	13.265	1.269	11.27	16.525
POP_home	Population home country (in millions)	3630	57.533	174.986	1.03	1315.129
Ln POP_home	log population home country	3630	2.748	1.420	.03	7.182
POP_host	population host country (in millions)	3630	39.055	61.856	3.551	289.81
Ln POP_host	log population host country	3630	2.873	1.197	1.267	5.669
Xr_home	Exchange rate home country	3630	224.135	903.460	.019	9358.553
Ln Xr_home	log exchange rate home country	3630	2.054	2.593	-3.938	9.144
Xr_host	Exchange rate host country	3630	3.88	15.045	.614	116.252
Ln Xr_host	log exchange rate host country	3630	.333	0.947	-.488	4.756
Comlang_off	common langauge in home and host country	3630	.105	0.307	0	1
Colony	colonial relationship between home and host country	3630	.017	0.130	0	1
Distance	Distance between home and host country's' most populated cities (km)	3630	6749.146	4738.421	55	19618
Ln Distance	log distance between home and host country	3630	8.451	0.988	4.007	9.884
Landlocked_home	a landlocked home country	3630	.158	0.365	0	1
Landlocked_host	a landlocked host country	3630	.087	0.282	0	1
Contig	common border between home and host country	3630	.029	0.168	0	1
EU	EU membership of the host country	3630	.667	0.471	0	1
NAFTA	NAFTA membership of the host country	3630	.106	0.308	0	1
Continent_northamerica	Continent Dummy, = 1 if home country located in North America	3630	.034	0.180	0	1
Continent_latinamerica	Continent Dummy, = 1 if home country located in Latin America	3630	.198	0.398	0	1
Continent_asia	Continent Dummy, = 1 if home country located in Asia	3630	.243	0.429	0	1
Continent_europe	Continent Dummy, = 1 if home country located in Europe	3630	.334	0.472	0	1
Continent_pacifc	Continent Dummy, = 1 if home country located in Oceania	3630	.022	0.147	0	1
Gee	Government Effectiveness Estimate, Worldwide Governance Indicators, World Bank	3630	.244	0.941	-1.35	2.125
Rqe	Regulatory Quality Estimate, Worldwide Governance Indicators, World Bank	3630	.303	0.849	-1.222	2.177
Panel B:	**Sample 2: 21 OECD Host, 76 Home countries**					
IMM:	Log immigrant Stock:					
Primary	immigrant Stock with primary school education	2814	8319.368	98374.983	0	4454822.7
Ln Primary	log immigrant Stock with primary school education	2723	5.612	2.621	0	15.309
Secondary	immigrant Stock with secondary school education	2814	3356.293	22880.228	0	1000863.7
Ln Secondary	log immigrant Stock with secondary school education	2695	5.344	2.484	0	13.816
Tertiary	immigrant Stock with tertiary school education	2814	5605.799	34956.578	0	919138.61
Ln Tertiary	log immigrant Stock with tertiary school education	2740	5.465	2.626	0	13.731

CPI_Home	CPI corruption index in the home country	1752	-3.595	1.507	-9.4	-1.7
CCI_home	CCI corruption index in the home country	2814	.29	0.698	-2.156	1.527
GDP_home	Real GDP home country at chained PPPs (in millions. 2017US$)	2814	326075.98	801943.190	5588.494	7307993
Ln GDP_home	log GDP home country	2814	11.35	1.583	8.628	15.804
GDP_host	Real GDP host country at chained PPPs (in millions. 2017US$)	2814	1499457.6	2892770.827	78461.156	15028912
Ln GDP_host	log GDP host country	2814	13.278	1.269	11.27	16.525
POP_home	Population home country (in millions)	2814	62.318	195.675	1.03	1315.129
Ln POP_home	log population home country	2814	2.701	1.466	.03	7.182
POP_host	population host country (in millions)	2814	39.428	62.254	3.551	289.81
Ln POP_host	log population host country	2814	2.885	1.196	1.267	5.669
Xr_home	Exchange rate home country	2814	286.97	1017.483	.019	9358.553
Ln Xr_home	log exchange rate home country	2814	2.512	2.704	-3.938	9.144
Xr_host	Exchange rate host country	2814	3.725	14.507	.614	116.252
Ln Xr_host	log exchange rate host country	2814	.326	0.931	-.488	4.756
Comlang_off	common langauge in home and host country	2814	.096	0.295	0	1
Colony	colonial relationship between home and host country	2814	.022	0.147	0	1
Distance	Distance between home and host country's' most populated cities (km)	2814	7119.723	4251.758	55	19586
Ln Distance	log distance between home and host country	2814	8.597	0.862	4.007	9.883
Landlocked_home	a landlocked home country	2814	.177	0.382	0	1
Landlocked_host	a landlocked host country	2814	.084	0.277	0	1
Contig	common border between home and host country	2814	.009	0.096	0	1
EU	EU membership of the host country	2814	.662	0.473	0	1
NAFTA	NAFTA membership of the host country	2814	.108	0.310	0	1
Continent_northamerica	Continent Dummy, = 1 if home country located in North America	2814	.015	0.121	0	1
Continent_latinamerica	Continent Dummy, = 1 if home country located in Latin America	2814	.255	0.436	0	1
Continent_asia	Continent Dummy, = 1 if home country located in Asia	2814	.299	0.458	0	1
Continent_europe	Continent Dummy, = 1 if home country located in Europe	2814	.213	0.409	0	1
Gee	Government Effectiveness Estimate, Worldwide Governance Indicators, World Bank	2814	-.148	0.646	-1.35	1.998
Rqe	Regulatory Quality Estimate, Worldwide Governance Indicators, World Bank	2814	-.022	0.659	-1.222	2.177
Panel C:	**Corruption Indices: Descriptive Statistics**					
	Sample 1: 21 OECD Host, 97 Home countries					
CPI	CPI corruption index in the home country (raw data)	2568	4.917	2.476	1.7	9.6
CCI	CCI corruption index in the home country (raw data)	3630	.145	1.047	-1.527	2.315
CPI_Home	CPI corruption index in the home country (after adjusting the signs)	2568	-4.913	2.476	-9.6	-1.7
CCI_home	CCI corruption index in the home country (after adjusting the signs)	3630	-.145	1.047	-2.315	1.527
	Sample 2: 21 OECD Host, 76 Home countries					
CPI	CPI corruption index in the home country (raw data)	1752	3.595	1.507	1.7	9.4
CCI	CCI corruption index in the home country (raw data)	2814	-.29	0.698	-1.527	2.156
CPI_Home	CPI corruption index in the home country (after adjusting the signs)	1752	-3.595	1.507	-9.4	-1.7
CCI_home	CCI corruption index in the home country (after adjusting the signs)	2814	.29	0.698	-2.156	1.527

Table 2 CCI index: Exports, Home Country Corruption and Skilled-Unskilled Immigration (Sample 1: 21 OECD Host, 97 Home countries)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
LnIMM	0.118***	0.118***	0.0844***	0.0828***	0.136***	0.133***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home	-0.596***	-0.724***	-0.587***	-0.754***	-0.568***	-0.705***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home × LnIMM		0.0204***		0.0266***		0.0211***
		(0.004)		(0.000)		(0.001)
lnGDP_home	0.981***	0.980***	0.983***	0.981***	0.964***	0.964***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnGDP_host	2.886***	2.925***	3.093***	3.139***	2.949***	2.981***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnPOP_home	-0.168***	-0.164***	-0.145***	-0.138***	-0.167***	-0.163***
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
lnPOP_host	-2.098***	-2.136***	-2.277***	-2.321***	-2.180***	-2.209***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnXr_home	-0.0124	-0.0124	-0.0146*	-0.0143	-0.0120	-0.0117
	(0.152)	(0.152)	(0.094)	(0.100)	(0.165)	(0.174)
lnXr_host	0.0695***	0.0685***	0.0550***	0.0525**	0.0849***	0.0842***
	(0.001)	(0.001)	(0.008)	(0.011)	(0.000)	(0.000)
Comlang_off	0.452***	0.473***	0.472***	0.501***	0.371***	0.399***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Colony	0.703***	0.658***	0.865***	0.819***	0.738***	0.699***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
LnDistance	-0.882***	-0.883***	-0.894***	-0.898***	-0.880***	-0.880***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Landlocked_home	-0.443***	-0.425***	-0.479***	-0.454***	-0.477***	-0.460***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Landlocked_host	-0.234***	-0.249***	-0.277***	-0.292***	-0.189***	-0.200***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.006)	(0.003)
Contig	0.236***	0.305***	0.314***	0.390***	0.324***	0.374***
	(0.004)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3301	3301	3301	3301	3301	3301
R-sq	0.870	0.870	0.867	0.868	0.870	0.870
adj. R-sq	0.869	0.869	0.866	0.867	0.869	0.869

Notes: Dependent variable: log of bilateral export flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CCI: Control of Corruption Indicator. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 3 CCI index: Imports, Home Country Corruption and Skilled-Unskilled Immigration (Sample 1: 21 OECD Host, 97 Home countries)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
LnIMM	0.115***	0.115***	0.101***	0.0978***	0.116***	0.111***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home	-0.666***	-0.985***	-0.652***	-0.982***	-0.645***	-0.895***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home × LnIMM		0.0507***		0.0524***		0.0385***
		(0.000)		(0.000)		(0.000)
lnGDP_home	1.265***	1.263***	1.263***	1.259***	1.253***	1.253***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnGDP_host	1.543***	1.641***	1.702***	1.793***	1.649***	1.709***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnPOP_home	-0.272***	-0.262***	-0.258***	-0.244***	-0.263***	-0.254***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnPOP_host	-0.616***	-0.710***	-0.761***	-0.847***	-0.726***	-0.778***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnXr_home	0.0803***	0.0804***	0.0784***	0.0790***	0.0802***	0.0806***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnXr_host	-0.0259	-0.0283	-0.0388	-0.0438*	-0.0154	-0.0166
	(0.328)	(0.280)	(0.146)	(0.097)	(0.572)	(0.538)
Comlang_off	0.377***	0.428***	0.369***	0.426***	0.325***	0.377***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Colony	0.735***	0.623***	0.852***	0.761***	0.811***	0.740***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
LnDistance	-0.698***	-0.699***	-0.699***	-0.707***	-0.703***	-0.703***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Landlocked_home	-0.599***	-0.554***	-0.624***	-0.576***	-0.640***	-0.607***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Landlocked_host	-0.0315	-0.0690	-0.0717	-0.101	0.000727	-0.0195
	(0.736)	(0.460)	(0.443)	(0.279)	(0.994)	(0.837)
Contig	0.310***	0.482***	0.373***	0.523***	0.403***	0.493***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3301	3301	3301	3301	3301	3301
R-sq	0.833	0.834	0.831	0.833	0.831	0.832
adj. R-sq	0.831	0.833	0.830	0.832	0.830	0.831

Notes: Dependent variable: log of bilateral import flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CCI: Control of Corruption Indicator. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 4 CPI index: Exports, Home Country Corruption and Skilled-Unskilled Immigration (Sample 1: 21 OECD Host, 97 Home countries)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
LnIMM	0.103***	0.152***	0.0587***	0.125***	0.124***	0.177***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home	-0.145***	-0.222***	-0.140***	-0.246***	-0.134***	-0.224***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home × LnIMM		0.0114***		0.0155***		0.0128***
		(0.001)		(0.000)		(0.000)
lnGDP_home	1.174***	1.167***	1.182***	1.168***	1.152***	1.144***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnGDP_host	2.946***	3.000***	3.146***	3.204***	2.964***	3.011***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnPOP_home	-0.403***	-0.392***	-0.380***	-0.358***	-0.400***	-0.383***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnPOP_host	-2.144***	-2.195***	-2.304***	-2.359***	-2.181***	-2.223***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnXr_home	-0.0348***	-0.0337***	-0.0381***	-0.0362***	-0.0368***	-0.0352***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnXr_host	0.0521***	0.0506***	0.0384**	0.0337*	0.0653***	0.0634***
	(0.007)	(0.009)	(0.048)	(0.080)	(0.001)	(0.001)
Comlang_off	0.535***	0.568***	0.583***	0.629***	0.459***	0.506***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Colony	0.401***	0.337**	0.546***	0.468***	0.408***	0.342**
	(0.006)	(0.022)	(0.000)	(0.002)	(0.006)	(0.021)
LnDistance	-0.884***	-0.887***	-0.902***	-0.910***	-0.878***	-0.880***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Landlocked_home	-0.409***	-0.389***	-0.445***	-0.417***	-0.438***	-0.418***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Landlocked_host	-0.234***	-0.259***	-0.260***	-0.285***	-0.190***	-0.211***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.006)	(0.002)
Contig	0.146*	0.221**	0.227**	0.308***	0.230***	0.284***
	(0.095)	(0.011)	(0.013)	(0.001)	(0.009)	(0.001)
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2430	2430	2430	2430	2430	2430
R-sq	0.884	0.885	0.881	0.882	0.884	0.885
adj. R-sq	0.883	0.884	0.880	0.881	0.883	0.884

Notes: Dependent variable: log of bilateral export flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CPI: Corruption Perception Index. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. The control variables are included and exhibit similar signs and coefficients as those presented in Table 2. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 5 CPI index: Imports, Home Country Corruption and Skilled-Unskilled Immigration (Sample 1: 21 OECD Host, 97 Home countries)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
LnIMM	0.134***	0.254***	0.118***	0.239***	0.139***	0.230***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home	-0.198***	-0.385***	-0.190***	-0.384***	-0.185***	-0.341***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home × LnIMM		0.0277***		0.0283***		0.0220***
		(0.000)		(0.000)		(0.000)
lnGDP_home	1.376***	1.359***	1.372***	1.347***	1.357***	1.343***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnGDP_host	1.472***	1.602***	1.623***	1.729***	1.555***	1.636***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnPOP_home	-0.448***	-0.419***	-0.431***	-0.391***	-0.435***	-0.407***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnPOP_host	-0.582***	-0.707***	-0.713***	-0.814***	-0.673***	-0.743***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnXr_home	0.0529***	0.0555***	0.0490***	0.0525***	0.0500***	0.0526***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
lnXr_host	-0.0432	-0.0469*	-0.0579**	-0.0665**	-0.0316	-0.0349
	(0.126)	(0.092)	(0.042)	(0.018)	(0.279)	(0.228)
Comlang_off	0.412***	0.490***	0.410***	0.493***	0.351***	0.432***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Colony	0.475**	0.319	0.564***	0.422**	0.534***	0.422**
	(0.014)	(0.105)	(0.004)	(0.033)	(0.006)	(0.030)
LnDistance	-0.675***	-0.681***	-0.676***	-0.690***	-0.677***	-0.680***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Landlocked_home	-0.437***	-0.390***	-0.465***	-0.414***	-0.482***	-0.448***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Landlocked_host	-0.0208	-0.0806	-0.0531	-0.100	0.0242	-0.0112
	(0.832)	(0.409)	(0.588)	(0.306)	(0.809)	(0.910)
Contig	0.188**	0.368***	0.264***	0.413***	0.303***	0.395***
	(0.049)	(0.000)	(0.005)	(0.000)	(0.001)	(0.000)
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2430	2430	2430	2430	2430	2430
R-sq	0.843	0.846	0.842	0.844	0.842	0.844
adj. R-sq	0.842	0.845	0.840	0.843	0.840	0.842

Notes: Dependent variable: log of bilateral import flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CPI: Corruption Perception Index. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. The control variables are included and exhibit similar signs and coefficients as those presented in Table 2. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 6. (Sample 2: 21 OECD Host, 76 Home countries) CCI index: Trade, Home Country Corruption and Skilled-Unskilled Immigration

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
Panel A (Exports):						
LnIMM	0.124***	0.121***	0.0942***	0.0891***	0.145***	0.141***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home	-0.623***	-0.684***	-0.622***	-0.715***	-0.603***	-0.680***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home × LnIMM		0.0111		0.0175		0.0141
		(0.371)		(0.178)		(0.230)
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2530	2530	2530	2530	2530	2530
R-sq	0.819	0.819	0.816	0.816	0.819	0.819
adj. R-sq	0.818	0.818	0.814	0.814	0.818	0.818
Panel B (Imports):						
LnIMM	0.111***	0.0998***	0.0946***	0.0800***	0.102***	0.0936***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home	-0.660***	-0.875***	-0.655***	-0.923***	-0.653***	-0.819***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home × LnIMM		0.0391**		0.0505***		0.0303**
		(0.020)		(0.003)		(0.048)
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2530	2530	2530	2530	2530	2530
R-sq	0.772	0.772	0.770	0.771	0.770	0.770
adj. R-sq	0.770	0.770	0.768	0.769	0.768	0.768

Notes: Panel A shows dependent variable: log of bilateral export flows for the average year within the period 1991-95 and 2001-05; Panel B shows dependent variable: log of bilateral import flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CCI: Control of Corruption Indicator. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 7 CPI index: Exports and Imports, Home Country Corruption and Skilled-Unskilled Immigration (Sample 2: 21 OECD Host, 76 Home countries)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
Panel A (Exports):						
LnIMM	0.107***	0.122***	0.0649***	0.0923***	0.133***	0.158***
	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.000)
CPI_home	-0.227***	-0.250***	-0.229***	-0.273***	-0.224***	-0.265***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home × LnIMM		0.00415		0.00776		0.00702
		(0.540)		(0.247)		(0.240)
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1659	1659	1659	1659	1659	1659
R-sq	0.839	0.840	0.836	0.836	0.840	0.840
adj. R-sq	0.837	0.837	0.834	0.834	0.838	0.838
Panel B (Imports):						
LnIMM	0.136***	0.204***	0.114***	0.182***	0.121***	0.168***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home	-0.232***	-0.342***	-0.233***	-0.340***	-0.233***	-0.309***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home × LnIMM		0.0192**		0.0191**		0.0130*
		(0.030)		(0.028)		(0.085)
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1659	1659	1659	1659	1659	1659
R-sq	0.785	0.786	0.783	0.783	0.783	0.783
adj. R-sq	0.782	0.783	0.780	0.781	0.780	0.780

Notes: Panel A shows dependent variable: log of bilateral export flows for the average year within the period 1991-95 and 2001-05; Panel B shows dependent variable: log of bilateral import flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CPI: Corruption Perception Index. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 8 CCI index: Exports, Home Country Corruption and Skilled-Unskilled Immigration, above or below the median of Governance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
	Government Effectiveness (gee)						**Regulatory quality (rqe)**					
	Panel A (above the median of gee)						**Panel A (above the median of rqe)**					
	Sample 1: 21 OECD Host, 97 Home countries						Sample 1: 21 OECD Host, 97 Home countries					
LnIMM	0.119***	0.136***	0.0732***	0.0989***	0.127***	0.148***	0.112***	0.128***	0.0723***	0.0979***	0.127***	0.150***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home	-0.365***	-0.549***	-0.357***	-0.607***	-0.328***	-0.551***	-0.306***	-0.470***	-0.305***	-0.551***	-0.276***	-0.519***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home × LnIMM		0.0281**		0.0382***		0.0334***		0.0258**		0.0386***		0.0373***
		(0.013)		(0.001)		(0.002)		(0.028)		(0.002)		(0.002)
Observations	1710	1710	1710	1710	1710	1710	1695	1695	1695	1695	1695	1695
R-sq	0.883	0.884	0.879	0.880	0.882	0.882	0.887	0.888	0.884	0.885	0.887	0.888
adj. R-sq	0.881	0.882	0.878	0.879	0.880	0.881	0.886	0.886	0.883	0.884	0.885	0.886
	Sample 2: 21 OECD Host, 76 Home countries						Sample 2: 21 OECD Host, 76 Home countries					
LnIMM	0.130***	0.129***	0.0895***	0.0880***	0.154***	0.154***	0.122***	0.121***	0.0797***	0.0794***	0.133***	0.134***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home	-0.411***	-0.360***	-0.404***	-0.350***	-0.391***	-0.403***	-0.415***	-0.391***	-0.423***	-0.410***	-0.398***	-0.410***
	(0.000)	(0.007)	(0.000)	(0.009)	(0.000)	(0.002)	(0.000)	(0.004)	(0.000)	(0.003)	(0.000)	(0.002)
CCI_home × LnIMM		-0.00916		-0.00983		0.00214		-0.00416		-0.00233		0.00223
		(0.609)		(0.602)		(0.902)		(0.822)		(0.904)		(0.901)
Observations	1293	1293	1293	1293	1293	1293	1287	1287	1287	1287	1287	1287
R-sq	0.834	0.834	0.829	0.829	0.834	0.834	0.834	0.834	0.830	0.830	0.833	0.833
adj. R-sq	0.831	0.831	0.827	0.827	0.832	0.831	0.831	0.831	0.827	0.827	0.831	0.831
	Panel B (below the median of gee)						**Panel B (below the median of rqe)**					
	Sample 1: 21 OECD Host, 97 Home countries						Sample 1: 21 OECD Host, 97 Home countries					
LnIMM	0.146***	0.145***	0.117***	0.105***	0.168***	0.160***	0.148***	0.125***	0.119***	0.0744***	0.177***	0.144***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)
CCI_home	-0.315***	-0.322*	-0.332***	-0.431***	-0.309***	-0.382***	-0.476***	-0.688***	-0.488***	-0.856***	-0.457***	-0.726***
	(0.000)	(0.057)	(0.000)	(0.010)	(0.000)	(0.009)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home × LnIMM		0.00119		0.0189		0.0136		0.0379		0.0707**		0.0498**
		(0.962)		(0.469)		(0.531)		(0.191)		(0.018)		(0.045)
Observations	1591	1591	1591	1591	1591	1591	1606	1606	1606	1606	1606	1606
R-sq	0.815	0.815	0.811	0.811	0.815	0.815	0.802	0.802	0.798	0.799	0.803	0.803
adj. R-sq	0.812	0.812	0.808	0.808	0.812	0.812	0.800	0.800	0.795	0.796	0.800	0.800
	Sample 2: 21 OECD Host, 76 Home countries						Sample 2: 21 OECD Host, 76 Home countries					
LnIMM	0.136***	0.158***	0.113***	0.119***	0.157***	0.151***	0.145***	0.134***	0.117***	0.0803***	0.173***	0.135***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.009)	(0.000)	(0.000)
CCI_home	-0.380***	-0.205	-0.387***	-0.342*	-0.359***	-0.407**	-0.263***	-0.352	-0.278***	-0.545***	-0.263***	-0.542***

	(0.000)	(0.317)	(0.000)	(0.081)	(0.000)	(0.026)	(0.004)	(0.105)	(0.003)	(0.010)	(0.004)	(0.006)
CCI_home × LnIMM		-0.0321		-0.00884		0.00902		0.0158		0.0516		0.0521*
		(0.299)		(0.784)		(0.752)		(0.622)		(0.130)		(0.082)
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1237	1237	1237	1237	1237	1237	1243	1243	1243	1243	1243	1243
R-sq	0.794	0.794	0.791	0.791	0.794	0.794	0.802	0.802	0.798	0.798	0.802	0.802
adj. R-sq	0.791	0.791	0.787	0.787	0.790	0.790	0.798	0.798	0.794	0.794	0.798	0.798

Notes: Dependent variable: log of bilateral export flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CCI: Control of Corruption Indicator. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 9 CCI index: Imports, Home Country Corruption and Skilled-Unskilled Immigration, above or below the median of Governance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
	Government Effectiveness (gee)						**Regulatory quality (rqe)**					
	Panel A (above the median of gee)						**Panel A (above the median of rqe)**					
	Sample 1: 21 OECD Host, 97 Home countries						Sample 1: 21 OECD Host, 97 Home countries					
LnIMM	0.107***	0.140***	0.0793***	0.116***	0.100***	0.126***	0.0932***	0.121***	0.0728***	0.104***	0.105***	0.128***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home	-0.481***	-0.832***	-0.468***	-0.825***	-0.454***	-0.736***	-0.568***	-0.848***	-0.560***	-0.857***	-0.544***	-0.789***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CCI_home × LnIMM		0.0535***		0.0547***		0.0421***		0.0439***		0.0467***		0.0376**
		(0.000)		(0.000)		(0.001)		(0.004)		(0.005)		(0.019)
Observations	1710	1710	1710	1710	1710	1710	1695	1695	1695	1695	1695	1695
R-sq	0.869	0.871	0.867	0.868	0.867	0.868	0.863	0.864	0.862	0.863	0.863	0.863
adj. R-sq	0.867	0.869	0.865	0.867	0.866	0.867	0.861	0.862	0.860	0.861	0.861	0.862
	Sample 2: 21 OECD Host, 76 Home countries						Sample 2: 21 OECD Host, 76 Home countries					
LnIMM	0.105***	0.110***	0.0742***	0.0805***	0.0880***	0.0936***	0.0785***	0.0792***	0.0497**	0.0515**	0.0536**	0.0544**
	(0.000)	(0.000)	(0.002)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.031)	(0.027)	(0.038)	(0.038)
CCI_home	-0.379***	-0.585***	-0.372***	-0.590***	-0.370***	-0.531***	-0.389***	-0.428***	-0.395***	-0.491***	-0.395***	-0.431***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.008)	(0.000)	(0.002)	(0.000)	(0.003)
CCI_home × LnIMM		0.0369		0.0404*		0.0290		0.00695		0.0174		0.00633
		(0.100)		(0.067)		(0.149)		(0.748)		(0.419)		(0.750)
Observations	1293	1293	1293	1293	1293	1293	1287	1287	1287	1287	1287	1287
R-sq	0.816	0.816	0.814	0.814	0.814	0.815	0.805	0.805	0.804	0.804	0.804	0.804
adj. R-sq	0.813	0.813	0.811	0.811	0.811	0.811	0.802	0.802	0.801	0.801	0.801	0.801
	Panel B (below the median of gee)						**Panel B (below the median of rqe)**					
	Sample 1: 21 OECD Host, 97 Home countries						Sample 1: 21 OECD Host, 97 Home countries					
LnIMM	0.136***	0.111***	0.130***	0.0835***	0.141***	0.123***	0.158***	0.113***	0.149***	0.0731**	0.158***	0.111***
	(0.000)	(0.000)	(0.000)	(0.010)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.040)	(0.000)	(0.003)
CCI_home	-0.298***	-0.513*	-0.299***	-0.682**	-0.302***	-0.450*	-0.325***	-0.728**	-0.322***	-0.941***	-0.323***	-0.716***
	(0.004)	(0.064)	(0.004)	(0.010)	(0.004)	(0.086)	(0.002)	(0.012)	(0.002)	(0.001)	(0.002)	(0.008)
CCI_home × LnIMM		0.0386		0.0736*		0.0276		0.0722*		0.119***		0.0727*
		(0.339)		(0.073)		(0.466)		(0.095)		(0.008)		(0.072)
Observations	1591	1591	1591	1591	1591	1591	1606	1606	1606	1606	1606	1606
R-sq	0.757	0.757	0.756	0.756	0.756	0.756	0.756	0.757	0.755	0.756	0.754	0.755
adj. R-sq	0.754	0.754	0.753	0.753	0.752	0.752	0.753	0.754	0.752	0.753	0.751	0.752
	Sample 2: 21 OECD Host, 76 Home countries						Sample 2: 21 OECD Host, 76 Home countries					
LnIMM	0.126***	0.0969**	0.126***	0.0712	0.136***	0.117**	0.166***	0.120***	0.163***	0.0838*	0.191***	0.153***
	(0.000)	(0.024)	(0.000)	(0.113)	(0.000)	(0.014)	(0.000)	(0.006)	(0.000)	(0.076)	(0.000)	(0.002)
CCI_home	-0.430***	-0.657*	-0.422***	-0.820**	-0.417***	-0.557*	-0.234*	-0.596	-0.235*	-0.809**	-0.237*	-0.511

	(0.001)	(0.066)	(0.001)	(0.017)	(0.002)	(0.098)	(0.083)	(0.104)	(0.080)	(0.024)	(0.078)	(0.140)
CCI_home × LnIMM		0.0416		0.0789		0.0266		0.0646		0.111**		0.0511
		(0.438)		(0.150)		(0.598)		(0.230)		(0.048)		(0.317)
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1237	1237	1237	1237	1237	1237	1243	1243	1243	1243	1243	1243
R-sq	0.722	0.723	0.722	0.723	0.722	0.722	0.740	0.740	0.739	0.740	0.739	0.739
adj. R-sq	0.718	0.718	0.718	0.718	0.717	0.717	0.735	0.735	0.734	0.735	0.735	0.735

Notes: Dependent variable: log of bilateral import flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CCI: Control of Corruption Indicator. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 10 CPI index: Exports, Home Country Corruption and Skilled-Unskilled Immigration, above or below the median of Governance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
	Government Effectiveness (gee)						**Regulatory quality (rqe)**					
	Panel A (above the median of gee)						**Panel A (above the median of rqe)**					
	Sample 1: 21 OECD Host, 97 Home countries						Sample 1: 21 OECD Host, 97 Home countries					
LnIMM	0.110***	0.163***	0.0571***	0.144***	0.117***	0.178***	0.108***	0.158***	0.0651***	0.162***	0.123***	0.195***
	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home	-0.101***	-0.166***	-0.0970***	-0.200***	-0.0856***	-0.162***	-0.103***	-0.167***	-0.0989***	-0.220***	-0.0890***	-0.183***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home × LnIMM		0.00958**		0.0153***		0.0111**		0.00930**		0.0174***		0.0133***
		(0.034)		(0.001)		(0.015)		(0.037)		(0.000)		(0.004)
Observations	1428	1428	1428	1428	1428	1428	1441	1441	1441	1441	1441	1441
R-sq	0.883	0.884	0.879	0.880	0.882	0.882	0.889	0.890	0.886	0.887	0.888	0.889
adj. R-sq	0.881	0.882	0.877	0.878	0.880	0.880	0.887	0.888	0.884	0.885	0.886	0.887
	Sample 2: 21 OECD Host, 76 Home countries						Sample 2: 21 OECD Host, 76 Home countries					
LnIMM	0.128***	0.139***	0.0780***	0.0979**	0.154***	0.186***	0.111***	0.121***	0.0557**	0.0739	0.107***	0.115***
	(0.000)	(0.001)	(0.002)	(0.027)	(0.000)	(0.000)	(0.000)	(0.008)	(0.026)	(0.108)	(0.000)	(0.008)
CPI_home	-0.149***	-0.162***	-0.149***	-0.175***	-0.143***	-0.184***	-0.192***	-0.205***	-0.200***	-0.224***	-0.190***	-0.201***
	(0.000)	(0.006)	(0.000)	(0.003)	(0.000)	(0.001)	(0.000)	(0.002)	(0.000)	(0.000)	(0.000)	(0.001)
CPI_home × LnIMM		0.00235		0.00452		0.00708		0.00225		0.00430		0.00185
		(0.773)		(0.577)		(0.346)		(0.801)		(0.621)		(0.814)
Observations	869	869	869	869	869	869	875	875	875	875	875	875
R-sq	0.838	0.838	0.833	0.833	0.838	0.839	0.834	0.834	0.830	0.830	0.832	0.832
adj. R-sq	0.834	0.834	0.829	0.829	0.834	0.834	0.830	0.830	0.825	0.825	0.828	0.828
	Panel B (below the median of gee)						**Panel B (below the median of rqe)**					
	Sample 1: 21 OECD Host, 97 Home countries						Sample 1: 21 OECD Host, 97 Home countries					
LnIMM	0.114***	0.165**	0.0749***	0.155**	0.151***	0.204***	0.124***	0.164***	0.0729***	0.151**	0.157***	0.198***
	(0.000)	(0.014)	(0.000)	(0.041)	(0.000)	(0.002)	(0.000)	(0.009)	(0.001)	(0.024)	(0.000)	(0.001)
CPI_home	-0.148**	-0.258	-0.176***	-0.342*	-0.164***	-0.276*	-0.177***	-0.256*	-0.185***	-0.337**	-0.174***	-0.259*
	(0.016)	(0.128)	(0.004)	(0.066)	(0.007)	(0.090)	(0.000)	(0.074)	(0.000)	(0.024)	(0.000)	(0.050)
CPI_home × LnIMM		0.0181		0.0286		0.0187		0.0140		0.0277		0.0146
		(0.416)		(0.276)		(0.389)		(0.492)		(0.219)		(0.420)
Observations	1002	1002	1002	1002	1002	1002	989	989	989	989	989	989
R-sq	0.837	0.837	0.834	0.834	0.839	0.839	0.826	0.826	0.821	0.822	0.827	0.827
adj. R-sq	0.833	0.833	0.830	0.830	0.835	0.835	0.822	0.822	0.818	0.818	0.823	0.823
	Sample 2: 21 OECD Host, 76 Home countries						Sample 2: 21 OECD Host, 76 Home countries					
LnIMM	0.106***	0.118	0.0715***	0.145	0.142***	0.231***	0.124***	0.209**	0.0848***	0.241**	0.185***	0.305***
	(0.000)	(0.189)	(0.003)	(0.152)	(0.000)	(0.006)	(0.000)	(0.018)	(0.000)	(0.019)	(0.000)	(0.000)

CPI_home	-0.218**	-0.242	-0.243***	-0.387	-0.218**	-0.399*	-0.222***	-0.406*	-0.248***	-0.568**	-0.255***	-0.508**
	(0.010)	(0.279)	(0.005)	(0.112)	(0.010)	(0.054)	(0.008)	(0.077)	(0.004)	(0.023)	(0.002)	(0.014)
CPI_home × LnIMM		0.00430		0.0268		0.0326		0.0316		0.0582		0.0446
		(0.891)		(0.464)		(0.263)		(0.322)		(0.127)		(0.124)
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	790	790	790	790	790	790	784	784	784	784	784	784
R-sq	0.811	0.811	0.808	0.808	0.812	0.813	0.823	0.824	0.820	0.821	0.827	0.828
adj. R-sq	0.806	0.806	0.803	0.803	0.807	0.807	0.819	0.819	0.815	0.816	0.823	0.823

Notes: Dependent variable: log of bilateral export flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CPI: Corruption Perception Index. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Table 11 CPI index: Imports, Home Country Corruption and Skilled-Unskilled Immigration, above or below the median of Governance

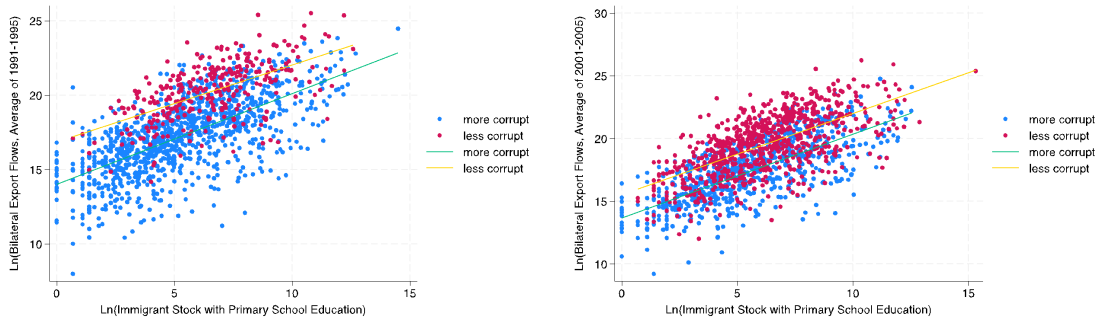
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Variables	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary	Primary	Primary	Secondary	Secondary	Tertiary	Tertiary
	Government Effectiveness (gee)						**Regulatory quality (rqe)**					
	Panel A (above the median of gee)						**Panel A (above the median of rqe)**					
	Sample 1: 21 OECD Host, 97 Home countries						Sample 1: 21 OECD Host, 97 Home countries					
LnIMM	0.102***	0.182***	0.0781***	0.174***	0.111***	0.180***	0.0938***	0.206***	0.0810***	0.227***	0.119***	0.236***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home	-0.175***	-0.274***	-0.168***	-0.283***	-0.161***	-0.248***	-0.207***	-0.352***	-0.201***	-0.384***	-0.194***	-0.345***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
CPI_home × LnIMM		0.0146***		0.0170***		0.0126***		0.0209***		0.0264***		0.0214***
		(0.001)		(0.001)		(0.008)		(0.000)		(0.000)		(0.000)
Observations	1428	1428	1428	1428	1428	1428	1441	1441	1441	1441	1441	1441
R-sq	0.873	0.874	0.870	0.871	0.871	0.872	0.868	0.870	0.867	0.870	0.868	0.870
adj. R-sq	0.871	0.871	0.868	0.869	0.869	0.870	0.866	0.868	0.865	0.867	0.866	0.868
	Sample 2: 21 OECD Host, 76 Home countries						Sample 2: 21 OECD Host, 76 Home countries					
LnIMM	0.102***	0.105**	0.0699**	0.0780	0.0924***	0.104**	0.0731***	0.0527	0.0415	0.0350	0.0472	0.0314
	(0.000)	(0.047)	(0.018)	(0.156)	(0.006)	(0.050)	(0.004)	(0.286)	(0.160)	(0.502)	(0.162)	(0.542)
CPI_home	-0.175***	-0.179**	-0.175***	-0.185***	-0.173***	-0.188***	-0.195***	-0.167**	-0.199***	-0.190***	-0.198***	-0.177***
	(0.000)	(0.014)	(0.000)	(0.008)	(0.000)	(0.003)	(0.000)	(0.025)	(0.000)	(0.009)	(0.000)	(0.008)
CPI_home × LnIMM		0.000577		0.00184		0.00262		-0.00481		-0.00154		-0.00366
		(0.956)		(0.854)		(0.759)		(0.627)		(0.876)		(0.672)
Observations	869	869	869	869	869	869	875	875	875	875	875	875
R-sq	0.812	0.812	0.810	0.810	0.811	0.811	0.799	0.799	0.797	0.797	0.797	0.797
adj. R-sq	0.808	0.808	0.805	0.805	0.806	0.806	0.794	0.794	0.792	0.792	0.792	0.792
	Panel B (below the median of gee)						**Panel B (below the median of rqe)**					
	Sample 1: 21 OECD Host, 97 Home countries						Sample 1: 21 OECD Host, 97 Home countries					
LnIMM	0.190***	0.365***	0.169***	0.357***	0.176***	0.301***	0.211***	0.304***	0.182***	0.301***	0.188***	0.281***
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)
CPI_home	0.103	-0.276	0.0711	-0.319	0.0549	-0.211	0.0824	-0.102	0.0776	-0.154	0.0767	-0.114
	(0.228)	(0.252)	(0.402)	(0.199)	(0.517)	(0.383)	(0.209)	(0.569)	(0.242)	(0.420)	(0.254)	(0.542)
CPI_home × LnIMM		0.0619*		0.0671*		0.0444		0.0326		0.0421		0.0328
		(0.055)		(0.056)		(0.178)		(0.217)		(0.153)		(0.228)
Observations	1002	1002	1002	1002	1002	1002	989	989	989	989	989	989
R-sq	0.772	0.773	0.770	0.770	0.769	0.769	0.775	0.776	0.771	0.772	0.770	0.771
adj. R-sq	0.767	0.768	0.765	0.766	0.764	0.764	0.771	0.771	0.767	0.767	0.766	0.766
	Sample 2: 21 OECD Host, 76 Home countries						Sample 2: 21 OECD Host, 76 Home countries					
LnIMM	0.195***	0.390***	0.183***	0.411***	0.195***	0.353***	0.236***	0.415***	0.225***	0.426***	0.258***	0.410***
	(0.000)	(0.003)	(0.000)	(0.003)	(0.000)	(0.005)	(0.000)	(0.002)	(0.000)	(0.003)	(0.000)	(0.001)
CPI_home	0.0457	-0.356	0.0272	-0.421	0.0164	-0.305	0.131	-0.258	0.0982	-0.317	0.0603	-0.260

	(0.700)	(0.242)	(0.819)	(0.173)	(0.891)	(0.290)	(0.256)	(0.429)	(0.394)	(0.340)	(0.602)	(0.389)
CPI_home × LnIMM		0.0715		0.0832*		0.0578		0.0666		0.0753		0.0565
		(0.121)		(0.083)		(0.174)		(0.166)		(0.144)		(0.205)
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Membership dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Continent dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	790	790	790	790	790	790	784	784	784	784	784	784
R-sq	0.738	0.739	0.736	0.737	0.735	0.736	0.762	0.762	0.759	0.760	0.759	0.760
adj. R-sq	0.731	0.732	0.729	0.730	0.728	0.729	0.755	0.756	0.753	0.753	0.753	0.753

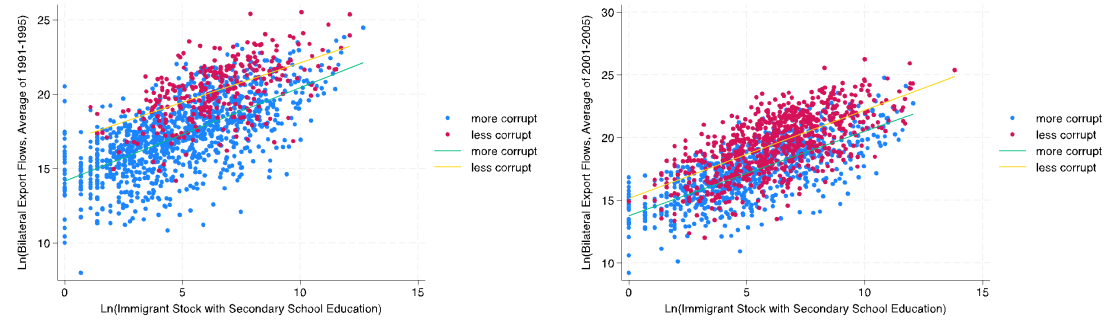
Notes: Dependent variable: log of bilateral import flows for the average year within the period 1991-95 and 2001-05. Corruption is measured by CPI: Corruption Perception Index. IMM denotes the number of immigration stock from the home country residing in the OECD host country. Primary-Immigrant stock with primary education; Secondary-Immigrant Stock with secondary school education; Tertiary-Immigrant Stock with tertiary school education. P values are in parentheses. *significant at 10%; **significant at 5%, ***significant at 1%. OLS: Ordinary Least Squares.

Figure 1. Sample 1 including 21 OECD home countries below (21 OECD host, 97 home countries): CPI Export.

Panel A: Immigrant Stock with Primary school education.



Panel B: Immigrant Stock with Secondary school education.



Panel C: Immigrant Stock with Tertiary school education.

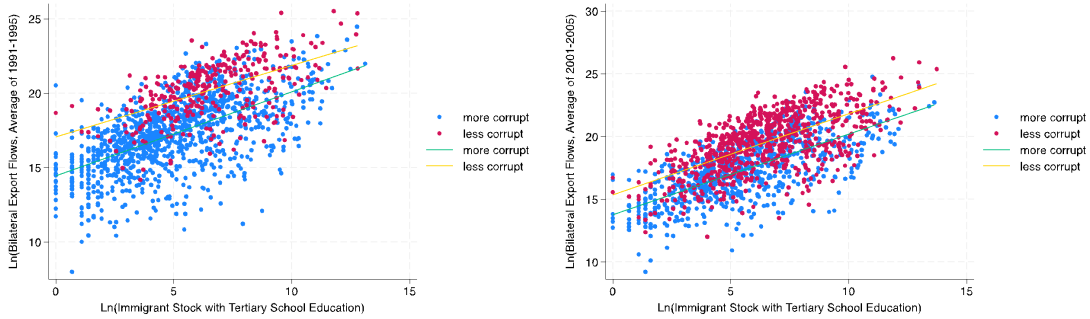
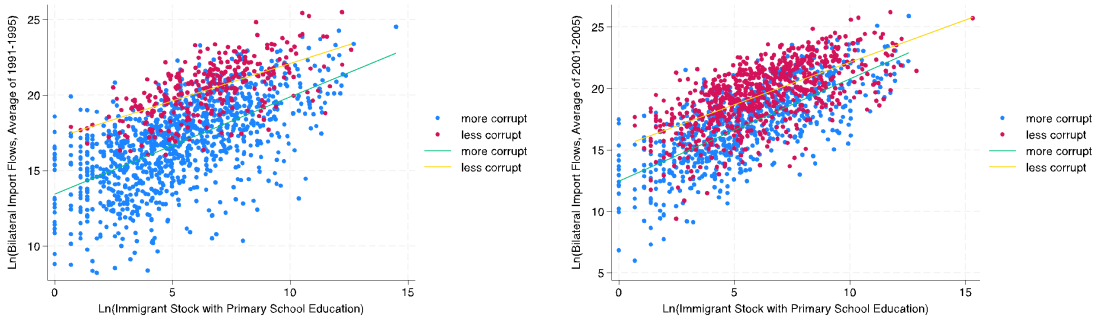
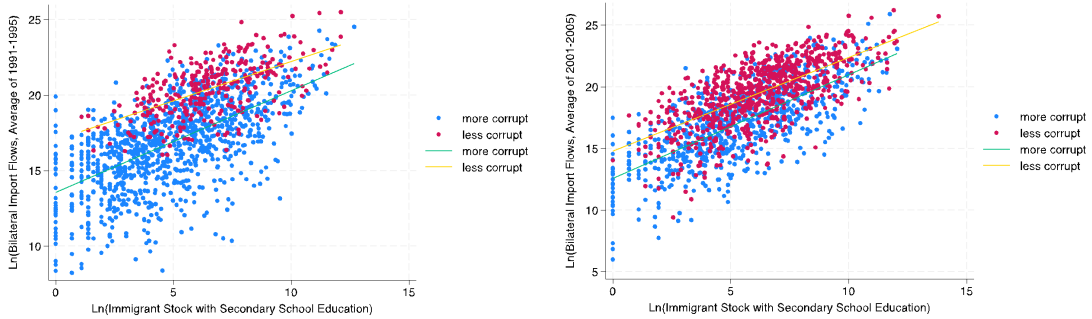


Figure 2. Sample including 21 OECD home countries below (21 OECD host, 97 home countries): CPI Import.
Panel A: Immigrant Stock with Primary school education.



Panel B: Immigrant Stock with Secondary school education.



Panel C: Immigrant Stock with Tertiary school education.

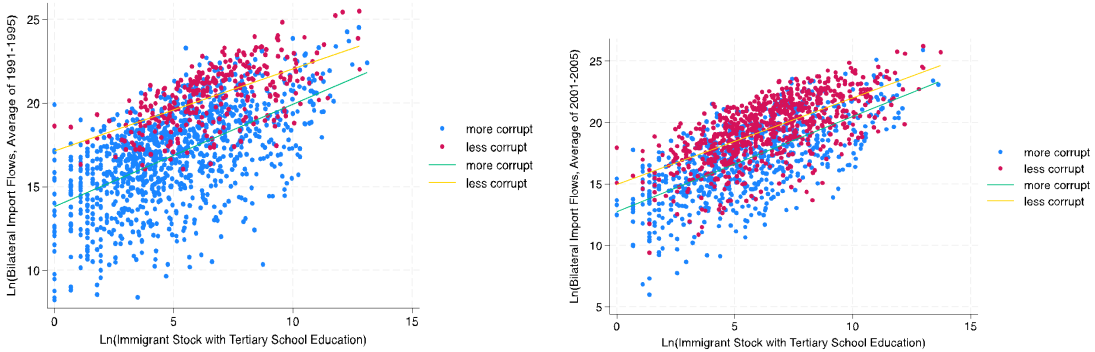
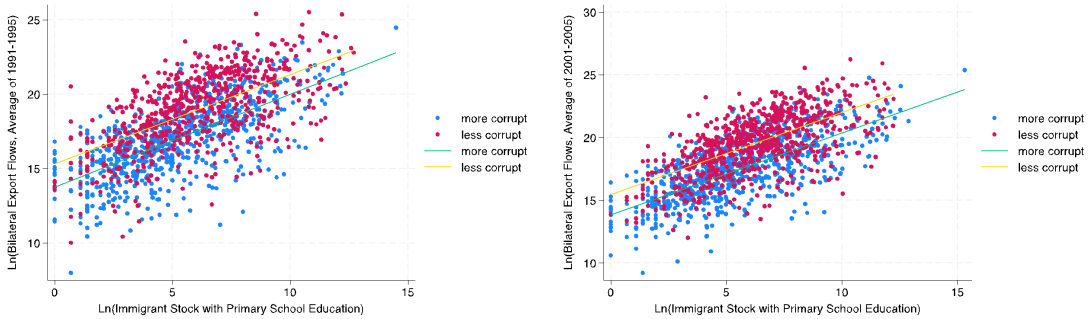
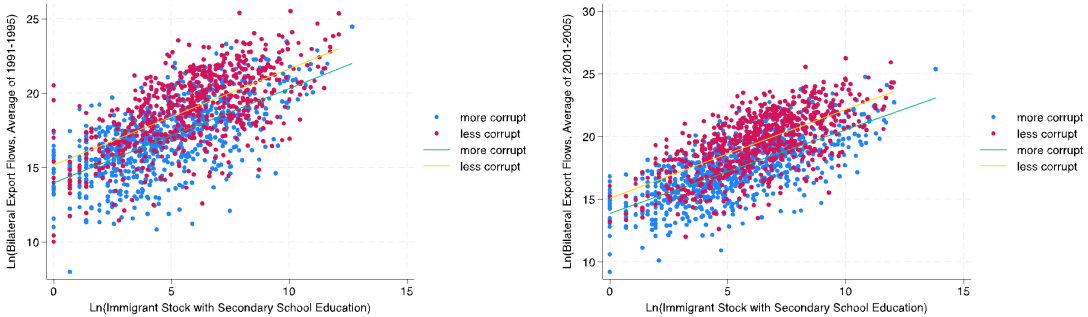


Figure 3. Sample including 21 OECD home countries below (21 OECD host, 97 home countries): CCI Export.

Panel A: Immigrant Stock with Primary school education.



Panel B: Immigrant Stock with Secondary school education.



Panel C: Immigrant Stock with Tertiary school education.

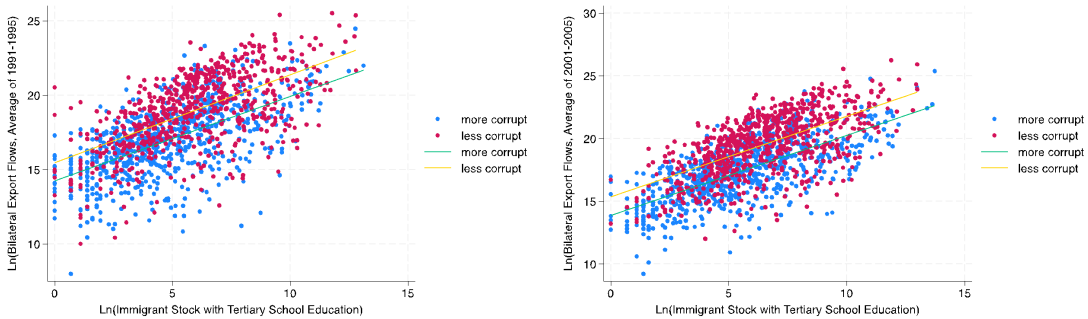
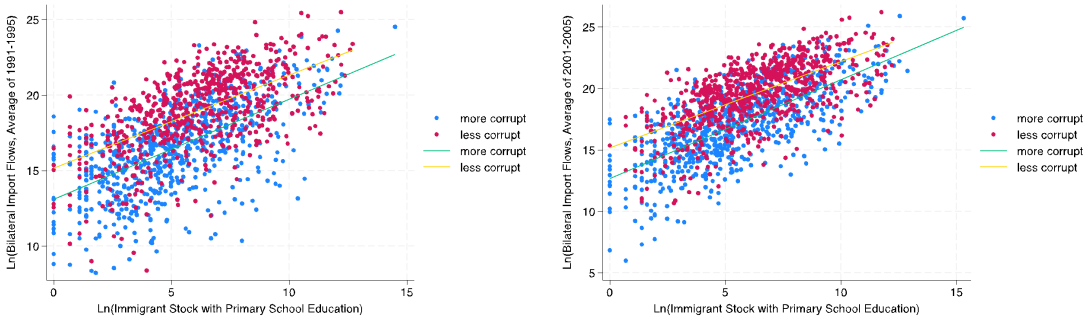
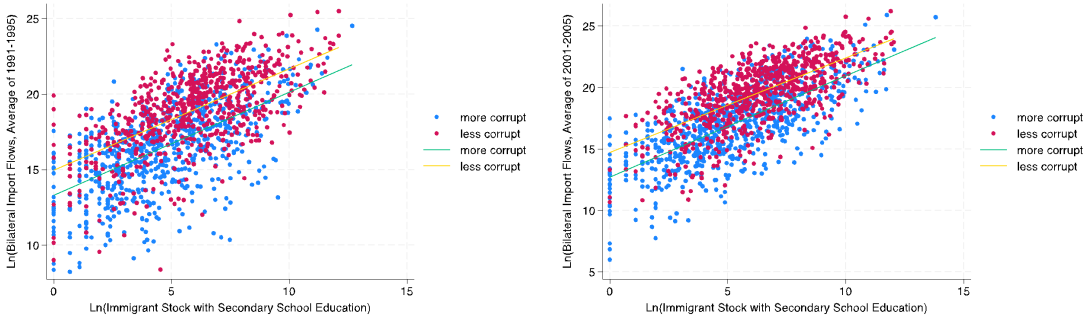


Figure 4. Sample including 21 OECD home countries below (21 OECD host, 97 home countries): CCI Import.

Panel A: Immigrant Stock with Primary school education.



Panel B: Immigrant Stock with Secondary school education.



Panel C: Immigrant Stock with Tertiary school education.

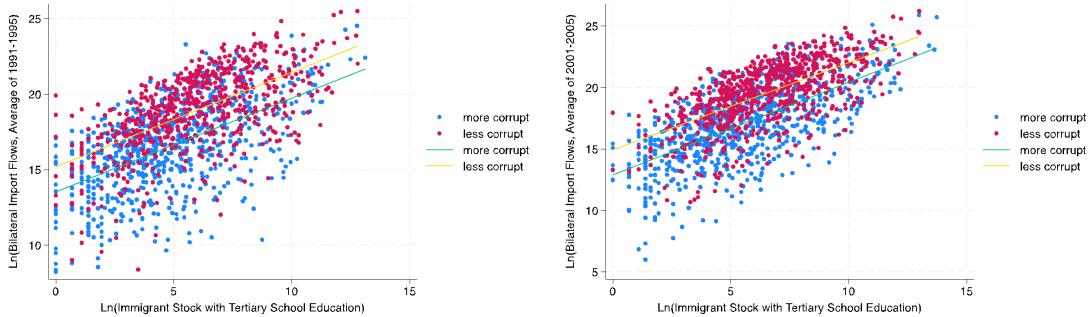
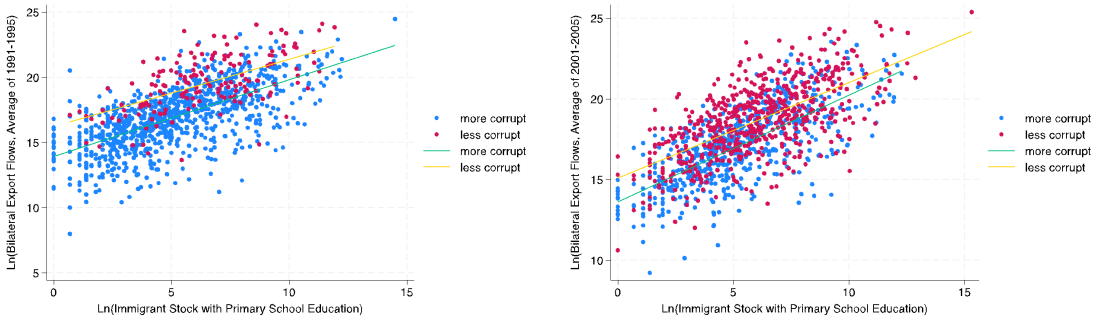
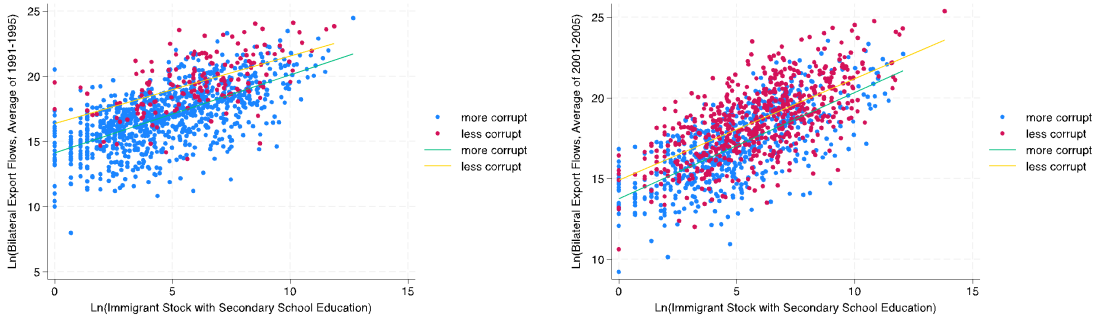


Figure 5. Sample excluding 21 OECD home countries below (21 OECD host, 76 home countries): CPI Export.

Panel A: Immigrant Stock with Primary school education.



Panel B: Immigrant Stock with Secondary school education.



Panel C: Immigrant Stock with Tertiary school education.

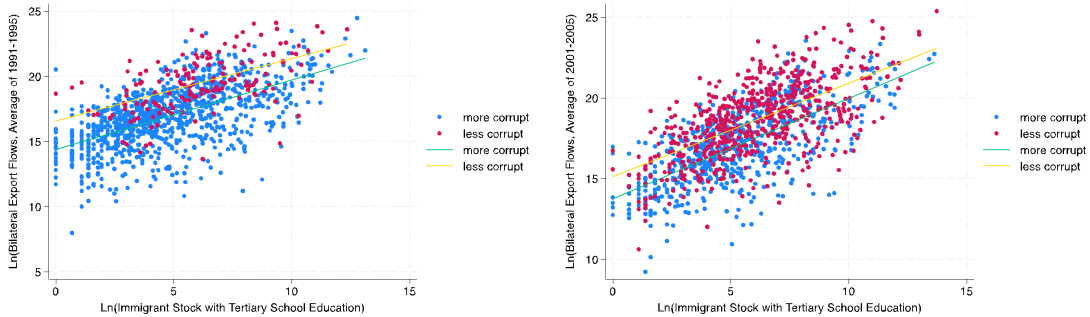
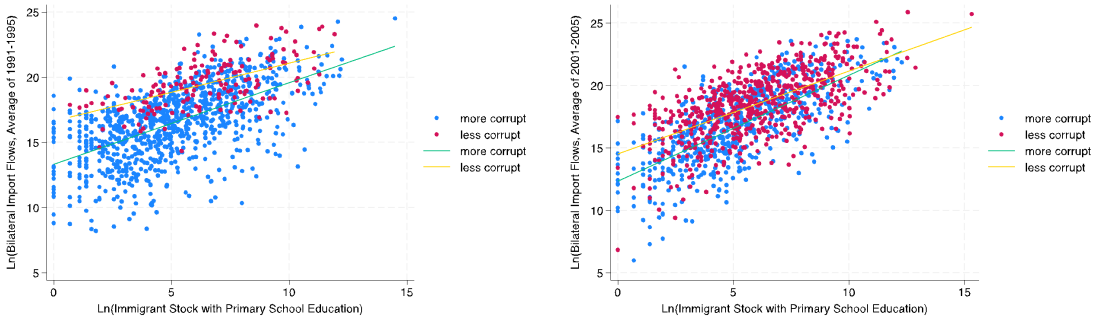
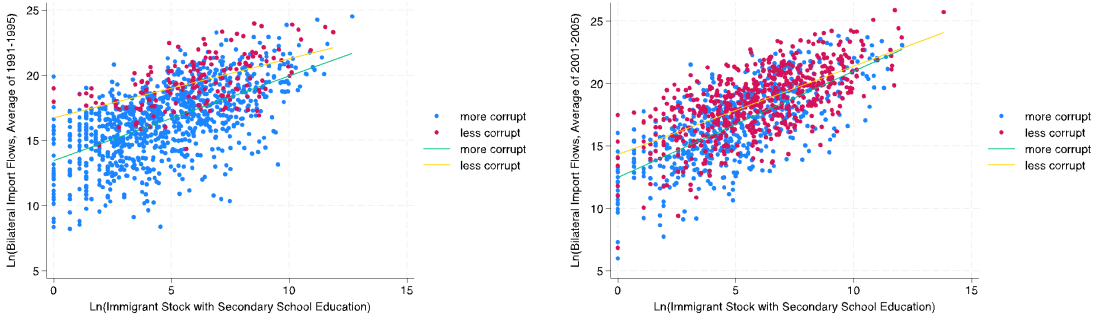


Figure 6. Sample excluding 21 OECD home countries below (21 OECD host, 76 home countries): CPI Import.

Panel A: Immigrant Stock with Primary school education.



Panel B: Immigrant Stock with Secondary school education.



Panel C: Immigrant Stock with Tertiary school education.

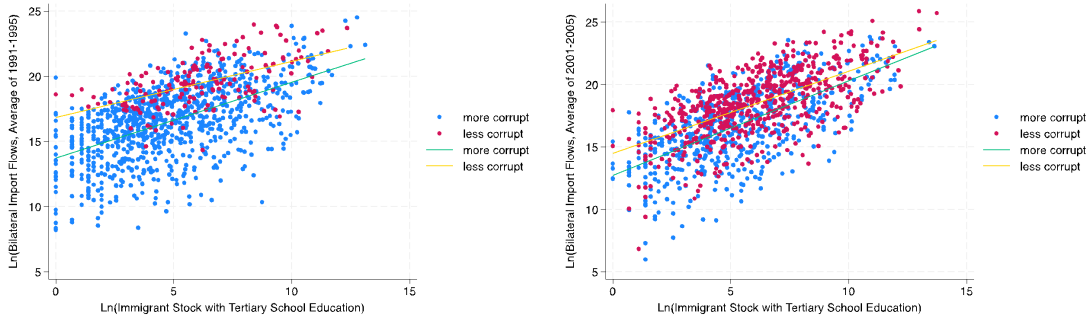
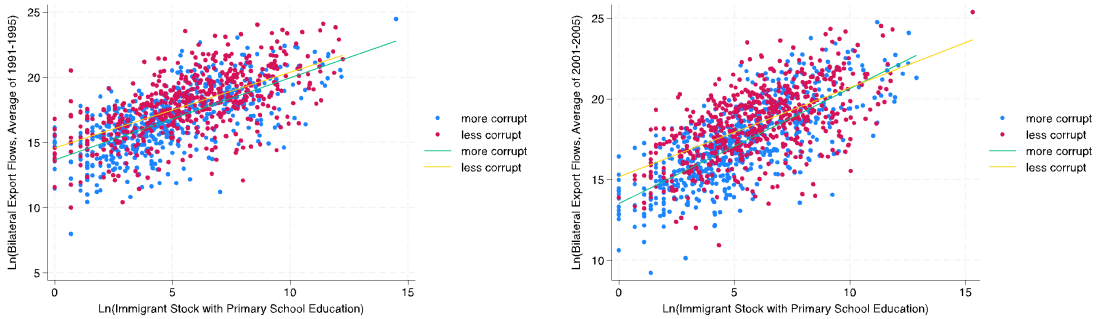
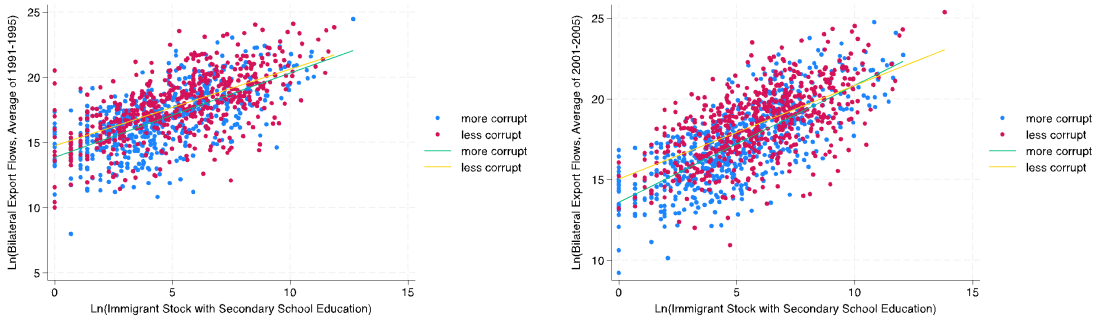


Figure 7. Sample excluding 21 OECD home countries below (21 OECD host, 76 home countries): CCI Export.

Panel A: Immigrant Stock with Primary school education.



Panel B: Immigrant Stock with Secondary school education.



Panel C: Immigrant Stock with Tertiary school education.

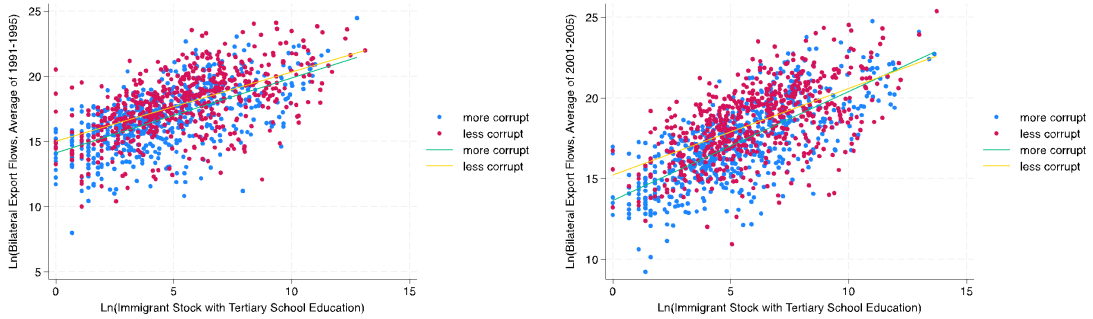
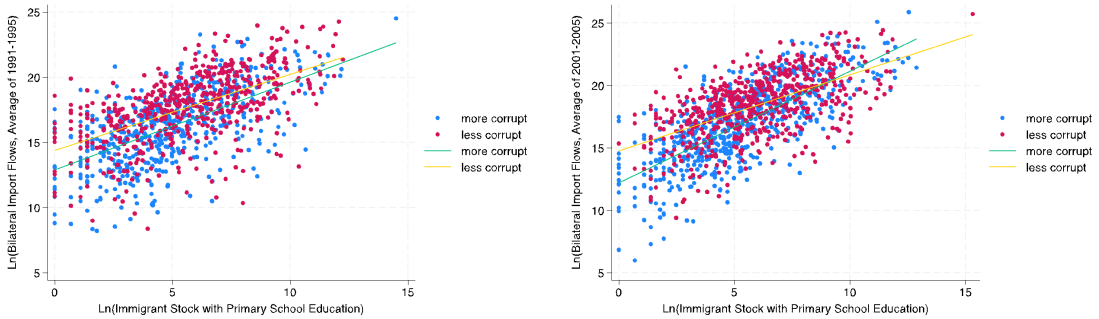
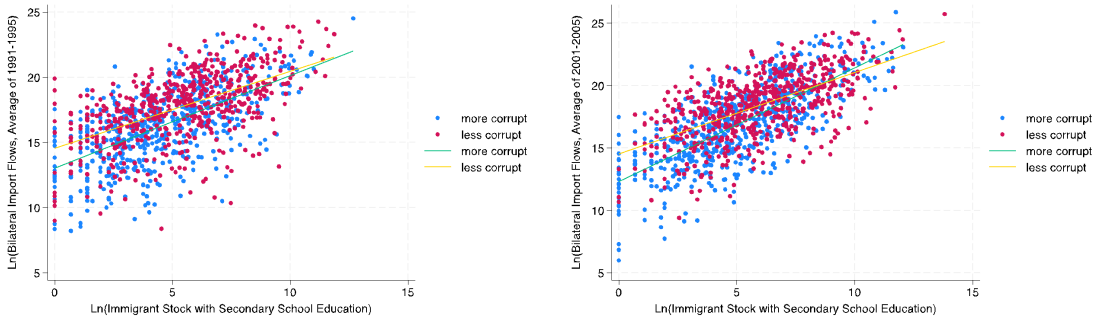


Figure 8. Sample excluding 21 OECD home countries below (21 OECD host, 76 home countries): CCI Import.

Panel A: Immigrant Stock with Primary school education.



Panel B: Immigrant Stock with Secondary school education.



Panel C: Immigrant Stock with Tertiary school education.

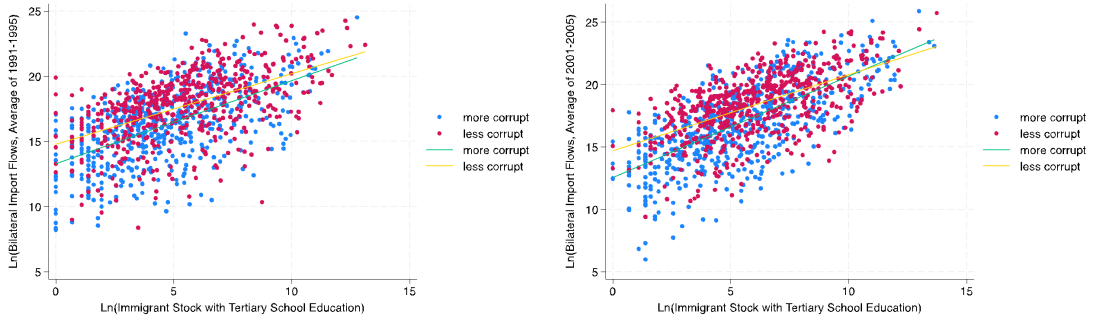
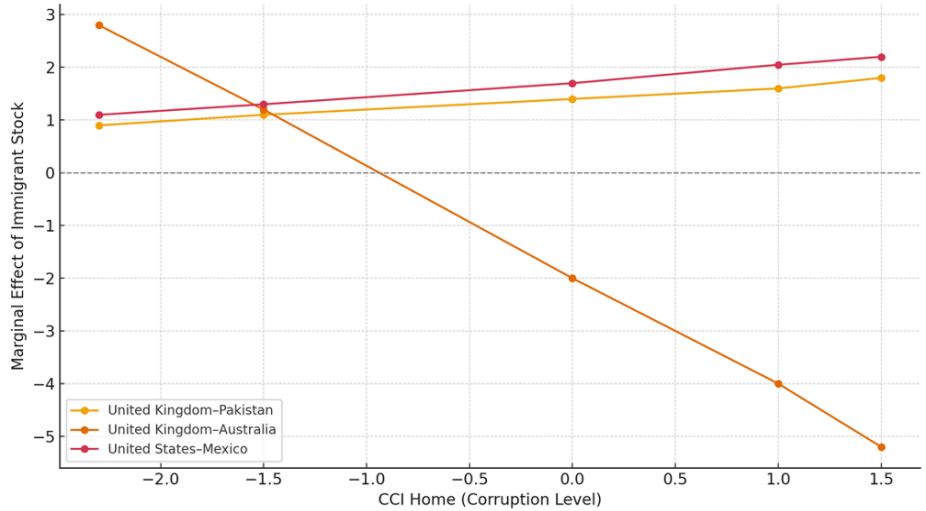
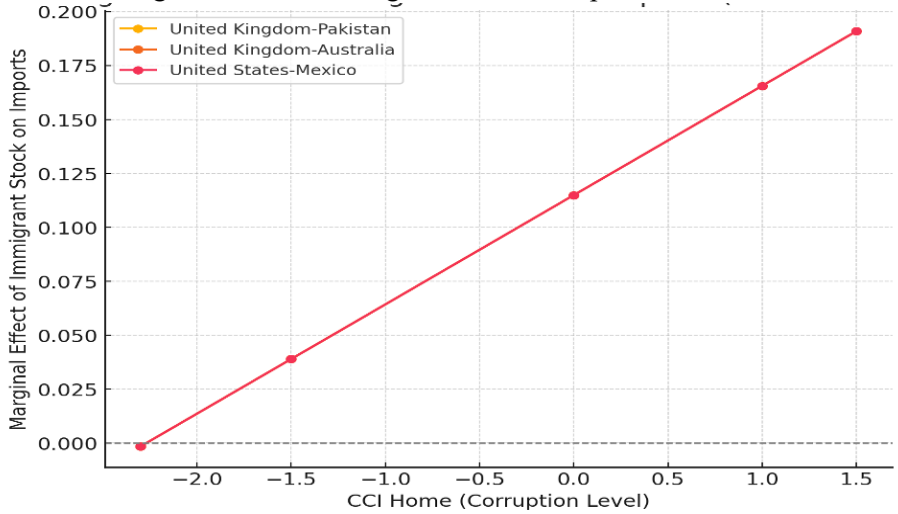


Figure 9. The marginal effects of immigration on trade

Panel A: Marginal effect of immigrant stock on exports.



Panel B: Marginal effect of immigrant stock on imports.



Appendix

List of countries included in sample 1	
21 OECD residence countries	Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States
97 OECD and non-OECD countries of origin	Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Finland, France, Gabon, Georgia, Germany, Ghana, Greece, Guatemala, Haiti, Honduras, Hungary, India, Indonesia, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Korea, Latvia, Lithuania, Madagascar, Malaysia, Mali, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Morocco, Mozambique, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Norway, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Kingdom, United States, Uruguay, Venezuela, Yemen, Zambia
List of countries above or below the median of governance	
List of countries above the median of regulatory quality (rqe) index:	Argentina, Armenia, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, Costa Rica, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Gabon, Germany, Greece, Hungary, Ireland, Israel, Italy, Jamaica, Japan, Korea, Latvia, Lithuania, Malaysia, Mauritius, Mexico, Netherlands, New Zealand, Norway, Panama, Peru, Poland, Portugal, Romania, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Trinidad and Tobago, Tunisia, Turkey, United Kingdom, United States, Uruguay
List of countries below the median of regulatory quality (rqe) index:	Algeria, Algeria, Algeria, Algeria, Armenia, Azerbaijan, Bangladesh, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Cameroon, China, Colombia, Cote d'Ivoire, Croatia, Dominican Republic, Ecuador, Egypt, El Salvador, Gabon, Georgia, Ghana, Guatemala, Haiti, Honduras, India, Indonesia, Jordan, Kazakhstan, Kenya, Madagascar, Mali, Mauritania, Mauritius, Moldova, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, Niger, Pakistan, Paraguay, Peru, Philippines, Romania, Russia, Sri Lanka, Tanzania, Thailand, Tunisia, Ukraine, Venezuela, Yemen, Zambia

List of countries above the median of government effectiveness (gee) index:	Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Chile, Costa Rica, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Korea, Latvia, Lithuania, Malaysia, Mauritius, Mexico, Netherlands, New Zealand, Norway, Panama, Peru, Philippines, Poland, Portugal, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Trinidad and Tobago, Tunisia, Turkey, United Kingdom, United States, Uruguay
List of countries below the median of government effectiveness (gee) index	Algeria, Argentina, Armenia, Azerbaijan, Bangladesh, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Cameroon, China, Colombia, Cote d'Ivoire, Dominican Republic, Ecuador, Egypt, El Salvador, Gabon, Georgia, Ghana, Guatemala, Haiti, Honduras, India, Indonesia, Jamaica, Kazakhstan, Kenya, Madagascar, Mali, Mauritania, Moldova, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, Niger, Pakistan, Paraguay, Peru, Philippines, Romania, Russia, Sri Lanka, Tanzania, Trinidad and Tobago, Turkey, Ukraine, Venezuela, Yemen, Zambia
List of countries with missing values in corruption perception index (CPI)	
Missing CPI data for the following countries in the 90s period	Algeria, Armenia, Azerbaijan, Bangladesh, Bolivia, Bosnia and Herzegovina, Bulgaria, Burkina Faso, Cambodia, Cameroon, Costa Rica, Cote d'Ivoire, Croatia, Czech Republic, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Gabon, Georgia, Ghana, Guatemala, Haiti, Honduras, Israel, Jamaica, Jordan, Kazakhstan, Kenya, Latvia, Lithuania, Macedonia, Madagascar, Mali, Mauritania, Mauritius, Moldova, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, Niger, Panama, Paraguay, Peru, Poland, Romania, Russia, Slovakia, Slovenia, Sri Lanka, Tanzania, Trinidad and Tobago, Tunisia, Ukraine, Uruguay , Vietnam, Yemen, Zambia
Missing CPI data for the following countries in the 00s period	Burkina Faso, Mauritania

List of countries included in sample 2	
21 OECD residence countries	Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States
76 non-OECD countries of origin	Algeria, Argentina, Armenia, Azerbaijan, Bangladesh, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Cameroon, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Czech Republic, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Gabon, Georgia, Ghana, Guatemala, Haiti, Honduras, Hungary, India, Indonesia, Israel, Jamaica, Jordan, Kazakhstan, Kenya, Korea, Latvia, Lithuania, Madagascar, Malaysia, Mali, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, Niger, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, Sri Lanka, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Uruguay, Venezuela, Yemen, Zambia
List of countries above or below the median of governance	
List of countries above the median of regulatory quality (rqe) index:	Argentina, Armenia, Bolivia, Brazil, Bulgaria, Chile, Colombia, Costa Rica, Croatia, Czech Republic, Egypt, Estonia, Gabon, Hungary, Indonesia, Israel, Jamaica, Jordan, Korea, Latvia, Lithuania, Malaysia, Mauritius, Mexico, Moldova, Mongolia, Morocco, Panama, Peru, Philippines, Poland, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, Sri Lanka, Thailand, Trinidad and Tobago, Tunisia, Turkey, Uruguay
List of countries below the median of regulatory quality (rqe) index:	Algeria, Argentina, Armenia, Azerbaijan, Bangladesh, Bolivia, Bosnia and Herzegovina, Bulgaria, Cambodia, Cameroon, China, Cote d'Ivoire, Dominican Republic, Ecuador, Egypt, El Salvador, Georgia, Ghana, Guatemala, Haiti, Honduras, India, Indonesia, Kazakhstan, Kenya, Madagascar, Mali, Mauritania, Moldova, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, Niger, Pakistan, Paraguay, Philippines, Russia, Sri Lanka, Tanzania, Ukraine, Venezuela, Yemen, Zambia
List of countries above the median of government effectiveness (gee) index:	Argentina; Armenia; Bolivia; Brazil; Bulgaria; Chile; China; Colombia; Costa Rica; Croatia; Czech Republic; Estonia; Gabon; Ghana; Hungary; India; Israel; Jamaica; Jordan; Korea; Latvia; Lithuania; Malaysia; Mauritania; Mauritius; Mexico; Moldova; Morocco; Mozambique; Panama; Peru; Philippines; Poland; Singapore; Slovakia; Slovenia; South Africa; Sri Lanka; Thailand; Trinidad and Tobago; Tunisia; Turkey; Uruguay

List of countries below the median of government effectiveness (gee) index	Algeria; Armenia; Azerbaijan; Bangladesh; Bolivia; Bosnia and Herzegovina; Cambodia; Cameroon; China; Colombia; Cote d'Ivoire; Dominican Republic; Ecuador; Egypt; El Salvador; Gabon; Georgia; Guatemala; Haiti; Honduras; Indonesia; Kazakhstan; Kenya; Madagascar; Mali; Mauritania; Moldova; Mongolia; Morocco; Mozambique; Nepal; Nicaragua; Niger; Pakistan; Paraguay; Peru; Philippines; Romania; Russia; Sri Lanka; Tanzania; Ukraine; Venezuela; Yemen; Zambia.
List of countries with missing values in corruption perception index (CPI)	
Missing CPI data for the following countries in the 90s period	Algeria, Armenia, Azerbaijan, Bangladesh, Bolivia, Bosnia and Herzegovina, Bulgaria, Burkina Faso, Cambodia, Cameroon, Costa Rica, Cote d'Ivoire, Croatia, Czech Republic, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Gabon, Georgia, Ghana, Guatemala, Haiti, Honduras, Israel, Jamaica, Jordan, Kazakhstan, Kenya, Latvia, Lithuania, Macedonia, Madagascar, Mali, Mauritania, Mauritius, Moldova, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, Niger, Panama, Paraguay, Peru, Poland, Romania, Russia, Slovakia, Slovenia, Sri Lanka, Tanzania, Trinidad and Tobago, Tunisia, Ukraine, Uruguay , Vietnam, Yemen, Zambia
Missing CPI data for the following countries in the 00s period	Burkina Faso, Mauritania

Note: The following countries appear twice in the list of countries above the median of the government effectiveness (gee) Index because their scores were above the median in one period and below the median in another period. Armenia; Bolivia; China; Colombia; Gabon; Mauritania; Moldova; Morocco; Mozambique; Peru; Philippines; Sri Lanka; The following countries appear twice in the list of countries above the median of the regulatory quality(rqe) Index: Argentina, Armenia, Bolivia, Bulgaria, Egypt, Indonesia, Moldova, Mongolia, Morocco, Philippines, Russia, Sri Lanka

Corruption Index across Countries

Home country	1995 CPI index (raw data)	1995 CPI index (adjusted)	Home country	1996 CCI index (raw data)	1996 CCI index (adjusted)	Home country	2005 CPI index (raw data)	2005 CPI index (adjusted)	Home country	2005 CCI index (raw data)	2005 CCI index (adjusted)
New Zealand	9.55	-9.55	Denmark	2.23	-2.23	Finland	9.6	-9.6	Finland	2.32	-2.32
Denmark	9.32	-9.32	Finland	2.21	-2.21	New Zealand	9.6	-9.6	Denmark	2.29	-2.29
Singapore	9.26	-9.26	Sweden	2.17	-2.17	Denmark	9.5	-9.5	New Zealand	2.2	-2.2
Finland	9.12	-9.12	Norway	2.14	-2.14	Singapore	9.4	-9.4	Singapore	2.17	-2.17
Sweden	8.87	-8.87	New Zealand	2.11	-2.11	Sweden	9.2	-9.2	Sweden	2.02	-2.02
Canada	8.87	-8.87	Singapore	2.11	-2.11	Switzerland	9.1	-9.1	Switzerland	2.02	-2.02
Australia	8.8	-8.8	Netherlands	2.08	-2.08	Norway	8.9	-8.9	Norway	2.01	-2.01
Switzerland	8.76	-8.76	Canada	2.03	-2.03	Australia	8.8	-8.8	Netherlands	1.97	-1.97
Netherlands	8.69	-8.69	Switzerland	1.99	-1.99	Austria	8.7	-8.7	Australia	1.95	-1.95
Norway	8.61	-8.61	United Kingdom	1.98	-1.98	Netherlands	8.6	-8.6	Austria	1.92	-1.92
United Kingdom	8.57	-8.57	Germany	1.91	-1.91	United Kingdom	8.6	-8.6	United Kingdom	1.9	-1.9
Ireland	8.57	-8.57	Australia	1.88	-1.88	Canada	8.4	-8.4	Canada	1.88	-1.88
Germany	8.14	-8.14	Austria	1.73	-1.73	Germany	8.2	-8.2	Germany	1.88	-1.88
Chile	7.94	-7.94	Ireland	1.71	-1.71	United States	7.6	-7.6	Ireland	1.59	-1.59
United States	7.79	-7.79	United States	1.57	-1.57	France	7.5	-7.5	United States	1.55	-1.55
Austria	7.13	-7.13	Chile	1.45	-1.45	Belgium	7.4	-7.4	Chile	1.47	-1.47
France	7	-7	Portugal	1.37	-1.37	Ireland	7.4	-7.4	Belgium	1.39	-1.39
Japan	6.72	-6.72	Israel	1.35	-1.35	Chile	7.3	-7.3	France	1.37	-1.37
Portugal	5.56	-5.56	France	1.25	-1.25	Japan	7.3	-7.3	Spain	1.33	-1.33
Malaysia	5.28	-5.28	Japan	1.19	-1.19	Spain	7	-7	Japan	1.22	-1.22
Argentina	5.24	-5.24	Spain	1.13	-1.13	Portugal	6.5	-6.5	Uruguay	1.07	-1.07
Spain	4.35	-4.35	Uruguay	1.12	-1.12	Estonia	6.4	-6.4	Portugal	1.07	-1.07
Korea	4.29	-4.29	Slovenia	1.11	-1.11	Israel	6.3	-6.3	Estonia	1.03	-1.03
Hungary	4.12	-4.12	Trinidad and Tobago	0.9	-0.9	Slovenia	6.1	-6.1	Slovenia	0.91	-0.91
Turkey	4.1	-4.1	Poland	0.71	-0.71	Uruguay	5.9	-5.9	Israel	0.83	-0.83

Greece	4.04	-4.04	Costa Rica	0.7	-0.7	Jordan	5.7	-5.7	Hungary	0.65	-0.65
Colombia	3.44	-3.44	Czech Republic	0.68	-0.68	Malaysia	5.1	-5.1	Korea	0.62	-0.62
Mexico	3.18	-3.18	Hungary	0.67	-0.67	Korea	5	-5	South Africa	0.57	-0.57
Italy	2.99	-2.99	Estonia	0.45	-0.45	Italy	5	-5	Slovakia	0.49	-0.49
Thailand	2.79	-2.79	Lithuania	0.42	-0.42	Hungary	5	-5	Czech Republic	0.49	-0.49
India	2.78	-2.78	Italy	0.41	-0.41	Tunisia	4.9	-4.9	Costa Rica	0.48	-0.48
Philippines	2.77	-2.77	Korea	0.38	-0.38	Lithuania	4.8	-4.8	Italy	0.41	-0.41
Brazil	2.7	-2.7	Malaysia	0.38	-0.38	South Africa	4.5	-4.5	Latvia	0.38	-0.38
Venezuela	2.66	-2.66	Greece	0.34	-0.34	Slovakia	4.3	-4.3	Greece	0.36	-0.36
Pakistan	2.25	-2.25	Slovakia	0.22	-0.22	Czech Republic	4.3	-4.3	Lithuania	0.33	-0.33
China	2.16	-2.16	Jamaica	0.19	-0.19	Greece	4.3	-4.3	Mauritius	0.32	-0.32
Indonesia	1.94	-1.94	Mongolia	0.11	-0.11	El Salvador	4.2	-4.2	Poland	0.27	-0.27
Guatemala	Missing	Missing	Mauritius	0.03	-0.03	Mauritius	4.2	-4.2	Jordan	0.26	-0.26
Poland	Missing	Missing	Brazil	-0.02	0.02	Costa Rica	4.2	-4.2	Malaysia	0.2	-0.2
Jordan	Missing	Missing	Jordan	-0.04	0.04	Latvia	4.2	-4.2	Croatia	0.17	-0.17
Ukraine	Missing	Missing	Sri Lanka	-0.06	0.06	Bulgaria	4	-4	Bulgaria	0.06	-0.06
Ecuador	Missing	Missing	Argentina	-0.1	0.1	Colombia	4	-4	Trinidad and Tobago	0.02	-0.02
Armenia	Missing	Missing	Morocco	-0.11	0.11	Jamaica	3.6	-3.6	Turkey	-0.03	0.03
Panama	Missing	Missing	Turkey	-0.15	0.15	Ghana	3.5	-3.5	Madagascar	-0.07	0.07
Honduras	Missing	Missing	Latvia	-0.2	0.2	Turkey	3.5	-3.5	Colombia	-0.13	0.13
Czech Republic	Missing	Missing	Panama	-0.2	0.2	Peru	3.5	-3.5	Brazil	-0.14	0.14
El Salvador	Missing	Missing	Cote d'Ivoire	-0.26	0.26	Mexico	3.5	-3.5	Thailand	-0.19	0.19
Nicaragua	Missing	Missing	China	-0.27	0.27	Panama	3.5	-3.5	Georgia	-0.22	0.22
Cote d'Ivoire	Missing	Missing	Bosnia and Herzegovina	-0.27	0.27	Egypt	3.4	-3.4	Romania	-0.24	0.24
Uruguay	Missing	Missing	Ghana	-0.34	0.34	Croatia	3.4	-3.4	Bosnia and Herzegovina	-0.24	0.24
Haiti	Missing	Missing	Thailand	-0.36	0.36	Poland	3.4	-3.4	Tunisia	-0.26	0.26
Bangladesh	Missing	Missing	Philippines	-0.36	0.36	China	3.2	-3.2	Mexico	-0.27	0.27

Bosnia and Herzegovina	Missing	Missing	Bulgaria	-0.36	0.36	Sri Lanka	3.2	-3.2	Jamaica	-0.31	0.31
Sri Lanka	Missing	Missing	Madagascar	-0.37	0.37	Morocco	3.2	-3.2	Morocco	-0.31	0.31
Mauritania	Missing	Missing	India	-0.38	0.38	Romania	3	-3	Peru	-0.33	0.33
Russia	Missing	Missing	Peru	-0.4	0.4	Dominican Republic	3	-3	Sri Lanka	-0.34	0.34
Cambodia	Missing	Missing	Mozambique	-0.42	0.42	Mongolia	3	-3	Panama	-0.35	0.35
Tunisia	Missing	Missing	Dominican Republic	-0.42	0.42	Mali	2.9	-2.9	India	-0.36	0.36
Mali	Missing	Missing	Moldova	-0.44	0.44	Armenia	2.9	-2.9	Ghana	-0.37	0.37
Bulgaria	Missing	Missing	Romania	-0.45	0.45	Tanzania	2.9	-2.9	Argentina	-0.39	0.39
Niger	Missing	Missing	Armenia	-0.47	0.47	Bosnia and Herzegovina	2.9	-2.9	El Salvador	-0.45	0.45
Paraguay	Missing	Missing	Egypt	-0.47	0.47	India	2.9	-2.9	Algeria	-0.48	0.48
Algeria	Missing	Missing	Colombia	-0.51	0.51	Gabon	2.9	-2.9	Mali	-0.5	0.5
Trinidad and Tobago	Missing	Missing	Mexico	-0.51	0.51	Moldova	2.9	-2.9	Mozambique	-0.53	0.53
Morocco	Missing	Missing	Tunisia	-0.53	0.53	Mozambique	2.8	-2.8	Mauritania	-0.56	0.56
Latvia	Missing	Missing	Mauritania	-0.56	0.56	Argentina	2.8	-2.8	Zambia	-0.59	0.59
Slovenia	Missing	Missing	Nicaragua	-0.56	0.56	Algeria	2.8	-2.8	Tanzania	-0.6	0.6
Estonia	Missing	Missing	Algeria	-0.57	0.57	Madagascar	2.8	-2.8	China	-0.61	0.61
Peru	Missing	Missing	Croatia	-0.58	0.58	Yemen	2.7	-2.7	Nicaragua	-0.61	0.61
Kazakhstan	Missing	Missing	Nepal	-0.64	0.64	Zambia	2.6	-2.6	Mongolia	-0.61	0.61
Nepal	Missing	Missing	Ecuador	-0.68	0.68	Kazakhstan	2.6	-2.6	Philippines	-0.62	0.62
Tanzania	Missing	Missing	Tanzania	-0.7	0.7	Nicaragua	2.6	-2.6	Egypt	-0.62	0.62
Costa Rica	Missing	Missing	Yemen	-0.74	0.74	Ukraine	2.6	-2.6	Guatemala	-0.67	0.67
Zambia	Missing	Missing	Mali	-0.78	0.78	Honduras	2.6	-2.6	Moldova	-0.67	0.67
Yemen	Missing	Missing	Bolivia	-0.82	0.82	Bolivia	2.5	-2.5	Gabon	-0.67	0.67
Bolivia	Missing	Missing	Zambia	-0.84	0.84	Ecuador	2.5	-2.5	Armenia	-0.67	0.67
Jamaica	Missing	Missing	Indonesia	-0.86	0.86	Guatemala	2.5	-2.5	Dominican Republic	-0.69	0.69
Lithuania	Missing	Missing	Venezuela	-0.86	0.86	Nepal	2.5	-2.5	Ecuador	-0.71	0.71
Madagascar	Missing	Missing	Guatemala	-0.86	0.86	Philippines	2.5	-2.5	Niger	-0.72	0.72

Croatia	Missing	Missing	Niger	-0.87	0.87	Niger	2.4	-2.4	Ukraine	-0.72	0.72
Slovakia	Missing	Missing	El Salvador	-0.87	0.87	Russia	2.4	-2.4	Bolivia	-0.74	0.74
Ghana	Missing	Missing	Bangladesh	-0.97	0.97	Venezuela	2.3	-2.3	Nepal	-0.74	0.74
Israel	Missing	Missing	Cambodia	-1.02	1.02	Cambodia	2.3	-2.3	Honduras	-0.81	0.81
Mauritius	Missing	Missing	Russia	-1.05	1.05	Georgia	2.3	-2.3	Russia	-0.82	0.82
Moldova	Missing	Missing	Honduras	-1.08	1.08	Indonesia	2.2	-2.2	Indonesia	-0.88	0.88
Kenya	Missing	Missing	Gabon	-1.1	1.1	Cameroon	2.2	-2.2	Yemen	-0.89	0.89
Mozambique	Missing	Missing	Ukraine	-1.11	1.11	Azerbaijan	2.2	-2.2	Kenya	-1	1
Gabon	Missing	Missing	Kazakhstan	-1.13	1.13	Paraguay	2.1	-2.1	Kazakhstan	-1.01	1.01
Cameroon	Missing	Missing	Kenya	-1.16	1.16	Pakistan	2.1	-2.1	Venezuela	-1.03	1.03
Georgia	Missing	Missing	Paraguay	-1.17	1.17	Kenya	2.1	-2.1	Azerbaijan	-1.04	1.04
Egypt	Missing	Missing	Haiti	-1.17	1.17	Cote d'Ivoire	1.9	-1.9	Pakistan	-1.05	1.05
Mongolia	Missing	Missing	Pakistan	-1.22	1.22	Haiti	1.8	-1.8	Cameroon	-1.18	1.18
Dominican Republic	Missing	Missing	Cameroon	-1.33	1.33	Bangladesh	1.7	-1.7	Cambodia	-1.21	1.21
Azerbaijan	Missing	Missing	Azerbaijan	-1.45	1.45	Thailand	Missing	Missing	Cote d'Ivoire	-1.24	1.24
Romania	Missing	Missing	Georgia	-1.53	1.53	Mauritania	Missing	Missing	Paraguay	-1.32	1.32
						Brazil	Missing	Missing	Haiti	-1.37	1.37
						Trinidad and Tobago	Missing	Missing	Bangladesh	-1.39	1.39