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Does a Country's Diaspora Promote Exports? Evidence from an Augmented Gravity Model for the Dominican Republic

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Abstract

Most evidence on the trade-creating effect of migration comes from large developed host countries; much less is known about whether a small developing country's own diaspora promotes its exports. We provide such evidence for the Dominican Republic, whose diaspora equals roughly 16 percent of its population. Using an augmented gravity model for 45 partner countries over 2001–2024, our preferred Poisson pseudo-maximum likelihood estimate of the diaspora export elasticity is 0.484. The association is stable across robustness checks—including the exclusion of the United States—and is corroborated by a shift-share instrumental variables strategy based on the 1990 distribution of the diaspora. It is asymmetric, with no comparable association for imports, and operates primarily through cross-sectional differences across destinations, consistent with slow-moving preference and network channels. Product-level elasticities are positive and significant for food, textile, and machinery exports alike, indicating that the association extends beyond culturally specific goods to manufactured exports where nostalgia demand is implausible. The findings identify the diaspora as a quantitatively important, demand-side correlate of Dominican exports, and suggest that the trade benefits of emigration accrue over the long run rather than in response to short-run changes in migrant stocks.

Keywords: Diaspora Trade Effects; Gravity Model; Poisson Pseudo-Maximum Likelihood; Shift-Share Instrument; Dominican Republic

JEL Classification: F14, F22, O54

1 Introduction

International migration has grown substantially over the past three decades. According to the United Nations Department of Economic and Social Affairs (UN DESA), the global stock of international migrants reached 304 million in 2024 (United Nations, Department of Economic and Social Affairs, 2024). As migrant communities grow in their host countries, their economic ties to their home countries extend beyond remittances to include trade, investment, and the transfer of knowledge and business practices.

The Dominican Republic is among the countries most affected by this phenomenon. With an estimated 1.8 million Dominican-born individuals living abroad as of 2024—equivalent to roughly 16 percent of the home country population—the diaspora is a central feature of the Dominican economy (United Nations, Department of Economic and Social Affairs, 2024). The vast majority reside in the United States (US), with significant communities also established in Spain, Italy, and several other European and Caribbean nations. Remittances represent approximately 8 to 10 percent of gross domestic product (GDP) (World Bank, 2024), underscoring the economic significance of emigrant ties.

A growing body of research has documented that immigrant communities can promote bilateral trade between their host and origin countries, through both demand for home country goods and the reduction of transaction costs that inhibit international trade. This paper asks whether this relationship holds for the Dominican Republic and, in particular, whether the diaspora is associated with greater *exports* from the Dominican Republic to destination countries. The export focus is motivated by two features of the Dominican case. First, the country's export structure includes both culturally specific products—such as food and agricultural goods—and network-intensive manufactured products such as textiles from the *Zonas Francas*,¹ providing a setting where the two primary theoretical channels—preference and information—generate distinct, testable predictions at the product level. Second, the Dominican Republic is a small open economy where exports are critical for growth, making export promotion of direct policy relevance.

The main results are as follows. The preferred Poisson pseudo-maximum likelihood (PPML) estimate of the diaspora export elasticity is 0.484, implying that a ten percent larger Dominican migrant stock in a partner country is associated with 4.8 percent higher exports from the Dominican Republic to that country. The estimate is essentially unchanged when year fixed effects absorb common shocks (0.461) and is remarkably stable across robustness checks, including the exclusion of the United States, the largest trading partner and host of the largest diaspora community. A shift-share instrumental variables strategy, which predicts current diaspora stocks from the 1990 distribution of Dominicans across destinations interacted with subsequent aggregate emigration, yields estimates of similar magnitude and detects no endogeneity in the baseline specification. The association is primarily cross-sectional in nature: destinations with structurally larger Dominican communities import more from the Dominican Republic, while within-country changes in diaspora size over the sample period are too smooth—and, in the underlying data, too infrequently observed—to identify a within effect with precision. By contrast, the diaspora shows no significant association with imports in the baseline PPML specification.

Product-level disaggregation shows positive and significant PPML elasticities for all three major export groups: food and agriculture (0.297), textiles and apparel (0.270), and machinery, electronics, and medical devices (0.193). The point estimates line up with the theoretical prediction that the preference channel matters most for culturally specific goods, although formal tests cannot reject the equality of the three elasticities, so the ordering should be read as suggestive.

This paper makes three contributions. First, it provides origin-country evidence on the diaspora–trade relationship for a small developing economy. The literature is dominated by studies of large developed host countries (e.g., Dunlevy, 2006; Girma & Yu, 2002; Gould, 1994; Head & Ries, 1998; Peri & Requena-Silvente, 2010); a smaller body of work adopts the origin-country perspective, including Ehrhart, Le Goff, Rocher, and Singh (2014) on African exports, Bastos and Silva (2012) on Portuguese firms and emigrants, Murat and Pistoressi (2009) on the Italian diaspora, and Hatzigeorgiou and Lodefalk (2016) on Sweden. None of these covers a Caribbean small open economy, and none combines the origin-country perspective with product-level evidence from an export-processing (*Zona Franca*) sector; this less studied setting is the gap the paper fills. Second, the paper documents a sharp export–import asymmetry: the association is large for exports and absent for imports in the baseline specification, identifying the diaspora as a demand-side force. Seen from the origin country, this mirrors the host-country studies in which import effects typically dominate (Head & Ries, 1998), since in both cases the diaspora draws home-country goods toward the migrants themselves. Third, the paper supplements the descriptive gravity evidence with a Card-style enclave instrument (Card, 2001), bringing shift-share identification to a literature where

¹ *Zonas Francas* (Free Trade Zones) are designated export processing areas in the Dominican Republic where firms operate under special tax and customs regimes. As of 2026, the Dominican Republic has 97 active *Zona Franca* parks with 860 operating firms generating over 200,000 direct jobs (Consejo Nacional de Zonas Francas de Exportación (CNZFE), 2026). *Zona Franca* exports reached a historic high of US\$8,604 million in 2025, of which 73.4 percent was directed to the United States.

it remains rare in origin-country applications.

The remainder of the paper is organized as follows. Section 2 reviews the literature. Section 3 presents the theoretical framework. Section 4 describes the data and empirical strategy. Section 5 presents the results, including the instrumental variables evidence. Section 6 concludes.

2 Literature Review

2.1 The Gravity Model of Trade

The gravity model of trade is the most widely used empirical framework for analyzing bilateral trade flows (Head & Mayer, 2014). The model predicts that bilateral trade between two countries is proportional to their economic sizes and inversely related to the trade costs between them. Tinbergen (1962) first applied the gravity equation to international trade, and Anderson (1979) provided the first rigorous theoretical foundation from a model with constant elasticity of substitution (CES) preferences. The most influential theoretical contribution came from Anderson and van Wincoop (2003), who demonstrated that bilateral trade depends not only on bilateral trade costs but also on each country's trade costs with all other partners—a concept they termed “multilateral resistance.” In the empirical migration-trade literature, the gravity model serves as the natural baseline framework because it already incorporates the key variables, including economic size, distance, language, and colonial ties, that simultaneously affect both trade and migration patterns. Augmenting the gravity equation with a migration variable, as first proposed by Gould (1994), allows researchers to estimate the marginal association of diaspora networks with trade while controlling for the standard determinants of bilateral trade.

2.2 Theoretical Channels: Preference and Information

The theoretical literature identifies two primary channels through which a country's diaspora can affect its bilateral trade flows. The first is the *preference* or nostalgia channel, introduced by Gould (1994). Migrants retain a taste for the goods they consumed in their home country, including food, beverages, and other culturally specific products. As the diaspora in a given host country grows, so does the demand for home country goods, creating export opportunities for firms in the origin country. The preference channel predicts that the diaspora effect should be strongest for differentiated consumer goods, particularly food and agricultural products with a strong cultural or ethnic identity.

The second channel is the *information* or network effect, formalized by Rauch and Trindade (2002) in their study of ethnic Chinese networks in international trade. Migrants possess knowledge of both their home country and host country markets—including language, business practices, legal systems, and consumer preferences—and these informational advantages reduce the transaction costs that would otherwise inhibit trade. Diaspora networks can also provide contract enforcement through community trust and reputation mechanisms. Unlike the preference channel, the information channel affects both exports and imports, and its effects extend beyond consumer goods to manufactured products where market knowledge and business connections facilitate trade.

2.3 Empirical Evidence

A substantial body of empirical research has estimated the diaspora–trade relationship since Gould (1994)'s pioneering study. The evidence is remarkably consistent: across different countries, time periods, and estimation methods, a larger immigrant stock is associated with greater bilateral trade. Head and Ries (1998) found a significant effect of immigration on both Canadian exports and imports, with the import effect roughly three times larger than the export effect. Rauch and Trindade (2002) found that ethnic Chinese networks significantly increased bilateral trade, particularly for differentiated goods where information problems are most severe. Subsequent studies have confirmed these findings in the United Kingdom (Girma & Yu, 2002), US states (Dunlevy, 2006), and Spanish regions (Peri & Requena-Silvente, 2010). The quantitative review by Genc, Gheasi, Nijkamp, and Poot (2012), synthesizing 48 studies conducted between 1994 and 2010, finds that a ten percent increase in the immigrant stock is associated with approximately a 1.5 percent increase in bilateral trade.

The vast majority of these studies examine the relationship from the perspective of large developed host countries. A smaller literature adopts the perspective of the migrants' origin country. Ehrhart et al. (2014) find that African countries' emigrant stocks are associated with higher exports to destination countries, particularly for differentiated goods. Bastos and Silva (2012), using matched firm-level data for Portugal, show that Portuguese firms are more likely to export, and export more, to destinations hosting larger Portuguese emigrant communities. Murat and Pistoiesi (2009) document that the Italian diaspora is associated with both Italian exports and imports,

and Hatzigeorgiou and Lodefalk (2016) provide firm-level evidence for Sweden that foreign-born employees facilitate exports to their birth countries. Relative to this literature, the present paper studies a Caribbean small open economy with an exceptionally concentrated diaspora, examines the export–import margin explicitly, and exploits product-level variation from the *Zona Franca* export-processing sector.

3 Theoretical Framework

3.1 Gravity Equation with Migration

Following Anderson and van Wincoop (2003), bilateral exports from country i to country j satisfy

$$X_{ij} = \frac{Y_i \cdot Y_j}{Y_W} \cdot \left(\frac{t_{ij}}{\Pi_i \cdot P_j} \right)^{1-\sigma}, \quad (1)$$

where Y_i and Y_j are the nominal incomes of the exporting and importing country, Y_W is world income, t_{ij} represents bilateral trade costs, $\sigma > 1$ is the elasticity of substitution between varieties, and Π_i and P_j are the outward and inward multilateral resistance terms. Following Gould (1994) and Rauch and Trindade (2002), the migrant stock enters as an additional determinant of bilateral trade costs alongside the standard proxies, including a regional trade agreement (RTA) indicator:

$$\ln t_{ij} = \delta_1 \ln \text{Dist}_{ij} + \delta_2 \text{ComLang}_{ij} + \delta_3 \text{Colony}_{ij} + \delta_4 \text{RTA}_{ij} + \delta_5 \ln \text{Migrant}_{ij}, \quad (2)$$

where Migrant_{ij} is the stock of individuals born in country i and residing in country j , and $\delta_5 < 0$ captures the trade-cost-reducing role of migrant networks. Since trade costs enter equation (1) with exponent $(1 - \sigma) < 0$, a larger diaspora raises bilateral trade. Log-linearizing, substituting equation (2), and adding a panel time subscript yields the estimating equation

$$\begin{aligned} \ln X_{ijt} = & \beta_0 + \beta_1 \ln \text{Migrant}_{ijt} + \beta_2 \ln \text{GDP}_{it} + \beta_3 \ln \text{GDP}_{jt} + \beta_4 \ln \text{Dist}_{ij} \\ & + \beta_5 \text{ComLang}_{ij} + \beta_6 \text{Colony}_{ij} + \beta_7 \text{CAFTA}_{jt} + \beta_8 \text{EPA}_{jt} + \varepsilon_{ijt}, \end{aligned} \quad (3)$$

where $\beta_1 = (1 - \sigma) \times \delta_5 > 0$ is the *diaspora export elasticity*: a one percent larger Dominican migrant stock in partner country j is associated with β_1 percent higher Dominican exports to j .

Equation (3) differs from equation (1) in three respects that should be made explicit. We measure the nominal incomes Y_i and Y_j by GDP; the change of symbol carries no change of concept. World income Y_W and the outward resistance term Π_i vary only over time in a single-exporter setting, and are absorbed by the constant in the pooled specifications and by the year fixed effects in columns (5) and (6) of Table 2, which is also why $\ln \text{GDP}_{it}$ cannot be reported in those columns. The inward term P_j is destination-specific: it is absorbed by the country fixed effects in columns (2) and (6), and is elsewhere proxied by distance, common language, and colony, so that β_1 may absorb residual destination-level resistance correlated with diaspora size; Section 5.5 addresses this directly. Finally, the generic term RTA_{ij} is replaced by the two agreements that bind for Dominican exports over 2001–2024, so that $\delta_4 \text{RTA}_{ij}$ maps into $\beta_7 \text{CAFTA}_{jt} + \beta_8 \text{EPA}_{jt}$, where CAFTA-DR denotes the Dominican Republic–Central America–United States Free Trade Agreement and EPA the Caribbean Forum (CARIFORUM)–European Union (EU) Economic Partnership Agreement.

One conceptual qualification is in order. Modeling the migrant stock exclusively as a component of t_{ij} is a convenient simplification: the information channel is genuinely a trade-cost channel, but the preference channel operates by shifting destination-country demand toward home-country varieties rather than by lowering the cost of trading them. A fuller treatment would let the diaspora enter both the trade cost function and the preference parameters of the CES aggregator. Because both formulations deliver the same reduced-form prediction—a positive β_1 —we retain the trade-cost formulation for parsimony, while noting that β_1 bundles a cost-side and a demand-side mechanism.

3.2 Channel-Specific Predictions

Although the two channels cannot be separated in the aggregate equation, they generate distinct predictions along two margins that our data can speak to.

The first margin is the *direction of trade*. The preference channel is inherently directional: nostalgia demand by Dominicans abroad raises Dominican exports to their host countries but gives no reason for the Dominican Republic to import more from those countries. The information channel, by contrast, is symmetric: market knowledge and business networks lower transaction costs in both directions, and in host-country studies the associated import

effects are typically at least as large as the export effects (Head & Ries, 1998). A finding that the diaspora is associated with exports but not imports therefore points toward a dominant role for the demand side.

The second margin is the *product composition of exports*. The preference channel should be concentrated in culturally specific consumer goods—in the Dominican case, food and agricultural products such as plantains, cacao, rum, and tropical beverages. The information channel extends to products for which migrants hold no consumption preference but where market access frictions are important; Dominican-owned business networks connected to the *Zona Franca* apparel sector are a natural example. Products traded within vertically integrated multinational supply chains, such as medical devices, should be least sensitive to either channel, since global firms internalize the relevant market knowledge.

3.3 Hypotheses

Based on the theoretical framework, the following hypotheses are tested:

- H1:** A larger Dominican diaspora in a partner country is associated with greater Dominican exports to that country ($\beta_1 > 0$).
- H2:** The diaspora–trade association is stronger for exports than for imports, since the preference channel creates direct demand for Dominican goods abroad.
- H3:** The diaspora export elasticity is largest for food and agricultural products, moderate for textiles and apparel, and smallest for machinery and medical devices.

4 Data and Empirical Strategy

4.1 Data Sources and Sample

Trade data. Bilateral trade data are obtained from the United Nations Comtrade database (United Nations Statistics Division, 2026).² The Dominican Republic is the reporter country. For the product-level analysis, exports are downloaded at the two-digit Harmonized System (HS) level and aggregated into three groups: Food and Agriculture (HS 01–24); Textiles and Apparel (HS 50–63); and Machinery, Electronics, and Medical Devices (HS 84–90). The product-level dataset contains 63,871 country-year-product observations.

Migration data. Data on the stock of Dominican-born migrants abroad are obtained from the UN DESA International Migrant Stock 2024 revision (United Nations, Department of Economic and Social Affairs, 2024),³ which provides estimates at five-year intervals from 1990 onward (plus 2024). The estimation panel uses the 2000–2024 estimates; annual values are obtained by linear interpolation between observed years. The 1990 and 2000 distributions are used to construct the shift-share instrument in Section 5.5.

Gravity variables. Time-invariant bilateral variables—weighted distance, common official language, and colonial relationship—are obtained from the GeoDist database of the Centre d’Études Prospectives et d’Informations Internationales (CEPII) (Mayer & Zignago, 2011).⁴ GDP data for 2001–2024 come from the World Bank’s World Development Indicators (WDI) (World Bank, 2024).⁵

Trade agreements. Two trade agreement dummies are constructed. *CAFTA-DR* equals one when the agreement is in force for a given partner (El Salvador, Guatemala, Honduras, and Nicaragua from 2006; the United States from 2007; Costa Rica from 2009). *EPA* equals one for EU member states from 2009 onward, when the CARIFORUM–EU Economic Partnership Agreement was provisionally applied.⁶

Sample construction. The estimation sample is constructed in three steps. First, the full Comtrade panel covers approximately 160 trade partners. Second, of these, 55 destinations have Dominican-born migrant stock estimates in the UN DESA data. Third, 10 of the 55 are dropped for reasons of data availability, each of which is worth stating explicitly because several of the excluded destinations host sizeable Dominican communities. Four

²United Nations Statistics Division, UN Comtrade Database, 2001–2024, <https://comtradeplus.un.org> (last accessed 12 July 2026).

³United Nations, Department of Economic and Social Affairs, International Migrant Stock 2024, 1990–2024, <https://www.un.org/development/desa/pd/content/international-migrant-stock> (last accessed 12 July 2026).

⁴CEPII, GeoDist database, https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=6 (last accessed 12 July 2026).

⁵World Bank, World Development Indicators, 2001–2024, <https://databank.worldbank.org/source/world-development-indicators> (last accessed 12 July 2026).

⁶The Caribbean Community (CARICOM)–Dominican Republic Free Trade Agreement is not modeled separately: it entered into force provisionally in December 2001, leaving no pre-treatment period in the sample, and it is reciprocal only with CARICOM members outside the estimation sample.

are non-sovereign territories whose merchandise trade is reported within a metropolitan customs territory, so that no separate bilateral series exists: Puerto Rico (42,387 Dominicans in 2024) and the United States Virgin Islands are reported within the United States figures, and Guadeloupe and Martinique within those of France. The diaspora in these territories is therefore embedded in the United States and French observations rather than omitted from the analysis. Curaçao and Sint Maarten are excluded because the CEPII GeoDist database provides no bilateral distance for either: both became separate entities only upon the dissolution of the Netherlands Antilles in 2010, after the database was compiled. UN DESA reports migrant stocks for the two islands separately throughout its vintages, and Comtrade reports them as separate partners from 2011; the pre-2011 Netherlands Antilles aggregate has no counterpart in the migration data and is therefore dropped as well. None of the three series is aggregated with any other partner. Liechtenstein records no bilateral trade with the Dominican Republic. The remaining three—Anguilla, Montserrat, and the British Virgin Islands—lack GDP data in the World Development Indicators.⁷ The resulting estimation sample is an unbalanced panel of 1,064 observations covering 45 partner countries over 2001–2024. These countries are systematically closer to the Dominican Republic (mean distance 4,883 km versus 8,846 km in the full panel), have larger economies (mean GDP \$702 billion versus \$449 billion), and are more likely to share an official language (38 percent versus 14 percent). Moreover, the migration subsample accounts for approximately three-quarters of total Dominican trade, capturing the bilateral relationships that are economically most significant. Table 1 reports descriptive statistics.

Treatment of zeros. The migrant stock enters all specifications as $\ln(1 + \text{Migrant}_{ijt})$. Thirteen country-year observations—Estonia in 2001–2005 and Latvia in scattered years—record a migrant stock of zero and enter the regressions with a value of $\ln(1) = 0$; several further Baltic observations record interpolated stocks below one person. Because stocks in the economically relevant destinations range from the thousands to over 1.4 million, the +1 adjustment is numerically irrelevant except for these marginal observations.⁸ Zero trade flows are handled by the estimators themselves: PPML retains all 1,064 observations with trade in levels, while the log-linear specifications exclude the 23 zero-export (respectively 10 zero-import) observations.

4.2 Empirical Strategy

The baseline specification in equation (3) is estimated using several estimators. *Pooled ordinary least squares* (OLS) exploits both cross-sectional and time-series variation but does not account for unobserved country-specific heterogeneity. The *country fixed effects* (FE) specification includes country dummies α_j that absorb all time-invariant bilateral characteristics; β_1 is then identified solely from within-country variation over time. The *random effects* (RE) specification is also estimated; the Mundlak (Mundlak, 1978) auxiliary regression test is used instead of the standard Hausman test because the latter is unreliable with cluster-robust standard errors and a small number of clusters (Cameron & Miller, 2015); the test result is reported in Section 5.1.

The preferred estimator throughout is PPML, proposed by Santos Silva and Tenreyro (2006). PPML addresses two well-known problems with the log-linear OLS gravity model: (i) Jensen’s inequality implies that OLS is biased under heteroskedasticity when applied to log-linearized gravity equations; and (ii) the log-linear specification requires dropping zero-trade observations, potentially introducing selection bias. PPML estimates the model in multiplicative form, with trade in levels, and is consistent under correct specification of the conditional mean regardless of the true variance function (Head & Mayer, 2014).

Fixed effects structure. With a single exporter, year fixed effects λ_t play a role that deserves emphasis: they absorb Dominican GDP, world income, the outward multilateral resistance term Π_t , common shocks such as the 2008–09 trade collapse and the coronavirus disease 2019 (COVID-19) pandemic, and—because trade and GDP are measured in current US dollars—common nominal growth that would otherwise load onto trending regressors such as the migrant stock. Our preferred cross-sectional specification is therefore PPML with year fixed effects, and the most demanding specification combines country and year fixed effects, identifying β_1 purely from within-country deviations net of common shocks. Importer-year fixed effects, the standard in multi-exporter gravity settings, are infeasible here: with a single exporter they would absorb the migrant stock variable entirely.

All specifications use standard errors clustered at the country level (45 clusters) to account for heteroskedasticity and serial correlation within country-pairs (Cameron & Miller, 2015). The Modified Wald test confirms the presence of heteroskedasticity in the FE residuals ($\chi^2(45) = 1794.38, p < 0.001$), further justifying cluster-robust inference. Because 45 clusters is at the margin of reliable cluster-robust inference, we additionally report wild cluster bootstrap p -values (Cameron, Gelbach, & Miller, 2008) for the key coefficient.

Two caveats apply to the fixed-effects estimates. First, the migration data are observed only at five-year

⁷Individual zero-trade observations are retained: the final panel contains 23 country-years with zero exports and 10 with zero imports, which enter the PPML estimations. Only destinations lacking the data required to estimate the gravity equation are excluded.

⁸This convention also explains the observation at the origin of Figure 1: Latvia’s recorded migrant stock m in 2024 is zero, which maps to zero under $\ln(1 + m)$.

intervals; linear interpolation smooths within-country variation, which attenuates FE estimates and inflates their standard errors. Second, the within-country variation over 2001–2024 is modest relative to the enormous cross-sectional variation in diaspora size, so the panel is fundamentally better suited to identifying cross-sectional than within-country associations. Section 5.5 addresses the endogeneity of the cross-sectional variation directly with a shift-share instrument.

5 Results

5.1 Baseline Export Results

Figure 1 provides a first look at the data, plotting the log of Dominican migrant stock against the log of exports for the 45 countries in the sample in 2024. The positive association is suggestive, but the regression analysis that follows is needed to determine whether it holds after controlling for economic size, distance, language, and trade agreements. Table 2 reports the gravity model estimated for Dominican Republic exports. The coefficient on $\ln(\text{migrant stock})$ is positive across all six specifications, consistent with Hypothesis H1.

In the OLS specification (column 1), the diaspora export elasticity is 0.281, significant at the one percent level ($p = 0.001$; wild cluster bootstrap $p = 0.002$). A ten percent larger Dominican migrant stock in a partner country is associated with 2.8 percent higher Dominican exports to that country. The RE estimate is similar at 0.237 ($p = 0.005$), and the Mundlak test decisively rejects the random effects assumption that the country effects are uncorrelated with the regressors ($\chi^2(4) = 42.98$, $p < 0.001$), cautioning that the cross-sectional variation partly reflects country-level heterogeneity—a concern taken up with the instrumental variables strategy in Section 5.5. The FE estimate is 0.222 and marginally significant ($p = 0.072$).

The preferred PPML estimate (column 4) is 0.484, significant at the one percent level ($p < 0.001$; score bootstrap $p = 0.007$). The larger magnitude relative to OLS reflects PPML’s estimation of the conditional mean of trade in levels, which weights the economically largest flows more heavily, together with its consistency under the heteroskedasticity documented above. Adding year fixed effects (column 5) leaves the estimate essentially unchanged at 0.461 ($p = 0.001$; score bootstrap $p = 0.012$), confirming that the cross-sectional association is not an artifact of common trends, dollar inflation, or global shocks.

The within-country margin. Column 6 reports the most demanding specification, PPML with both country and year fixed effects, in which the elasticity is identified purely from within-country deviations net of common shocks. The point estimate remains positive and of comparable magnitude, 0.357, but is imprecisely estimated ($p = 0.216$; score bootstrap $p = 0.340$). Two remarks put this in context. First, without year fixed effects the country-FE PPML estimate is considerably larger and statistically significant (0.702, $p = 0.003$); the contrast indicates that common nominal growth over 2001–2024 loads onto the trending migrant stock once country intercepts are absorbed, and that year fixed effects are indispensable in this single-exporter setting. Second, the within-country variation available for identification is intrinsically limited: migrant stocks are observed at five-year intervals and interpolated in between, so the within estimates carry little power by construction. We therefore read the evidence as follows: the diaspora–export association is a robust *cross-sectional* regularity—destinations with structurally larger Dominican communities import systematically more from the Dominican Republic—while the within-country evidence is positive but statistically inconclusive. This reading is consistent with both theoretical channels, which operate through consumption habits and business relationships that form gradually and vary far more across destinations than within destinations over two decades.

Magnitudes. The preferred estimates of 0.46–0.48 lie well above the meta-analytic consensus elasticity of roughly 0.15 for a ten percent immigrant-stock increase reported by Genc et al. (2012). Three considerations account for the gap. First, the meta-analysis averages over many fixed-effects and host-country studies whose designs mechanically yield smaller estimates; our own log-linear estimates (0.22–0.28) are much closer to the consensus range, and the PPML–OLS gap primarily reflects PPML’s weighting of the largest flows. Second, the Dominican Republic is an extreme case: its diaspora equals 16 percent of the home population and is heavily concentrated in its main export markets, so the cross-sectional covariation between diaspora and exports is unusually strong. Third, single-origin cross-sectional designs bundle the diaspora with unmodeled bilateral ties; the instrumental variables evidence in Section 5.5 suggests this bundling does not drive the result, but the estimates are best interpreted as an upper range for the association rather than as directly comparable to multi-country panel estimates.

Gravity controls and the single-exporter caveat. Partner GDP enters positively and significantly in most specifications, and the colonial relationship dummy is large and positive, capturing the historically deep economic ties with Haiti and France. Two coefficients in the PPML columns depart from textbook gravity patterns and deserve comment: distance is negative but insignificant (−0.520), and common official language is negative and significant (−1.153). Both reflect the atypical geography of Dominican exports in a single-exporter design. PPML

fits the largest flows, and the dominant destinations—the United States, Haiti, Canada, and Switzerland (the latter driven by gold shipments)—do not share Spanish, while many Spanish-speaking Latin American partners import comparatively little from the Dominican Republic conditional on size and diaspora. With one exporter, these coefficients measure the residual geography of one country’s trade rather than structural trade-cost parameters, and we caution against structural interpretation; importantly, the anomalies are not driven by the United States alone, as both persist when the US is excluded (Section 5.4).

The CAFTA-DR coefficient. CAFTA-DR is positive in OLS (1.614) but negative in the specifications with country fixed effects. The within-country pattern is explained by timing: the agreement’s entry into force for the United States (2007) coincided with the collapse of Dominican textile exports to the US following the 2005 expiry of the Multi-Fibre Arrangement and with the 2008–09 recession. Consistent with this reading, the CAFTA coefficient is positive and significant (+1.82, $p = 0.001$) when the United States is excluded—the agreement is associated with more trade with the Central American partners—and it shrinks to insignificance (−0.22) once partner-specific linear trends are included. The negative within coefficient should therefore be read as the US textile-cycle coinciding with CAFTA’s entry into force, not as evidence that the agreement reduced trade.

5.2 The Export–Import Asymmetry

Hypothesis H2 predicts a stronger diaspora association for exports than for imports. Table 3 reports the import estimations in the same six specifications used for exports in Table 2. In the baseline PPML specification (column 4) the import coefficient is small and insignificant (0.054, $p = 0.241$), in sharp contrast to the export coefficient of 0.484, and it remains small once year fixed effects are added (0.027, $p = 0.579$). The asymmetry, however, should be stated conditionally rather than absolutely: the import association is not uniformly zero. The RE estimate is 0.218 ($p = 0.066$), and the PPML specification with country and year fixed effects yields 0.187 ($p = 0.070$), suggesting a modest import margin once unobserved heterogeneity is absorbed.

The robust statement, which holds in every one of the six specifications, is that the export coefficient exceeds the import coefficient, and dramatically so in the cross-sectional PPML comparisons that carry the most weight (0.484 versus 0.054 in the baseline, and 0.461 versus 0.027 with year fixed effects). This asymmetry is the signature of the preference channel: nostalgia demand raises exports to host countries with no counterpart on the import side, whereas a dominant information channel would generate effects of comparable size in both directions (Head & Ries, 1998). The Dominican diaspora thus appears to operate primarily as a demand-side force.

5.3 Product-Level Results

Table 4 reports the gravity model estimated separately for the three export product groups, in the same six specifications used for aggregate exports in Table 2; a pooled specification interacting the migrant stock with product-group indicators, discussed below, provides the formal comparison of elasticities.

Food and Agriculture (HS 01–24) exhibits the largest diaspora elasticity among the cross-sectional specifications. The OLS estimate is 0.363 ($p = 0.005$) and the PPML estimate is 0.297 ($p < 0.001$), essentially unchanged at 0.286 ($p = 0.001$) once year fixed effects are added. The FE and RE estimates are positive but not statistically significant, consistent with the primarily cross-sectional nature of the association. The pattern accords with the preference channel: Dominican migrants abroad demand ethnic and nostalgia goods—plantains, tropical fruits, cacao, rum, and other culturally specific products—creating export opportunities for Dominican firms.

Textiles and Apparel (HS 50–63) shows a significant association in PPML (0.270, $p = 0.050$; 0.335 with year fixed effects, $p = 0.014$). The OLS estimate is positive but not significant (0.173), and the FE estimate is negative and insignificant. The log-linear specifications lose substantial power at this level because 24 percent of observations (254 out of 1,041) have zero textile exports and are dropped; PPML, which retains all observations, is better suited at this level of disaggregation. The significant PPML result is notable because textiles are not a nostalgia good—Dominican migrants do not demand Dominican-made clothing for cultural reasons. It is instead consistent with the information and network channel: Dominican business networks connected to the *Zona Franca* industrial sector leverage migrant connections to facilitate apparel exports to host-country markets.

Machinery, Electronics, and Medical Devices (HS 84–90) shows the smallest point estimate among the cross-sectional specifications. The PPML estimate is 0.193 ($p = 0.013$) and 0.121 with year fixed effects ($p = 0.088$), while the log-linear estimates are smaller and at best marginally significant (OLS 0.130, $p = 0.061$; FE −0.089 and RE 0.018, both insignificant). This is consistent with *Zona Franca* manufactured exports in these sectors being organized primarily through multinational supply chains and foreign direct investment—medical device exports to the United States, for example, flow through vertically integrated global firms rather than migrant-mediated business relationships.

The within-country margin. Column (6) applies the country-and-year fixed effects specification to each group. Food (0.119) and textiles (−0.115) are insignificant, and machinery is negative and significant at five percent (−0.765). We do not read the last as evidence that the diaspora reduces machinery exports: identification rests on year-to-year deviations in interpolated stocks, and machinery and medical device exports originate in a small number of large *Zona Franca* plants whose output tracks investment and supply-chain decisions rather than destination demand. As in the aggregate, the product-level evidence is cross-sectional.

Testing the equality of elasticities. The separate regressions in Table 4 do not test whether the elasticities differ from one another. We therefore estimate a pooled PPML model on the stacked product-level panel (3,123 observations) in which the migrant stock—and every gravity control—is interacted with product-group indicators. The group-specific migrant elasticities reproduce those in column (4) of Table 4 (0.297, 0.270, 0.193, each individually significant). Pairwise Wald tests, however, cannot reject equality for any pair (food vs. textiles, $p = 0.835$; food vs. machinery, $p = 0.287$; textiles vs. machinery, $p = 0.541$), nor jointly ($\chi^2(2) = 1.21$, $p = 0.546$). The honest summary of the product-level evidence is therefore twofold. The diaspora association is positive and statistically significant for *all three* product groups in the cross-sectional specifications, including manufactured goods for which the preference channel is implausible—evidence that the information channel operates broadly. The *ordering* of the point estimates matches the prediction of Hypothesis H3, but the differences between groups are not statistically distinguishable at conventional levels, so H3’s ranking receives only suggestive support.

5.4 Robustness

Table 5 subjects the export elasticity to a battery of robustness checks. Panel A reports the baseline PPML specification; Panel B repeats each check in the most demanding specification with country and year fixed effects.

Benchmark years only. Restricting the sample to the five years in which UN DESA directly observes migrant stocks (2005, 2010, 2015, 2020, and 2024) eliminates any influence of interpolated values. The export elasticity is 0.622 ($p < 0.001$), somewhat above the baseline of 0.484, indicating that interpolation attenuates rather than inflates the estimate.

Lagged migration. Replacing the contemporaneous migrant stock with its five-year lag addresses simple reverse-causality concerns, since exports in year t cannot determine the migrant stock observed five years earlier. The coefficient of 0.479 ($p < 0.001$) is virtually identical to the baseline.

Excluding dominant partners. Excluding the United States—the largest trading partner and host to the largest diaspora community—yields an elasticity of 0.503 ($p < 0.001$); excluding Spain yields 0.489 ($p < 0.001$), and excluding both yields 0.490 ($p = 0.002$). The cross-sectional association is therefore not an artifact of the two dominant bilateral relationships but holds across the remaining forty-three partners.

Panel B shows the same pattern, with less precision, in the specification with country and year fixed effects: the point estimates remain positive and of comparable or larger magnitude throughout (0.35–0.92), but the within-country estimates are generally not significant at conventional levels, for the power reasons discussed in Section 5.1. Notably, the within-country point estimate is essentially unaffected by excluding the United States (0.428 versus 0.357 in the full sample), so the weak within evidence is a matter of precision, not of a single dominant observation.

Finally, because 45 clusters is at the margin of reliable cluster-robust inference (Cameron et al., 2008), we compute wild (respectively score) cluster bootstrap p -values for the key coefficient: $p = 0.002$ for OLS, $p = 0.007$ for baseline PPML, $p = 0.362$ for linear FE with year effects, and $p = 0.340$ for PPML with country and year fixed effects. Bootstrap inference thus confirms both halves of the conclusion: the cross-sectional association is significant at the one percent level, and the within-country estimates are statistically inconclusive.

5.5 Instrumental Variables Evidence

The gravity estimates above are descriptive: the Mundlak test indicates that diaspora size covaries with country-level heterogeneity, and unobserved bilateral ties could in principle drive both migration and trade. To probe whether such endogeneity distorts the estimates, we construct a shift-share (“enclave”) instrument in the tradition of Card (2001). The logic is that migrants settle where compatriots already live, so the historical distribution of the diaspora predicts its current distribution for reasons unrelated to subsequent bilateral trade shocks.

Design. The predicted migrant stock for destination j in year t is

$$\hat{M}_{jt} = s_{j,1990} \times M_{-j,t}, \quad (4)$$

where $s_{j,1990}$ is destination j ’s share of the total Dominican diaspora in 1990, taken from the earliest UN DESA vintage and predating the estimation sample by more than a decade, and $M_{-j,t}$ is the aggregate Dominican migrant stock in year t *excluding destination j* (leave-one-out). The leave-one-out construction matters here: the United

States held 88.25 percent of the 1990 diaspora, so without it the aggregate shift for the US would be dominated by the US's own stock. The instrument is $z_{jt} = \ln(1 + \hat{M}_{jt})$, matching the transformation of the endogenous regressor. As an overidentification check we construct a second instrument from the 2000 shares.

Results. Table 6 reports the results. The first stage is strong: the instrument enters with a coefficient of 0.72 ($t = 9.6$), and the Kleibergen–Paap F statistics are 91.3 (1990 shares), 77.6 (2000 shares), and 111.5 (both), far above conventional weak-instrument thresholds. The two-stage least squares (2SLS) estimates of the export elasticity are 0.401, 0.366, and 0.381 across the three instrument sets, each significant at the one percent level ($p < 0.001$ in all three cases)—slightly *above* the OLS estimate of 0.281 on the identical sample, a pattern consistent with attenuation from measurement error in the interpolated stocks rather than with upward endogeneity bias. Weak-instrument-robust Anderson–Rubin tests reject a zero elasticity at the one percent level in all cases, and in the overidentified specification the Hansen J test does not reject instrument validity ($J = 0.387$, $p = 0.534$).

Because the preferred estimator is PPML, we also implement a control-function (CF) version (Wooldridge, 2015): the first-stage residual is added to the Poisson regression, and standard errors are obtained from a cluster bootstrap of the full two-step procedure (499 replications). The elasticity is 0.539 (bootstrap standard error 0.235, $p = 0.022$), close to the baseline PPML estimate of 0.484, and the coefficient on the first-stage residual—a direct test of the endogeneity of the migrant stock—is small and insignificant (-0.147 , $p = 0.677$).

Interpretation and caveats. The instrument addresses reverse causality and time-varying bilateral shocks: current trade cannot affect the 1990 settlement pattern, and aggregate emigration growth is driven by origin-country conditions rather than destination-specific trade opportunities. It is less powerful against deep historical confounding: the forces that placed Dominicans in particular destinations by 1990 could be correlated with durable bilateral ties that independently favor trade (Goldsmith-Pinkham, Sorkin, & Swift, 2020). Colonial relationships and common language—the most obvious such ties—are controlled throughout, and the Hansen test detects no misspecification, but the exclusion restriction ultimately rests on the assumption that the residual historical settlement pattern affects 2001–2024 exports only through the current diaspora. We therefore present the instrumental variables results as corroborating, rather than replacing, the descriptive gravity estimates: across every identification approach—cross-sectional PPML, year-fixed-effects PPML, lagged stocks, and the shift-share instrument—the diaspora export elasticity lies in a band of roughly 0.36 to 0.54, and no approach suggests that endogeneity inflates the baseline estimate.

6 Conclusion

This paper examined the association between the Dominican diaspora and Dominican Republic exports using an augmented gravity model with panel data covering 45 partner countries over 2001–2024. The preferred PPML estimate of the diaspora export elasticity is 0.484, essentially unchanged at 0.461 when year fixed effects absorb common shocks, and stable across a battery of robustness checks including the exclusion of the United States. A shift-share instrumental variables strategy based on the 1990 distribution of the diaspora yields estimates of similar magnitude and detects no endogeneity, corroborating the descriptive evidence. By contrast, the diaspora shows no significant association with imports in the baseline specification; across every specification the export coefficient exceeds the import coefficient, identifying the diaspora as primarily a demand-side force. The association is predominantly cross-sectional: destinations with structurally larger Dominican communities import systematically more from the Dominican Republic, while the within-country evidence is positive but imprecise, consistent with preference and network channels that are structural and slow-moving.

Product-level disaggregation shows positive and significant PPML elasticities for all three major export groups—food and agriculture (0.297), textiles and apparel (0.270), and machinery and medical devices (0.193). The ordering matches the theoretical prediction that culturally specific goods respond most, but formal tests cannot reject equality of the elasticities, so the sharper conclusion is that the association extends beyond nostalgia goods to manufactured exports, indicating that the information and network channel operates broadly alongside the preference channel.

Three policy implications follow, with the caveat that they extrapolate from associations rather than experimentally identified effects. First, policies that lower transaction costs for food exporters targeting diaspora markets—trade facilitation programs, export promotion through diaspora networks, and product certification that meets destination-market standards—could reinforce the preference channel. Second, programs that connect Dominican *Zona Franca* producers with diaspora business networks abroad could complement existing trade agreements like CAFTA-DR. Third, for machinery and medical devices, trade facilitation and foreign direct investment policies are likely more relevant than diaspora engagement. More broadly, because the diaspora–trade association is structural and cumulative rather than driven by short-run changes in migrant stocks, the trade benefits associated with emigration accrue over the long run, underscoring the potential value of sustained diaspora engagement policies

such as diaspora trade directories and diaspora bond instruments.

Several limitations remain. The migration data are observed at five-year intervals and interpolated at intermediate years, which limits the power of within-country comparisons; the shift-share instrument addresses reverse causality and time-varying shocks but cannot fully rule out deep historical confounding; and the estimation sample of 45 countries, while covering 74 percent of Dominican trade, over-represents nearby, larger, and Spanish-speaking partners. Future research could extend the analysis to trade in services, particularly tourism, and to comparative studies with other Caribbean countries that have large diasporas relative to their populations.

Declarations

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Data availability. This study uses publicly available secondary data. Bilateral trade data are from the United Nations Comtrade Database (<https://comtradeplus.un.org>); migrant stock data from the United Nations, Department of Economic and Social Affairs, International Migrant Stock 2024 (<https://www.un.org/development/desa/pd/content/international-migrant-stock>); gross domestic product data from the World Bank's World Development Indicators (<https://databank.worldbank.org/source/world-development-indicators>); and bilateral distance, common language, and colonial relationship data from the CEPII GeoDist database (https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=6). All sources were last accessed on 12 July 2026. The constructed panel dataset and the Stata code that reproduce all tables and figures are available from the corresponding author on request.

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Tables and Figures

Table 1 Descriptive statistics for the full trade sample and the migration subsample, 2001–2024

Variable	Obs.	Mean	Std. Dev.	Min	Max
<i>Panel A: Full Trade Sample (N = 3,730, ≈160 countries)</i>					
Total trade (USD mill.)	3,730	448	3,190	0.000002	82,000
Exports (USD mill.)	3,730	96.9	873	0	30,500
Imports (USD mill.)	3,730	351	2,410	0	51,600
GDP partner (USD bill.)	3,730	449	1,800	0.021	28,800
GDP Dom. Rep. (USD bill.)	3,730	65.4	29.1	21.4	124
Distance (km)	3,710	8,846	4,428	254	18,413
Common language	3,710	0.14	0.35	0	1
Colony	3,710	0.01	0.11	0	1
<i>Panel B: Migration Subsample (N = 1,064, 45 countries, 2001–2024)</i>					
Exports (USD mill.)	1,064	292	1,610	0	30,500
Imports (USD mill.)	1,064	887	4,200	0	51,600
Migrant stock	1,064	28,607	156,815	0	1,483,418
GDP partner (USD bill.)	1,064	702	2,720	0.359	28,800
GDP Dom. Rep. (USD bill.)	1,064	64.5	29.2	21.4	124
Distance (km)	1,064	4,883	3,504	254	16,080
Common language	1,064	0.38	0.49	0	1
Colony	1,064	0.02	0.15	0	1
CAFTA-DR	1,064	0.10	0.30	0	1
EPA	1,064	0.23	0.42	0	1
Exports food (USD mill.)	1,041	31.0	149	0	1,776
Exports textiles (USD mill.)	1,041	28.1	168	0	2,176
Exports machinery (USD mill.)	1,041	35.5	238	0	2,824

Source: United Nations Statistics Division, UN Comtrade Database, 2001–2024 (<https://comtradeplus.un.org/>); United Nations, Department of Economic and Social Affairs, International Migrant Stock 2024, 1990–2024 (<https://www.un.org/development/desa/pd/content/international-migrant-stock>); World Bank, World Development Indicators, 2001–2024 (<https://databank.worldbank.org/source/world-development-indicators>); CEPII, GeoDist database (https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=6). All last accessed 12 July 2026.

Notes: All trade values and GDP reported in millions (mill.) and billions (bill.) of current US dollars. Migrant stock is the number of Dominican-born individuals residing in the partner country. Panel A includes all country-year pairs with non-missing trade data. Panel B restricts to countries with available UN DESA migration data and recorded bilateral trade. Thirteen country-year observations in Panel B (Estonia 2001–2005 and Latvia in scattered years) record a migrant stock of zero; the migrant stock enters all regressions as $\ln(1 + m)$, where m is the migrant stock, so these observations are retained.

Table 2 The effect of the Dominican diaspora on exports

	(1) OLS	(2) FE	(3) RE	(4) PPML	(5) PPML	(6) PPML
ln(migrant stock)	0.281*** (0.080)	0.222* (0.121)	0.237*** (0.084)	0.484*** (0.126)	0.461*** (0.140)	0.357 (0.289)
ln(GDP Dom. Rep.)	0.809*** (0.243)	1.151*** (0.196)	1.097*** (0.167)	0.540** (0.211)		
ln(GDP partner)	0.718*** (0.137)	0.766*** (0.211)	0.783*** (0.162)	0.406** (0.178)	0.399** (0.180)	−0.025 (0.377)
ln(distance)	−1.645*** (0.394)		−1.790*** (0.375)	−0.520 (0.449)	−0.536 (0.463)	
Common language	0.114 (0.327)		0.462 (0.403)	−1.153*** (0.308)	−1.151*** (0.322)	
Colony	2.037*** (0.647)		1.774*** (0.687)	2.299*** (0.577)	2.242*** (0.578)	
CAFTA-DR	1.614*** (0.338)	−0.526** (0.224)	−0.295 (0.210)	−0.612** (0.296)	−0.413 (0.386)	−1.283*** (0.249)
EPA	−0.065 (0.557)	−0.400 (0.275)	−0.367 (0.270)	−1.317** (0.608)	−1.178* (0.663)	−0.714** (0.306)
Observations	1,041	1,041	1,041	1,064	1,064	1,064
R^2 / Pseudo- R^2	0.679	0.373		0.920	0.950	0.980
Country FE	No	Yes	No	No	No	Yes
Year FE	No	No	No	No	Yes	Yes

Notes: OLS = ordinary least squares; FE = fixed effects; RE = random effects; PPML = Poisson pseudo-maximum likelihood; CAFTA-DR = Dominican Republic–Central America–United States Free Trade Agreement; EPA = CARIFORUM–European Union Economic Partnership Agreement. Dependent variable: ln(exports) in columns (1)–(3); exports in levels in columns (4)–(6). Cluster-robust standard errors at the country level (45 clusters) in parentheses. Time-invariant variables (distance, common language, colony) are absorbed by country fixed effects in columns (2) and (6); ln(GDP Dom. Rep.) is absorbed by year fixed effects in columns (5) and (6), since the Dominican Republic is the single exporter. Constants included but not reported. The log specifications drop 23 zero-export observations; PPML retains all observations. Wild (score) cluster bootstrap p -values for ln(migrant stock): 0.002 in column (1), 0.007 in column (4), 0.012 in column (5), 0.340 in column (6). Without year fixed effects, the country-FE PPML estimate is 0.702 ($p = 0.003$); see Section 5.1. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 3 The effect of the Dominican diaspora on imports

	(1) OLS	(2) FE	(3) RE	(4) PPML	(5) PPML	(6) PPML
ln(migrant stock)	0.077 (0.081)	0.194 (0.221)	0.218* (0.118)	0.054 (0.046)	0.027 (0.050)	0.187* (0.103)
Observations	1,054	1,054	1,054	1,064	1,064	1,064
Country FE	No	Yes	No	No	No	Yes
Year FE	No	No	No	No	Yes	Yes

Notes: Dependent variable: ln(imports) in columns (1)–(3); imports in levels in columns (4)–(6). Columns (1)–(6) correspond to the specifications of the same number in Table 2; all regressions include the full set of gravity controls, subject to the same absorption rules. Cluster-robust standard errors at the country level (45 clusters) in parentheses. Constants included but not reported. The log specifications drop 10 zero-import observations; PPML retains all observations. In every column the import coefficient on ln(migrant stock) lies below the corresponding export coefficient in Table 2. PPML with country fixed effects but no year effects yields 0.279 ($p = 0.006$). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 4 The effect of the Dominican diaspora on exports by product group

	(1) OLS	(2) FE	(3) RE	(4) PPML	(5) PPML	(6) PPML
<i>Panel A: Food and Agriculture (HS 01–24)</i>						
ln(migrant stock)	0.363*** (0.129)	0.132 (0.264)	0.187 (0.149)	0.297*** (0.084)	0.286*** (0.083)	0.119 (0.168)
Observations	1,008	1,008	1,008	1,041	1,041	1,041
<i>Panel B: Textiles and Apparel (HS 50–63)</i>						
ln(migrant stock)	0.173 (0.144)	−0.393 (0.271)	0.052 (0.216)	0.270** (0.137)	0.335** (0.136)	−0.115 (0.356)
Observations	787	787	787	1,041	1,041	1,041
<i>Panel C: Machinery, Electronics, and Medical Devices (HS 84–90)</i>						
ln(migrant stock)	0.130* (0.069)	−0.089 (0.121)	0.018 (0.063)	0.193** (0.078)	0.121* (0.071)	−0.765** (0.339)
Observations	864	864	864	1,041	1,041	1,041
Country FE	No	Yes	No	No	No	Yes
Year FE	No	No	No	No	Yes	Yes
<i>Equality of PPML elasticities (pooled interacted model, N = 3,123):</i>						
Food = Textiles: $p = 0.835$; Food = Machinery: $p = 0.287$; Textiles = Machinery: $p = 0.541$						
Joint equality: $\chi^2(2) = 1.21$, $p = 0.546$						

Notes: Product groups are identified using UN Comtrade HS 2-digit classification data. Dependent variable: ln(exports) by product group in columns (1)–(3); exports in levels in columns (4)–(6). Each panel shows only the coefficient on ln(migrant stock) with its cluster-robust standard error; all regressions include the full set of gravity controls (partner GDP, Dominican Republic GDP, distance, common language, colony, CAFTA-DR, EPA) and a constant, subject to the absorption rules of Table 2. Columns (1)–(6) correspond to the specifications of the same number in Table 2. PPML retains zero-export observations; log specifications drop them. The equality tests are Wald tests from a pooled PPML model on the stacked product-level panel in which the migrant stock and all gravity controls are interacted with product-group indicators; the group-specific elasticities in that model reproduce those in column (4). On column (6), see Section 5.3. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 5 Robustness of the diaspora export elasticity

	(1) Baseline	(2) Benchmark years	(3) Lagged migration	(4) Excl. US	(5) Excl. Spain	(6) Excl. US & Spain
<i>Panel A: Baseline PPML</i>						
ln(migrant stock)	0.484*** (0.126)	0.622*** (0.156)	0.479*** (0.119)	0.503*** (0.144)	0.489*** (0.134)	0.490*** (0.157)
Observations	1,064	222	839	1,040	1,040	1,016
<i>Panel B: PPML with country and year fixed effects</i>						
ln(migrant stock)	0.357 (0.289)	0.924 (0.562)	0.507 (0.316)	0.428 (0.302)	0.350 (0.294)	0.418 (0.314)
Observations	1,064	222	839	1,040	1,040	1,016

Notes: Dependent variable: exports in levels. All regressions include the full set of gravity controls from Table 2. Column (2) restricts the sample to years in which UN DESA directly observes migrant stocks (2005, 2010, 2015, 2020, 2024). Column (3) replaces the contemporaneous migrant stock with its five-year lag. Columns (4)–(6) exclude the indicated partners; the associated p -values on ln(migrant stock) are < 0.001 , < 0.001 , and 0.002 respectively. Cluster-robust standard errors at the country level (45 clusters) in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 6 Shift-share instrumental variables estimates

	(1) OLS	(2) 2SLS 1990 shares	(3) 2SLS 2000 shares	(4) 2SLS both	(5) CF-PPML 1990 shares
ln(migrant stock)	0.281*** (0.080)	0.401*** (0.106)	0.366*** (0.101)	0.381*** (0.100)	0.539** (0.235)
First-stage residual					-0.147 (0.352)
Kleibergen–Paap F		91.3	77.6	111.5	
Anderson–Rubin test (p)		0.000	0.000	0.000	
Hansen J (p)				0.534	
Observations	1,041	1,041	1,041	1,041	1,064

Notes: 2SLS = two-stage least squares; CF-PPML = control-function Poisson pseudo-maximum likelihood. The instrument interacts destination shares of the 1990 (respectively 2000) Dominican diaspora, from the corresponding UN DESA vintages, with the leave-one-out aggregate Dominican migrant stock in year t ; the United States accounts for 88.25 percent of the 1990 diaspora. Dependent variable: $\ln(\text{exports})$ in columns (1)–(4), estimated on the positive-exports sample; exports in levels in column (5). All regressions include the full set of gravity controls from Table 2. The p -values on $\ln(\text{migrant stock})$ are < 0.001 in columns (1)–(4) and 0.022 in column (5). Column (5) reports the control-function PPML estimator: the first-stage residual is added to the Poisson regression, and standard errors are obtained from a cluster bootstrap of the two-step procedure (499 replications). The insignificant first-stage residual indicates no detectable endogeneity of the migrant stock. Standard errors clustered at the country level (45 clusters) in parentheses; the Hansen J statistic is computed with the colony dummy partialled out. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

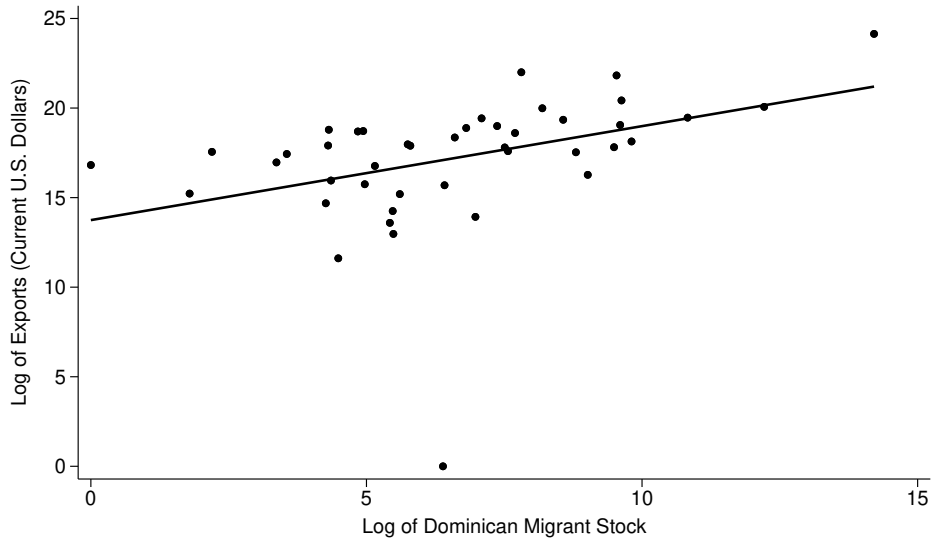


Fig. 1 Dominican Diaspora and Export Flows by Destination, 2024. *Note:* The migrant stock is plotted as $\ln(1 + m)$, where m is the number of Dominican-born residents in the destination; the observation at the origin (Latvia) corresponds to a recorded stock of zero. Data for 2024 from United Nations, Department of Economic and Social Affairs, International Migrant Stock 2024 (<https://www.un.org/development/desa/pd/content/international-migrant-stock>), and United Nations Statistics Division, UN Comtrade Database (<https://comtradeplus.un.org>); both last accessed 12 July 2026