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**Final Project:**  
**Replication**

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# Contents

<b>Introduction</b>	<b>1</b>
<b>1 Pure Replication</b>	<b>1</b>
<b>2 Cross-continent Analysis</b>	<b>3</b>
<b>3 Why and Where to Migrate? An Evidence from Brazilian Expats</b>	<b>5</b>
3.1 The Gravity Model - Poisson Pseudo Maximum Likelihood . . . . .	5
3.1.1 Linguistic Distance . . . . .	6
3.1.2 Cultural Proximity . . . . .	7
3.1.3 Mobility Friction . . . . .	7
3.1.4 General Policy Restrictiveness . . . . .	8
3.1.5 Network Effects . . . . .	8
3.1.6 Political Instability . . . . .	9
3.2 Final Remarks . . . . .	10
<b>References</b>	
<b>Appendix</b>	
Part 1 . . . . .	
Part 2 . . . . .	
Part 3 . . . . .	

## Introduction

This study investigates global inequality of opportunity through a comprehensive three-part analysis that builds upon Milanovic (2015) seminal work on how location determines individual income prospects. The research examines both the theoretical foundations and empirical manifestations of what Milanovic terms “citizenship premiums”, the substantial income advantages that accrue to individuals solely based on their country of residence, independent of personal characteristics or effort.

The analysis proceeds through three interconnected components that collectively demonstrate how geographical circumstances create systematic inequalities and shape individual migration decisions. Part 1 provides a pure replication of Milanovic’s original findings using the World Income Distribution database, confirming that country-level factors explain between 65-93% of global income variation. This replication establishes the empirical foundation for understanding how location dominates individual characteristics in determining economic outcomes.

Building upon this foundation, Part 2 extends the analysis through a continental comparison that reveals how geographical circumstances translate into economic disadvantages. The cross-continental analysis demonstrates that South America exhibits GDP per capita levels approximately four times lower than North America, creating substantial “location premiums” that represent entirely circumstantial constraints on individual income potential.

Part 3 completes the analytical framework by examining how individuals respond to these location-based opportunities through migration decisions. Using Brazilian expatriate data across 101 destination countries, this section employs a gravity model approach to analyze how citizenship premiums interact with various barriers and facilitating factors to shape migration patterns. The analysis reveals that while income differentials serve as the primary driver of migration decisions, the ability to access citizenship premiums is significantly constrained by linguistic barriers and facilitated by cultural connections and network effects.

The integrated analysis demonstrates that global inequality of opportunity operates through multiple interconnected mechanisms. Location determines available economic opportunities, creating the foundation for migration incentives identified by Milanovic. However, the realization of these opportunities depends on individual and institutional factors that create unequal access to citizenship premiums across different populations.

The Brazilian case study is particularly illuminating given Brazil’s intermediate position in the global income distribution, occupying approximately the 50th percentile globally. This positioning allows examination of both emigration incentives toward higher-income destinations and immigration potential from lower-income regions, providing insights into how citizenship premiums operate across the entire spectrum of global inequality.

Finally, all code and data files used can be found at the following github repository: [Milanovic-2015 replication](#)

## 1 Pure Replication

The replication of Milanovic (2015) seminal work on global inequality of opportunity was conducted through a comprehensive translation of the original Stata code to R, maintaining

full fidelity to the author’s methodological approach while leveraging R’s analytical capabilities. The original dataset, `final08_1.RData`, containing the World Income Distribution (WYD) database, was directly imported and processed using R’s native data manipulation functions. All statistical procedures, including regression analyses, data transformations, and variable constructions, were meticulously converted from Stata syntax to R equivalents, ensuring that each computational step replicated the exact procedures outlined in the original paper. The translation process involved careful attention to differences in statistical software implementations, particularly in handling missing values, population weights, and regression specifications. R packages such as `dplyr` for data manipulation, `estimatr` for robust standard errors, and `fastDummies` for categorical variable encoding were employed to maintain analytical consistency with the original Stata implementation.

The replication successfully reproduced all key results from Milanovic’s original analysis with remarkable precision. Table 1, examining how income depends on circumstances, was replicated exactly, showing that country dummies explain between 65.7% and 73.3% of income variation depending on whether population weights are applied. The coefficients for GDP per capita and average years of schooling matched the original results precisely, with GDP per capita coefficients ranging from 0.868 to 1.013 across different specifications. Similarly, the comprehensive ventile analysis presented in Table 3 was successfully replicated, demonstrating that country-level GDP per capita explains between 87.2% and 93.3% of income variation across all twenty global income classes. The consistency of these results across both unweighted and population-weighted specifications confirms the robustness of Milanovic’s original findings and validates the accuracy of our R implementation.

The World Income Distribution (WYD) database represents a comprehensive compilation of household survey data from 118 countries, covering approximately 93.9% of the global population in 2008. The dataset contains income information organized into percentiles for each country, where each percentile represents 1% of the national population ranked by income. Key variables include real annual per capita income in PPP dollars (`inc`), country identifiers (`contcod`), income percentiles (`group`), GDP per capita (`gdpppp`), population weights (`pop`), and Gini coefficients measuring within-country inequality. The dataset’s construction involved harmonizing household surveys conducted primarily between 2007 and 2009, with income values adjusted to 2008 purchasing power parity to ensure cross-country comparability. This methodological approach allows for both within-country and between-country income comparisons, making it uniquely suited for analyzing global inequality of opportunity.

Figure 1.1 provides a striking visualization of global income inequality by plotting income distributions across five major economies: Brazil, China, Germany, India, and Russia. The graph employs a logarithmic scale on the y-axis to accommodate the vast income differences, ranging from approximately \$100 to \$50,000 in PPP terms. Each country’s income distribution is represented by a curve connecting income levels from the 1st to the 100th percentile, with specific markers highlighting the 1st, 25th, 50th, 75th, and 100th percentiles. The most compelling feature of this visualization is the horizontal dashed line representing Germany’s poorest percentile, which demonstrates that even the poorest Germans earn more than substantial portions of the middle class in other countries. This stark comparison illustrates Milanovic’s core finding about the overwhelming importance of location in determining individual income prospects.

Table 1 systematically examines how individual income depends on various circumstances through six different regression specifications. The analysis compares individual viewpoint (unweighted) regressions with world-as-it-is (population-weighted) approaches, using GDP per capita, average years of schooling, and country dummies as explanatory variables. The results consistently demonstrate that country-level factors, particularly GDP per capita, are the dominant determinants of individual income. When country dummies are included, they explain approximately two-thirds to three-quarters of income variation, highlighting the paramount importance of citizenship or location. The negative coefficients on Gini coefficients across specifications suggest that higher within-country inequality is associated with lower average incomes, controlling for other country characteristics. These findings provide empirical evidence for Milanovic’s theoretical framework regarding the primacy of location in global income determination.

Table 3 extends the analysis through a comprehensive ventile-based examination, dividing the global population into twenty income groups of 5% each and running separate regressions for each ventile. This approach allows for investigation of whether the importance of country-level factors varies across different positions in the global income distribution. The results reveal remarkably consistent patterns across all income classes, with GDP per capita coefficients ranging from 0.769 to 1.045 and adjusted R-squared values consistently exceeding 0.87. The stability of these relationships across ventiles suggests that location matters equally for individuals regardless of their position in the global income hierarchy. The high explanatory power achieved in these regressions underscores the fundamental role of country characteristics in determining individual economic outcomes, supporting Milanovic’s central thesis that global inequality is primarily driven by between-country rather than within-country differences. The weighted specifications generally show slightly higher explanatory power and larger GDP coefficients, reflecting the greater representation of populous countries in the global income distribution analysis.

## 2 Cross-continent Analysis

Following Milanovic (2015) framework for analyzing global inequality of opportunity, the continental comparison reveals fundamental disparities in economic circumstances that are largely beyond individual control, creating systematic migration incentives. The analysis employs Milanovic’s conceptualization that individual income is determined by circumstances (factors beyond personal control) versus effort, with location of birth being a primary circumstance affecting life outcomes.

The GDP per capita analysis across continents demonstrates the substantial role of geographical circumstances in determining economic opportunities. Consistent with Milanovic’s findings on the importance of country of residence, North America exhibits GDP per capita levels exceeding 30,000 USD, while South America reaches approximately 8,000 USD. This represents a location premium of nearly 4:1, illustrating what Milanovic terms the “citizenship premium”, the income advantage derived purely from being born in a more prosperous region. Europe’s intermediate position with GDP per capita around 20,000 USD further supports the hierarchical nature of global economic geography identified in the original research.

The per capita income distributions reinforce Milanovic's core finding that "where you live" is more important than "what you do" for determining individual income. The continental income analysis reveals that average incomes in North America and Europe substantially exceed those in South America, creating what the author describes as location-based inequality of opportunity. For Brazilian individuals, this represents a fundamental constraint on income potential that is entirely circumstantial rather than related to personal characteristics or effort.

Milanovic's emphasis on inequality of opportunity finds particular relevance in the Gini coefficient analysis across continents. South America exhibits the highest inequality levels globally, with Gini coefficients exceeding 0.5, indicating that within-country inequality compounds the between-country inequality documented in the paper. This creates a dual disadvantage for South American residents: lower absolute income opportunities compared to developed regions, and higher relative inequality within their own societies. Following Milanovic's framework, this represents both absolute and relative dimensions of inequality of opportunity.

The income distribution by continental percentiles provides empirical support for Milanovic's argument about the dominance of location in determining global income position. The analysis demonstrates that individuals in the lower percentiles of North American and European income distributions often exceed the income levels of upper percentiles in other continents. This pattern directly supports the paper's central thesis that circumstances, particularly location of birth, are primary determinants of global income inequality.

From the perspective of global inequality of opportunity, these continental disparities create systematic migration incentives that align with Milanovic's theoretical predictions. Brazilian individuals face circumstances that limit their income potential purely based on location, independent of personal attributes or effort levels. Migration to higher-income regions represents a mechanism for overcoming circumstantial disadvantages, transforming what Milanovic identifies as "unfair" location-based inequality into improved economic opportunities.

The continental analysis reveals the specific mechanisms through which location affects life outcomes, as emphasized throughout Milanovic's research. Higher GDP per capita in destination regions translates to better institutional frameworks, more productive economic systems, and superior public goods provision. Lower inequality in developed regions, particularly Europe, indicates more equitable opportunity structures that provide broader access to economic advancement regardless of family background.

These findings establish the empirical foundation for understanding Brazilian migration decisions within Milanovic's inequality of opportunity framework. The substantial location premiums documented across continents create powerful economic incentives for migration, representing rational responses to circumstantial disadvantages. For Brazilian individuals, particularly those from middle and lower-income backgrounds, migration offers the potential to overcome geographical constraints on income potential and access more equitable opportunity structures.

The continental analysis thus demonstrates how Milanovic's theoretical insights about the primacy of location in determining global inequality translate into concrete migration incentives. The systematic disadvantages faced by South American residents, purely due to circumstances of birth location, provide strong justification for migration as a strategy

for improving life outcomes. This sets the foundation for examining how individual characteristics interact with these location-based opportunity structures to influence migration decisions, as explored in the subsequent analysis of Brazilian migration determinants.

### 3 Why and Where to Migrate? An Evidence from Brazilian Expats

This section examines Brazilian migration patterns through the theoretical lens established by Milanovic (2015) on global inequality of opportunity, specifically analyzing how citizenship premiums and locational income advantages influence migration decisions. Building upon the understanding that location can provide income advantages ranging from 2-fold to 20-fold as demonstrated in the original paper, we investigate which destinations Brazilian expatriates select and what factors beyond pure income differentials influence these choices.

The analysis is particularly relevant given Brazil's position in the global income distribution. As shown in our previous analysis, Brazil occupies approximately the 50th percentile of the global income distribution, meaning Brazilian nationals face substantial potential citizenship premiums from migrating to higher-income countries while simultaneously representing an attractive destination for migrants from lower-income regions. This intermediate position makes Brazil an ideal case study for understanding how individuals respond to the locational income advantages identified by Milanovic.

Our empirical approach employs a gravity model framework to analyze the determinants of Brazilian expatriate populations across 101 destination countries as of 2008. This methodology allows us to decompose migration decisions into their constituent elements: economic opportunities (citizenship premiums), various forms of distance and friction, and institutional factors that may facilitate or impede migration flows.

#### 3.1 The Gravity Model - Poisson Pseudo Maximum Likelihood

The gravity model framework provides a robust approach for analyzing bilateral migration flows by incorporating both the attractive forces of destination countries and the various forms of resistance that impede movement. Following the theoretical insights from Milanovic (2015) regarding the importance of locational income advantages, our model emphasizes the role of income differentials while controlling for other factors that influence migration costs and benefits.

Our empirical specification takes the following form:

$$\begin{aligned}
 E[Expats_j|X_j] = & \exp(\beta_0 + \beta_1 \ln(distance_j) + \beta_2 \ln(income_j) \\
 & + \beta_3 language\_dist_j + \beta_4 cultural\_prox_j + \beta_5 gini_j \\
 & + \beta_6 visa_j + \beta_7 policy_j + \beta_8 \ln(diaspora_j) \\
 & + \beta_9 instability_j + \gamma_r + \ln(pop_j))
 \end{aligned} \tag{1}$$

where  $Expats_j$  represents the number of Brazilian expatriates in destination country  $j$ ,  $X_j$  represents the vector of explanatory variables,  $\gamma_r$  represents continent fixed effects, and

$\ln(pop_j)$  serves as an offset variable to control for destination country population size. The model employs heteroskedasticity-robust standard errors to account for potential variance heterogeneity across countries of different sizes and characteristics.

The Poisson Pseudo Maximum Likelihood (PPML) estimation approach addresses several econometric challenges inherent in migration data. Unlike traditional OLS estimation on logged variables, PPML naturally accommodates zero migration flows, handles heteroskedasticity robustly, and provides consistent estimates of elasticities even when the underlying data do not strictly follow a Poisson distribution. This methodological choice is crucial given the highly skewed nature of migration flows, where a small number of destinations attract the majority of migrants while many potential destinations receive very few or no Brazilian expatriates.

The model demonstrates excellent performance with an adjusted pseudo R-squared of 0.969713, indicating that our framework explains approximately 97% of the variation in Brazilian expatriate stocks across destination countries. This high explanatory power suggests that the combination of economic opportunities (citizenship premiums), distance measures, and institutional factors successfully captures the primary determinants of Brazilian migration decisions.

### 3.1.1 Linguistic Distance

Linguistic distance represents one of the most significant barriers to realizing the citizenship premiums identified by Milanovic (2015). Our analysis employs the Automated Similarity Judgment Program (ASJP) database to calculate precise measures of linguistic similarity between Brazilian Portuguese and the official languages of destination countries. This approach uses normalized Levenshtein distances across 40 basic vocabulary items to quantify the cognitive and communication barriers faced by Brazilian migrants.

The linguistic distance coefficient ( $\beta_3 = -4.734224$ ) emerges as one of the most substantial and statistically significant effects in the model (z-value = -12.215132,  $p < 0.001$ ). This finding indicates that linguistic dissimilarity creates profound barriers to migration, with a one-unit increase in linguistic distance associated with approximately a 99% reduction in expected expatriate stocks, holding all other factors constant.

This result has important implications for understanding how citizenship premiums are realized in practice. While Milanovic demonstrates that locational advantages can provide substantial income gains, our findings suggest that linguistic barriers significantly constrain individuals' ability to access these opportunities. Portuguese shares considerable similarity with Spanish (linguistic distance approximately 0.31), moderate similarity with other Romance languages like Italian and French (distances around 0.42-0.48), but substantial differences with English (distance approximately 0.73) and Germanic or Asian languages (distances typically exceeding 0.78).

The magnitude of the linguistic distance effect reflects multiple dimensions of integration costs. Beyond basic communication challenges, linguistic dissimilarity affects professional integration through certification and licensing requirements, social integration through network formation limitations, and cultural adaptation through reduced access to local media, education, and social institutions. These factors combine to create substantial barriers to realizing the full citizenship premiums available in linguistically distant destinations.



### 3.1.2 Cultural Proximity

Cultural proximity is operationalized through historical migration patterns to Brazil between 1884 and 1953, reflecting the insight from Milanovic's framework that institutional and social familiarity can facilitate the realization of locational income advantages. Countries that contributed significantly to Brazil's demographic formation through historical immigration are hypothesized to maintain cultural connections that reduce migration costs for contemporary Brazilian expatriates.

The cultural proximity coefficient ( $\beta_4 = 3.217388$ ) shows a positive and statistically significant relationship with Brazilian expatriate stocks (z-value = 2.499562,  $p = 0.012$ ). This finding confirms the theoretical expectation that cultural familiarity facilitates migration by reducing the barriers to accessing citizenship premiums in culturally connected destinations.

This result supports Milanovic's framework by demonstrating that institutional and social familiarity can significantly reduce the transaction costs of realizing locational income advantages. Countries that were major sources of immigration to Brazil during the historical period (particularly Germany, Italy, Spain, and Portugal) maintain cultural connections that facilitate contemporary Brazilian emigration. These connections operate through multiple channels: shared cultural practices and social norms that ease integration, institutional familiarity that reduces bureaucratic barriers, established social networks that may persist across generations, and mutual recognition agreements that facilitate professional qualification transfers.

The positive cultural proximity effect indicates that historical migration patterns create enduring advantages for accessing citizenship premiums. Brazilian emigrants benefit from the cultural capital accumulated through historical connections, including language similarities (particularly with Portugal and Spain), religious and cultural institutions established by earlier immigrant communities, and diplomatic relationships that may facilitate migration procedures.

This finding demonstrates that while citizenship premiums provide the primary economic motivation for migration as identified by Milanovic, the ability to access these premiums is enhanced by historical cultural connections. Countries with strong cultural ties to Brazil not only offer attractive citizenship premiums but also provide more accessible pathways for Brazilian nationals to realize these locational income advantages, creating a compound effect that makes these destinations particularly attractive to Brazilian emigrants.

### 3.1.3 Mobility Friction

Mobility friction is captured through visa requirements for Brazilian nationals, measured using the DEMIG VISA Database. This variable represents the baseline institutional barriers that must be overcome to access citizenship premiums in different destinations. The visa requirement coefficient ( $\beta_6 = 0.166790$ ) shows an unexpected positive sign but lacks statistical significance (z-value = 0.289314,  $p = 0.772$ ).

This finding suggests that formal visa requirements do not significantly deter Brazilian migration in our sample, which may reflect several factors. First, the visa variable captures only whether visas are required rather than the practical difficulty of obtaining them, including approval rates, processing times, or documentation requirements. Countries with

nominal visa requirements but streamlined processes for Brazilian nationals may not present substantial barriers to migration.

Second, our dependent variable measures legal expatriate residents rather than all migration attempts, potentially capturing primarily successful migrants who were able to navigate visa requirements effectively. This selection effect means that visa requirements might influence migration attempts or temporary flows without significantly affecting the stock of established legal residents.

The lack of significant visa effects also supports Milanovic's emphasis on the magnitude of citizenship premiums. When locational income advantages are substantial, motivated migrants may be willing to invest significant effort in overcoming administrative barriers. Countries offering large citizenship premiums attract migrants who are sufficiently motivated to navigate complex visa processes, while countries offering smaller premiums may not justify such efforts regardless of visa requirements.

#### **3.1.4 General Policy Restrictiveness**

General migration policy restrictiveness is measured using the Immigration Policies in Comparison (IMPIC) database, which provides quantitative indices of policy restrictiveness across labor and family immigration dimensions for the period 2005-2008. The policy restrictiveness coefficient ( $\beta_7 = 0.480162$ ) shows a positive but statistically insignificant effect (z-value = 0.259837,  $p = 0.795$ ).

Similar to visa requirements, this finding suggests that formal policy restrictions have limited effects on observed expatriate stocks. This result aligns with Milanovic's framework emphasizing the dominance of economic opportunities in migration decisions. When citizenship premiums are substantial, skilled migrants may find legal pathways through employment-based programs, investment visas, or other channels that bypass general restrictiveness measures.

The insignificant policy effects may also reflect the characteristics of Brazilian emigrants in our data. Skilled professionals and educated individuals are more likely to qualify for employment-based immigration programs that operate outside general restrictiveness measures. Countries with restrictive general policies often maintain parallel programs for skilled workers, allowing qualified Brazilian emigrants to access citizenship premiums despite overall policy restrictiveness.

This pattern is consistent with the global inequality framework where highly skilled individuals have greater ability to access locational income advantages through legal migration channels, even when general policies are restrictive. The selection processes inherent in skill-based immigration programs may amplify this effect by concentrating successful Brazilian emigrants among those most capable of navigating complex policy environments.

#### **3.1.5 Network Effects**

Network effects are operationalized through the logarithm of existing Brazilian-born populations in destination countries as of 2000, reflecting the theoretical insight that established migrant communities can reduce the costs of accessing citizenship premiums. The diaspora

network coefficient ( $\beta_8 = 0.141456$ ) demonstrates a positive and highly significant relationship with Brazilian expatriate stocks (z-value = 3.382278,  $p < 0.001$ ).

This finding confirms that established Brazilian communities facilitate additional migration through multiple channels that reduce the costs of realizing citizenship premiums. Network effects operate through information provision about employment opportunities and bureaucratic procedures, direct assistance with housing, job search, and initial settlement logistics, social support systems that ease cultural adaptation and integration, and potential formal or informal referral systems for employment opportunities.

The magnitude of this coefficient indicates that a 1% increase in the established Brazilian-born population is associated with approximately a 14% increase in contemporary expatriate stocks. This substantial network effect suggests that migration patterns exhibit strong path dependence, where early migrants to particular destinations create advantages that attract subsequent migrants.

Within Milanovic's citizenship premium framework, network effects represent a mechanism for reducing the transaction costs of accessing locational income advantages. Established communities provide knowledge about how to navigate local institutions, access employment opportunities, and integrate into local social and economic systems. This reduces the effective barriers to realizing citizenship premiums and makes destinations with larger existing communities more attractive to potential migrants.

The network effects findings also suggest that migration patterns, once established, tend to be self-reinforcing and persistent over time. Destinations that attracted early Brazilian migrants benefit from cumulative advantages that continue to attract additional migrants, creating concentration effects that may persist even if the original comparative advantages of these destinations change.

### 3.1.6 Political Instability

Political instability is measured through the number of coup events, attempted coups, and conspiracy attempts in destination countries during 1998-2008, using data from the Cline Center Coup d'État Project. The political instability coefficient ( $\beta_9 = 0.400908$ ) shows a positive but statistically insignificant relationship with Brazilian expatriate stocks (z-value = 1.228565,  $p = 0.219$ ).

This unexpected result suggests that political instability, as measured by coup events, does not significantly deter Brazilian migration. Several factors may explain this finding within the citizenship premium framework. First, the magnitude of citizenship premiums available in high-income but politically unstable destinations may outweigh political risk considerations for Brazilian migrants. When locational income advantages are substantial, migrants may be willing to accept higher political risks to access these opportunities.

Second, Brazilian emigrants may have different risk assessments regarding political instability given Brazil's own historical experience with military rule and democratic transition. Migrants from countries that have experienced political volatility may be more tolerant of instability in destination countries than migrants from countries with longer traditions of political stability.

Third, the types of political instability captured by coup events may not represent the forms of uncertainty most relevant to individual migration decisions. Economic policy uncer-

tainty, regulatory changes, or social unrest might have different effects on migration patterns than the specific political events measured in our analysis.

The insignificant political instability effect also suggests that economic opportunities dominate political considerations in migration decisions, consistent with Milanovic's emphasis on the primacy of income advantages in shaping global mobility patterns.

### 3.2 Final Remarks

The empirical analysis reveals several key insights about how Brazilian expatriates respond to citizenship premiums and overcome barriers to accessing locational income advantages:

**Income Effects Dominate Migration Decisions:** The income coefficient ( $\beta_2=2.867749$ ,  $z = 6.071942$ ,  $p < 0.001$ ) emerges as the most economically and statistically significant determinant of Brazilian migration patterns. This finding supports Milanovic's thesis that locational income advantages drive global mobility. The magnitude implies a semi-elasticity of  $\approx 2.9\%$ : a 1% increase in destination income is associated with about a 2.9% increase in the expected Brazilian expatriate rate (holding other factors constant). For context, a 10% increase corresponds to roughly a 31–33% higher expected rate, underscoring the powerful pull of income differences across countries.

This strong income elasticity reflects Brazil's intermediate position in the global income distribution. As demonstrated in our earlier analysis, Brazil occupies approximately the 50th percentile globally, meaning migration to high-income countries offers substantial citizenship premiums while migration to lower-income destinations typically involves income sacrifices. The strong response to income differentials confirms that Brazilian emigrants are primarily motivated by opportunities to access the locational advantages identified by Milanovic.

**Linguistic Barriers Significantly Constrain Access to Citizenship Premiums:** The large negative linguistic distance effect demonstrates that communication barriers create substantial obstacles to realizing locational income advantages. This finding extends Milanovic's analysis by identifying specific mechanisms through which citizenship premiums may be difficult to access in practice. Portuguese speakers face lower barriers to accessing opportunities in Spanish-speaking countries and other Romance language destinations, while Germanic and Asian language destinations present substantial linguistic barriers despite potentially offering large citizenship premiums.

**Network Effects Create Path-Dependent Migration Patterns:** Finally, the significant positive diaspora effect confirms that established migrant communities reduce the costs of accessing citizenship premiums. This creates cumulative advantages for destinations that attracted early Brazilian migrants, leading to concentration effects that persist over time. Network effects represent a mechanism for reducing transaction costs and information asymmetries that might otherwise prevent individuals from accessing available citizenship premiums.

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# Appendix

## Part 1

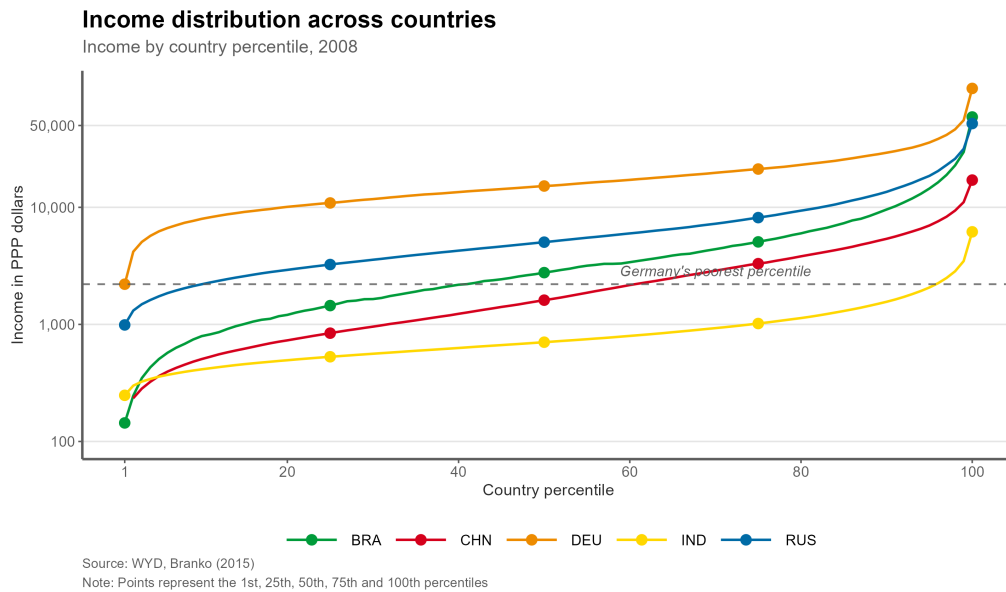


Figure 1

Table 1: How income depends on circumstances

DEPENDENT VARIABLE: NATURAL LOG OF HOUSEHOLD PER CAPITA INCOME IN \$PPP FOR EACH COUNTRY OR PERCENTILE						
	Individual Viewpoint (unweighted regressions)			World as It Is (population-weighted regressions)		
	GDP per Capita (in logs)	Average Number of Years of Schooling	Country Dummies	GDP per Capita (in logs)	Average Number of Years of Schooling	Country Dummies
	1	2	3	4	5	6
Proxy for mean country income	0.868 (0.00)	0.335 (0.00)	—	1.013 (0.00)	0.408 (0)	—
Gini index (in %)	−0.015 (0.00)	−0.013 (0.07)	—	−0.012 (0.03)	−0.015 (0.14)	—
Constant term	0.799 (0.02)	5.779 (0.00)	5.288 (0.00)	−0.711 (0.28)	5.250 (0.00)	5.288 (0.00)
Country dummies	—	—	Yes	—	—	Yes
Population weight (in million)	—	—	—	6,133	5,711	6,139
$R^2$	0.660	0.481	0.733	0.610	0.534	0.657
$Adj.R^2$	0.660	0.480	0.730	0.610	0.534	0.653

Note:  $p$ -values in parentheses.

Table 2: Explaining a person's position in the world income distribution given her national income class (ventile)

DEPENDENT VARIABLE: NATURAL LOG OF HOUSEHOLD PER CAPITA INCOME						
Income Class	Unweighted Regressions			Weighted Regressions		
	GDP per capita (logs)	Gini coefficient	Adj. $R^2$	GDP per capita (logs)	Gini coefficient	Adj. $R^2$
1	0.769***	-0.058***	0.899	0.850***	-0.062**	0.920
2	0.828***	-0.044***	0.907	0.949***	-0.045**	0.930
3	0.845***	-0.038***	0.907	0.981***	-0.038**	0.930
4	0.857***	-0.034***	0.906	1.001***	-0.034*	0.929
5	0.865***	-0.030***	0.905	1.014***	-0.030*	0.928
6	0.871***	-0.027***	0.903	1.023***	-0.026*	0.927
7	0.873***	-0.024***	0.902	1.029***	-0.023	0.926
8	0.878***	-0.021***	0.900	1.036***	-0.020	0.926
9	0.881***	-0.019***	0.899	1.040***	-0.016	0.926
10	0.881***	-0.016***	0.898	1.042***	-0.013	0.926
11	0.885***	-0.014***	0.898	1.045***	-0.009	0.926
12	0.883***	-0.011**	0.897	1.045***	-0.005	0.926
13	0.886***	-0.009**	0.896	1.045***	-0.002	0.926
14	0.886***	-0.006	0.895	1.043***	0.001	0.926
15	0.886***	-0.003	0.894	1.042***	0.005	0.926
16	0.886***	-0.000	0.893	1.039***	0.008	0.928
17	0.885***	0.003	0.892	1.035***	0.011	0.929
18	0.882***	0.007*	0.891	1.028***	0.014	0.931
19	0.876***	0.013**	0.887	1.017***	0.018	0.933
20	0.863***	0.028***	0.872	0.993***	0.025	0.931

Note: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$

## Part 2

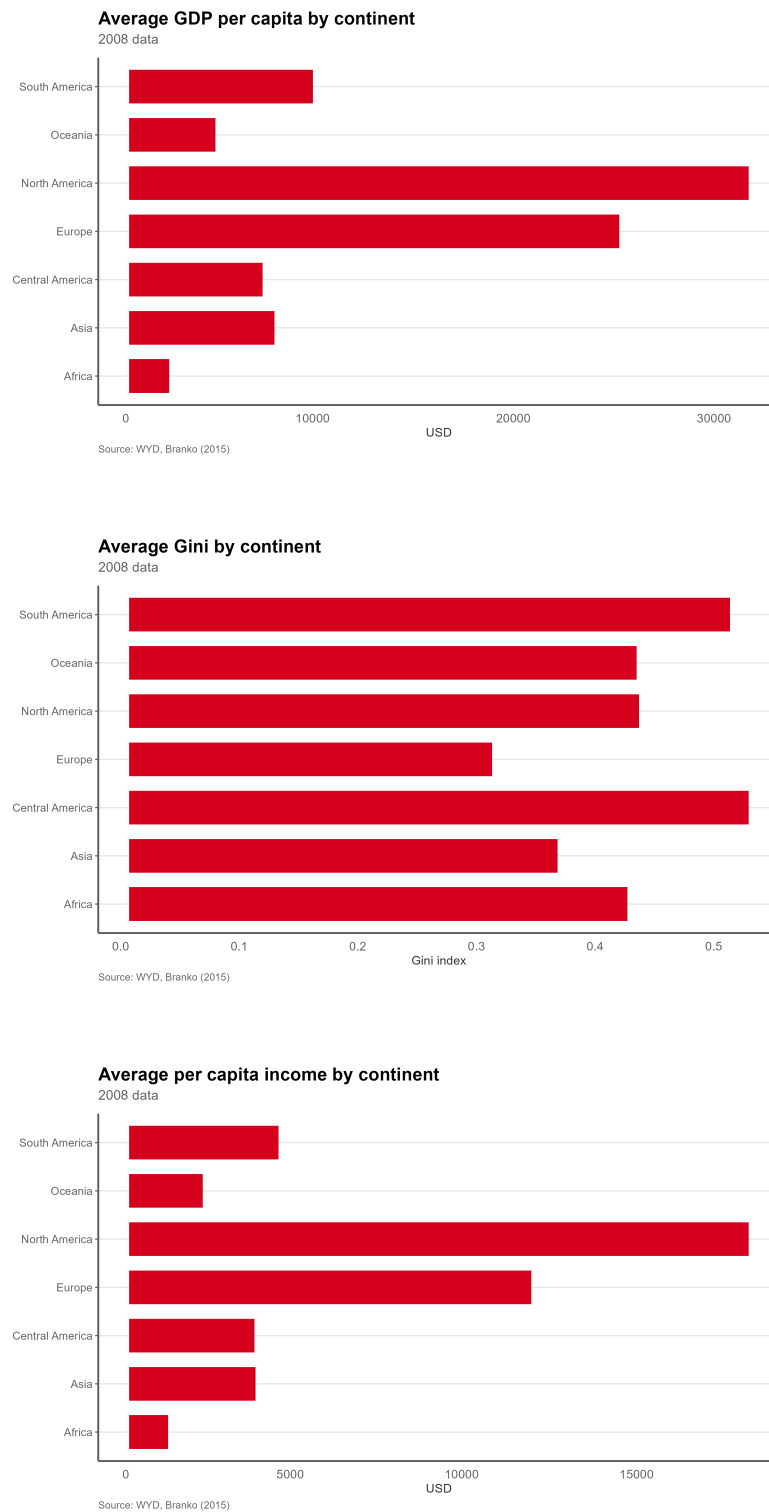


Figure 2



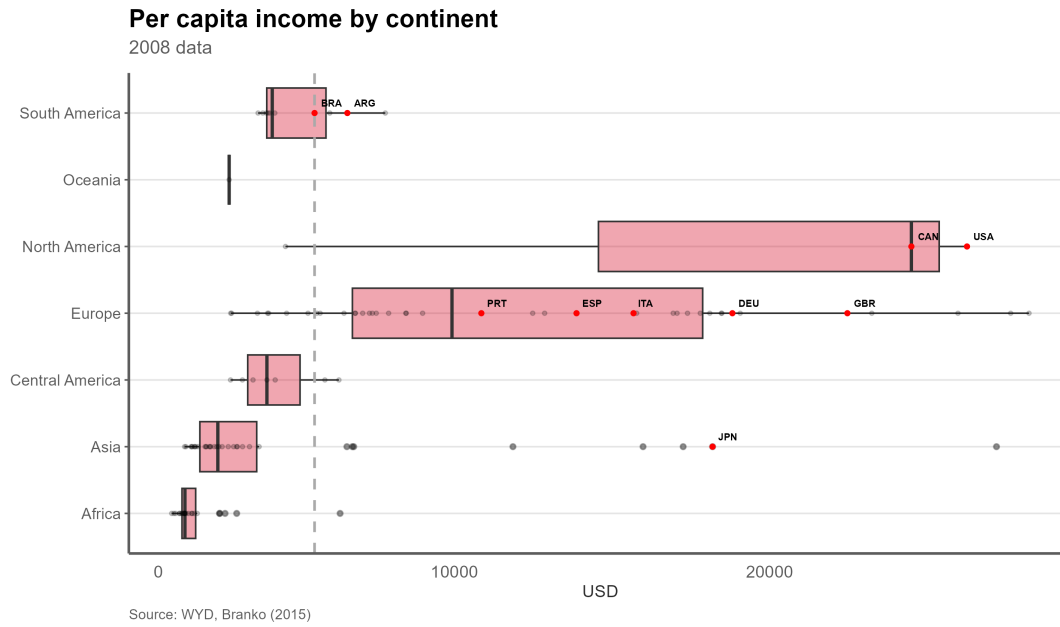


Figure 3

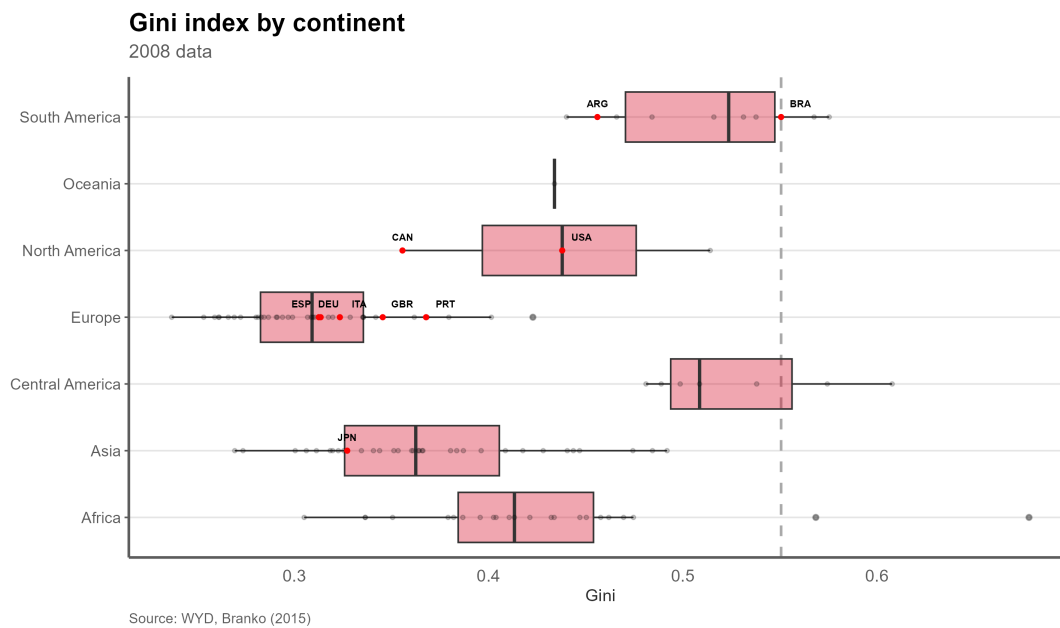


Figure 4

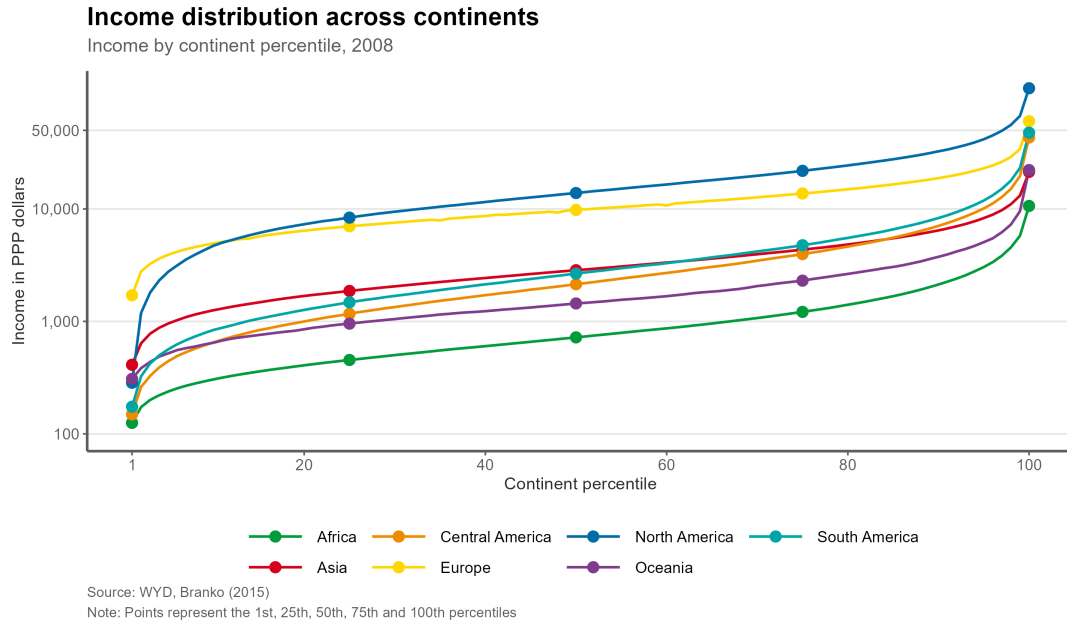


Figure 5

## Part 3

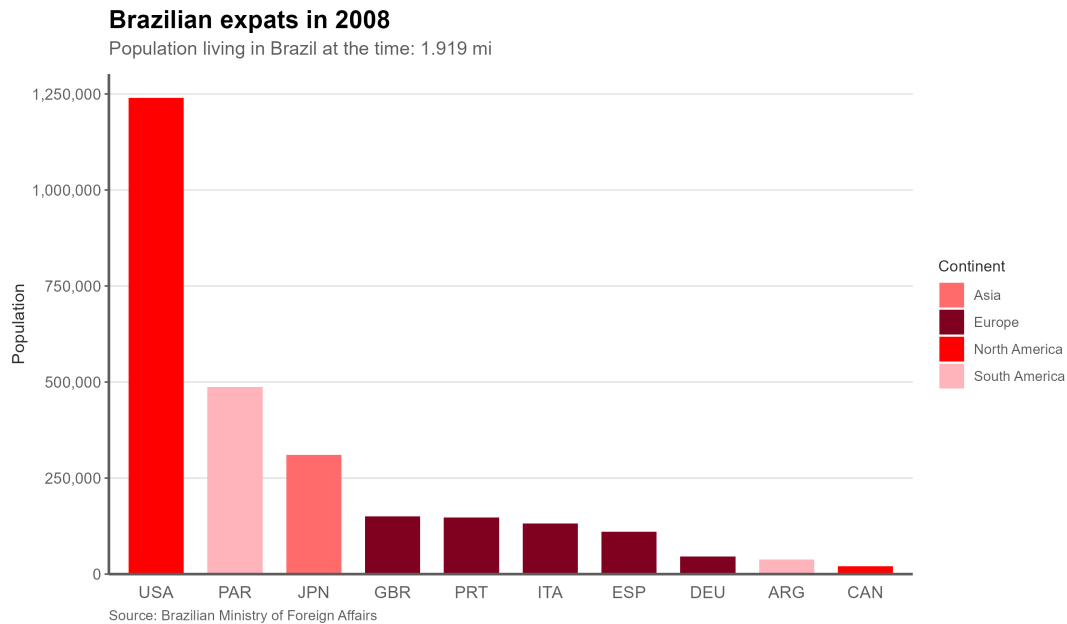


Figure 6

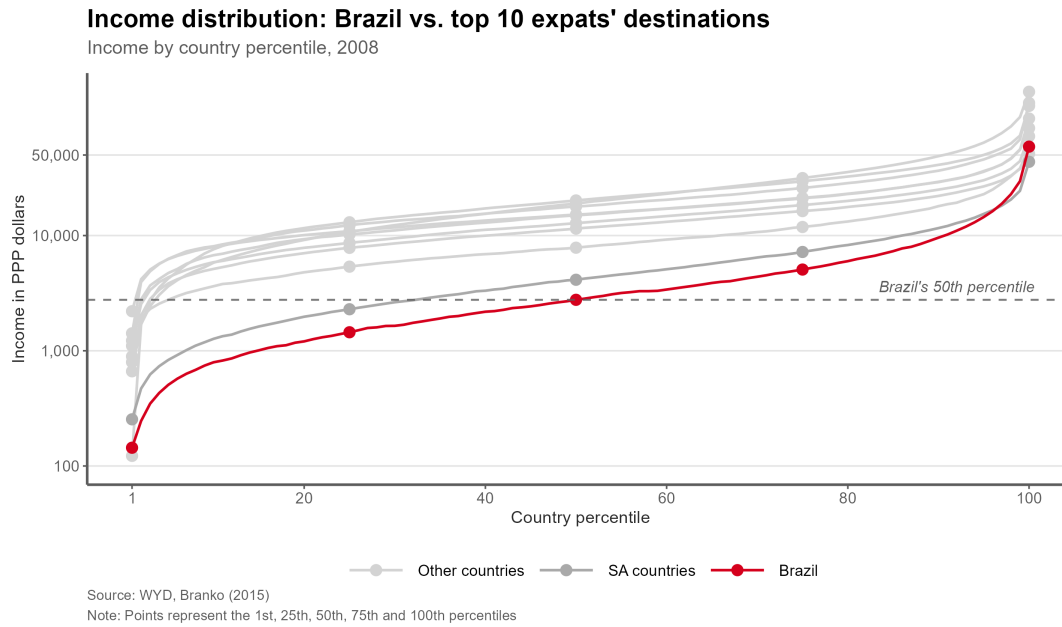


Figure 7

Table 3: Gravity model (Poisson Pseudo Maximum Likelihood - PPML)

DEPENDENT VARIABLE: EXPATS				
Variable	Estimate	Std. Error	z value	Pr(>  z )
ln_dist	0.064695	0.277448	0.233178	0.8156
ln_inc	2.867749	0.472295	6.071942	<0.001***
language_dist	-4.734224	0.387570	-12.215132	<0.001***
cult_prox	3.217388	1.287181	2.499562	0.012*
gini	9.424121	3.920928	2.403543	0.016*
visa	-0.166790	0.576501	-0.289314	0.772
mig_policy	0.480162	1.847936	0.259837	0.795
ln_diaspora	0.141456	0.041810	3.383278	<0.001***
n_coups	0.400908	0.326322	1.228565	0.219
Observations: 101				
Offset: log(df\$pop)				
Fixed-effects: reg: 6				
Standard-errors: Heteroskedasticity-robust				
Log-Likelihood: -200,702.0     Adj. Pseudo R <sup>2</sup> : 0.969713				
BIC: 401,473.2     Squared Cor.: 0.993294				
Note: *** $p < 0.001$ , ** $p < 0.01$ , * $p < 0.05$ , '.' $p < 0.1$				