

# A Legacy of Animosity in the Southern Cone of South America? Attitudes of Paraguayan Consumers Towards Argentina and Brazil

## ¿UN LEGADO DE ANIMOSIDAD EN EL CONO SUR DE AMÉRICA? ACTITUDES DE LOS CONSUMIDORES PARAGUAYOS HACIA ARGENTINA Y BRASIL

**Michael J. Pisani**<sup>1\*</sup>    
Central Michigan University

**Alcides G. Cáceres Zarate**    
Independent Researcher

**José-Carlos Tello**<sup>2</sup>    
Universidad Americana

**Silvio Eduardo Becker**<sup>3</sup>    
Universidad Americana

\* Corresponding author.

1 Central Michigan University,  
College of Business Administration,  
200 Smith Hall, Mt. Pleasant, MI  
48559, USA.

2 Universidad Americana, Facultad  
de Ciencias Económicas y Admi-  
nistrativas, Desarrollo e Innovación  
“IDI Lab”, Brasilia 1100, 1204,  
Asunción, PARAGUAY.

3 Universidad Americana, Facultad  
de Ciencias Económicas y  
Administrativas, Desarrollo e  
Innovación “IDI Lab” y  
Departamento de Marketing y  
Publicidad, Brasilia 1100, 1204,  
Asunción, PARAGUAY.

### Abstract

**Purpose:** This article explores the interconnection between Paraguayan consumer behavior and products from Argentina and Brazil, situating the study within the context of past hostilities (animosity) and present uneven relations among the three nations.

**Methodology:** Employing snowball sampling methodology, we conducted surveys with 385 middle- and upper-class Paraguayans from the greater Asunción area, both in-person and online, during the first half of 2022. The survey included questions on country-of-origin scales (specially consumer animosity), product preferences, and demographics. We developed and estimated a conceptual model connecting antecedents with Paraguayan consumer attitudes toward Argentina and Brazil using multiple regression.

**Findings:** The impact of acculturation and the receipt of household remittances is significant on consumer animosity (CA). Elevated levels of acculturation intensify CA, while receiving household remittances acts as a mitigating factor against CA feelings.

**Practical Implications:** Novel antecedents of consumer animosity inform and may guide decision-making for businesses and policymaking in addressing consumer animosity in Paraguay.

**Originality:** This is the first study of consumer animosity in Paraguay.

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## Resumen

**Propósito:** Analizar la interconexión entre comportamiento del consumidor paraguayo y productos de origen argentino y brasileño, considerando hostilidades pasadas y actuales relaciones desiguales.

**Metodología:** Mediante muestreo de bola de nieve, se encuestó a 385 paraguayos de clases media-alta de Gran Asunción en persona y en línea durante el primer semestre de 2022. El cuestionario incluyó escalas de país de origen, preferencias de productos y datos demográficos. Se desarrolla y estima un modelo conceptual, utilizando regresión múltiple, que vincula antecedentes con actitudes de consumidores paraguayos hacia productos hechos en Argentina y Brasil.

**Resultados:** Aculturación y recepción de remesas domésticas influyen significativamente en la animosidad del consumidor (AC), incrementándola y mitigándola respectivamente.

**Implicaciones:** Nuevos antecedentes de AC informan y pueden guiar la toma de decisiones empresariales y políticas públicas para abordar la AC en Paraguay.

**Originalidad:** Primera investigación sobre animosidad del consumidor paraguayo.

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## INTRODUCTION

The War of the Triple Alliance is a before and after marker in Paraguayan history (Mandl, 2021; Warren, 1985). From 1864-1870, Paraguay was at total war with neighboring Argentina, Brazil, and Uruguay. For Paraguay, a landlocked nation in the heart of South America, this was a war where half or more of its pre-war population of about 400,000 (Williams, 1979) was lost to conflict, starvation, exhaustion, and exposure (Warren, 1978). Perhaps as many as three-quarters of the Paraguayan male population perished in the war (Saeger, 2007). At war's end, Paraguay was in ruin, and was occupied for nearly a decade by mostly Brazilian military forces (Saeger, 2007). The Argentinian and Brazilian victors swallowed disputed territory that reduced the size of Paraguay by one-fourth. In Paraguay, the immediate pre-war period is labeled the "Golden Era", the aftermath "Atrocity and Ruin" (Cantero, 2018).

It took more than a generation after 1870 for Paraguay to regain some economic footing, yet Argentina and Brazil maintained a constant state of political intrigue and meddling in Paraguay through the end of the nineteenth century. Such interference has been a mainstay throughout Paraguay's existence. At independence in 1811, Paraguay fought off an

armed attempt by Argentina to envelope and subsume Paraguay into a larger Argentina (Williams, 1979). During the Spanish colonial era, Brazilian raiders seeking native slave labor were a constant threat to the population in Paraguay (Poppino, 1973). In the twentieth century, an uneasy balance of power persisted between Argentina and Brazil with Paraguay literally caught in the middle by neighbors much larger in size and population<sup>1</sup>. Where Paraguay could play the regional powers against each other, it sought refuge; when it could not, it sought appeasement (Mandl, 2021). Argentina held more sway in the first half of the twentieth century, Brazil in the latter half of the twentieth century and into the present time.

Complicating the regional power rivalry was Paraguay's authoritarian past, where dictators ruled the country from independence until 1989 (Roett & Sacks, 1991). The Paraguayan transition to democratic rule is still ongoing in the twenty-first century (Mandl, 2021). More recent times have seen some neighborly cooperation through economic integration in the form of MERCOSUR (the Southern Common Market), binational hydroelectric energy infrastructure development (Itaipú [Brazil-Paraguay] and Yacyretá [Argentina-Paraguay] dams), and foreign direct investment in Paraguayan agriculture. Nevertheless, tensions remain.

1. Contemporary Argentina and Brazil are about seven and thirty-one times the population, respectively, of Paraguay. In terms of geography, Argentina and Brazil are about seven and twenty-one times the size, respectively, of Paraguay.

In 2023, Argentina enacted a toll of river shipping along its stretch of the Paraná River that accesses the Atlantic Ocean. This waterway is essential for Paraguayan goods to reach international markets. Also in 2023, Brazil unilaterally decided on fee and revenue structures affecting energy produced by the Itaipú Dam for Paraguay. The revised fee structure benefitted Brazil at the expense of Paraguay. Cross-border contraband movement is a constant and serious three-nation (Argentina-Brazil-Paraguay) challenge, especially in the tri-border area where all three countries meet (Pisani & Ovando Rivarola, 2019).

The present study seeks to understand the intersection of historical and present relations with Argentina and Brazil with the Paraguayan consumer. In essence, does the past and present matter for Paraguayans when considering products originating in Argentina or Brazil. This brief historical context brings us more formally to our research question: “How has the intense legacy of hostile interactions, coupled with ongoing cooperation and tensions, impacted the Paraguayan consumer view of Argentina and Brazil?” This research question derives from the consumer animosity stream of international marketing research.

Paraguay has been referred to as an “island surrounded by land” (Roa Bastos, 1977) and as the “South American Tibet” (Mandl, 2021). The business literature is nearly silent regarding Paraguay. In fact, Paraguayan consumers are rarely studied. This current research seeks, as a small step forward, to help break the isolation of Paraguay and knowledge about its consumers.

The remainder of this article flows as follows. Section 2 provides an overview of the pertinent literature and develops our conceptual model and associated hypotheses. Section 3 provides a brief overview of the contemporary business and economic environment of Paraguay. Section 4 describes our data, descriptive statistics, and methodology. Section 5 presents our research findings, including a discussion of the results and managerial implications. The last section concludes the paper inclusive of public policy implications, avenues for future research, and study limitations.

## LITERATURE REVIEW

### *Pertinent Literature*

Contextual and temporal considerations matter in the study of consumer animosity (Amine, 2008; Lee et al., 2017). The investigation of consumer animosity occurs within a binational framework, where necessary and essential is an understanding of the legacy of bilateral relations. Hence, Shoham et al. (2016) argue that a prevailing level of animosity between nations is a precursor to that animosity spilling over into commerce. In its first appearance in the literature, Klein et al. (1998, p. 90) defined consumer animosity as “the remnants of antipathy related to previous or ongoing military, political, or economic events” impacting consumers’ willingness to buy foreign-made products.

Consumer animosity explores a very specific attitude of consumer preference between country pairs. Largely, it is the relative distaste for a particular country that forms the essence of the animosity concept of product consumerism for country-specific imported goods and services. Using a nine-question attitudinal scale, consumer animosity measures the degree of individual-level hostility, both latent and overt, in the purchase perception of specific bilateral national pairings (Klein et al., 1998). Examples of such pairings have included China and Japan (Klein et al., 1998), South Korea and Japan (Han, 2017) China and South Korea (Shin, 2001), China and Taiwan (Souiden et al., 2018), the United States and Iran (Bahae & Pisani, 2009), the Netherlands and Germany (Nijssen & Douglas, 2004), Serbia and the United States (Fernández-Ferrín et al., 2015), Australia and France (Ettenson & Klein, 2005), and so on with Asia, the United States, and Europe constituting the geographical distribution of the bulk of published studies. Some attention is given to the Middle East, with little to none attributed to Africa and Latin America. Collectively, these studies of consumer animosity indicate the robustness of the construct in different bi-national contexts.

Various variables (antecedents, predictors, and moderators) linked with empirical studies have been estimated in association with consumer animosity. These include a standard set of demographic variables, e.g.,

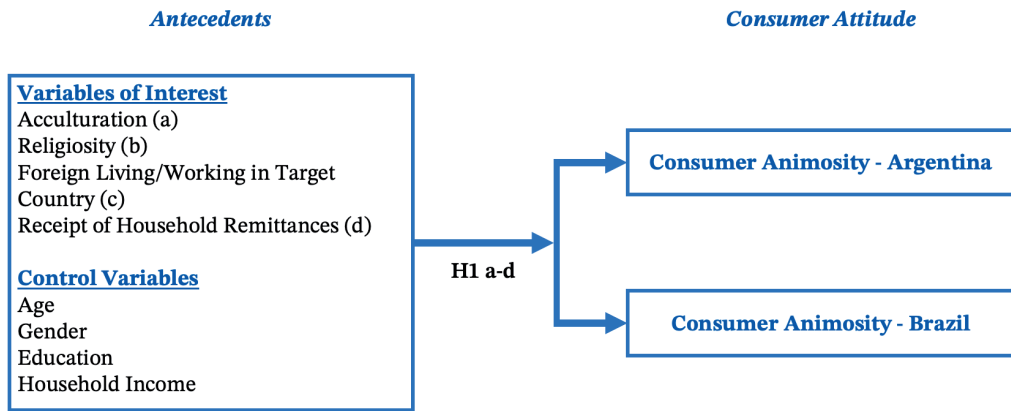
gender, age, education, occupation, income, ethnicity, foreign travel experience (Bahae & Pisani, 2009) as well as topical approaches, including Hofstede’s cultural values (Westjohn et al., 2021; Han, 2017), product country image (Wang et al., 2023), the Covid-19 pandemic as situational animosity (Nawaz et al., 2023; Fong et al., 2022), and the sharing economy (Li et al., 2021). Consumer animosity has also been linked to an array of products and consumers’ stated willingness to buy specific products (Klein et al., 1998; Nijssen & Douglas, 2004; Bahae & Pisani, 2009).

Our research seeks in part to replicate and extend the consumer animosity construct into two new country pairs in South America, offer novel antecedents for consumer animosity, and model these elements into consumers’ willingness to buy specific foreign-origin products. We are the first to focus on Paraguayan consumer animosity vis-à-vis Argentina and Brazil, replicating the applicability of consumer

animosity in these bilateral environments. Novel antecedents of acculturation, religiosity, lived and worked time in the target foreign country, and the receipt of household remittances are tested as an extension of the literature on consumer animosity.

**Conceptual Model and Hypotheses**

We propose a conceptual model of four novel antecedents of consumer animosity. These antecedents include acculturation, religiosity, previous foreign residence, and the receipt of household remittances (see Figure 1). Along with these new variables, we also employ a common and self-explanatory set of control variables previously investigated in consumer animosity literature. These are respondent’s age, gender, years of education, and household income. We next offer support for the new variables.



**Figure 1.** A Conceptual Model of Paraguayan Consumer Animosity with Argentina and Brazil. *Source: Authors’ conceptual framework.*

Paraguay has received various waves of immigration over its history, such as Mennonites and Southern Europeans in the early 20th century, and Brazilians in the latter half of the 20th century. The process of acculturation, the dropping of the previous home country culture for the new country culture (Gordon, 1964; Portes & Rumbaut, 2014), is ongoing in Paraguay. Formed from the sociological literature, we employ the generation score measure as a proxy for acculturation. This

parsimonious measure of acculturation is found to be robust in Hispanic settings in the US and has been used widely in that context (Richardson & Pisani, 2017; Pisani 2023).

The generation score considers three generations of familial lineage (respondent, respondent’s parents, respondent’s grandparents) and is constructed based on birth location (after Richardson & Pisani, 2017). Each generation is assigned up to 4 points, with the allocations as

follows: respondent born in Paraguay receives 4 points, if the respondent is born outside of Paraguay, a score of 0 points is given. For each parent born in Paraguay, a score of 2 points is assigned, otherwise 0. For each grandparent born in Paraguay, 1 point is assigned, otherwise 0. The point range for the generation score spans from 0 to 12. We suggest stronger birth ties to Paraguay will result in a greater tie (i.e., acculturation) to Paraguay, resulting in higher levels of consumer animosity toward traditional antagonists.

**H1a1:** Greater levels of acculturation will enhance consumer animosity toward Argentina.

**H1a2:** Greater levels of acculturation will enhance consumer animosity toward Brazil.

Traditional values and Catholicism are deeply rooted in Paraguayan culture (Mandl, 2021). For example, the pilgrimage to Caacupé, in Paraguay on December 8 of each year to celebrate the Immaculate Conception of Mary includes several hundreds of thousands of devout Paraguayans. Pope Francis in 2015 led a mass at Caacupé and mentioned the heroism of Paraguayan women in the aftermath of the War of the Triple Alliance, connecting both religion and the war. Catholic iconography, shrines, and celebrations abound throughout Paraguay. In fact, even the current constitutional law recognizes the “protagonism of the Catholic Church in the historical and cultural formation of the country” (Constitución Nacional, 1992). One parsimonious measure of religiosity is church attendance (Azzi & Ehrenberg, 1975). Nonetheless, churchgoing in Paraguay may be irregular illustrating degrees of religiosity as measured by frequency of church attendance. We offer competing hypotheses as to the impact of religiosity as measured by church attendance as there is no literature to guide us. Hence,

**H1b1a:** Greater levels of religiosity will enhance consumer animosity toward Argentina.

**H1b1b:** Greater levels of religiosity will enhance consumer animosity toward Brazil.

**H1b21a:** Greater levels of religiosity will dampen consumer animosity toward Argentina.

**H1b21b:** Greater levels of religiosity will dampen consumer animosity toward Brazil.

Living and working in a foreign country offer a deep perspective not available to those who haven’t experienced life abroad. This is different than a temporary visit, such as that of a tourist or of medical tourism. Life and work experiences allow for a more intimate understanding and openness to others through sustained daily life connections among different people, places, and cultures. In the current study of the Paraguayan consumer, it is the time spent living and working in Argentina either in Argentina or Brazil that accounts. Hence, the following hypotheses are offered.

**H1c1:** Previous residence (foreign living and working) in Argentina will mitigate consumer animosity toward Argentina.

**H1c2:** Previous residence (foreign living and working) in Brazil will mitigate consumer animosity toward Brazil.

Household remittance receipts are typically money from family members working abroad to family members in the home country. Local push factors such as lack of jobs or poor pay combined with foreign pull factors such as work availability and good pay induce workers to leave home and seek work abroad. In Paraguay, remittance flows are common, particularly from family members who have left to work abroad. In 2022, the equivalent of 493.5 million US dollars were sent back to Paraguay with Argentina, Brazil, Spain, and the United States contributing 5.1%, 2.4%, 59.3% and 20.0% of the remittance flow, respectively (BCP, 2023). Such remittance flows provide an importance source of household income, approximately one percent of household income across most income groups including middle- and upper-class households (INE, 2023), and offer a helpful connection to the outside world. Hence, we offer the following hypotheses.

**H1d1:** Receipt of household remittances will mitigate consumer animosity toward Argentina.

**H1d2:** Receipt of household remittances will mitigate consumer animosity toward Brazil.

## CONTEMPORARY BUSINESS AND ECONOMIC ENVIRONMENT OF PARAGUAY

Paraguay has experienced considerable economic growth with a relatively open and stable macroeconomy over the past two decades (Borda & Caballero, 2020). While the Covid-19 pandemic disrupted most national economies in 2020 and 2021 including Paraguay's, the country returned to its natural growth trajectory posting a 4.1% increase in GDP in 2022 (International Monetary Fund, 2022). Paraguay's economy heavily relies on agricultural exports (mainly soy and beef) and green energy produced by hydroelectric dams operated in cooperation with Brazil and Argentina. Some foreign investment finds its way into Paraguay, but it is rather small compared to regional standards (Tinelli et al., 2020), as is the national population base of just more than seven million people.

About one-third of the country's population resided in and around the capital of Asunción with Ciudad del Este and Encarnación important regional cities. All these urban areas, located on borders with Argentina or Brazil contribute to a vibrant cross-border trade, both regulated and unregulated (Vázquez, 2006; Pujadas & Szeikut, 2018). Lately, Paraguayan visits to Argentina are more commonly associated with same-day cross-border shopping. While Paraguayan's overnight vacation are more often connected with Brazil, though cross-border shopping and overnight vacations occur in both countries (MarketData, 2023).

Economic diversification is occurring gradually in Paraguay as incipient industrialization spurred on by a maquiladora sector complementing to its agricultural and green

energy base. The maquiladora industry is part and parcel connected with Paraguay's membership in MERCOSUR with Argentina, Brazil, and Uruguay.<sup>2</sup> The trade pact, while important, has yet to fully realize its potential (Masi, 2022; Duarte Sánchez, et al., 2023). One reason may be contrary positions regarding China and Taiwan as Paraguay is one of the few remaining nations with diplomatic relations with Taiwan, thus hindering further advancement of MERCOSUR in East Asia (Hedivan & Cabral López, 2023). Paraguay is also challenged by a huge informal sector that employs about two-thirds of the economic active population (Pisani & Ovando, 2019) and recent inflation and wage adjustments (Subsecretaría de Estado de Economía, 2023; Recalde & Meza, 2022).

## DATA, DESCRIPTIVE STATISTICS, AND METHODOLOGY

### Data

In the second quarter of 2022, 385 middle- and upper-class Paraguayan consumers were surveyed through a purposive snowball sampling procedure.<sup>3</sup> Recruitment of survey respondents was facilitated by several Paraguayan institutions of higher education with graduate programs, alumni groups, and organizations.<sup>4</sup> The targeted respondent group was graduate students (e.g., MBA, DBA, 5th year undergraduate students, diplomado bridge programs), and professionals to reflect a mature and financially secure urban consumer. In Paraguay, it is this group that has the greatest potential numerical interaction (by population size, maturity, and purchasing power) with imported products and the decision and capability to buy local versus foreign products.

The survey was administered in person and online using an online platform (i.e., Qualtrics)

2. Venezuela is also a member of MERCOSUR but has been suspended from the trade group since 2017.

3. In all, 486 respondents attempted the survey and 385 completed the survey for our analyses. In a few cases where one or two questions are missing from a multi-item scale, imputed missing values were entered. Imputed values were rare and fewer than five responses for the consumer animosity scale were adjusted accordingly (or less than one percent per scale). Fully incomplete responses were eliminated.

4. Specific universities, groups and organizations included: AGI - Asociación de Graduados de INCAE (Instituto Centroamericano de Administración de Empresas)-Paraguay, CADEP (Centro de Análisis y Difusión de la Economía Paraguaya), EDAN (Escuela de Administración de Negocios), EducationUSA-Paraguay, Fulbright Association of Paraguay (in partnership with the US Embassy), Fundación MAE - UC (Maestría en Administración de Empresas - Universidad Católica), Instituto Desarrollo, UIP (Unión Industrial Paraguaya), Universidad Americana, Universidad Autónoma de Asunción, UCA (Universidad Católica "Nuestra Señora de la Asunción"), Universidad Columbia, and Universidad Paraguayo Alemana.

to record responses. The survey instrument was constructed in English and translated into Spanish by a bilingual researcher and back-translated as instructed by Brislin (1980) and included the consumer animosity scale and demographic information among others. A small pilot test in early 2022 permitted minor adjustments for wording clarification. The survey generally took respondents about 20-25 minutes to complete.

### Descriptive Statistics

The descriptive statistics for our respondent sample appears in Table 1. The four variables of interest appear at the top of the table. The mean generation score, our proxy for acculturation, is 10.4 with some variation indicating an immigration background of many of the respondents. Religiosity, as measured by the frequency of church attendance, reveals 56.1% of the respondents rarely or never attend church while 43.9% of respondents attend church regularly (at least once a month or more frequently). Approximately one in ten respondents have lived and worked in one of the target countries of Argentina or Brazil. And about one in ten respondent households receive remittances from abroad.

**Table 1.** Descriptive Statistics

Variables	Value
<b>Variables of Interest</b>	
Acculturation-Mean Generation Score (std. dev.)	10.4 (5.7)
Religiosity (%)	
Regular Church Attendance (≥ Once per Month)	43.9
Non-Regular or No Church Attendance (2 times per year ≤)	56.1
Foreign Living/Working (%)	
In Argentina	10.6
In Brazil	9.6
Receipt of Household Remittances (%)	
Yes	10.3
No	89.7
<b>Control Variables</b>	
Age-Mean Years (std. dev.)	32.4 (12.7)
Gender (%)	
Male	43.2
Female	56.8
Education-Mean Years (std. dev.)	18.6 (4.8)
Monthly Household Income-By Multiples of the Monthly Minimum Wage (MW)* (%)	
Middle Class (1-5 < MW)	33.2
Upper Class (5 ≥ MW)	66.8
<b>Consumer Animosity (CA)</b>	
CA-Argentina-Mean Score (std. dev.)  Cronbach alpha	30.2 (9.7)   0.855
CA-Brazil-Mean Score (std. dev.)  Cronbach alpha	35.0 (10.6)   0.887

Notes: \* For the period July 1, 2021, thru June 30, 2022. Source: Authors' calculations.

The four control variables are reported next in Table 1, all with expected values. The mean age of respondents is 32.4 years, higher than the national mean of 27 years, yet as expected due to the targeting of graduate students. Women make up a slightly greater percentage of respondents; this is in line with expectations as more women in Paraguay attend university than men. Respondents are highly educated averaging 18.6 years of study representative of their graduate school attainment. Lastly, one-third of the respondents live in middle class households and two-thirds of the respondents live in upper class households. Education and income are tightly linked in Paraguay.

The consumer animosity (CA) scales for both Argentina and Brazil are reported at the bottom of Table 1. The 9-question scale is adapted from the survey originators (Klein et al., 1998) and are listed in Appendix A for each country. Survey respondents were asked to complete the consumer animosity scale for both Argentina and Brazil. As CA is bilateral pair dependent, no two pairs are alike and are measured independently. The mean score of the 9-item CA scale is 30.2 for Argentina and 35.0 for Brazil (with a possible score range of 9 to 63 utilizing a 7-point Likert-type answer scale). These two CA scores are statistically different (as per a paired t-test) indicating a higher level of consumer animosity for Brazil than Argentina for this sample. Scale reliability considers the internal consistency of answers to scale questions and is reported as Cronbach alpha. The Cronbach alpha for each scale is high, 0.855 for Argentina and 0.887 for Brazil, and acceptable.

### Methodology

The multivariate statistical procedure undertaken in our analyses is multiple regression. Multiple regression is a robust multivariate statistical tool to discern the relationship between a dependent variable and a set of independent or predictor variables (Hair et al., 1995). In the present study, multiple regression is an appropriate research method as we seek to determine the relationship through an explanatory chain model or conceptual model between a set of novel independent variables—acculturation, religiosity, lived/ worked in target country, and the receipt of household remittances—with the dependent

variable, the consumer animosity scale (see Figure 1). Because consumer animosity has been researched in several binational contexts over two decades, we also include a set of control variables (age, gender, education, income) that are present in many previous studies of consumer animosity.

The variables are constructed in the following manner. The generation score ranges between 0 and 12 as detailed in section 2.2 above and serves as a proxy for acculturation. It is a count variable. The next three variables of interest are constructed as dichotomous variables. Church attendance acts as a proxy for religiosity, where religiosity is scored as 0 for never attending church or seldom attending church (two times or less per year) and 1 for church attendance monthly or higher. For respondents that have lived and worked in the target country (either Argentina or Brazil), 0 denotes never having lived or worked in the target country and 1 is scored for those who have lived in the target country. Lastly for the respondent, receipt of household remittances is measured as 0 for receiving none and is scored as 1 for receiving remittances. The control variables for age and education are delineated in years—that is, respondent age and educational attainment in years. Gender is computed as 0 for female and 1 for male. Lastly, respondent household income is constructed as 0 for middle class households and 1 for upper class households. Our differentiation of income classes is based upon the work of the Finance Ministry of Paraguay in determining middle income and other classes in Paraguay (Galeano et al., 2021). The dividing line between middle- and upper-class income is approximately \$1,650 per month, calculated by multiples of the monthly minimum wage, for the period under study.

## RESULTS & DISCUSSION

This section is divided into reporting the significant empirical results for consumer animosity with Argentina and Brazil. This is done separately in sections 5.1 and 5.2. A discussion of the results follows in section 5.3.



### Results for Consumer Animosity and Argentina

The results of the multiple regression model estimation for consumer animosity and Argentina are reported in Table 2. Two predictor variables are significant, acculturation and received household remittances. A one-point increase in the generation score for respondents, the proxy for acculturation, results in a 0.383 point increase in the CA score supporting H1a1. The results for respondents in households that

receive remittances realize a reduction in CA by 3.675 points. Thus, H1d1 is supported. The results for religiosity and having lived and worked in Argentina are not significant, and thus do not support H1b1a or H1b2a, nor H1c1. The model diagnostics are within acceptable ranges and appear at the bottom of Table 2. A low VIF and a correlation matrix for the variables is included in Appendix B and indicate no concerns with multicollinearity.

**Table 2.** Multiple Regression Model of Consumer Animosity for Argentina

Variables of Interest	$\beta$	S.E.	t-statistic	Significance
Constant	28.876	3.043	9.819	0.001
Acculturation	0.383	0.189	2.028	0.043
Religiosity	-0.374	1.025	-3.64	0.716
Lived/Worked in Target Country (Argentina)	-1.390	1.719	-0.809	0.419
Received Household Remittances	-3.675	1.736	-2.117	0.035
<b>Control Variables</b>				
Age	0.006	0.045	0.136	0.892
Gender	0.780	1.035	0.753	0.452
Education	-0.185	0.117	-1.589	0.113
Household Income	-0.284	1.083	-0.262	0.793
Model Diagnostics: $R = 0.201$ , $R^2 = 0.040$ , Adj. $R^2 = 0.019$				
Model ANOVA: $F = 1.983$ , $p = 0.048$				
VIF 1.3 <				

Note: Standard errors are robust to heteroskedasticity of the errors. Source: Authors' calculations.

### Results for Consumer Animosity and Brazil

The results of the multiple regression model estimation for consumer animosity and Brazil are reported in Table 3. Two predictor variables are significant, acculturation and received household remittances as is one control variable. A one-point increase in the generation score for respondents, the proxy for acculturation, results in a 0.633 point increase in the CA score supporting H1a2. The results for respondents in households that receive remittances realize a

reduction in CA by 4.540 points. Thus, H1d1 is supported. The results for religiosity and having lived and worked in Brazil are not significant, and thus do not support H1b1b or H1b2b, nor H1c2. We note that the lived and worked in Brazil variable is nearly significant ( $p = 0.130$ ) with the hypothesized negative sign. Within the control variables, gender is significant with male respondents possessing higher consumer animosity feelings (3.013 points) toward Brazil than female respondents.<sup>5</sup> The model

5. As suggested by a reviewer, we also conducted a complementary multivariate statistical procedure, the Seemingly Unrelated Regressions (SUR) model. This regression model jointly estimated the relationship of the explanatory variables of interest (i.e., acculturation, religiosity, lived/worked in target country, and the receipt of household remittances) with the dependent variables, the consumer animosity scales of Argentina and Brazil. The joint estimation of these equations considered the possible correlation of the errors of these two aversion scales which would indicate the presence of similar underlying determinants. The results of the SUR estimation strongly support and confirm our multiple regression findings of variable significance, predictive importance and measurement, and directionality (results available upon request). In addition, the inference tests in the SUR regression are robust regarding a matrix of variances and covariances of the system errors and to both heteroscedasticity and cross equation correlation. We thank the anonymous reviewer for this suggestion.

diagnostics are within acceptable ranges and appear at the bottom of Table 3. A low VIF and a correlation matrix for the variables is included

in Appendix C and indicate no concerns with multicollinearity.

**Table 3.** Multiple Regression Model of Consumer Animosity for Brazil.

Variables of Interest	$\beta$	S.E.	t-statistic	Significance
Constant	26.207	3.242	8.084	0.001
Acculturation	0.633	0.199	3.181	0.002
Religiosity	0.128	1.108	0.115	0.908
Lived/Worked in Target Country (Brazil)	-2.883	1.899	-1.518	0.130
Received Household Remittances	-4.540	1.862	-2.439	0.015
<b>Control Variables</b>				
Age	0.000	0.049	0.001	0.999
Gender	3.013	1.115	2.702	0.007
Education	0.068	0.126	0.542	0.588
Household Income	0.285	1.170	0.243	0.808
Model Diagnostics: $R = 0.281$ , $R^2 = 0.079$ , Adj. $R^2 = 0.058$				
Model ANOVA: $F = 3.822$ , $p = 0.001$				
VIF $1.3 <$				

Note: Standard errors are robust to heteroskedasticity of the errors.

Source: Authors' calculations.

### Discussion of Results

Acculturation and receipt of household remittances significantly influence consumer animosity among the respondents in our study. The stronger one's connection to Paraguay, the greater the association with higher levels of consumer animosity toward Argentina and Brazil. The legacy of Paraguayan animus inculcated through schooling, media, and oral histories, both past and present toward both Argentina and Brazil, is revealed by higher levels of acculturation. This is a novel finding in the consumer animosity literature. In other societies with sufficient levels of immigration, acculturation may also play a role and may be an important variable within the study of consumer animosity.

The receipt of household remittances among our respondents has a mitigating influence on the level of consumer animosity toward Argentina and Brazil. The current reliance on outside economic structures that facilitate the flow of money from family member earning abroad to Paraguayan households alleviates consumer animosity feelings. This reliance and economic assistance may foster more positive

feelings towards other places, influencing consumer behavior. This finding is another novel one within the consumer animosity literature.

The association between religiosity and consumer animosity is not significant, suggesting that this variable should not be further considered in future studies. While having lived and worked in the target country did not prove to be significant in the present study, it still may be a valuable variable for consideration. In the Brazilian model, this variable was nearly significant, and, as hypothesized, the negative sign was observed in both models. It seems reasonable that the experience of living in the target country may influence feelings related to consumer animosity.

Several managerial implications emerge from this study. For more acculturated Paraguayans in our sample of middle- and upper-class respondents, the antipathy toward both Argentina and Brazil is greater than for those less acculturated Paraguayans. Arising from this knowledge, marketing campaigns promoting local products, especially those that compete with Argentina and Brazil, may benefit by highlighting country-

of-origin differences. Additionally, the level of consumer animosity is more intense in the case of Brazil over Argentina suggesting perhaps a more focused approach vis-à-vis Brazilian products for Paraguayan competitors. Additionally, knowing which households receive remittances from abroad may provide a pathway toward the greater acceptance of Argentinian and Brazilian goods.

## CONCLUSION

Consumer animosity is described as the lingering hostility stemming from prior or current military, political, or economic events that impact consumers' willingness to purchase products manufactured abroad. Our study is the first to consider Paraguayan consumer animosity towards its larger neighbors. In our sample of middle- and upper-class Paraguayans, we have shown that consumers with a greater connection (acculturation) to Paraguay—measured by a higher generation score—have a higher hostility towards products from Brazil and Argentina. However, this effect is reduced in those consumers who receive remittances from their relatives living abroad. These results are statistically relevant when considering individual differences in schooling, age, gender, and family income (control variables) of the consumers in our survey. We previously expected that religiosity and previous residence in one country under study could influence some hostility to either Brazilian or Argentinian products. However, the results do not allow us to reach this conclusion.

The influence of remittances on antipathy towards Brazilian and Argentine products should increase the relative preferences for Paraguayan products. Some measures that could be implemented include the creation and promotion of marketing campaigns showing that Paraguayan products have a similar quality and functionality to goods produced in Brazil or Argentina. This may take the form of a current initiative, the *Paraguayo Como Vos* (Paraguayan Like You) campaign, undertaken by the nation's primary trade association, the *Unión Industrial Paraguaya*. Furthermore, households receiving remittances from abroad could be identified to adapt advertising strategies.

In the long term, public policy should not

forget to promote a sustained growth of the Paraguayan economy. Strong economic growth would considerably increase the family budget and thus reduce dependence on remittances, and consequently diminish the preference for products of Argentine and Brazilian origin.

The previous residence of the consumer is not a determinant in hostility towards Argentine and Brazilian products. In both regressions, the estimated effect coincides with the working hypothesis: previous residence in Brazil and Argentina lessen hostility to their products, but this effect was not statistically significant. Perhaps a more precise measurement, a continuous variable, could improve the quantification of its impact on hostility towards products of Argentine and Brazilian origin.

By extending consumer animosity to the Paraguayan market environment and considering it in pairs with its neighbors, which are two of the major regional (South American) economies, we add to the body of knowledge on international consumer behavior. Our results only apply to the individuals who were surveyed, which could be deemed as a study limitation. Demographic and additional variables may improve the relationships with and our comprehension of consumer animosity in these country pairs. In such an effort, we hope to build on the current studies. However, future research may expand these analyses to include the whole range of consumers, as well as consumers in cross-border markets (i.e., the entrepôts of the capital Asunción and its surroundings, Ciudad del Este, and Encarnación) and product classes.

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The authors declare that they did not receive assistance from an AI during the research process nor during the writing of this document.

## REFERENCES

- Amine, L.S. (2008). Country-of-Origin, Animosity and Consumer Response: Marketing Implications of Anti-Americanism and Francophobia. *International Business Review*, 17(4), 402-422. <https://doi.org/10.1016/j.ibusrev.2008.02.013>
- Azzi, C. & Ehrenberg, R. (1975). Household Allocation of Time and Church Attendance. *Journal of Political Economy*, 83(1), 27-56. <https://www.jstor.org/stable/1833272>
- Bahae, M. & Pisani, M.J. (2009). Iranian Consumer Animosity and American Products: A Witch's Brew or Elixir?. *International Business Review*, 18(2), 199-210. <https://doi.org/10.1016/j.ibusrev.2009.02.002>
- BCP (Banco Central del Paraguay) (2023). Anexo Estadístico del Informe Económico, Cuadro 55 Remesas Familiares. Available at: <https://www.bcp.gov.py/anexo-estadistico-del-informe-economico-i365>, accessed June 22, 2023.
- Borda, D. & Caballero, M. (2020). Crecimiento y Desarrollo: Económico en Paraguay, Asunción, Paraguay: Centro de Análisis y Difusión de la Economía Paraguaya, CADEP.
- Brislin, R.W. (1980). Translation and Content Analysis of Oral and Written Materials. In Harry C. Triandis and William W. Lambert (Eds.), *Handbook of Cross-Cultural Psychology*. Boston, MA, USA: Allyn & Bacon.
- Cantero, J. (2018). Paraguay: Atrociada, Atasco, Auge y la Reinvencción. Asunción, Paraguay.
- Constitución Nacional (1992). Constitución Nacional de Paraguay. <https://www.bacn.gov.py/leyes-paraguayas/9580/constitucion-nacional->
- Duarte Sánchez, D.D., Ruiz Díaz, M., & Kwan Chung, C.K. (2023). Impacto de las Empresas Maquiladoras de Exportación en el Crecimiento Económico y Generación de Empleo en Paraguay, 2020. *Revista de Análisis y Difusión de Perspectivas Educativas y Empresariales-RADEE*, 3(5), 8-16. <https://doi.org/10.56216/radee012023jun.a01>
- Ettenson, R. & Klein, J.G. (2005). The Fallout from French Nuclear Testing in the South Pacific: A Longitudinal Study of Consumer Boycotts. *International Marketing Review*, 22 (2), 199-224. <https://doi.org/10.1108/02651330510593278>
- Fernández-Ferrín, P., Bande-Vilela, B., Klein, J.G., & del Río-Araújo, M.L. (2015). Consumer Ethnocentrism and Consumer Animosity: Antecedents and Consequences. *International Journal of Emerging Markets*, 10(1), 73-88. <https://doi.org/10.1108/IJOEM-11-2011-0102>
- Fondo Monetario Internacional [International Monetary Fund] (2022). Paraguay: Solicitud de un Instrumento de Coordinación de Políticas de dos Años. November. <https://www.imf.org/en/Publications/CR/Issues/2022/12/03/Paraguay-Request-for-a-Two-Year-Policy-Coordination-Instrument-Press-Release-Staff-Report-525940>
- Fong, C.M., Chang, H.H.S., & Han, Y.L. (2022). Animosity, Preference Conflict and Consumption Context in an International Crisis: A Normative Influence Perspective. *International Marketing Review*, 39(6), 1285-1308. <https://doi.org/10.1108/IMR-07-2021-0219>
- Galeano, J.J., Coronel, L. & Ocampos, V. (2021). Evolución de la Clase Media en Paraguay Bajo un Enfoque de Vulnerabilidad y Medición de Activos. Documento de Trabajo, Dirección de Estudios Económicos, Subsecretaría de Estado Economía, Ministerio de Hacienda, Agosto de 2018, revisión final noviembre de 2021. [https://www.economia.gov.py/application/files/5716/5160/0032/DDT\\_Evolucion\\_de\\_la\\_clase\\_media\\_en\\_PRY.pdf](https://www.economia.gov.py/application/files/5716/5160/0032/DDT_Evolucion_de_la_clase_media_en_PRY.pdf)
- Gordon, M. (1964). *Assimilation in American Life: The Role of Race, Religion, and National Origins*. New York, NY: Oxford University Press.
- Hair, J.F., Jr., Anderson, R.E., Tatham, R.L., & Black, W.C. (1995). *Multivariate Data Analysis, with Readings* (fourth edition). Upper Saddle River, NJ, USA: Prentice Hall.

- Han, C.M. (2017). Individualism, Collectivism, and Consumer Animosity in Emerging Asia: Evidence from Korea. *The Journal of Consumer Marketing*, 34(4), 359-370. <https://doi.org/10.1108/JCM-09-2016-1937>
- Heduvan, J.H. & Cabral López, M.A. (2023). Factores Endógenos y Exógenos en el Relacionamiento Bilateral entre Paraguay y la República de China (Taiwán): Primacías en un Contexto Internacional Tensionado por el Contexto Chino-Estadounidense. *Revista UNISCI*, 61(January), 147-167. <http://dx.doi.org/10.31439/UNISCI-160>
- INE [Instituto Nacional de Estadística], República del Paraguay (2023). Principales Resultados de Pobreza Monetaria y Distribución de Ingreso [for years 2017-2022]. <https://ine.gov.py>
- Klein, J.G., Ettenson, R., & Morris, M.D. (1998). The Animosity Model of Foreign Product Purchase: An Empirical Test in the People's Republic of China. *Journal of Marketing*, 62(January), 89-100. <https://doi.org/10.2307/1251805>
- Lee, R., Lee, K.T., & Li, J. (2017). A Memory Theory Perspective of Consumer Ethnocentrism and Animosity. *European Journal of Marketing*, 51(7-8), 1266-1285. <https://doi.org/10.1108/EJM-03-2014-0188>
- Li, Y., Li, B., Wang, G., & Yang, S. (2021). The Effects of Consumer Animosity on Demand for Sharing-Based Accommodations: Evidence from Airbnb. *Decision Support Systems*, 140(January), 1-10. <https://doi.org/10.1016/j.dss.2020.113430>
- Mandl, T. (2021). *Modern Paraguay: Uncovering South America's Best Kept Secret*. Jefferson, NC, USA: MacFarland & Company, Inc., Publishers.
- MarketData (2023). Turismo emisor: Los paraguayos prefieren vacacionar en Brasil, pero comprar en Argentina. *Nacionales*. <https://marketdata.com.py/noticias/nacionales/turismo-emisor-los-paraguayos-prefieren-vacacionar-en-brasil-pero-comprar-en-argentina-114357/>
- Masi, F. (2022). Paraguay y los Treinta Años del Mercosur. In Gerardo Caetano and Diego Hernández Nilson (Eds.), *30 Años de MERCOSUR: Trayectorias, Flexibilización e Interregionalismo*, Montevideo, Uruguay: Departamento de Ciencia Política, Facultad de Ciencias Sociales, Universidad de la República, pp. 65-70. <https://www.fundacioncarolina.es/wp-content/uploads/2022/10/Mercosur-30-anos-libro-digital.pdf>.
- Nawaz, M.Z., Nawaz, S., Guzmán, F., & Plotkina, D. (2023). The Aftermath of COVID-19: The Rise of Pandemic Animosity Among Consumers and its Scale Development. *Journal of Business Research*, 157(March), 1-16. <https://doi.org/10.1016/j.jbusres.2022.113550>
- Nijssen, E.J. & Douglas, S.P. (2004). Examining the Animosity Model in a Country with a High Level of Foreign Trade. *International Journal of Research in Marketing*, 21, 23-38. <https://doi.org/10.1016/j.ijresmar.2003.05.001>
- Pisani, M.J. (2023). Simplifying the Connection Between Acculturation and Ethnic Entrepreneurship Using Targeted Survey Questions for Quantitative Analyses. *Sage Research Method Cases in Business*. <https://doi.org/10.4135/9781529667493>
- Pisani, M.J. & Ovando Rivarola, F.G. (2019). *Understanding the Determinants of Economic Informality in Paraguay: A Kaleidoscope of Measures*. Cham, Switzerland: Palgrave Macmillan.
- Poppino, R.E. (1973). *Brazil: The Land and People* (second edition). New York, NY: Oxford University Press.
- Portes, A. & Rumbaut, R.G. (2014). *Immigrant America: A Portrait* (fourth edition). Oakland, CA: University of California Press.
- Pujadas, J.J. & Szekut, A. (2018). Soberanía, Políticas Fronterizas y Prácticas Transnacionales en Paraguay. *Iztapalapa, Revista de Ciencias Sociales y Humanidades*, 39(85), 59-80. <https://doi.org/10.28928/revistaiztapalapa/852018/atc3/pujadasmunozjj/szekuta>

- Recalde, M. & Meza, D. (2022). Análisis de la afectación del reajuste del Salario Mínimo Legal Vigente en los trabajadores asalariados formales del sector privado. June, MTESS [Ministerio de Trabajo, Empleo y Seguridad Social]. [https://www.mtess.gov.py/application/files/9016/5842/3791/Analisis\\_salario\\_minimo\\_reajuste\\_2022\\_09\\_06.pdf](https://www.mtess.gov.py/application/files/9016/5842/3791/Analisis_salario_minimo_reajuste_2022_09_06.pdf)
- Richardson, C. & Pisani, M.J. (2017). *Batos, Bollillos, Pochos, and Pelados: Class and Culture on the South Texas Border* (revised edition). Austin, TX: University of Texas Press.
- Roa Bastos, A. (1977). *Paraguay: Una isla rodeada de tierra*. El Correo de la UNESCO. [http://www.lacult.unesco.org/docc/oralidad\\_06\\_07\\_56-59-paraguay.pdf](http://www.lacult.unesco.org/docc/oralidad_06_07_56-59-paraguay.pdf)
- Roett, R. & Sacks, R.S. (1991). *Paraguay: The Personalist Legacy*. Boulder, CO: Westview Press.
- Saeger, J.S. (2007). *Francisco Solano López and the Ruination of Paraguay: Honor and Ego-centrism*. Lanham, MD, USA: Rowman & Littlefield Publishers, Inc.
- Shin, M. (2001). The Animosity Model of Foreign Product Purchase Revisited: Does It Work in Korea?. *Journal of Empirical Generalizations in Marketing Science*, 6, 6-14.
- Shoham, A., Gavish, Y., & Rose, G. M. (2016). Consequences of Consumer Animosity: A Meta-Analytic Integration. *Journal of International Consumer Marketing*, 28(3), 185-200. <https://doi.org/10.1080/08961530.2015.1116040>
- Souidenm N., Ladhari, R., & Chang, L. (2018). Chinese Perception and Willingness to Buy Taiwanese Brands. *Asia Pacific Journal of Marketing and Logistics*, 30(4), 816-836. <https://doi.org/10.1108/APJML-09-2017-0203>
- Subsecretaría de Estado de Economía, Ministerio de Hacienda [Paraguay] (2023). *Panorama Macroeconómico del Paraguay*. Asunción: Oficina de Relaciones con Inversionistas. [https://economia.gov.py/application/files/1216/8372/8807/COMPLADO\\_PANORAMA\\_MACROECONOMICO\\_2023\\_.pdf](https://economia.gov.py/application/files/1216/8372/8807/COMPLADO_PANORAMA_MACROECONOMICO_2023_.pdf)
- Tinelli, M. L., Tinelli, F., & Delogne, M. (2020). *Inversión de Impacto en Paraguay: Oportunidades y Desafíos de un Mercado con Enorme Potencial* June, Programa de las Naciones Unidas para el Desarrollo (PNUD) [United Nations Development Programme]. <https://www.unepfi.org/wordpress/wp-content/uploads/2020/09/Inversion-de-impacto-en-Paraguay-PNUD.pdf>
- Vázquez, F. (2006). *Territorio y Población: Nuevas Dinámicas Regionales en el Paraguay*. Asunción, Paraguay: ADEPO/UNFPA/GTZ. <https://paraguay.unfpa.org/es/publicaciones/territorio-y-poblaci%C3%B3n-nuevas-din%C3%A1micas-regionales-en-el-paraguay>.
- Wang, S., Tang, Z., Stewart, D.W., & Paik, Y. (2023). Interplay of Consumer Animosity and Product Country Image in Consumers' Purchase Decision. *Journal of International Business Studies*, 54(3), 505-513. <https://doi.org/10.1057/s41267-022-00556-0>
- Warren, H.G. (1985). *Rebirth of the Paraguayan Republic: The First Colorado Era, 1878-1904*. Pittsburg, PA: University of Pittsburg Press.
- Warren, H.G. (1978). *Paraguay and the Triple Alliance: The Postwar Decade, 1869-1878*. Austin, TX: Institute of Latin American Studies, The University of Texas at Austin.
- Westjohn, S.A., Magnusson, P., Peng, Y., & Jung, H. (2021). Acting on Anger: Cultural Value Moderators of the Effects of Consumer Animosity. *Journal of International Business Studies*, 52(8), 1591-1615. <https://doi.org/10.1057/s41267-019-00289-7>
- Williams, J.H. (1979). *The Rise and Fall of the Paraguayan Republic, 1800-1870*. Austin, TX: University of Texas Press.

## APPENDICES

### Appendix A1: Consumer Animosity Scale for Argentina

1. I dislike Argentinians.
2. I feel angry toward Argentinians.
3. Argentinians are arrogant and look down on Paraguayans.
4. Argentina took advantage of us on the Yacyretá Dam Deal.
5. Argentina is not a reliable trading partner.
6. Argentina wants to gain economic power over Paraguay.
7. Argentina is taking advantage of Paraguay.
8. Argentina has too much economic influence in Paraguay.
9. Argentinians are doing business unfairly with Paraguay.

### Appendix A2: Consumer Animosity Scale for Brazil

1. I dislike Brazilians.
2. I feel angry toward Brazilians.
3. Brazilians took advantage of us on the Itaipú Dam Deal.
4. Brazilians are taking over the countryside and displacing Paraguayans.
5. Brazil is not a reliable trading partner.
6. Brazil wants to gain economic power over Paraguay.
7. Brazil is taking advantage of Paraguay.
8. Brazil has too much economic influence in Paraguay.
9. Brazilians are doing business unfairly with Paraguay.

### Appendix B: Correlation Matrix for Consumer Animosity and Argentina

	Income	Remittances	Religiosity	Age	Generation Score	Gender	Lived/ Worked in Argentina	Education
Income	1.000	-0.021	-0.017	-0.034	-0.151	-0.002	0.059	0.024
Remittances	-0.021	1.000	-0.023	0.000	0.109	-0.065	-0.095	-0.016
Religiosity	-0.017	-0.023	1.000	-0.050	-0.020	0.060	-0.081	-0.400
Age	-0.034	0.000	-0.050	1.000	0.051	0.161	0.104	0.056
Generation Score	-0.151	0.109	-0.020	0.051	1.000	-0.009	-0.025	-0.049
Gender	-0.002	-0.065	0.060	0.161	-0.009	1.000	-0.011	0.074
Lived/ Worked in Argentina	0.059	-0.095	-0.081	0.104	-0.025	-0.011	1.000	-0.098
Education	0.024	-0.016	-0.400	0.056	-0.049	0.074	-0.098	1.000

Source: Authors' calculations.

## Appendix C: Correlation Matrix for Consumer Animosity and Brazil

	Income	Remittances	Religiosity	Age	Generation Score	Gender	Lived/ Worked in Brazil	Education
Income	1.000	-0.002	-0.021	0.022	-0.030	-0.158	0.071	-0.024
Remittances	-0.002	1.000	-0.064	0.072	0.160	-0.009	-0.012	0.061
Religiosity	-0.021	-0.064	1.000	-0.026	-0.003	0.110	-0.103	-0.017
Age	0.022	0.072	-0.026	1.000	0.060	-0.049	-0.083	-0.402
Generation Score	-0.030	0.160	-0.003	0.060	1.000	0.048	0.111	-0.054
Gender	-0.158	-0.009	0.110	-0.049	0.048	1.000	-0.037	-0.013
Lived/ Worked in Brazil	0.071	-0.012	-0.103	-0.083	0.111	-0.037	1.000	-0.097
Education	-0.024	0.061	-0.017	-0.402	-0.054	-0.013	-0.097	1.000

Source: Authors' calculation