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Maza-Avila, F., Pérez-González, M., & Vergara-Schmabach, J. (2023). Perceptions of the socioeconomic effects of Venezuelan migration among informal traders in Cartagena de Indias (Colombia). Economics and Sociology, 16(3), 281-301. doi:10.14254/2071-789X.2023/16-3/15

RECENT ISSUES IN SOCIOLOGICAL RESEARCH

PERCEPTIONS OF THE SOCIOECONOMIC EFFECTS OF VENEZUELAN MIGRATION AMONG INFORMAL TRADERS IN CARTAGENA DE INDIAS (COLOMBIA)

ABSTRACT. The aim of this article is to analyse the impact of knowledge of Venezuelan migration and of the perceived socioeconomic effects of this migration on the perceptions held by Colombians engaging in informal commercial activities in Cartagena de Indias, Colombia, and on the strategies that they adopt to ensure the survival of their informal businesses. A structural equation model was developed based on data from a questionnaire administered to a representative sample of 301 informal traders in the historic centre and beach area in Cartagena de Indias, Colombia. The application of a causal theoretical model allowed the main factors affecting perceptions of migration from Venezuela among Colombian-born informal traders to be assessed. The research results indicated that the variables Knowledge of Venezuelan migration (COM), Social effects of migration (ESM) and Economic effects of migration (EEM) have significant correlation with Perceptions of Venezuelan migration (PHM). Moreover, Economic effects of migration (EEM) correlate significantly with Strategies and actions implemented by informal traders to ensure the survival of their businesses (EAI). The obtained results can be used to develop targeted action plans to contribute to improving these perceptions.

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Received: November, 2022 1st Revision: June, 2023 Accepted: August, 2023

DOI: 10.14254/2071-789X.2023/16-3/15

F22, J61

JEL Classification: C12, C35, Keywords: socioeconomic effects, Venezuelan migration, perceptions, structural equations, Cartagena de Indias

Introduction

Perceptions of the effects of migration are of significant interest to governments and public institutions. In order to design public policies that ensure that migrants are adequately integrated in their destination countries, the native population's attitudes to immigrants and perceptions of the impact of immigration on their personal finances and on society must be taken into consideration (Ceyhun, 2020). The academic community has also taken an interest in the subject, as these perceptions allow predictions to be made as to people's readiness to accept or reject immigrants in a particular region or country (Hainmueller & Hopkins, 2014). In addition, such perceptions play a role in explaining and elucidating conclusions in research on economics and international migration (Facchini et al., 2013; Mayda, 2006).

The literature on perceptions of the effects of migration points to several different types of impacts (Maza Ávila et al., 2022), however, this article will only address two of them. Firstly, economic effects, drawing on the labour market competition hypothesis and the fiscal burden hypothesis (Hainmueller & Hopkins, 2014), show the impact through variables such as income and occupational status (employed or unemployed); they are moderated by factors such as education and social class. Secondly, social effects, based on theories of personal identity, values and beliefs, and social interaction (Berg, 2015), use variables such as citizen culture, interpersonal relationships, and respect for symbolic sites.

This study differs from previous research into perceptions of migration and its effects in several ways. First of all, it focuses on an emerging country, Colombia, with high rates of labor informality (above 60% of the employed population) and poverty levels (40% in 2021), diverging from the majority of research in the field, which has focused on developed countries (Alrababa'h et al., 2019; Tsai et al., 2019). Colombia is uniquely interesting as in recent years it has become the main receiving country for Venezuelan migrants (Bermúdez et al., 2018), who are attracted by its geographic proximity and by the long-standing historic and cultural ties between the two countries (Sáez et al., 2020). Unlike the vast majority of research, which takes people in general as the study population and makes no specific distinction between them (Hainmueller & Hopkins, 2014), this study focuses on informal traders – more specifically, those offering goods and services in Cartagena de Indias – who tend to be vulnerable and low-skilled (Lopez, 2012), revealing a very different perspective on perceptions of migration.

This study aims to fulfil three main objectives: a) to describe informal traders in the tourism sector in Cartagena de Indias and determine their level of knowledge of Venezuelan migration; b) to evaluate their perceptions of the effects of Venezuelan migration on their informal work; and c) to analyse the strategies implemented to mitigate these effects. The following three research questions are intended to be answered: (a) How much do informal traders in the tourism sector of Cartagena de Indias know about Venezuelan migration?; b) What is the perception of informal traders in the tourism sector of Cartagena de Indias sector of Cartagena de Indias on the socio-economic effects of Venezuelan migration on their informal work? and c) What strategies have informal traders in the tourism sector of Cartagena de Indias implemented to mitigate the effects of Venezuelan migration? In this particular case, the last point is crucial as practically every Venezuelan migrat in Colombia works in the informal sector (Farné & Sanín, 2020), competing with native informal traders for the same areas and customers. In order to fulfil objective a), sociodemographic variables such as age, gender, social class, education level and type of product sold will be used, while objective b) will focus on perceptions of the socioeconomic impact of the Venezuelan migrant population in general¹ and of the migrants

¹ The magnitude of these perceptions may increase in the current context, as the Colombian government recently introduced the Temporary Protection Statute for Venezuelan Migrants with a view to regularising migrants in the country. This could lead to xenophobia, as the national government will be mobilising significant resources to benefit the non-native population. The fiscal burden model (Hainmueller & Hopkins, 2014) conceptualises this phenomenon.

who have begun to trade near local people's work areas in particular². Finally, the state of emergency provoked by the COVID-19 pandemic is another variable included in the analysis.

Venezuelan migration to Colombia

Colombia is one of the Latin American countries that is currently experiencing immigration from Venezuela. It is estimated that the number of Venezuelan emigrants in October 2021 stood at 5.91 million (R4V, 2021), of whom 1,842,390 (31.2%) chose Colombia as their destination (Migración Colombia 2021). Venezuelans emigrate in search of better opportunities to live and work amid a context of political and economic instability in their native country. As a result, Venezuela currently leads migration to countries in South, Central and North America, as well as Europe, among other regions of the world (Rodríguez-Morales et al. 2019). Although emigration from Venezuela has been taking place for approximately 20 years, it has risen considerably since 2017 when sociopolitical instability in the country became more acute, accompanied by hyperinflation, limited access to healthcare and declining food production and availability, which has led to a deterioration in the population's nutritional health (Doocy et al. 2019).

Mass migration from Venezuela to Colombia has also affected the country's economy and society, with impacts ranging from a rise in demand for basic social services such as healthcare (Doocy et al. 2019; Anonymous Reference 2 2022), education, drinking water and basic sanitation to pressures on the labour market and wage variation, as well as gradual changes to customs and consumption patterns (Aruj 2008). Venezuelan migration has become the largest phenomenon of its kind in Colombia's recent history and the economic effects are particularly visible in the informal economy (Migración Colombia 2018). With fewer legal requirements and formalities in the informal economy (De Soto 1986) and greater accessibility with regard to productivity, technology and educational qualifications in informal commerce in particular (Aguilera Díaz, Arrieta Arrieta, Carreño Castellar and Uribe Villa, 2015), Venezuelan migrants are drawn to Colombia's informal sector -especially in the tourism sector-, exacerbating the already serious issue of informality in the country's labour market.

By way of example, on 30 June 2017, there were 403,702 Venezuelans in Colombia, of whom 140,000 had entered the country in an irregular manner (Migración Colombia 2017). However, by 30 August 2021, the number of people with Venezuelan nationality in Colombia had risen to 1,842,390 (Migración Colombia 2021), representing an increase of 356.4% in a four-year period. Venezuelan migration is concentrated in cities such as Bogotá (393,716), Medellín (148,714), Cúcuta (98,680), Barranquilla (93,321), Cali (84,160) and Cartagena de Indias (50,026). Cartagena de Indias is one of the most popular tourist destinations in Colombia (Anonymous Reference 3 2021) and the city's tourist and cultural appeal serves to attract Venezuelan migrants, who opt to join the informal economy³. According to figures from the National Administrative Department of Statistics for January 2022, Cartagena de Indias reported a rate of informality of 62.3%, placing it fourth among Colombia's cities with the highest rates of informality and almost 20% above the national average of 43.9% (DANE 2022). The informality of Cartagena de Indias is concentrated in the tourism sector, which has received the largest number of Venezuelan migrants. Against this backdrop, experts agree that these rates

 $^{^{2}}$ In Colombia, there have been clashes between native traders and migrants as new Venezuelan migrants are constantly arriving and advertising their products in spaces traditionally occupied by natives.

³ In the informal economy, because it has fewer legal requirements and formalities (De Soto 1986), and in informal commerce, because it is accessible in terms of the technology, education level and productivity required (Aguilera Díaz, Arrieta Arrieta, Carreño Castellar & Uribe Villa, 2015).

of informality will continue to rise amid further Venezuelan migration⁴ and the COVID-19 crisis, which will heighten the impact on Colombia's economy ⁵ and may influence perceptions of the effects of migration.

In response to the Venezuelan migration phenomenon, the Colombian government has implemented a series of policies and programs in recent years. These include the registration and regularization of migrants, the provision of basic services and health care, and the offer of employment and training programs. According to Colombia's Ministry of Foreign Affairs, the government has invested more than US\$300 million in humanitarian aid and migration assistance programs. However, according to a study by Human Rights Watch, problems persist in the care of migrants, such as lack of access to health and education services, and discrimination and acts of violence against them.

Theoretical approach

Perceptions and attitudes among inhabitants of the destination country, as well as immigration policies and initiatives aimed at the immigrant population, play a key role in establishing interrelations between different population segments and shaping inter-group relations (Fussell 2014). Given the rise of migration and the importance of obtaining more extensive knowledge of the phenomenon in order to develop realistic measures in response to it, an increasing number of studies are exploring perceptions of migration among residents in the destination city or country. According to Berg (2015), the main theories on opinions and attitudes towards immigrants may be summarised in five broad categories: personal and social identity; self and group interest; cultural values and beliefs; social interaction, and multilevel theories. Berg states that these categories should not be understood as a series of elements providing an individual explanation or as a unidirectional sum of elements, but rather as a set of interacting factors explaining a phenomenon from a multidimensional, multilevel perspective with strong interrelationships between conceptual aspects and practical reality.

With regard to the factors involved, it is relevant to note that the concept of identity has undergone a significant transformation: it is now viewed as a dynamic social construction linked to relationships rather than a physical, geographical location (Baeza Virgilio 2012). Identity is no longer understood as something intangible passed from generation to generation, but as a social construction shaped by multidimensional interrelationships (Marcus 1995). Reflecting this changing perspective, Gravelle (2018) analyses perceptions of immigration among the native population, identifying areas that may be affected by different types of threats:

- Economic threats with regard to rising competition for jobs, especially at times of slower economic growth (Scheve and Slaughter 2001; Malhotra et al. 2015; Citrin et al. 1997; Hopkins 2010; Wilkes and Corrigall-Brown 2010; Billiet, Meuleman, and De Witte 2014; Goldstein and Peters 2014).
- Cultural threats in terms of exposure of the destination country's values, traditions, customs or identity to the innate culture conveyed by immigrants' behaviour and interaction with incoming cultural elements, which may diminish the value of these elements in the destination country (Schildkraut 2011; Newman, Hartman, and Taber

⁴ There is an ongoing debate among academics as to the effects of Venezuelan migration on the Colombian labour market. Some scholars maintain that it is impossible to ascertain the true impact due to a lack of research analysing the phenomenon. For more information, please see the Venezuela Migration Project overseen by Revista Semana: <u>https://migravenezuela.com</u>.

⁵ Migration often impacts the economy and society of the destination country. These impacts range from increasing demand for social services, healthcare (Doocy et al. 2019), education and basic sanitation to pressures on the labour market, wage variation and changes to local culture and traditions (Aruj 2008).

2012; Hainmueller and Hopkins 2014; Chandler and Tsai 2001; McLaren 2003; Harell et al. 2012)

• Political threats, as immigrants may behave differently in the destination country in relation to different political currents and the resident population may react differently to immigrants depending on their ideological stance (McLaren 2003; Hawley 2011; Schildkraut 2011; Hainmueller and Hopkins 2014; Gravelle 2016).

Hainmueller and Hopkins (2014) highlight the rise in migration and its economic and political influence. With regard to political influence, the theory of labour market competition between the native and immigrant population is particularly relevant and is based on the factor proportions model (FP), emphasising the possibility of perfect replacement between local people and immigrants. The distribution will differ according to immigrants' education level and skills: if most immigrants are low-skilled, the supply of low-level employment will rise, bringing down wages or employment rates among native people in this segment of the economy and leading to rising wages among more highly-skilled native people. The opposite will occur if most immigrants are highly-skilled, affecting their wages and employment levels, as well as leading to rising wages among lower-skilled native people, who will be relatively scarcer than before (Scheve and Slaughter 2001).

The impact of immigration on native workers differs depending on the segment of the labour market to which they belong: generally speaking, lower-skilled workers are more likely to be against immigration. Maydas (2006) points to a stronger positive correlation between native people and immigrants in countries where the skill level is higher among native people than immigrants. However, these models of the impact on wages have been criticised because of their conceptual ambiguity with regard to the characteristics of elements susceptible to replacement, countries, economies and other factors (Hainmueller and Hiscox 2007).

Another important aspect of migration theory to consider is the impact of immigrants on public finances in the destination country (Campbell et al. 2006; Bilodeau and Fadol 2011). What influence do they have on public revenues and expenditure? The answer is unclear and varies significantly, according to many of the studies carried out on this topic (Hanson, Scheve, and Slaughter 2007; Facchini and Mayda 2009; Crepaz and Damron 2008).

1. Literature review

The use of quantitative methods to analyse migration allows researchers to refute or reaffirm the determinants or effects involved. Previous research has tended to focus on the causes of migration, drawing primarily on information from migrants themselves. These studies have sought to describe migrants, using data from individual surveys and quantitative methods. In the case of structural equation models applied to migration in particular, the literature points to a number of different approaches that are all based on causal models. These models are used to identify significant elements in a group of variables or constructs with a view to enhancing understanding of the determinants and effects involved in migration.

1.1. Social and demographic effects

The literature presents the initial findings of causal models, which point to a significant relationship between perceptions of migration and sociodemographic variables. From the migrant's perspective, according to Hay (1980), there is an inverse relationship between an individual's income and migration. In other words, the lower their income, the more likely they are to move away from their place of residence. Cadwallader (1985) proposes a causal model

with additional sociodemographic variables, concluding that income, education level and employment influence people's intentions to migrate.

From the perspective of individuals located in the countries of destination of migration, other scholars include cultural elements as determinants of these individuals' perceptions of migration. Finell et al. (2013), for example, conclude that these cultural factors are necessary for a deeper understanding of this type of phenomena. Meanwhile, Hainmueller & Hopkins (2014) show that the cultural impacts of migration on local populations are among individuals' concerns, despite having a lower weight than economic impacts.

Another less commonly studied factor when explaining migration are psychological aspects. According to Gallego & Pardo (2014), individual personality must be considered in studies on perceptions of migration. Psychological aspects are included in studies on factors influencing coexistence between the resident and migrant population (Olmedo-Moreno et al., 2014). Where levels of coexistence are adequate, migrants will have access to better living conditions, among other aspects (Liu et al., 2013). When this is not the case, there is a negative impact on migrants' living conditions and quality of life (Tong & Kawachi, 2020). It is important to note that perceptions of migration may be influenced by the media (Theorin & Strömbäck, 2019).

1.2. Economic and political effects

Economic reasons are among the main determinants of perceptions of migration. They generate effects that result in positive and negative impacts on people (Mocetti and Porello 2010; Guerreiro, Rebelo, and Teles 2020; Chassamboulli and Peri 2020; Facchini, Frattini, and Mayda 2015), encouraging migration (Esposito, Collignon, and Scicchitano 2020; Wallace and Wu 2019; Ziller, Wright, and Hewstone 2019; Danaj, Lazányi, and Bilan 2018). Du et al. (2019) propose a framework resolved with a structural equation model in which they evaluate the socioeconomic effects of migration on a population, concluding that community effects play a more important role than individual migrants.

Another factor that should be considered in studies of perceptions is their relationship with the formulation of public policies (Tsai, Tsai, and Huang 2019; España and Vera 2020) and with established policies between nations (Xu 2019; Das, Marjit, and Kar 2020; Furlanetto and Robstad 2019). These policies shape the conditions that increase migration flows, creating favourable conditions in the destination country or adverse conditions in the country of origin.

1.3. Designing models of perceptions of migration

With regard to models including perceptions of migration, the literature shows that these types of studies use their own data collection procedures, focusing on the population directly affected by the phenomenon, and that their results contribute to public policy formulation. According to Anonymous Reference 1 (2022), social and psychological factors are the most commonly used to explain individuals' perceptions of migration phenomena, followed by economic and demographic factors.

Research shows that perceptions vary by geographic region, according to the conditions or context in which migration takes place (Esipova et al. 2015; Méndez, Cebolla, and Pinyol 2014; Centro Nacional de Estudios Migratorios 2019; Monreal, Cardenas, and Terron 2010; de Miguel Luken and Cavajal Gutiérrez 2007; Navarrete 2017; Longhi, Nijkamp, and Poot 2010). Therefore, not all effects of migration are associated with adverse situations in migrants' destination countries. Pietrzak et al. (2012) conclude that it is possible to encounter favourable perceptions of the socioeconomic effects of migration after applying a structural equation model to a specific case in Poland.

2. Methodological approach

2.1. Theoretical model and hypothesis

This article is the product of a research study aiming to evaluate knowledge of Venezuelan migration among Colombian informal traders in the historic centre and beach area in Cartagena de Indias, the economic and social effects of this migration, the influence of these factors on perceptions of migration among the traders, and the strategies they adopt to mitigate the effects and ensure the survival of their informal businesses. To evaluate knowledge of Venezuelan migration and the economic and social effects of this migration among Colombian informal traders, a confirmatory modelling strategy was applied, using a structural equation model to enable the statistical significance of the relationships between the variables to be evaluated.

In the proposed framework, two main models were identified: a) a measurement model representing the relationships between the latent variables – or constructs – and their indicators - or empirical or observable variables; and b) a structural model describing the interrelationship between the constructs. The measurement model allowed the suitability of the selected indicators for measuring the constructs of interest to be confirmed (Cupani, 2012), while the structural model served as a reference point to break the model down into dimensions or constructs. Each dimension was evaluated using a structured questionnaire, whose items were represented as observable variables in the model. The variables covered by the questionnaire are shown in Table 1:

Dimension	Questions	Code
0000	Age range	AGE
	Gender	GEN
DEMOCE A DUIC	Civil status	EC
ASDECTS	Municipality of residence	MR
ASILCIS	Ethnic group or origin	PE
	Socioeconomic status	ESE
KNOWLEDGE OF	I am familiar with the political, economic and social situation in Venezuela.	COM1
VENEZUELAN MIGRATION	I am familiar with the socioeconomic conditions of Venezuelan immigrants in Colombia.	COM2
(COM)	I am aware of new informal traders from Venezuela joining the informal labour market in the city.	COM3
ECONOMIC	Effects on income	EEM1
EFFECTS OF	Effects on supply, production and sales costs	EEM2
VENEZUELAN	Effect on total sales	EEM3
MIGRATION	Effect on number of customers	EEM4
(EEM)	Effect on number of local competitors	EEM5
	Effects on safety at the work site	ESM1
SOCIAL EFFECTS	Effects on care for the environment	ESM2
OF VENEZUELAN MIGRATION	Effects on noise levels at the work site	ESM3
	Effects on conservation of the work site	ESM4
	Effects on care or maintenance of the city's historical heritage	ESM5
	Effects on work-related stress levels	ESM6
	Effects on frequency of inspections by authorities	ESM7

Table 1. Observable variables evaluated in the model

Dimonsion	Questions	Coda	
Dimension	Questions		
	Effects on occupation of the public space	ESM8	
	Level of agreement with the national government allowing people from	DUM1	
PERCEPTIONS OF	Venezuela to come and live in Colombia	F 1 11VI 1	
VENEZUELAN	Evaluation of the effect of Venezuelan people coming to live in the city	DUMO	
MIGRATION	on the local economy	F 1 11V12	
(PHM)	Belief that people from Venezuela coming to live in the city make it a	DUM2	
	better or worse place	FINIS	
	Offer more attractive prices for customers	EAI1	
	Improve quality of products	EAI2	
STRATEGIES AND	Increase variety of products	EAI3	
ACTIONS	Present products differently	EAI4	
IMPLEMENTED	Increase working hours to reach more customers	EAI5	
(EAI)	Offer better service to customers	EAI6	
	Improve appearance of work equipment or site	EAI7	
	Clean work equipment more often	EAI8	

Source: own compilation

The conceptual model developed to evaluate knowledge and socioeconomic effects of Venezuelan migration among informal traders in Cartagena de Indias (Graph 1), based on the results of the literature review by Maza-Ávila, Murillo-Ferrer & Pérez-Barrios (2022), is presented below:



Graph 1. Proposed theoretical model and hypotheses on the effects of Venezuelan migration among informal traders in Cartagena de Indias (Colombia) Source: *own data*

Conventions: COM= Knowledge of Venezuelan Migration; EEM= Economic Effects Of Venezuelan Migratio; ESM= Social Effects Of Venezuelan Migration; PHM= Perceptions Of Venezuelan Migration; EAI= Strategies And Actions Implemented

Four hypotheses (H_1 to H_4) were proposed with regard to the relationships between the constructs in order to identify the key factors affecting perceptions of Venezuelan migration and strategies and actions implemented by informal traders in Cartagena de Indias (Colombia):

*H*₁: There is a positive causal effect between the variables KNOWLEDGE OF MIGRATION (COM) and PERCEPTIONS OF MIGRATION (PHM) among informal traders in Cartagena de Indias (Colombia) *H*₂: There is a negative causal effect between the variables SOCIAL EFFECTS OF MIGRATION (ESM) and PERCEPTIONS OF MIGRATION (PHM) among informal traders in Cartagena de Indias (Colombia)

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H₃: There is a negative causal effect between the variables ECONOMIC EFFECTS OF MIGRATION (EEM) and PERCEPTIONS OF MIGRATION (PHM) among informal traders in Cartagena de Indias (Colombia)

*H*₄: There is a positive causal effect between the variables ECONOMIC EFFECTS OF MIGRATION (EEM) and STRATEGIES AND ACTIONS IMPLEMENTED (EAI) among informal traders in Cartagena de Indias (Colombia)

2.2. Description of the study population, sample and sampling technique

The study population were Colombians engaging in informal economic activity in the historic centre and beach area in Cartagena de Indias. Since there are no updated figures on the number of informal traders in the city for 2021^6 and given the dynamics of the sector as a result of the low barriers to entry, an infinite population was assumed. A sample of 301 informal traders with Colombian nationality was estimated, assuming a confidence level of 95% and a margin of error of 5.6%, and using a stratified sampling strategy. Data were collected in March and April 2021. The map below shows the distribution of the sample:



Map 1. Distribution of questionnaires administered to informal traders in Cartagena de Indias Source: *own compilation*

In order to obtain information relevant to the study, a five-point Likert scale was used. This is the most commonly used scale when measuring perceptions (Vergara-Schmalbach & Quesada, 2013). For the questions associated with the Knowledge of Venezuelan migration (COM) variable, a scale with values from 0 to 5 was established, with 0= No knowledge and 5= High level of knowledge. Similarly, for the Perceptions of economic effects of Venezuelan migration (EEM) variable and the Perceptions of social effects of Venezuelan migration (ESM) variable, a scale with values from 0 to 5 was used, with 0= No effect and 5= Major effect. In the case of the Strategies and actions implemented (EAI) variable, a scale from 0 to 5 was used, with 0= Never and 5= Very often.

Finally, for the Perceptions of immigration (PHM) variable, a Likert scale adapted to the information sought from respondents was used as follows:

⁶ The most recent statistics available can be found in the Census of Informal Traders conducted in 2016 by the Public Space and Mobility Department at Cartagena City Hall in the areas of the city with the highest numbers of tourists (historic centre, Manga, Bocagrande and Crespo). The figure at that time was 2,595 informal traders.

- A scale from 1 to 5 showing the Colombian informal traders' level of agreement with the national government allowing people from Venezuela to come and live in the country, with 1= Completely disagree and 5= Completely agree.
- A scale from 1 to 3 showing the Colombian informal traders' evaluation of the impact on the local economy of people from Venezuela coming to live in Cartagena de Indias, with 1= Negative, 2= None and 3= Positive.
- A scale from 1 to 3 evaluating the belief among Colombian informal traders that people from Venezuela coming to live in Cartagena de Indias make the city a better or worse place, with 1= Worse place; 2= No effect and 3= Better place.

The structural model proposed, which included observable and latent variables relating to knowledge, social effects, economic effects, perceptions of migration and strategies implemented, was resolved using the partial least squares (PLS) method for structural equation models (SEM) (Chin, 1998), which is considered a second-level multivariate statistical technique (Hair et al., 2016). The main advantages of using a PLS-SEM model are that it is highly effective in predictive and non-confirmatory situations (F. Hair Jr et al., 2014) and that it does not require a large sample size (Henseler et al., 2015). In addition, its non-parametric nature means that there is no need to ensure the normality of the data (Chin & Newsted, 1999). The SmartPLS software developed by Ringle et al. (2005) was used. PLS-SEM models comprise two components: the structural model, which shows the dependency relationships between exogenous variables and endogenous dependent variables, and the measurement model, which identifies relationships between the latent variables and the observed variables (Martínez Ávila & Fierro Moreno, 2018).

3. Conducting research and results

All 301 questionnaires were accepted, resulting in an effectiveness rate of 100%. The majority of the informal traders surveyed in the historic centre and beach area in Cartagena de Indias (Bocagrande, Castillogrande and Laguito) were men (78%), with a minority of women (21.33%). Most of the respondents resided in Cartagena de Indias (94.68%). Middle-aged adults between the ages of 35 and 64 were predominant (73.09%), followed by a significant proportion of young adults (17.28%). The mean age of the sample was 47.23 years old, with a standard deviation of 13.22 years. The respondents described themselves as Afro-descendants (23.59%) and mixed race (22.26%), although a large number did not report belonging to any ethnic group (48.84%). The predominant socioeconomic status was Class 1 and Class 2, the lowest on the scale, which jointly accounted for 93.69% of the sample. Finally, although the majority of the respondents were in a permanent relationship (62.13%), the percentage of those living in consensual union exceeded those who were married (42.86% vs. 19.27%). A significant proportion were single (31.89%) (Table 2):

Variables	Response options	n	%
A	Young adult	52	17.28%
	Older adult	29	9.63%
Age range	Middle-aged adult	220	73.09%
	Overall total	301	100%
	Male	234	78.00%
Condon	Female	64	21.33%
Gender	Other	2	0.67%
	Overall total	300	100%
	Single	96	31.89%
	Married	58	19.27%
	Consensual union	129	42.86%
Civil status	Separated/divorced	9	2.99%
	Widowed	7	2.33%
	Dk/na	2	0.66%
	Overall total	301	100%
	Cartagena	285	94.68%
	Bayunca (Cartagena)	6	1.99%
	Santa rosa	5	1.66%
Maariainalitaa af	Baru (Cartagena)	1	0.33%
Municipality of	Bocachica (Cartagena)	1	0.33%
residence	Tierra Bomba (Cartagena)	1	0.33%
	Turbaco	1	0.33%
	Arjona	1	0.33%
	Overall total	301	100%
	Mixed race	67	22.26%
	Indigenous	13	4.32%
Ethnic group or	Afro-descendant	71	23.59%
origin	None	147	48.84%
	Dk/na	3	1.00%
	Overall total	301	100%
Socioeconomic status	Class 1	241	80.07%
	Class 2	41	13.62%
	Class 3	10	3.32%
	Class 4	1	0.33%
	Dk/na	8	2.66%
	Overall total	301	100%

Table 2. Sociodemographic aspects. Informal traders in the historic centre and beach area in Cartagena de Indias

Source: *own compilation*

The main activities of Colombian informal traders include the sale of soft drinks and beer (15.2%), manufactured goods (11.4%), handicrafts (10.8%), prepared food (8.6%), rental of tents and/or chairs on the beach (8.6%) and tourist guide services (8.6%), among others. Most of the vendors work every day of the week (84%) and have been in business for an average of 21 years (SD= 12 years). For almost all Colombian informal traders (98.67%), this trade is their main source of income, although a significant percentage (85.38%) often combine it with other activities, such as masonry, informal transport or plumbing. Among the reasons for engaging in this activity are, in order, the difficulty of finding another job or trade (62.13%), the possibility of earning a subsistence income (35.55%) and a taste for the informal trade (27.33%)

On the other hand, Colombian informal vendors indicate their concern about the arrival of Venezuelan informal traders trying to occupy their same vending spaces. In fact, in the last year, almost all Colombian traders indicate that they have observed an increasing presence of

informal traders from Venezuela (99.66%), occupying the same sectors where they work (84.72%) and offering products and/or services similar to those offered by them, such as the sale of soft drinks and beer (13.47%), sweets and/or candy (11.97%), handicrafts (11.43%) and fruit (10.88%). They also indicate that this presence is greater, in order, near tourist sites (19.39%), in the beach area - Bocagrande, Castillogrande and Laguito - (18.66%) or near a public space with high vehicular traffic (15.83%). This, according to respondents, has led to problems both in communication (39.73%) and in the relationship between Colombian and Venezuelan traders (36.7%).

3.1. Analysis of the measurement model

Based on the causal model proposed, a total of 21 questions relating to knowledge of Venezuelan migration, evaluation of its economic and social effects, general perceptions of migration and strategies and actions implemented to mitigate the perceived effects were evaluated. Fifteen missing pieces of data were identified and replaced with the most frequent value or mode for the variable (O'Loughlin & Coenders, 2004). The validity and reliability of the measurement model were determined before the structural model was analysed. Meanwhile, the individual reliability of each indicator or observed variable (OV) was evaluated by examining the loadings (λ) or simple correlations with their respective latent variables (LV). Indicators with $\lambda \ge 0.70$ were accepted. The OVs were more strongly correlated with their own LV than with other LVs, corroborating Fornell & Larcker (1981) (Table 3):

	COM	EAI	EEM	ESM	PHM
COM1	0.951	0.166	0.108	0.036	0.210
COM2	0.950	0.180	0.114	0.012	0.209
EAI2	0.120	0.819	0.374	0.066	-0.038
EAI3	0.214	0.741	0.306	0.138	-0.031
EAI4	0.152	0.846	0.328	0.134	-0.032
EAI6	0.182	0.840	0.448	0.025	-0.124
EAI7	0.127	0.853	0.350	0.125	-0.107
EAI8	0.113	0.871	0.348	0.038	-0.065
EEM1	0.054	0.273	0.865	0.397	-0.254
EEM2	0.108	0.490	0.730	0.254	-0.100
EEM3	0.108	0.374	0.895	0.337	-0.271
EEM4	0.104	0.332	0.856	0.296	-0.262
EEM5	0.098	0.301	0.761	0.392	-0.256
ESM2	0.039	0.104	0.283	0.822	-0.192
ESM3	0.041	0.058	0.214	0.764	-0.127
ESM4	0.000	0.034	0.237	0.781	-0.147
ESM5	0.029	0.089	0.280	0.728	-0.105
ESM6	-0.005	0.088	0.475	0.735	-0.193
PHM1	0.239	-0.047	-0.218	-0.152	0.802
PHM2	0.186	-0.086	-0.207	-0.194	0.803
PHM3	0.041	-0.064	-0.219	-0.134	0.705

Table 3. Results of cross loading by observed variable

Source: *own compilation using results in SmartPLS*

The following graph shows the solved model for perceptions of the effects of Venezuelan migration among informal traders in Cartagena de Indias (Colombia) after applying the PLS algorithm and removing any indicators with loading values (λ) below 0.7 (Graph 2):



Graph 2. Solved model for the effects of Venezuelan migration among informal traders in Cartagena de Indias (Colombia)

Source: own compilation using results in SmartPLS

Conventions: COM= Knowledge Of Venezuelan Migration; EEM= Economic Effects Of Venezuelan Migratio; ESM= Social Effects Of Venezuelan Migration; PHM= Perceptions Of Venezuelan Migration; EAI= Strategies And Actions Implemented

The reliability of the instrument for each construct was then evaluated. To do this, four criteria were used: Cronbach's alpha, composite reliability, AVE and rho_A. Cronbach's alpha is used to measure internal consistency reliability in social sciences research, but it tends to provide a conservative measure in PLS-SEM. According to Tavakol & Dennick (2011), reports on acceptable Cronbach's alpha values range from 0.70 to 0.95. The results of the model reveal a Cronbach's alpha between 0.7 and 0.9, indicating that the instrument used has good internal consistency (Table 4).

To supplement Cronbach's alpha, researchers such as Hair Jr et al.(2014) suggest calculating the composite reliability index, which demonstrates high levels of internal consistency reliability between the latent variables when the results exceed 0.6 (Wong, 2013). The calculation of this indicator produced a result ranging from 0.8 to 0.9, indicating good levels of reliability. The average variance extracted (AVE) was also calculated, allowing the validity of the construct as an indicator between the observable variables and other related latent variables to be determined. The average variance extracted (AVE) exceeded 0.6, placing it above the minimum recommended value of 0.5 (Hair et al., 2016) (Table 4). Finally, the Spearman's correlation coefficient (rho_A) was calculated, measuring the correlation between two random variables with values exceeding 0.7 accepted as optimal. In the case of the model, the results were within the acceptable range (Table 4):

Table 4. Measures of confidence and validity for the instrument						
Variable	Cronbach's alpha	rho_A	Composite reliability	Average variance		
				extracted (AVE)		
EAI	0.909	0.918	0.930	0.688		
COM	0.893	0.893	0.949	0.903		
EEM	0.880	0.883	0.913	0.679		
ESM	0.827	0.846	0.877	0.588		
PHM	0.667	0.688	0.814	0.595		

Source: own compilation using results in SmartPLS

Finally, the Heterotrait-Monotrait Ratio (HTMT), recommended by Henseler et al. (2015), was calculated. The HTMT allows discriminant validity to be evaluated more reliably in structural equation models based on variance. The discriminant criterion is satisfied as the values obtained do not exceed 0.9 (Teo et al., 2008; Henseler et al., 2015) (Table 5):

Table 5. Discriminant validity

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	EAI	COM	EEM	ESM	PHM
EAI					
COM	0.202				
EEM	0.474	0.129			
ESM	0.126	0.047	0.458		
PHM	0.103	0.259	0.366	0.264	

Source: own compilation using results in SmartPLS

3.2 Analysis of the structural model

The structural model was validated using the bootstrap method, with 1,000 sub-samples generated based on the behaviour of the original data in order to conduct tests of significance. Once the bootstrapping method was complete, the t-statistics were checked to establish the significance of the relationship coefficients for the model, considering coefficients with t-statistics exceeding 1.96 to be significant (Wong, 2013). The initial model considered the five latent variables proposed. The significance between all the observed variables and their latent variables is particularly prominent. Relationships were found between the exogenous latent variables and the endogenous latent variables, some with a positive effect (COM variable with PHM variable; EEM variable with EAI variable) and others with a negative effect (EEM and ESM variables with PHM variable). Table 6 shows the relationships between the variables with a t-statistic value exceeding 1.96, pointing to a significant causal effect between them with a confidence level $(1-\alpha)$ of 95%.

The algebraic sign, magnitude and statistical significance of the path coefficients (or standardised weights), which indicate the extent to which a change in the exogenous variable is related to the change in an endogenous variable, were also evaluated and form the basis of the relationships in the hypotheses for the research model. According to Chin (1998), values equal to or exceeding 0.2 are considered acceptable. The analysis also followed the criterion developed by Falk & Miller (1992), who state that the variance explained in an endogenous construct is the result of multiplying the absolute value of the path coefficient (β) by the corresponding correlation coefficient between the two variables and that values over 1.5% may be considered acceptable. The R² values, which indicate the amount of variance in the endogenous construct that is explained by the exogenous variables, must be equal to or greater than 0.1 (Falk & Miller, 1992). The results obtained are acceptable as they exceed these values (Table 6):

Table 0. 1-statistics results from application of bootstrapping method							
Structural effect	Path coefficients	Standard deviation (STDEV)	t-statistics (O/STDEV)	p-values	R2	Hypothesis	
COM -> PHM	0.253	0.049	5.200	0.000	_	Sig.***	
EEM -> PHM	-0.260	0.060	4.357	0.000	0.150	Sig.***	
ESM -> PHM	-0.111	0.055	2.031	0.043		Sig.*	
EEM -> EAI	0.439	0.058	7.634	0.000	0.193	Sig.***	

Table 6	T statistics regults	from applic	nation of bootst	ronning mothod
Table 6.	- I -STATISTICS TESTITIS	пош яронс	allon of dooisi	гарыну тепоо

Source: own compilation using results in SmartPLS

Nb: Sig.= significant; Nsig. = non-significant; * = p < 0.05; ** = p < 0.01; *** = p < 0.001.

Conclusion

The impact of knowledge of migration and perceived social and economic effects on perceptions of Venezuelan migration among Colombian informal traders in Cartagena de Indias (Colombia) and on the strategies they adopt to ensure the survival of their informal businesses were analysed. The results demonstrated the validity of both the measurement model and the structural model. All analysed variables were accepted and a final causal model was obtained. In the model, the Knowledge of migration (COM), Social effects of migration (ESM) and Economic effects of migration (EEM) dimensions have a causal effect on Perceptions of migration (PHM). Meanwhile, the Economic effects of migration (EAI) by informal traders in Cartagena de Indias (Colombia). Therefore, all four hypotheses were accepted (Table 7):

Table 7. Results of the study hypotheses

HYPOTHESIS	RESULT
H1: There is a positive causal effect between the variables KNOWLEDGE OF	
MIGRATION (COM) and PERCEPTIONS OF MIGRATION (PHM) among informal	Accepted
traders in Cartagena de Indias (Colombia)	
H2: There is a negative causal effect between the variables SOCIAL EFFECTS OF	
MIGRATION (ESM) and PERCEPTIONS OF MIGRATION (PHM) among informal	Accepted
traders in Cartagena de Indias (Colombia).	
H3: There is a negative causal effect between the variables ECONOMIC EFFECTS OF	
MIGRATION (EEM) and PERCEPTIONS OF MIGRATION (PHM) among informal	Accepted
traders in Cartagena de Indias (Colombia)	
H5: There is a positive causal effect between the variables ECONOMIC EFFECTS OF	
MIGRATION (EEM) and STRATEGIES AND ACTIONS IMPLEMENTED (EAI) among	Accepted
informal traders in Cartagena de Indias (Colombia)	
Source: our compilation	

Source: *own compilation*

In general, Knowledge of migration (COM), Social effects of migration (ESM) and Economic effects of migration (EEM) explain 15% of the variance in the endogenous variable Perceptions of migration (PHM), corroborating the findings of studies on the effects of social (Malhotra et al. 2015; Hopkins 2010; España and Vera 2020; Billiet, Meuleman, and De Witte 2014; Goldstein and Peters 2014; Hainmueller and Hopkins 2014) and economic factors (Mocetti and Porello 2010; Guerreiro, Rebelo, and Teles 2020; Chassamboulli and Peri 2020; Facchini, Frattini, and Mayda 2015) on perceptions of migration at the international level.

In addition, Economic effects of migration (EEM) explains 19.3% of the Strategies and actions implemented (EAI) variable. These results point to two particularly interesting conclusions. Firstly, the effects of migration between countries with similarly adverse

socioeconomic conditions tend to be most severe for informal traders in the destination country, who commonly represent a large sector of the economy. In this context, the perception of the socioeconomic impact of migration may be greater the larger the informal market in the migrants' host country. However, for greater precision of the results, other contextual variables of the migration host country should also be considered, such as the sector and type of informal activity exercised, the characteristics of informal vendors and the participation of women in the labor force. Secondly, when informal traders are faced with events that affect their commercial activity, such as immigration, they are driven to adopt marketing strategies, which are based on the knowledge they have obtained during their daily activities and allow them to preserve their business's profits and sustainability over time (Saldarriaga, Vélez-Zapata, and Betancur 2016).

Research implications

Identifying the factors that influence Perceptions of migration (PHM) is highly valuable in studies evaluating perceptions of migration among residents of the destination country. It also enhances understanding of perceptions of migration from the perspective of the characteristics of the host nation. In this specific study, it allows us to understand how informal traders, who form part of what is considered a structural phenomenon in Latin America, perceive migration and design and implement commercial strategies to ensure the sustainability of their businesses. This information is of significant value when it comes to designing, applying and monitoring public policy measures and other initiatives aimed at both immigrants and residents with a greater degree of success, enhancing the possibilities for interaction and integration between the two groups.

Study limitations

Although the study was approached in a rigorous, systematic manner, there were a series of limitations that may have affected the results. The first of these limitations is the cross-sectional design and quantitative nature of the study: it would be appropriate to follow this up with a longitudinal study allowing the causal relationships between the variables influencing PHM to be confirmed. Similarly, qualitative or mixed methods studies would provide an opportunity for more in-depth analysis of the aspects influencing PHM. The second limitation is related to the sample, which only included informal traders. The geographical scope of the analysis was another limitation. It is possible that results from samples from different regions would contradict or confirm the findings of this study. Equally, the results may not be applicable to developed economies. Therefore, further research is required to confirm or refute these findings in alternative settings.

Areas for future research

To be able to generalise the results, PHM among traders in the formal sector in Colombia and other regions in Latin America must also be evaluated in order to enable comparative analyses. Although an attempt was made to select a proportional sample of men and women, the influence of gender on perceptions of migration is another interesting area for future research. PHM in informal economic contexts requires further conceptual development through studies that allow relationships in practical settings that have yet to be validated to be corroborated. Therefore, procedures and scales for measuring PHM must be validated in order to enable longitudinal studies to take place and public policies relating to migration and migrants' relationship with their host society to be evaluated.

Acknowledgement

The article is the result of the research project "Percepciones de los vendedores informales de las ciudades de Cartagena de Indias y Santa Marta sobre los efectos de la migración venezolana en sus actividades comerciales" financed by the Universidad de Cartagena, Colombia (Res N° 02061-2019; AC Nº 116-2019). The authors are thankful to the University of Cartagena for financial support to carry out this research.

References

- Aguilera-Díaz, M., Arrieta-Arrieta, A. M., Carreño-Castellar, A. F., & Uribe-Villa, C. (2015). Caracterización del comercio en Cartagena y Bolívar, 2000 -2014. Documentos de Trabajo Sobre Economía Regional y Urbana; No. 229.
- Alrababa'h, A., Williamson, S., Dillon, A., Hangartner, D., & Hainmueller, J. (2019). Attitudes toward migrants in a highly impacted economy: evidence from the Syrian refugee crisis in Jordan. Comparative Political Studies. https://doi.org/10.1177/0010414020919910
- Aruj, R. S. (2008). Causas, consecuencias, efectos e impacto de las migraciones en Latinoamérica. Papeles de Población, 55, 95-116.
- Berg, J. A. (2015). Explaining Attitudes toward Immigrants and Immigration Policy: A Review of the Theoretical Literature. Sociology Compass, 9(1), 23-34. https://doi.org/10.1111/soc4.12235
- Bermúdez, Y., Mazuera-Arias, R., Albornoz-Arias, N., & Morffe, M. (2018). Informe sobre la movilidad humana venezolana. Realidades y perspectivas de quienes emigran (p. 26). Servicio Jesuita a Refugiados (SJR). https://www.cpalsocial.org/documentos/570.pdf
- Billiet, J., Meuleman, B., & De Witte, H. (2014). The relationship between ethnic threat and economic insecurity in times of economic crisis: Analysis of European Social Survey data. *Migration Studies*, 2(2), 135–161. https://doi.org/10.1093/MIGRATION/MNU023
- Bolivar, L. M., & Maza-Avila, F. J. (2022). Losing Your Main Trade Partner: Adapting Trade Networks Amid Commercial Blockages. In D. Vrontis, A. Thrassou, Y. Weber, S. M. R. Shams, E. Tsoukatos, & L. Efthymiou (Eds.), Business Under Crisis, Volume II. Palgrave Studies in Cross-disciplinary Business Research, In Association with EuroMed Academy of Business (pp. 19-41). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-76575-0 2
- Cadwallader, M. (1985). Structural-Equation Models of Migration: An Example from the Upper Midwest USA. Environment and Planning A: Economy and Space, 17(1), 101-113. https://doi.org/10.1068/a170101
- Centro Nacional de Estudios Migratorios. (2019). Percepción de los chilenos sobre la inmigración. Universidad de Talca.
- Ceyhun, H. E. (2020). Determinants of Public Attitudes Towards Immigrants: Evidence from Barometer. Arab Refugee Survey Quarterly, 39(1), 100-121. https://doi.org/10.1093/rsq/hdz016
- Chassamboulli, A., & Peri, G. (2020). The economic effect of immigration policies: analyzing and simulating the U.S. case. Journal of Economic Dynamics and Control, 114, 103898. https://doi.org/10.1016/j.jedc.2020.103898
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295–336). Psychology Press.

- Chin, W. W., & Newsted, P. R. (1999). Structural Equation Modeling Analysis with Small Samples Using Partial Least Square. In *Statistics Strategies For Small Sample Research* (pp. 307–341). SAGE Publications.
- Cupani, M. (2012). Análisis de Ecuaciones Estructurales: conceptos, etapas de desarrollo y un ejemplo de aplicación. *Revista Tesis*, *1*, 186–199. https://revistas.unc.edu.ar/index.php/tesis/article/view/2884
- Danaj, A., Lazányi, K., & Bilan, Y. (2018). Perceptions and implications of immigration in France – Economic, social, political and cultural perspectives. *Economics and Sociology*, 11(3), 226–247. https://doi.org/10.14254/2071-789X.2018/11-3/14
- DANE. (2022). *Mercado Laboral. Principales resultados enero 2022* (p. 110). https://www.dane.gov.co/files/investigaciones/boletines/ech/ech/pres_web_empleo_rue da_prensa_ene_22.pdf
- Das, G. G., Marjit, S., & Kar, M. (2020). The Impact of Immigration on Skills, Innovation and Wages: Education Matters more than where People Come from. *Journal of Policy Modeling*. https://doi.org/10.1016/j.jpolmod.2020.02.003
- De Longueville, F., Zhu, Y., & Henry, S. (2019). Direct and indirect impacts of environmental factors on migration in Burkina Faso: application of structural equation modelling. *Population and Environment*, 40(4), 456–479. https://doi.org/10.1007/s11111-019-00320-x
- de Miguel Luken, V., & Cavajal Gutiérrez, C. (2007). Percepción de la inmigración y relaciones de amistad con los alumnos extranjeros en los institutos. *Migraciones*, 22(22), 147–190.
- De Soto, H. (1986). *El otro sendero: la revolución informal* (pp. 0–317). https://doi.org/10.1016/0362-3319(88)90062-6
- Doocy, S., Ververs, M.-T., Spiegel, P., & Beyrer, C. (2019). The food security and nutrition crisis in Venezuela. *Social Science & Medicine*, 226, 63–68. https://doi.org/10.1016/j.socscimed.2019.02.007
- Du, F., Liu, L., Jiang, C., Long, D., & Lan, M. (2019). Discerning the effects of rural to urban migrants on burglaries in ZG city with structural equation modeling. *Sustainability* (*Switzerland*), 11(3). https://doi.org/10.3390/su11030561
- Esipova, N., Ray, J., Pugliese, A., & Tsabutashvili, D. (2015). *How the World Views Migration*. 68.
- España, A., & Vera, D. (2020). Attitudes Toward Immigration: Ethnicity Trumps Skills But Not Legality? *Social Science Quarterly*, 101(2), 545–557. https://doi.org/10.1111/ssqu.12758
- Esposito, P., Collignon, S., & Scicchitano, S. (2020). The effect of immigration on unemployment in Europe: Does the core-periphery dualism matter? *Economic Modelling*, 84(January), 249–258. https://doi.org/10.1016/j.econmod.2019.04.014
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128
- Facchini, G., Frattini, T., & Mayda, A. M. (2015). International Migration. In International Encyclopedia of the Social & Behavioral Sciences: Second Edition (pp. 511–518). Elsevier Inc. https://doi.org/10.1016/B978-0-08-097086-8.31125-4
- Facchini, G., Mayda, A. M., & Mendola, M. (2013). What drives individual attitudes towards immigration in South Africa? *Review of International Economics*, 21(2), 326–341. https://doi.org/10.1111/roie.12039
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling* (1st ed.). University of Akron Press.

- Farné, S., & Sanín, C. (2020). Panorama laboral de los migrantes venezolanos en Colombia 2014-2019. Universidad Externado de Colombia.
- Finell, E., Olakivi, A., Liebkind, K., & Lipsanen, J. (2013). Does it matter how I perceive my nation? National symbols, national identification and attitudes toward immigrants. *Scandinavian Journal of Psychology*, 54(6), 529–535. https://doi.org/10.1111/sjop.12082
- Fornell, C., & Larcker, D. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/https://doi.org/10.2307/3151312
- Furlanetto, F., & Robstad, Ø. (2019). Immigration and the macroeconomy: Some new empirical evidence. *Review of Economic Dynamics*, 34, 1–19. https://doi.org/10.1016/j.red.2019.02.006
- Gallego, A., & Pardos, S. (2014). The Big Five Personality Traits and Attitudes towards Immigrants. *Journal of Ethnic and Migration Studies*, 40(1), 79–99. https://doi.org/10.1080/1369183X.2013.826131
- Ghanbari, Y., Arianfar, V., & Mahroei, Z. (2018). Structural Equation Modeling of the Impact of Agricultural Status on the Jointly Utility System Before and After Drought on the Rural Population Survival (Case Study: Fasa County). *Geography and Development*, 16(50), 143–160.
- Goldstein, J. L., & Peters, M. E. (2014). Nativism or Economic Threat: Attitudes Toward Immigrants During the Great Recession. *International Interactions*, 40(3), 376–401. https://doi.org/10.1080/03050629.2014.899219
- Guerreiro, J., Rebelo, S., & Teles, P. (2020). What is the optimal immigration policy? Migration, jobs, and welfare. *Journal of Monetary Economics*, *xxxx*. https://doi.org/10.1016/j.jmoneco.2020.04.009
- Hainmueller, J., & Hopkins, D. J. (2014). Public Attitudes Toward Immigration. Annual Review of Political Science, 17(1), 225–249. https://doi.org/10.1146/annurev-polisci-102512-194818
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (2nd Editio). SAGE Publications.
- Hay, M. J. (1980). A Structural Equations Model of Migration in Tunisia. *Economic Development and Cultural Change*, 28(2), 345–358. https://doi.org/10.1086/451175
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
- Hopkins, D. J. (2010). Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition. *American Political Science Review*, 104(1), 40–60. https://doi.org/10.1017/S0003055409990360
- Liu, Z., Wang, Y., & Tao, R. (2013). Social Capital and Migrant Housing Experiences in Urban China: A Structural Equation Modeling Analysis. *Housing Studies*, 28(8), 1155–1174. https://doi.org/10.1080/02673037.2013.818620
- Longhi, S., Nijkamp, P., & Poot, J. (2010). Joint impacts of immigration on wages and employment: Review and meta-analysis. In *Journal of Geographical Systems* (Vol. 12, Issue 4). https://doi.org/10.1007/s10109-010-0111-y
- Lopez, E. (2012). El comercio informal en Colombia: causas y consecuencias. *In Vestigium Ire*, 5(1), 109–116.
- Malhotra, N., Margalit, Y., Mo, C. H., American, S., Science, P., April, N., Malhotra, N., & Margalit, Y. (2015). Economic Explanations to Immigration : Distinguishing between Prevalence and Conditional Impact. *American Journal of Political Science*, 57(2), 391– 410. https://doi.org/https://doi.org/10.1111/ajps.12012

- Martínez Ávila, M., & Fierro Moreno, E. (2018). Aplicación de la técnica PLS-SEM en la gestión del conocimiento: un enfoque técnico práctico. In *RIDE Revista Iberoamericana para la Investigación y el Desarrollo Educativo* (Vol. 8, Issue 16). https://doi.org/10.23913/ride.v8i16.336
- Mayda, A. M. (2006). Who Is against Immigration? A Cross-Country Investigation of Individual Attitudes toward Immigrants. *The Review of Economics and Statistics*, 88(3), 510–530.
- Maza Ávila, F. J., Murillo Ferrer, D. A., & Pérez Barrios, S. C. (2022). Percepciones hacia la inmigración y sus determinantes: una Revisión Sistemática de la Literatura. In A. Paniagua Vázquez, F. J. Maza Ávila, J. E. Borunda Escobedo, & I. Camargo González (Eds.), *La migración en Latinoamérica:estado actual, oportunidades y retos* (1st ed., p. 256). El Colegio de Chihuahua. http://www3.colech.edu.mx/_layouts/wss/publicacion.aspx?i=192
- Méndez, M., Cebolla, H., & Pinyol, G. (2014). ¿Han cambiado las percepciones sobre la inmigraciñon en España? *Crítica*, 994, 14–21.
- Migración Colombia. (2017). Radiografia de Venezolanos en Colombia. In *Ministerio de Relaciones Exteriores* (p. 8).
- Migración Colombia. (2018). Más de 870.000 venezolanos están radicados en Colombia.
- Migración Colombia. (2021). *Distribución de Venezolanos en Colombia. gosto 2021* (pp. 1–38). Migración Colombia. https://www.statista.com/study/48424/colombia/
- Mocetti, S., & Porello, C. (2010). How does immigration affect native internal mobility? New evidence from Italy. *Regional Science and Urban Economics*, 40(6), 427–439. https://doi.org/10.1016/j.regsciurbeco.2010.05.004
- Monreal, C., Cardenas, R., & Terron, T. (2010). La percepción del fenómeno de la inmigración por la juventud española. Un estudio comparado entre Andalucía y Madrid. *Revista de Humanidades*.
- Navarrete, B. (2017). Percepciones sobre inmigración en Chile: Lecciones para una politica migratioria. *Migraciones Internacionales*, 9(1), 180–210.
- O'Loughlin, C., & Coenders, G. (2004). Estimation of the European Customer Satisfaction Index: Maximum Likelihood versus Partial Least Squares. Application to Postal Services. *Total Quality Management & Business Excellence*, 15(9–10), 1231–1255. https://doi.org/10.1080/1478336042000255604
- Olmedo-Moreno, E., Berrocal, E., Olmos-gómez, M., & Expósito-López, J. (2014). Structural Equations Model (SEM) of a questionnaire on the evaluation of intercultural secondary education classrooms. *Suma Psicológica*, *21*(2), 107–115.
- Pietrzak, M. B., Żurek, M., Matusik, S., & Wilk, J. (2012). Application of Structural Equation Modeling for Analysing Internal Migration Phenomena in Poland. *Przegląd Statystyczny*, 59(z. 4), 487–503.
- Rao, S., & Andini, V. (2019). Modelling student migration to Karnataka for Higher Education using a partial least square structural equation model. *Higher Education Quarterly*, 73(2), 135–152. https://doi.org/10.1111/hequ.12173
- Ringle, C. M., Wende, S., & Will, A. (2005). *SmartPLS 2.0 M3* (2nd ed.). University of Hamburg. www.smartpls.de
- Rodríguez-Morales, A. J., Bonilla-Aldana, D. K., Morales, M., Suárez, J. A., & Martínez-Buitrago, E. (2019). Migration crisis in Venezuela and its impact on HIV in other countries: the case of Colombia. *Annals of Clinical Microbiology and Antimicrobials*, 18(1), 9. https://doi.org/10.1186/s12941-019-0310-4

- Sáez, F. A. A., de Andrade, A. F., Sicard, N. G., & Medina, F. D. (2020). The integration of Venezuelan citizens in Colombia: Speech of immigrant leaders in Bogotá and Cúcuta. *Sociologia, Problemas e Praticas*, 94, 39–59. https://doi.org/10.7458/SPP20209417249
- Saldarriaga, J., Vélez-Zapata, C., & Betancur, G. (2016). Estrategias de mercadeo de los vendedores ambulantes. Semestre Económico, 19(39), 155–172. https://doi.org/10.22395/seec.v19n39a7
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal* of Medical Education, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd
- Teo, T. S. H., Srivastava, S. C., & Jiang, L. (2008). Trust and electronic government success: An empirical study. *Journal of Management Information Systems*, 25(3), 99–132. https://doi.org/10.2753/MIS0742-1222250303
- Theorin, N., & Strömbäck, J. (2019). Some Media Matter More Than Others: Investigating Media Effects on Attitudes toward and Perceptions of Immigration in Sweden. *International Migration Review*, 1–27. https://doi.org/10.1177/0197918319893292
- Tong, L., & Kawachi, I. (2020). Experiences of discrimination and self-reported health in Chinese migrants: a structural equation model. *BMC Public Health*, 20(1), 1477. https://doi.org/10.1186/s12889-020-09588-3
- Tsai, T. han, Tsai, C. hung, & Huang, C. (2019). Different Immigrants, Same Attitudes? Making Sense of the Association Between Two Immigrant Groups. *Social Science Quarterly*, 100(6), 2369–2390. https://doi.org/10.1111/ssqu.12706
- Vergara-Schmalbach, J. C., Maza-avila, F. J., Martinez-nagle, O., & Girado-Guzman, C. A. (2021). Evaluation of the quality of the tourist service offered to foreign tourists in the city of Cartagena de Indias, Colombia. *Tourism and Hospitality Management*, 27(2), 293–314. https://doi.org/https://doi.org/10.20867/thm.27.2.4
- Vergara-Schmalbach, J. C., & Quesada, V. M. (2013). Valoración de la Calidad del Servicio Mediante Modelos de Ecuaciones Estructurales (No. 1). Universidad de Cartagena.
- Wallace, M., & Wu, Q. (Miranda). (2019). Immigration and the quality of life in U.S. metropolitan areas. *Social Science Journal*, 56(4), 443–457. https://doi.org/10.1016/j.soscij.2018.09.016
- Wong, K. K. K.-K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, 24(1), 1–32. http://marketingbulletin.massey.ac.nz/v24/mb_v24_t1_wong.pdf
- Xu, D. (2019). The effects of immigration restriction laws on immigrant segregation in the early twentieth century U.S. *Journal of Comparative Economics*, *October*, 1–26. https://doi.org/10.1016/j.jce.2019.10.004
- Ziller, C., Wright, M., & Hewstone, M. (2019). Immigration, social trust, and the moderating role of value contexts. *Social Science Research*, 79, 115–126. https://doi.org/10.1016/j.ssresearch.2018.12.009