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EDITORIAL

THE IMPACT OF FRANCHISING ON DEVELOPMENT

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Abstract

In the universe of literature on franchises, several studies have examined the impact of franchising on economic growth, tending to focus on growth rather than development, although the empirical research has already concluded that franchising does have an influence on economic growth. Likewise, some articles have underscored the importance and influence of franchising on development, but have failed to provide empirical proof of its true sway. With that in mind, this paper provides empirical evidence demonstrating the relationship between franchising and development.

Keywords: Franchises, economic development, industrial organization, empirical studies, Latin America.

1. INTRODUCTION

Many companies choose franchising as an organizational structure to do business; although they may not to be visible to the eye of the consumer, franchises are found across myriad industries. Franchising constitutes an efficient way to grow without needing to make a major investment (resource scarcity theory). It is also a contractual agreement between the franchiser (owner of a concept or business format) and the franchisee (company or independent investor).

The franchiser transfers its company's know-how in exchange for economic compensation, which may be a royalty payment or a buy-in right (Lafontaine and Blair, 2005). The franchiser offers support, an established brand, a proven operations system, and valuable business contacts to the franchisee. Bear in mind that the franchisee is not starting a business from zero, as he receives a business off the shelf, ready to run at full speed from the very first day (business format).² This particularity of the franchise reduces the amount of time needed to get up to the equilibrium point and is a way to share business risk between the franchiser and franchisee. In broad strokes, this industrial organizational model is a competitive advantage in practically every economic sector due to the nature of the model.

As such, a franchise constitutes a very close relationship between what it is and its legal side. Now, even though there are advantages that are beneficial to both the franchiser and the franchisee, it is inevitable that both of the parties signing the contract will try to take advantage (moral risk).³ For the system as a whole to be successful, it is undeniably important to have an institutional framework and a complete contract to reduce the uncertainty surrounding individual transactions (Pfister *et al.*, 2006; Solís-Rodríguez and González-Díaz, 2015). It is clear that there is mutual dependence in this contractual relationship. The concerns of franchisers and franchisees frequently match up, but they are not entirely compatible, and this can spur conflict in the contractual relationship (Blair and Lafontaine, 2005).

It is not exactly known where franchising came from originally, but the United States is generally recognized for having developed it the furthest (Lafontaine and Blair, 2005; Asociación Internacional de Franquicias, 2012). By 2012, there were 13,928 units, adding 168,000 new jobs in the United States. Likewise, the business volume rose by 37 million, contributing 4.8% to the gross domestic product (GDP). Franchising makes a positive and significant contribution to the balance of payments in many countries, as it is frequently exported and is growing (Michael, 2014).

The sectors where franchises are most commonly found are: fast food service restaurants, at 26% of the market, business services, with 19%, followed by personal services, with 11% (Asociación Internacional de Franquicias, 2012); accordingly, franchises are most often found in the services sector. Additionally, this industrial organizational model is a source of jobs in the places where it sets up. In the United States, it has created 18 million jobs and in China, five million (Dant et al., 2011). But what seems to be most important in many countries' economic models is not the mere fact of job creation, but rather also the positive momentum it can give to an economy, enabling exchange that raises the level of development in the country of origin (Preble and Hoffman, 2006). Likewise, other companies end up indirectly benefiting. Franchising has stood out for playing a prominent role in the economies of developed and developing countries (Kosová and Lafontaine, 2012; Michael, 2014).

In Latin America, franchising has played a prominent role in economic growth, and its boom has undoubtedly happened in just a few countries, like Brazil and Mexico, where there were 2,703 and 1,499 brands, respectively in 2013 (Fadairo and Lanchimba, 2017). Although these values are certainly representative in the region, they are far from developed countries like the United States, with 770,368 stores as compared to the 114,409 and 73,000 in Brazil and Mexico, respectively.

Looking at how the number of franchised brands per capita has evolved, Guatemala started high in 2010 but declined by 2013; on the other side, Argentina and Brazil saw growth. On another note, comparing countries from different regions—both geographic and economic, specifically, France, the United States, and Brazil—, Dant et al. (2008) observed multiple franchising models with characteristics that make them unique. The United States for example is far more developed

when it comes to franchises than France, and is decades ahead of Brazil.

Given the historical and economic importance of franchising in the United States, empirical studies tend to focus on this country, although several also consider other countries in Latin America (Fadairo and Lanchimba, 2017). However, at present, the region has become a top destination for growing international franchise chains, as the market is less saturated than the United States, Canada, Western Europe, or Japan (Fadairo and Lanchimba, 2017; Preble and Hoffman, 2006).

Few studies have diagnosed the importance of franchising in developing countries, much less in emerging countries. Chanut *et al.* (2013) looked at studies in Northern Africa and found the importance of examining the status of the situation of the franchises. These authors evince the need for a profound study in emerging countries. Accordingly, a description of the real situation of the franchise and its impact on the economy, especially in Latin America, is justified. This will enable a broader perspective on the topic and will raise the number of studies on this industrial organizational model. From the microeconomic standpoint, a franchise is a lab to study different vertically- or horizontally-organized structures, while from the macroeconomic standpoint, few studies have been conducted in this regard. Thus, Michael (2014) revealed the macroeconomic impact of franchising in Latin America. However, this study did not evaluate franchises as organizational models, but rather by economic sector.

Against that backdrop, the following question emerges: Can franchises lead to economic development? To answer that question, Michael (2014) observed that Latin America is below the mean in terms of franchising, meaning that there are fewer franchised brands in the region as compared to other countries. The author also found that the macroeconomic improvement delivered by franchises to a country (a valuable source of know-how) depends on whether the system proves to be adaptable to the cultural and economic diversity and legal environment. In this context, franchises can have a significant impact on countries' development (Kaufmann and Leibenstein, 1988, cited by Michael, 2014, p.4; Lanchimba et al., 2017). Nevertheless, Michael (2014) errs by assuming that economic growth is equal to development, as the author measures economic growth but generalizes the conclusions to development.

On the contrary, this study aims to measure in general terms the breadth of development, similar to the paper by Lanchimba *et al.* (2017), meaning, development is considered through the lens of social and political aspects, in addition to economic growth. Having determined the level of development of each country in the study, we analyze the impact of franchises on development in Latin American countries. The objective of this paper is therefore to study the impact of franchising on development.

In this context, Section 2 provides the analytical framework; Section 3 describes the data and variables used in the analysis. Section 4 introduces the methodology and results. Finally, we conclude by examining implications for future research on this mode of industrial organization.

2. ANALYTICAL FRAMEWORK

Franchising can arrive to a country through local or international entrepreneurs.

International franchising means that a local franchiser opens a new branch abroad; the franchiser may choose to use: a) a one-unit franchise; b) a franchise development area; c) a master franchise; or d) franchising as a joint venture, in order to expand operations into the international market. These modes of company governance differ from one another by the degree of control the franchiser retains over stores. Thus, a one-unit franchise implies that the franchiser is running his franchise alone abroad. A franchise development area describes a situation in which the franchiser grants a geographic space to the franchisee abroad to develop business. When the franchiser gives the franchisee the right to franchise in a geographic space, it is said to be a master franchise. Finally, franchising as a joint venture means that two companies go in together develop the franchise business.

There are many different reasons that could justify a franchiser's choice to expand abroad and how it is done. One main difference depending on the foreign governance structure chosen is the degree of control the franchiser retains over the stores abroad. Researchers have sought to explain the international franchising choice from different theoretical standpoints (theory of agency, transaction cost theory, and more).

The literature on international franchises has posited a suite of problems, such as explaining the traits of franchisers involved abroad (Elango, 2007) or the contractual clauses used by these types of franchisers (Lafontaine and Oxley, 2004). With that said, the advent of franchising can make a positive contribution to the country where it lands by transmitting knowledge, as long as the system is: adaptable to the cultural and economic diversity and the legal environment in new countries (Kaufmann and Leibenstein, 1988). Nevertheless, Anderson and Gatignon (1986), from the transaction cost theory standpoint proposed by Williamson (1979), argue that companies that go abroad must mediate between the benefits of integration (control that reduces transaction costs) and the cost of integration (rising international costs at the company). These authors conclude that optimal control is given by the specificities of the assets, uncertainty, and opportunism.

In short, when a franchiser extends his franchise internationally, he needs strategies for the franchise to be successful in the host country, and they must be in the economic and institutional spheres, to name a few. Franchisers differ from each other in terms of size, scope, experience, capacity, and country of origin, but everything becomes more complex when it comes to the international market, where uncertainty in the market can be significant. Along these lines, a successful franchise will have to improve and learn along the way to move from the domestic market to an international market (Preble and Hoffman, 2006).

Indeed, there is a great deal of empirical research (based on data from the fast food industry), precisely in the United States, as it is the country that has developed at the fastest speed, although the issue is that the results have spread to other industries and countries. Accordingly, there are frequently questions about the degree of cultural exchange that has really emerged, as well as integration with the culture or society where the franchise plans to set up shop (Dant, 2008).

In this sense, few studies have been completed about the status of franchising around the world, and, much less, about the role played by the number of franchises in a country in its social and economic development. Michael (2014) found that franchising tends to be attracted by highly-developed countries; the study asserts that in countries with economic development, franchising has started to become important when it comes to establishing growth parameters. As such, franchising in recent years has emerged as the most effective strategy to grow a business, create jobs, and achieve economic development (Lanchimba *et al.*, 2017).

In this setting, we can speak of the causal relationship between the presence of a franchise and economic development in a given country, leading to the following hypothesis: franchises contribute positively to development in countries.

3. DATA AND VARIABLES

The sources of information are manifold. First, information about the number of brands franchised in each country and the percentage of local franchising was taken, the majority anyway, from reports published by the European Franchise Federation, as well as reports the organization publishes about other countries around the globe. The International Franchise Association and the Ibero-American Franchise Federation served as supplementary information sources. Moreover, to study the macroeconomic variables, the main information source was the World Bank and the Global Good Governance Indicators.

Based on the sources listed above and the information available as of 2011, the countries summarized in Table 1 were analyzed.

To complete missing or outdated data on the variables needed for this analysis, we used additional sources of information, like the franchise associations from each country, which is why there are no missing data.

Table 1. Countries Studied

Country	Number of franchises	Country	Number of franchises	Country	Number of franchises
Germany	990	Argentina	563	Australia	1 100
Austria	440	Belgium	350	Brazil	22 426
Colombia	430	Croatia	175	Denmark	188
Ecuador	215	Slovenia	106	Spain	947
United States	3 000	Philippines	1 300	Finland	270
France	1 569	Greece	456	Guatemala	275
Holland	739	Hungary	361	India	1 800
Indonesia	375	Italy	885	Japan	1 233
Mexico	1 013	New Zealand	485	Peru	268
Poland	746	Portugal	578	United Kingdom	929
Egypt	400	Czech Republic	190	Singapore	600
Sweden	700	Sweden	275	Turkey	1 708
Ukraine	320	Uruguay	220	Venezuela	450

Source: Created by the authors based on data from the European Franchise Federation.

3.1 Description of the Variables

3.1.1 Dependent variable

Development level indicator (y_i): The synthetic variable built is the indicator of countries' development level, and it will be built based on the following variables: annual percentage of GDP, GDP in current United States dollars, GDP per capita, national gross income per capita, exports of goods and services, foreign direct investment, national gross income per capita by purchasing power parity, Gini index, consumer price inflation, total population, life expectancy at birth, number of Internet users for every 100 people, imports of goods and services, total unemployment, added value of agriculture, CO2 emissions, inflation as an index of GDP deflation, and quality of governance. These variables were considered as

they constitute global development indicators, according to the World Bank, and reflect a broad selection of economic, social, and environmental indicators, grounded in data collected by the World Bank and over 30 associated organizations.

Specifically, the development level indicator is created using the Somarriba and Peña (2009) et al. (Somarriba et al., 2014; Ivand et al., 2016; Holgado et al., 2015; Zarzosa and Somarriba, 2013) method; that is to say, the P2 developed by Peña (1977). It is a synthetic indicator combining the information contained in a set of indicators, and was designed to draw interspatial and intertemporal comparisons across variables. The R program was used to create the indicator. The variables chosen for the study seek to measure, in a general sense, the varied facets and breadth of development, to prevent debates about the advantage of social and economic development, and reduce as much as possible any errors or discrepancies that could arise in the measurement.

This methodology constitutes a tool to measure concepts from different dimensions, like welfare, development, living standards, etc. Moreover, it overcomes various limitations found in traditional approaches, like the principal components analysis or the data envelopment analysis; it enjoys good statistical properties and enables aggregating information from various macroeconomic indicators.

To analyze the institutional context, we chose the variable of governance quality. This variable is predicated on the global good governance index, and constitutes a set of research data summarizing different standpoints on governance quality. These data are furnished by many companies, citizens, and survey results conducted in industrialized and developing countries. It is based on 31 underlying data sources recording the perception of governance from a great deal of survey-takers and expert assessments from around the planet. This index, including its per capita calculation, is used as the foundation to compare development levels and calculate a complex suite of indices characterizing socioeconomic development vectors for each country.

With that said, the rest of the variables comprising the development level indicator come from a range of indicators encompassing economic, social, and environmental dimensions. Thus, GDP is the outcome of annual production with added value; when its per capita calculation is included, it serves as the foundation to compare national development levels and calculate a set of indices characterizing the socioeconomic development vectors in each country (Novichkov, 2007). Moreover, Tridico (2007) found that investment in human development is crucial to obtaining GDP growth; nevertheless, because human development is correlated with institutions, adequate institutional policy is important for development to come about.

Gross national income represents the sum of added value for all resident producers, plus taxes on production (but not subsidies) not included in the valuation of production, plus net inflows of primary income (employee remuneration and property rents) from abroad (Aizenman *et al.*, 2013). Although the GDP per capita is the most frequently used in the mainstream and academic discourse, the difference resides in the fact that gross income per capita is better suited to allocation across international organizations (Kernet *et al.*, 2015).

Exports of goods and services represent the value of all of the goods and other market services provided to the rest of the world; imports of goods and services represent the value of all of the goods and other market services received from the rest of the world; both include the value of goods, freight, insurance, transport, travel, royalties, licensing rights, and other services, like communications, construction, financial and information, business, personal, and government services; they do not include employee compensation or investment income (Aizenman et al., 2013). Moreover, foreign direct investment has fueled economic growth, in broad strokes, by not only raising the supply of capital, depending on the policies in place in destination countries, but also by facilitating technology transfer. This is important, as it contributes to human capital formation, which can improve economic growth prospects; in conclusion, foreign direct investment eases economic growth both directly and through indirect channels (Anwar and Nguyen, 2010). Likewise, the Gini index symbolizes inequality and poverty; it is used to measure the income gap within a country (Subramanian, 2002). Along other lines, the empirical literature suggests that the persistence of inflation cannot be a structural phenomenon intrinsic to industrial countries, but rather that it varies pursuant to the stability and transparency of the monetary policy regime (Hondroyiannis and Lazaretou, 2007).

3.1.2 Independent variables

Number of brands (x_{1i}): Brands have long been around, ever since objects evidencing human existence can be traced. With that said, brands have tended to play two major roles. They have been witnesses of each period of interest, from the most ancient times to the contemporary age. The first role is as conveyor of information, when it comes to goods and services, for both consumers and distribution channels. In their second role, brands have acted as a transporter of image or meaning. The evidence suggests that brands are multidimensional constructs and have become more complex over time (Moore and Reid, 2008). With that said, it is important to note that for this variable, we only consider brands that are franchises, both local and foreign. We use the number of brands, rather than sales volume, as it is an alternative and much realer way to measure franchise growth (Blair and Lafontaine, 2005). Specifically, the total number of brands in a country is divided by population total, in order to better capture brand representativeness.

3.1.3 Control variable

Presence of local brands in Latin America (x_{2i}): Aliouche and Schlentrich (2011) found evidence that countries home to large markets and strong political and legal systems are much more appealing for franchisers from the United States looking to grow abroad. With that said, the BRIC countries (Brazil, Russia, India, China, and South Africa),⁵ are

considered risky due to their political instability, cultural and geographical distance (however, the authors did not delve into a deep analysis of these countries). For example, Brazil has a good deal of representation around the world with many local brands franchised, even bringing it close the level of the developed countries (Fadairo and Lanchimba, 2017). It is not only Brazil which stands out in Latin America. So too do Mexico and Argentina (see Figure 1). In fact, countries in Latin America share certain cultural, economic, and geographic aspects that would reduce the costs of transaction and control.

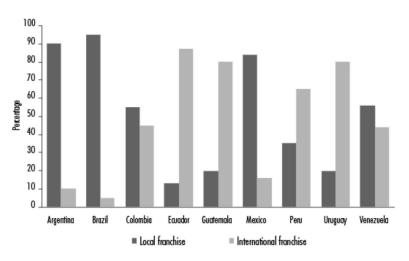


Figure 1. Percentage of International Franchises in Latin America

Source: Fadairo and Lanchimha, 2017.

However, Figure 1 suggests that in Latin America, there are more local franchises in better economically-developed countries (Brazil, Mexico, Argentina). At the same time, the development of local franchises familiar with the cultural aspects of these countries would reduce opportunism, having a positive impact on the development of the franchise in the country and therefore the country itself. It is therefore important to keep in mind the percentage of local brands in Latin America as a control variable. With that said, the percentage of local brands that a country has could be a development driver, meaning a positive sign would be expected. Concretely, we shall use the percentage of local franchises in Latin American countries, for the mere fact of being a country belonging to this region.

Franchise law (America (x_{3i}): the variable takes the value of 1 if there is franchise law in the country, 0 if not. To construct this variable, we looked at the Fadairo and Lanchimba (2017) study, as well as reports from the International Franchise Association and franchising associations in regions around the world. If a country does not belong to the association in its region, or does not belong to the International Franchise Association, the conclusion was drawn that the country does not have a franchise law. To a certain extent, the study of franchises in the United States and the generalization of these results to the rest of the countries have created issues derived from differences between countries, characterized for having emerging markets. In this context, the legal system surrounding franchises is in many countries still in a nascent phase. Moreover, the culture of each country determines the foundation of the franchiser-franchisee relationship (Dant, 2008).

3.2 Descriptive Statistics and Correlations

Because there are no missing data, all of the variables have the same amount of data, namely, 39 observations. Table 2 summarizes the high standard deviation for the variable percentage of local franchises in Latin America. More generally speaking, the statistics shown in the table reflect a good degree of diversity in the sample. Because the sample was so small, we conducted normality analysis. Moreover, the correlation between the variables number of franchises, percentage of local franchises in Latin America, and development level is a little bit high, so we analyze the potential problem of endogeneity between the variables.

Table 2. Descriptive Statistics

Variable	Mean	Std. Dev.	1	2	3
Development level	250.119	55.071	1	0.4430***	-0.3106*
Number of franchises	0.00003	0.000027	0.4430***	1	-0.3248**
Percentage of local franchises in Latin America	0.1713	0.401	-0.3106*	-0.3248**	1

Significance: * 10%; ** 5%; *** 1%.

Source: Created by the authors.

4. METHODOLOGY

Finally, with the information on the variables presented in the section above, to check whether franchises contribute positively to development in these countries, we estimate the following econometric⁷ model:

$$y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_3 x_{3i} + \varepsilon_i$$

Where \mathcal{Y}_i is the development level indicator, \mathcal{X}_{Ii} is the number of brands, \mathcal{X}_{2i} represents the percentage of local brands in Latin America, \mathcal{X}_{3i} is the franchise law, \mathcal{E}_i is the error, and i represents the countries considered in the study. Using the general model, we propose three specifications: one, using all of the explanatory variables (Model 1), another without the variable of percentage of local franchises in Latin America (Model 2), and the third with only the percentage of local franchises in Latin America and the variable of the franchise law (Model 3). The tests proposed to estimate the model include: i) variables omitted and functional form, i) heteroscedasticity, iii) multi-collinearity, iv) specification errors, v9 normality, and vi) endogeneity.

4.1 Model Specification Testing

The results in Appendix B show that for Models 1, 2, and 3, there are no omitted variables and that they have the correct functional form. There are no heteroscedasticity problems, nor multi-collinearity between the variables, nor specification errors. On another note, because the sample size is small (less than 100 observations), we assume a problem of normality. With that said, the Skewness-Kurtosis test and the Jarque-Bera test serve to test the assumption of normality. According to the theory of the Jarque-Bera test, if the value of $JB < X^2$, there Ho is not rejected; on the contrary, Ho is rejected and the errors are not normally distributed (Boutabar, 2010). Models 1 and 2 gave favorable results, leading to the conclusion of a normal distribution. But Model 3 is not normally distributed. Thus, the normality must be corrected via a quantile regression, as it is one of the solutions to this type of problem (López and Mora, 2007). This estimation method is robust against errors and atypical (non-normal) values. It assumes a parametric distribution of the errors (Koenker and Bassett, 1978), as it makes the estimate minimizing the sum of the absolute deviations from the mean.

Furthermore, the cause-effect relationship established in the hypothesis, intuitively and based on the correlation matrix (see Table 2), could be inverted. Although there is no literature in this regard, we prove that there is a possible issue of endogeneity in the econometric estimate, meaning it is possible that it is not franchises which drive country development, but rather a country's development which drives the status of the franchises. Considering that, we compare a model estimated with the ordinary least squares method and one in two phases, where the variable was instrumented against the past. Likewise, based on the correlation matrix, we conducted the test for the variable. That test was done for all three models. In the first two models, we did the endogeneity test for the variable of *brands*, while for Models 1 and 3, it was done for the variable of *local brands*. The results show that the null hypothesis is accepted, and the variables are exogenous (see Table 2). In short, although intuitively, we might speak of a causal inverse relationship (endogeneity problems), after performing the test, we can assert that there are no problems of this sort. As such, the proposed relationship between the variables is the right one, and based on the empirical literature to establish this relationship, the model specification is appropriate.

4.2 Results of the Estimate

The results of the estimate are shown in Table 3. Based on the above section, the least ordinary squares method is used to estimate Model 1. We checked the robustness in Models 2 and 3. These models were estimated using the least ordinary squares method and a quantile regression, respectively.

The estimates allow us to comment on, one, the quality of the econometric model. The R-squared values are a little low (between 27% and 34%), which is typical of cross-sectional data. The results of the estimate pertaining to the number of brands reveal that, as predicted, franchises have a significant and positive impact on development, confirming our hypothesis. The sign pertaining to percentage of local brands proves to have a significant influence on development. However, the negative sign found contradicts the expected sign. Likewise, the results pertaining to the franchise law

underscore this variable's significant and positive impact on this variable in development. This result is important because little is known about the influence of franchise laws on development. This turns out to be an indicator that shows the importance of laws to this mode of industrial organization.

Table 3. Results of the Models

	Model 1 Development level (least ordinary squares)	Model 2 Development level (least ordinary squares)	Model 3 Development level (quantile regression)
Number of franchises	84525.8**	100591.6**	
	[29765.81]	[29365.84]	
Presence of local brands	-3.757*		-4.477**
in Latin America	[2.0487]		[2.9095]
Franchise laws	4.274**	3.525**	3.590**
	[1.7284]	[1.7337]	[2.5589]
Constant	21.89***	20.97***	23.68**
	[1.3815]	[1.329]	[1.3409]
R ²	0.342	0.279	0.1483
Akaike information criterion	234.4	236	240.48
Bayesian information criterion	241.1	241	245.47

Significance: * 10%; ** 5%; *** 1%.
Source: Created by the authors.

5. DISCUSSION AND CONCLUSIONS

This study analyzed how franchises contribute to a country's development, beginning by constructing the development level. This led to the conclusion of the importance of tying the macroeconomic to the microeconomic, as it offers a better perspective of how the economy, policy, and society are operating. The results corroborate that franchises contribute positively to countries' development levels, confirming the assumptions made by Michael (2014) and Lanchimba *et al.* (2017).

We can also conclude that the franchise laws have a significant impact on development. Pfister *et al.* (2006) found that economic agents are significantly influenced by the laws, as they are by their effectiveness and their complexity. With that said, the *franchise law* variable is significant and positive, which matches up with the fact that in the present day, franchise laws were made to protect both the franchiser and franchisee; this translates into a better relationship, and, at the end of the day, better results for the franchise, as both parties are fully aware of their rights and responsibilities.

Another striking result is the negative sign of the variable showing percentage of local brands in Latin America, as we expected a positive sign. Nevertheless, it can be explained because when a country's development level improves with the presence of foreign franchises coming into the market, the flipside is that the number of local franchises goes down. Another explanation is that franchisers have built their capacities through experience to achieve successful international expansion. This, in conjunction with an oversaturated domestic market, leads them to quickly jump on international growth opportunities (Preble and Hoffman, 2006). In this context, in most of the Latin American countries, the concept of a franchise first touched down with the arrival of foreign brands, like Martinizing in Ecuador, Kentucky Fried Chicken in Peru, and McDonald's in Argentina, Uruguay, and Venezuela (Fadairo and Lanchimba, 2017), so the presence of local brands was delayed due to a lack of knowledge about the franchising concept.

Generally speaking, franchises influence a country's development, but not only economically; also, socially and culturally; when economic development arrives, it leads more foreign franchises to come into the country, which translates into a change in the population, because the culture shifts. Everything comes in a "bundle." Franchises in turn create more jobs, and society starts to see them as something beneficial. There are atypical cases in Latin America, however, where there is a high percentage of local franchises. These include: Brazil, Argentina, and Mexico, where over 80% of franchises are local. Brazil is considered to be the most developed in terms of franchises, alongside Mexico, which may be due to the history of these two nations.

In Mexico, the defining trait is that it borders the United States and enjoys agreements like the North American Free Trade Agreement (NAFTA), which may not have led to a net benefit, but have entailed progress for the industrial and corporate sectors in the country. Nevertheless, franchises came later to Mexico than to most of the countries in Latin America; specifically, McDonald's landed in 1985, much later than in Ecuador, where Martinizing came in 1967 (Fadairo and Lanchimba, 2017). This slower start is because Mexican laws prohibited foreign franchises from coming into the country; later, after trade agreements were signed and the franchise laws enacted, this form of organizational structure began to pick up speed. Furthermore, Brazil is one of the most developed when it comes to franchises, and also belongs to the set of high-growth emerging countries: Brazil, Russia, India, China, and South Africa, meaning it is an emerging market with a lot of growth potential, to which franchises arrived early on (Yázigi is a local franchise launched in 1954).

One of the characteristics in common to Mexico, Brazil, and Argentina in terms of franchises is they all have specific laws regulating franchises, although Argentina's law was enacted only recently.

To sum it up, although we expected a positive sign for presence of local brands, Latin America is an unsaturated territory with a long way to go. In fact, no country in the region boasted a high development indicator, which, when compared to the rest, leads to the conclusion that the percentage of local brands does not entail a positive relationship.

This research is not free from limitations: *i*) Looking at the results, it is worth asking what outcome we would have gotten using data from at least 50% of the countries in the world, but limited to macroeconomic franchise data, which would give us a much broader base of countries. *ii*) At present, these countries are marked by the series of crises set off in 2008. These had an influence in the short term, while others are currently in crises growing deeper every day; by contrast, there are others just recently starting to be affected. Thus, these data are only valid for the year in which they were taken, as the changing economy makes it impossible to forecast what to expect in coming years based on the data recorded.

Finally, this research aims to open the door to future research on these topics, and contribute to increasing the number of studies on franchises in the Latin America region; this is a positive, as it emphasizes the importance of considering Latin American countries in analyses of franchises.

Appendix A. Results of the Development Level Indicator

Country	Development level	Country	Development level	Country	Development level
Germany	29.82	Argentina	24.59	Australia	30.67
Austria	27.83	Belgium	31.53	Brazil	23.34
Colombia	20.79	Croatia	20.16	Denmark	28.78
Ecuador	18.90	Slovenia	23.16	Spain	27.27
United States	38.28	Philippines	16.65	Finland	28.38
France	27.05	Greece	20.78	Guatemala	17.29
Holland	34.64	Hungary	23.68	India	23.77
Indonesia	18.32	Italy	24.44	Japan	25.66
Mexico	20.03	New Zealand	26.55	Peru	17.87
Poland	23.59	Portugal	21.76	United Kingdom	24.85
Egypt	18.89	Czech Republic	23.30	Singapore	40.52
Sweden	28.59	Sweden	30.78	Turkey	24.01
Ukraine	20.15	Uruguay	21.36	Venezuela	27.47

Source: Created by the authors.

Appendix B. Results of the Model Specification Tests

Test		Model 1	Model 2	Model 3
Omitted variables:	Ho: p-value=0,000	p-value=0,7747	p-value=0,7625	p-value=0,3052
Heteroscedasticity:	Ho: p-value>0,05	p-value=0,5687	p-value=0,3196	p-value=0,8762
Multi-collinearity:	VIF<10	VIF=1,13	VIF=1,03	VIF=1,08
Specifications	Ho: hat y hatsq no son	hat=0,967	hat=0,811	hat=1,08
	significantes	hatsq=0,703	hatsq=0,983	hatsq=0,513
Normality:	Ho: JB <x²< td=""><td>JB=3,89631</td><td>JB=3,284</td><td>JB=8,7712737</td></x²<>	JB=3,89631	JB=3,284	JB=8,7712737
Endogeneity:				
(i) Number of	Durbin chi²			
franchises	Ho: p-value>0,05	p-value=0,1979	p-value=0,2734	
	Exogenous variable			
	Wu-Hausman			_
	Ha: p-value<0,05	p-value=0,2276	p-value=0,2992	
	Endogeneity problem			
	Instrument:	F=362,31	F=558,87	_
		R2=0,9688	R2=0,0,9688	
		Marcas2010	Marcas2010	
		Coef.=1,057***	Coef.=1,0561***	
		Err. Est.=0,034092	Err. Est.=0,032051	
(ii) Percentage of local franchises in L.A.	Durbin chi²			
	Ho: p-value>0,05	p-value=0,8843		p-value=0,8523
	Exogenous variable			
	Wu-Hausman			
	Ha: p-value<0,05	p-value=0,8927		p-value=0,8610
	Endogeneity problem			
	Instrument	F=18,77		F=12,58
		R ² =0,4291		R ² =0,4113
		Marcalocal2010		Marcalocal2010
		Coef.=0,8307***		Coef.=0,8872**
		Err. Est.=0,2028		Err. Est.=0,1957

Significance: * 10%; ** 5%; *** 1%. Source: Created by the authors.

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- ² The business format is one in which the franchiser principally sells a way of doing business (Blair and Lafontaine, 2005).
- ³ The franchiser does not observe the effort the franchisee makes to run the business. Although sales can be considered part of an indicator of effort expended, they are due in part to nature (state of the world). So, the franchiser is unable to distinguish which portion of sales is attributable to the efforts of the franchisee and which to nature. On another note, franchisers provide support in terms of advertising and chain management, unobserved by the franchisee. As such, there is a problem of moral risk in the franchiser-franchisee relationship.
- ⁴ The vertical structure refers to companies in the same productive chain (not necessarily the same owner) linked to each other through a contract or belonging to the same company. The horizontal structure, on the other hand, refers to companies in the same economic sector, linked to one another through a contract, commercial agreement, or belonging to the same company.
- ⁵ These are emerging economies with a lot of traits in common: large populations, vast territories, lots of natural resources, GDP growth over the past 10 years. The countries in this group are: Brazil, Russia, India, China, and South Africa.
- ⁶ The places are complex entities composed of numerous characteristics, including but not limited to: environment, urban design, history, culture, politics, etc. A local brand may synthesize these components into a unified and organized image (Plaza et al., 2015). Furthermore, the physical characteristics of a product are important drivers of the perception of quality, as are advertising, and brand distribution, like shelf space, which all affect perceived quality (Bronnenberg, 2008).
- ⁷ The econometric estimate is done with the statistical software Stata.

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