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## **Specialty Coffee Shops in Mexico: Factors Influencing the Likelihood of Purchasing High-Quality Coffee**

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# Specialty Coffee Shops in Mexico: Factors Influencing the Likelihood of Purchasing High-Quality Coffee

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## BACKGROUND

- Determinants of purchase of high quality coffee is relevant information for coffee farmers in Mexico, who sometimes lack marketing outlets for their specialized products.
- The commercialization of specialty coffee began in the United States in the 1980s led by Starbucks®, inspiring a generation of young coffee entrepreneurs to open their own businesses (Luttinger and Dicum 2006; Clark 2007).
- Specialty coffee emerged as a niche market where sensory attributes such as taste, aroma, body, sweetness, and bitterness, were perceived by consumers as distinctive product attributes (Daviron and Ponte 2005).
- The Specialty Coffee Association of America® (SCAA) suggests that specialty coffee is one that has a quality score of more than 80-cup points out of 100 (Coffee Chemistry 2015).
- Consumers are willing to pay a higher price for specialty coffee over conventional coffee, considering that such premium price may mean a greater benefit for coffee farmers (Castro et al. 2004; Cardona 2012).
- In Mexico, specialty coffee shops emerged in the 1990s when young entrepreneurs tried to mimic the success of Starbucks®. The pioneers in Mexico were Coffee Factory®, followed by franchises such as Café Etrusca®, Coffee House®, and Gloria Jeans®. Mexican consumers embraced the emergence of local coffee shops relatively quickly.
- A comprehensive directory or list server of specialty coffee shops in Mexico does not exist. However, Euromonitor International (2017) indicates that the coffee shop market in Mexico grows annually between 20% and 25%.
- The opening of specialty coffee shops in Mexico will increase the demand for coffee and may improve the economic conditions in the producing regions (Salgado 2014).
- Coffee shops create an alternative market for the farmer, who usually sells to intermediaries or to the export market (Fujigaki 2010), outlets that do not necessarily pay/compensate for high-quality coffee.
- This study aims to start understanding the demand-side of specialty coffee in Mexico.
- We propose models capturing determinants of specialty coffee purchasing behavior.
- The models assume that a specialty coffee owner decides the level of quality coffee to buy –hence, the price to pay for his/her main input– based on his/her background, on characteristics of the coffee shop, and socio-economic characteristics.
- Knowing the determinants of specialty coffee purchasing behavior should ultimately benefit coffee farmers by better targeting their customers.

## DATA

- We analyzed information collected from 115 in-depth personal interviews to coffee shop owners from May 2018 to July 2019, and in early 2020 across 15 cities, in seven states, in Mexico.
- We initially contacted owners of 46 coffee shops registered by the Mexican Association of Coffee and Specialty Coffee Shops, A.C. (AMCCE by its acronym in Spanish), and those who accepted were interviewed. Additional coffee shops were identified/refereed by those individuals interviewed (i.e., snowball).

Table 1. Total Number of Coffee Shops in the Sample			
State	Number of interviews	%	Average Cafeteria's Age (years)
Mexico City	46	40.0	4.1
Veracruz	31	27.0	4.6
Oaxaca	18	15.7	5.3
Puebla	11	9.6	5.4
Guanajuato	3	2.6	1.7
Jalisco	3	2.6	10.3
Michoacán	1	0.9	25.0
Nuevo León	1	0.9	0.3
Tamaulipas	1	0.9	1.0
Total	115	100.0	4.8

Source: Own elaboration.

## MODEL

- It is assumed that specialty coffee shop owners from the same cluster  $j$  (city) share similar characteristics difficult to measure, such as entrepreneurial ability, organizational culture, or business infrastructure. Thus, a multilevel model for clustered dichotomous responses is estimated to explain the probability that specialty coffee shop owner  $i$  buys the  $j^{th}$  coffee quality, where residuals are decomposed into two error components. This model then is a cluster regression model with city-specific random intercepts:

$$y_{ij}^* = \delta_0 + \delta_1 Z_{1ij} + \dots + \delta_p Z_{pij} + \zeta_j + \varepsilon_{ij} \\ = (\delta_1 + \zeta_j) + \delta_1 Z_{1ij} + \dots + \delta_p Z_{pij} + \varepsilon_{ij}$$

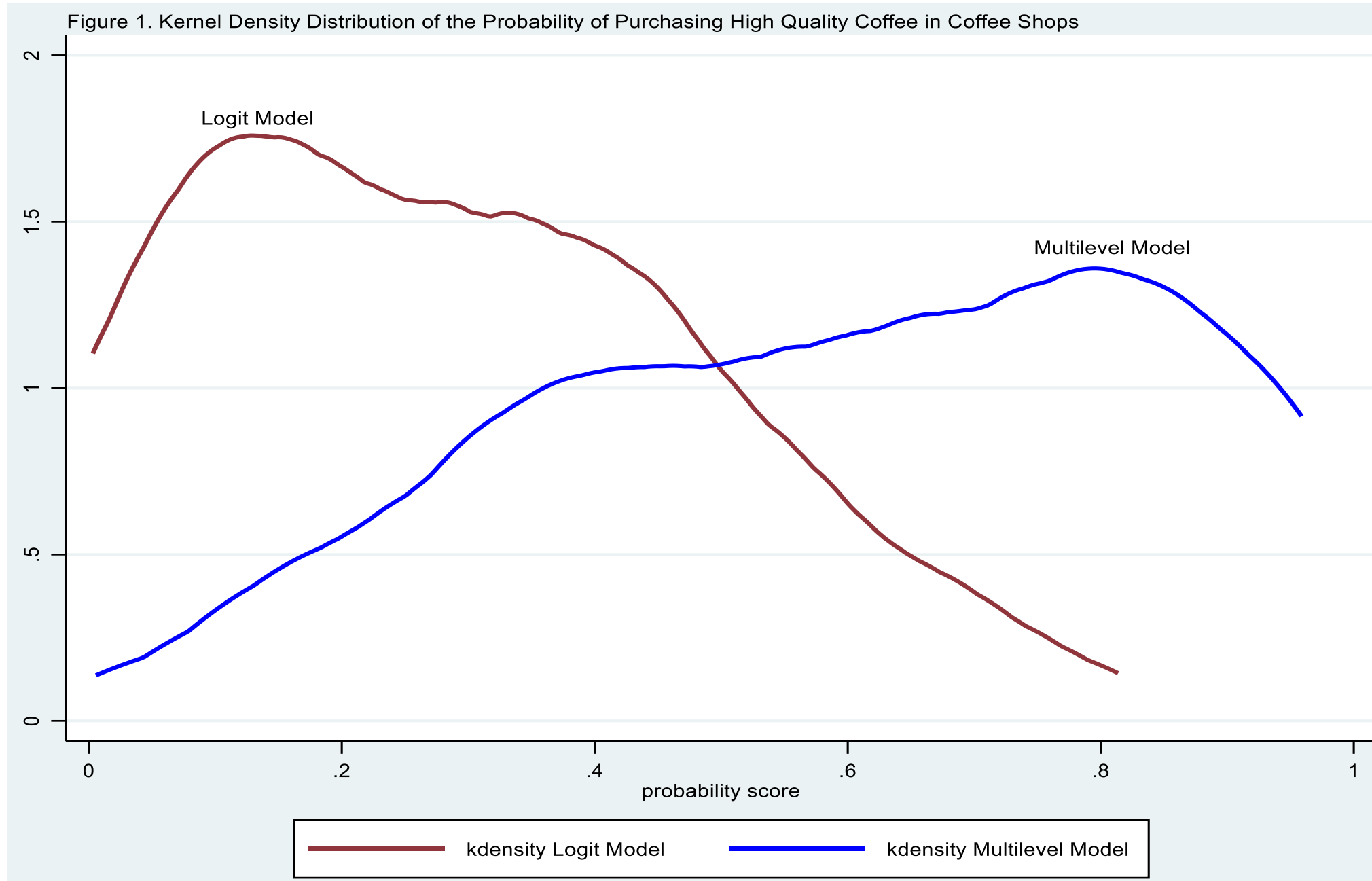
- The dependent variable  $y_{ij}$ =1 or 0 has categorical values, defined as 1 = the specialty coffee shop owner buys Premium Specialty coffee with a quality score of at least 85 points out of 100 as defined by the SCAA®, or  $y_{ij}$ =0 if the coffee shop owner buys Specialty coffee with a quality score between 80 and 84 points in city  $j$ , and  $Z_{ij}$  represents the vectors of explanatory variables affecting purchasing probability (Table 2). The  $\delta$  coefficients are the parameters to be estimated, and  $\xi$  has a normal distribution (0,  $\tau$ ).

## OBJECTIVE

- To identify the factors that influence the probability of purchasing high-quality coffee in specialty coffee shops in Mexico.

## RESULTS

- ✓ Of particular interest is the negative sign of the estimate for a variable indicating whether the coffee shop guarantees testing coffee by Q Graders or coffee professionals. Since there is a direct relationship between coffee quality bought and price, it might be the case that the Q grader allows the owner to save some costs on raw coffee because he/she may exploit other sensorial characteristics, such as blends or aroma, in the preparation and commercialization of coffee drinks.
- ✓ The more the coffee shop owner sells roasted or ground coffee to other buyers within Mexico, the more likely he/she is to buy Premium Quality coffee.
- ✓ Buying coffee directly from coffee farmers rather than through intermediaries increases the likelihood of buying coffee from the highest quality. It might be that buying directly from farmers increases the level of trust in quality –due to traceability, which may allow coffee shops to focus their marketing strategies on selling higher-quality coffee beverages.



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Table 2. Estimation Results of the Probability of Purchasing High Quality Coffee in Coffee Shops in Mexico					
Variable name	Variable Description	Logit Model		Multilevel Model	
		Odds Ratio	P-value	Odds Ratio	P-value
Y	Dummy [1 if coffee shop owner is purchasing Premium Quality Coffee <sup>1</sup> ; 0 if purchasing Specialty Coffee <sup>2</sup> ]				
I. Coffee shop owner's profile					
Gender	Coffee shop owner's gender (1=Male, 0=Female)	-0.567	0.277	-0.302	0.632
Age_Owner	Age of coffee shop owner (years)	0.0684*	0.063	0.0684	0.129
Educ_Owner	Coffee shop owner's education (1=Bachelor's degree; 0 Otherwise)	-1.040*	0.064	-1.149*	0.076
Barismo	1= Owner knows about barismo (preparation in cup); 0 Otherwise)	0.793	0.124	0.634	0.245
II. Characteristics of the coffee shop					
Age_CShop	Number of years the coffee shop has been operating in the market/100	-6.520	0.179	-6.153	0.385
Unique_Owner	Dummy (1 if there is only one owner of the coffee shop; 0 Otherwise)	1.020*	0.097	1.571**	0.014
Environment	Dummy (1 if environmental protection is the main concept of the coffee shop; 0 Otherwise)	1.146	0.128	1.047	0.209
Social_Benefit	Dummy (1 if the concept of the coffee shop is to generate social benefit; 0 Otherwise)	-0.375	0.469	-0.540	0.410
III. Characteristics of the purchase					
Catacion	Dummy (1 if the coffee was tasted by Q Graders or coffee professionals before purchase; 0 Otherwise)	-2.430***	0.001	-2.702***	0.005
Altitude	Dummy (1 if the altitude where the coffee is produced is the main characteristic for its purchase; 0 Otherwise)	0.221	0.387	0.494*	0.075
Buy_Farmers	Dummy (1 if the coffee shop owner buys coffee directly from the producers; 0 Otherwise)	0.91	0.102	1.178*	0.061
Difficult_Buy	Dummy (1 if it is difficult to buy coffee; 0 Otherwise)	-2.114**	0.049	-2.157**	0.017
Chiapas	Dummy ( 1 if the coffee purchased comes from the state of Chiapas; 0 Otherwise)	-0.683	0.264	-0.832	0.275
Oaxaca	Dummy ( 1 if the coffee purchased comes from the state of Oaxaca; 0 Otherwise)	-0.596	0.357	-0.565	0.481
Guerrero	Dummy ( 1 if the coffee purchased comes from the state of Guerrero; 0 Otherwise)	-0.899	0.288	-0.886	0.366
No_States	Number of Mexican states where the purchased Specialty Coffee comes from	0.476*	0.062	0.528	0.113
No_Months	Total number of months the coffee shop owner purchased Specialty Coffee	-0.0427	0.452	-0.0245	0.694
IV. Characteristics of the sale					
Sell_Coffee	Dummy (1 if the coffee shop owner sell roasted or ground coffee to other buyers in Mexico; 0 Otherwise)	1.584**	0.042	1.868**	0.016
Age_Consumers	Dummy (1 if the age of the consumers in the coffee shop is between 31 and 50 years; 0=Otherwise)	0.384	0.539	0.00801	0.99
V. Socio-economic characteristics of the context					
Income_Index	The income level in the city where the coffee shop is located	2.521	0.65	7.297	0.293
Mean_Educ	Average years of education of the population in the city where the coffee shop is located	0.871	0.21	1.028	0.208
Constant	Constant of the model	-13.13	0.106	-19.44**	0.031
Key Statistics					
N	Number of observations	106		101	
df_m	Model degrees of freedom	21		21	
ll	Log likelihood	-53.98		-48.65	
Chi²	Chi-squared	26.27		21.28	
AIC	Akaike Information Criterion	152		141.3	
BIC	Bayesian information criterion	210.6		198.8	

<sup>1</sup>Coffee Premium Quality: ≥85 points in cup; <sup>2</sup>Specialty Coffee Quality (≥80 and <85 points in cup) according to the Specialty Coffee Association of America® (SCAA). Source: Own elaboration.