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# TRADITIONAL RETAIL OUTLETS OR SUPERMARKETS: A PROBIT ANALYSIS OF SHOPPERS IN TRINIDAD AND TOBAGO

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**Abstract:** The purpose of this study is to identify consumers' retail outlet choice for Roots and Tubers in Trinidad and Tobago between traditional and modern retail outlets, and also to find out what influences consumers' shopping preferences for one or the other retail format. A Probit model, where both demographics and store attributes were used to predict outlet choice was the methodology utilized in the study. The results obtained suggest that the traditional outlets are the preferred place to purchase Roots and Tubers with 71% of the sample selecting these outlets. Of the fifteen independent variables analyzed in the Probit model, four demographic variables – age, employment status, ethnicity and income – and two latent factors of the store attributes labeled "value" and "location" were statistically significant. Of note, older buyers are 12% more likely to choose the traditional outlet while there is a 16% higher probability that persons in the higher income brackets will choose supermarkets as their retail outlet. These results provide an insight into the choice of outlet of shoppers and the strengths and weaknesses of the two retail formats.

**Keywords:** Traditional retail outlet, Supermarkets, Probit analysis, Trinidad and Tobago, Roots and Tubers  
(JEL code: Q13, M31, C25)

## INTRODUCTION

In Trinidad and Tobago (T&T) there has been a considerable amount of interest in the starchy roots and tubers (R&Ts) in the recent past given the rising food import bill. R&Ts were a major source of carbohydrates in the diets of the Region's people. However, it is a well known "law" of economics that as income rise the per capita consumption of starchy food staples – R&Ts – falls. Durrant (1987) recognized this declining trend when he wrote "Generally, the production and consumption of indigenous root crops have been declining over the last two decades and this trend has been ascribed to a wide variety of factors. Among these factors, the most important would seem to relate to limited forms in which root crops may be consumed – given the low levels of processing technology. In addition, there is the relative inconvenience involved in the preparation of these foods when compared with other high-energy staples such as rice and wheat flour".

To date there appears to be little research undertaken to identify who buys R&Ts, where and why in T&T. Traditionally, in the Caribbean R&Ts were primarily sold at the public markets, roadside stands and farm gate. These outlets were not only a place for selling but also for communing/socializing, particularly for many older folks. Today, with the transformation of the food retailing sector taking place in T&T, shoppers can now purchase R&Ts also

from supermarkets<sup>1</sup>. Another key feature of the contemporary food retail sector in T&T is the proliferation of fresh produce roadside stands emerging, many in close proximity to established supermarkets.

The emergence and rapid growth of supermarkets and their impact have been analyzed by many researchers, for example, Reardon, T., Timmer, C. P., Barrett, C. B., & Berdegué, J (2003), Weatherspoon D. D., & Reardon, T., (2003), Reardon, T., Henson, S., & Berdegué, J. (2007), Reardon, T., and Gulati, A. (2008). The impact of supermarkets on the food and agribusiness sectors is so diverse and significant it is commonly referred to as the "Supermarket Revolution". As the literature indicates supermarkets were originally viewed by development economists, policymakers, and practitioners as the rich people's place to shop, however, today supermarkets are no longer found only in strategic locations in capital cities in developed and developing countries but have spread rapidly into low-income rural communities.

Consumers choose different retail outlets as a result of numerous factors such as, store attributes (location, ease of access, ease of parking, and assortment of goods carried, price etc.) and socio-economic factors (income, employment status,

<sup>1</sup> For purposes of this study, the term supermarket is used to refer to all self-service retail food and grocery outlets, regardless of floor space and number of stock keeping units (SKUs) carried.

educational level attained etc.). There are numerous different analytical approaches in the literature commonly used when studying retail outlet choice and patronage behavior. These range from simple Chi-square test, Independent Sample T-test, to sophisticated regression models. This study utilizes the Probit Binary Choice Model in an attempt to identify the store attributes and demographics that influences the choice of retail outlet for R&Ts in T&T.

For purposes of this research the R&Ts that are being considered are the starchy ones – Cassava (*Manihot esculenta*), Dasheen (*Colocasia esculenta*), Edo (eddoe) (*Xanthosoma spp.*; *Colocasia spp.*), Potato (*Solanum tuberosum*), Potato, sweet (*Ipomoea batatas*), Yam (*Dioscorea spp.*) Tannia (*Xanthosoma sagittifolium*). The rest of the paper is organized as follows. The next section provides a brief review of some relevant literature to this study. This is followed by a statement of the problems addressed in the study. Thereafter, the analytical approach and conceptual framework along with data used in the study are described. This is followed by the results, and finally the discussion and conclusions.

## LITERATURE REVIEW

Diets and food purchasing trends have changed in T&T in the last few decades. Sustained economic growth in developing countries has resulted in a positive rate of growth in real per capita income. Consequently, consumers' decision of where to shop might not be only driven by price. On one hand due to time-pressured household heads, and more women employed out of the home, the "one stop shop" convenience of supermarkets appears to be giving the traditional public markets and roadside fresh produce stands stiff competition. Further, some analyst are suggesting that based on volume discounts received by supermarkets from their suppliers, supermarkets are able to offer their customers better prices. In the contemporary food market in T&T with more educated, health conscious, and time pressured shoppers, why would some shoppers still want to frequent the public markets? A better understanding of consumers' behavior and those key factors that affect consumers' choice of retail outlet in the highly competitive food retail sector in T&T is a must for retail outlet operators.

The store attributes influencing retail outlet choice have attracted the interest of researchers for many decades. More than five decades ago, Martineau P. (1958) in a study titled 'The Personality of the Retail Store' suggested that the store's personality or image has two components, its functional qualities and its psychological attributes. The functional attributes included such attributes as, location, assortment of products and store layout, while the psychological attributes related to the feelings generated by functional factors such as spacious, not crowded etc. Since then there has been many other aspects of the store that have been identified as influencing retail outlet choice.

Kunkel J. H. and Berry L. L. (1968) suggested that part of the problem academics and practitioners encountered while researching retail image was due to the difficulty in arriving at a consensus of what exactly is store image. They

suggested the following definition: 'retail store image is the total conceptualized or expected reinforcement that a person associates with shopping at a particular store'. In an attempt to operationalize their definition they suggested the following twelve components of store image: Price of merchandise; Quality of merchandise; Assortment of merchandise; Fashion of merchandise; Sales personnel; Location convenience, Other convenience factors; Services; Sales promotions; Advertising; Store atmosphere and Reputation on adjustments. Others, such as, Saraswat M. et al (2010) define store image as the symbolic, experiential expression of the manner in which consumers see or visualize a store.

Aaker and Jones (1971) in their contribution to our understanding of store choice behavior looked at the Linear Learning Model. They found that the model was of limited usefulness when predicting store choice and stated "Successful models of store choice behavior depend upon researchers' ability to obtain appropriate definitions of store choice. Under one definition they found the model was viable in representing store choice behavior.

The socio-economic profile of shoppers at different retail formats have been investigated, especially in developed countries by numerous researchers, and with the transformation of the retail sector in emerging and developing economies a number of studies are now being done there. Oghojafor, B. E. A. & Nwagwu, K. O. (2013) examined the influence of income, education level attained, type of employment, marital status and family size on choice of shopping outlets for grocery products in Lagos Nigeria. They found that socio-economic variables such as, income, level of education, type of employment, marital status and family size did not influence retail outlet choice for groceries by Nigerian women.

Panda A. (2013) in a study titled "Customer Patronage towards Food and Grocery Retail – A Case Study" analyzed fifteen variables thought to influence selection between traditional outlets and modern outlets in Odisha state in India, using the Paired t-test approach. The variables analyzed by Panda were convenient location, parking space, product volume, product variety, expected price, phone order service, home delivery, availability of credit, convenience of time, goods return facility, goods exchange facility, bargaining facility, self service facility, sales promotion schemes, and loyalty programs. Opinion of the customers regarding convenient location, parking space, product volume, product variety, home delivery, goods return facility, goods exchange facility, and customer loyalty programs were significantly different in the two formats. Variables like parking space, product variety, product volume to be purchased, sales promotion schemes, self service facility, and customer loyalty programs led the customers to the organized retail formats.

Zameer A. and Mukherjee D. (2013) also studied the food and grocery retail patronage behavior in India between Kirana stores and modern retailers; however, they focused on urban consumers. In this study seventeen factors were analyzed: Distance (convenience of location), Parking facility, Product variety, Product quantity to be purchased, Expected prices, Phone order facility, Home delivery facility, Sales promotion

schemes, Credit facility, Bargaining facility, Product quality, Self-service facility, Time required for shopping (convenience of quick purchase), Goods return facility, Goods exchange facility and Availability of loyalty programs. In this study they found that there was a significant difference in the role played by convenience of location, parking facility, product variety, product quantity, home-delivery facility, sales promotion schemes, bargaining facility, self-service facility, goods return facility, goods exchange facility and availability of loyalty programs between the two formats.

In a study by Iqbal et al. (2013) on Pakistani Society titled, "Impact of Demographic Factors on Store Selection: An Insight in Pakistani Society" they found education level, occupation, income level and household size did influence store selection. Salma Mirza (2010) in her study of urban Pakistanis found that age, gender and occupation had no influence on the choice of retail format, while household income, household size and education does influence choice of retail format. As she reported her findings differed from Prasad, C. J. and Reddy, D. R. (2007) who found age, occupation, educational level, household income level and household size does influence the choice of retail format.

Prashar M. (2013) examined retail outlet attributes that acted as drivers of store selection in the Indian food and grocery sector for three formats, convenience stores, supermarkets and hypermarkets. This study found that availability and variety of products at store, store ambience, service and facilities, and value for money were the key factors in store selection. Further, this study found that store location was outperformed by other store atmospherics. Prasad C. J. and Aryasri A. R. (2011) in their study on retail format choice for food and grocery products in India found that shoppers' age, gender, occupation, education, monthly household income, family size and distance travelled to store have significant association with retail format choice decisions.

Maruyama and Trung (2007) examined the choice of traditional bazaar or supermarkets in Hanoi using a Probit Model. The demographic variables used in this analysis were SEX, CHILDREN younger than six years old in the household, AGE, and average monthly INCOME. Type of TRANSPORT used to go shopping was also included. The following attributes were rated on a scale from 1 to 5, where 1 was not important and 5 very important, FRESH, NEWGOODS, QUALITY, SAFETY, CHEAP, USUALSELLER, CONVENIENCE, SERVICE, and NOBARGAIN, some of which were also used in the three models analyzed – fresh food, processed food and drinks, and non-food products. In the case of the analysis for fresh food FRESH, SAFETY, CHEAP, USUALSELLER, CONVENIENCE, NOBARGAIN, income and type of transport were statistically significant. The coefficients for SAFETY, NOBARGAIN, INCOME and TRANSPORT all had negative signs. In the case of processed foods and drinks SAFETY, CHEAP, USUALSELLER, NOBARGAIN, INCOME and TRANSPORT were statistically significant. The coefficients SAFETY, NOBARGAIN, and TRANSPORT had negative signs. Only four variables were statistically significant for non-food products, with the coefficients for

QUALITY, NOBARGAIN and SEX having negative signs and the coefficient for CHEAP positive. The findings indicated that perishable food item had the tendency to be purchased in traditional outlets.

Terano et al. (2014) examined the choice between Modern and Traditional Retailers in Malaysia using a Binary Logit Model. The demographic variables used in the analysis were gender, age, education, accompany (child) and family size. Factor analysis was used to extract four latent factors from twelve statements. The four latent factors extracted explained 65% of the variance in twelve original statements. Seven variables were statistically significant, four demographic and three latent factors. The decision rule utilized was: reject the null hypothesis if the probability of the test statistic is less than or equal to alpha 0.1. Age, education, accompany (child), family size, packaging, store environment and product price were statistically significant. The coefficients for family size and product price carried negative signs.

It is against this backdrop the following 20 store attributes were identified for this study: Price of R&Ts, Variety of R&Ts available, Presentation of R&Ts, Quality of R&Ts, Ability to self select R&Ts, Ability to argue over price, Availability of other food products, Outlet near home, Ease of parking, Ease of getting to and from outlet, Cleanliness of place, Appearance of place, Crowdedness of place, Speed of being able to select item, Speed of being able to pay for item, Outlet recommended by friends, Outlet frequented by friends, Customer advice offered by sellers, Friendliness of sales persons, and Operating hours. The demographic variables selected were age, employment status, education level attained, sex, ethnicity, household size, household monthly income and being the primary household food purchaser or not.. Using the Probit binary methodology this study attempts to increase our knowledge on food marketing in the Caribbean in general and more specifically on the buyers' choice of retail outlet in T&T for R&Ts.

## RESEARCH PROBLEMS AND CONCEPTUAL FRAMEWORK

Based on the brief review provided above the problems that will be addressed in this study are as follows:

To identify the preferred choice of retail outlet for buyers of R&Ts in T&T;

To identify the socio-economic and store attributes that influences the choice of retail outlet for R&Ts buyers in T&T;

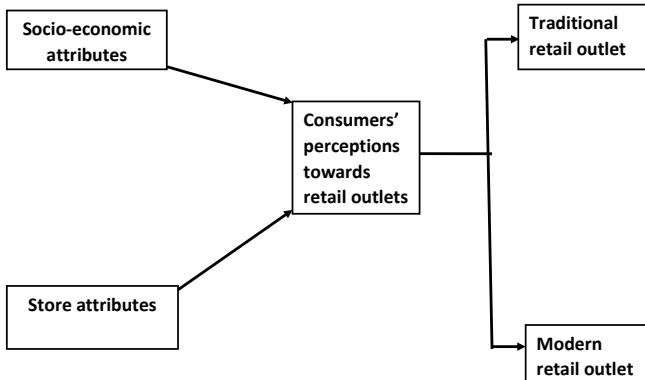
**Figure 1** illustrates the conceptual framework used in the study. The demographic variables and store attributes are hypothesized to have an influence on being either a traditional or modern outlet shopper of R&Ts. Since the dependent variable is a dichotomous variable – traditional or modern, and the predictors - demographic and store attributes variables are all categorical the Probit model was thought suitable for this exercise. However, as is pointed out in Maddala (1988) pp. 273 " we are not likely to get very different results using (8.16) or (8.17), that is, the logit or the probit method, unless the samples are large". Further, the estimated coefficients are related by a factor of 0.625.

For purposes of this exercise the dependent variable is defined as follows:

Traditional retail outlet - public markets and roadside stands, and

Modern retail outlet - supermarkets.

Figure 1: Conceptual framework of the study



## ANALYTICAL APPROACH AND DATA

To investigate what shoppers' and store attributes influenced the choice of outlet between the modern retail outlets and the traditional formats a questionnaire was developed and pretested in January 2015. The questionnaire tried to identify the main choice of retail outlet used by respondents when purchasing R&Ts. Based on recall, respondents were also asked to indicate the R&Ts purchased the most in the last year from a volume basis. The respondents were asked to rank the selected store attributes on a scale of 1 to 5, where 1 was not important and 5 very important. Socio-economic attributes of the respondents were also collected such as household income, educational level attained, age, family size, ethnicity, sex and employment status. The decision rule employed in this study is as follows: reject the null hypotheses if the probability of the test statistic is less than or equal to alpha 0.10.

Data collection was conducted in both islands, Trinidad and Tobago. Questionnaires were administered to prospective respondents who were willing to participate at banks, hospitals, outside supermarkets and in public markets during the months of February and March 2015. A total of 600 questionnaires were administered of which 498 were fully completed and returned, giving a response rate of 83 percent. The relevant data was analyzed using STATA version 10. The analysis was conducted in a three stage process:

1. Descriptive analysis;
2. Factor analysis; and
3. Probit binary analysis.

Tables 1 and 2 illustrate the coding of the dependent and socio-economic variables used in the probit binary regression. In T&T there is a general belief that the younger generation, 25 years and under, are more convenience oriented, and as such are attracted to shopping in malls and supermarkets.

Hence, the reason for coding of the age groups in this manner. With regards to the household size, the average household size is 3.64, so for purposes of this study 4 persons was used as the cutoff point for household size. A two income household in T&T is expected to earn at least TT\$15,000 monthly, consequently, the coding of monthly household income in this way.

Table 1: Coding of the dependent variable.

Variable	Coding	Label
Dependent variable	1	Public market
	0	Supermarket

Table 2: The coding of the independent demographic variables

Variables	Coding	Label
Age	1	> 25 years
	0	25 years and younger
Employment status	1	Employed
	0	Unemployed
Educational level	1	Secondary and below
	0	Tertiary
Household size	1	4 and less persons
	0	> 4 persons
Income	1	> \$ 15001
	0	≤ \$15000
Gender	1	Male
	0	Female
Ethnicity	1	African descent
	0	Other
Marital status	1	Single
	0	Other
Primary food purchaser (PHP)	1	Primary food purchaser for household
	0	Other

The following Probit model was developed:

$$Y = \Phi(X\beta + \varepsilon)$$

$$\Phi^{-1}(Y) = X\beta + \varepsilon$$

Where:

$Y$  = is the retail outlet of choice of buyers of R&Ts;

$\Phi$  = Cumulative Distribution Function (CDF) of the standard normal distribution

$\beta$  = parameters to be estimated by maximum likelihood estimation

$\varepsilon$  = Error term

$X$  = a vector of independent variables – retained latent factors from the factor analysis and the following demographic variables:

$X_1$  = Age  
 $X_2$  = Income  
 $X_3$  = Educational level attained  
 $X_4$  = Household size  
 $X_5$  = Employment status  
 $X_6$  = Gender  
 $X_7$  = Ethnicity  
 $X_8$  = Marital status  
 $X_9$  = Primary food purchaser (PFP)  
 $X_{10} \dots \dots X_i$  = Latent factors retained from factor analysis

## RESULTS

Table 3 illustrates a breakdown of the independent demographic variables into the various categories. The sample consisted of 62% of respondents being over twenty years old and the remaining 38% twenty five years old and younger. The majority (60%) were employed. With regards to educational status, 53% were tertiary level trained with the remaining 47% having secondary and lower levels of education. The majority of the respondents were women (62.7%) with male buyers of R&Ts being 37.3%. The one to four persons household size accounted for 57.8% of the respondents. The majority of the households (75%) had monthly income of less than TT\$ 15,000<sup>2</sup>. T&T is a multiracial nation with Indian and African descendants being the predominant races. \$8.2% of the sample considered themselves being of African descent.

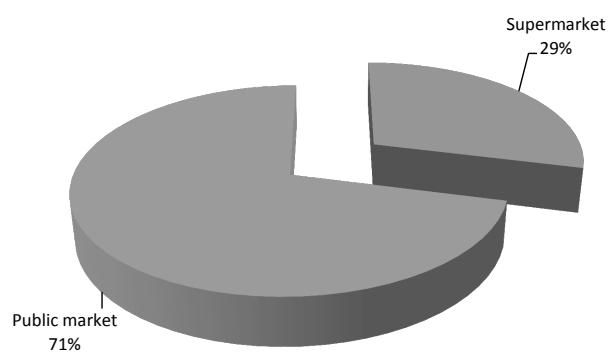
Table 3: Frequencies of demographic independent variables in model

Variables		Percent
Age	25 years and younger	38.0
	>25 years	62.0
Employment status	Employed	60.0
	Unemployed	40.0
Educational level	Tertiary	53.0
	Secondary & under	47.0
Gender	Male	37.3
	Female	62.7
Household size	1-4 persons	57.8
	>4 persons	42.2
Income	<\$15000	74.6
	>\$15001	25.5
Ethnicity	African descent	48.2
	Other	51.8
Marital status	Single	55.2
	Other	44.8
PFP	Yes	46.6
	No	53.4

Figure 2 illustrates the percent of buyers patronizing the two outlet formats. As can be deduced from this diagram the majority of the buyers purchased their R&Ts from the traditional outlets. This suggests that the traditional outlets are still a force to be reckoned with for R&Ts, and possibly fresh produce on the whole in the T&T food market.

<sup>2</sup> US\$1.00 = TT\$6.27

Figure 2: Percent of buyers patronizing the two retail outlets



There were only twenty store attributes used in the factor analysis and as such the KMO test was used to check for sampling adequacy. The result of the KMO test as is shown in table 4 was 0.820, which indicates sampling adequacy.

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.820
Bartlett's Test of Sphericity	4111.02
df	190
Sig.	.000

Table 5 illustrates the results of the factor analysis. From the twenty variables six underlying factors were loaded and saved for use in the probit regression. Component 1 loaded heavily on the price, quality and attributes related to value and will be referred to "Value". Component 2 loaded heavily on attributes related to the speed of service and will be referred to as "Service". Component 3 loaded on attributes related to information received from others and would be labeled "Advice". Component 4 loaded on attributes related cleanliness and appearance and would be labeled "Aesthetics". Component 5 loaded on attributes related location and would be labeled "Location". Component 6 loaded on attributes related to ability to bargain and availability of other foods and would be labeled "Assortment". Together the six components accounted for 68% of the cumulative variance. In general, a factor analysis accounting for 60 – 70% of the total variance is considered a good fit to the data. Loadings below 0.40 were suppressed.

Table 5: Rotated component matrix

	Component					
	1	2	3	4	5	6
Price of R&Ts	.786					
Variety of R&Ts available	.762					
Presentation of R&Ts	.703					
Quality of R&Ts	.683					
Ability to self select R&Ts	.511					
Speed to select items		.852				

	Component					
	1	2	3	4	5	6
Speed to pay for items	.811					
Crowdedness of place	.633					
Operating hours	.569					
Outlet liked by friends		.849				
Outlet recommended by friends			.816			
Customer advice offered			.801			
Friendliness of sales persons			.633			
Cleanliness of place				.859		
Appearance of place				.851		
Ease to and from outlet					.855	
Outlet near home						.768
Ease of parking						.632
Ability to haggle over price						.857
Availability of other foods						.645

The Scree Plot is illustrated in figure 3. The plot shows that six components had Eigenvalues greater than one. This suggests that the six latent factors can be retained for further analysis.

Figure 3: Scree Plot

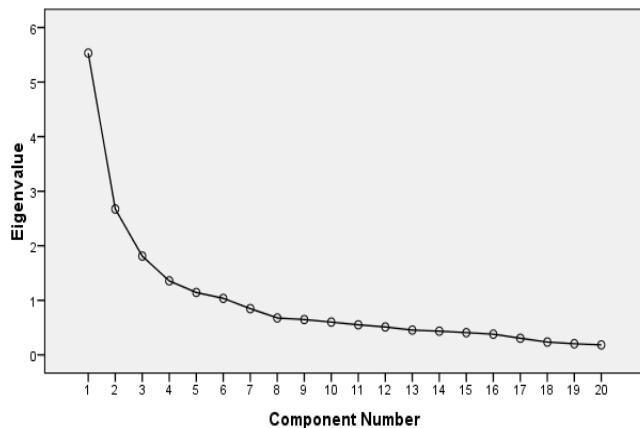


Table 6 illustrates the variables in the equation with the estimated coefficients and other relevant data. The first thing to note here, is six of the variables are statistically significant, four socio-demographic, Age (.057), Employment status (.104), Ethnicity (.004) and Income (.002) and two latent variables retained from factor analysis, “Value” (.000) and “Location” (.009). Also worthy of note is that of the statistically significant variables only two of the estimated coefficients are positive Age and Value.

The estimated model can be written as follows:

$$\text{Probability (public market)} = \text{Probit} (B'X)$$

$$\begin{aligned} \text{Where } B'X = 1.025 + .347 * \text{Age} + (-.454) * \text{Income} + \\ (-.046) * \text{Education} + .089 * \text{Household size} \\ + (-.260) * \text{Employment status} + (-.145) * \text{Gender} + \\ (-.368) * \text{Ethnicity} \\ + (-.188) * \text{Marital status} + (-.112) * \text{PFP} + .270 * \text{Value} + \\ (-.077) * \text{Service} \\ + .025 * \text{Advice} + (-.032) * \text{Aesthetics} + (-.176) * \text{Location} + \\ .066 * \text{Assortment} \end{aligned}$$

Although some of the variables are statistically significant, the low McFadden R2 indicates that the set of predictors as a whole has little explanatory power on the choice of retail outlet. The results, however, tells us that the older buyers – age 25 or older – are 12% more likely to choose the traditional outlet for the purchase of R&Ts. This probability will however decrease by the same amount – 12% - if the buyer is of African descent. The computed marginal effects also give evidence that buyers that are employed have an 8.5% higher probability of choosing supermarkets as their retail outlet. It is also worthy to note that there is a 16% higher probability that persons in the higher income brackets – more than \$15,000 per month household income – will choose supermarkets as their retail outlet for R&Ts. Gender, marital status, PFP, education and household size did not appear to be important in the choice of retail outlet.

With regards to the attributes of the public market versus the supermarket, buyers who place greater importance on value are more likely to choose the traditional outlet. The probability of this choice will increase 9 percentage points for each level of a 5-tiered importance scale. Conversely, for a similar importance scale, the effect of location of the outlet is to decrease this probability by almost 6% for each level of the scale. In other words, buyers who perceive location as “very important” have an almost 13% lower probability of choosing the traditional outlet (Note the maximum value for “Location” is 2.245).

## DISCUSSION AND CONCLUSIONS

The purpose of this study was to illustrate consumers’ retail outlet choice for R&Ts between traditional and modern outlets, and also to find out what determines/influences consumers’ shopping preferences for retail format choice. As is the case with many primary research projects there are limitations and this study is no exception. A limitation of the study is the sampling method used and as a result the generalization of the findings. Notwithstanding this, based on the results obtained one can safely conclude that the traditional outlets – public markets and roadside stands – are the preferred places to purchase R&Ts in T&T, with 71% of the sample using these outlets.

In the contemporary food marketing arena factors influencing where one shops are numerous. This study simultaneously used retail outlet attributes and demographics to

Table 6: Results of the probit binary choice model

Variable	$\beta$	S.E.	P >  z	Sig.	Marginal probability
Age	.347	.182	0.057	*	.117
Employment status	-.260	.160	0.104	*	-.085
Ethnicity	-.368	.128	0.004	***	-.122
Education level	-.046	.131	0.728		-.015
Household size	.089	.127	0.485		.030
Gender	-.145	.130	0.267		-.049
Income	-.454	.145	0.002	***	-.159
Marital status	-.188	.153	0.220		-.062
PPF	-.112	.146	0.445		-.037
“Value”	.270	.062	0.000	***	.089
“Service”	-.077	.064	0.229		-.026
“Advice”	.025	.062	0.689		.008
“Aesthetics”	-.032	.064	0.621		-.011
“Location”	-.173	.065	0.009	***	-.057
“Assortment”	.066	.062	0.292		.022
Constant	1.025	.229	0.000	***	
Log likelihood	-272.77				
Number of observations		498			
LR chi <sup>2</sup> (15)		53.44			
Prob >		0.00			
Pseudo R <sup>2</sup>		0.09			

\*\*\* Significant at the 1% level, \*\* Significant at the 5% level,  
 \* Significant at the 10% level

identify those factors that influenced the choice of retail outlet. Four demographic variables were found to be statistically significant – age, employment status, ethnicity and income. The results of the study support the view that higher income shoppers would tend to gravitate towards the supermarkets, given the strong negative coefficient. The two statistically significant outlet attributes were related to “Value” of R&Ts and “Location” of outlet. In the case of “Value”, shoppers who are more interested in receiving the best quality/price combination are more likely to choose the traditional market for the purchase of R&Ts. The results also support the view that proximity to home and ease of parking are attributes that will strongly influence consumers to choose supermarkets over traditional outlets when shopping for R&Ts.

Customer segmentation provides the opportunity for marketers to better tailor their offerings to target groups that are most likely to respond positively. However, in the food industry where increasing competitiveness is occurring alongside an unprecedented evolution of consumer demand, the diversity of customer needs and buying behaviors displayed by the contemporary food shopper is calling into question some of the traditional segmentation techniques. This study attempted to identify shoppers of R&Ts at traditional and modern outlets based on store attributes and demographics, however, the overall performance of the model left much to be desired. An assessment of the results evinces the need for further

research in the dynamic and highly competitive food retail sector in T&T as business operators and other stakeholders try to understand the contemporary food shoppers.

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