

DEMAND AND MARKET CONCENTRATION FOR BRANDED SAUSAGE ROLLS IN OYO STATE, NIGERIA

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Abstract: Branded sausage is one of the fast foods, and the demand for it in Nigeria is increasing substantially due to growing household affluence and its availability and affordability. The study examined the market concentration and the need for branded sausage rolls in Oyo State using 290 respondents (buyers and sellers) collected through a three-stage sampling procedure. The study affirmed that Gala (small and big) had the highest percentage (41.3%) of consumers while bigi and the rite spicy had 22.7% and 21.4%, respectively. The yum-yum brand had the lowest consumers percentage (1.8%). The average amount consumers spent on gala (big and small size) per month was ₦824.18 followed by rite spicy and bigi with a moderate amount of ₦582.98 and ₦520 per month. Gala (small and big) had the highest inequality in sales revenue (0.42) while bigi had the least (0.26). The market concentration of gala was the highest (50%) while bigi had the least (40%). The market share of the gala (big and small size) was 54.4 percent followed by rite spicy and bigi with 23.9 and 21.1 percent, respectively. Monthly income, taste, quality, price, and availability influenced consumers' preference for sausage rolls while monthly payment, household size and brand consumed determined consumers' monthly expenditure on sausage rolls in the study area. The yum-yum brand had the lowest consumer's percentages in the sausage market at 1.8%. Producers of other sausage rolls brands should develop strategies that would ensure fair competition with other brands so that the dominance of some brands can be reduced to prevent the emergence of a monopolist in the sausage rolls market. The need for market segmentation based on consumers' income is recommended.

Keywords: *Branded sausage rolls, Market inequality, Lorenz curve, Market share.*

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INTRODUCTION

The socio-economic configuration of Nigeria is changing with time. Changes in people's lives are attributed to rising income and ever-increasing urbanization. Development is identified as the driver of food consumption patterns of the populace. Economic (cost and time-saving) and social (expediency) reasons often compel individuals and households to relying on consuming food outside of one's home (Stewart et al., 2004; Binkley, 2006; Arulogun et al., 2011). According to Durgan et al. (2014), Food Away From Home (FAFH) includes meals and refreshments made available by eateries

and sellers in kiosks by the roadsides. Food away from home can also be regarded as uncooked or cooked, hot or frozen foods that can be eaten without further cooking. Different terms have been used to describe food away from home. These include fast foods, ready-to-eat food, and convenient food. Examples include sausage roll, meat pie, burger, moi-moi and others.

Snacks, the light, fast and ready-to-eat food are demanded in large quantities mainly in towns and cities where workers in government establishments, private and industrial sectors consume them as a refreshment or to quench hunger or as a substitute for the authentic meal (Pikuda et al., 2011). In

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Nigeria, varieties of local refreshments are sold in the eateries, fast food, along the street at different locations in market places, industrial sites, motor parks, railway stations, schools. A large percentage of the urban populace depends on snacks as a substitute for lunch at work or maybe consume for enjoyment because of the taste. As the metropolitan way of life gets progressively more chaotic, time is too short for people to cook meals at home. Lack of time has led to changes in residents' habits and other peculiar characteristics, including the food consumed. Many urban inhabitants, particularly youths and children, obtain a large amount of their nutrition from snacks and fast foods sold cheaply on the street since they are frequently available. Snack consumption is expanding, and snacks are sold everywhere. Snacks can be taken at any time, including in between meals. (Johnson et al., 2010; Olutayo et al., 2009).

Branded sausage is a manufactured snack product produced from beef and wheat flour enjoyed by the public. Because of expanding household prosperity and accessibility, the demand for branded sausages in Nigeria is skyrocketing. As a result, new food processing companies continue to emerge with different brands, such as gala, bigi, yum-yum, rite, meaty, chopsy and super bite. They are differentiated by taste, wrapping, and other characteristics (Ladislav et al., 2015). This study aims to establish the market share of each of the branded sausage rolls, as well as the factors that influence customers' sausage roll choices. The following research questions are posed to attain this goal: (1) What are the socio-economic features of branded sausage roll purchasers and sellers?; (2) What percentage of the market does each branded sausage roll contribute?; (3) What factors influence consumers' decision to buy branded sausage rolls?

Previous research on fast meals, restaurant food, and snacks is classified into two categories: studies conducted within Nigeria (Ogundari et al., 2013; Ogundele, 2014; Olorunfemi, 2014; Oyinbo et al., 2015; Olise, 2015; Abdullatiff et al., 2017) and outside of Nigeria (Dybczak et al., 2014; Verbic et al., 2014; Junsky, 2014; Ashrafi, 2014; Cupak et al., 2015; Liu et al., 2015; Aruppillai et al., 2015; Ying, 2016). Most studies on fast food in Nigeria had smaller scope in terms of the study area (Sowunmi et al. 2018; Olorunfemi, 2014; Olanikanmi, 2012). However, this study utilized a larger study area that consisted of five different towns in Oyo State, Nigeria, namely; Ibadan, Ogbomoso, Oyo town, Iseyin and Eruwa expected to have a robust finding on demand for branded sausages rolls in Oyo State. It is expected that the study would showcase the scorecard of the producers of branded sausage rolls in terms of market share and concentration for the necessary adjustments if need be.

Theoretical framework and literature review

The concept of consumer behavior serves as the foundation for this research. According to Reynolds (2005), utility refers to a good's (or service's) ability to satisfy a desire. He posited that psychological, economic, social and cultural factors influenced consumer behavior. For example, consumer behavior (demand for branded sausage rolls) is controlled by the unit price, income of the consumer and brand of sausage rolls, among others.

In demand analysis, scholars have employed a variety of analytical tools. These include Almost Ideal Demand System: AIDS (Ogunniyi, 2011; Adetunji and Rauf, 2012; Motallei and Pendell, 2013; Dawoud and Seham, 2013; Iwang, 2014; Akinbode, 2015), Quadratic Almost Ideal Demand System (Olorunfemi, 2012; Adetunji and Rauf, 2012; Lakkakula, Schmitz and Ripplinger, 2016; Olubokun, 2018), Linear Expenditure System (Pollak, Robert and Wales, 1992; Robert, 2001; Paul, 2005; Moses, 2018), Double Hurdle Model (Blundell and Meghir, 1987; Newman, 2003; Moses, 2012; Akinbode and Dipeolu, 2012; Eakins, 2014; Olanikanmi, 2015), Heckman model (Olorunfemi and Ajibefun, 2008; Andrew, 2009; Cesar, 2014). However, the limitations of these significant methods of analysis are well documented. For instance, the AIDS model performed poorly in price and income elasticities as income changed. LA/AIDS model reveal simultaneity bias problem. QUAIDS model requires the use of non-linear techniques that can be computationally demanding, especially for large and disaggregated demand systems. The linear expenditure system's shortcoming is the restrictiveness but allows the estimation of the demand equations using available software, while still addressing the problems of zero consumption and heteroscedasticity. If the Heckman selection model is not well-specified and the variables in the selection model do not predict response/non-response well, the IMR may be weaker than projected, and the technique may have limited power to discover bias. (Sales et al., 2004).

In studies, income inequality is measured using different tools such as Coefficient of Variation (Champernowre and Cowell, 1998; Compano and Salvatore, 2006), Robin hood Index (Kennedy, et al., 1996; Shi et al., 2003; Sohler et al., 2003), Entropy Index (Kawachi and Kennedy, 1997; Weich et al., 2003; Hou and Myles, 2005; Cowell, 1995; Jenking, 1991). Unlike Gini coefficient, coefficient of variation lacks upper bound (Eisenberg, 2015). Robin Hood index excludes sensitivity parameter (De Maio, 2007) while the entropy index is not easy to understand (Hart, 1971). However, this study utilised Herfindahl.

Analytical framework

Gini coefficient/ Lorenz curve

Corrado Gini established the Gini coefficient/Lorenz curve as a statistical measure of distribution in 1912. As a measure of economic inequality, typically, it is used to quantify income distribution or, less frequently, wealth distribution among a population (Gini, 1912; U.S. Census Bureau, 2021). The Gini coefficient can also assess output and sales revenue disparities among corporations or small businesses. The values range from 0 to 1, with 0 indicating perfect inequality and 1 indicating perfect equality. The graphical illustration of the disparity is the Lorenz curve. The bigger the inequality or concentration, the more the curve goes away from the diagonal line (line of equality). The x-axis represents the cumulative percentage of the total variable of interest (examples are sales revenue and output), measuring income distribution or, less commonly, wealth distribution among a population;. In contrast, the y-axis represents the cumulative percentage of the variable of interest's frequency (the number of firms under consideration that produces a certain quantity of output or sold a certain amount of produce), while the y-axis represents the cumulative percentage of the total variable of interest (examples are sales revenue and production). It measures the market concentration by showing the percentage of sellers that control the total revenue obtained from a product in a market. Following Sithiyot, and Holasut (2021), using the equations in (1) and (2), the area under the Lorenz curve and the exact mathematical solution for the Gini index (Gini) is derived:

$$\int_0^1 y(x)dx = \frac{1}{P+1}$$

$$Gini = 1 - 2 * \int_0^1 y(x)dx = \frac{P-1}{P+1}$$

Where:

P represents the degree of inequality in income distribution as measured by the Gini index; X represents the function of variable of interest (revenue, output)

Multinomial logistic regression

The multinomial logistic regression model is used where the response variable is made up of more than two levels or categories. It is an off-shoot of binary logistic regression. The multinomial logistic regression takes a broader view of logistic regression by categorizing it into more than one class of problem. In multinomial logistic regression, Y takes the values of 1, 2, 3,.....n. The result reported is usually n-1; one of the dependent variables serves as base level.

Multinomial logistic regression model is given as:

$$\log \left[\frac{\pi_j(x_i)}{\pi_k(x_i)} \right] = \alpha_{oi} + \beta_{1j} x_{1i} + \beta_{2j} x_{2i} + \dots + \beta_{pj} x_{pi} \quad (4)$$

Where j= 1, 2, ..., (k-1), i = 1, 2, ..., n. Since all the 's adds to unity, this reduces to:

$$\log(\pi_j(x_i)) = \frac{\exp(\alpha_{oi} + \beta_{1j} x_{1i} + \beta_{2j} x_{2i} + \dots + \beta_{pj} x_{pi})}{1 + \sum_{j=1}^{k-1} \exp(\alpha_{oi} + \beta_{1j} x_{1i} + \beta_{2j} x_{2i} + \dots + \beta_{pj} x_{pi})} \quad (5)$$

For j = 1, 2, ..., (k-1), the model parameters are estimated. Following Chatterjee et al. (2006), This fitting was done with statistical tools.

RESEARCH METHODS

Description of the study area

The study was conducted in Oyo State. Ibadan is the capital of Oyo State, a southern Nigerian inland state. Kwara State borders Oyo State on the north, Osun State on the east, Ogun State on the south, and the Republic of Benin and Ogun State on the west. In 1976, Oyo State was excised from the former western region. The Yoruba ethnic group dominates Oyo State, which is a homogeneous territory (Oladejo, 2010). The climate is equatorial, with dry and wet seasons and high humidity levels. The dry season runs from November to March, and the wet season is from April to October. For almost all of the year, the average daily temperature is between 25 °C and 35 °C (Oyo State, n.d). In the rural areas of Oyo State, farming is common, whereas, in the urban areas, trading, commerce, manufacturing, banking, and administration are common among residents. Oyo State is the business hub in the southwest, with market square or stalls found on almost every street and corner in the state's capital and inner suburbs (Oxford Business Group, n.d). Apart from the numerous marketplaces, the state has many motor parks. The motor parks also act as a point of purchasing and selling goods.

Sample selection and data collection

This study used a three-stage sampling method. Five towns/cities were purposefully chosen in the first round based on their population and many business activities involving buying and selling. Based on the information acquired from the union, vehicle parks were randomly picked from each municipality in the second stage. The final selection stage involved selecting buyers and sellers randomly from each of the vehicle parks. The buyers of sausage rolls were randomly chosen based on proportionate size to the number of sellers in each vehicle park. Both consumers and vendors were

given a total of 310 questionnaires. Using eq. 6, two hundred and twenty (220) buyers and ninety (90) sellers of branded sausages were found. The sample sizes for branded sausage purchasers (220) and sellers (90) were determined using the IFAD (n.d) approach.

The sample sizes for the study were estimated using the International Fund for Agricultural Development (IFAD) protocol based on the formula below (buyers of branded sausages: $195.9 \cong 196$; suppliers of branded sausages: $72.9 \cong 73$). Allowances for design effect and contingency were built into the final sample sizes (220 and 90 for purchasers and sellers of branded sausages, respectively). The accommodation for design defect and contingency allowance accounted for the difference between the calculated and final sample sizes.

$$n = \frac{z^2 p(1-p)}{m^2}$$

Where:

n = the sample size

Z = the confidence level at 95 % (1.96)

p = the estimated percentage of sausage buyers in the motor parks used out of the all parks in the Ibadan metropolis (90 %), estimated percentage of branded sausage sellers out of the sellers in Ibadan metropolis (85%)

m = the margin of error (5 % or 0.05)

Data collected and utilized

This research utilised primary data. Data were collected using well-structured copies of questionnaire (buyers and sellers). For the consumers of branded sausage rolls, 240 questionnaires were administered while 228 and 220 were returned and used for analysis respectively. For the sellers of branded sausage rolls, 110 questionnaires were administered and 90 questionnaires were used for the analysis. Two well-structured questionnaires were employed to collect data from the respondents, one for the consumers (220) and the other for the sellers of branded sausages (90). The questionnaire had three sections for customers and two for sellers. Section A (for consumers) contained socio-economic characteristics. Section B (for consumers) contains consumption questions. Section C contains questions such as (frequency of purchase of branded sausage rolls, where they buy branded sausage rolls from, and consumption per week of branded sausage rolls). Section A (for sellers) contains socio-economic characteristics. Section B (for sellers) contained questions on the consumption of sausages.

Data Analysis

Descriptive statistics were used to profile the socio-economic characteristics of purchasers and

sellers of branded sausage rolls in the study area. The descriptive statistics used included frequency distribution, charts, measures of central tendency (mean, median, and mode) and measures of dispersion (standard deviation and skewness).

1. Market share determination

Herfindahl Hirschman index was used to estimate the market share of each sausage brand. The model used is given as:

$$HHI = \sum_{i=1}^n w_i S_i = \sum_{i=1}^n S_i^2$$

Where: S_i represents the market share of i^{th} seller

The squaring of market shares contributes to the prominence of the firms with big market share. Moreover, the index presents a more realistic picture of market concentration (Peleckis, 2022).

2. Inequality in sales revenue

To measure the level of inequalities in branded sausage rolls among sellers, the Lorenz curve/Gini-coefficient was used. It indicated the percentage of branded sausage roll sales that was controlled by a percentage of merchants. The Lorenz Curve is obtained as follows:

$$L\left(\frac{k}{p}\right) = \frac{\sum_{i=1}^k Y_i}{Y}$$

Where:

k represents the position of each seller in the market share of the total revenue from the market (k runs from 1 to n)

p represents the total number of sellers in the branded sausage rolls market.

Y_i represents is the total revenue of the i^{th} seller in the market

$\sum_{i=1}^k Y_i$ = is the cumulated revenue up to the k^{th} seller.

It is apparent that $\sum_{i=1}^k Y_i$ ranges between 0, for $k = 0$, and Y, for $k = n$, therefore,

$$L\left(\frac{k}{p}\right) = \frac{\sum_{i=1}^k Y_i}{Y} \text{ ranges between 0 and 1}$$

3. Drivers of consumers' preference for branded sausage rolls

The drivers of customers' preference for each of the identified branded sausage rolls were determined using multinomial logistic regression. Four (4)

sausage brands were considered but small gala was used as the base level. Hence, only three results were reported (Big gala, Rite and Bigi). The model for the multinomial regression model is given as:

$$\log[p(Y = 1)] = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k$$

Where:

Y = 1 represents the baseline consumption (small gala)

Y = 2 represents consumption for Big gala

Y = 3 represents consumption for Rite spicy

Y = 4 represents consumption for Bigi

X₁ = Age (year) of consumer

X₂ = Sex of consumer

X₃ = Marital status of consumer

X₄ = Household size of consumer

X₅ = Monthly income (N) of consumer

X₆ = Size of branded sausage rolls (dummy: 1 if consumers regard size as a factor for consumption preference among brands of sausage rolls and 0 otherwise)

X₇ = Taste of branded sausage rolls (dummy: 1 if consumers regard taste as a factor for consumption preference among brands of sausage rolls and 0 otherwise)

X₈ = Quality of branded sausage rolls (dummy: 1 if consumers regard quality as a factor for consumption preference among brands of sausage rolls and 0 otherwise)

X₉ = Price (N) of branded sausage rolls (dummy: 1 if consumers regard price as a factor for consumption preference among brands of sausage rolls and 0 otherwise)

X₁₀ = availability of branded sausage rolls (dummy: 1 if consumers regard

Availability as a factor for consumption preference among brands of sausage rolls and 0 otherwise)

RESULTS AND DISCUSSION

Socio-economic characteristics of respondents (consumers and sellers)

The study showed that 23.6% of consumers were from Ibadan and 19.1% were from Oyo town, Ogbomoso, Iseyin and Eruwa, respectively. The study showed that 34.7% of consumers within the age bracket of 18-47years consumed gala (big and small) while 20.8% and 19.2% consumed rite spicy and bigi respectively. The study also revealed that 25.2% of consumers were female that consumed gala (big and small) while 12.9% and 13.9% were male that consumed rite spicy and bigi respectively. It revealed that 31.2.2% of consumers married consumed gala (big and small) while 18.3% and 17.3% of consumers married consumed rite spicy and bigi respectively and the average household size was 4.2. Also, 87.7% of consumers had formal education. Furthermore, most consumers (61%)

were business owners and artisans while 23% and 16% were public servants in government and private organisations respectively. The average monthly income of consumers that consumed gala (big and small size) was ₦90329.91 while ₦71702.36 and ₦82000.26 were the average monthly income of rite spicy and bigi.

The study showed that 24.4% of sellers were from Ibadan and 18.9% were from Oyo town, Ogbomoso, Iseyin and Eruwa, respectively. The study showed that 37.8% of the sellers were within the age bracket of 48-57years. The study also revealed that 87.8% and 86.7% were female and married. The average household size was 4.3. Also, 56.7% of the sellers had secondary education, while only 3.3% had no formal education.

Furthermore, 31.1% of the sellers had three years experience in selling while 13.3% and 3.3% had less than a year and six to eleven years, respectively. Table 1 shows the average monthly income and amount spent on the different branded sausage rolls. The table shows that consumers that consume gala (big and small size) had the highest average income of ₦90329.91 and a total average of ₦824.18 is spent every month on gala (big and small size). It means that 0.91% of their average income is spent on the consumption of gala (big and small size). The average income of rite spicy and bigi were ₦71702.36 and ₦82000.26 respectively with a moderate amount of ₦582.98 and ₦520 spent on branded sausage rolls respectively. However, the average income of bigi is greater than rite but the average amount spent on rite is more significant than bigi. It could mean that the quantity consumption on rite is more than that of bigi.

Table 1. Average income (N) and amount spent (N) on branded sausage rolls per month

	Big/small gala	Rite	Bigi
Income	90329.91	71702.36	82000.26
Amount spent per month	824.18	582.98	520
Percentage (%)	0.91	0.81	0.63

Source: Field survey (2019)

Market share of branded sausage rolls based on sales revenue

Table 2 shows that gala small size had the highest market share of 38.6% in the market. This was followed by rite spicy that had 23.9% in the market while bigi and gala big size had 21.1% and 15.8% respectively. Super bite and yum-yum had the lowest market share of 0.37% and 0.95% respectively. The market share of gala small size been the highest could be attributed to the quality which has evolved over the years or consumers long time awareness with the brand.

Table 2. Market share of sausage brands in the daily sales revenue of sausage sellers

Sausage brands	Daily sales revenue ₦	Percentage contribution to the total daily sales revenue
Small gala	36500	38.6
Rite spicy	22700	23.9
Bigi	20000	21.1
Big gala	14400	15.8
Yum-yum	900	0.95
Super bite	350	0.37

Source: Field survey (2019)

The extent of inequalities (Lorenz curve and Gini coefficient) in sales revenue of branded sausage rolls

Figure 1 demonstrates that 50% of big-size gala vendors controlled around 75% of total daily sales of big size gala in the research area, while 50% of gala small size dealers controlled approximately 79% of total daily small gala sales. Also, 50% each of bigi and spicy sellers controlled 74% and 70% of the total daily sales, respectively. The result shows that there was inequality in the sausage rolls market in the study area. The disparity in the market were confirmed by the Gini coefficient as shown in the Table 3. The gala small size had the highest with a Gini coefficient of 0.42.

Table 3. Gini coefficient estimates for branded sausage rolls

Brands	Gini-estimate
Gala small size	0.42
Gala big size	0.38
Bigi	0.36
Rite spicy	0.26

Source: Field survey (2019)

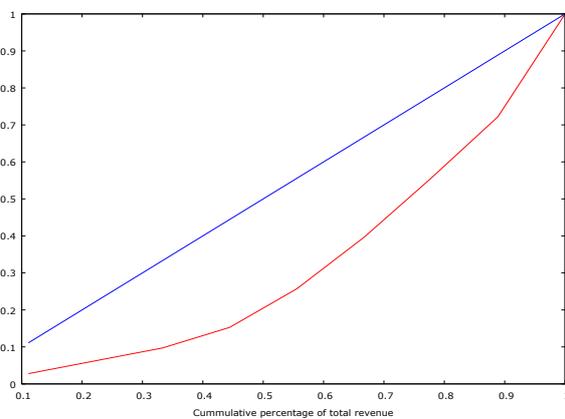


Figure 1a. Inequality in Big Gala Market

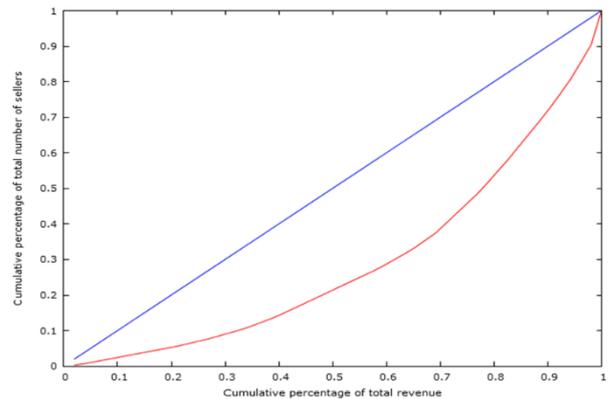


Figure 1b. Inequality in Small Gala Market

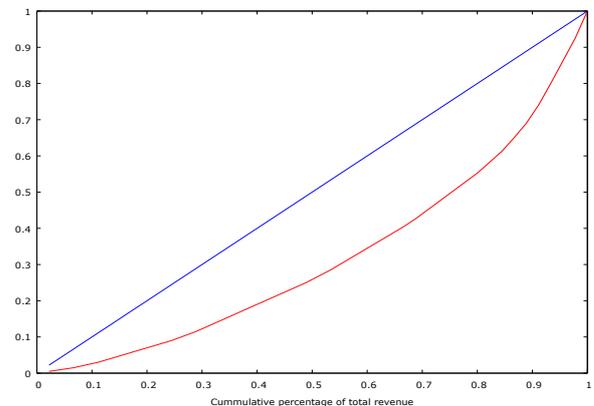


Figure 1c. Inequality in Bigi Market

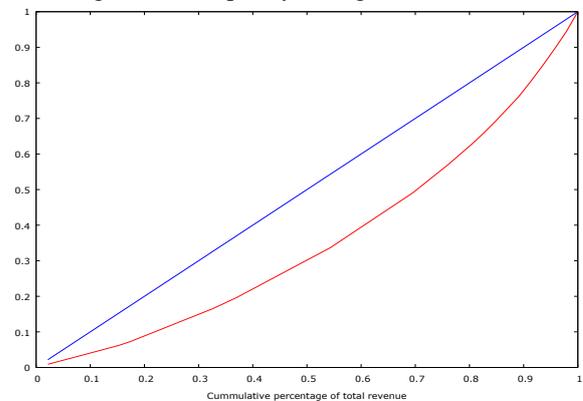


Figure 1d. Inequality in Rite Sprice Market

Determinants of consumers' preference for the selected sausage rolls

The multinomial logistic regression in Table 4 shows consumers preference for each of the branded sausage rolls. Small gala was used as the baseline. The model has a LRchi² score of 42.18, indicating that it a good fit (p<0.1). Household size (p<0.05), monthly income (p<0.1) and the quality (p<0.05) were the determinants of consumers' preference for big-sized Gala while age (p<0.05) and marital status (p<0.10), taste (p<0.05), price per unit (p<0.1) and availability (p<0.1) influenced consumers' preference for rite spicy in the study area. Consumers' preference for Bigi was influenced by

taste ($p < 0.05$), quality ($p < 0.05$), price ($p < 0.1$) and availability ($p < 0.05$). The findings found that with every 0.25 rise in a consumer's monthly income, the likelihood of a consumer preferring big-sized gala over other sausage rolls increases by 0.25. It could be because of the pressure of large family size may compel the head of household to opt for snacks. It is consistent with Amao et al. (2006) finding. Also, for every one year increase in a consumer's age, the likelihood of preferring Rite spicy brand over other sausage rolls decreases by 0.06. It may be connected

with consciousness of consumers to what is consumed as they get older. It agrees with Ahmed and Haboubi (2010). Moreover, consumer preferences for Bigi and Spicy brands of sausage by consumer increase as the product is made available. It is in agreement with consumers' preferences (Deivanai, 2016).

Table 4. Multinomial logistic regression on consumers' preference for each of the sausage rolls

Variables	Gala big size				Rite spicy				Bigi			
	Coeff.	Std. error	Z	P-value	Coeff.	Std. error	Z	P-value	Coeff.	Std. error	Z	P-value
Age	.017	.028	-0.63	0.531	-.055**	.027	-2.00	0.046	-.035	.026	-1.34	0.179
Sex	-.496	.492	-1.01	0.313	.285	.424	0.67	0.502	.209	.415	0.50	0.615
Marital status	.409	.726	0.56	0.573	1.700*	.623	2.73	0.006	.796	.598	1.33	0.183
Household size	.248**	.123	2.00	0.045	.057	.115	0.59	0.615	.096	.111	0.87	0.385
Income per month	.463*	.277	1.67	0.095	.0014	.257	0.01	0.995	.190	.245	-.78	0.437
Size	1.312	1.261	1.04	0.298	1.10	1.178	0.94	0.350	1.586	1.090	1.45	0.146
Taste	.901	.789	1.14	0.254	1.45**	.701	2.07	0.038	1.470**	.683	2.15	0.031
Quality	1.897**	.858	2.21	0.027	1.122	.760	1.48	0.140	1.585**	.739	2.14	0.032
Price per unit	-12.243	670.14	-0.02	0.985	1.80*	1.070	1.68	0.092	1.926*	1.057	1.82	0.068
Availability	1.005	.934	-1.08	0.282	1.420*	.775	1.83	0.067	1.535**	.764	2.01	0.045
Constant	-7.455	2.932	-2.54	0.011	-1.231	2.642	-0.47	0.641	-3.599	2.541	-1.42	0.157

$LR\chi^2(30) = 42.18$, $prob > \chi^2 = 0.0691$, Base outcome used is gala small size.

NOTE: *, **, *** Represents 10%, 5% and 1% level of significance respectively

Source: Field survey (2019)

CONCLUSION

Based on the empirical evidence from this study, it can be concluded that most consumers and sellers were of the economic working age and had formal education. The highest market share of branded sausage rolls was gala (small and big size) followed by rite spicy and bigi. The total daily sales were controlled by gala (big and small size). Producers of other sausage rolls brands should develop a strategy that would ensure fair competition with other brands so that the dominance of some brands can be reduced to prevent the emergence of a monopolist in the sausage rolls market. However, lending to sellers from microfinance banks or cooperative societies should be encouraged to restock to increase the daily sales revenue in sausage markets.

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