British Journal of Marketing Studies (BJMS)
Vol. 7, Issue 4, pp.76-82, July 2019
Published by European Centre for Research Training and Development UK (www.eajournals.org)

MARKETING RESEARCH ON FOOD CONSUMERS' BEHAVIOR IN GEORGIA'S CONSUMER MARKET

Todua N. Maghlakelidze K.

Javakhishvili Tbilisi State University, Faculty of Economics and Business

ABSTRACT: *The marketing survey of thirty products has been included in the consumer basket of Georgia. Information obtained from the respondents' surveys on the current and consumable acceptable prices of products are used by this information to construct linear, indicative and linear models to reflect the change in time.*

KEY WORDS: Marketing, respondent, consumer prices, regression.

INTRODUCTION

The Marketing Survey has an important place in the modern market economy's theoretical and practical research. The Marketing Information is used by firms, companies and public institutions in the management of their activities and also in making relevant conclusions and decisions. The Marketing survey is based on the behavior of consumers towards the ongoing processes in the country. As a result, the Marketing Survey is important to the country's political, economic and social development and improvement [1]. The survey along with the marketing methodology, statistical methods of research are used namely regressive analysis and time series.

1. Let's analyze the responses of consumers in ten shopping centers on current and acceptable prices of thirty products included in the consumer's basket. Note that the A marking marks the current price of the products and B mark - the acceptable price for the user. We will use these marks in the analysis below. It should be noted that consumers and sellers were respondents in the survey.

The numbering of thirty products is given in the table, which will be used in the surveys presented below.

Print ISSN: 2053-4043(Print), Online ISSN: 2053-4051(Online)

List 1. Product Numbers

N	Product	N	Product	N	Product
1	Rice	11	Cooked Sausage	21	Eggs
2	Buckwheat	12	Smoked Sausage	22	Butter
3	Pasta	13	Sausage	23	Vegetable Oil
4	Wheat Bread	14	New Fish	24	Aubergine
5	Wheat Flour	15	Frozen Fish	25	Potatoes
6	Corn Flour	16	Milk	26	Kidney Beans
7	Beef	17	Plain Yogurt	27	Sugar
8	Pork	18	Cheese	28	Wine
9	Chicken	19	Cottage Cheese	29	Vodka
10	Minced Beef	20	Sour Cream	30	Beer

Given below are the lists of the consumer's and seller's results of the survey about current and acceptable prices for the products numbered with A and B marks.

List 2. Current and acceptable prices for consumers.

N		1	2	3	4	5	6	7	8	9	10	11	12
1	A	1	1	1.2	1.2	1.2	1.2	1.5	1.5	1.7	1.7	1.9	1.9
	B	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	1	1
2	A	1.2	1.2	1.2	1.4	1.4	1.5	1.6	1.8	1.8	1.9	2	2
	B	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3	A	2	2	2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3
	B	1	1	1	1.2	1	1	1	1.2	1.2	1.2	1	1
4	A	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9
	B	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5
5	A	2	2	2	2	1.8	1.8	1.8	2	2	2	2.2	2.2
	B	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.8
6	A	1.8	1.8	1.8	1.8	2	2	2	2.2	2.2	2.2	2.2	2.2
	B	1	1	1	1	1	1	1.1	1.1	1.1	1.1	1.2	1.2
7	A	14	14	14	14	15	15	14	16	16	16	15	15
	B	7	7	7	8	7	8	8	7	7	7	8	8
8	A	9	9	9	10	10	10	9	9	10	10	10	18
	B	5	5	5	5	7	7	7	6	6	6	5	5
9	A	4	4	4	6	5	5	5	5	6	6	7	7
	B	3	3	3	3	3.5	3.5	4	4	3	3	3.5	3.5
10	A	14	14	14	14,5	14,5	15	15	15	15	16	15	15
	B	5	5	6	5	5	6	6	6	5	5	6	5

Continuations of List 2.

Print ISSN: 2053-4043(Print), Online ISSN: 2053-4051(Online)

N		1	2	3	4	5	6	7	8	9	10	11	12
11	A	7	7	8	8	8	8	9	9	9	10	9	9
	B	4	4	3	3	3	3	4	4	3	3	4	3
12	A	10	10	12	11	11	11	11	10	12	12	13	13
	B	3	4	4	5	3	3	3	4	3	3	4	4
13	A	9	9	9	8	8	10	10	10	9	9	10	9
	B	3	3	4	3	4	4	4	3	4	4	5	4
14	A	13	13	13	14	15	14	14	13	14	14	15	14
	B	5	4	4	5	5	5	4	3	4	4	5	4
15	A	7	7	7	8	7	7	8	8	8	8	7	7
	B	2	2	3	2	3	3	4	4	4	3	4	4
16	A	3	3	3	4	3.5	3	4	3	3	4	4	4
	B	1	1	1	1	1	1.2	1.2	1	1	1	1.2	1.2
17	A	1.2	1.2	1.2	1.4	1.4	1.2	1.2	1.2	1.2	1.2	1.4	1.4
	B	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.4
18	A	8	8	8	9	9	10	9	10	10	10	9	10
	B	4	4	4	4	4.5	4.5	4	4	4	3.5	3	4
19	A	3	3	3	4	4	3.5	3.5	4	4	4	4.5	4
	B	1	1	1	1.5	1.5	1.5	1	1	1.2	1.2	1	1
20	A	2	2	2	2	2.2	2.2	2	2	2.5	2.5	2.5	2.5
	B	0.6	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.9	0.9	1	0.9

Continuation of List 2.

Print ISSN: 2053-4043(Print), Online ISSN: 2053-4051(Online)

N		1	2	3	4	5	6	7	8	9	10	11	12
21	A	0.3	0.3	0.3	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3
	B	0.1	0.1	0,15	0,15	0,15	0.1	0.2	0.1	0.1	0.1	0,15	0,15
22	A	5	5	6	5	5	5.5	6	6	5.5	6	6.5	6
	B	3	3	3	4	4	3	3	3	3	4	3	3
23	A	3	3	3	3	3	3.5	3.5	3	4	4	4	4
	B	1	1	1	1	1	1.5	1.5	3	4	4	4	4
24	A	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	1.5	1.5
	B	1.5	1.5	1.5	1.5	1.5	1.5	2	2	2	2	1.5	1.5
25	A	1.8	1.8	1.8	1.8	1.8	2	2	2	1.8	1.8	2	2
	B	1	1	1	1	1	0.8	0.8	0.8	1	1	0.8	0.8
26	A	4	4	4	4	4	4.5	4.5	4.5	4	4	4.5	4.5
	B	1.5	1.5	1.5	1.5	1.5	1	1	1	1	1.5	1.5	1.5
27	A	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.4	1.4	1.4
	B	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.6	0.6	0.5	0.5	0.5
28	A	7	7	7	7	8	8	8	8	10	10	8	8
	B	3.5	3.5	3.5	3.5	4	4	4.5	4.5	4.5	3	2.5	3
29	A	8	8	8	9	10	10	10	9	8	9	10	9
	B	3	3	3	4	3	3	4	3	3	3	2	3
30	A	4	4	4	3	3	3	2	2	2	2	3	3
	B	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5

Based on information from Table 1 and Table 2 and with the use of a computer, the following equations of the Group A of current prices and Group B of acceptable prices are given:

1. Linear Regressive Equation $X(t)=at+b$
2. An Indicator Equation $X(t)=b-a^t$
3. First Row Auto-regressive Equation $X(t)=aX(t-1)+b$

These Equations describe the products current and acceptable for consumers prices evolution in time. The results of the marketing surveys are given in Table 1 and Table 2.

We can observe, that we used the following marking: $\exp(x)=e^x$, where e is the well known number – e=2.72.

Print ISSN: 2053-4043(Print), Online ISSN: 2053-4051(Online)

Product	Group A: Current Prices	Group B: Acceptable Prices
1. Rice	1. X(t)=0.0902t+0.847 2. X(t)=0.9219exp(0.0639t) 3. X(t)=0.9486X(t-1)+0.1532	4. X(t)=0.437t+0.4227 5. X(t)=0.4632exp(0.0595) 6. X(t)=0.0427X(t-1)+0.4227
2. Buckwheat	1. X(t)=0.0822t+1.0409 2. X(t)=1.0977exp(0.0529t) 3. X(t)=0.9763X(t-1)+0.1091	1. X(t)=0.0112t+0.3939 2. X(t)=0.3946exp(0.025t) 3. X(t)=0.75X(t-1)+0.125
3. Pasta	1. X(t)=0.0315t+1.9955 2. X(t)=1.9977exp(0.0146t) 3. X(t)=0.7796X(t-1)+0.5102	1. X(t)=0.0114t+0.3435 2. X(t)=0.3824exp(0.029t) 3. X(t)=0.2143X(t-1)+0.8429
4. Wheat Bread	1. X(t)=0.0378t+1.5045 2. X(t)=1.5078exp(0.0223t) 3. X(t)=0.737X(t-1)+0.493	1. X(t)=0.0035t+0.5561 2. X(t)=0.5538exp(0.0656t) 3. X(t)=0.2143X(t-1)+0.4214
5. Wheat Flour	1. X(t)=0.0161t+1.8788 2. X(t)=1.8817exp(0.0078t) 3. X(t)=0.775X(t-1)+0.46	1. X(t)=0.001t+0.8182 2. X(t)=0.8173exp(0.0012t) 3. X(t)=0.0833X(t-1)+0.7583
6. Corn Flour	1. X(t)=0.0545t+1.68 2. X(t)=1.6965exp(0.0275t) 3. X(t)=0.9X(t-1)=0.24	1. X(t)=0.022t+0.9318 2. X(t)=0.9399exp(0.028t) 3. X(t)=0.9583X(t-1)=0.0625
7. Beef	1. X(t)=0.1608t=13.788 2. X(t)=13.802exp(0.0109t) 3. X(t)=0.5X(t-1)+7.5	1. X(t)=0.0524t+7,0758 2. X(t)=7.0712exp(0.002t) 3. X(t)=0.6071(t-1)+2.2857
8. Pork	1. X(t)=0.1189t+8.8939 2. X(t)=8.9149exp(0.0121t) 3. X(t)=0.6X(t-1)+4	1. X(t)=0.0315t+5.5455 2. X(t)=5.4735exp(0.006t)
9. Chicken	1. X(t)=0.2587t+3.6515 2. X(t)=3.8055exp(0.0491t) 3. X(t)=0.7358X(t-1)+1.6418	1. X(t)=0.042t+3.0606 2. X(t)=3.0518exp(0.012t) 3. X(t)=0.6071X(t-1)+2.2857
10. Minced Beef	1. X(t)=0.1329t+13.886 2. X(t)=13.898exp(0.099t) 3. X(t)=0.5988X(t-1)+6	1. X(t)=0.0175t+5.303 2. X(t)=5.284exp(0.013t) 3. X(t)=0.1X(t-1)+6
11. Cooked Sausage	1. X(t)=0.2203t+6.9848 2. X(t)=7.0359exp(0.026t) 3. X(t)=0.6808X(t-1)+2.85	1. X(t)=0.0245t+3.5758 2. X(t)=3.5404exp(0.074t) 3. X(t)=0.067X(t-1)+3.1333
12. Smoked Sausage	1. X(t)=0.2168t+9.9242 2. X(t)=9.9843exp(0.018t) 3. X(t)=0.5783X(t-1)+5.5471	1. X(t)=0.0105t+3.6515 2. X(t)=3.5727exp(0.012t) 3. X(t)=0.0385X(t-1)+3.5
13. Sausage	1. X(t)=0.0699t+8.7121 2. X(t)=8.6934exp(0.0077t) 3. X(t)=0.2903X(t-1)+6.5161	1. X(t)=0.1084t+3.0455 2. X(t)=3.0634exp(0.0292t) 3. X(t)=0.1087X(t-1)
14. Fresh Fish	1. X(t)=0.1049t+13.152	1. X(t)=0.049t=4.6515

Print ISSN: 2053-4043(Print), Online ISSN: 2053-4051(Online)

	2. X(t)=13.145exp(0.0072t) 3. X(t)=0.3226X(t-1)+9.4516	2. X(t)=4.6214exp(0.012t) 3. X(t)=0.2X(t-1)+3.4
15. Frozen Fish	1. X(t)=0.0385t+7.1667 2. X(t)=7.1575exp(0.0051t) 3. X(t)=0.2X(t-1)+6	1. X(t)=0.1888t+1.9394 2. X(t)=2.008exp(0.064t) 3. X(t)=0.3929X(t-1)+2.1429
16. Milk	1. X(t)=0.0752t+2.6997 2. X(t)=2.9786exp(0.0215t) 3. X(t)=0.0112X(t-1)+3.51	1. X(t)=0.014t+0.9758 2. X(t)=2.978`exp(0.0127t) 3. X(t)=0.381X(t-1)+0.676
17. Plain Yogurt	1. X(t)=0.0084t+1.2121 2. X(t)=1.2113exp(0.0065t) 3. X(t)=0.381X(t-1)+0.8	1. X(t)=0.0052t+0.4924 2. X(t)=0.4916exp(0.012t) 3. X(t)=0.01X(t-1)+0.45
18. Cheese	1. X(t)=0.1818t=7.9848 2. X(t)=8.0008exp(0.0203t) 3. X(t)=0.393X(t-1)+5.7857	1. X(t)=0.0507t+4.2979 2. X(t)=4.3129exp(0.014t) 3. X(t)=0.42X(t-1)+2.29
19. Cottage Cheese	1. X(t)=0.1101t+2.9924 2. X(t)=3.0081exp(0.039t) 3. X(t)=0.412X(t-1)+2.3059	1. X(t)=0.0073t+1.20.61 2. X(t)=1.1794exp(0.005t) 3. X(t)=0.382X(t-1)+0.736
20. Sour Cream	1. X(t)=0.0531t+1.8545 2. X(t)=1.8772exp(0.023t) 3. X(t)=0.712X(t-1)+0.68	1. X(t)=0.0479t+0.397 2. X(t)=0.4397exp(0.068t) 3. X(t)=0.889X(t-1)+0.1179
21. Eggs	1. X(t)=0.0035t+0.2939 2. X(t)=0.2881exp(0.0121t) 3. X(t)=0.1X(t-1)+0.35	1. X(t)=0.0012t+0.1212 2. X(t)=0.1179exp(0.0954t) 3. X(t)=0.137X(t-1)+0.1538
22. Butter	1. X(t)=0.1066t+4.9318 2. X(t)=4.9465exp(0.0194t) 3. X(t)=0.367X(t-1)+3.63	1. X(t)=0.0035t+3.2727 2. X(t)=3.2449exp(0.0015t) 3. X(t)=0.083X(t-1)+3
23. Vegetable Oil	1. X(t)=0.1119t+2.6894 2. X(t)=2.7488exp(0.0322t) 3. X(t)=0.7X(t-1)+1.1	1. X(t)=0.035t+0.9394 2. X(t)=0.952exp(0.0284) 3. X(t)=0.417X(t-1)+0.7083
24. Aubergine	1. X(t)=0.096t+3.25 2. X(t)=3.2888exp(0.0248t) 3. X(t)=0.94X(t-1)+0.32	1. X(t)=0.035t+0.9394 2. X(t)=0.952exp(0.0284t) 3. X(t)=0.607X(t-1)+0.66
25. Potatoes	1. X(t)=0.0161t+1.7788 2. X(t)=1.78exp(0.0854t) 3. X(t)=0.464X(t-1)+1.02	1. X(t)=0.0161t+1.0212 2. X(t)=1.0239exp(0.0184t) 3. X(t)=0.464X(t-1)+0.479
26. Kidney Beans	1. X(t)=0.0402t+3.947 2. X(t)=3.9503exp(0.095t) 3. X(t)=0.464X(t-1)+2.285	1. X(t)=0.014t+1.4242 2. X(t)=1.4601exp(0.0114t) 3. X(t)=0.607X(t-1)
27. Sugar	1. X(t)=0.0028t+1.4152 2. X(t)=1.4147exp(0.012t)	1. X(t)=0.0339t+0.8621 2. X(t)=0.8814exp(0.052t) 3. X(t)=0.741X(t-1)+0.142
28. Wine	1. X(t)=0.1958t+6.7273 2. X(t)=6.7812exp(0.0243t) 3. X(t)=0.583X(t-1)+3.424	1. X(t)=0.1123t+3.0551 2. X(t)=2.9214exp(0.0142t) 3. X(t)=0.786X(t-1)+2.0104

Print ISSN: 2053-4043(Print), Online ISSN: 2053-4051(Online)

29. Vodka	1. X(t)=0.0979t+8.3636 2. X(t)=8.3297exp(0.0113t) 3. X(t)=05X(t-1)+4.5909	1. X(t)=0.0455t+3.3788 2. X(t)=3.3935exp(0.0125t)
30. Beer	1. X(t)=0.1503t+3.8939 2. X(t)=3.8937exp(0.054t) 3. X(t)=0.6974X(t-1)+0.789	1. X(t)=0.0052t+0.4972 2. X(t)=0.4916exp(0.0124t) 3. X(t)=0.633X(t-1)+0.167

In the end, we want to observe the result. The equations based on the A and B groups represent predictive equations of X(t) prices. Between them, one type of linear equation allows us to compare the growth rate of the product prices. Linear regressive equations same as trend equations hold an important place in the invariable values of variables in random variables (random rate).

REFERENCES

[1] Kotlez P. and Armstrong G. (2009). Principles of Marketing. Pearson Education, New Jersey.

[2] Malhotza N.K. (2008). Marketing Research: An Applied Orientation. New Jersey.

[3] Todua N. Dotchviri T. (2015). ON THE MARKETING RESEARCH OF CONSUMER PRICES AND INFLACTION PROCESS, British Journal of Marketing Studies, Vol. 3, N0.2, pp.48-57.

Print ISSN: 2053-4043(Print), Online ISSN: 2053-4051(Online)