

Determinants of Consumption Expenditure in Ekiti State

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Abstract

The purpose of this paper is to see if really the basic hypothesis of the Keynesian theory of the consumption function works in Ekiti State of Nigeria. In doing this, the study tried to examine whether income has any relationship with the private consumption expenditure of the people of Ekiti State and whether family size, price and taste have any effect on the inhabitants of the state's consumption expenditure. In the course of this paper, primary data was used; questionnaires were administered to a representative segment of Ekiti state. For this purpose, the chi-square (χ^2) analysis was employed to test the hypothesis. The result showed that income was significant in the determination of consumption expenditure in Ekiti state. It was recommended that since income was found to have a positive significant influence on the consumption expenditure of Ekiti people, any government policy that increase income will therefore have a positive influence on the aggregate demand of the people, this will have multiplying effects on the economic activity of the state.

Section One

INTRODUCTION

All theories of consumption show that in any economy in which people have free choice, the total volume of personal consumption expenditure is generally influenced by the amount of income that people receive, price of the consumer goods, peoples taste and preferences and a host of other factors. This paper therefore intends to unravel the one that is most significant specifically in Ekiti state. (Development involves changes in the structure of the economy, with the industrial sector becoming increasingly important, and since what is produced by industrialization will be consumed largely by the people, there is no doubt that private consumption expenditure will be mostly affected by changes in the structure of the economy. Hence, development therefore involves changes in the pattern of consumption expenditure (Barro, Robert and H.I. Grossman. 2008).

To indicate the directions of changes in the pattern of consumptions expenditure there is need to know the composition and quantity of what people in the economy consume, causes of changes in what the people consumed and how this differs from one another among people of different classes in the state. There is no reason to doubt that, the content of consumption expenditure in developing countries may quite different from those of developed countries which may be as a result of many factors that are beyond the scope of this paper. One aspect of development may be on how to improve such consumption content. A common feature of consumption expenditure in developing countries is that commodities for consumption in developing countries consist of "primary" goods, mostly staple food like garri" and other commodities made up of semi processed foods and services.

Studies on the consumption expenditure have provided empirical evidence to verify the Engel's law which states that the percentage of income spent on food declines as income increases (Jonson, Per.2004, Phillips, A. W. 2010.) The study of consumption expenditure do not only made great contributions to our knowledge of the economy, it equally gave us an insight into an estimation of changes in consumption pattern that is likely to occur with changes in any of the variables that determines consumption patterns. In view of this, it is the aim of this paper to proffer solution to the questions of the nature of the relationship between consumption expenditure other variables such as, income, price, family size, taste, and environment.

The Study therefore seek as its major objective to analyze and evaluate the consumption pattern of the Ekiti people with respect to their income, price, family size, taste and the environment. To achieve this objective the paper setout the hypotheses that there is no significant relationship between the peoples consumption expenditure pattern and their income, price of the product, poverty level, standard of living, the population size and the environment. To achieve this paper has been divided into five sections, following this introduction the next section will focus on the literature review and theoretical background of the paper while section three deals with the method to be employed for the research. Chapter four contains the estimation and analysis of the data while the last section is the conclusion and recommendation of the paper.

Section Two:

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Consumption in economics is the selection, acquisition and use of goods and services for the satisfaction of wants. Consumption may also refer to the entire pattern of living of individuals or groups of and to the non-economics as well as economic factors that influence consumer behaviour. The concept of "consumption expenditure" is very important in the sense that it idealizes the concept of price theory which measures the use of goods and services. Consumers attempt to maximize their life time utility in allocating their

wealth between current consumption and future consumption.

Keynes, J.M. (1936), defined consumption as the part of income that was not saved, thereby distinguishing between purchases that satisfy wants directly and investments that became assets in the absence of a satisfactory means of measuring the goods actually consumed, thus monetary measure of consumption has been widely accepted and used as a basis for predicting economic trend. Friedman, Milton. (1972), opined that consumption represents the total quantity of goods and services bought and consumed by consumers during a period, that is, it is the expression of total consumer demand. He further said that the concept of consumption is important to the theory of income and employment. In economics, the word consumption simply means the using up of goods and services which may include the purchase of durable goods such as furniture or vehicles, as well as works of art that may increase in value over a period of time. In modern industrial economics, consumption as previously defined accounts for 70% to 80% of total national expenditure. Schorfheide, Frank. (2010) defined consumption expenditure as the amount that household spend on purchasing goods and services for consumption. He equally submitted that consumption expenditure is by far the most significant of all basic types of expenditure that causes product to occur and thus income to be earned. He also gave the view that in any economy in which people have free choice, the total volume of personal consumption expenditure is determined primarily by the amount of disposable income (yd) that people receive. The quantitative association between consumption and disposable (After tax) income was first emphasized by Keynes (1936) in his book the “propensity to consume” although nowadays it goes by the less elegant appellation “consumption function”.

The basis of Keynesian theory of employment and income determination is that the amount of the commodity consumers depend on the income it receives in aggregate. Thus we have the equation:

$$Y = C + I$$

The factors that can affect individual consumption are numerous, as mentioned in the introductory parts of this paper, but out of all, one stands out as the most important, the disposable income that people are left with after the payment of taxes. Furthermore Barnett, W.A., Geweke, and Shell. (2006), asserted that to determine how a consumer will allocate his income among various goods and services, we have to enunciate a few assumptions which may deviate from reality. Phillips, A. W. (2010) on his own observed that consumption of an individual will be determined by his income and the prices ruling in the market in conjunction with his preferences or tastes. He further relates consumer expenditure to his total income and concluded that two factors are relevant to this analysis, they are;

- (a) Necessity goods e.g. food, clothing e.t.c.
- (b) Luxury good e.g. cars, books, vacation e.t.c.

According to him, the percentage of income spent on a particular commodity depends on the nature of that commodity and that the percentage of income spent on necessity decreases as income increases. Lastly, that the consumer spends ever increasing greater amounts of income on luxury goods like cars, refrigerator e.t.c. as their income increases. Opinions from other quarters have it that how much each person spends on the goods and services depends on his propensity to consume, his desire to use income for the purpose of consumption. Various “subjective” and “objective” considerations are thought to influence the willingness of consumers to spend their incomes and thus the current amount of production. The decision people make to spend part of their disposable income on consumer products such as television set, bottles of beer and part in other ways such as to buy stocks and bonds or put it in savings accounts are based upon their spending preferences, the preferences which is believed to be influenced by various subjective consideration.

Keynes (1936) noted that certain psychological drivers may lead individuals to save some of their disposable incomes rather than make consumption expenditures in his list. Keynes included subjective motivations such as “precaution”, foresight, calculation and independence”. Savings as precaution occurs because individual may want to build up a reserve of wealth to protect themselves against unexpected calamities such as unemployment, injury or illness. Savings motivated by foresight occurs so that the individuals will be able to meet future consumption needs after all or part of their disposable income ends. Someone who wish to be able to afford even higher levels of consumption expenditure at some future time may be instructed by calculation to save part of their income and lend it out to earn interest. Keynes (1936) in his book also noted psychological drives or “enterprise” “pride” and “avarice” as motivations for persons to allocate a portion of their disposable income to non-consumption uses. Savings might occur, for example while an individual is acquiring the financial capacity to enter into some speculative or business enterprises. On the other hand pride may cause him to save some of his income so that he will be able to leave an inheritance, or he may simply be a miser and save part of his income just for the sake of savings. Obviously other psychological forces in addition to those enumerated by Keynes (1936) tend both to offset and promote high proportion of savings out of disposable income. For one thing, individuals may allocate high proportions of their income to consumption because they feel the desirability and necessity of maintaining their position in society they find it psychologically necessary to consume. An individual’s psychological motivation for savings rather than consumption also may be influenced by his community’s traditional method or evaluating success and worthiness. For instance, consumption expenditure tends to be expanded as individuals seek for recognition and

esteem.

Expectations of fall or increase in income concerning future incomes and product prices continue to be another factor. For instance, if an individual expects his income to be lower in the future, he may refrain from making a purchase today. First because any indebtedness associated with the purchase will have to be paid back later out of his lower income. Secondly, because he may desire to save today in order to be able to continue consumption expenditure at that level in the future when his income declines. Conversely, an individual such as a recent graduate who is just being employed may expect higher levels of income in the future thus he may go into debts. In order to attain a high level of consumption expenditure because he feels that he cannot only continue that level of consumption in the future but also can pay off debts incurred as a result of today's consumption out of his expected higher income. No doubt, similar reactions occur in regards to expected changes in product prices when prices are expected to fall, consumption expenditure may decline as a larger portion of the income is saved now for the period when prices are expected to fall. When prices are expected to rise, the portion of income devoted to consumption expenditure may rise because any income saved will be worth less in the future when it will not buy as many goods and services as it would now. Furthermore a hosts of other objectives factors that affects consumption abounds in the literatures, these factors includes the following, utility of the consumers individual preferences, prices of the product, social pressures, customs and habits, advertisement, availability of consumer credit, size of his income,

Consumption as an economic concept has been a source of controversy in terms of its determinants. Its controversial nature is underlined by the applicable number of studies and contributions that have been made towards establishing its determinants. In effects therefore, a lot of hypothesis are associated with consumption expenditure as economic concept. Among these are; the absolute income hypothesis (Keynes, 1936), relative income hypothesis (J.S. Duesenbury, 1949), the permanent income hypothesis (Friendman 1959), and life cycle hypothesis (F. Modigliani and A. Brumbery) 1954.

Section Three:

METHOD AND THE STATISTICAL TOOLS OF ANALYSIS

The population of the study of this project would focus on the inhabitants of Ekiti State. A sample, which is a representative of the whole population would be taken from towns such as Ado, Ilawe, Ikole, Ikere, Iyin and Oye these are the major cities in the state. Questionnaires will be administered to the representative segment of the inhabitants of these towns. For this study, a total of one hundred and eighty (180) questionnaires would be administered on random basis to each of the sampled towns. Thirty (30) questionnaires would be allocated to each of the selected towns.

In this study the chi-square analysis (X^2) will be used to test the significance of the independent variables on the dependent variable. The population of the study of this project would focus on the inhabitants of Ekiti State. A sample, which is a representative of the whole population would be taken from towns such as Ado, Ilawe, Ikole, Iyin, Ikere and Oye. These samples must be chosen so as to be representative of the population. The method through which this would be done is the sampling procedure. For this project, the simple random sampling method would be used. They would be administered at the above mentioned notable towns and would be distributed randomly by distributing copies of questionnaires which would be administered to representative segment of Ekiti State. For this paper, a total of one hundred and eighty (180) questionnaires would be administered on random basis .. Thirty (30) questionnaires would be allocated to each of the towns in question. The methods or procedures necessary to carry out the analysis are the use of frequency table, percentage and chi-square method. The chi-square analysis (X^2) will be used to test the significance of the independent variables on the dependent variables, while the frequency table and percentage methods are used to analyze the data collected.

The formula for the chi-square method is

$$X^2 = \frac{(O - E)^2}{E}$$

Where

O = The Observed frequency of any value

E = The Expected frequency

The X value obtained from the calculation is compared with the value from the chi-square table. The degree of freedom (V) is obtained by the formula.

$$V = (\text{Row} - 1) (\text{Column} - 1)$$

The decision rule for the chi-square is that if the value of X^2 calculated is more than (i.e. greater than) the values obtained from the chi-square table, the null hypothesis should be rejected while the alternative hypothesis will be accepted.

Section Four:

DISCUSSION OF FINDINGS

In this section, attempt is made to present and analyze the data collected for the paper. The data

collected through the use of questionnaires were collated and analyzed statistically with the use of percentages, frequency tabulations and the chi-square analysis.

A presentation of the factors which mostly determine the private consumption expenditure.

Factors	Frequency	Percentage
Income	154	88.5
Price	9	5.2
Family size	6	3.4
Taste	4	2.3
Environment	1	0.6
Total	174	100

Source: compiled from the questionnaire administered.

Observing the table above, it is clear that income tends to influence the consumption expenditure more than other factors. It could be seen that of the one hundred and seventy four (174) questionnaires returned, 88.5% of the total indicated that income is the most important factor that determines their consumption expenditure. The next row which is the price of goods indicates that 5.2% of the total respondents said their consumption expenditure is determined by price. Family size has a contribution of just 3.4% of their consumption expenditure determination. Taste of the respondent and the environment in which the consumer lives also determines the consumption expenditure by 2.3% and 0.6% respectively.

A complete breakdown of the primary data collected on each of the determinants of consumptions expenditure is presented below.

Summary of Determinant of Consumption Expenditure.

Area	Frequency	Income	Price	Taste	Family	Expenditure
Ado	30	28	2	0	0	0
Ilawe	30	26	1	2	1	0
Ikere	28	24	2	0	2	0
Ikole	29	23	3	0	2	1
Iyin	30	28	1	1	0	0
Oye	27	25	0	1	1	0
Total	174	154	9	4	6	1

Source: compiled from the questionnaire administered.

From the above tables, we can safely conclude that income acts primarily to determine the consumption expenditure on consumer good. The other factors also influence consumption to certain extent.

TEST OF HYPOTHESIS

Given the formula

$$X^2 = \sum_{i=1}^j \frac{(O_i - e_i)^2}{e_i}$$

Where O_i is the observed frequency e_i is the expected frequency in respect of each cell.

there is no significant relationship between private consumption expenditure and level of income.

Income as a Major Determinant of Consumption Expenditure

Area	Frequency	Agree	Disagree
Ado	30	28	2
Ilawe	30	26	4
Ikere	28	24	4
Ikole	29	23	6
Iyin	30	28	2
Oye	27	25	2
Total	174	154	20

Source: compiled from the questionnaire administered.

Table of expected frequency

Frequency	Agree	Disagree
30	26.55	3.45
30	26.55	3.45
28	24.78	3.22
29	25.67	3.33
30	26.55	3.45
27	23.89	3.1
174		

$$X^2 = \sum_{ei} \frac{(O_i - e_i)^2}{e_i}$$

$$X^2 = 4.551$$

Decision criteria

The decision rule is to accept the null hypothesis if X2 calculated is less than the X2 tabulated for K = (Row – 1) (Columns – 1) degree of freedom at 5 percent level of significance otherwise reject.

Managerial decision

$$K = 5$$

The null hypothesis is rejected. Hence, the alternative hypothesis is accepted. That income level has a significant relationship with private consumption expenditure. The Responses of the Respondents on a High Poverty Level for the People of Ekiti State.

Area	Frequency	Agree	Disagree	Indifferent
Ado	30	23	3	4
Ilawe	30	27	-	3
Ikere	28	26	-	2
Ikole	29	27	2	-
Iyin	30	29	1	-
Oye	27	25	-	2
Total	174	157	6	11

Source: compiled from the questionnaire administered.

Table of expected frequency

Frequency	Agree	Disagree	Indifferent
30	27.07	1.03	1.9
30	27.07	-	1.9
28	25.26	-	1.8
29	26.17	1	-
30	27.07	1.03	-
27	24.36	-	1.7

INDIFFERENT

$$X^2 = 10.46$$

TEST OF HYPOTHESIS

Given the formula

$$X^2 = \sum_{i=j}^k \frac{(o - e)^2}{e}$$

The decision rule is to accept the null hypothesis (Ho) . if X2, Calculated is less than the X2 tabulated for

K = (Row – 1) (Column – 1) degree of freedom at 5 percent level of significance otherwise reject.

MANAGERIAL DECISION

$$K = (5) (2) = 10$$

$$5\% = 0.05 \quad 1-0.05 = 0.95$$

$$X^2_T = 3.940$$

$$X^2_C = (10.46) > X^2_T (3.940)$$

The null hypothesis is rejected, the alternative hypothesis is accepted. Therefore, we can say that the consumption expenditure pattern of the people of Ekiti State has a significant relationship with the poverty level.

The response of the respondents on a low standard of living for the people of Ekiti State.

Area	Frequency	Agree	Disagree	Indifferent
Ado	30	24	3	3
Ilawe	30	26	1	3
Ikere	28	26	1	1
Ikole	29	27	-	2
Iyin	30	29	-	1
Oye	27	23	2	2
Total	174	155	7	12

Source: compiled from the questionnaires administered.

Frequency	Agree	Disagree	Indifferent
30	26.72	1.21	2.07
30	26.72	1.21	2.07
28	24.94	1.34	1.93
29	25.83	-	2
30	26.72	-	2.07
27	24.05	1.09	1.86

Decision Criteria

The decision rule is to accept to Null Hypothesis (H_0). If X^2 calculated is less than the X^2 tabulated for $K = (\text{Rows}-1) (\text{Columns} - 1)$ degree of freedom at 5 percent (5%) level of significance otherwise reject.

Test of Hypothesis

$$\begin{aligned}
 K &= (5) (2) \\
 &= 10 \\
 5\% &= 0.05, \quad 1-0.05 = 0.95 \\
 X^2_T &= 3.940 \\
 X^2 &= 6.003
 \end{aligned}$$

Managerial Decision

Since $X^2_C (6.003) > X^2_T (3.940)$. We reject the null hypothesis and accept the alternative hypothesis. Therefore, we can say that the consumption expenditure pattern of the people of Ekiti State has a significant relationship with the standard of living.

Section Five:

CONCLUSION

Income was found to play a very vital role in the determination of the consumption expenditure pattern of the people of Ekiti State. In the course of this study, consumption spending was also found to be the most significant of all the basic types of purchasing in the economy. It was also discovered in this study that both the higher and lower income classes tend to use the same proportions of their income for consumption purposes. Though problems are inevitable, but if the recommendation proposal, along with other remedies are adopted and implemented, consumption expenditure will remain the sole dominant of all forms of purchasing in the economy. In view of this it will be recommended that, since income has a positive relationship with consumption expenditure, it would be necessary for government to increase the income level of workers to make them have a higher standard of living.

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