

## Applying Islamic Rational Consumption Perspective in Egypt

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### Abstract

This study investigated the impact of applying Islamic rationality on consumption in Egypt by using economic methods. We covered the period starting from year 2000 due to the changing in consumer taste as an impact of overwhelming globalization and, place limitations: the study is concerned with Egypt, designing an Islamic consumption framework that may be applicable to Egypt and using the suggested framework to develop Islamic theory of consumer behavior, which will add the concept of "Rushd" (as opposed to the concept of rationality in secular economics) in adjusting the consumption in Egypt. Finally, we found that the most important conclusion is that conventional economics should include normative and religious instrument to attain the goal on consumer satisfaction. To achieve this goal, it is concerned with applying three methods of linear regression (ordinary least squares, least trimmed square and M- estimation) on the data of consumption and expenditure at 2015 in both urban and rural sectors to study the effect of some independent variables on the total expenditure (the dependent variable). A comparison between the three methods is made using the standard error and R – squared obtained. The relation between the dependent variable and independent variables is represented by the path analysis using the Amos program. Two of robust skewness and kurtosis measures are used to determine the shape of the distribution of the total annual income in both urban and rural sectors before and after removing the outliers in income data. It is suggested

to calculate the Zakah by dividing the individuals into two groups (poor and nonpoor) according to the median of the income.

**Key words:** Ordinary least squares, Least trimmed square, M – Estimation square, Scale robust measure, Zakah, skewness robust measure, kurtosis robust measure, Path analysis, Expenditure groups.

### Introduction

“Achievement of consumer’s satisfaction” is the ultimate goal of economic theories either in Conventional economics or in Islamic Economics. Whereby, fulfilling consumer’s satisfaction is through maximizing his utility which necessitates “Rational behavior of the Consumer” in both economic systems. Thus, “Rationality” can be seen as the core of achieving consumer’s satisfaction. According to “Oxford Dictionary”, “Rationality” is defined as: “means based on or in accordance with reason or logic, able to think sensibly or logically and having the capacity to reason”. And according to Islam “Rationality” is achieving the end through moderation in consumption (*Wasatiyyah*). Turning to conventional and Islamic economic systems, although in both cases a “Rational Consumer” is: “the one who is neither a miser nor a spendthrift”, but still there are major differences in both systems vision of “Rationality”. On one hand, Conventional Perspective views “Rationality” as maximizing only own self-interest without limits, earning at anyway, whereas morals, religious, social values are absent, moreover; no treatment is offered for immoral activities when practiced. Thus, “Conventional Rational Consumer”: refers to “An individual who spends his income in such a way as to achieve maximum satisfaction- to gain material benefits- even through a portion of this may be allocated for the consumption of alcoholic beverages”. On the other hand, Islamic Perspective views “Rationality” as recognizing self-interest but in accordance

with *Shari'ah* principles by ensuring religious, cultural, historical and social values and also ensuring the achievement of the social welfare of the whole society through earning at honest means which aims at creating a balanced society. Thus, "Islamic Rational Consumer": is the one who seeks consuming the resources – whom ALLAH is the owner- to achieve material and spiritual needs through spending on *Halal* (what is permissible in *Shari'ah*) and moderating spending. In the Quran ALLAH says: "those who, when they spend, are not extravagant and not niggardly but hold a just (balance) between those (extremes)". Thus, from the above mentioned, it can be concluded that the framework of the Islamic perspective of "Rational Consumer" is more comprehensive than the Conventional one. Therefore, the paper aims to apply Islamic Rational Consumption perspective in Egypt.

### **Literature Review**

Heba (1990) aimed at presenting a theoretical framework for some consumption theories, and then analyzing consumption functions applied in: Egypt, India, and Urban of South America. It resulted that on the national level, that the marginal propensity to consume in Egypt for private consumption is high. In addition, that the variation in the consumption of the food commodities is significant in the 3 independent variables.

Maha (1999) provided a study on consumption and means of rationalizing it in different fields, in addition to highlighting on consumer's behavior and the factors driving consumption. The study resulted was performed in a form of a questionnaire and resulted in different methods enforcing rationalizing consumption especially in food and clothes.

Eman (2006) provided a study on the reasons behind the changes that appeared in the consumption culture, by introducing social, economic, political and legal awareness for the Egyptian

society. She performed a field study to search for the various reasons that participated in the change of the consumption culture for the society under investigation Benha University. The result showed the existence of a correlation between: each of: gender or sex, age, educational / level, professional level social status, amount of income and the change of the culture of consumption in the society, under investigation. In additions it resulted that there is a group of factors affecting the change of the culture of consumption in the society as: the successive economic policies, globalization, openness towards the foreign world, change of income's level, mass media and recent / modern means of communication and technology.

Rabi (2006) presented a theoretical study concerned with consumption behavior and factors influencing it, in addition to fields of Rationalizing family consumption and the role of the community agencies in promoting the culture of Rationalizing consumption. This study enriches the theoretical field of consumption and it benefits in the formulation of a questionnaire as a tool to collect data in this research:

Nagah (2008) showed the brilliant sides of Islamic economics and comparing the Islamic economics with conventional one in addition to determining the different means in protecting the consumer in the Islamic economics. The study uses the historical method to show the facts about consumer protection and uses comparative method to compare between Islamic and conventional economics. The study revealed that despite that Islamic economics and Conventional economics agreed on the necessity of protecting the consumer from the harms that might affect him, also it indicated that the Muslim consumer showed be attached to *shari'ah* principles.

Norah (2010) used the descriptive and historical method to show the Islamic foundations. The importance of the study is presented

in elaborating the significant role of globalization in spreading the culture of consumption between broad sectors of individuals and populations in all countries as a general and in the developing countries in specific. Although studies have been made to study consumption pattern in Egypt, and conventional Economics theories have provided assistance to adjust consumption pattern but little studies have been done to study consumption pattern in Egypt according to Islamic Economics. Moreover, adding "*Rushd*" element (Rationality) in studying the Egyptian consumption through encouraging moderate living standard as neither extravagant nor niggardly but balancing between them according to *shari'ah* principles, will enhance having a justly balanced nation, which will consequently improve Egypt's effectiveness and efficient in utilizing its resources in the short-run on one hand and fastening its path on development in the long-run.

Amal (2014) aimed to understand attitudes of Saudi university student towards the awareness of the rational consumption culture and the sources of this awareness. The study performed a questionnaire on a sample consisting of 550 female students from the department of social studies at the University studies for girls' center in King Saud University. The statistical treatment of the study indicated the presence of statistical relationship between the social background of the student and the knowledge of rational consumption culture and the practice of this culture. And it ended with some recommendations at the level of university, community and family.

**Importance of the study:**

1. To highlight the meaning, strengths and implications of "Rationalism" that is inherent in the Islamic World view.
2. To examine Conventional Consumption strengths; weaknesses and threats in order to be able to provide Islamic critics on these Conventional approaches of Consumption.

3. This study indicates the relative importance of "Islamic Rationalism" element in Moderating Consumption pattern.
4. Understanding Consumption pattern in Egypt.
5. The output of this study could assist policy makers to formulate new consumption pattern model to face consumption challenges in Egypt.

**Study Limitations:**

Time limitations: the study covers the period starting from year 2000 due to the changing in consumer taste as an impact of overwhelming globalization.

Place limitations: the study is concerned with Egypt.

**Objectives of the Study:**

1. Understanding Consumption pattern in Egypt.
2. Presenting "Islamic Economics" as an alternative to existing economic doctrines and systems.
3. Designing an Islamic Consumption Framework that may be applicable in Egypt.
4. Using the suggested framework to develop Islamic theory of consumer behavior, which will add the concept of "*Rushd*" (as opposed to the concept of Rationality) in secular Economics) in adjusting the Consumption pattern in Egypt.

**Study Hypotheses:**

1. Islamic rational consumption is more comprehensive than Conventional Rational Consumption.
2. Egypt is suffering from extravagance spending.
3. Consumption level in Egypt will be lower if Islamic Rational Consumption is applied.

### **Methodology of the study:**

The research will investigate the impact of applying Islamic Rationality on Consumption in Egypt by using econometric method.

### **Data Sources:**

To measure the impact of applying Islamic Rationality on Consumption in Egypt whereby the data for Income, Expenditure and Consumption is available from the CAPMAS (Central Agency for Public Mobilization and Statistics) through the survey published named "Income, Expenditure and Consumption", in addition other data as Poverty and Investment are available through the CAPMAS website.

The final selected data for the study since year 2000 as the Egyptian consumer has been deprived of choice for a longtime and at the beginning of 2000, the Egyptian consumer starts to demand new products and equipment in the face of globalization and offers good outlets for foreign.

### **Empirical Framework:**

This study uses deductive methods to analyze Conventional Consumption situation in Egypt and the effects of applying Islamic Rationality on it. Also, it uses an econometric model which will be conducted to know whether Rationality in an Islamic perspective could affect the Conventional Consumption.

The linkage between Islamic Rationality and Consumption can be viewed in terms of the following hypothesis: Islamic Rationality has a positive impact on Consumption. Consequently, Consumption is the dependent variable while Islamic Rationality and other factors are independent variables.

Panel data are a type of longitudinal data, in other words two or more observations that are collected on many units at different points of time

Panel data tends to have several advantages over cross-sectional data and time-series data, as:

Greater capacity for capturing the complexity of human behavior than a single cross-section or time series data

Simplifying computation and statistical inference whereby, it involves at least two dimensions, a cross-sectional dimension and a time series dimension.

Allowing control for omitted (unobserved or mis measured) variables.

Giving more informative data, more degrees of freedom, more variability, less collinearity among variables, more variability

In this section the researcher Nahed apply the procedure of the multiple linear regression using the ordinary least squares (OLS) method and two robust regression methods: Least Trimmed Square (LTS) and M – Estimation in SAS and R programs on both the urban and the rural sectors to compare between the three methods. The path analysis in AMOS program for both urban and rural sectors are obtained. It is interested with some variables such as the economic sector, the education status, the family size and the total annual income which affecting the total expenditure. This study is concerned with determining the shape of the distribution of the total annual income before and after removing the outliers from the data of the income using the classical measures of skewness and kurtosis:  $B_1, B_2$  and robust measures of skewness and kurtosis. It is concerned with calculating the zakat. Also, it is interested in the method to allocate the income between the expenditure groups.



The dependent variable is the total expenditure for the family denoted by  $Y$  which is affected by the selected following independent variables: the economic sector for the family denoted by  $X_1$ , the education status for the family denoted by  $X_2$ , the family size denoted by  $X_3$  and the income denoted by  $X_4$ . The data used in the present paper is obtained from the row data of the income, expenditure and consumption data for the year 2015 from the central agency for public mobilization and statistics (CAPMAS). The total data is divided into urban and rural sectors to compare between them. A sample of 600 objects is selected from each sector to be used in this paper. It is suggested to apply the ordinary least squares and two of the robust regression methods: the trimmed least squares and the  $M$  – estimation and compare between the three methods using both the standard error and the  $R$  – square measure obtained. When the trimmed least squares method is applied the outliers, which found in the data are removed then the weighted least squares method is applied. The three methods are applied on the data using both SAS and R programs. The total results are obtained in the appendix. The standard error for the variables under study which are obtained when applying the three methods for urban data are given in table (1).

Table (1): the results from applying the three methods for urban and rural sectors

Method		Standard error for the estimates of coefficients					$\beta^2$	Proportion of outlier
		intercept	$B_1$	$B_2$	$B_3$	$B_4$		
OLS	Urban	3442	21.87	448.2	547.8	0.005825	0.8805	-
	Rural	2633.38163	18.23961	366.22929	401.15613	0.05211	0.421	-
Final weighted least squares (LTS)	Urban	1022.018	6.4538	144.5956	165.5849	0.0146	0.8258	8%
	Rural	1080.071	7.212	146.9306	165.2148	0.0266	0.7815	9.67%
M-estimation	Urban	1058.008	6.7243	137.7808	168.3943	0.0018	0.578	8.6%
	Rural	1104.325	7.6489	153.5805	168.2273	0.0219	0.5045	9.33%

\*These calculations are made by the researcher

It is noticed that the standard error for the intercept and the independent variables has the smallest value when the LTS method is applied then the M – estimation method then the OLS method except for the last independent variable in the two sectors. In addition, the R – squared measure has the largest value for the LTS method than the two methods the OLS and the M – estimation and urban sector has larger value than rural sector in the three methods.

The scale parameter  $\sigma$  is usually unknown. In LTS method the median absolute deviation,  $w$ , is defined by:

$$(|X - x_{0.5}| \leq w) = 0.5$$

In other words,  $w$  is the median of the distribution associated with  $|X - x_{0.5}|$ , the distance between  $X$  and its median.

It is suggested to represent the relation between the dependent variable and the independent variables using the path analysis in AMOS program.

Path analysis for urban data is given in figure (1).

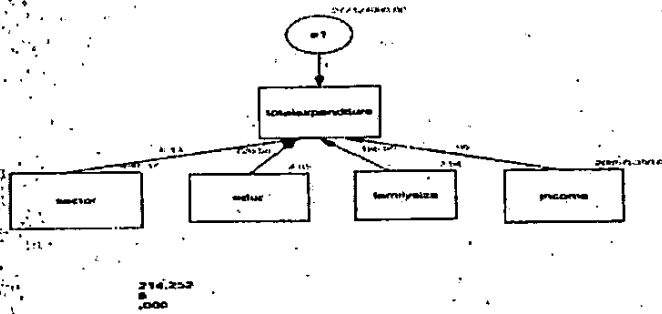


Figure (1): path analysis for urban data which is made by the researcher. Since the p – value for the urban sector is equal to 0.01 which less than the level of significance  $\alpha = 0.05$  so that the model is fitting well.

Path analysis for rural data is given in figure (2).

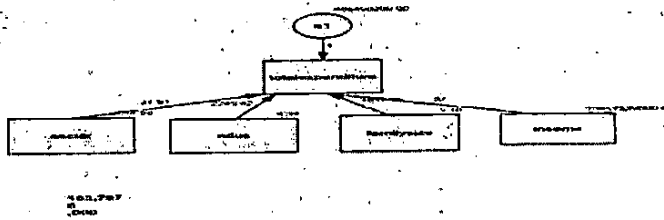


Figure (2): path analysis for rural data which is made by the researcher. Since the p – value for the rural sector is equal to 0.01 which less than the level of significance  $\alpha = 0.05$  so the model is fitting well.

The values for both the two measures of goodness of fit AIC and BIC are given in table (2). It is noticed that the goodness of fit is satisfied at the lowest value for these measures.

Table (2): the values of AIC and BIC

	AIC	BIC	CR
Urban sector	181.797	221.369	17.306
Rural sector	232.252	271.825	

\*These calculations are by the researcher

It is noticed the measure CR (regression weight estimated by the estimate of its standard error) is equal to 17.306 which is greater than 1.964 so it means that the model of regression fits well. The two measures for goodness of fit AIC and BIC for the urban sector is less than for the rural sector so it is the best fitting for the empirical distribution of the data under study.

It is suggested to study the shape of the distribution of the income data for both urban and rural sectors using the skewness and the kurtosis measures.

The Hinkley (1975) coefficient for measuring the skewness (which is robust against outliers) is given by:

$$SC = \frac{(Q_{1-p} - Q_{0.5}) - (Q_{0.5} - Q_p)}{(Q_{1-p} - Q_p)}$$

where  $Q_p$  ( $0 < p < 0.5$ ) is the  $p^{th}$  quantile of the random variable  $X$ .

It is noticed that as the value of  $p$  increased the value of the measure of skewness  $SC$  decreased. It is suggested to use  $p = 0.2$  since there are outliers in the income data which is skewed to the right.

The Hogg (1974) coefficient for measuring the kurtosis (which is robust against outliers) is given by:

$$KC = \frac{Q_{1-p} - Q_p}{Q_{1-q} - Q_q}$$

where  $0 < P < q < 0.5$  and  $Q_p$  denotes the  $p$  - quantile of the distribution. It is noticed that as the value of  $p$  increased the value of the measure of kurtosis  $KC$  increased. It is suggested to use  $p = 0.2$ .

The results for both the skewness and the kurtosis measures before removing outliers and after removing them are given in table (3) using Mathcad program.

Box plot is used to determine the outliers in the data of the income using SPSS program. It is found that 12 individuals are considered as outliers (%2) in each urban and rural sector.

Table (3): the values of both the skewness and the kurtosis measures for urban and rural sectors

				Robust skewness (	Robust kurtosis (
urban	Full sample	19.22	427.86	0.219	1.566
	Reduced sample	1.634	3.656	0.178	1.537
rural	Full sample	1.502	3.476	0.176	1.63
	Reduced sample	1.221	1.679	0.132	1.582

\*These calculations are by the researcher

It is noticed that the distribution of the data of the income for both urban and rural sectors is skewed to the right since the values of the  $B_1$  and  $SC$  are positive. In addition, the value of the skewness measure is decreased after removing the outliers from the data but these values are bigger in urban sector than in rural sector. It is noticed that the values of  $B_2$  for both full sample in urban and rural sectors and in reduced sample in urban sector are greater than 3 ( the distribution of the data is Leptokurtic). For reduced sample in rural sector the value of  $B_2$  is less than 3 ( the distribution of the data for the income is called platykurtic). On the other hand, the value of  $KC$  is bigger in rural sector than in urban sector and less than 3 ( the distribution of the data is platykurtic).

Location and scale measures for the income data for the full and reduced sample for urban and rural sectors are given in table (4)

Table (4): location and scale measures for the income data for the full and reduced sample for urban and rural sectors

		mean	Median	Standard deviation	IQR
urban	Full sample	53631.4524	39266.56	153937.7281	14546.5625
	Reduced sample	44326.6882	38942.28	26855.11857	14243.5625
rural	Full sample	29875.8947	27443.25	14454.18814	7571.01
	Reduced sample	28733.1968	27287.5		7146.125

\*These calculations are by the researcher

From table (4) it is noticed that the median is lower than the mean which indicates no symmetry of the distribution. As for the measures of scale the standard deviation dropped greatly compared to the interquartile range which indicates the sensitivity of the standard deviation to outliers. Measures of location and scale are almost the same for rural and urban sectors.

The present paper is concerned with a trial to distribute the annual total income on the expenditure groups. To do this it is suggested to calculate the ratio of each group of the expenditure groups to the total groups, then multiplying the total income by each ratio. The total income for rural is 38305.1. The results of these calculations for the rural sector are given in table (5).

Table (5): the ratio of the expenditure groups for rural sector

The ratio of each group	The share of each group from the income
0.41	15830.3 (Food and Non-Alcoholic Beverages)
0.06	2472.8 (Clothing and Foot wear)
0.17	6423.7 (Housing, Electricity, Water, Gas and other Fuels)
0.04	1699.6 (Furnishings, H.H equipment and routine H.H maintenance)
0.11	4050.0 (Health)
0.05	2091.9 (Transport)
0.02	795.1 (Communication)
0.02	787.0 (Recreation and Culture)
0.03	1291.9 (Education)
0.03	1309.1 (Restaurants and Hotels)
0.04	1515.4 (Miscellaneous goods and services)

\*These calculations are by the researcher

It is noticed that the group of expenditure for the food and non-alcoholic beverages has the largest value.

The total income for urban is 51178.8. The results for the urban sector are given in table (6).

Table (6): the ratio of the expenditure groups for urban sector

The ratio of each group	The share of each group from the income
0.03	366.76 (Food and Non-Alcoholic Beverages)
0.05	633.28 (Clothing and Foot wear)
0.19	2293.92 (Housing, Electricity, Water, Gas & other Fuels)
0.04	480.34 (Furnishings, H.H equipment and routine H.H maintenance)
0.10	1215.48 (Health)
0.08	886.43 (Transport)
0.03	351.57 (Communication)
0.02	261.85 (Recreation and Culture)
0.24	2722.44 (Education)
0.05	569.62 (Restaurants and Hotels)
0.04	480.83 (Miscellaneous goods and services)

\*These calculations are by the researcher

It is noticed that the group of expenditure for education has the largest value. The individuals in the data obtained from the central agency for public mobilization and statistics (CAPMAS). It is suggested to calculate the median of the total annual income for each individual in both urban and rural sectors in which the individuals which have incomes under this median are considered poor and the individuals which have incomes above this median are considered nonpoor. To calculate the Zakah, it is suggested to multiply the total income of the individuals who are nonpoor by %2.5 and add the obtained value to the total income of the individuals who are poor in both urban and rural sectors. Since each individual has the code 1 or 0 in both the data of urban and rural sectors at 2015. Code (1) means that the individual is poor and code (0) means that the individual is nonpoor. It is suggested to divide these individuals into two groups. One group contains the individuals who have the code (1) which are considered poor



and the other group contains the individuals who have code (0) which are considered nonpoor. To calculate the Zakah, it is suggested to multiply the total income of the individuals who are nonpoor by %2.5 and add the obtained value to the total income of the individuals who are poor in both urban and rural sectors.

### Statement of the Problem

As mentioned above (in the introduction), that "Rationality" Principle in "Rational Consumption" is discussed from 2 different perspectives, from Conventional Economics perspective and from Islamic Economic ones. Since it is mentioned that Islamic Rational consumption is more comprehensive that conventional one, thus here there is an arising question which is: Why Islamic Rational Consumption? Thus, the question can be answered through comparing the worldview of the two systems and then elaborating the benefits of Islamic Rational Consumption and then concluding the preferable and most appropriate one of them.

Table (7) Comparison between: Islamic Rational Consumer and Conventional Rational Consumer

Points of Comparison	Islamic Rational Consumer	Traditional Rational Consumer
Similarities	- In both cases a rational consumer is the one who is neither a miser nor a spendthrift	
Meaning of the term "Rational Consumer"	An Islamic Rational consumer is the one who is not against the principles of Islam, who strongly believes in Islamic <i>Shariah</i> , aiming to spend in <i>moderation</i> , so he is neither extravagant nor miser for both worldly life and <i>hereafter life</i> .	Refers to an individual whose main target is to achieve maximum satisfaction through spending his way, even if he allocated a portion of his income to consume alcoholic beverages.
Positive Economics	Included	Motivated

Source: Information collected by the researcher from different sources

Normative Economics	Included	Avoided
Value Judgment	Value judgment, social, national, cultural values	No value judgment
Earning	Earning at honest way	Earning at any way
Eternal Expenditure (In the way of ALLAH)	Muslims are concerned with spending in the way of ALLAH.	Spending in the way of ALLAH is not explicitly discussed in conventional economies.
Utility	Worldly and Hereafter (Eternal Utility is present)	Life span of a human (maximize utility through only material needs and wants)
Hoarding	An Islamic rational consumer follows the principle: "Hoard it and pay 2.5% of it every year in the way of ALLAH" since that Islam gives permission to hoarding but at a small price	A rational consumer in conventional economics is not concerned with hoarding wealth, thus a rational consumer "will not hoard wealth".
Type of demands	<ul style="list-style-type: none"> <li>- Demand for alcoholic drinks and other prohibited goods and service is zero</li> <li>- Demand of luxury goods would decrease.</li> <li>- Demand for necessities and for some comforts would increase.</li> </ul>	<ul style="list-style-type: none"> <li>- Demand for alcoholic drinks is allowed in addition that they are economic research seeks to define and compare costs and benefits of alcohol consumption and related policy interventions, including taxes.</li> <li>- Demand of luxury goods is increasing due to advancement of technology and improvement in economic conditions.</li> </ul>

Source: Information collected by the researcher from different sources

<p><b>Stages of life and difference in Visions of two consumers</b></p>	<p>Born (coming from heavenly life)</p> <p>Education life (worldly + Religious)</p> <p>Working Professional life (earning an honest way directed by Religion)</p> <p>Family life (Religious)</p> <p>Life Style (Moderate/simple life style)</p> <p>Worldly life (Enjoy the worldly life and Prepare for Hereafter life)</p> <p>Retired life (reading, travelling, Ibadah, etc.)</p> <p>Death (start the journey for Hereafter life)</p>	<p>Born (Natural law of human life)</p> <p>Education life (worldly)</p> <p>Working Professional life (earning in anyway)</p> <p>Family life (wealth)</p> <p>Life Style (Luxurious life style)</p> <p>Worldly life (Enjoy the worldly life – Only place for success and rewards)</p> <p>Retired life (reading, travelling, etc.)</p> <p>Death (Natural Departure)</p>
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Source: Information collected by the researcher from different sources

<p><b>Characteristics of Rational consumer</b></p>	<p>The key assumptions are as follows:</p> <ol style="list-style-type: none"> <li>1- Consumer behavior is based on Islamic Economic Rationalism and fear of ALLAH.</li> <li>2- An Islamic Consumer strongly believes in Islamic Shariah.</li> <li>3- A consumer is regarded as economic and moral utility maximizer.</li> <li>4- He can control his wants as well as demand.</li> <li>5- Utility or satisfaction derived from worldly and Heavenly.</li> <li>6- He only Consumes useful while avoid harmful goods and services, for himself and for whole society.</li> <li>7- Spend in moderation neither as miser nor extravagant, both for here (Worldly) and hereafter (Heavenly).</li> <li>8- Strictly consider Halal and Haram in consumption.</li> <li>9- He does not hoard his wealth</li> </ol>	<p>The rational consumer is ethical when:</p> <ol style="list-style-type: none"> <li>1- His spending is fairly done even through borrowing.</li> <li>2- His spending is justified albeit for the appetite desires.</li> <li>3- He is not encouraged to borrow even if the bank interest rate is not high</li> <li>4- He adheres to not spending money in illegal products and services although his spiritual emptiness pushes him/her to acquire the forbidden.</li> </ol>
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Source: Information collected by the researcher from different sources

**Comment on the above-mentioned table:**

**It can be concluded that:**

- It highlighted some of the weaknesses in Conventional Economics as: avoiding normative economics, principle of self-interest, focuses only on worldly life, spending could be done through borrowing, and social and moral values are absent, can consume any kind of goods.

- It highlighted some of the strengths in Islamic economics as: including normative economics, encourages the welfare of the society, takes into consideration worldly life and hereafter life, motivating spending in the way of the ALLAH, and encourages the presence of social and moral values, consume only halal and prohibits Haram. Therefore, the question is answered by highlighting the strengths of Islamic rational consumption and that rationality is a situation between extravagance and niggardly. Thus, by elaborating the Egyptian case study, it can be seen that since 1990, a rapid shift in household consumption occurred in Egypt, a new consumption culture has been drawn in Egypt, mainly due to globalization. An overwhelming new lifestyle has been drawn in Egypt to draw demand attention, for instance Cairo alone includes more than 24 shopping malls, huge number of supermarkets- offering everything you can imagine, fancy restaurants, the spread of mobile telephones and coffee shops, plastic surgery and the body. Thus, despite the fact that, household final consumption expenditure is formulating a major component in the GDP formula in Egypt- where by it is increasing until it reached %82.24 in 2015 and that the share of Egyptian Household expenditure in the public budget increased in the financial year 2015/2014 by 3 times more than the financial year 2008/2007. Still, in terms of prosperity and Welfare, Egypt ranked as the second least prosperous country in North Africa, where by

it ranked 117<sup>th</sup> (out of 149 country) on the "Legatum Prosperity Index"<sup>52</sup> in 2016. Moreover, by looking at the "Prosperity Gap"<sup>(1)</sup>, it is found out that since 2013 Egypt is suffering from prosperity index close by %27. Thus, it is evident that despite the high percentage spent on consumption from GDP, still Egypt suffering from lack of prosperity and welfare. Thus, the arising question here is: what is the defect that is occurring in the Egyptian Consumption pattern that deprives Egypt from enjoying prosperity, welfare and good quality of life? By viewing the relative distribution for average per capita of family annual expenditure by major expenditure groups by tens categories of Egypt total in 2015, we will find out that:

Table (8): The Relative distribution for average per capita of family annual expenditure by major expenditure groups by categories in Egypt total in Year 2015

Expenditure Groups	Percentage (%) of Total (100)
Food and Non-Alcoholic Beverages	34.4
Housing, water, electricity, gas and other fuels	17.5
Health	10.0
Transport	6.3
Clothing and Footwear	5.6
Education	4.8
Alcoholic Beverages, Tobacco and Narcotics	4.7
Furnishings, H.H equipment and routine H.H maintenance	4.1
Restaurants and Hotels	4.0
Miscellaneous goods and services	3.9
Communication	2.5
Recreation and Culture	2.1

Source: CAPMAS, "Annual statistical book 2015", Section (22), (Public indicators: Income, Expenditure and Consumption survey 2015), pp. 9-6

(1) "Prosperity Gap": "takes a country's GDP and uses it as the yardstick to measure a nation expected Prosperity Index ranking.

By analyzing the above table, it is clear that the 3 major components in the household consumption are: Food and Non-Alcoholic Beverages with %34.4, then the second component is Housing, water, electricity, gas and other fuels with %17.5, and the third one is Health with %10. Thus, to better analyze Consumption pattern in Egypt, main components formulating household consumption should be examined.

**1<sup>st</sup> Component: Concerning Food Expenditure:**

Although Egyptians are considered as big spenders and food consumers, also food expenditure is a major component in household spending, still Food consumption in Egypt suffering from problems. One hand, by looking at the dietary energy consumption per person in Egypt, it is found out for instance in 2007, Egypt recorded 3,160 calorie intakes per day where by the required calories per day to maintain are about 2000 calories per day for average woman and about 2500 calories per day for average man. On the other hand, FAO found out that Egypt has an increasing rate of food losses and waste, whereby wastes and losses reached:

Table (9): Percentages of food losses and waste in Egypt in 2015

Item	Vegetables and fruits	Fish	Milk
Percentage of food losses and waste	50%	40%	30%

Source: Gehan elmenofi, Roberto Capone, Francesco Böttalico, Hamid El Bilali, "An exploratory survey on household food waste in Egypt", October 2015, research gate, Page 1298

Moreover, the economic loss resulted from food wastes reached 1.5 million tons/per annum in wheat and about 11 million EGP/annually in wheat, tomato and orange. In addition, a questionnaire was performed to introduce the concept of food losses and waste - its total sample size is 181 adults Egyptian - found out the following results:

Table (10): Respondents estimation for purchased food groups wastage (In Percentage)

Items	Less than 2%	3 to 5%	6 to 10%	11 to 20 %	Over 20%
Cereals and bakery products	63.5%	19.3%	9.9%	0.6%	6.6%
Roots and tubers	75.7%	14.9%	4.4%	3.3%	1.7%
Pulses and oil seeds	84.0%	11.0%	2.2%	1.1%	1.7%
Fruits	75.1%	14.9%	5.0%	1.7%	3.3%
Vegetables	65.7%	19.9%	9.9%	1.7%	2.8%
Meat and meat products	93.4%	2.8%	1.7%	1.7%	0.6%
Fish and seafood	91.2%	6.6%	1.1%	0.6%	0.6%
Milk and dairy products	81.8%	12.2%	3.3%	-	2.8%

Source: Gehan elmenofi, Roberto Capone, Francesco Bottalico, Hamid El Bilali, "An exploratory survey on household food waste in Egypt", October 2015, research gate, Page 1302

It is showed in the above table the percentage of food waste in Egypt in 2015. Thus, Aggregate food Consumption in Egypt is high in addition it is evident that some Egyptians are suffering from Extravagance spending. To sum up, it is clear that food expenditure problem is that Egyptians is extravagance spending.

### **2<sup>nd</sup> Component: Concerning Housing, water, electricity, gas and other fuels:**

Turning to the 2<sup>nd</sup> major component formulating household expenditure, it is found out that: on one hand, *water* supplies and available water resources tend to decrease; as shown in the following table:

Table (11): Decreases of the yearly water shape per capita in Egypt over a century

year	1897	1927	1947	1960	1970	1986	1993	2000	2015
Water quantity per Capita (m <sup>3</sup> )	5084	3484	2604	1893	1713	1138	981	957	663

Source: Rasha El Gohary, "Agriculture, Industry and Wastewater in the Nile Delta", International Journal of Scientific Research in Agricultural sciences, 2015, page 159



On the other hand, still water demand continues in increasing due to pressures put on water resources as rising pressure due to population growth, rapid urbanization, acceleration of economic and demographic development, farmers preference of using flood irrigation in new land regardless of exploring new irrigation systems. Moreover, the Nile River is receiving a large quantity of industrial, agriculture and domestic wastewater. It is worth to mention that the water pollution is a kind of water waste and it can be caused by either natural effect or by human intervention. Along the river there are about 700 industrial facilities, and many industries are causing wastes into the Nile River. In spite of consuming the agriculture sector of %85 of total demand for water, it contributes of only about %20 in the GDP. In addition, although it is evident that there is *extravagance* spending in agriculture, the wheat accounted for almost %32.6 of the total imports bill in 2013. Moreover, other Egyptians are suffering from uneven distribution of water, for instance, since that some farmers are misusing water resources and already water resources are scarce. Also, despite that water coverage supply is increasing still sanitation services lagging behind. Thus, it is evident that there is gap as water supply is decreasing and water demand is increasing in addition to human intervention which is participating in wasting large quantities of water, so some Egyptians are suffering from *Extravagance* spending in water. Turning to *gas expenditure*, on one hand, for the fiscal year 2015/2014 it is found out that in gas oil for instance, despite that Egypt was the 25<sup>th</sup> world's largest oil producer, representing %0.3 of the global total (in year 2010), it has become increasingly dependent on importing oil products, totaling as much as 1.3\$ billion per month (almost 15.6 billion \$ per year out of total almost less than 5000\$ million during 2015). Thus, there is *extravagance* spending in gas in Egypt. To sum up, it is clear that some extracts of gas expenditure in Egypt as oil is suffering *extravagance* spending.

### 3<sup>rd</sup> Component: Concerning Health Expenditure

Although, total expenditure of health improved to reach %5.6 of GDP in 2014. Moreover, according to CAPMAS, expenditure on health is increasing as income increases, whereby at the top income level expenditure spent on healthcare reached %10.6 of income in 2015 while for average Egyptian family %9.2 of income is spent annually on healthcare. Also, according to Central Bank to Egypt, per capita government spending on health is 108 (PPP int. USD). Still, health expenditure has some weaknesses. As despite the high caloric intake, by some Egyptians, still the Egyptian individual suffering from triple burden of malnutrition (obesity, stunting and micronutrient deficiencies (*anemia*) and unbalanced essential food elements like energy, protein, and fat content. Moreover, %35.1 of total population in 2011 were found to be suffering from poor dietary diversity, where by this rate reached almost %58.3 in the low-level income (Poor Egyptians). Although, Health expenditure in the 3<sup>rd</sup> item on the Relative distribution for average per capita of family annual expenditure in year 2015, still nearly %50 of Egyptians do not have health insurance coverage, whom are mainly residents of rural areas, employers in informal sectors, self-employed and farmers. Moreover, by looking at child mortality under age 5, despite that they are decreasing and reached to 24 children per 1000 live births in 2015, the rate is still high comparing with the countries which have the lowest under5-mortality rates in the world. Their under5- mortality rate is 3 children per 1000 live births. Thus, to sum up, some Egyptian are suffering from *extravagance* consumption in health expenditure despite that their health is weak. Turning to ne kind of *haram* products which is: *Alcoholic Beverages, Tobacco and Narcotics* as shown in table (1) in the Appendix that %4.7 out of average per capita of family annual expenditure by major expenditure groups by tens categories of Egypt total in Year 2015 is spend on alcoholic

beverage, tobacco and narcotics. Despite that Islam is specified as the state religion in Egypt and that principles of *shari'ah* is the primary source of legislation. Unfortunately, by looking at the percentage of Tobacco use in the following table:

Table (12): Tobacco use data from the latest survey results as at 31 December 2014

Smoking Prevalence (%)	Youth Tobacco Use		Adult Tobacco smoking		Adult cigarette smoking
	Current tobacco use	Current Cigarette smoking	Current	Daily	Daily
Male	7.2	5.8	46.0	44.3	35.8
Female	2.8	1.4	0.4	0.3	-

Note that: Youth: ages 15-13, Adult: ages 64-25

Source: World Health Organization, "Egypt: WHO Report on the Global Tobacco Epidemic", 2015, page 2

As it is shown in the above table that Tobacco percentage of use relatively high despite the fact that Egypt is Muslim country and Islam is prohibiting smoking as smoking affects body causing health problems as cancer. Moreover, concerning alcoholic drinks, despite that tourism rate are fluctuating, alcohol sales are in an increase whereby companies as: Al-Ahram Beverages Co (ABC) and Egyptian International Beverages Co (EIBCO) are leading alcoholic drinks and launched numerous products in 2015. Thus, some Egyptians are consuming alcoholic expenditures despite that they are *haram* products and are making *extravagance* consumption of them. Thus, it can be concluded that the Egyptian society is a Consuming society, moreover, his consuming is far away from "Rational Element" whereby most Egyptians are suffering from *extravagance* spending.

And this explains the current Egyptian Economic situation, whereby:

Egypt's Balance of Payment (BOP) recorded deficit about \$ 3.7 billion dollars during the fiscal year 2016/2015.

Egypt's Total external debt recorded \$ 46.1 billion dollars at the end of September 2015.

Therefore, despite being a Consuming society in Egypt, and that Egypt is borrowing to develop the Society and solve deficits, still Egypt is far away from achieving social welfare of the society. Thus, the solution ensuring "Rationality" principle in consumption. Thus, an arising question here is: How Islamic Rational consumption is going to solve the consumption spending problem? Rationality is something that is unique to the Islamic economic system. It is found out that consumer behavior has a certain focus in the Islamic system whereby, it provides certain rules in the market in addition it provides a set of rules for its economic agents. These rules are in the form of *Shari'ah* rules aiming at governing consumer behavior. The application of these rules may lead to the development of the institutions that are enabling individuals and also society to improve their well-being level on a path of sustainable development. Thus, by following the "Islamic Rationalism", consumption spending problem is going to be solved as:

- Islamic Rational consumption aims at making a right balance between: material needs and spiritual needs –on the contrary of the conventional thought of rationalism which focuses only on the material needs- where man could not neglect his share of the world and at the same time he seeks the abode of the hereafter.

- Since that, people living in the world as only temporary life and the hereafter life is the permanent one, as Islamic thought view, thus he aims at succeeding at the hereafter life, where by his success depends on the utilization of resources and best use of resources in the worldly life, so he aims at avoiding extravagance.

- Elimination of *Israf* and *Tabthir* should be main principles in solving consumption spending problem. Whereby *Tabthir* is

"spending your money on something which is not permissible to begin with, for example, drinking or the eating of pork". *Israf* is "spending on something which is otherwise permissible to spend your money on, but spending extravagantly". So *Israf* is extravagance.

- A man has to prevent Haram spending due to different harmful and not promising consequences resulting from this kind of spending as:

Haram spending lead to losing money.

Haram spending could lead to individual economic and social corruption, and this corruption may scatter to reach all layers of the society.

Haram spending results of losing the benefit of Halal utility, so there is no Halal utility.

Based on Islamic principles, resources will be allocated through Islamically valid means.

To sum up, "Islamic Rationalism" could solve "Consumption spending" problem through:

Focusing on *shari'ah* principles.

Encouraging Halal spending and discouraging Haram spending.

Assures moderation in spending, so neither extravagant nor miser.

Promoting the welfare of the whole society through distributing a man's spending on both: material needs (his own self-interest) and spiritual needs (spending in the way of ALLAH).

Allocate resources efficiently and use Islamically valid means for the fulfillment of the mean

Encouraging Halal Utility.

**Concluding remarks:**

1. The standard error is almost for the three methods of regression but it has the smallest value in the LTS method
2. The R – squared measure has the largest value in the LTS method
3. The standard deviation is usually unknown which is estimated by the robust scale measure MAD when applying both the LTS and M – estimation methods
4. The values of AIC and BIC measures for goodness of fit in urban sector are larger in urban sector than in rural sector
5. Measures of skewness and kurtosis have least values after removing the outliers than before removing them
6. When allocating the income to the expenditure groups in rural sector the group which contains the **Food and Non-Alcoholic Beverages** has the largest share while in urban sector the group which contains education has the largest share
7. To calculate the Zakah, it is suggested to divide the individuals according to the median of their income or according to the code 1 or 0 into two groups in which the group of individuals which have income above this median or have code (0) are considered nonpoor and the group of individuals which have income under this median or have code (1) are considered poor
8. The most important conclusion is that, conventional economics should include normative and religious instrument to attain the goal of consumer satisfaction.
9. Zakah in Islam limits the excessive spending and the distribution of income to the expenditure groups leads to the planning of spending.

### Recommendation

Actually, most individual's base decisions on social, political and ethical considerations as well as on personal gain. Also, what people do may be strongly affected by habit, custom, and tradition. Every society weaves a fabric of institutions that guide its economic behavior. Zakah and charity are the only major sources of earning reward in the hereafter. The desire to increase income is strong for a Muslim consumer because he would like to spend in the right way. Also, it is a Muslim's religious obligation to improve his economic condition so that he becomes a Zakah payer rather than a Zakah receiver. Islamic Rationalism" could solve "Consumption spending" problem through:

Focusing on shari'ah principles.

Encouraging Halal spending and discouraging Haram spending.

Assures moderation in spending, so neither extravagant nor miser.

Promoting the welfare of the whole society through distributing a man's spending on both: material needs (his own self-interest) and spiritual needs (spending in the way of ALLAH).

Allocate resources efficiently and use Islamically valid means for the fulfillment of the mean

Encouraging Halal Utility.

In rural sector it is suggested to increase the share from income for both the education and the health expenditure groups than the **Food and Non-Alcoholic Beverages** group. In addition, it is suggested to increase the share from income for the health expenditure group.

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## Appendix

The used Model is "A multiple linear regression model", it is a very advanced statistical and it is extremely powerful when you are trying to develop a "model" for predicting a wide variety of outcomes. A multiple linear regression model is a linear model that describes how a "Y" variable relates to two or more "X" variables., where the equation of the multiple regression is:

$$Y = a + b_1x_1 + b_2x_2$$

The model will be estimated using (SAS and R) programs and will be presented as following:

$$C_{it}^* = a + b_1Y_{it} + b_2PR_{it} + b_3G_{it} + b_4AG_{it} + e_{it}$$

where:

$C^*$ : is the dependent variable

Y, PR, G, AG: are the dependent variables.

a: is the constant (Intercept)

$b_1, b_2, b_3, b_4$ : are the slope of the independent variables on  $C^*$  respectively.

t: is referring to time periods

i: is the number of levels

e: is the error

The explanation of the variables that will be used in the model:

### $C^*$ : Islamic Rational Consumption:

It is the consumption after deducting the Haram consumption and adding the independent variables that form the Islamic Rational Consumption.

### Y: Islamic Rational Household Income Variable:

Household income is one of the main independent variables and is a main determinant of household consumption. By looking

at the Distribution of Households by Groups of Annual Household Income, it is found out that the society is divided into 20 Income levels (according to the CAPMAS) ranging from less than 10,000 Egyptian pounds per year for Individual to more than 100,000 Egyptian pounds per year for each individual.

Since that the main is to measure Islamic Rational Consumption therefore the Islamic Rational Income should be measured.

Thus, Islamic rational Household Income will be measured by including family annual expenditure by major expenditure groups according to Islamic rationality

where:

$$Y_{it} = r_1 F_{it} + r_2 S_{it} + r_3 H_{it} + r_4 T_{it} + r_5 L_{it} + r_6 E_{it} + r_7 P_{it} + r_8 R_{it} + r_9 M_{it} + r_{10} I_{it} + r_{11} V_{it} + e_{it}$$

where:

Table (1): Variables that will be included in the previous Equation

Symbol	Expenditure Groups
F	Amount of rational food and non-alcoholic beverages
S	Amount of rational housing, water, electricity, gas and other fuels.
H	Amount of rational health
T	Amount of rational transport
L	Amount of rational clothing and footwear
E	Amount of rational education
P	Amount of rational furnishings, H.H equipment and routine H.H maintenance
R	Amount of rational restaurants and hotels
M	Amount of miscellaneous goods and services
I	Amount of rational communication
V	Amount of rational recreation and culture

Note that: Consumption of Alcoholic beverages, Tobacco and other Haram products are eliminated from the equation since that the study is concerned only with Halal products that are in accordance with *shari'ah*.

**PR: Place of Residence Variable:**

It is one of the main determinants of that have an impact on household consumption expenditure, whereby the pattern of spending on different expenditure varies according to urban and rural areas.

**G: Gender Variable:**

It is one of the determinants that have an impact on household consumption expenditure, whereby the pattern of spending differs according to the gender as Male or Female.

**AG: Age Variable:**

It is one of the determinants that have an impact on household consumption expenditure, whereby the pattern of spending differs according to the age

The outputs of applying the ordinary least squares on the data of the urban sector using R program are shown in Table (2).

Table (2): the outputs of the ordinary least squares on the data of the urban sector

	Estimate	Std. Error	T value	P - value
Intercept	4204	3442	1.222	0.22235
	-27.91	21.87	-1.276	0.20244
	2245	448.2	5.01	7.19e-7
	1518	547.8	2.771	0.00577
	0.3725	0.005825	63.591	2e-16

\*These calculations are by the researcher

**The regression equation from applying the OLS method is given by:**

Where the negative value reflects the reverse relation between the dependent variable (total expenditure) and the independent variable (the economic sector). The positive value 2245 reflects the positive relationship between the and the independent



variable (the education status). The positive value 1518 reflects the positive relationship between the and the independent variable (the family size). The positive value 0.3725 reflects the positive relationship between the and the independent variable (the income). Residual standard error for these data is 21670. Multiple R – squared is 0.8805 means that %88.05 from the total variation of the dependent variable is explained by the regression line and the independent variables. Adjusted R – squared is 0.8797. The summary statistics for the data of the urban sector is given in table (3).

Table (3): the summary statistics of the data from the urban sector

Min	1Q	Median	3Q	Max
-92382	-7490	-1783	3913	366225

\*These calculations are by the researcher

The outputs of applying the LTS method before removing the outliers in the data of the urban sector using SAS program are shown in table (4).

Table (4): the estimates for the variables under study

Parameter	Estimate
Intercept	-99.4647
	1.3508
	615.5205
3	775.1413
	0.7019
Scale (sLTS)	6302.535

\*These calculations are by the researcher

The regression equation from applying the LTS method before removing the outliers from the data is given by:

Where the positive value reflects the positive relationship between the dependent variable (total expenditure) and the independent variable (the economic sector). The positive

value reflects the positive relationship between the and the independent variable (the education status). The positive value reflects the positive relationship between the and the independent variable (the family size). The positive value reflects the positive relationship between the and the independent variable (the income).Diagnostics summary for the data of the urban sector is given in table (5).

Table (5): diagnostics summary for urban data

Observation Type	Proportion
Outlier	0.08
R - square	0.8258

\*These calculations are by the researcher

It is noticed that the proportion of outliers in the data is %8. R – squared for LTS estimation is 0.8258 means that %82.58 from the total variation of the dependent variable is explained by the regression line and the independent variables. Parameter estimates for final weighted least squares after removing the outliers from the data are given in table (6) for the urban data.

Table (6): Parameter estimates for final weighted least squares fit for urban sector

Parameter Estimates for Final Weighted Least Squares Fit							
Parameter	df	Estimates	Standard error	95% Confidence interval limits		Chi - Square	P - value
Intercept	1	-445.943	1022.018	-2449.06	1557.175	0.19	0.6626
X1	1	1.0948	6.4538	-11.5545	13.7441	0.03	0.8653
X2	1	459.2981	144.5956	175.896	742.7003	10.09	0.0015
X3	1	1075.179	165.5849	750.6383	1399.719	42.16	0.0001
X4	1	0.6905	0.0146	0.6619	0.7191	2244.14	0.0001
Scale	0.	6121.671					

\*These calculations are by the researcher

The regression equation from applying the Final Weighted Least Squares after removing the outliers from the data is given by:

Where the positive value reflects the positive relationship between the dependent variable (total expenditure) and the independent variable (the economic sector). The positive value reflects the positive relationship between the and the independent variable (the education status). The positive value reflects the positive relationship between the and the independent variable (the family size). The positive value reflects the positive relationship between the and the independent variable (the income). Summary statistics for the dependent and the independent variables from applying LTS method in urban sector are given in table (7).

Table (7): summary statistics for urban sector

Variable	Q1	Median	Q3	Mean	Standard Deviation	MAD
X1	3	4	100	34.6517	44.9215	4.4478
X2	3	6	6	5	2.0842	2.9652
X3	3	4	5	3.9583	1.7612	1.4826
X4	26801.8	39266.6	55853	53631.5	153938	20503.9
Y	22933.1	32167.8	45151.3	40450.1	62466.2	15713.4

\*These calculations are by the researcher

Parameter estimates from applying the M - estimation on the data of the urban sector using SAS program are shown in table (8)

Table (8): parameter estimates for urban sector

Parameter Estimates							
Parameter	df	Estimates	Standard error	95% Confidence interval limits		Chi-Square	P - value
Intercept	1	-313.393	1058.008	-2387.05	1760.264	0.09	0.7671
X1	1	-0.2589	6.7243	-13.4383	12.9204	0	0.9693
X2	1	448.1174	137.7808	178.0722	718.1629	10.58	0.0011
X3	1	1037.351	168.3943	707.304	1367.398	37.95	0.0001
X4	1	0.6974	0.0018	0.6939	0.7009	151684	0.0001
Scale	1	5613.223					

\*These calculations are by the researcher

The regression equation from applying the LTS is given by:

Where the negative value reflects the reverse relation between the dependent variable (total expenditure) and the independent variable (the economic sector). The positive value reflects the positive relationship between the and the independent variable (the education status). The positive value reflects the positive relationship between the and the independent variable (the family size). The positive value reflects the positive relationship between the and the independent variable (the income). The robust estimate for the scale parameter is 5613.223. Diagnostics summary for the data of the urban sector are given in table (9).

Table (9): diagnostics summary for urban data

Observation Type	Proportion
Outlier	0.0867

\*These calculations are by the researcher

It is noticed that the proportion of outliers in the data is %8.67. Goodness – of – fit measures for the urban data is given in table (10).

Table (10): Goodness – of – fit measures for the urban data

Goodness – of – Fit	
Statistic	Value
R – Square	0.578
AICR	901.2104
BICR	924.2982

\*These calculations are by the researcher

R – squared for LTS estimation is 0.578 means that 57.8 % from the total variation of the dependent variable is explained by the regression line and the independent variables. The outputs of applying the OLS method on the data of the rural sector using R program are shown in table (11).

Table (11): the outputs of OLS method on the data of the rural sector

	Estimate	Std. Error	T value	P - value
Intercept	7426.68178	2633.38163	2.82	0.00496
X1	-6.12692	18.23961	-0.336	0.73705
X2	720.58187	366.22929	1.968	0.04958
X3	-188.97786	401.15613	-0.471	0.63775
X4	0.95801	0.05211	18.383	2e-16

\*These calculations are by the researcher

The regression equation from applying the OLS method is given by:

Where the negative value reflects the reverse relation between the dependent variable (total expenditure) and the independent variable (the economic sector). The positive value reflects the

positive relationship between the and the independent variable (the education status). The positive value reflects the positive relationship between the and the independent variable (the family size). The positive value reflects the positive relationship between the and the independent variable (the income). Residual standard error for these data is 16720. Multiple R – squared is 0.421 means that %42.1 from the total variation of the dependent variable is explained by the regression line. Adjusted R – squared is %41.71. The summary statistics for the data of the rural sector is given in table (12).

Table (12): the summary statistics of the data from the rural sector

Min	1Q	Median	3Q	Max
-143634	-6616	-2846	3080	244028

\*These calculations are by the researcher

The parameter estimates from applying the LTS method on the data of the rural sector using SAS program are shown in table (13).

Table (13): the parameter estimates for the variables under study

Parameter	Estimate
Intercept	4020.77
3	3.8011
	1.0197
Scale (sLTS)	6322.527

\*These calculations are by the researcher

The regression equation from applying the LTS before removing the outliers from the data is given by:

Where the negative value reflects the reverse relation between the dependent variable (total expenditure) and the independent variable (the economic sector). The negative value reflects the reverse relation between the and the independent variable (the education status). The positive value reflects the positive relationship between the and the independent variable (the family size). The positive value reflects the positive relationship between the and the independent variable (the income). The robust estimate for the scale parameter is 6322.527. Diagnostics summary for the data of the rural sector is given in table (14).

Table (14): diagnostics summary for rural data

Observation Type	Proportion
Outlier	0.0967
R – square	0.7815

\*These calculations are by the researcher

It is noticed that the proportion of outliers is %96.7 in the data under study. R – squared for LTS estimation is 0.7815 means that %78.15 from the total variation in the dependent variable is explained by the regression line and the independent variables. Parameter estimates for final weighted least squares after removing the outliers from the data are given in table (15) for the urban data.

Table (15): Parameter estimates for final weighted least squares fit for rural sector

Parameter Estimates for Final Weighted Least Squares Fit							
Parameter	df	Estimates	Standard error	95% Confidence interval limits		Chi – Square	P – value
Intercept	1	5274.282	1080.071	3157.382	7391.182	23.85	0.0001
X1	1	-4.012	7.212	-18.1472	10.1232	0.31	0.578
X2	1	21.826	146.9306	-266.153	309.8047	0.02	0.8819
X3	1	160.5037	165.2148	-163.311	484.3189	0.94	0.3313
X4	1	0.9907	0.0266	0.9386	1.0429	1388.63	0.0001
Scale	0	6283.38					

\*These calculations are by the researcher

**The regression equation from applying the Final Weighted Least Squares after removing the outliers from the data is given by:**

Where the negative value reflects the reverse relation between the dependent variable (total expenditure) and the independent variable (the economic sector). The negative value reflects the positive relationship between the and the independent variable (the education status). The positive value reflects the positive relationship between the and the independent variable (the family size). The positive value reflects the positive relationship between the and the independent variable (the income). The robust estimate for the scale parameter is 6283.38. Summary statistics for the dependent and the independent variables from applying LTS method in the rural sector are given in table (16).



Table (16): summary statistics for rural sector when applying LTS method

Variable	Q1	Median	Q3	Mean	Standard Deviation	MAD
X1	4	9	9	28.3383	40.5945	7.413
X2	2	5	6	4.25	2.0152	2.9652
X3	3	5	6	4.5217	1.8838	1.4826
X4	20765.8	27443.3	35866.4	29875.9	14454.2	10585.4
Y	25093	33693.9	45050.7	38082.5	21895.6	13939.4

\*These calculations are by the researcher

Parameter estimates from applying the M - estimation on the data of the rural sector using SAS program are shown in table (17).

Table (17): parameter estimates for rural sector

Parameter Estimates							
Parameter	df	Estimates	Standard error	95% Confidence interval limits		Chi-Square	P - value
Intercept	1	4049.187	1104.325	1884.749	6213.624	13.44	0.0002
X1	1	-3.9058	7.6489	-18.8973	11.0858	0.26	0.6096
X2	1	156.0477	153.5805	-144.965	457.06	1.03	0.3096
X3	1	102.2988	168.2273	-227.421	432.0183	0.37	0.5431
X4	1	-1.0234	0.0219	0.9806	1.0663	2193.07	0.0001
Scale	1	6373.812					

\*These calculations are by the researcher

The regression equation from applying the M estimation method is given by:

Where the negative value reflects the reverse relation between the dependent variable (total expenditure) and the independent variable (the economic sector). The negative value reflects the positive relationship between the and the independent variable (the education status). The positive value 102.2988 reflects the positive relationship between the and the independent variable (the family size). The positive value 1.0234 reflects the positive relationship between the and the independent variable (the income). The robust estimate for the scale parameter is .6373.812. Diagnostics summary for the data of the rural sector is given in table (18).

Table (18): diagnostics summary for urban data

Observation Type	Proportion
Outlier	0.0933

\*These calculations are by the researcher

It is noticed that the proportion of outliers is %9.33 in the data under study. Goodness – of – fit measures for the rural data is given in table (19).

Table (19): Goodness – of – fit measures for the rural data

Goodness – of – Fit	
Statistic	Value
R – Square	0.5045
AICR	860.4061
BICR	884.5158

\*These calculations are by the researcher

R – squared for M – estimation is 0.5045 means that %50.45 from the total variation in the dependent variable is explained by the regression line and the independent variables.

## تطبيق الاستهلاك الرشيد من منظور إسلامي

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### ملخص الدراسة

إن الهدف النهائي للنظرية الاقتصادية هو تحقيق رضا المستهلك سواء في الاقتصاد التقليدي أو الإسلامي حيث أن تحقيق رضا المستهلك يكون من خلال تعظيم فائدته التي تقتضي الضرورة لتحقيق «السلوك الرشيد للمستهلك» في كلا النظامين الاقتصاديين. وبالتالي يمكن اعتبار «الرشد» جوهر تحقيق رضا المستهلك. وبما أن إطار المنظور الإسلامي «المستهلك الرشيد» هو أكثر شمولاً من الإطار التقليدي. لذا، تهدف الورقة إلى تطبيق منظور الاستهلاك الرشيد الإسلامي في مصر.

تشير هذه الدراسة إلى الأهمية النسبية لعنصر «الرشد الإسلامي» في نمط الاستهلاك المعتدل فهم نمط الاستهلاك في مصر. أيضاً يمكن أن تساعد مخرجات هذه الدراسة صناع السياسة على صياغة نموذج نمط استهلاك جديد لمواجهة تحديات الاستهلاك في مصر.

قامت الباحثتان بتغطية الفترة التي تبدأ من عام ٢٠٠٠ إلى ٢٠١٥ ودراسة التغير في ذوق المستهلك كأثر اقتصادي للعولمة الناشئة في مصر. ووضع إطار للاستهلاك الرشيد الذي يمكن تطبيقه على مصر واستخدام إطار العمل المقترح وتطوير النظرية الإسلامية لسلوك المستهلك، والتي ستصنف مفهوم «الرشد» في ضبط الاستهلاك في مصر. وأخيراً، وجدنا أن أهم استنتاج هو أن الاقتصاد التقليدي يجب أن يتضمن مفهومًا معيارياً ودينيًا لتحقيق الهدف المتعلق برضا المستهلك. ولتحقيق هذا الهدف، تهتم الدراسة بتطبيق ثلاث طرق للإنحدار الخطي (المربعات الصغرى العادية،  $M$ -estimation, least trimmed square) على بيانات الاستهلاك والانفاق في عام ٢٠١٥ في كل من قطاعي الحضر والريف لدراسة تأثير بعض المتغيرات المستقلة على إجمالي الانفاق (المتغير التابع). يتم إجراء مقارنة بين الطرق الثلاث باستخدام الخطأ المعياري و  $R$ -squared الذي تم الحصول عليهما. يتم تمثيل العلاقة بين المتغير التابع والمتغيرات المستقلة بواسطة تحليل المسار باستخدام برنامج Amos. تستخدم اثنين من مقاييس الاتواء والتفرض لتحديد شكل توزيع إجمالي الدخل السنوي في كل من قطاعي الحضر والريف قبل وبعد إزالة القيم المتطرفة من بيانات الدخل. يقترح لحساب الزكاة تقسيم الأفراد إلى مجموعتين (فقير و غير فقير) حسب قيمة الوسيط للدخل.

وتبين أيضاً من هذه الدراسات أن هناك تحول سريع في استهلاك الأسر المعيشية في مصر، وقد تم استزراع ثقافة استهلاك جديدة في مصر، ويرجع ذلك أساساً إلى العولمة. تم رسم نمط حياة جديد في مصر لجذب انتباه الطلاب، على سبيل المثال القاهرة وحدها تضم أكثر من ٢٤ مركز تسوق، وعدد كبير من محلات السوبر ماركت - تقدم كل ما يمكنك تخيله.

المطاعم الفاخرة ، انتشار الهواتف المحمولة والمقاهي ، الجراحة التجميلية والجسم. وهكذا ، على الرغم من حقيقة أن الإنفاق الاستهلاكي النهائي للأسرة يقوم بصياغة مكون رئيسي في صيغة الناتج المحلي الإجمالي في مصر - حيث يتزايد حتى يصل إلى ٨٢,٢٤ ٪ في عام ٢٠١٥ ، وأن نصيب مصر من نفقات الأسرة في الموازنة العامة زاد في السنة المالية ٢٠١٤/٢٠١٥ بنسبة ٢ مرات أكثر من السنة المالية ٢٠٠٧/٢٠٠٨. ومع ذلك ، من حيث الرخاء والرفاهية ، احتلت مصر المرتبة الثانية من حيث الازدهار في شمال أفريقيا ، حيث احتلت المرتبة ١١٧ (من ١٤٩ دولة) في «مؤشر ريجاتوم ليجاتوم» في عام ٢٠١٦. وعلاوة على ذلك ، من خلال النظر إلى «الازدهار» الفجوة ، تبين أنه منذ عام ٢٠١٢ تعاني مصر من مؤشر الازدهار بنسبة ٢٧ ٪. وهكذا ، من الواضح أنه على الرغم من النسبة العالية التي تنفق على الاستهلاك من الناتج المحلي الإجمالي ، إلا أن مصر لا تزال تعاني من عدم الرخاء والرفاهية. وهكذا ، فإن السؤال المطروح هنا هو ، ما هو الخطأ الذي يحدث في نمط الاستهلاك المصري الذي يحرم مصر من التمتع بالرخاء والرفاهية ونوعية الحياة الجيدة؟ من خلال عرض التوزيع النسبي لمتوسط نصيب الفرد من الإنفاق السنوي للأسر حسب مجموعات الإنفاق الرئيسية حسب فئات العشرات من إجمالي مصر في عام ٢٠١٥ وهو ما بينه الباحث في الجدول رقم ٨. من خلال تلك الدراسة.

من خلال تحليل الجدول ٨ ، تبين أن المكونات الرئيسية الثلاثة في الاستهلاك المنزلي هي: الأغذية والمشروبات غير الكحولية بنسبة ٢٤,٤ ٪ ، ثم العنصر الثاني هو الإسكان والمياه والكهرباء والغاز وأنواع الوقود الأخرى بنسبة ١٧,٥ ٪ ، والثالث هو الصحة بنسبة ١٠ ٪. وبالتالي ، من أجل تحليل أفضل لنموذج الاستهلاك في مصر ، تم فحص المكونات الرئيسية لصياغة الاستهلاك المنزلي. أيضا من خلال الدراسة قام الباحث بتناول تجرية توزيع إجمالي الدخل السنوي على مجموعات الإنفاق. للقيام بذلك ، اقترح حساب نسبة كل مجموعة من مجموعات الإنفاق إلى إجمالي المجموعات ، ثم ضرب إجمالي الدخل لكل نسبة. ومن كل ما سبق بالفعل تحققت الاهداف التالية:-

(١) فهم نمط الاستهلاك في مصر.

(٢) عرض «الاقتصاد الإسلامي» كبديل للعقائد والنظم الاقتصادية القائمة.

(٣) تصميم إطار للاستهلاك الإسلامي يمكن تطبيقه في مصر.

(٤) استخدام الإطار المقترح لتطوير النظرية الإسلامية لسلوك المستهلك ، والذي سيضيف مفهوم «Rushd» (في مقابل مفهوم العقلانية) في الاقتصاد العلماني) في ضبط نمط الاستهلاك في مصر. وقد تحققت بالفعل من الدراسة الفرضيات التالية وذلك وفقا للبيانات التي قام بتحليلها الباحث ،

(١) الاستهلاك الرشيد في النظام الإسلامي أكثر شمولاً من الاستهلاك الرشيد التقليدي.

(٢) مصر تعاني من الإنفاق والبدخ.

(٣) مستوى الاستهلاك في مصر سيكون أقل إذا تم تطبيق الاستهلاك الرشيد الإسلامي.