The Impact of new governmental food subsidies strategy on customer’s current economic conditions

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Keywords
Egypt, government regulations, food subsidies, customer’s satisfaction, future financial expenditure.

Abstract
Investigating the impact of the new food subsidies strategy applied by the minister of internal trade and affairs after the 2nd revolution on customers’ satisfaction and future financial expenditure. The field study will be done using quantitative approach in order to assess the impact of the new strategy on Egyptian citizen’s current economic conditions. Despite the significant academic and practical interest in food subsidies, this research is the first that investigates the relationships between governmental regulations and citizens’ economic conditions after the 2nd Egyptian revolution. Also, this study contributes in adding to the body of knowledge regarding the relationship between governments’ strategy, Customer satisfaction, and future financial expenditure plan within the Egyptian contexts.

Introduction
Rural poverty is at the core of the Arab countries’ food-security problems. About one quarter of the population of Arab countries is poor, and 76% of these poor people live in rural areas. Poverty rates in rural areas are also dropping more slowly than in urban areas, according to a 2007 report by the Food and Agriculture Organisation. Governments in the Arab countries have historically relied on subsidies to lower the cost of food as the principal means for protecting the poor and sharing wealth. The fundamental problem with subsidies is that they benefit the rich far more than the poor. They are as expensive as they are inefficient, failing to deliver any economic or social value equal to the money spent on them (Ali and Richard, 1996).

The food subsidies programs implemented by the country’s government aims to decrease the prices of goods to be lower than the prices in the free market. One of the food subsidies intentions is to play a positive role of ensuring social stability, thus this role can be debated on. There is a wide range of subsidy types. Direct transfer, where the government gives cash directly to the people. Another type is tax subsidy, where the government reduce the tax, which involves the use of taxes or quotas to limit imports. Implementing a subsidy on food for example will lower the prices of food and therefore leads to increasing the consumption of it (Ali and Richard, 1996).

Many criticisms about food subsidy programs increased in several developing countries because of their large contributions to government budget deficits. The critics claim that because of inappropriate targeting, a huge part of food subsidies is “leaked” to high-income people. Food subsidies programs are necessary to guarantee the supply of necessary basic food to the poor according to supporters of food subsidies. They argue that
poor people spend a greater proportion of income on food than rich, and therefore food subsidies are put to protect the welfare of the economy (Rai and El-Ghobashy, 2014).

Egypt may be an ideal country for testing the food subsidies programs; food policy has been the single most dominant theme of state involvement in Egyptian society for all of recorded history. For decades, Egypt’s food subsidy system has been a mainstay of the government’s long-term policy of promoting social equity and political stability. It has also been a major component of the social safety net for the poor, guaranteeing the availability of affordable staples, helping to reduce infant mortality and malnutrition, and mitigating the adverse effects of recent economic reform and structural adjustment (Ahmed et al, 2001).

The key of success of food subsidy programs lay in the degree to which the program is able to deliver the subsidized food to the target group that is intended to reach. Targeting requires the population as a whole to be screened in order to determine which people should receive food subsidies and which should not. Screening of individuals can be done in two ways, administrative targeting or self-targeting. Administrative targeting let the government agency or bureaucracy to select the receivers of food subsidies, for example select them on the basis of income, or area of residence (Adams, 2000).

Self-targeting takes place when food subsidies are accessible to all, even through the program is targeting only a percentage of the population. Self-targeting can be best implemented correctly when the targeted group for example poor people consume different food items than the rest of the population (Adams, 2000).

Moreover, the extensive production and supply of products is no longer the sole objective of economic activities, achieving the main objectives of the public and private organizations are connected largely to ensuring customer satisfaction. Thus, the main aim of organizations, whether private or public, is to not only ‘sell’ or provide products to consumers, but also to meet the high degree of requirements and needs of them. Generally, the importance of customer satisfaction lies in the recognition of the method and manner in which organizations, whether private or public, create ‘comfort’ among consumers of products, as well as among the suppliers of such products (Noureldeen, 2014).

This paper seeks to capture the impact of the Egyptian governmental strategy regarding the new food subsidies regulations on Egyptian economic conditions. More specifically, the research aims to investigate the impact of the new food subsidization strategy applied by the minister of internal trade and affairs after the second revolution on customers satisfaction and future financial expenditures. The findings of this study will demonstrate the impact of new government regulations on all the variables under investigation. Therefore, these variables have to be taken into consideration by the minister of internal trade as well as the Egyptian prime minister in formulating their future plans.

**Literature Review**

**a) Subsidies System in Egypt**

Egypt has a large, and comparatively complex, food subsidy system. Controls and subsidies on food have been part of Egypt’s social policy for centuries. Since Pharoanic times, the public distribution of grain at subsidized prices was seen as part of the moral responsibility of the ruler and was an important element in the preservation of social stability (Hidrobo, 2014). When they were reintroduced during World War II, they involved only a small share of government resources and were not targeted. The aim was to mitigate the adverse effects of food shortages and inflation. After the 1952 revolution, the food subsidies continued to provide minimum quantities of basic food items for most Egyptians,
with no attempt to target any specific group. Until 1960s the total cost of the food subsidy remained small. By 1970s the system expanded to include more items such as beans, lentils, frozen fish, frozen meat, and chicken. (Hussein, 2014)

Indeed, after this large expansion in the 1960s and 1970s, the system was gradually reformed in the 1980s and 1990s. As part of a broader consumer welfare program that was subsidizing transport, housing, and energy, food subsidies rose to more than 20 percent of government spending in mid-1970s. Because the cost was becoming unsustainable, a cut was attempted in 1977, but it was perceived as “unfair.” Sparking violent riots, it was reversed in a few days (Gutner et al. 1998). Since that time budgetary pressures have forced a considerable “downsizing” of the food subsidy program. In fact, in 1981, reform efforts resumed. Given the political sensitivity, a gradual, measured, and quiet reduction of food subsidies, particularly for baladi bread, was undertaken without much publicity. These measures included targeting ration cards through red cards that offer lower subsidy ratios for higher income beneficiaries, and reducing the number of subsidized foods consumed mainly by higher income groups. The government also controlled the rise in the number of ration card beneficiaries, improved scrutiny application, and reduced subsidies through various techniques through gradually reducing the quantity of a particular subsidized food and in some cases gradually replacing it with a more expensive version. Food subsidy cost was cut to 5.6 percent of government spending in 1996–97, without unrest (Ahmed et al. 2001).

Given the Egyptian government’s objective of reforming the food subsidy system to better target the poor, it is important to understand how was the system of government food subsidy distribution working from 1995 until July 2014. The map of the Arab Republic of Egypt presented in Figure 1 locates the governorates. While, Figure 2 shows the relationship between the distribution of total food subsidy benefits and population by governorates. Cairo receives preferential treatment in allocation of food subsidy benefits. In Dakhalia, Sharkia, Kafr El-Sheikh, and Behera (all in Lower Egypt), the share of population significantly exceeds the share of benefits. In the remaining 21 governorates, benefits are distributed more or less in accordance with population distribution.

![Figure 1: Egypt's Map](image)
Clearly, there is a strong urban bias in the allocation of food subsidies in Egypt. At the time of the 1996 census, 57 percent of the Egyptian population lived in rural areas, but only 30 percent of total food subsidies were allocated to rural areas. Recent poverty estimates for Egypt show a higher incidence of poverty in the rural areas than in urban areas (Datt, et al 1998; Cardiff 1997; INP 1996). A major reason for the difference in the allocation of benefits to urban and rural areas is that much higher quantities of subsidized baladi bread are made available to urban dwellers. There are two probable reasons for the urban bias: (1) many rural households are producers of wheat and other staple foods, and therefore they are perceived to depend less on purchased food staples than do their urban counterparts; (2) for political stability, it is important to keep bread prices low for urban consumers (Ahmed et al. 2001).

Further changes were introduced, yet food subsidies remain costly and fail to reach many of the poor and vulnerable. Since 2005, there have been changes in the eligibility criteria; the number and prices of ration card food items, and the production and distribution of baladi bread. But, the system is still costly, accounting for almost 2 percent of GDP and suffering from large leakages. Baladi bread subsidies, the largest component of food subsidies, are open to all Egyptians, and ration cards cover more than two-thirds of Egyptians. If the system were to target specific groups, the swings could be huge (World Bank, 2010).

Indeed, as Egyptian political systems have succeeded, the feeling that the government is ethically bound to provide bread, food and basic goods like fuel at affordable prices grew more inherent. Following a series of financial crises that have befallen the Egyptian government in recent decades, attempts have been made to remove or lower subsidies sufficiently to lower the public budget deficit. It seems that previous policies failed to direct goods subsidies to the poor and those in real need. Reticence to reopen the subsidies file has complicated attempts at fiscal reform in Egypt, especially after many Egyptians saw subsidies as an acquired right. The new Egyptian government will likely be more able to face the expected protests against the reduction of subsidies — especially fuel subsidies — and price increases (Noureldeen, 2014).

Egyptian food subsidy program was a self-targeting program rather than administrative. The self-targeted program means that the food is available for all, but the program aims to target certain people only. One of the major programs of the Egyptian subsidy system that made it hard to calculate the size of these subsidies is that the official government budget did not include or list the subsidy in it. For example, when the water is sold at less than the cost of production, these losses are listed on the accounts of the production companies not on the government budget. However, food subsidies in Egypt
have always been included in the government budget since most of the items are imported like wheat and flour (Adams, 2000).

Given that the Egyptian food subsidy system was mostly untargeted, the evidence that the distribution of benefits is not skewed toward any particular income group is not surprising. However, this pattern also suggested that a significant proportion of subsidy benefits accrue to the non-needy. As a result, the past food subsidy system in Egypt represents an expensive means of improving food security and nutrition of the poor. The value of total benefits from the food subsidy system going to the non-needy was LE 1,933.5 million, or about one-half of total food subsidy costs in 1997-32 Combining the system leakage with targeting inefficiency, the results reveal that only about one-third of the total food subsidy paid for by the government (LE 1,224.4 million in 1997) goes to the needy, of which benefits from baladi bread account for 64.9 percent; wheat 12.8 percent; sugar, 12.2 percent; and cooking oil, 10.1 percent (Ahmed et al, 2001).

The Egyptian food subsidy is costly; it consists of two programs, baladi bread which is available to anyone for purchase, and ration cards which includes fixed monthly quotas for the necessities available to card holders. In 2000/2001 the fiscal cost of food subsidies were around 0.9 per cent of GDP, and then in 2008/2009 it reached two per cent of GDP. A huge portion of the food subsidies is diverted away from the intended users. Examples of system leakages are: baladi bread was used as animal or fish feed, and reselling subsidised foods in black market. Statistics showed that if these leakages are eliminated, the Egyptian government could save up to 73 per cent of the cost of food subsidies. Another issue was that the food subsidy reached urban areas more than rural areas especially Cairo (World Bank, 2010).

As seen the food subsidy system has several advantages, in spite of these advantages the reform process is needed. In spite of several positive aspects of the food subsidy system in Egypt, mainly its significant poverty reduction impact; there is hard evidence on the large losses in the subsidy bill, whether in terms of leakages to non-intended beneficiaries or benefits received by non-needy groups. International experience shows that Egypt’s system is not different from universal subsidies and ration programs all over the world. They are all vulnerable to leakages, suffer from errors of inclusion and of exclusion, and are biased toward urban populations (World Bank, 2010).

Therefore, Egypt should benefit from other countries “good practices”, on which there is a great deal of consensus. These good practices adopted a wide range of reform methods: i) elimination or phasing out such as Mexico’s Tortivales (Free Tortilla) program, and Bangladesh’s Palli rationing scheme; ii) reorganization of the system such as introducing targeting in the case of the Public Distribution System (PDS) in India; iii) drastic changes of the types of commodities distributed and the populations covered, such as in Tunisia; or iv) replacement by other programs, such as the rice ration program in Sri Lanka, which has been replaced by a food stamp program. Currently, only a few countries have universal food subsidies, but all have discussions on reforms (World Bank, 2010). Comparing Egyptian system with universal subsidies, there is no difference and all systems are exposed to leakages and suffer from errors of inclusion and of exclusion, and are biased to urban areas more than rural areas.

Moreover, the Egyptian government’s food subsidy program is designed to protect the most vulnerable from shocks such as rising food prices, but only 30 percent of Egyptians really need this protection while more than 70 percent receives it. While the food subsidies did succeed in preventing an even more dramatic spike in poverty during the recent
succession of crises, the program is very expensive and not well targeted to those who need it most (Hussein, 2014).

After the second revolutionary wave in June 2013, there was a massive need to cut government spending on subsidies to reduce the deficit in the government annual budget plan. Egypt's subsidy problems became particularly urgent. Egypt spends close to 10% of its GDP on subsidies, and almost everyone agrees that the subsidies are not effective at reaching the poorest of the poor. Therefore, in July 2014 Egypt introduced a new food subsidy system nationwide in an attempt to terminate the leakage and waste previously found. Starting with the Baladi Bread, according to Egypt’s minister of Supply, Dr. Khaled Hanafi, he clearly stated that the new smart card system provides each citizen with 150 loaves of bread a month for 5 piasters (less than 1 U.S. cent) per loaf (Rai and El-Ghobashy, 2014).

As for the food subsidy system aside from the bread, the minister announced that he is going to modify the food subsidy system in order to widen the range of goods offered to consumers who are holders of the new smart card. The new system is a cash transfer system as each smart card holder can get a certain number of points related to the number of family members and each commodity will be worth a certain number of points (Farid, 2014).

To implement the new food subsidy system, the government should first finish with introducing the smart cards. These smart cards should be known and understood by every citizen, and each citizen should hurry up to have one. The budget allocation to this food subsidy system is 13 billion EGP in fiscal year 2014/2015 compared to 10 billion EGP in fiscal year 2013/2014. According to the Ministry of Finance these smart card benefited around 67 million citizens, which is around 80% of the population (Farid, 2014).

According to Dr. Khaled Hanafi the new modified food subsidy system will gradually eliminate the non-needy from the system, this will happen by using income based criteria when making the smart card to citizens. This will enable the poor to receive more benefit without increasing the burden on the budget. Another benefit from the system is improving the quality of the subsidized products and the way the service is provided. By this one can say that the objective of the subsidy system is reached, where the targeted group is reached, providing necessary food commodities to them, protecting them from hunger and malnutrition. Indeed, this new subsidies system may indirectly contribute to malnutrition, as they keep the prices of rationed, calorie-dense foods far below market prices, increasing the relative costs of non-subsidized, often more nutritious, foods (Hussein, 2014).

b) Customer Satisfaction and Expenditure Level

The main concern of the Egyptian government is to provide food for the poorest people, who are due to lack of income or extremely low income cannot ensure their daily subsistence. In fact in Egypt, the main manner in which the state helps the categories of the population below subsistence is by offering subsidized, energy and other essential services like electricity. “Satisfaction is the customer’s fulfillment response. It is a judgment that a product or service feature, or the product of service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment” (Oliver, 1997).

From a macroeconomic perspective, it is argued that while productivity measures the quantity of economic output, customer satisfaction measures the quality of economic output (Fornell, et al, 1996). Clearly, consumption will not be sustainable if the quality of output is compromised. Despite this logic, some economists have questioned whether there is a link between overall customer satisfaction and economy-wide consumer-expenditure trends
(Hilsenrath and Freeman, 2002). Their doubt is most likely attributed to the assumption in the economic theory of consumer behavior that regards one unit of satisfaction from a particular consumption package as being independent of the satisfaction derived from other consumption units.

Some studies suggest that as income increases, consumers tend to become more critical of the goods they consume and harder to please (Anderson et al. 2008). Morgeson et al. (2011) further investigated this influence at the national level and found that consumers in societies with a higher per capita income tend to express lower satisfaction with goods and services. The authors explain, “Consumers, as their wealth grows with the nation’s economy (over long periods of time), gradually become more demanding”

Moreover, customer satisfaction plays a crucial role in determining consumption expenditure in Egypt. Indeed, the maximum satisfaction that consumer obtains from the consumption of various goods and services that they purchase, at a certain level of income (budget). In fact, when undertaking expenditure, consumers first of all decide whether to incur in such cost by comparing their purchase with other opportunities in other industries, then they decide on the goods and services to buy based on the goods and services offered on the market and the budget available. Expenditure is therefore a consumer choice between goods and services within various industries (Zheng and Zhang, 2011). Consumers are assumed to be able to rank goods and services, in such a way that they are able to select the particular combinations for which their utility function takes the largest value, at a certain level of income (budget).

This implies that the budgeting procedure by which individuals allocate their incomes among different goods and services is composed by two stages (Deaton and Muellbauer, 1980): first, the individual decides in which broad commodity groups (like, food, housing, clothes, etc.) to allocate its income; second, the individual decides which goods and services he/she wants to buy within each group without any reference to the expenditure in the other groups.

Finally, high customer satisfaction should indicate loyalty for current customers, reduced price elasticity, insulation of current customers form competitive efforts, lower costs of future transactions, reduced failure costs, lower costs of attracting new customers, and an enhanced reputation for the firm” (Anderson et al., 1994).

According to previous studies and research mentioned above the following hypothesis was developed:

**H1: The increased customers’ satisfaction from the new food subsidies strategy negatively relates to future financial expenditure.**

The hypothesis shows two variables, the customers’ satisfaction from the new subsidies strategy as a dependent variable, and the future financial expenditure as an independent variable. The model below in figure 3 explains the relationship between the variables.
Data and Methodology

a) Research Design

This study investigates the impact of new governmental food subsidies strategy on consumer’s satisfaction and its effect on future financial expenditure by using a descriptive and analytical methodology. The field study will be done using quantitative approach in order to assess the impact of the new strategy on Egyptian customer satisfaction. A well-structured questionnaire was distributed randomly to cardholders of food subsidies to obtain primary data from the respondents. The Questionnaire results will be then entered manually to Statistical Package for Social Science (SPSS) Version 20. Several analytical techniques using the SPSS will be used to assess the relationships among the variables under investigation such as split analysis, reliability analysis, correlation, ANOVA and regression.

b) Sample of the study

A simple random structured questionnaire is distributed in Alexandria. 1000 questionnaires were distributed as a hard copy to be filled manually throughout different areas in Alexandria. To reach the smart cardholder, the questionnaire was distributed in front of the outlets selling subsidized food items.

c) Questionnaire Structure

The Questionnaire is divided into three sections. The first section consists of seven questions; each question targeted a specific concept. The first question tests the degree of satisfaction of the consumer towards the distributional channel of the food subsidies in Egypt specifically in Alexandria. The second question investigates the customer’s satisfaction towards the concept of food subsidies. The third question explores customer’s satisfaction towards the new prices of food subsidies. The fourth question tests customer’s satisfaction towards the quality of the products after the new food subsidy system is implemented. The fifth and sixth questions are about the types and variety of the products available for the customers and whether these products are fulfilling their needs or not. Lastly the seventh question investigates the customer’s reaction towards the timing of introducing the new food subsidy strategy. The second section, consists of demographic questions, such as gender, age. Also includes the time of dealing with food subsidies, education level of the customers, and their monthly income. The third section consists of five questions about the customers’ future financial expenditure.

Five-point Likert scale was used to answer questions. It should be noted that the questions use mainly as a scale of measurement the continuous scale 1-5 (1 - very dissatisfied, bellow my expectations and 5 - very satisfied, over my expectations).

d) Research Analysis Tools

Several analytical techniques using the SPSS will be used to assess the relationships among the variables under investigation such as split analysis, reliability analysis, correlation, ANOVA and regression. Split analysis is done by, splitting the data got from the questionnaire; in this case splitting the questionnaires collected by gender. By splitting the questionnaire to male respondents and female respondents, then seeing the average of each of the other four demographic questions (Age, time dealing with food subsidies, educational level, and monthly income) in each. The split analysis will show if the gender plays a role in changing out outcome results. Reliability analysis is measured by Cronbach’s alpha, to see whether the questionnaire is reliable or not. This test will be done on the seven questions testing the customer satisfaction, and for the 5 questions testing the future financial expenditure. Correlation analysis tests if there is a relationship between the variables. The coefficient indicates if this relationship exists significantly and whether it is positive or
negative. The analysis of variance (ANOVA) analyses the differences between variables and shows if the model is significant or not. Finally, factors analysis will be used to extract a new variable affecting consumer’s satisfactions and current economic conditions.

Analysis & Findings

a) Descriptive analysis

Descriptive Statistics was done in order to describe or to have a better understanding of the sample respondent. The sample respondents’ frequencies are shown in figure 1, it included 36.0% males and 64.0% females. It was found that 28.5% of the sample belonged to age group 20-30 years, 26.5% of the sample belonged to age category 30-40 years, 21% to age group 40-50 years, and 24% were 50 years old or above.

The time of dealing with food subsidies of the respondents, 5% were less than 1 year, 30.5% were between 1 to 3 years, 28.5% were 3 to 5 years, 30.5% were 5 to 7 years, and 5.5% were 7 years or above. These statistics are also shown in table 1. The respondents’ education level, 16% were equal to secondary education or equivalent, 33% were not educated, 20.5% hold university degree, 30.5% were semi-educated, and these are shown in table 1. Monthly income of the respondents were divided into categories shown in table 1, 18.5% the respondents’ income was less than 500L.E, 50.5% were between 500L.E to 1000L.E, 13% their income ranged between 1000L.E to 1500L.E, and 18% ranged from 1500LE or above.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Percentage of participation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>36%</td>
</tr>
<tr>
<td>Female</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>20 to 30 years</td>
<td>28.5%</td>
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<tr>
<td>30 to 40 years</td>
<td>26.5%</td>
</tr>
<tr>
<td>40 to 50 years</td>
<td>21%</td>
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<tr>
<td>50 years or above</td>
<td>24%</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>5%</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>30.5%</td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>28.5%</td>
</tr>
<tr>
<td>5 to 7 years</td>
<td>30.5%</td>
</tr>
<tr>
<td>7 years or above</td>
<td>5.5%</td>
</tr>
<tr>
<td><strong>Time of dealing with food subsidies</strong></td>
<td></td>
</tr>
<tr>
<td>Secondary education or equivalent</td>
<td>16%</td>
</tr>
<tr>
<td>Not educated</td>
<td>33%</td>
</tr>
<tr>
<td>University Degree</td>
<td>33%</td>
</tr>
<tr>
<td>Semi educated</td>
<td>30.5%</td>
</tr>
<tr>
<td>Less than 500 L.E</td>
<td>18.5%</td>
</tr>
<tr>
<td>500L.E to 1000L.E</td>
<td>50.5%</td>
</tr>
<tr>
<td>1000L.E to 1500L.E</td>
<td>13%</td>
</tr>
<tr>
<td>1500L.E or above</td>
<td>18%</td>
</tr>
</tbody>
</table>

Table 1: Demographics Frequencies

The split analysis was done and shown in table 2, divided gender to male and female. Male respondents age average came out to be 2.56. This means that the average male respondents were from category 2 (30 to 40 years) and category 3 (40 to 50 years). The average time of dealing with food subsidies of male respondents was 2.62. This shows that average male respondents were from category 2 (1 to 3 years) and more from category 3 (3 to 5 years). The average educational level for male respondents was 2.68. This explains that the average male respondent’s educational level was from category 2 (not educated) and more from category 3 (hold university degree). Monthly income average for male respondents was 2.22. Showing that the average monthly income for the male was from category 2 (500L.E to 1000L.E) and category 3 (1000L.E to 1500L.E).

As for the female respondents, the average age was 2.32, which lies in category 2 (30 to 40 years) and category 3 (40 to 50 years). Average time of dealing with food subsidies for
female was 3.23, which reflects category 3 (3 to 5 years) and category 4 (5 to 7 years). The educational level average for female respondents was 3.25, which again lies in category 3 (Hold university degree) and category 4 (semi-educated). Lastly the monthly income average for female respondents was 2.35, which reflects category 2 (500L.E to 1000L.E) and category 3 (1000L.E to 1500L.E).

<table>
<thead>
<tr>
<th>Male</th>
<th>Mean</th>
<th>Female</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>2.56</td>
<td>Age</td>
<td>2.32</td>
</tr>
<tr>
<td>Time dealing with food subsidies</td>
<td>2.62</td>
<td>Time dealing with food subsidies</td>
<td>3.23</td>
</tr>
<tr>
<td>Educational level</td>
<td>2.68</td>
<td>Educational level</td>
<td>3.25</td>
</tr>
<tr>
<td>Monthly income</td>
<td>2.22</td>
<td>Monthly income</td>
<td>2.35</td>
</tr>
</tbody>
</table>

*Table 2: Male and Female Mean Demographics*

b) Analytical analysis

The questionnaire was tested for reliability by using reliability analysis. The reliability is measured by Crannach’s alpha. Cronbach’s alpha is considered significant if it is 0.60 or above. The results are shown in table 3. The reliability analysis showed high reliability, since all coefficients were higher than 0.60. This indicated that all customers understood the questionnaire in the same manner.

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>0.815</td>
</tr>
<tr>
<td>Future financial expenditure</td>
<td>0.933</td>
</tr>
</tbody>
</table>

*Table 3: Cronbach’s Alpha*

There is a strong negative significant correlation between customer satisfaction and future financial expenditure shown in table 4.

<table>
<thead>
<tr>
<th>Customer satisfaction</th>
<th>Future financial expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient Correlation</td>
<td>-0.709</td>
</tr>
<tr>
<td>Sig. (2 tailed)</td>
<td>000</td>
</tr>
</tbody>
</table>

*Table 4: Correlation*

The adjusted R-squared is 0.721, which means that 72% of the variation in future financial expenditure is explained by customer satisfaction, this is shown in table 5. The analysis of variance (ANOVA) shows if the model is significant or not. The results in table 5 below showed that the regression model is significant. The coefficient showed a significant negative relation between customer satisfaction and future financial expenditure shown in table 5.

<table>
<thead>
<tr>
<th>Adjusted R-squared</th>
<th>0.721</th>
</tr>
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<tbody>
<tr>
<td>ANOVA</td>
<td>0.000</td>
</tr>
<tr>
<td>Coefficient</td>
<td>Beta</td>
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<td></td>
<td>Sig.</td>
</tr>
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</table>

*Table 5: Regression Results*
Results
This study showed that 800 questionnaires out of the 1000 questionnaires were valid and used in the analysis. The descriptive results showed that the respondents were mostly females. The age category range was almost the same for all categories. For the time of dealing with the food subsidies, the highest percentages were in categories 2 (1 to 3 years) and 4 (5 to 7 years). As for the educational level of the respondents most of them were either not educated, semi educated or hold university degree. Half of our sample, which we can say 400 respondents’ monthly income was between 500L.E and 1000L.E. When the split analysis was done, the interesting result that came out was that the female respondents, who had the majority of the sample, had longer time frame of dealing with food subsidies than male.

Moreover, the analytical results showed that there is a strong negative significant correlation between our two variables customer satisfaction and future financial expenditure. The model was proved to be significant and showed a significant negative relationship between the variables using ANOVA and coefficient. Lastly, the results showed that a high percentage of the variation in future financial expenditure is explained by customer satisfaction.

Discussion and Summary
Major reforms of the food subsidy system are currently a high priority to the Egyptian government; there is significant interest both inside and outside the government for the food subsidy system to perform in a more cost-effective and efficient manner that better targets subsidies to the needy. The government therefore has time to devise programs with long-term impact. The goal of this research is to capture the impact of the Egyptian governmental strategy regarding the new food subsidies regulations on Egyptian economic conditions. More specifically, the research aims to investigate the impact of the new food subsidies strategy applied by the minister of internal trade and affairs after the second revolution on customers satisfaction and future financial expenditure. The results showed that the impact of the new governmental food subsidies strategy increased the customer’s satisfaction, which lead to decreasing their future financial expenditure. Furthermore, the Egyptian government is helping people by offering the subsidised goods, to increase their satisfaction. As the results showed that as the customer’s satisfaction increased due to the new food subsidies system, customers’ future financial expenditure decreased. The future financial expenditure decreased since the amount of money that they used to pay for a certain amount of goods decreased. Customers after the new food subsidies system can now be able to receive better quality of the products, a variety of different products, and with lower prices. As a results, the increased customer’s satisfaction from the food subsidies system lead to lower future financial expenditure. Finally, this was only the first step taken by the Egyptian government. In Egypt, the subsidized issue is highly politicized, numerous options exist that can simultaneously strengthen the social
safety net, while reforming the system so that it more effectively reaches the poor and has a reduced impact on government expenditures.

**Direction for Future research**

Based on the findings of the study, future research may replicate the same study on different cities. It will be useful to test the same model using different respondents from different areas in Egypt. Future research may also consider using different variable other than future financial expenditure, for example see the effect of the customers’ satisfaction with saving. Another future research can look change the dependent variable and view this idea from the producers’ point of view about the new governmental food subsidies strategy.

**References**


Hussein, M., 2014. Egypt to modify food subsidy system within three months. *Ahram Online.* Available at:


