Consumption Pattern of Different Commodities in Pakistan

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Abstract

The aim of this research is to analyze the “Consumption Pattern of Different Commodities in Pakistan” using the cross-sectional data taken from the household integrated Economic survey. This paper aims to analyze that what is the impact of per capita consumption on different household income group in Pakistan. In particular, per capita consumption of eleven (11) different variables with respect to different income groups. Ordinary least square method was used for the estimation of each equation for each variable. In the purpose of estimating this, different income groups were taken and identified the exact relationship between average incomes per household to the average expenditures per household since in the estimation of equations per capita consumption of each income group calculated respect to per capita income, so the formation of different equations were determined. Per capita income (PCY) becomes independent of the unit of observation. Since, each household faces the same commodity prices prevailing at the time of household survey, for the purpose of analysis, total consumption expenditure has been disaggregated in to 11 commodity groups listed in table. The table indicates that value of R-squared is high and the coefficient have correct signs and are significant at 1 percent level of significance, at 5 percent level of significance and at 10 percent level of significance. Overall results explain that with the increase in income expenditure increase for luxuries and decrease for necessities, but it will differ in rich and poor. Finally it is found that poor people consume more on necessities and rich people consume on luxuries as their income increase.

Keywords: per capita income, per capita consumption, variables, ordinary least square.
Introduction

The purpose of this study explains that how can we spend more or less within the increase or decrease in income. When income increases poor people increases their spending on necessary goods, while rich people increases their spending on non-necessary goods.

When income decreases spending of both poor and rich decreases. The main point which was discussed in this paper to check overall share of expenditure on different household income groups in Pakistan. Rather household refers to a single person or a group of person who normally live and eat together.

Engel presented an empirical law more than hundred years ago. According to empirical law within an increase in income, the share of expenditure on food items in overall household expenses tend to decrease, while the expenditure on clothing, fuel, and lightning remains constant, and on luxury goods increases. Since then different studies presented for the post developed and developing countries have fulfilled Engel’s law.

Consumption can be defined as the amount of money that spends on those things which derive direct satisfaction, while constructing the level of consumption the most important factor is income level. There some other variables like income distribution, division of assets, size of household, prices, geographical difference can also affect the level of consumption in this study, variations in consumption of different items have been explained in terms of total expenditures, per capita consumption, per capita income and household size.

The research of consumer responsiveness to changes in income and relative prices was carried out in a single equation model. Ordinary least square (OLS) method has used for regression analysis of each variable.

It provides us a correct measurement of regression analysis and gives an exact response to change in both income and relative prices.

So the main purpose of this study is to investigate the changes in the level of consumption within the increase in income level.

Food prices are considered the most important determinant of total expenditure and as a demand for other commodities. Unfortunately education is considered one of the items on which household consume less their spendings. In the Household Integrated Economic Survey (HIES) the literacy was calculated for the population of five years not for the ten years. It does not give more detailed account of expenditure on education and also not collected information for each individual.

Government’s efforts are required to enhance the literacy rate by increasing the allocation of resources to the education sector.
Review of Literature

In this study, variation of different consumption items have been explained in term of total expenditure Per capita consumption, per capita income and household size.

Burney and khan (1991) concluded the house hold consumption level separately for the rural and urban sectors on Pakistan by calculating the marginal expenditure shares and consumption destinations for 12 commodities groups by using the household data of 1984-85.

Cheema and Malik (1985) examined the changes in the pattern of consumption and employment under alternative income distribution in Pakistan.

For this study data was taken from (HIES) 1979. The result shows that when income redistribution will be in the favor of lower income the demand of basic necessities. The result shows that the consumption pattern of the poor household can be increased within the redistribution of income without greater effect of rich. The effects of employment are also seems to be positive. In (1982) Siddique explored the level of consumption in Pakistan. He used the data taken from the different issues of the HIES (1968-69) author used weighted least sequence. The aim of his study was to test the validity of Engel’s law with data of Pakistan. The very important points that Engel’s law is contradicted by Pak’s study. In case of clothing housing and lightening and fuel. Shahnwaz (1982) analyzed the level of consumption in Pakistan. He done his analysis with the heel of Engle elasticity’s and ratios as obtained through the summary of current economic condition on Pakistan (HIES).

Author also examines the expenditure share denoted to food and non food items while the result was the expenditure on food item decreases within the increasing level of house hold expenditure while the expenditure share increases for non food items.

Methodology

When analyzing income and consumption pattern, we need to consider the different source of income. The percentage contribution of income source is compared with those calculated for the Household integrated economic survey (HIES) report.

Income source is directly related to the pattern of consumption when income increases the consumption on luxuries that lowers the income. But, when income decreases consumption is only for necessities in case of high income, people consume high. While in case of low income, consumption is going to decrease.

In the purpose of calculating this, we like different Income groups and identify the exact relationship between average incomes per household to the average expenditures per household.
Since, in our estimation equation, we calculate the per capita consumption of each income group with respect to per capita income. So the formation of equation is determined here as:

\[ P_{cci} = \alpha + \beta \text{PCY} \]

The term PCY refers to the per capita income and becomes independent of the unit of observation. Since, each household faces the same commodity prices prevailing at the time of the household survey,

In our equation,

- \( P_{cci} = \) per capita consumption of eleven (11) income groups
- \( 1 \) stands for different variables like food, clothing, footwear, Rent, fuel and lightning personal care, medical care, education
- Recreation, transport and other miscellaneous etc

These are found to be income elastic as well as fairly sensitive to the changes in prices. Here

- \( P_{ccf} = \alpha + \beta \text{PCY} \)
- \( P_{ccf} = \) per capita consumption of food
- \( P_{ccf1} = \alpha + \beta \text{PCY} \)
- \( P_{ccf1} = \) per capita consumption of fuel and lightning

- \( P_{ccm} = \alpha + \beta \text{PCY} \)
- \( P_{ccm} = \) per capita consumption of miscellaneous
- \( P_{ccc1} = \alpha + \beta \text{PCY} \)
- \( P_{ccc1} = \) per capita consumption of clothing
- \( P_{ccfw} = \alpha + \beta \text{PCY} \)
- \( P_{ccfw} = \) per capita consumption of foot wear
- \( P_{ccmd} = \alpha + \beta \text{PCY} \)
- \( P_{ccmd} = \) per capita consumption of medical care
- \( P_{ccct} = \alpha + \beta \text{PCY} \)
- \( P_{ccct} = \) per capita consumption of transport
- \( P_{ccp} = \alpha + \beta \text{PCY} \)
- \( P_{ccp} = \) per capita consumption of personal care
- \( P_{ccr} = \alpha + \beta \text{PCY} \)
- \( P_{ccr} = \) per capita consumption of recreation
- \( P_{ccrn} = \alpha + \beta \text{PCY} \)
- \( P_{ccrn} = \) per capita consumption of rent on housing
- \( P_{cce} = \alpha + \beta \text{PCY} \)
- \( P_{cce} = \) per capita consumption of education

Data

In order to examine the consumption pattern of different income groups we divided total consumption expenditure into eleven groups. This study is primarily based on the cross...
sectional data given in the “household integrated economic survey”. The secondary data taken from this survey have been classified by income groups.

It only distinguished among incomes coming from primary occupation, secondary occupation and other work.

There were also some changes in the consumption section. For most consumption items, the recall period was the last month. It does not considered the last weeks.

In the House-hold integrated economic survey (HIES) the literacy was calculated for the population of five years not for ten years. It does not give more detailed account of expenditure on education and also not collected information for each individual.

Result:

The study is based on household integrated economic survey for the purpose of analysis, total consumption expenditure has been disaggregated into 11 commodity groups, listed in table.

Table:

<table>
<thead>
<tr>
<th>Commodity Group</th>
<th>t-ratio (computed)</th>
<th>R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>PCCF 312.09</td>
<td>0.152</td>
</tr>
<tr>
<td>Fuel and Lightning</td>
<td>PCCFL 40.095</td>
<td>0.026</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>PCCM 37.406</td>
<td>0.068</td>
</tr>
<tr>
<td>Clothing</td>
<td>PCCCL 26.357</td>
<td>0.02</td>
</tr>
<tr>
<td>Foot Ware</td>
<td>PCCFW 9.668</td>
<td>0.007</td>
</tr>
<tr>
<td>Medical care</td>
<td>PCCMD 26.28</td>
<td>0.017</td>
</tr>
<tr>
<td>Transport</td>
<td>PCCT -7.403</td>
<td>0.037</td>
</tr>
<tr>
<td>Personal Care</td>
<td>PCCP 21.009</td>
<td>0.015</td>
</tr>
<tr>
<td>Recreation</td>
<td>PCCR -1.381</td>
<td>0.003</td>
</tr>
<tr>
<td>Rent</td>
<td>PCCRN -4.214</td>
<td>0.134</td>
</tr>
<tr>
<td>Education</td>
<td>PCCE -9.069</td>
<td>0.041</td>
</tr>
</tbody>
</table>
The table indicates that value of R-squared is high and the co-efficient have correct signs and are significant at 1 percent level of significance, at 5 percent level of significance and at 10 percent level of significance.

The negative intercept in some equations, which implies a positive co-relation between the average propensity to consume and the increase in income, highlights the inadequate availability of these items, identifies them as superior goods. The negative intercepts of transport, recreation, rent and education shows that with the increase in come consumption expenditures of these variables increase for rich people and decrease for poor people. When income decreases consumption expenditures decrease for both rich and poor people. Because poor increase their consumption firstly on necessaries.

R-squared is the co-efficient of determination. As its values are high consumption of food has 83 percent variations around its mean. Other variables like fuel, miscellaneous, footwear and medical has 93% and 63% variations. Recreation and education has 84% and clothing, transport, personal care and rent has 92% variations around their mean.

Conclusion

The purpose of this study has been analyzed the “consumption pattern of different commodities in Pakistan”, using the cross-sectional data taken from the household integrated economic survey. In particular we have examined the per capita consumption of eleven (11) different variables with respect to different income groups. Here, we use ordinary least square method (OLS) for the estimation of each equation for each variable. Expenditures increase for luxuries and decrease for necessities, but it will differ in rich and poor. Finally it is found that poor people consume more on necessities and rich people consume more on luxuries as their income increase.

References


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