
THE PRICE EFFECT ON POPULATION CONSUMPTION DEMAND

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Abstract

In this article, the authors are concerned with the correlation between prices and household consumer demand. In this regard, statistical data sources are analyzed in order to provide information on the size, dynamics and structure of consumption. The research analyzes the particularities of different categories of households and consumers (employees, employers, free-lancers, workers in agriculture, etc.). It is analyzed the situation of the household head, household structure, as reflected by its members. The authors describe the main documents used for data collection and research methodology applied.

Key words: price, demand, household, information, goods

JEL Classification: E21, E31

Introduction

Statistical characterization of the size, structure and dynamics of consumption, as a mass phenomenon, is based on a statistical information system (S.I.S.) integrated to the economic information system (E.I.S). In the statistical information system there is an informational subsystem appropriate to the nature and specificity of consumption. Thus, the organization and operation of this statistical information subsystem is managed by a central direction within N.I.S. and, territorially by specialized services in this area.

Collection of statistical data to characterize household consumption is generally based on the Household Budget Survey (HBS), Quality of Life Survey (QLS), Health Survey (HS) time use survey (TUS) provided by N.I.S. There are also used observations recorded during the census information provided by the statistical service, the balance sheets of banking institutions and insurance undertakings and statements by the Ministry of Finance on the work of family associations and self-employed persons, information on funds considered to be achieved within hidden activities.

Another source of data useful for analyzing and forecasting household consumption is represented by income tax statements. Information provided by these statements, having a high degree of authenticity and truthfulness, can be correlated and used (in the event of distortion) so the correct data on household incomes of using the HBS method and layering households under survey to enhance the representativeness of the sample households.

One feature worth mentioning in statistics of household consumption is the fact that the production information is based mainly on selective observations and not on debt observations because they do not provide efficient information in real time, and the costs of an well-organized survey are smaller than of the exhaustive observation.

Literature review

Aisen and Veiga (2013) discuss on the effects of political instability on economic development and growth. Anghelache, Niță and Badiu (2016) analyze the inflation phenomenon at the level of the Romanian economy, previous analyses on a similar topic are presented by Anghelache, Anghelache, Dumitrescu, Dragomir, and Soare (2015), Anghelache, Gheoghe, Manole, Fetcu (Stoica), Ciocan (2012). Anghelache, Manole and Anghel (2015) evaluate the influence of consumption on the Gross Domestic Product, through regression. Anghelache, Voineagu, and Gheorghe (2013) describe the framework of inflation measurement and analysis. Baron, Biji et.al (1996) is a reference work in the field of statistical research. Becker (2006) focuses on the study of the modern consumer behavior, Ekström (2003), Perkins, Forehand,, Greenwald, and Maison (2007) develops on a close topic. Chaudhuri and Majumdar (2006) approach the issue of conspicuous consumption. Dobrodolac (2011) covers the usefulness of econometric models' forecasting capability as management support instrument. Eekhoudt, Gollier and Schlesinger (2005) approach the economic and financial decision-making proces under the impact of risk. Rolsky, Schmidli, Schmidt and Teugels (2009) describe the usefulness of stochastic processes in insurance and finance modeling. Turnovsky (2000) is preoccupied with the macroeconomic dynamics.

Research methodology

Household Budget Survey (HBS), initiated in 2000 is a continuous investigation and is the main instrument for assessing the income, expenditure and consumption. The investigation is based on concepts and definitions harmonized with European standards, but also with Romanian legislation and respond to stringent requirements on completeness, consistency and comparability of data.

HBS is a N.I.S. research can provide detailed analysis of economic and social situation of the population. The information collected allows identification of households and disadvantaged people or those discouraged to substantiate adequate social protection programs and identifies social inequalities, poverty incidence and profile.

In research are summarized households from all categories: employees, employers, self-employed in non-agricultural activities, members of cooperatives non-agricultural self-employed in agriculture, members of farming associations, contributing family, unemployed, retirees, students, housewives, and other categories (preschool, elderly, disabled, dependents, etc). Household employment to one of these categories is determined by the household head main employment status.

Head of the household, usually the husband, is a declared adult and is recognized by other members of the household. The decision belongs exclusively to the household members and is also considering personal characteristics, such as authority, age, occupation, income, ownership of household etc.

Head of the household, based on the activity developed and on how is obtaining revenue, from the standpoint of occupational status can be:

- The employee is an employed person under labor contracts, on determined or undetermined period, in an economic or social unit, regardless of its ownership form, in return for a payment as wages in cash or in kind and of other rights granted by law or established by the collective bargaining agreement that are subject to taxation, according to legal provisions. Are included all individuals who develop permanent, seasonal, daily, occasional or hourly disciplines activities, paid employees on probation, priests and pastors and professional caregiver, caregiver at home for the elderly, personal assistant or the professional personal assistant of the disabled person employed with individual labor contract;

- The owner is a person who carries on the business in his own unit, a firm, shop, company, office, cabinet etc. and has one or more employees and at the same time are also employed in own enterprise or are holders of tenancy management or employees who use concession;

- Self-employed in non-agricultural activities is the person who carries out such activities in their free time on his own unit without using wage labor;;

- A member of a non-agricultural cooperative – a person who is conducting activities in handicraft cooperatives consumer or credit units, without using wage labor and also people working at home, based on orders of the cooperative;

- The Self-employed in agriculture - a person who works his land, orchards, vineyards, taking care of livestock, develops agricultural activities,

either alone or together with other members of the household, whether they are main activities or activities performed occasionally and without continuity, but from which they get an unemployment income;

- Member of an agricultural association - the person who operates an agricultural association with legal entity;

- Family aid - a person practicing in an economic family unit with agricultural or non-agricultural activity, belonging to a household member or relative, whom helps, but is not receiving remuneration in the form of salary or payment in kind (such as an employee performing the same work);

- An unemployed person is a person aged between 15 years and the statutory retirement age, able to work, but is not employed and is looking for a job (including the first job) and is ready to start immediately work whether is registered or not at territorial employment agencies, receiving or not unemployment benefits;

- Retiree - a person whose main source of income acquired is the pension for work and age limit (including for work in agriculture) for loss of working capacity or successor's pension, pension for disabled, orphaned or widowed by war;

- A student - a person attending classes at a public or private school, primary, secondary, high-school, vocational, of forman, post high-school, on short or long-term, in order to be trained or to acquire a profession;

- Housewife - the person who develops activities in the household such as cooking, laundry, maintenance and care of the home, not for trading domestic industry activities, child care and education etc. and do not receive any wage, pension (not realize any income);;

- Other - includes preschool children, older persons, persons with disabilities, persons deprived of liberty (detained or arrested, whether if in the place of detention carries out an activity or not), not absent from the household for more than 6 months, dependents etc.

The category of household member includes:

- persons present, the temporarily absent or away for an extended period in the household, but not less than 6 months (to study in other places, vacation, at relatives, in nursing homes, in hospitals nursing homes, assisted at shelters for victims of domestic violence);

- children in the care of people from outside the household nursery or kindergarten in camps ;

- people working (at home or abroad), if they have not formed another household or obtained residence in another locality;

- institutionalized persons (located in residential centers for the elderly, disabled or children, monastery etc.) that are part of the household, but are absent during the reference month, not for more than 6 months;

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- persons deprived of liberty (detained or arrested) part of the household, absent during the reference month, but not absent from the household for more than 6 months;
 - children in foster care for more than 6 months;
 - elderly and other dependents of the household;
 - persons in a rented home participating at household expenses and living with household members for a period of at least 6 months or not domiciled elsewhere;
 - persons employed to perform services in the household, participating at household expenses and living with household members for a period of at least 6 months or not domiciled elsewhere.

There were not included in HBS people living permanently in shared housing units (located in residential centers for the elderly, disabled or children etc.), people who have no common budget with household members and any guests who are temporarily residing in the household⁴³.

In the survey the unit selected and researched is the residence, using the sampling process and the unit observation is the household as a fundamental unit for data collection and analysis. According to this principle, if at an address are more households, data collection is carried out to every household in part, using a different questionnaire.

The household is a group of two or more persons, with or without children, who usually live together and generally have family ties and are housekeeping (do housework) participating jointly or in part at the household income and expenses. Where appropriate, household members work together the land or livestock, consume and share the value of the products obtained. The household may consist of a group of two or more persons, with or without children, between whom there are family ties, but by agreement live together and have a common budget. People who do not belong to another household and live and housekeep alone are considered households of one person.

The observation program is structured into two categories of documents recorded: household survey questionnaires and diary. Filling the questionnaire information is based on interview questions answered by the head of household. Filling the journal household is done by self-registration of the head of the household, his/her spouse or another person in the household who can make proper records, daily or on short periods of time on the current expenditure of the household.

Collecting information from households by a statistical operator is made during three visits to the households' residence:

- the first visit is held between 28 - 30/31 of the previous month;
- the second visit - between 10 and last day of the reference month;

- and the third visit – in the period 1-7 of the month following the reference.

Where applicable, the visits are established during the reference month, depending on the recording necessities, understanding with household members and additional visits.

Within this statistical research main variables recorded in questionnaires are:

- The composition and structure depending on the characteristics of household members;
- Socio-occupational status, educational level, work done by household members;
- Money income, on formation sources and income in kind;
- Expenses on destinations and expenses in kind;
- Consumption of food products;
- Housing and living conditions;
- Endowment with durable goods;
- Individual perceptions of household wealth and the satisfaction level of current needs;
- Arrivals and departures of foodstuffs in / household;
- Surface in use;
- Products produced from animal slaughter and poultry;
- Livestock and quantities of products used to feed it.

Household Budget Survey (HBS) is organized as a quarterly continuous research on a period of 3 consecutive months, on a sample of 9504 permanent housing, divided into monthly subsamples permanent independent housing by 3168. It was used a two-stage sampling plan.

In the first stage, the sample “master” EMZOT’2011 (Multifunctional Sample of Territorial Areas) was drawn based on data from the Census of Population and Housing in October 2011 (RPL’2011). EMZOT was conducted in order to be used as a base for the survey sample of households in the inter survey period. EMZOT is a sample of 792 research centers distributed in all counties and districts of Bucharest (450 in urban and 342 in rural areas). The 792 research centers, treated as primary sampling units (UP) were selected using the extraction method stratified and balanced by UP within each layer. The stratification criteria were county and area of residence, by their intersection resulted a total of 88 layers (in Bucharest the selection was made separately for each of the six administrative districts).

In the second step were extracted residences from each research center. 9504 permanent residences were selected, quarterly in three monthly waves by 3168 according to a systematic selection algorithm. The houses taken in second step are treated as secondary sampling. Of each research center were

sampled 12 homes quarterly, 4 housing monthly respectively.

Based on data provided by the Household Budget Survey we can determine the following indicators:

- Average number of members per household;
- Total revenue;
- money income based on training sources (gross wages and other wage rights; income from agriculture, agriculture independent income, income from social benefits, income from property, income from the sale of household assets, other income);
- in kind income (the equivalent in kind income of employees and recipients of social benefits; value of consumption of agricultural products from own resources);
- Loans and credits, amounts withdrawn from CEC Bank, other banks and similar institutions;
- Total expenses;
- Total consumption expenses;
- expenses on destinations (expenses for food and beverages consumed, costs for purchasing non-food goods, payments for services; costs for food and beverages consumed; investment expenditure, production costs, taxes, contributions, dues, fees, other expenses) ;
- Loans and loans repaid amounts deposited at CEC Bank, other banks and similar institutions;
- Food consumption in the household and catering;
- Food consumption expressed in calories and nutrients;
- Average living space per person;
- The number of persons living room;
- Endowment with durable goods;
- The degree of satisfaction of needs in relation to household income, etc.

Household Budget Survey is the main source of data on expenditure and household consumption. According to this statistical research total expenditure include: spending money and the price of animal and human consumption of agricultural products from the household own resources.

Spending money represents all money spent (including the equivalent of in kind income of employees and beneficiaries of social services, excluding deposits held with banks and similar institutions, loans and credits repaid), indifferently of the destination: purchase of food (consumed and not consumed in the reference period), non-food goods and payment of services; investments; production; payment of taxes, contributions and subscriptions; other money expenses.

Expenses for unconsumed food and beverages consist of expenses incurred for the purchase of food that were not consumed during the reference

month, being stocked or destined to other purposes (for manufacturing, animal and poultry food, given, losses).

Investment expenditures are those expenditures of investments nature made by a household in a given time period for the purchase of properties, buildings, land and high capacity equipment, new and old, animals for milk, stock, equipment (including labor) new construction, extensions, major repairs (capital), shares, currencies.

Total production costs consist of household expenses in a certain period of time for household production: purchases of animal feeds and poultry, animals for meat and fur, poultry products, seeds, veterinary treatment of animals and poultry, other expenses for household production and feed value of the consumption from own resources.

Expenses on taxes, fees, contributions, fees and other expenses, sums of money spent for mandatory payments to the fiscal system.

The equivalent animal and human consumption of food and non-food products from the households own resources represents the numerical expression of animal and human consumption of food and non-food products from own resources of the household (agricultural production, stocks of previous periods, products manufactured in the household, products received as a gift or for work etc).

It must be made a clearly distinguish between total expenditure of the population and its total consumption expenditure.

Thus, the total consumption expenditure include the amount of population expenses for current consumption needs (food, non-food, services) and consumed and the equivalent of human consumption of agricultural products from the household own resources.

Total food consumption expenses are represented by all costs and in kind expenses in order to ensure the food needs of a household or person in a certain period of time.

Total expenditure on non-food goods are all costs and in kind expenses in order to meet non-food needs of a household or person at a certain time.

Payments for services are all costs and in kind expenses of a household or a person in a certain period of time for payment of services.

Conclusions

Payments for services are all costs money and in kind expenses of a household or a person in a certain period of time for payment of services.

Average consumption / physical food per person is the average quantities of food for human consumption in any form of consume (raw and processed), supply source and where to eat (household or public catering facilities).

Average consumption of products expressed in calories and nutrients per person is determined based on data on average daily consumption per capita, food and food composition expressed in calories and nutrients (protide, lipids, carbohydrates) entered into people alimentation in a certain period of time (usually one day).

Equipping households with durable goods in running state represent the number of durable goods in running for on average 100 households (excluding leased assets or borrowed from others or institutions)

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