HOUSEHOLD EXPENDITURE PATTERNS IN REPUBLIC OF ARMENIA

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Abstract. Household final consumption expenditure is typically the largest component of final uses of GDP. It is therefore an essential variable for economic analysis of demand.

This study has two goals: The first is to outline how the composition of final demand changes as household income grows in Republic of Armenia. The second one is to discuss how consumption patterns are linked to a range of geographic, demographic and social factors that may account for observed differences in consumption patterns in RA.

Keywords: Household Expenditure, Demand Saturation, Structural Changes.

JEL Classification: C02, P24, R20, R22, R23.

1. Introduction

Household consumption is one of the crucial driving forces of economic growth. It makes more than half of the GDP in most developed countries. Over time to time, as their wealth increases, households aimed to change their spending patterns, and a large variety of new goods enters the consumption basket. This phenomenon is widely known as a welfare-enhancing feature of modern economic development (Grossman and Helpman, 1991; Barro and Sala-i-Martin, 1995).

This study has two goals: The first is to outline how the composition of final demand changes as household income grows in Republic of Armenia. The second one is to discuss how consumption patterns are linked to a range of geographic, demographic and social factors that may account for observed differences in consumption patterns.

This paper's main arguments are:

- Differences in spending patterns between households tends to grow as household income rises in RA.

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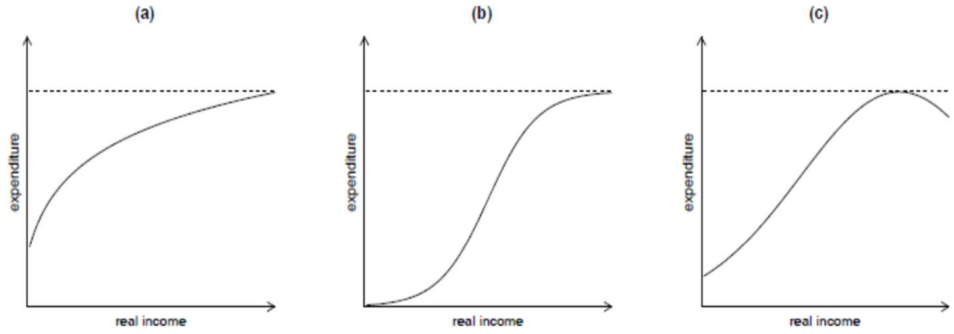
- Households stop to increase their expenditure on some goods and services that have reached saturation levels of expanses
- There are number of forces that have an impact on that spending shifts such as urbanization, ageing population rising inequality.

This study is structured as follows. Section 2 outlines how one of well-known macroeconomic trends, Engel's Law, tends to impact consumption patterns in Republic of Armenia. Section 3 discusses the broader connections between household consumption patterns and economic factors such as urbanization, rising inequality and ageing population.

2. Demand saturation. Engel's law. Household consumption patterns in Republic of Armenia

Many state that household expenditure on a good a fixed set of characteristics has an absolute upper limit in case of increasing income (Aoki and Yoshikawa, 2002; Metcalfe, 2006; Saviotti, 2008). An upper satiation level exists for all types of goods and services although at different levels of real income. In microeconomics, Engel curves are used to describe how real expenditure varies with household income. Engel curve also describes how household expenditure on a particular good or service varies with household income (Chai A, Moneta A, 2010). Pasinetti hypothesizes that an Engel curves relative to any good possess one of the shapes displayed in Figure 1.(1981, p. 77) .

Figure 1: Demand saturation hypothesis



Note: a) is the hypothesized EC for goods 'necessary for physiological reasons' (e.g. food); b) is the hypothesized EC for almost all other cases; c) is the hypothesized EC for inferior goods.
Source: Pasinetti (1981)

According to Figure 1, demand saturation occurs in certain goods and services, but not in others. The most prominent example of saturation in Engel curves is the case of food consumption. As households become more affluent, it has been widely observed that their budget share on food tends to decrease as household income grows (Clements and Chen, 1996).

Engel's Law states that as income rises, the proportion of income spent on food falls even if absolute expenditure on food rises (Engel, 1857). According to Banerjee and Duflo (2017) in terms of relative effect, 1% increase in overall expenditure translates into 2/3% increase in the average population's budget share spending on food by poor family. Engel's law essentially describes demand-driven shifts between food and non-food spending.

Let's examine the trends for spending in the food in RA.

Table 1 reports the 8 highly aggregated expenditure categories found in the reports of the Statistical Committee of the Republic of Armenia (2019).

Table 1: Changes in Armenian annual consumption expenditure shares, 2004 to 2018

Expenditure category	2004		2018		Change in Expenditure share
	AMD (monthly average per household)	Budget share (%)	AMD (monthly average)	Budget share (%)	
Food	10797	56.1	18496	40.4	-15.7
Alcoholic beverages	163	0.8	322	0.7	-0.1
Tobacco	808	1653	4.2	3.6	-0.6
Healthcare	1500	7.8	2770	6.0	-1.8
Education	708	3.7	1255	2.7	-1.0
Utilities	1146	6.0	6962	15.2	+9.2
Transportation	694	3.6	1521	3.3	-0.3
Telecommunication	291	1.5	1994	4.4	+2.8

Source: Statistical Committee of the Republic of Armenia (2019)

Data from the Table 1 suggest that overall growth in consumer consumption has been unevenly distributed across different expenditure categories. Precisely, there seems to be:

- A decreasing budget share of expenditure on goods, such as food and clothing.
- A decreasing budget share of expenditure on alcohol and tobacco. The root cause of that can be rising prices because of increase in taxes on these goods.

- A stable share on expenditure on healthcare, education and transportation
- Increasing expenditure on utilities and telecommunication.

The above mentioned patterns suggest that rising income alters household composition demand away from food and towards manufactures durables and services. However, these trends are consistent with the argument that more wealthy households demand a greater variety of goods as they derive utility from jointly consuming these goods with a number of other similar variants.

Table 2: Changes in Armenian annual consumption expenditure shares for food, 2004 to 2018 (kg per household)

Food type	2004	2018	Change is expenditure share
Bread	12.8	10.5	-2.3
Potato	4	3.3	-0.7
Meat	1.4	2	+0.6
Egg (quantity)	8.5	11.3	+2.7

Source: Statistical Committee of the Republic of Armenia (2019)

Table 2 shows that household composition demand within expenditure categories also changes. For instance, there is decline in the budget share for bread and potato, but on the other hand share for meats and other proteins tends to grow (Comprehensive Household Survey, 2004, 2008-2018).

3. Shifts in household consumption of Armenia

As discussed in the previous section, rising household income alters the composition of household spending such that budget share of food consumption declines and consumption on non-food categories grows. There are number of forces that have an impact on that shifts.

Ageing population.

The population of the Republic of Armenia is getting older. The number of people over the age of 60 was 440 thousand in 2011 representing over 20 per cent of the Armenian's de jure population and the ratio of elder people is estimated to be increased (Population Census of Armenian, 2011). As the population ages, overall consumption is likely to decrease. Danzigner (1983) stated that the elderly spend less than non-elderly at the same level of

income, and that the very oldest have the lowest average budget share to spend.

In terms of how composition of consumption may be affected, studies have been shown declining trend in spending on food. Spending share on energy, health and body care, holiday and travelling expenditures and furniture increases with ageing, while expanses on clothing, transport and communication decrease (Luhrmann, 2005).

Urbanization.

Urbanization refers to the proportion of the total national population living in areas classified as urban, urban growth strictly refers to the absolute number of people living in those areas (Tacoli, Cecilia, 2015). Urbanization has resulted in reduced levels of per-capita calorie consumption and hence per- capita food consumption (Huang and David, 1993).

Table 3: Changes in Armenian annual consumption expenditure shares for urban and rural population, 2004 to 2018

Expenditure Category	Urban population				Rural population			
	AMD		%		AMD		%	
	2004	2018	2004	2018	2004	2018	2004	2018
Food	11109	18134	53.1	38.5	10281	18793	62.5	43.8
Alcoholic beverages	173	306	0.8	0.7	146	350	0.9	0.8
Tobacco	894	1494	4.3	3.1	666	1916	4	4.5
Healthcare	1794	2966	8.6	6.2	1012	2448	6.1	5.7
Education	976	1477	4.7	3.1	265	889	1.6	2.1
Utilities	1382	8288	6.6	17.5	755	4774	4.6	11.1
Transportation	929	1625	4.4	3.4	303	1358	1.8	3.1
Telecommunication	421	2265	2	4.8	75	1546	0.5	3.6

Source: Statistical Committee of the Republic of Armenia (2019)

Table 3 shows how household spending has been changed for both rural and urban population in RA. As we see, trends are the same as we have for overall population but rural population has more budget share for food and less budget share for services than urban population. This is likely due to differences in the nature of work and sedentary lifestyles that results in lower calorie demand among urban residents.

Rising income inequality.

As economies develop, income inequality tends to widen. (Chotikapanich, 2012). Rising income inequality will result in more distinct consumption baskets between the rich and the poor in the economy. While low income households may prefer to spend to basic necessities, the basket of goods and services consumed by the high income households is likely to be more oriented towards luxury goods and services (Clements and Gao, 2012).

Table 4: Changes in Armenian annual consumption expenditure shares for 1-st and 10-th decile, 2004 to 2018

Expenditure Category	1-st decile		10-th decile	
	2004 (%)	2018 (%)	2004 (%)	2018 (%)
Food	73.4	57.5	38	21.3
Alcoholic beverages	0.4	0.4	1.1	1.1
Tobacco	5.1	3	2.9	2.6
Non-grocery goods	8.6	14.3	18.6	18.2
Services	12.5	24.8	39.4	56.9

Source: Statistical Committee of the Republic of Armenia (2019)

Table 4 shows how household spending has been changed for 1-st and 10-th decile in RA. Although the trends for both 1-st and 10-th decile is the same but composition of spending is different. Households from the 1-st decile are tend to spend more budget share on food and less budget share for services than households from the 10-th decile.

Growing income differences within a population show that the population's total expanses will be dispersed across a wider range of goods and services linked to segments of the hierarchy of demand. If all households had the same income, spending would be more concentrated in the basket of goods and services preferred by the given income level. In contrast, growing income inequality could generate a reduction in the market's scope for any given good.

4. Conclusion.

As a summary, crucial changes in expenditure patterns that takes place when household income rises may alter the industrial composition of the

economy in RA. As households become richer and begin to diversify their expanses beyond necessities, the growth rate of manufacturing goods and services may rise. This opens up the possibility of a positive feedback loop between the increase of the demand side and that of the supply side of the economy.

Rising household income induces shifts in the composition of spending such that the budget share of food spending decreases and spending on non-food items grows. In terms of how precisely non-food spending grows, there are a number of forces that affect to it.

Demographic and urbanization trends also appear to have a major influence on how demand evolves and may in some cases accelerate the rate of demand-driven structural change. The other factors such as rising income inequality and ageing population also have a significant impact on the composition of spending.

Growing income inequality could generate a reduction in the market's scope for any given good. Spending share on energy, health and body care, holiday and travelling expenditures and furniture increases with ageing, while expanses on clothing, transport and communication decrease (Luhrmann, 2005).

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ՀՀ ՏՆԱՅԻՆ ՏՆՏԵՍՈՒԹՅՈՒՆՆԵՐԻ ԾԱԽՍԵՐԻ ՄՈԴԵԼՆԵՐԸ

Կարապետյան Հ.Ռ.

Ամփոփում: Տնային տնտեսությունների վերջնական սպառման ծախսերը, որպես կանոն, ՀՆԱ-ի վերջնական օգտագործման ամենամեծ բաղադրիչն են: Հետևաբար, դա պահանջարկի տնտեսական վերլուծության կարևորագույն բաղադրիչներից մեկն է:

Այս ուսումնասիրությունն ունի երկու նպատակ: Առաջինն է պարզել, թե ինչպես է փոփոխվում տնային տնտեսությունների ծախսերի կազմը, երբ Հայաստանի Հանրապետությունում աճում են տնային տնտեսությունների եկամուտները: Երկրորդ նպատակն է քննարկել, թե ինչպես են սպառման ձևերը կապված աշխարհագրական, ժողովրդագրական և սոցիալական մի շարք գործոնների հետ, որոնք կարող են հանգեցնել ՀՀ սպառման մոդելի փոփոխությանը:

Բանալի բառեր. տնային տնտեսությունների ծախսեր, պահանջարկի հագեցվածություն, կառուցվածքային փոփոխություններ:

МОДЕЛИ РАСХОДОВ ДОМАШНИХ ХОЗЯЙСТВ РА

Карапетян О.Р.

Аннотация. Расходы на потребление домашних хозяйств обычно являются крупнейшим компонентом конечного использования ВВП. Следовательно, это важная переменная для экономического анализа спроса.

ИЭто иследование преследует две цели: первая - показать, как меняется состав конечного спроса по мере роста доходов домохозяйств в Республике Армения. Второй - обсуждение того, как модели потребления связаны с рядом географических, демографических и социальных факторов, которые могут объяснить наблюдаемые различия в моделях потребления в РА.

Ключевые слова: расходы домохозяйств, насыщение спроса, структурные изменения.