

## PECULIARITIES OF CONSUMER DEMAND FORMATION IN THE FOOD MARKET IN TERMS OF MACROECONOMIC INSTABILITY

**VARCHENKO OLGA,**  
*doctor of economics, professor,*  
*Bila Tserkva National Agrarian University, Ukraine*

**ARTIMONOVA IRYNA,**  
*PhD in economics, associate professor,*  
*Bila Tserkva National Agrarian University, Ukraine*

**Abstract:** *It has been proved that the need for studying the characteristics of food consumption increases during periods of exacerbation of systemic threats of both internal and external nature. OverviewThe scientific basis for the formation of consumer demand and the factors that determine it in the current conditions of the country have been overviewed. It has been established that existing models of consumption function in national conditions are limited by the following factors: the specificity of income distribution for consumption and savings; most of the models have a high level of mathematical abstraction, which complicates the development of real consumption patterns; regularities, which the models are grounded on, are real manifestation in practice only in a stable economy. The peculiarities of formation of consumer demand for food in Ukraine , taking into account the structure of income distribution of rural and urban population regarding kinds of food, location (town, countryside) and some sources of food self-supply, have been highlighted. There have been suggested the directions for expansion of economic availability of food for the population of the country through poverty reduction, the introduction of targeted support for disadvantaged groups and focus on achieving balanced nutrition of all age groups.*

**Keywords:** *demand, purchasing power, consumption, food.*

**Introduction.** Consumption, including food, is an important area of society oriented at ensuring human development, their physical, intellectual and spiritual potential and meeting a number of requirements. Studying the features of food consumption becomes especially important in periods of systemic crises, exacerbation of systemic threats of both internal and external nature. This is due not only to the fact that the level of meeting the needs of the population for the major food affects the economic security of the country, which is determined by economic or social availability of food but also can lead to negative synergistic effects in macrosectors of the national economy.

**Analysis of recent research and publications.** The theoretical basis of consumption has been considered by many foreign and national scientists. Among modern foreign economists there should be mentioned M. Friedman - the development of permanent income hypothesis, F. Modigliani - justification of the concept of life cycle, G. Becker - the study of human behavior and human capital theory, A. Saint - development of principles of welfare economics and the fight against poverty, J. Hekman and D. McFadden - the study of consumer behavior of individuals and family households and other researchers who are a basis for defining priorities of economic and social policy of the country.

Versatile issues regarding consumption are studied in works of Ukrainian scientists: D. Bohynya, V. Heyets, V. Danylyshyn, V. Ilyin, M. Kim, I. Kryuchkova, E. Libanova, N. Novikov, B. Paskhaver, S. Pyrozhev, I. Radionova, Y. Sayenko, M. Sokolyk, S. Tyutyunnykova and others. The issues of consumption in terms of food security are discussed in scientific works of O. Borodina, V. Vlasov, Ya. Zhalil, V. Krupin, M. Kulayets, T. Lozinska, M. Khorunzhi and other scientists.

**The aim of the article** is to generalize theoretical principles of modern consumption patterns and study the dynamics of macroeconomic demand for food, identify factors and constraints of consumer demand in Ukraine in conditions of instability.

**Presenting main material.** Generalizing theoretical approaches to the study of consumption it appears to be appropriate to consider the position of sociologists P. Zerylo, D. Frenzen and P. Hirsch [1]. They stressed on the following basic approaches to the study of consumption: productive consumption (mercantilists); idiosyncratic consumption (marginalists); functional consumption (G. Becker, J. Stigler) institutional consumption (T. Veblen, D. Commons); intertemporal consumption (M. Friedman, D. Dusenberry); psychological consumption (J. Caton). However, it is not quite clearly defined the criteria for differentiation of these approaches.

The study of consumption as an economic category was considered in works of Aristotle, Xenophon, Plato. Later on mercantilists referred to consumption issues in the study of trade balance: consumption of domestic product was seen as productive, while that of imported - as unproductive. Therefore consumption was considered to be an instrument of economic policy and the objectives of the state.

In the classical economic theory of consumption a comprehensive study and the disclosure of internal determinants of consumer process was not required. The subject of the study was "wealth" and the source of its origin and accumulation. Classical political economy was formed in a shortage of goods, chronic shortfalls and, therefore, underconsumption, resulting in the need to create an economic system oriented at production growth. Adam Smith, David Ricardo, John. Mill gave the

decisive role in the motivation of economic behavior to selfish personal interests of individuals [2]. The main motives of economic activity of the population in consumption are the intentions to improve their financial situation and to increase their own profits. Within this theory consumption is a "self-contained process of utilising goods that have their own structure and laws of motion" [3].

Due attention was paid to the study of in the deterministic concept of the theory of cycles, which limits the cyclicness in behavior of economic agents by the influence of objective economic factors. Thus, S. Sismondi and later L. Loderdel and T. Malthus pointed out that lack of consumption is one of the factors of the crisis of overproduction. John. Hobson [4] put forward a postulate, according to which "non-productive" economic surplus, which includes all rents, excess income from interest, profits and wages, acts as a source of savings. The method of appropriating "non-productive" surplus tends to disrupt the balance between consumer spendings and savings, which creates economic depression.

In the theory of cycles and crises in "Capital" K. Mars claims that an individual is not free in the choice of economic behavior, because their needs and preferences have already been formed by the society [5]. Hence, the crisis of overproduction is associated with a relative narrowing of effective demand. From the position of Marxism the individual is the main productive force of the society, which requires the development of two parties: labour force as the capacity to work and consumer power as the ability to consume. Work is a function of labour, consumption is a function onsumer power of an individual. An important role in the development of the economic theory of consumption played marginalism, which laid the foundations of the theory of marginal utility and consumer demand. The neoclassical theory of marginalism is based on the microeconomic approach to the study of idiosyncratic (H.Hossen, J.Dupuis, W.Jevons , Dzh.Klark, A.Marshal, K.Menher, V.Pareto) where consumption is seen through one of the most important subjects of the market - the consumer. Thus W.Jevons and L. Walras focus on the rational calculation of agents. According to the law of diminishing utility, one of the important goals of consumer behavior, is to maximize the utility and to meet the needs. However, K. Menger and E. Bohm-Bevark emphasize a more complicated objective and subjective nature of the human condition, emphasizing the natural and social origin [6, 7]. The only motive that directs the activities of households, is to ensure their welfare. This target function is modified toward achieving the best option of meeting the needs rather than the optimal one.

Supporters of neoclassical approach assigned the priority role to subjective motives and incentives in consumption. In particular, I. Kristol noted that the economy of supply accepts behaviour motives - internal impulses to improve its position as the starting point of economic activity and economic growth [8]. The basic idea, according to A.Laffer is that the man works in order not to pay taxes but

to generate income. In this case, it is personal and private reasons relating to the distribution of income, production and savings [9]. J. Von Neumann and O. Morgenstern, founders of game theory, consider that the behavior of an individual consumer depends on the behavior of other participants [10]. Hence, in the process of interaction of agents of consumption and distribution of disposable income, resistant systems can be broken.

It should be noted that parallelly the institutional theory of consumption is developing (T. Veblen, J. Commons, J. Dewey), which claims that rational calculation is not the only motive that determines the behavior of households regarding the distribution of income on consumption and savings. The most important here is the institution of habits and traditions. Thus, Veblen in his concept of demonstrative consumption treats instincts (institutions) as ways (customs) of conscious and purposeful behavior [11]. He identified a number of effects related to demonstrative consumption, in particular, Veblen effect where the increase in consumer demand is due to the fact that the product has a higher price, which consists of two components - the real price and the prestige price as well as the snob effect and the effect of accession to the majority.

The research of functional relationship between income and consumption for the first time is reflected in the work by J. Keynes "The general theory of employment, interest and money" [12]. According to Keynesian hypothesis of "absolute" income, with the analysis of cause-effect relationships the role of current income is determined primarily by the psychological effect of the amount on the size of personal consumption and savings. If the level of current income is below the average median level, the household income is fully directed on consumption. In the future, if the rising level of income is saved, the consumption comes into line with the new level but disproportionately to the income, thus savings increase along with income growth more rapidly. With the reduction of profit the dependence remains: orienting households to support the living standard at the expense of reducing savings.

The macroeconomic theory by J. Keynes led to the extension of consumption function research. Thus S. Kuznets and R. Goldsmith found that consumption function behavior over the cycle is in accordance with the basic psychological law, but for longer periods of time the tendency to reduce the propensity to consumption is not established, and the consumer's attitude to income is stable. The means of resolving this conflict was the hypothesis of time trend established in the studies of Smizis, Livingstone, Mosak [13]. Using annual data, researchers found that the magnitude of the average consumption per capita depend on real data of net income and time trend, characterized by a positive coefficient of regression.

The question of cyclical changes in the correlation between consumption and income is investigated by R. Harrod and E. Hansen [14]. In particular, the hypothesis of E. Hansen generalized cyclical behavior of consumption function. The author argues that consumption is determined not only by the size of income but partly also by the features that stage of the cycle in which the income was obtained. If the phase of the cycle has a resistant uncertain character, consumption changes in approximately the direct proportion to the change of income. Otherwise, that is, if the phase of the cycle is characterized by sharp jumps, the consumption percentage does not vary as dramatically as income. Age tendency to increase consumption function should not be considered as absolutely constant tendency as the relations between variables incur due to changes in economic institutions.

Fluctuations of consumption function over time were studied by D. Robertson, who developed the hypothesis of previous income on the basis of the method of period analysis [15]. When building the model the author relies on the assumption that consumer spendings tend to lag behind changes in disposable income for a unit of time - period. With the growth income households increase consumption, but not immediately because the adjustment of consumption to income takes place with a delay. In this case, when deciding on the size of this current consumption, it is necessary to take into account that agents spend the income of the previous period in the current period. Current savings in this case are defined as the difference between past income and current consumption.

Like the model of delayed spending there exists a hypothesis of relative income by J. Duesenberry [16], according to which the average income is regarded as average in the society or rather in typological groups. That is why consumption within individual households depends not so much on the absolute size of income, but on their membership in a particular typological group according to the distribution of income, in other words on the relative income. Consequently the basic psychological law by Keynes is just not for the absolute level of income, but for consumer's transition to another typological group with higher incomes. With a decrease in the relative income people are not inclined to give up the achieved level of consumption, so the probable behavior of a typical household is actually determined not by the current perception in terms of a depressed economy, but by the past maximum high income level. Moreover, consumption turns out to be the function of personal disposable income rather than national income, as Keynes believed. The existence of this kind of consumption function confirms the hypothesis of "peak" income by T. Davis, where the level of current consumption depends on the maximum point of the previous income. Therefore, it is worth mentioning another modified model that links consumption to the level of past income - the economic model of "distributional lag" by L. Klein [17].

The relationship between the distribution and growth rates of income is highlighted in the works of J. Robinson, N. Kaldor, J. Krihel, L. Pazinetti [18]. It should be noted that the model of income distribution for the economy as a whole by N. Kaldor [18] considers the overall total personal income as the sum of wages and profits. Based on these assumptions, the author puts forward the postulate that the marginal propensity to savings with income receivers from property is much higher with people who live on wages. It follows that the marginal propensity to consumption within different socio-economic groups is unequal and redistribution of income in favor of groups with a higher marginal propensity to consume will cause displacement of the curve that describes the behavior of the consumer features upwards.

However, some economists question the role of income redistribution effect that can be explained by the fact that their distribution is relatively stable, but its effects can occur only over a long period of time and in the short and even medium term analysis it plays a secondary role.

The neoclassical consumption function is based on the fact that before making a final decision on the use of disposable income, households must correlate today's interests with the future ones. Thus, according to the hypothesis of intertemporal budget choice, proposed by I. Fischer within the theory of consumer behavior, consumption is determined by the expected income throughout the man's life, but not just by the current one. In a stable economy consumption in the long term period consists of the second period income and accumulated savings, including interest on these savings. For this type of behavior consumption depends on the present value of income in a given period and the discounted value of future income.

Considering the differences between the behavior of short and long term consumption functions, researchers found that income level fluctuates throughout life, and savings allow households to redistribute income from the periods when its level is high to periods in which this level is low. This assumption of household's behavior is the basis of the hypothesis of "life cycle" of Modigliani, Ando-Brumbarh [19]. The life cycle model assumes that the person planning their consumption, takes into account the likely life expectancy and expected income. In the theory of "permanent" income M. Friedman noted that much of the consumption is determined not by changes in its value, but by the permanent, stable income, and in different years that income levels may experience random and temporal changes. Permanent income hypothesis is based on the fact that the functional dependence links the components of consumption and permanent income, but not that of the temporal one, which is aimed at savings [20].

It should be noted that in the 70-ies of the twentieth century there have been developed new methodological principles - the microeconomic foundations of the macroeconomic analysis, that is the phase of convergence in the theory of

consumption development starts, ie depth study of the macroeconomic dynamics of consumer demand. There is a convergence of micro and macroanalysis of consumption, which significantly expanded analytical tools of the basic theory through the active use of econometric modeling. A key role in the development of a formalized approach in line with the general equilibrium was played by Samuelson [21]. In macroeconomic studies of movement towards equilibrium, stochastic process, based on the adjustment of expectations of economic agents, is considered as probability. Consumers and producers make decisions on the amount of supply and demand at different time. Demand is formed in the situation of the current state of the market under the influence of current prices while the volume of supply is determined before the start of production. Scientific understanding of these processes has led to the development of the theory of economic expectations, founded in the 1930-ies by G. Myrdal, and to putting them into macroeconomic models.

According to the theory of consumption by M. Friedman and R. Lucas human behavior influenced by expectations at the macro level is reflected through transformation of variables in macroeconomic models. It should be noted that this concept provides for three options - a theory of extrapolation, adaptive and rational expectations. Introduction of important determinants that determine the types of consumer behavior of households, adaptive and rational expectations is extremely important because the level of social and economic adaptability largely determines the way of income formation and ways in which consumption and savings are realized.

Neoclassicists developed a new theory of consumer choice. Thus, in the theory of search by J. Stigler [22] and J. Buchanan, in addition to the traditional objectives of maximizing the process of meeting the needs and obtaining the largest utility, other options of the objective function, such as benefit consistency, taste stability, forming habits, and tradition stability are provided [23].

It should be noted that in the economic theory there also exist alternative approaches to the study of consumption. Along with neo-Keynesianism the evolutionary theory of consumption, within which the relationship of economic growth and peculiarities of consumer behavior and the change of behavior models have been examined, began to form. So, S. Metcalfe suggests that consumer behavior creates guiding lines, taking into account producers that can turn new technological opportunities into final goods and services for which there is a demand. Thus, L. Pazinetti developed multisector models where economic growth and structural changes are associated with long-term changes in consumer behavior, due to the consumption of new goods and services. In his turn, B. Lousbi draws attention to the fact that there is a conflict between the increasing potential of knowledge and limited cognitive ability of the man. R. Langouet and W.

Ruprecht argue that consumers' knowledge and the process of teaching them play an important role [24].

In his work "The model of life cycle of obtaining income" J. Hekman [25] developed the model of life cycle of labor supply, income, consumption and non-market benefits of education. The proposed scheme enabled them to follow changes in the behavior of households during their life cycle, depending on the initial human capital and financial wealth, market interest rates, tax rates and individual's abilities.

It is obvious that practical use of the considered above hypothesis for building a function model of consumption under national conditions will have a number of drawbacks: firstly, the models are limited by mostly the quantitative characteristics of this process not being taken into account; secondly, most of the theories are studied at a high level of mathematic abstraction, which complicates development of real consumption models; thirdly, the regularities on which the models are based have a real practical implication but only under conditions of stable economy. That is why it is important to consider peculiarities of the transformational period while building the model of consumer behavior of households. R. Coase points out that the modern economic theory lost touch with real practice, however it is impossible to examine economics as a science about restrictions and choices, paying no attention to the impact of society, history, culture and politics on man's economic life [26].

It is worth pointing out that it is important to predict consumer demand for principal kinds of food in order to secure balance, using tools of government regulations and flexible adjustment of producers' activities to the state of the market. It is known that as a result of specific development of agrarian and food market, supply and demand laws have a different way showing themselves as compared with other industries. Thus, customers' preferences regarding foodstuffs are rigid to changes but when consumers' incomes get lower, it is prices that influence demand for foodstuffs with the majority of the population. Being aimed at the basing methodological techniques for studying consumer demand, we used scientific works of both national and foreign researchers.

According to available at our disposal modern economic literature [27-32] it should be noted that demand is characterized by the following main factors: consumer demand is a value that is caused by a number of factors; certain regularities are characteristic of demand forming and changing that can be quantified; the regularities of demand forming and changes in demand are the result of a comprehensive analysis of quantitative and qualitative data. So, quantitative and qualitative characteristics of consumer demand is determined by the performance of a large number of interrelated factors that form a complex system. Besides, depending on the direction of factors impact on demand, some



authors distinguish variables that affect the demand from the side of production and the factors that influence the demand from the side of consumption. However, according to some researchers [23-35] the factors that determine demand are considered to be:

1. External factors: the number of goods offered for sale by the consumer market (supply volume); the level and correlation of consumer prices; the rate of inflation expectations market competitiveness; cultural, historical and climatic features of the market; market segmentation structure; government's influence on demand (government procurement, regulation of products and processes, improvement of the system of informing consumers, development of new standards, foreign aid and political ties, and other measures of stimulation).

2. Internal factors: the size of the consumer budget (cash income); the real needs of customers in benefits that can be implemented (or not) in a specific market goods; the number of independent customers. It should be noted that the specific feature of some factors is that they lead to a change of volume and structure of demand, and others – without changing the volume of demand, causing only structural changes. In addition, factors that cause the change in demand for a certain group of products can lead to changes in demand for other goods.

We believe that consumer demand for food products is a category that is inherent property of the “demand for consumer goods”. However, some specific features are unique only for the demand for food. First of all, it should be emphasized that the specific demand in food market is due to the peculiarities of consumer demand for food. In addition, demand, as part of the solvent consumer needs, has features that distinguish it from the insolvent needs.

It was found out that the main problem for the population of Ukraine nowadays is not a physical lack of foodstuffs, but limited economic opportunities of their acquisition. This raises the problem of science-based population needs for the products – an adequate food that provides the right amount of calories for an active and healthy life. Thus, important factors of the social aspect of food safety are the physical and economic food availability.

Compared with dietary intake levels 35-38% of meat and meat products, 42-46% of milk and milk products, 42-47% of fruits and berries were undernourished by the population for 2010–2014. However, the consumption of meat and meat products increased by 4%, eggs – by 8%, milk – by 8%, berries and grapes and potatoes – by 9% in 2014 compared with 2010. Whereas, actual consumption of cereal products decreased by 2.6%. Consumption of cereal products, potatoes, vegetables and eggs exceeded dietary intake levels in 2014 (Table 1).

In a survey of household members by the State Statistics Service of Ukraine, it was found out that consumption of fruits, berries, nuts and grapes decreased by 11%, fish and fish products – by 7%, vegetables and melons – by 3%,

meat, meat products and potato – by 2% for each position in households with children. Consumption of bread and bread products, eggs, milk and dairy products remained at the level of 2013. It should be noted that the consumption of nearly all basic foodstuffs by one person in the households with dependent children was much lower than in the households with one child: fruits, berries, nuts, grapes, meat and meat products, vegetables and melons, milk and dairy products, fish and fish products – 1.2 times lower for each position, eggs – by 11%, sugar – by 7%, oil and other vegetable fats – by 7% and bread and bakery products – by 1.3%.

At the same time, the number of staple food consumed by one person in a household without children was 1,5 – 1,2 times higher than in households with children. However due to cheaper food products of plant origin dietary energy consumption of Ukrainian population reached dietary intake levels.

**Table 1**  
**The consumption of basic foodstuffs in Ukraine (per capita per year), kg\***

Products	Dietary intake levels recommended by the State Research Center for Food Hygiene of Ministry of Health of Ukraine	Year				
		2010	2011	2012	2013	2014
Meat and meat products	83	52,0	51,2	54,4	56,1	54,1
Milk and dairy products	380	206,4	204,9	214,9	220,9	222,8
Eggs (pcs.)	290	290	310	307	309	310
Bread products	101	111,3	110,4	109,4	108,4	108,5
Potato	124	128,9	139,3	140,2	135,4	141,0
Vegetables and gourds	161	143,5	162,8	163,4	163,3	163,2
The fruits, berries and grapes	90	48,0	52,6	53,3	56,3	52,3

\* Source: compiled and calculated according to the data of State Statistics Service of Ukraine.

Private farm households play significant role in the public food supply, especially in rural areas. Thereby, individual households produced 51% of consumed potatoes in households in 2014, 29% – vegetables and melons, 27% – eggs, 13% – fruits, berries, nuts, grapes, 12% – milk and dairy products and meat and meat products. Rural households produce respectively from 88% to one third of above mentioned consumed products, so it can be concluded therefore that the majority of the population relies on individual farm households.

It will be noted that calorie daily content of one person was 3,236 calories in 2014; protein content in consumed products was 90 g, fats – 146 g, carbohydrates – 398 g, indicating the imbalance in consumption of food products in Ukraine. Dietary energy consumption decreased by 2% and the carbohydrates, proteins and fats in consumed products – by 1, 2 and 3% respectively compared with 2013.

According to the survey conducted in January 2015 by the State Statistics Service of Ukraine, about 4% of households (by 0.2% higher than in 2013) reported that they could not even provide sufficient levels of nutrition. Among households with dependent children the share of such households increased by 4 percentage points and accounted for 10%.

A number of factors influence on the consumption level of basic foodstuffs, in particular, the purchasing power of the population that is displayed through the size of total income and share that goes to buy food staples, which increased in 2014 by 1.8 percentage points in comparison with 2013 and is 54%.

The study found out that the share in the structure of expenses which households spend on buying food and eating out amounted for 54% in 2014, in urban households – 55%, rural households – 49%. The size of the equivalent cash costs per capita for purchase of food and eating out of the first decile households and households with per capita income below the monthly subsistence level was respectively 2.4 and 2.5 times lower than in tenth decile households.

It should be noted that the rate of spending on food is one of the indicators which is used to evaluate the level of food security. According to Ukrainian legislation limiting (threshold) criterion for this indicator is set at 60%. However, the level of security of the population as a whole is assessed in terms of expenses on food. For comparison, in the EU countries households spend on foodstuff up to 12% of overall consumer expenditures, and in the US – in the range of 8-10%.

The above mentioned results show that the significant costs of consumption are evidence of the high level of poverty of the population. It should be noted that the poor are considered to be those consumers who spend more than 60% of the household budget on food. In 2014 the percentage of such people in Ukraine exceeded 50%.

The growth of spending on food in plain term is not expected. Firstly, expenses on food are quite high in Ukraine as it is. Secondly, when the cost of basic foodstuff increases, the consumers tend to save money, focusing on products affordable to them. However, according to the UN, in 2014 in Ukraine the percentage of people who underfed namely they consumed less than 2100 calories per day, increased to 16.2%. This demonstrates the need to revise the parameters of the subsistence minimum in order to achieve social stability in the country, on the one hand and on the other – for producers is an indicator of the limited capacity of the food market, which in the case of stabilization of economic situation will lead to the expansion of the capacity of the food market.

Comparison of consumption level of basic foodstuffs per capita in towns and cities and in rural areas does not detect much difference, except for some products. Thus, the population in rural areas consumes more animal products such as milk and dairy products, potatoes and cereal products less fish and fish products.

This situation is explained by the fact that the vast majority of the rural population is engaged in growing potatoes and corn on their own private land and land shares (shares) to provide themselves with necessary food products. In addition, many rural households keep cows (often 1-2 and more), which allows, first, to meet their own needs in the consumption of dairy products, and to provide relatives who live in cities with dairy products.

The structure of nutrition of rural households by product group generally corresponds to the average for Ukraine, but also has some differences. First, the main feature of the diet of rural families is quite high level of consumption of dairy products – nearly 19% higher than the average value for Ukraine.

The cost of food in 2014 per capita averages UAH 34 per day in comparison with 31 UAH in 2013. The cost of food per day in first decile households and in the group of households with per capita income below the subsistence level was respectively 24 and 23 USD per person in comparison with 52 UAH in tenth decile households.

**Table 2**

**Distribution of the population of Ukraine by the projected level of consumption of milk, meat and eggs, 2014 \***

Groups by per capita income per month, UAH	The total overall revenue, ths. UAN / year	Meat and meat products, including offal and fat (in terms of meat), kg			Milk and dairy products (in milk equivalent), kg			Eggs and egg products, kg		
		actual consumption	calculated consumption	coefficient of elasticity	actual consumption	calculated consumption	coefficient of elasticity	actual consumption	calculated consumption	coefficient of elasticity
Less 1000	11,057	36,9	37,6	0,561	159,2	167,8	0,450	199,9	197,4	0,194
1001-1250	14,943	45,0	44,9	0,602	195,5	193,6	0,501	208,7	210,5	0,233
1251-1500	17,972	52,0	50,2	0,618	221,7	212,9	0,525	218,8	220,3	0,256
1501-1750	22,099	56,9	57,1	0,627	245,9	237,8	0,544	232,6	232,8	0,278
1751-2000	27,893	65,9	66,1	0,620	270,2	270,2	0,550	249,9	249,0	0,297
2001-2500	33,915	71,3	74,4	0,597	289,0	300,7	0,541	259,8	264,0	0,303
2501-3000	39,990	82,8	81,9	0,562	324,4	328,1	0,518	284,2	277,4	0,297
3001-3500	45,732	91,2	88,1	0,519	347,7	351,1	0,487	287,3	288,5	0,282
3501-4000	53,971	93,7	95,4	0,444	388,9	378,9	0,428	299,9	301,5	0,247
More 4000	82,538	107,2	107,2	0,028	427,2	428,3	0,088	320,9	320,9	-0,004
<b>All households</b>	<b>20,698</b>	<b>59,3</b>	<b>54,8</b>	<b>0,625</b>	<b>247,0</b>	<b>229,5</b>	<b>0,539</b>	<b>236,4</b>	<b>228,6</b>	<b>0,272</b>

\* Source: compiled and calculated according to the State Statistics Service of Ukraine.

Rural households traditionally spend up more family income on food than urban (respectively 56% and 52%). Thus the villagers ate more potatoes – 1.5 times, bread and cereal products – 1.3 times, sugar – by 14%, vegetables and melons – by 4%. Calorie daily content of one villager was by 13% higher than in urban residents (in 2013 – by 10%).

In 2014 there is a saving of differentiation in food consumption between different by the level of welfare population groups: the first decile households, households with per capita income below the subsistence level, and tenth decile households. Last spent on food, compared with the first decile households and households with per capita income below the subsistence level 1.4 times smaller share of total costs (45%), respectively, cost of consumed food by one person per day was 2.2 and 2.3 times higher (52 UAN) , and calorie content (3793 kcal) – 1.5 times higher. One person consumed fruits, berries, nuts, grapes, meat and meat products, milk and dairy products, fish and fish products, vegetables and melons, sugar, oil and other vegetable fats, eggs, bread and bread products respectively 2,4-1,2 times less in the first decile households and groups with per capita income per month below the subsistence minimum than in the tenth decile households. Consumption by the tenth decile households of potatoes was 13% higher than in the first decile households and 17% higher in the group of households with per capita income below the subsistence minimum.

Price elasticity for certain types of goods is used to assess the demand and supply on the market. Considering the different types of demand elasticity in formulating marketing strategy by economic agents this allows to provide forecasts for the short and medium terms, and to increase the responsiveness of management to changing market conditions. We conducted a calculation of elasticity` coefficient for major food types (Tables 2, 3).

The data in Tables 2, 3 show that the coefficient of elasticity for all foods tends to decrease since total income of the consumers begin to increase and they commenced to buy products of better quality and, consequently, more expensive products. Value of estimated coefficients of elasticity for all food products do not reach the unit because the consumption of food depending on income is slightly elastic. Thus, the consumption level is growing more slowly than income one (but with income exceeding 4000 UAN per month the consumption level is significantly reduced).

It should be noted that the national average coefficients of elasticity are the lowest for these foods: bread, eggs, and the highest for – meat, milk and dairy products, fruits and vegetables. Thus, the coefficients of elasticity for bread and bakery products respectively are: the highest rate – 0.307 for a group of people with an income per capita of 1751-2000 UAH per month, the lowest – for a group of people with an income of over UAH 4,000 (-0.420); for milk and dairy products:

maximum – 0.550 in the group with per capita income of 1751-2000 UAH / month, minimum – 0,088 (over 4,000 UAN / month.); meat and meat products: maximum – 0.627 (1501-1750 UAH / month.), minimum – 0,028 (over 4,000 UAN / month.); eggs and egg products, maximum – 0.303 (2001-2500 UAH / month.), minimum – -0.004 (over 4,000 UAN / month.); vegetables: maximum – 0.513 (1501-1750 UAH / month.), minimum – -0.193 (over 4,000 UAN / month.); fruits: maximum – 0.669 (1751-2000 UAH / month.), minimum – 0.427 (over 4,000 UAN / month.).

**Table 3**

**Distribution of the population of Ukraine by the projected level of consumption of vegetables, fruits and bread, 2014 \***

Groups by per capita income per month, UAH	The total overall revenue, ths. UAN / year	Vegetables, kg			Fruits, kg			Bread and bakery products (bread and pasta in terms of flour, cereals, legumes), kg		
		actual consumption	calculated consumption	coefficient of elasticity	actual consumption	calculated consumption	coefficient of elasticity	actual consumption	calculated consumption	coefficient of elasticity
Less 1000	11,057	64,8	66,6	0,434	27,2	27,6	0,558	86,01	89,3	0,232
1001-1250	14,943	73,7	76,4	0,480	33,0	32,9	0,610	92,57	96,3	0,269
1251-1500	17,972	87,7	83,7	0,500	37,9	36,9	0,636	107,51	101,4	0,288
1501-1750	22,099	96,5	92,9	0,513	42,9	42,1	0,657	110,62	107,8	0,303
1751-2000	27,893	105,4	104,7	0,511	47,2	49,2	0,669	116,66	115,8	0,307
2001-2500	33,915	111,2	115,5	0,490	54,5	56,1	0,667	120,59	122,8	0,292
2501-3000	39,990	124,8	124,9	0,453	62,5	62,5	0,657	131,66	128,6	0,262
3001-3500	45,732	131,1	132,3	0,407	72,5	68,2	0,640	130,80	132,8	0,220
3501-4000	53,971	142,4	140,6	0,321	73,6	75,7	0,607	134,39	136,8	0,136
More 4000	82,538	147,4	147,6	-0,193	95,1	94,8	0,427	133,30	132,2	-0,420
<b>All households</b>	<b>20,698</b>	<b>95,5</b>	<b>89,9</b>	<b>0,510</b>	<b>44,6</b>	<b>40,4</b>	<b>0,651</b>	<b>109,41</b>	<b>105,7</b>	<b>0,299</b>

\* Source: compiled and calculated according to the State Statistics Service of Ukraine.

Low and negative values of coefficients of elasticity can be observed in the population group with per capita income more than 4000 UAH for all types of foodstuffs, elasticity of which is quite low, that supports the conclusion that the consumption of these products with an increase of income decreases. Based on the obtained indexes of demand elasticity per capita income of the population we calculated consumption level of basic foodstuffs per capita.

This economic indicator can be used for diagnostics and forecasting of the industry's development. The higher income elasticity of demand, the better industry develops. Increase in the coefficient of elasticity in the dynamics about the same

rate indicates the stability of the industry, lack of growth – its stagnation, and finally the negative coefficient – a decrease of production volume.

The analysis by income elasticity of demand found out that changes in demand for foodstuffs greatly depend on the changes in incomes of the population. This is typical of such food products as milk and dairy products, meat and meat products, vegetables. Despite the fact that the amount of the average per capita consumption changes slow, growth in food prices forces consumers to spend more on their purchase.

Comparing the value of the income elasticity coefficients for different types of food, we can conclude that it grows for almost all goods with the increase of annual cash costs of acquisition of these products, largely due to the fluctuation of prices for investigational products that directs customers, even without changing (or slightly changing) of the amount of consumption, spend more money on their purchase.

So the poorer people, the greater part of the revenue they spend on food. Next consistent pattern is that low-income groups of the population mostly consume poor protein-caloric products (bread and its products, potatoes, vegetables).

**Conclusions.** Generalization of theoretical foundations of consuming capacity allows us to deepen understanding of this sector, its functioning and transformation. The systems approach to the study of consuming capacity allows us to conduct a comprehensive analysis of the relationship of consumption in the integrity and continuity, to explore the objective and subjective factors, to identify the diverse characteristics of food consumption and to show its place and role in changing economic system of society.

The system of relations of food consumption is the special subarea of management, where economic agents operate, goals are defined, activities are conducted and the results are achieved. Economic activity of agents in the food consumption is carried out based on consumer behavior, which is difficult under the current circumstances. The level of satisfaction of food needs reflects the level of welfare and is an indicator of potential opportunities for long-term growth of the national economy and living standards. In order to increase the economic accessibility of food to all sectors of the population the system of measures for reducing poverty should be developed, the targeted support for disadvantaged sectors of the population should be implemented and all age groups of population should be provided with adequate food and nutrition.

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