

# THEORETICAL AND METHODOLOGICAL FOUNDINGS OF THE RESEARCH OF HOUSEHOLDS AS PARTICIPANTS OF LOGISTIC SYSTEMS

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## Zdrenyk V. S., Kotys N. V. Theoretical and Methodological Groundings of the Research of Households as Participants of Logistic Systems

The article is aimed at determining the nature of households, their role and place in the logistic systems and substantiation of the necessity to use logistic approaches to stimulate the development of households. The article summarizes current approaches to the definition of the concept "household". The essence, role and place of households in logistic systems is characterized. Logistic determinants in ensuring the effective functioning of households are defined and the importance of logistic management in order to encourage their development is proved. Prospects for further research in this direction is scientific search for effective tools to manage development of households, adapted to modern conditions, that will ensure the competitiveness and steady development of all participants of logistic systems, among them households, which should undoubtedly be considered to be their main link.

**Keywords:** logistics, household, logistic system, logistic flow, logistic management.

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### Здреник В. С., Котис Н. В. Теоретико-методологічні засади дослідження домогосподарств як учасників логістичних систем

Метою статті є визначення сутності домогосподарств, їх ролі та місця в логістичних системах та обґрунтування необхідності застосування логістичних підходів з метою стимулювання розвитку домогосподарств. Узагальнено існуючі підходи до визначення поняття «домогосподарство». Охарактеризовано сутність, роль та місце домогосподарств у логістичних системах. Визначено логістичні детермінанти в забезпеченні ефективного функціонування домогосподарств та доведено важливість застосування логістичного управління з метою стимулювання їх розвитку. Перспективою подальших досліджень у даному напрямі є науковий пошук ефективного інструментарію управління розвитком домогосподарств, адаптованого до сучасних умов, що дозволить забезпечити конкурентоспроможність та сталий розвиток усіх учасників логістичних систем, у тому числі й домогосподарств, які, безумовно, слід вважати основною їх ланкою.

**Ключові слова:** логістика, домогосподарство, логістична система, логістичні потоки, логістичне управління.

**Рис.:** 3. **Табл.:** 1. **Бібл.:** 12.

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### Здреник В. С., Котис Н. В. Теоретико-методологические основы исследования домохозяйств как участников логистических систем

Целью статьи является определение сущности домохозяйств, их роли и места в логистических системах и обоснование необходимости применения логистических подходов с целью стимулирования развития домохозяйств. Обобщены существующие подходы к определению понятия «домохозяйство». Охарактеризованы сущность, роль и место домохозяйств в логистических системах. Определены логистические детерминанты в обеспечении эффективного функционирования домохозяйств и доказана важность применения логистического управления с целью стимулирования их развития. Перспективой дальнейших исследований в данном направлении является научный поиск эффективного инструментария управления развитием домохозяйств, адаптированного к современным условиям, что позволит обеспечить конкурентоспособность и устойчивое развитие всех участников логистических систем, в том числе и домохозяйств, которые, безусловно, следует считать основным их звеном.

**Ключевые слова:** логистика, домохозяйство, логистическая система, логистические потоки, логистическое управление.

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Under modern economic conditions households, performing their traditional function of consumption, production, exchange, saving and investment, influence socio-economic development of the country and relations in the society, define directions for regulation of the government policy, determine the behavior of all participants of market relations, create the basis for competition and affect logistic processes in the national economy.

New socio-economic conditions characterized by formation and strengthening of the market economy require a more thorough study of the functioning and development of households and regardless of objects of investigation more attention should be focused on economic and behavioral features of their research. In particular, now there is a need to analyze logistic aspects of the functioning of households and determination of their place in the logistic systems. Since the

functioning of households influences not only the welfare of individual families but that of the whole population of the country as well as development of the organization process and technology of commercial activities, the volume of profit of industrial and commercial enterprises. And the use of methods and tools of logistics, logistic analysis and management, application of functional and logistic approach as a methodological basis of the research of households offers new opportunities for their development and improvement of the socio-economic situation in Ukraine. The above-stated predetermines a special actuality of this research.

In foreign and domestic scientific literature the attention to studying concepts of logistics, elements of the logistic system, certain aspects of logistic functioning of market subjects and problems of feasibility of applying logistic approaches in different spheres of activities was paid by the following scholars: Y. Avanesov, B. Berman, G. J. Bolt, Kh. Ghizatullin, O. Dunayev, J. Evans, A. Zyryanov, L. Ibragimov, P. Kallen, Ye. Krykavskyy, F. Krutikov, K. Lysons, E. Mate, Yu. Nerush, S. Nikshych, E. Newman, O. Protsenko, N. Ratner, S. Sarkisov, Ch. Skovronek, S. Smerichevska, S. Uvarov, N. Fasolyak, H. E. Firon, N. Khvyshchun, M. Sharygin, Ya. Yandyganov and many others. Peculiarities of life and activities of households were studied by: S. Barsukova, I. Bodnar, I. Bochan, V. Zheryebin, T. Kizyma, A. Kolot, M. Lytvak, T. Libanova, V. Mandybura, N. Manokhina, S. Panchyshyn, A. Revenko, A. Romanov, M. Savluk, L. Slyusar, A. Surinov, S. Tyutyunnykova, N. Fedirko and many others.

Until recently logistic approaches and principles of logistics were not applied in studying problems of development of domestic households, although there is a good reason for that, because the classical model of economic circulation describes the interaction of households, enterprises and the state sector. In general, it is true that at the original state of establishment of market relations logistics was considered as science and practice possessing a definite set of tools and controlling and managing material flows in economic processes [1, p. 340], however they can be applied to different branches of human activities, including households.

There are very few scientific publications on issues concerning movement of material and concurrent flows among households and sectors of the national economy, as well as the role of logistics in ensuring the development of households.

The article is *aimed* at determining the nature of households, their role and place in the logistic systems and substantiation of the use of logistic approaches to stimulate the development of households.

Generalization of scientific approaches to studying households allows to determine the household as an institutional unit consisting of one person or a group of persons who live together in the same dwelling or a part of it, wholly or partially combine their incomes and assets, produce and consume goods and services collectively, possess the property and income and dispose of it, become participants of economic relations with other institutional units, are legally liable for their actions and decisions [2, p. 214].

From the macroeconomic point of view, households include employers, self-employed workers, hired workers, re-

ipients of income from transfers. The household has its specific structure – an individual, a group of persons, a family, and specific functions – meeting its own needs, production of goods and services, as well as specific sources of resources (wages, incomes from property, transfers, interest rates, incomes from sale of goods and services) [3, p. 24–25].

Circulation of resources, products, revenues and expenses among the sectors of the economic system is constantly taking place. The household in these processes is a basic element and a major participant in all markets: in the labor market – as an employer; the financial market – as a participant in operations with securities and cash; the consumer market – as a consumer of goods and services; the resource market – as an owner and a seller of resources [4, p. 8].

Thus, households are constantly engaged in this circulation. Moreover, they are in the center of all its flows. Performing various functions in the economic turnover, households realize the needs of individuals - members of households (Fig. 1).

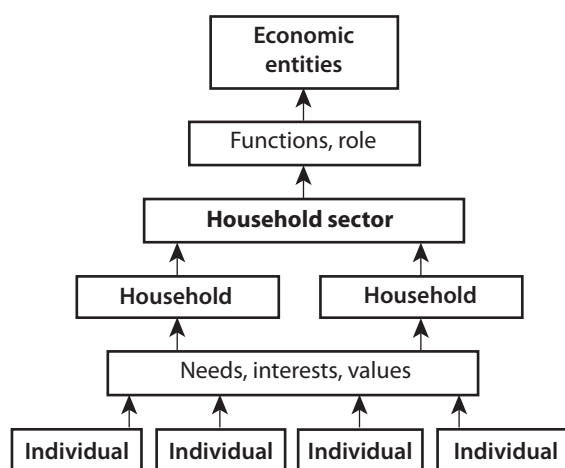
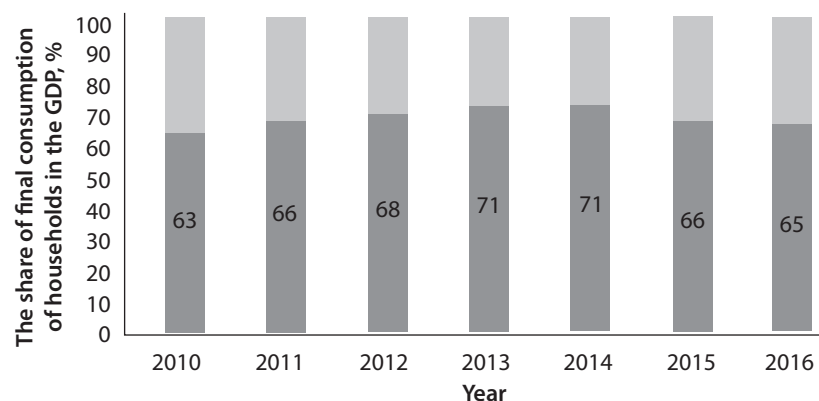


Fig. 1. Realization of needs of an individual through the household functions

Source: developed by the authors.

Households decide independently what goods, in what quantity and in what period of time are to be bought. In this way incoming flows of households are formed. Apart from that, households choose what resources (labor, commodity, manufacturing, entrepreneurial), in what quantity and when consumers are to be provided with – thus outgoing flows emerge.

So, households have a special strategic position, in a certain sense they are economically independent as they can buy the goods and services that are most appropriate to meet their needs in the most appropriate way within the limits of their money income. Freedom of consumer choice predetermines the behavior of all subjects of market relations, provides the basis for competition, determines the direction of the state policy and ensures development of the national economy. It should be noted that the volume of flow of goods and services from commercial enterprises and enterprises of the service sphere to households is considerable (Fig. 2).



**Fig. 2. Final consumption expenditures of households in the GDP structure in 2010–2016**

**Source:** developed by the authors based on the data of the State Statistics Service of Ukraine [5].

According to the official data of the State Statistics Service of Ukraine, the final consumption expenditures of households amounted to 1 537 974 UAH, which is 65% of the GDP in 2016. In 2015 the actual final consumption of households amounted to 1 553 757 UAH or 78% of the GDP. The total average monthly expenditures of the household were 4 952 UAH, while the share of consumption expenditures accounted for 93 % (Table 1) [5].

Therefore, the household should be considered as one of the most important subjects of the logistic system on a

scale of the national economy, which confirms the need to recognize households to be among the main links of logistic systems.

As links of logistic systems scientists mostly consider enterprises-producers, wholesale and intermediary organizations, enterprises-consumers of products for industrial purposes, retailers and transport-expediting enterprises [6, p. 44–45; 7, p. 109; 8].

Most of authors consider manufacturing and retail trade enterprises to be final consumers [9, p. 21]. In the case

**Table 1**

**The structure of the total household spending in 2010–2015**

Index	Year					
	2010	2011	2012	2013	2014	2015
Average total monthly expenditures per household, UAH	3073,3	3458,0	3592,1	3820,3	4048,9	4952,0
<i>Structure of the total household expenditures, %</i>						
Total consumption expenditures	89,9	90,1	90,8	90,2	91,6	92,9
food and soft beverages	51,6	51,3	50,1	50,1	51,9	53,1
alcoholic beverages, tobacco products	3,4	3,4	3,5	3,5	3,4	3,3
non-food products and services	34,9	35,4	37,2	36,6	36,3	36,5
including:						
clothing and footwear	6,0	5,7	6,1	5,9	6,0	5,7
dwelling; water, electricity, gas and other fuels	9,2	9,6	9,9	9,5	9,4	11,7
household items, household equipment and routine housing maintenance	2,3	2,2	2,3	2,3	2,3	2,0
health care	3,2	3,2	3,4	3,4	3,6	3,7
transport	3,7	4,0	4,3	4,3	4,3	3,7
communication	2,7	2,6	2,8	2,8	2,8	2,4
recreation and culture	1,8	1,9	2,0	2,1	1,8	1,5
education	1,3	1,3	1,3	1,2	1,1	1,1
restaurants and hotels	2,4	2,5	2,5	2,5	2,3	2,0
various goods and services	2,3	2,4	2,6	2,6	2,7	2,7
Total non-consumption expenditures	10,1	9,9	9,2	9,8	8,4	7,1
Payment for housing and utility services	7,6	8,0	8,3	8,0	8,1	10,2

**Source:** developed by the authors on the basis of the data of the State Statistics Service of Ukraine [5].

of products for industrial purposes, it is possible to agree with this approach. However, it can't be accepted concerning movement of consumer goods.

The carried out investigations give the grounding to state that households should be considered as final consumers of goods in the system of supply, because, as a rule, it is households that are meant to be consumers and buyers [10, p. 186; 11, p. 84]. The household is a final consumer of material goods and services created by the society. Simultaneously, households are producers of goods and services. Production of households can be both commodity and natural one. In the first case the objective is to sell or exchange the product in the market. In the second case – households produce goods and provide services for their own final consumption and for gross fixed capital formation.

Thus, logistic system, with regard to the presence of households in its structure should reflect the movement of material and concurrent flows from producers to consumers (households), formation of consumer commodities stocks of households (Fig. 3).

technical assistance in installing and adjusting purchased equipment, warranty service and maintenance, remote searching for goods, their choosing and purchasing (online shops) without leaving home. Meeting these demands is possible only by using integrated logistic services.

Making up logistic decisions in the production and distribution spheres producers of goods and services, and employees in the sphere of trade (services), should focus on the needs and wants of households. The study of the practical experience of foreign enterprises shows that one of the reasons stimulating them to apply logistic approaches is expanding the opportunities of improving their customer service, and as a result, increasing the number of consumers. Applying logistic concepts to households (providing them with goods, development of service sphere, providing internal movement of the received products) will improve the efficiency of using their production and trade capital as well as their provision with essential goods and services of high quality. Organization of flow processes in the sphere of goods turnover by means of logistic tools will ensure higher competitiveness of trade intermediaries within integrated

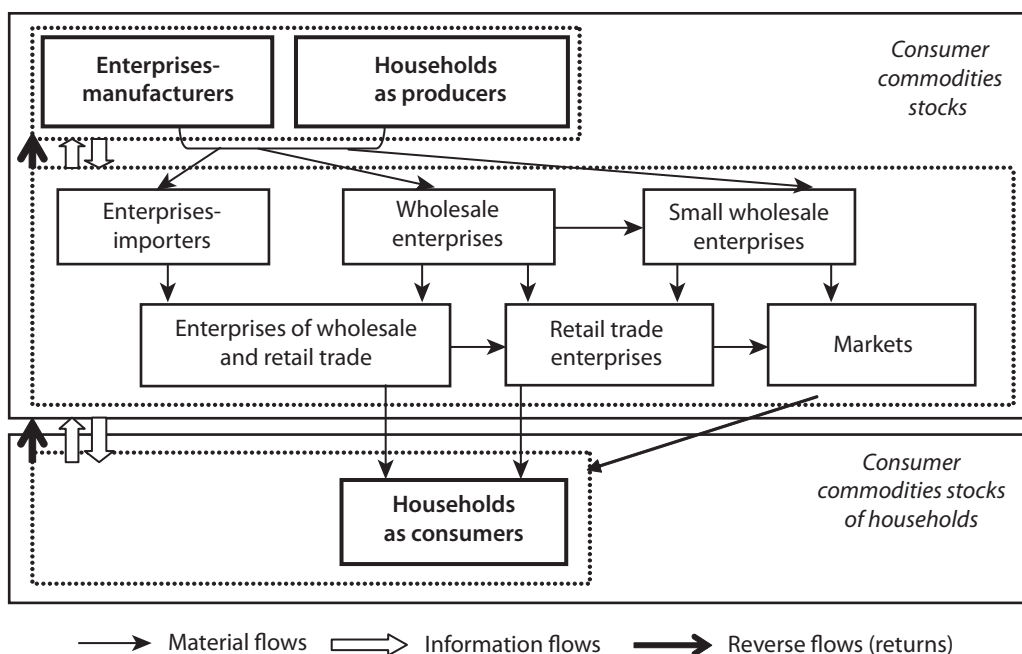


Fig. 3. The structural and functional scheme of the logistic system including households

Source: developed by the authors.

In the aggregated form, the structural and functional scheme of the logistic system of movement of material and immaterial flows includes the following subsystems: production, wholesale, trade intermediaries, retail sale, households (as both consumers and producers).

So, all functional spheres of logistics, in particular those of purchasing, carrying, informational and others are inherent to some extent in households as institutional units of the national economy and final independent units of the society.

Under modern conditions, besides needed and wanted goods consumers (households) require additional services: delivery of goods in shorter time and better interaction with transport organizations, provision of storage operations,

logistic systems, acceleration of the stock turnover, reduction in the distribution costs and consumption expenditures, growth in the profit and property potential of households as well as their total resources and incomes.

State institutions have a significant impact on improving the economic policy, raising the efficiency of reforms aimed at the development of households [12, p. 202–203]. Application of logistic approaches and principles of logistic management in state administration will make this impact more effective. In this sense, the mission of organs of state power and management is to ensure harmonious relations among consumers (households), economic entities and the state by creating institutional, orga-

nizational and economic conditions to meet the demand of households for goods and services at the international level of life quality standards.

The development of households is directly connected with the effectiveness of the social and economic reforms at commodity markets, which in its turn depends to a great extent on strengthening the role of the state and municipalities in ensuring and intensifying the social orientation of the consumer market. Considering the national commodity market as a logistic system including households, provides a possibility to reveal imbalances, explore and evaluate internal reserves for intensification of the production and commercial activities, and the social policy aimed at improvement of the functioning of households. Development of the logistic system of the commodity market will ensure stabilization of the general economic, political and social conditions in the country and its regions, adaptation of industrial and commercial organizations to market relations; will raise living standards of the population and increase money incomes of domestic households.

Taking into consideration the above mentioned, logistics of households is a comprehensive system of management of incoming, outgoing and internal flows of goods, products and services aimed at studying the consumer behavior of households in the market, assessing their impact on all elements of the logistic system, optimizing and integrating the external and internal material and immaterial flows to achieve optimal objectives in the spheres of production, circulation and consumption. Optimal objectives should be understood as minimization of reserves in logistic systems (including stocks of households), reduction of the time of movement of products to households, development of after sale services and warranty services, reduction of consumption expenditures, etc.

## CONCLUSIONS

The modern stage of development of the national economy requires involvement of innovative, more efficient and flexible management tools to provide functioning and development of households. It determines the topicality of further scientific research of tools for effective management of their development adapted to modern conditions, including logistic management.

Application of logistic approaches, all means and tools of logistics in the sphere of households will allow to find new ways to increase radically the efficiency of using their trade and production capital and ensure competitiveness and steady development of all participants of logistic systems, including households, which should undoubtedly be considered to be their main link. ■

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