# DECOMPOSITION OF FINANCIAL CAPACITY OF UKRAINIAN HOUSEHOLDS IN THE CONDITIONS OF CHANGING ECONOMIC ENVIRONMENT: REGIONAL SECTION\*

# Olha Mulska<sup>1</sup>, Taras Kloba<sup>2</sup>

Abstract. Challenges of economic instability update the study of their impact on the architecture of economic and consumer behavior of Ukrainian households, which determines their financial capacity. The purpose of the article is to carry out a comparative analysis of the financial capacity of Ukrainian households at the regional level and to identify applied features of consumer behavior in the economic crisis. The object is the financial capacity of Ukrainian households in terms of regions. The subject of research: analysis of different models of behavior of households in Ukraine (consumer, investment, and savings), which will determine the financial orientation of families by region. Research methodology. The methodological tools for assessing the economic behavior of households with the definition of its leading models – consumer, investment, savings, the correlation of which allows to determine the decomposition of the financial capacity of the territory (country, region, community). The methodological approach has been tested, which can serve as a basis for structuring management tasks in terms of strengthening the investment activities of households, ensuring the optimal structure of consumer spending to form the territory's resilience to financial shocks. An analysis of the economic behavior of households, based on the assessment of reflections – consumer, investment, and savings – as a result of the subject's understanding of its financial capacity, expressed in terms of costs and financial resources. The study results can help reflect the state of providing the entity with financial resources. These other tangible and intangible assets may be capitalized shortly and reoriented from consumption and savings to investment purposes of financial capacity of households in Ukraine. Improving the financial condition of households is closely linked to the resumption of economic activity of enterprises, as families are one of the most critical economic categories. An essential tool is an effective regional policy to level interregional disparities and effective long-term strategies for household financial behavior. Particular attention should be paid to financial planning, which is a prerequisite for effective management and control over the financial condition of households, which will balance the structure of income and expenditure, avoid unplanned expenses, rational use of available resources. When it comes to making financial decisions, they are always sensible, planned based on the real needs of household members or the adequacy of financial resources. Prospects for further research will be problem-solving, which is possible only at the state level and requires effective management decisions and the identification of different macroeconomic trends in the national economy.

Key words: economic growth, financial capacity, economic behavior, territory, household, conditions of variability.

# JEL Classification: O13, O18, D19

# 1. Introduction

The issue of consumer research has a multifaceted nature. On the one hand, modern society is evolving as a consumer. The ideas of thrift, conservation of environmental resources with the promotion of longterm consumption are increasingly promoted. On the other hand, the priorities of consumerism remain with the growing rights of consumers, particularly regarding access to quality products and in sufficient quantities. For societies that are developing or in



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a transformational environment, to which Ukraine belongs, the study of consumption and cost structure has a rather acute social character. However, it is intertwined with the structural shortcomings of the economy and the contradictions of innovative development.

The issue of studying the financial capacity of households is relevant in both theoretical and applied sense. For Ukraine, it acquires socially significant features given the need to improve the welfare of the population, improve other quality indicators of its life, and the formation of regional development programs, the concept of the financial well-being of communities and territories.

In the scientific discourse, there are numerous studies of consumer behavior, and the financial capacity of households, in terms of analyzing the structure of expenditures in the regions of Ukraine to identify the importance of consumer, investment, and savings activities. The results of the study develop ideas about the content of behavior in economic theory (Harasymiv, 2016; Teremtsova, 2010), the specifics of consumer behavior (Vasylkevych, 2011; Derkach, 2020; Kuzmuk, 2015; Pohorila, 2006). Identifying the features of the analysis of consumer behavior at the household level is carried out taking into account the regulations (Stankevych, 2008) and the results of research (Melykh, 2020; Stankevych, 2008; Cherenko, 2019; Bil, 2021; Mulska, 2021).

As a rule, consumer behavior is considered through the prism of the influence of marketing tools at the individual level. However, consumer behavior needs research with a more fundamental vision – forming a behavioral economy, ensuring the welfare of the population, and the impact on sustainable economic growth. Therefore this publication develops a methodology for researching consumer behavior in a more complex context.

## 2. Materials and methods of research

In the course of this study, various scientific methods and approaches were used, in particular, a systematic approach to ensure the analysis of the theoretical basis of the behavioral economy of households and the study of the processes of formation of consumer behavior. The dialectical method in the analysis of the current state and prospects of development of the behavioral economy of households at the level of regions of Ukraine; methods of economic analysis in the study of the characteristics of consumer, investment and savings activity of homes, in identifying interregional differences and relationships; methods of scientific abstraction, induction, and deduction in the formulation of recommendations for the regulation of consumer behavior of households, it's theoretical modeling in modern conditions.

The information base was primary sources, monographs of domestic and foreign authors, scientific publications in specialized publications, statistical and information bulletins of government agencies.

## 3. Results and discussion

The consumer behavior of households in Ukraine is constantly changing under economic shocks, political instability, growing social vulnerability, and, consequently, societal tensions. Moreover, the lack of sustainable economic growth over time leads to increased social inequality and deepening poverty, reduces the ability of households to save, and even more investment, their resources, causes the spread of migration among the population, especially young people, and generally threatens the quality of life, in the country.

According to a sample survey of the socio-economic situation of households, the absolute poverty rate in Ukraine in 2019 was nominally 1.1% (in 2016 -3.3%), which indicates a slight reduction in the share of households with per capita equivalent total income, lower than the statutory subsistence level. At the same time, the de-facto poverty rate is much higher when comparing incomes with the estimated subsistence level: in particular, in 2016 and 2019, the poverty rate reached 48.2% and 23.3% of households, respectively (Derzhavna sluzhba statystyky Ukrainy. Sotsialno-ekonomichne stanovyshche, 2019). Thus, despite reducing absolute poverty in Ukraine, its level remains high and varies significantly by region. Thus, considering the depth of income poverty, the worst situations traditionally include Rivne, Kherson, Luhansk, Zhytomyr, and Kyiv (excluding the city of Kyiv) oblasts, which affect the patterns of consumer behavior in these regions. (Cherenko, 2019). In general, the regional specificity of the formation of financial capacity of households is determined by socioeconomic determinants of the development of a particular region, the activity of territorial communities of which it consists, settlement structure, and objective other and subjective environmental factors.

The analysis of the dynamics of consumer aggregate household expenditures for 2009–2019 (Table 1) shows a relatively uniform growth of the indicator by region during the study period, in particular, 3.1-4.3 times compared to 2009 (the average value in Ukraine in 2009 and 2019 amounted to 2417.1 and 8826.3 UAH per month, respectively). However, if we compare the currency equivalent of household consumption expenditures (in EUR), the dynamics are less pronounced (an increase of 1.2-1.6 times) due to the depreciation of the national currency. Thus, the increase in consumption and household income is evidence-primarily of the impact of inflation in the country against the background of overall low purchasing power.

At the same time, the share of cash income accounted for by total consumer expenditures of households in Ukraine in 2019 was 79.2%, which is 11.3 percentage points. less than in 2009 (90.5%) (Figure 1).

Therefore, nominally households have become more solvent because they consume less of their cash income and conserve resources to finance non-consumer needs. However, in reality, these changes did not significantly affect the population's living standards, which remains one of the lowest among European countries. Nevertheless, the noticeable social stratification in the regional aspect attracts attention.

Thus, according to the above indicator, the least financially viable in ensuring their consumer spending (according to 2019) are households of Mykolaiv (88.8%), Chernihiv (88.7%), and Zaporizhzhia (86.9%) regions, while the most secured – families of Odesa region (67.0%). Almost 70-90% of cash income goes to consumption, thus limiting households' savings and investment activity. Thus is direct evidence of the monetary poverty of the population. In previous years, this figure in some regions (Volyn, Ivano-Frankivsk, Rivne, Ternopil, Cherkasy, etc.) exceeded 100%, i.e., the income received did not cover the consumer needs of households, to meet which, probably, used savings, borrowed capital, and other sources. Among the reasons for this situation are the higher percentage of the rural population in these areas and the larger share of the people employed in agriculture, forestry, fishing, and hunting. And this, in turn, affects the structure of the comprehensive resources of households. Thus, the share of cash income in more urbanized regions is higher compared to areas where households make extensive use of non-monetary sources, in particular in the form of products obtained from personal farms and self-procurement. Thus, the importance of the socio-demographic characteristics of households in shaping their consumer behavior.

Table 1

Dynamics of total consumer expenditures of households by regions of Ukraine (on average per month per household, UAH), 2009–2019

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019/2009
UKRAINE	2417,1	2765,7	3118,3	3265,5	3444,6	3707,4	4602,1	5331,5	6634,1	7655,4	8826,3	3,7
Autonomous Republic of Crimea	2342,4	2660,2	2927,5	3090,7	3354,4							X
Vinnytsia	2281,4	2564,9	2939,7	3119,4	3137,9	3504,6	4704,5	5384,2	6982,1	7547,1	8824,3	3,9
Volyn	2219,7	2733,5	3151,2	3286,7	3502,8	3788,7	5065,6	5755,4	6714,1	7850,8	8889,4	4,0
Dnipropetrovsk	2310,7	2530,1	2797,7	2947,1	3050,4	3389,3	4082,0	4973,7	6205,7	7707,0	8225,2	3,6
Donetsk	2365,1	2731,9	3124,3	3344,7	3610,7	3333,0	3936,7	4704,0	5799,5	6440,7	7952,2	3,4
Zhytomyr	2254,1	2524,0	2663,1	2976,7	2900,8	3342,8	4260,7	4604,8	5930,1	6651,1	8211,8	3,6
Zakarpattia	2818,8	3147,1	3701,9	3860,9	4336,8	5000,3	6538,4	8054,1	9167,5	10814,3	12161,7	4,3
Zaporizhzhia	2196,1	2643,0	3044,4	3340,7	3233,8	3890,2	4522,0	4734,6	6151,9	7747,8	8035,8	3,7
Ivano-Frankivsk	2727,7	2993,8	3184,9	3322,1	3580,7	4012,1	5146,8	6617,8	8411,0	8733,9	10442,0	3,8
Kyiv	2573,8	2762,1	2947,9	3097,8	3434,8	3400,5	4390,2	4867,1	5600,0	7062,5	8429,7	3,3
Kirovohrad	1887,3	2067,9	2537,1	2538,2	2835,2	3033,4	4013,9	4655,7	5918,9	6831,8	7740,5	4,1
Luhansk	2199,2	2557,3	2744,0	3137,3	3014,5	2893,2	3319,5	4017,7	5280,4	6158,7	6703,7	3,1
Lviv	2646,5	2991,2	3227,7	3474,3	3878,8	4157,4	5369,5	6541,7	7820,1	9252,3	11053,6	4,2
Mykolaiv	2546,6	2957,8	3337,2	3597,1	3686,0	3849,2	4263,3	5155,6	6074,1	7642,1	8856,0	3,5
Odesa	2327,5	2927,9	3147,0	3185,7	3274,4	3786,0	4680,1	5136,3	6330,3	7164,7	8261,7	3,6
Poltava	2023,1	2434,5	2884,0	2864,4	3241,8	3454,2	4312,3	4802,8	6278,8	6694,4	7366,9	3,6
Rivne	2431,3	2746,1	2975,0	3044,5	3030,5	3240,2	4193,1	4538,6	6000,4	6489,4	8267,0	3,4
Sumy	1868,8	2482,1	2631,0	2563,3	2780,4	3162,4	4187,8	4683,6	6061,2	6845,2	7747,7	4,2
Ternopil	2420,4	2610,3	3026,8	3115,7	3286,7	3651,6	5243,2	5905,7	8553,8	8039,6	9716,0	4,0
Kharkiv	2347,8	2689,7	2921,2	3095,7	3404,6	3653,6	4380,5	4884,0	6168,9	7106,2	7463,5	3,2
Kherson	1938,2	2397,9	3172,1	3175,3	3234,4	3709,8	4060,4	5026,6	5907,1	6363,9	7164,8	3,7
Khmelnytskyi	2249,5	2518,7	2622,4	2645,5	3008,5	3124,9	4000,5	4978,5	6000,0	6764,6	8229,3	3,7
Cherkasy	2530,5	2957,6	3307,3	3410,7	3506,6	3584,8	4698,3	4945,1	6141,7	6954,5	7948,9	3,1
Chernivtsi	2607,4	2713,6	3057,4	3244,4	3411,1	3984,4	4813,8	6300,3	7317,5	8528,4	9310,3	3,6
Chernihiv	2171,9	2534,9	2913,1	2874,6	3174,6	3342,8	4573,9	4969,6	6406,8	7998,2	8683,9	4,0
Kyiv (city)	3638,8	3983,9	4905,7	4945,3	5203,0	5088,7	6097,3	7156,8	8787,3	10351,6	13058,2	3,6
Sevastopol (city)	3131,0	3699,1	4541,2	4591,1	3810,8							X

Note: "..." – no data.

Source: compiled by the authors according to the data (Derzhavna sluzhba statystyky Ukrainy. Vytraty i resursy domohospodarstv Ukrainy, 2009, 2019)

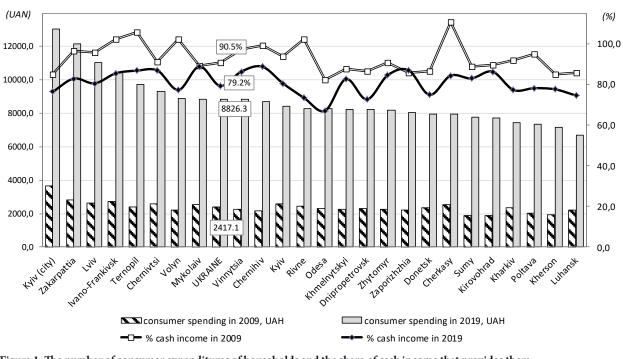


Figure 1. The number of consumer expenditures of households and the share of cash income that provides them, by regions of Ukraine in 2009 and 2019 (on average per month per household)

Source: compiled by the authors according to the data (Derzhavna sluzhba statystyky Ukrainy. Vytraty i resursy domohospodarstv Ukrainy, 2009, 2019)

Almost half of the total household expenditures are spent on food and non-alcoholic beverages (46.6% in Ukraine as a whole in 2019), while in Volyn, Donetsk, Kyiv (excluding Kyiv), Odesa, and Rivne oblasts this figure exceeded 50, 0%. At the same time, in developed countries, households spend no more than 30% of their total family income on food (Melykh, 2020).This trend is one of the reasons for Ukrainians' passivity towards savings.

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Despite this, positive changes in the consumer capacity of households have taken place. Compared to 2009, in 2019, the share of homes that spend more than 50% of total expenditures on food decreased. Moreover, the percentage of households with high risks of social exclusion has significantly reduced (with average per capita equivalent total income per month below the statutory subsistence level) – from 16.2% in 2009 to 1.1% in 2019. This trend indicates a reduction in the depth of poverty.

The investment behavior of households is statistically estimated by the average monthly expenditures on the purchase of shares, real estate (houses, apartments, cottages, garages), construction, major repairs, bank deposits, and the number of contributions to private pension funds. According to official statistics, on average, in 2019, this figure in Ukraine was UAH 445.9 per month per household (4 times more than in 2009) it ranged from UAH 44.0 in the Kyiv region (excluding capital) to 1528.1 UAH in the Chernivtsi region (Table 2). There is a significant scope of variation due to different income levels and different consumer behavior patterns in the regions. It should be noted that the investment potential of the population in Ukraine is not fully involved due to low financial capacity. And foreign investment in the country's economy has declined due to general socio-economic instability and the military conflict in eastern Ukraine. This situation requires an effective domestic investment policy based on its financial resources.

From 2009 to 2019, the share of investment expenditures in the structure of total spending of households in Ukraine increased from 4.1% to 4.6% (Figure 2); in most regions, there were also constructive changes. Of course, these are not significant structural changes, but still, a positive factor is a fact that the population thus increases its financial capacity, forms a resource base for passive income, raises living standards. However, it should be noted that the share of such expenditures in households in developed countries is much higher, so to optimize the structure of total spending, it is necessary to increase investment costs (investments).

Another model of financial behavior of households is saving activity, which is a significant source of economic development and an effective tool to protect capital from economic shocks. In this context, it is necessary to distinguish financially active and financially passive households by region and compare the savings activity of homes with macroeconomic

#### Table 2

Investment expenditures \* of households by regions of Ukraine (on average per month per household, UAH), 2009–2019

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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019/2009
UKRAINE	112,7	133,1	147,2	132,2	166,1	131,7	125,5	141,7	225,0	313,3	445,9	4,0
Autonomous Republic of Crimea	151,7	160,9	97,5	126,9	162,6							x
Vinnytsia	124,8	101,1	191,7	141,5	100,2	90,2	71,3	139,8	293,3	146,4	607,5	4,9
Volyn	41,5	78,7	65,2	81,9	115,7	143,6	83,1	76,4	188,4	292,4	361,1	8,7
Dnipropetrovsk	108,1	106,3	162,8	133,1	133,4	133,8	170,2	201,1	309,8	691,3	796,7	7,4
Donetsk	107,8	136,3	99,8	90,6	97,4	63,2	29,5	32,3	246,8	203,9	131,7	1,2
Zhytomyr	175,4	63,4	105,2	51,8	311,0	120,7	88,1	303,1	141,3	122,5	230,9	1,3
Zakarpattia	193,9	145,8	248,6	202,0	125,0	255,8	263,3	60,5	151,8	583,7	155,1	0,8
Zaporizhzhia	193,6	214,2	288,3	308,4	363,0	305,5	305,3	277,2	576,0	661,1	766,3	4,0
Ivano-Frankivsk	66,6	57,8	63,8	49,9	16,8	14,6	5,6	17,7	135,7	16,7	143,6	2,2
Kyiv	127,8	94,8	193,3	91,2	153,8	98,1	44,6	1,1	68,5	16,5	44,0	0,3
Kirovohrad	64,7	100,1	221,6	176,5	151,1	129,2	168,3	165,4	161,1	202,6	884,9	13,7
Luhansk	152,8	147,2	166,9	221,7	212,8	290,0	307,9	230,1	380,7	691,0	680,8	4,5
Lviv	53,5	38,5	66,6	55,0	55,6	69,3	44,8	101,6	86,0	199,2	346,2	6,5
Mykolaiv	207,8	112,9	231,9	207,8	125,9	151,2	136,9	252,6	398,8	430,3	712,1	3,4
Odesa	96,1	197,7	65,0	58,4	132,9	94,0	60,5	72,6	84,1	41,3	249,9	2,6
Poltava	78,1	97,1	124,1	102,2	149,3	57,1	102,1	37,4	121,2	120,6	121,2	1,6
Rivne	60,2	110,6	71,9	69,7	97,9	182,9	148,7	101,7	85,1	97,3	231,6	3,8
Sumy	142,0	154,1	229,5	127,2	123,8	172,9	370,7	389,3	264,3	258,5	287,5	2,0
Ternopil	75,8	112,8	54,2	146,5	148,8	77,5	109,1	85,3	523,9	379,0	859,5	11,3
Kharkiv	71,7	87,6	99,1	127,6	140,1	223,9	167,1	169,0	121,0	413,2	545,5	7,6
Kherson	39,9	55,4	56,0	34,0	39,1	26,4	4,1	90,5	149,6	57,8	133,7	3,4
Khmelnytskyi	166,4	208,6	180,3	261,5	281,6	139,2	61,3	52,4	122,0	171,0	726,2	4,4
Cherkasy	83,5	86,3	78,6	106,1	103,6	125,8	64,7	79,8	242,5	569,1	527,4	6,3
Chernivtsi	273,2	219,4	206,6	320,6	348,3	454,3	462,8	531,5	817,9	982,5	1528,1	5,6
Chernihiv	132,2	175,4	225,2	272,1	223,7	141,0	129,9	145,9	346,6	547,4	525,5	4,0
Kyiv (city)	69,7	301,2	273,0	79,3	405,8	42,2	54,1	122,8	105,1	127,2	146,6	2,1
Sevastopol (city)	35,8	32,1	121,5	131,0	41,9							х

Notes: \* according to the methodology of the State Statistics Service of Ukraine, the investment expenditures of households include the following items of non-consumer expenditures: purchase of shares, real estate, construction, overhaul, bank deposits.

"..." – no data.

Source: compiled by the authors according to the data (Derzhavna sluzhba statystyky Ukrainy. Vytraty i resursy domohospodarstv Ukrainy, 2009, 2019)

development. Therefore, the empirical indicator can be the gross regional product (GRP) to analyze the latter. Experts have determined that the economic growth of a country or region directly depends on investment, a sufficient amount of which is at least 27-35% of GDP or GRP. However, for a long time, gross savings in Ukraine (from the population, enterprises, and the state) do not exceed 15% of GDP. Thus, more than 60% of gross savings are provided by non-financial corporations and households – only 20%, while the proportion is reversed in developed countries (Kraina proidannia, 2019).

There are no comprehensive regional statistics on organized and unorganized household savings, except for some surveys conducted by the statistical system. Therefore, the size and dynamics of potential savings can be estimated by deducting the accumulated capital of households not used in the current year after making all (consumer and non-consumer) expenditures. In essence, this is the difference between total resources and total household expenditures. The saved resources can potentially be used to invest in future income or become a financial "cushion" to protect the population from economic crises and shocks (Table 3). It is important to note that the savings capacity, as the total capacity of households to accumulate resources, during 2009-2019 increased in Ukraine 9.4 times: the most - in Ivano-Frankivsk region (20.5 times), the least - in Kirovograd, Chernivtsi, and Zaporizhia regions (3 times). However, the dynamics of the indicator during the analyzed period were unstable, which is evidence of the influence of various factors on these processes, including macroeconomic crises, imbalances in regional labor markets, the spread of the shadow economy, and informal employment.

According to Figure 3, most oblasts of Ukraine in 2019 showed a lower level of accumulated total

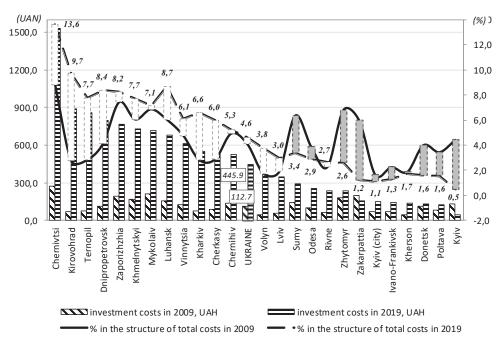


Figure 2. Distribution of investment expenditures of households by regions of Ukraine and their share in the structure of total spending, 2009 and 2019 (on average per month per household)

Source: compiled by the authors according to the data (Derzhavna sluzhba statystyky Ukrainy. Vytraty i resursy domohospodarstv Ukrainy, 2009, 2019)

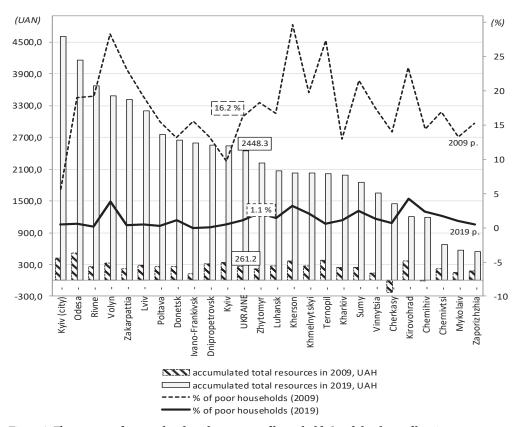


Figure 3. The amount of accumulated total resources of households \* and the share of low-income families with real incomes below the statutory subsistence level, by regions of Ukraine, 2009, 2019

Note: \* saved (unused) resources that could potentially be used to invest in future income. Calculated as the difference between total resources and total household expenditures (average per month per household).

Source: compiled by the authors according to the data (Derzhavna sluzhba statystyky Ukrainy. Vytraty i resursy domohospodarstv Ukrainy, 2009, 2019)

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#### Table 3

Accumulated total resources of households \* by regions of Ukraine (on average per month per household, UAH), 2009–2019

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019/2009
UKRAINE	261,2	396,4	385,7	542,5	640,3	514,4	279,7	518,4	1025,8	1595,5	2448,3	9,4
Autonomous Republic of Crimea	330,9	265,0	291,8	404,5	412,2							x
Vinnytsia	133,6	130,1	68,4	122,2	408,9	331,8	575,8	471,9	591,3	1254,1	1647,8	12,3
Volyn	332,2	367,2	343,5	674,8	694,4	443,4	66,9	585,0	1456,0	1806,4	3481,7	10,5
Dnipropetrovsk	319,0	508,7	416,4	612,3	749,6	543,5	478,3	374,4	814,6	1124,2	2554,5	8,0
Donetsk	255,8	628,8	661,5	1017,6	1023,5	349,2	367,5	320,4	1027,8	1824,0	2648,3	10,4
Zhytomyr	222,9	195,5	397,5	253,0	521,6	425,6	28,9	432,7	700,9	1540,8	2216,2	9,9
Zakarpattia	220,5	287,0	269,6	559,5	414,0	320,7	227,5	221,2	1110,0	1013,3	3413,3	15,5
Zaporizhzhia	180,5	255,7	216,7	262,8	288,1	209,0	228,4	399,3	403,0	454,2	546,1	3,0
Ivano-Frankivsk	126,4	174,5	213,6	319,8	405,0	419,6	426,6	394,4	1310,1	1661,6	2587,2	20,5
Kyiv	337,2	461,6	487,0	764,9	661,1	1042,7	885,8	994,8	1541,0	1944,9	2535,0	7,5
Kirovohrad	366,8	392,5	568,9	651,1	570,5	448,4	51,4	582,4	944,5	1542,6	1208,1	3,3
Luhansk	272,6	336,6	521,2	537,1	934,8	405,8	626,7	881,0	1173,3	1460,5	2069,2	7,6
Lviv	278,9	320,2	416,8	602,7	604,9	601,4	-54,9	397,5	1172,1	1860,7	3202,5	11,5
Mykolaiv	154,9	164,9	71,3	136,6	164,8	206,9	160,5	284,0	551,9	564,4	576,3	3,7
Odesa	520,6	591,7	445,8	1006,4	1142,3	1115,4	502,2	1306,7	2146,9	3378,3	4163,3	8,0
Poltava	263,4	645,1	283,7	551,2	631,9	705,8	190,4	771,6	1235,5	2536,7	2752,4	10,5
Rivne	260,3	488,0	354,1	594,8	781,6	773,2	562,8	1255,5	1812,6	2818,3	3669,7	14,1
Sumy	241,0	298,9	312,4	546,2	553,6	352,9	205,0	504,1	612,7	976,2	1856,4	7,7
Ternopil	380,4	222,9	417,7	280,3	577,1	293,3	-87,8	470,3	777,2	1666,8	2007,2	5,3
Kharkiv	250,5	374,7	339,5	445,0	515,7	471,3	357,0	354,8	726,7	1110,6	1982,5	7,9
Kherson	361,6	346,1	89,9	263,7	282,7	403,7	348,8	609,7	1059,9	1537,5	2033,1	5,6
Khmelnytskyi	265,8	299,6	375,5	519,0	524,4	652,9	415,5	600,0	1185,8	1722,2	2032,2	7,6
Cherkasy	-225,3	-124,4	-156,8	-109,0	66,7	84,7	-359,3	-27,9	908,0	355,1	1450,4	х
Chernivtsi	217,2	329,4	286,5	421,6	468,7	400,9	103,2	113,8	152,4	573,6	678,9	3,1
Chernihiv	-7,9	84,9	-75,0	264,7	205,9	329,1	25,0	161,4	440,2	578,5	1184,3	x
Kyiv (city)	422,0	995,3	1051,4	805,4	1062,0	671,9	83,4	503,1	1280,5	2687,7	4609,2	10,9
Sevastopol (city)	-23,5	-243,6	-325,0	110,8	690,5							х

Notes: \* saved (unused) resources that could potentially be used to invest in future income. Calculated as the difference between total resources and total household expenditures.

"..." – no data.

Source: compiled by the authors according to the data (Derzhavna sluzhba statystyky Ukrainy. Vytraty i resursy domohospodarstv Ukrainy, 2009, 2019)

resources of households relative to the national indicator (UAH 2,448.3 on average per household per month).

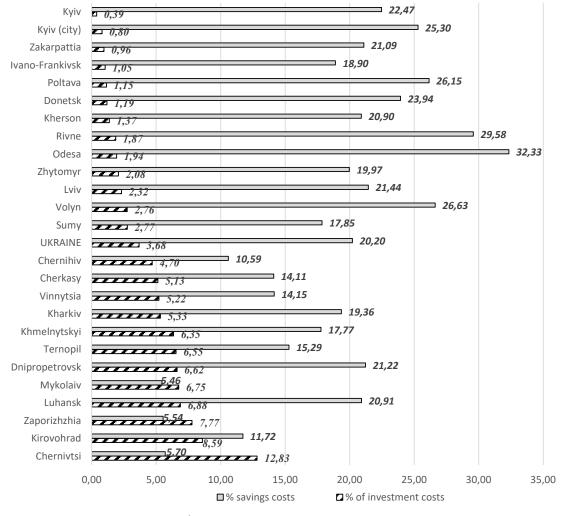
At the same time, almost all regions of this majority (except for Ternopil, Cherkasy, Mykolaiv, and Zaporizhia oblasts) were characterized by a higher level of household poverty according to the income criterion compared to the national average (1.1%). Accordingly, in those regions where households tended to accumulate more resources, the percentage of lowincome families mainly was lower than in Ukraine as a whole.

Based on the analysis of different models of household behavior in 2009–2019, the structure of their general activity (consumer, investment, and savings) was compiled, which allowed to find out the financial orientations of households by region. Listed in Figure 4, the decomposition of the financial capacity of households in 2019 shows that most of them focus on consumer behavior (i.e., do not have the opportunity to allocate a significant portion of income to savings) with a share of consumer spending from 64.2% to 84.0%, with a predominance of values higher than the national level (72.8%). The investment costs also vary region – from 0.4% to 12.8%, and the share of unused resources into savings ranged from 5.5% to 32.3%.

Given that there is no empirically proven optimal level of investment costs and optimal savings, we should focus on increasing the shift of emphasis in the direction of organized saving behavior and the transformation of accumulated capital into investment resources. Thus, the leading role in these processes is played by the credit and banking system. However, recent structural reforms in Ukraine's banking sector have harmed household deposits' protection and confidence in financial institutions. The low level of financial literacy of citizens, who are more prone to disorganized saving behavior in accumulating cash without placing it in the relevant financial institutions, also contributes. However, the natural source of domestic investment in the national economy is primarily organized household savings. The latter's growth is evidence of improving the welfare of the population and strengthening confidence in financial institutions and the state in general.

Unfortunately, there are few reasons for increasing the savings activity of the population in Ukraine, as wages predominate in the structure of total household resources. As you know, it is an indicator that determines the overall standard of living and savings and investment behavior of households. In Ukraine, the average monthly salary at the beginning of 2020 was 397 EUR, while in Poland, the value of this indicator was 1114 EUR, in Romania – 742 EUR, in the Czech Republic – 1250 EUR, in Germany – 3260 EUR (Labour Market (incl. LFS) hus, Ukraine lags behind the EU countries (including the poorest) several times the average wage.

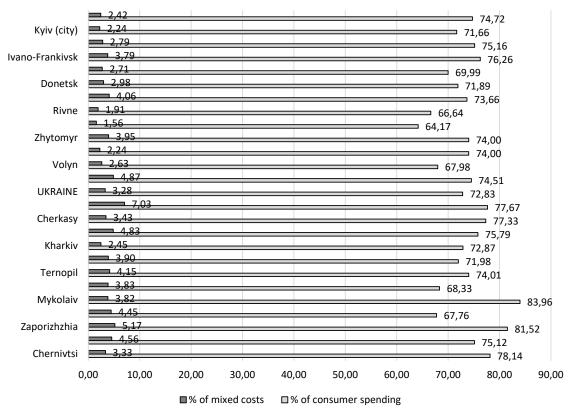
Moreover, the deteriorating economic situation in the country and regions, and, consequently, the reduction of guarantees of stable employment and a decent standard of living of households push citizens to try to find a job with higher wages, to get an education in other countries. Accordingly, with declining incomes, active inflation, exceeding the growth rate of household expenditures over income growth rates, limited opportunities for citizens to save and invest due to high food expenditures, migration sentiment is growing. These sentiments change especially sharply during periods of crisis and revolutionary change, as confirmed by a recent study by the authors (Levytska, Mulska, 2020).Critical periods in the economic and political life of Ukraine (the Orange Revolution,



*a) investment and savings behavior of households* 

#### Figure 4. Decomposition of financial capacity of Ukrainian households: regional section, 2019

Source: compiled by the authors according to the data (Derzhavna sluzhba statystyky Ukrainy. Vytraty i resursy domohospodarstv Ukrainy, 2009, 2019)



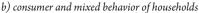


Figure 4. Decomposition of financial capacity of Ukrainian households: regional section, 2019

Source: compiled by the authors according to the data (Derzhavna sluzhba statystyky Ukrainy. Vytraty i resursy domohospodarstv Ukrainy, 2009, 2019)

the Great Recession of 2008–2009, and the Dignity Revolution) significantly affected the trends of external migration of the population of Ukraine and border regions, increasing disparities in regional labor markets and reducing the financial stability of households.

### 4. Conclusions

The financial potential of households, expressed in terms of cash and non-cash income, affects the formation of a model of their economic behavior and natural and potential consumer capacity. At the same time, savings activity is determined mainly by the level of total household income and, accordingly, the share of resources accumulated after implementing all expenditures. However, not all household savings are converted into investment resources, so the

Ukrainian economy is experiencing acute shortages. It was found that the average monthly volume of investments made by households in Ukraine through the purchase of shares, real estate (houses, apartments, cottages, garages), construction, overhaul, bank deposits, as well as contributions to private pension funds in 2019. was only 3.7% in the structure of total household resources. Thus, this indicates the need to shift the emphasis in consumer behavior to strengthen the role of non-consumer, particular investment, costs. The state must provide favorable institutional conditions to stimulate public investment and maintain the internal socio-economic environment, resistant to various crises and shocks. An essential tool here is an effective regional policy aimed at leveling interregional disparities and forming effective long-term strategies for the financial behavior of households with full use of its investment potential.

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