



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

---

**ANNALS OF THE POLISH ASSOCIATION  
OF AGRICULTURAL AND AGRIBUSINESS ECONOMISTS**

ROCZNIKI NAUKOWE  
STOWARZYSZENIA EKONOMISTÓW ROLNICTWA I AGRIBIZNESU

---

Received: 23.08.2023

Annals PAAAE • 2023 • Vol. XXV • No. (3)

Acceptance: 23.09.2023

License: Attribution 3.0 Unported (CC BY 3.0)

Published: 26.09.2023

JEL codes: D10, D12, G50, O12, O18, R20

DOI: 10.5604/01.3001.0053.8862

**MAŁGORZATA MIESZAŁA, ROMANA GŁOWICKA-WOŁOSZYN,  
ANDRZEJ WOŁOSZYN, JOANNA STANISŁAWSKA<sup>1</sup>**

Poznań University of Life Sciences, Poland

**CONSUMER EXPENDITURE OF RURAL HOUSEHOLDS  
IN POLAND**

Key words: rural households, urban households, consumption expenditure, fixed expenditure, expenditure structure

**ABSTRACT.** The main target of the research was to diagnose the level and structure of consumption expenditures of rural households in Poland in 2015-2021. Among consumption expenditures, special attention was paid to fixed expenditures, i.e. on food and non-alcoholic beverages, as well as on housing and energy carriers. Expenditures of rural households were compared to expenditures of urban households and analyzed against the background of all households in Poland. The data source was individual, unidentifiable data from the "Household Budget Survey" conducted by the Central Statistical Office in 2015-2021. It was noticed that in the years 2015-2021, relatively large disproportions in the level of consumption expenditure between rural and urban households were observed. In 2015, consumption expenditures per capita in households living in rural areas accounted for less than 3/4 of expenditures of households living in urban areas. However, in the analyzed period, the increase in the level of this occurrence was more than twice as high for rural households, which proves a pronounced convergence process. The greatest burden on rural household budgets was expenditure on food and non-alcoholic beverages, which in rural households amounted to about 30%, and in 2020, i.e. the first year of the COVID-19 pandemic, it exceeded 32%. It was noticed that the structure of consumption expenditures between rural and urban households were very similar in 2015 and 2021.

---

<sup>1</sup> Corresponding author: joanna.stanislawska@up.poznan.pl

## INTRODUCTION

A household is defined as the basic economic and consumption unit [Pietrzak et al. 2008]. It is related to the basic purpose of the household's operation, which is the maximum and most rational satisfaction of the common and individual needs of its members [Zalega 2007].

Consumption expenses incurred by a household serve to meet the needs of its members. This group of expenses includes both goods purchased for cash or on credit, as well as goods received free of charge<sup>2</sup>. The level of consumption expenditures, their structure, as well as changes, analyzed at the level of households, may indicate their standard of living [Utzig 2018], about new consumption patterns and lifestyle changes [Utzig 2016], the level of development of the economy and society, as well as the development of civilization [Borowska et al. 2020].

Financial situation of households varies regionally, both across countries and regions, as well as in the urban – rural relationship. In recent years, especially after Poland's accession to the European Union, popularity of rural areas is increasing. Much attention is paid to their problems, perspectives and development threats [Bański 2014, Hadyński 2015]. Eliminating existing regional differences in the standard of living, as well as in the urban – rural relationship, is an important goal of the EU cohesion policy [Kozera, Stanisławska 2019].

The differences between urban and rural households are indicated by the way they obtain income and a different way of distributing them. In the household budget, these differences result from the clear intertwining of the production and consumption nature of rural households. This affects the hierarchy of perceived and realized demands, which results from the system of values adopted in the local community, which in turn determines the mutual relations between natural consumption and commercial consumption. Therefore, differences in the nature of rural and urban households, as well as the accompanying different value systems adopted in both types of local communities, contribute to reporting different demands for goods and services, which implies differences in consumption patterns implemented in both categories of households [Gutkowska, Piekut 2014].

The main target of the research was to diagnose the level and structure of consumption expenditures of rural households in Poland in 2015-2021. Expenditures of rural households were compared to expenditures of urban households and analyzed against the background of all households in Poland. Among consumption expenditures, special attention was paid to fixed expenditures, i.e. on food and non-alcoholic beverages, as well as on housing and energy carriers.

<sup>2</sup> This category also includes natural consumption, i.e. consumer goods and services taken from self-employed activity or an individual farm used in agriculture and transferred to household needs [GUS 2018].

## RESEARCH MATERIAL AND METHODS

The data source was individual, unidentifiable data from the “Household Budget Survey” conducted by the Central Statistical Office in Warsaw (GUS) in 2015-2021. These studies annually covered over 30 thousand households and were conducted using the representative method, which allows to generalize the results to households in Poland altogether [GUS 2018]. The research unit in the study was a single household, but the data were aggregated at the level of class of place of residence and of country. The results, concerning the level and structure of consumption expenditure of rural households, were analyzed against the background of urban households and against the background of all households in Poland.

Descriptive statistics methods were used in the analyses, i.e. measures of location, dynamics of phenomena and structure index. When examining the structure of consumption expenditures, their basic division according to COICOP/HBS classification was used. To compare the similarity of the structure of consumption expenditures between rural and urban households, as well as within the given groups, but between 2015 and 2021, the index of structure similarity was used [Chomątowski, Sokołowski 1978].

## RESULTS OF EMPIRICAL RESEARCH

In the entire analyzed period, i.e. in the years 2015-2021, rural households had a lower real level of consumption expenditure compared to urban households (Figure 1). At the beginning of the research period, the average real consumption expenditure *per capita* in rural households was PLN 974, which accounted for 73% of the expenditure level of urban households. Until the outbreak of the COVID-19 pandemic, an increase in the level of consumer expenditures was recorded in both rural and urban households (except for a slight decrease in 2018). However, this increase in rural households was higher than in urban households by about 3 percentage points (p.p.) and amounted 11.5%. In 2020, after the announcement of the state of pandemic in Poland and the introduction of various restrictions following the announcement, the decrease of approximately 6% in consumer spending was noticed, compared to the previous year, both among rural and urban households. In 2021, an increase in consumption expenditure was noticed again, however in rural households it was about twice as high as in urban households and amounted to 5.7 and 2.7%, respectively. As a result, between 2015 and 2021, the average real consumption expenditure of households living in rural areas increased by 10.4% to PLN 1,075 per person, while in urban areas the increase was about 6 p.p. lower and amounted to 4.3%. In 2021, there were still relatively large disproportions in the level of consumption expenditure *per capita* between rural and urban households. Consumption

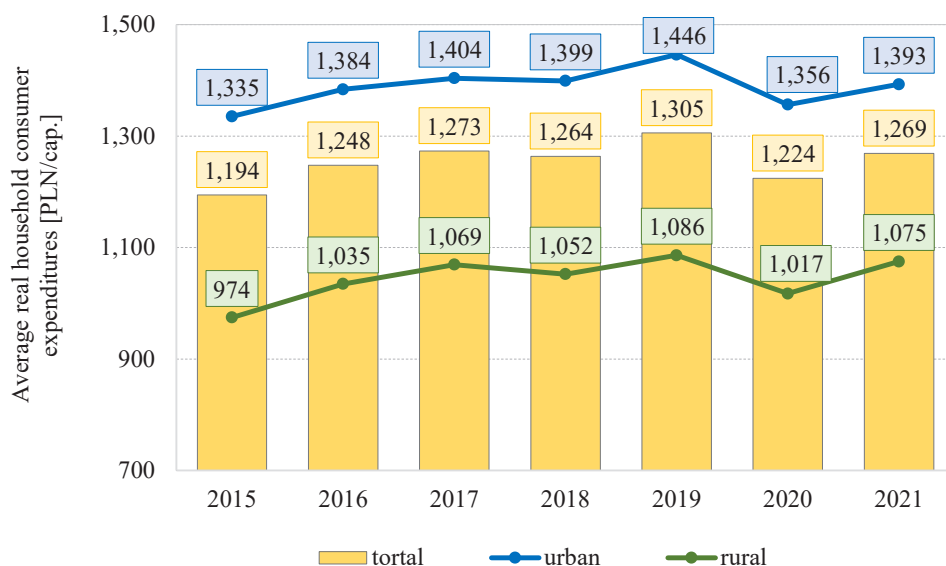


Figure 1. The average level of real consumption expenditure *per capita* in urban and rural households compared to the total in 2015-2021

Source: own study based on the “Household Budget Survey” [2015-2021]

expenditures of rural households accounted for approximately 77% of expenditures of urban households. However, compared to 2015, these disproportions decreased by over 4 p.p. Basing on the observed changes in the level of consumption expenditure in rural and urban households (becoming more similar, blurring disproportions), a clear convergence process of this phenomenon between these classes of residence was observed.

The main factor contributing to the lower level of consumption expenditure in rural areas is the lower level of disposable income of this group of households [Utzig 2016]. In the years 2015-2021, a continuous upward trend was observed in the level of real disposable income of rural and urban households (Figure 2). In addition, a decrease in income disproportions between these groups of households was observed. Average real income *per capita* in rural households in 2015 accounted for about 71% of their level in urban households, and in 2021 its value was 78%.

As research by Andrzej Wołoszyn [2020] showed, the worse income situation in rural areas is related to the location of enterprises in cities (especially large) characterized by high efficiency and offering relatively high wages. Cities are the areas of a large supply of high-quality human capital with a well-developed technical, social and scientific infrastructure, where not only specialists can count on relatively higher salaries. In the centers of the modern sector of the economy, the spill-over effect can be observed,

i.e. even workers with lower productivity receive higher wages than their counterparts in smaller towns. In turn, the decrease in income disproportions between urban and rural households may also be related to functional transformations in the countryside, especially in areas around large metropolises, where the phenomenon of suburbanization is observed [Stanisławska, Głowicka-Wołoszyn 2017]. The increasing level of awareness of the need for change and development in rural areas, along with the activity of local and regional authorities, is becoming a factor that stimulates local development and entrepreneurship and contributes to raising the standard of living of residents as well [Heffner, Klemens 2012]. The economic effect of urban sprawl is improvement of the income situation of the population. This is due, on the one hand, to the more affluent part of society moving to suburban areas, and on the other hand, along with the improvement of infrastructure and communication accessibility, the labor market in cities is also becoming more accessible to people from suburban areas, and entrepreneurship develops in suburban areas, especially services. Other factors, contributing to the lower level of consumption expenditure in rural households, may include limitations related to the availability of services, such as cinema, theatre, restaurants, bars, etc., as well as the lack of needs in this respect resulting from different consumption patterns [Gutkowska, Piekut 2016, Głowicka-Wołoszyn et al. 2017].

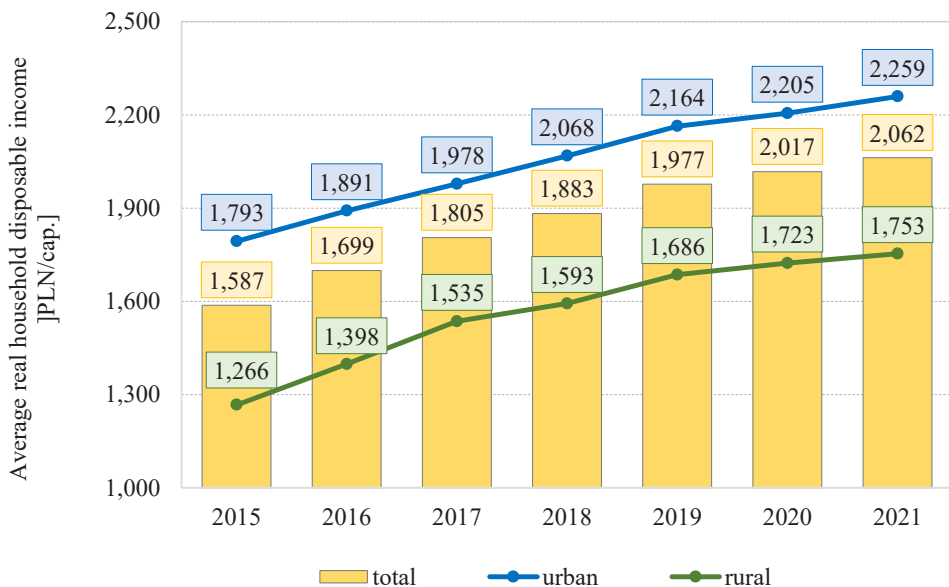


Figure 2. Average level of real disposable income *per capita* in urban and rural households compared to the total in 2015-2021

Source: own study based on the “Household Budget Survey” [2015-2021]

Table 1. The average level of real fixed expenditures per capita and their share in consumption expenditures in households by class of place of residence in 2015-2021 (in 2021 prices)

Class of place of residence	Types of expenditures							2021/2015
	2015	2016	2017	2018	2019	2020	2021	
Expenses on food and non-alcoholic beverages								
Average real level of expenses [PLN/person]								[%]
City	315	328	336	340	354	368	363	15.2
Village	278	295	305	308	323	327	323	16.2
Total	300	315	324	327	342	352	347	15.7
Share in total consumption expenditures [%]								p.p.
City	23.6	23.7	23.9	24.3	24.5	27.1	26.1	2.5
Village	28.5	28.5	28.5	29.3	29.7	32.2	30.0	1.5
Total	25.1	25.2	25.5	25.9	26.2	28.8	27.3	2.2
Expenditure on the use of housing and energy carriers								
Average real level of expenses [PLN/person]								[%]
City	288	292	295	281	286	278	280	-2.8
Village	194	198	204	181	180	179	202	4.1
Total	251	255	260	242	244	239	250	-0.4
Share in total consumption expenditures [%]								p.p.
City	21.6	21.1	21.0	20.1	19.8	20.5	20.1	-1.5
Village	19.9	19.1	19.1	17.2	16.6	17.6	18.8	-1.1
Total	21.0	20.4	20.4	19.1	18.7	19.5	19.7	-1.3
Fixed expenses (for food and non-alcoholic beverages as well as for the housing and energy carriers)								
Average real level of expenses [PLN/person]								[%]
City	603	620	631	621	640	646	643	6.6
Village	472	493	509	489	503	506	525	11.2
Total	551	570	584	569	586	591	597	8.3
Share in total consumption expenditures [%]								p.p.
City	45.2	44.8	44.9	44.4	44.3	47.6	46.2	1.0
Village	48.5	47.6	47.6	46.5	46.3	49.8	48.8	0.3
Total	46.1	45.7	45.9	45.0	44.9	48.3	47.0	0.9

Source: own study based on the "Household Budget Survey" [2015-2021]

The most burdensome expenses of Polish households are the so-called fixed expenses, i.e. expenses for food and non-alcoholic beverages, as well as expenses for housing and energy carriers. In the analyzed period, they accounted for approximately 45-48% of consumption expenditures of all households (Table 1). While expenditure on food and non-alcoholic beverages accounted for over 25%, and expenditure on housing and energy carriers accounted for about 20% of consumption expenditure.

The budgets of rural households, compared to urban households, were more heavily burdened with expenditure on food and non-alcoholic beverages. Their share in consumption expenditure was about 29-32% in rural areas and 24-27% in urban areas. The largest share of this type of expenditure in consumer spending was recorded in 2020, i.e. in the first year of the COVID-19 pandemic. This was related to the public's fear of an unknown threat, stockpiling, but also greater consumption resulting from the announced restrictions, e.g. remote work and remote learning. Between 2015 and 2021, there was a similar increase in the level of real expenditure on food, i.e. around 16% in rural and 15% in urban households.

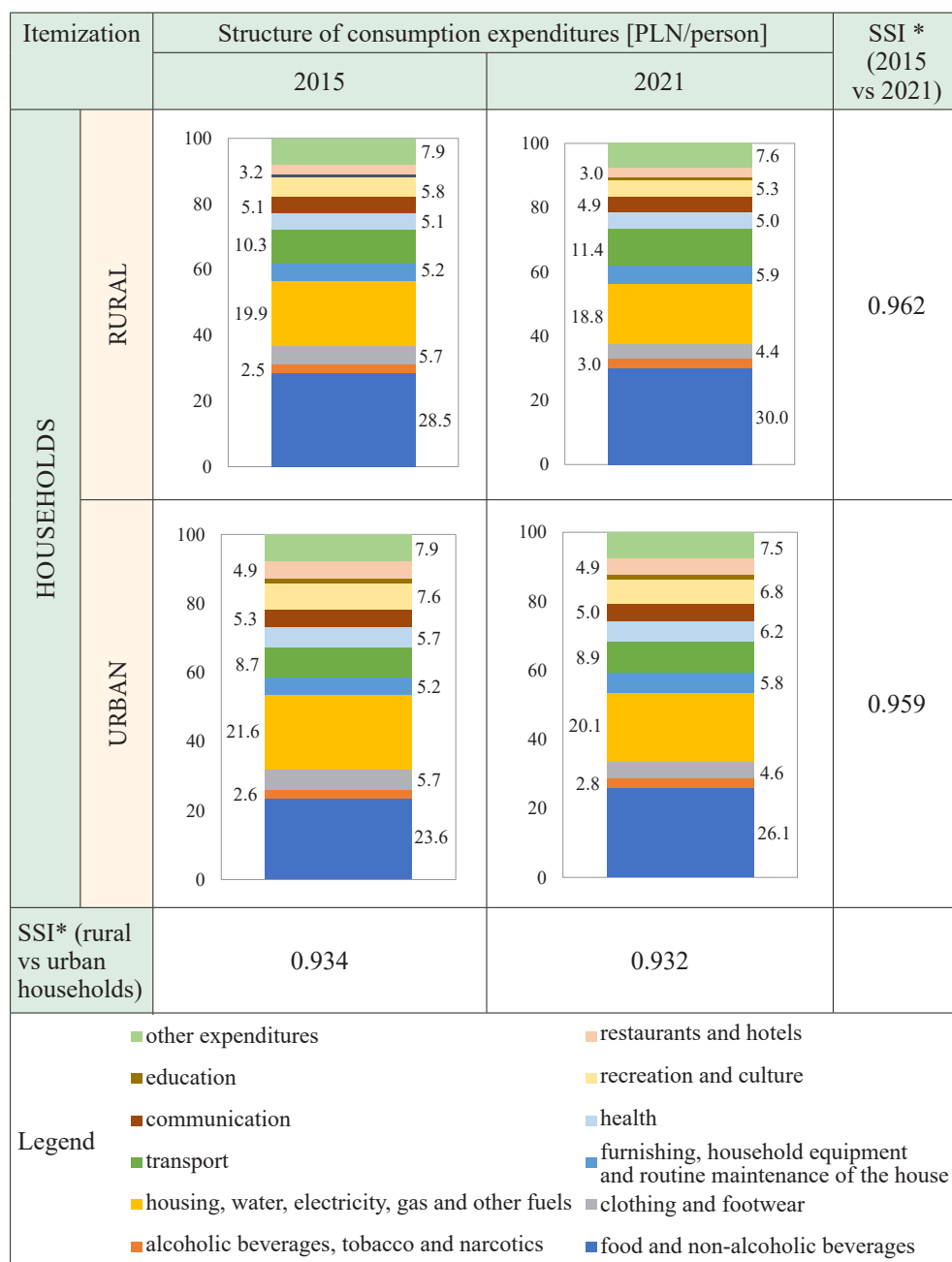
The lower level of expenditure on housing and energy carriers in rural households compared to urban households (by about 30%) is mainly due to the lack of rent payments. Rural households are not burdened with fees for the administration, housing community, ensuring order in the shared space, e.g. cleaning staircases, taking care of green areas, playgrounds, maintenance of elevators, etc. [Głowicka-Wołoszyn et al. 2021].

Apart from fixed expenditures, an important item in household budgets was expenditure on transport (Figure 3). In rural households, it accounted for 10.3% of consumption expenditures in 2015, and in 2021 their share increased by 1.1 p.p. In urban households, their share in 2015 was 8.7%, and at the end of the research period it increased by only 0.2 p.p. These differences naturally result from the fact that villages are farther away from service centers, and often schools and workplaces, which results in higher transport costs [Borowska et al. 2020], they also indicate that the lack of access to public transport and the need to use individual means of transport may increase expenditure on their purchase, which also falls into this category of consumption expenditure.

On the other hand, the lower share in the structure of consumption expenditures of expenditures on recreation, culture and on catering and hotel services in rural households is conditioned not only by economic factors, but also results, for example, from the availability of such services [Wołoszyn et al. 2018]. The decrease in the share of this type of expenditure in the structure of consumer expenditures between 2015 and 2021 results directly from the state of pandemic in 2021 and restrictions in access to this type of services.

The determined structure similarity indexes showed a very high similarity in the structures of consumption expenditures between rural and urban households both in 2015 and 2021, but also a very high similarity of structures at the beginning and end of the research period within each of the household groups (Figure 3).





\* SSI – structure similarity index

Figure 3. Structure of consumption expenditures by urban and rural households in 2015 and 2021

Source: own study based on the “Household Budget Survey” [2015-2021]

## SUMMARY AND CONCLUSIONS

Real consumption expenditure per person in rural households was lower than in urban households in the analysed period. The value of consumption expenditure *per capita* increased both in rural as well as in urban households, but in rural households it increased a bit faster than in urban households. In 2021, relatively large disparities in the level of *per capita* consumer spending between rural and urban households still existed. Consumption expenditure in rural households accounted for approximately 77% of the urban households' expenditure. However, compared to 2015, these disproportions decreased by over 4 p.p. Based on the observed changes in the level of real expenses in rural and urban households, we can state a clear convergence process of this phenomenon between these classes of residence.

Budgets of rural households, compared to urban households, were more burdened with expenses on food and non-alcoholic beverages. The largest share of this type of expenditure in consumer spending was recorded in 2020, i.e. in the first year of the COVID-19 pandemic.

A very high similarity in the structures of consumption expenditures between rural and urban households was found both in 2015 and 2021, as well as a very high similarity in the structures at the beginning and at the end of the research period within each group of households.

## BIBLIOGRAPHY

- Bański Jerzy. 2014. Perspektywy rozwoju polskiej wsi – wybrane zagadnienia (Development prospects for the Polish rural areas – selected issues). *Wieś i Rolnictwo* 4 (165): 13-25.
- Borowska Agnieszka, Aneta Mikuła, Małgorzata Raczkowska, Monika Utzig. 2020. *Konsumpcja dóbr i usług w gospodarstwach domowych w Polsce* (Consumption of goods and services in households in Poland). Warszawa: Wydawnictwo SGGW.
- Chomątowski Stanisław, Andrzej Sokołowski. 1978. Taksonomia struktur (Taxonomy of structures). *Przegląd Statystyczny* 25 (2): 217-225.
- Głowicka-Wołoszyn Romana, Agnieszka Kozera, Joanna Stanisławska, Andrzej Wołoszyn. 2021. *Warunki mieszkaniowe gospodarstw domowych w Polsce* (Housing conditions of households in Poland). Warszawa: Difin.
- Głowicka-Wołoszyn Romana, Joanna Stanisławska, Karolina Ratajczak. 2017. Wydatki na restauracje i hotele w gospodarstwach domowych rolników w Polsce w latach 2005-2015 (Expenditure on restaurants and hotels in farm households in Poland in 2005-2015). *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu* XIX (4): 53-59.
- GUS (Central Statistical Office – CSO). 2018. *Zeszyt metodologiczny. Badanie budżetów gospodarstw domowych* (Methodological notebook. Household budget survey). Warszawa: GUS.

- GUS (Central Statistical Office – CSO, Local Data Bank). 2021. *Badanie budżetów gospodarstw domowych*. Baza danych jednostkowych nieidentyfikowalnych za 2021 rok (Household budget survey. Unidentifiable unit database for 2021). Warszawa: GUS.
- Gutkowska Krystyna, Marlena Piekut. 2014. Konsumpcja w wiejskich gospodarstwach domowych (Consumption in rural households). *Więś i Rolnictwo* 4 (165): 159-178.
- Hadyński Jakub. 2015. *Regionalna konkurencyjność obszarów wiejskich* (Regional competitiveness of rural areas). Poznań: Wydawnictwo Uniwersytetu Przyrodniczego w Poznaniu.
- Heffner Krystian, Brygida Klemens. 2012. Warunki życia i aktywność społeczno-gospodarcza mieszkańców na obszarach wiejskich (na przykładzie województwa opolskiego) (Living conditions and social-economic activity of the rural population (Example of Opole Voivodship)). *Barometr Regionalny* 4 (30): 81-88.
- Kozera Agnieszka, Joanna Stanisławska. 2019. Regionalne zróżnicowanie warunków mieszkaniowych ludności zamieszkującej obszary wiejskie w Polsce (Regional diversity of housing conditions of the population living in rural areas in Poland). *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu XXI* (4): 233-243.
- Pietrzak Bogusław, Zbigniew Polański, Barbara Woźniak. 2008. *System finansowy w Polsce* (Financial system in Poland). Warszawa: PWN.
- Stanisławska Joanna, Romana Głowicka-Wołoszyn. 2017. Przemiany demograficzne na obszarach wiejskich województwa wielkopolskiego w latach 2005-2015 (Demographic changes in the rural areas of the wielkopolskie province in the years 2005-2015). *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu XIX* (1): 170-175.
- Utzig Monika. 2016. Struktura wydatków konsumpcyjnych ludności wiejskiej i miejskiej w Polsce (Structure of consumer spending by rural and urban population in Poland). *Handel Wewnętrzny* 1 (360): 161-171.
- Utzig Monika. 2018. Wydatki konsumpcyjne w wiejskich i miejskich gospodarstwach domowych jako miara ich poziomu życia (Urban and rural households' consumption expenditures as a measure of their level of living). *Annals of the Polish Association of Agricultural and Agribusiness Economists XX* (4): 195-199. DOI: 10.5604/01.3001.0012.3061.
- Wołoszyn Andrzej. 2020. *Nierówności dochodowe gospodarstw domowych w Polsce i ich uwarunkowania społeczno-ekonomiczne* (Income inequalities of households in Poland and their socio-economic conditions). Warszawa: PWN.
- Wołoszyn Andrzej, Karolina Ratajczak, Joanna Stanisławska. 2018. Wydatki na usługi hotelarskie i gastronomiczne oraz ich determinanty w gospodarstwach domowych w Polsce (Expenditures on hotel and catering services in polish households and its determinants). *Studia Oeconomica Posnaniensia* 6 (10): 93-110.
- Zalega Tomasz. 2007. Gospodarstwo domowe jako podmiot konsumpcji (Household as a subject of consumption). *Studia i Materiały. Wydział Zarządzania. Uniwersytet Warszawski* 1: 7-24.

\*\*\*

## WYDATKI KONSUMPCYJNE WIEJSKICH GOSPODARSTW DOMOWYCH W POLSCE

Słowa kluczowe: wiejskie gospodarstwa domowe, miejskie gospodarstwa domowe, wydatki konsumpcyjne, wydatki sztywne, struktura wydatków

ABSTRAKT. Głównym celem badań była diagnoza poziomu oraz struktury wydatków konsumpcyjnych wiejskich gospodarstw domowych w Polsce w latach 2015-2021. Wśród wydatków konsumpcyjnych szczególną uwagę zwrócono na tzw. wydatki sztywne, tj. na żywność i napoje bezalkoholowe oraz na użytkowanie mieszkania i nośniki energii. Wydatki wiejskich gospodarstw domowych porównano do wydatków miejskich gospodarstw domowych i analizowano na tle ogółu gospodarstw domowych w Polsce. Źródłem danych były jednostkowe, nieidentyfikowalne dane pochodzące z „Badania budżetów gospodarstw domowych”, przeprowadzonych przez GUS w latach 2015-2021. Stwierdzono, że w latach 2015-2021 występowały relatywnie duże dysproporcje w poziomie wydatków konsumpcyjnych pomiędzy wiejskimi i miejskimi gospodarstwami domowymi. W 2015 roku wydatki konsumpcyjne *per capita* w gospodarstwach domowych z obszarów wiejskich stanowiły mniej niż 3/4 wydatków gospodarstw domowych w miastach. Jednak w badanym okresie dla wiejskich gospodarstw domowych odnotowano ponaddwukrotnie większy wzrost poziomu zjawiska, świadczący o wyraźnym procesie konwergencyjnym. Największym obciążeniem budżetów wiejskich gospodarstw domowych były wydatki na żywność i napoje bezalkoholowe, które w wiejskich gospodarstwach domowych wynosiły około 30%, a w 2020 roku, tj. pierwszym roku pandemii COVID-19, przekroczyły 32%. Stwierdzono występowanie bardzo dużego podobieństwa struktur wydatków konsumpcyjnych pomiędzy wiejskimi i miejskimi gospodarstwami domowymi w latach 2015 i 2021.

### AUTHORS

MAŁGORZATA MIESZAŁA, BSC  
ORCID: 0009-0009-9396-8363  
Poznań University of Life Sciences  
Department of Finance and Accounting  
e-mail: malgorzatamieszala@onet.pl

ROMANA GŁOWICKA-WOŁOSZYN, PHD  
ORCID: 0000-0002-1039-3261  
e-mail: romana.glowicka@up.poznan.pl

JOANNA STANISŁAWSKA, PHD  
ORCID: 0000-0002-0028-140X  
e-mail: joanna.stanislawski@up.poznan.pl

ANDRZEJ WOŁOSZYN, PHD  
ORCID: 0000-0001-8992-7379  
e-mail: andrzej.woloszyn@up.poznan.pl

Proposed citation of the article:

Mieszala Małgorzata, Romana Głowicka-Wołoszyn, Andrzej Wołoszyn, Joanna Stanisławska. 2023. Consumer expenditure of rural households in Poland. *Annals PAAAE XXV* (3): 232-242.