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UKRAINIANS IN POLAND AND UKRAINE: IS THE WAR CRISIS ABLE TO CHANGE PATTERNS OF FINANCIAL BEHAVIOUR

ABSTRACT

The Russian war against Ukraine caused a large wave of displaced people both inside and outside the country. According to UNHCR as of 2023, more than 1.6 million Ukrainian citizens applied for protection status in Poland and 4.9 million people received internally displaced status in Ukraine. This paper aims to analyse the data from a 2023 survey of internally displaced Ukrainians and those who are considered refugees to identify how their financial patterns have changed and what measures can be applied for adjustment to a new environment. The results show that there are no significant changes in patterns of financial behaviour, however, both groups demonstrate coping strategies: more than 50% in both groups shorten their financial horizon plans. Their expenditures are focused mostly on essential needs. In both countries, Ukrainians invest less because of the decrease in their income. As well, the majority in both groups do not invest at all. Bank deposits remain the most popular investment for Ukrainians (in Ukraine is more than 25%, and in Poland is more than 15%). The real estate objects in Ukraine are less attractive because of security as before 2022. At the same time, Ukrainians are searching for alternative ways of investment. Ukrainians demonstrate a high level of using different digital technologies for different purposes, including personal finance. The fintech solutions are recommended to facilitate better decision-making in personal finance and change the patterns of financial behaviour. Fintech can increase the financial inclusion of IDPs in Ukraine and migrants in Poland and direct money flows for investment for further their pension payments.

Keywords: migration, refugees, internally displaced people, financial behaviour, personal finance, sustainable development, fintech

JEL Classification: D14, D91, G02, G11

INTRODUCTION

Different crises, such as economic shocks, wars, natural disasters, pandemics, or political instability, can affect various aspects of individual activities: employment and income, education, healthcare, housing and shelter, transportation, social life, and psychological well-being. The majority of financial behaviour studies show that despite the essence of the crises the financial situation of individuals usually worsens. The main reason is the loss of a permanent source of income (Kübilay, 2023; Viseu, 2021), uncertainty and shortening planning horizons (Kelley et al., 2022). Talking about migration, the additional burden is the adaptation to a new environment (Kwilinski et al., 2022). Yon (2020) assumed that people tend to feel psychological stress during financial instability.

According to the War Global Conflict Tracker at the beginning of 2024, there were armed conflicts/wars/ civil conflicts/ violent extremism in more than 27 countries (Global Conflict Tracker, 2024). Among those countries is Ukraine which suffers from Russian aggression. The war against Ukraine on full scale started in February 2022 and caused the biggest refugee movement in Europe since World War II (UNHCR, 2022), with an estimated 6.3 million migrants. In February-March 2022, nearly 3.5 million refugees crossed the Polish border, with Ukrainian citizens comprising over 95% of this total (Duszczuk & Kaczmarczyk, 2022).

According to UNHCR on the 3rd of September 2023, the total number of Ukrainians, who applied for a national protection plan in Poland, is more than 1,6 million Ukrainian citizens (Situation Ukraine refugee situation, 2023).

Do crises change the financial behaviour of individuals? What are their coping strategies? Do they have any anticrisis financial strategies in case of emergency?

Reports from sociology companies (Kyiv International Institute of Sociology, 2023), Rating groups (Rating, July 23-24, 2022 - 2023), professional associations (Independent Banking Ukrainian Association, 2022), USAID (Center Razumkov, 2023), other companies (DW, 2023) claim that the financial situation of individuals has generally worsened. This study is a continuation of the study on the financial behaviour patterns of Ukrainians in Poland and Ukraine (Polishchuk et. al, 2023). Such a new context as the crisis caused by the war can deepen the difference in the financial behaviour of Ukrainians in these two countries. Identified differences will help to adjust the support policy for Ukrainian refugees, IDPs and other vulnerable population groups.

LITERATURE REVIEW

During the past 20 years, much more information has become available on the financial behaviour of individuals during crises, mostly describing problems of the Global financial crisis of 2008 and Covid-19. The roadmap of the literature review includes studies of financial behaviour during the Global Financial Crisis, COVID-19 (I. Riepina, et. al, 2022, M. Tepluk, et. al, 2022) and the Russian war against Ukraine crises and reflects explorations in financial planning changes, generosity & charity, investment, loans and remittances.

Financial planning changes. As individuals try to handle the challenges related to income and asset losses it was revealed that the financial crisis increased focus on personal financial management tasks, creating a chance for improving financial literacy basics skills (O'Neill & Xiao, 2012). It is suggested, that after crises, those households usually recover faster who have a smaller amount of debt and people who are over 45 years old because of better financial resilience (Hall, Scheving and Zoega, 2021). Balanced monetary and macroeconomic policy is aimed at fighting poverty through financial planning and as a component of financial literacy (Haubrich, 2022; Kuznetsova et al., 2017).

Generosity & charity. During the COVID-19 crisis, individuals demonstrated increasing financial generosity, with donations observed from both constant and new donors (Fridman, Gershon & Gneezy, 2022; Littman et al., 2021; Calhoun, 2008). While facing COVID-19, certain individuals showed prosocial behaviours, supporting the community, while others chose to step back from society (Litofcenko et. al, 2023, Bailey & Kaplan, 2022).

Consumer loans. Hiilamo (2021) notes that the global economic crisis of 2008 highlighted the hidden over-indebtedness, which caused worsening economic conditions and decreasing income. Consumer loans lead to increasing debt levels of individuals during times of different essence crises including war (Cafiso, 2022). During the Great Depression, the collapse of long-term lending relationships caused the economic crisis, demonstrating the real effects of banking sector distress (Cohen, Hachem, Richardson, 2021). Kuk (2023) notes that consumer loans have been used to facilitate financial difficulties, however, they are also related to a higher probability of increasing debt and the situation worsens during downturns.

Investment behavioural patterns. The effects of conflict on investment can be multi-vector: some studies suggest that conflict increases investment while others report null or mixed correlations (Hutorov et al., 2020; Blair, Christensen & Wirtschafter, 2022; Goes & Bekkers, 2022; Bazaluk et al., 2024; Metzner & De-Juan-Vigaray, 2023). Investors may not step back because of political risks if war or armed conflict is expected to worsen because of profits from raising prices on goods and services (Lee, 2017, Ford, 2015).

Migrants' financial behaviour. Cultural, economic, and social capital determinants can help to predict migrants' financial choices (Kushnirovich, 2016; Haliassos et al., 2017; Chang, 2023; Hasso, Pelster, & Breitmayer, 2020; Due to Mient & Martijn, 2013). Didenko et al. (2020), Didenko et al. (2021), and Krupskyi et al. (2019) claim that consumer choice in favour of ecological products and services decreases during crises which is related to the increasing prices. Related literature on Ukrainian migrants in Poland mostly focused on the consequences of a large wave of refugees due to the Russian war against Ukraine (Urban, 2022), a comparison of before the war and war migrants and fewer about the reaction of the Polish government on this situation and their financial support (Khmelevska-Kalinska et al., 2023).

It is worth taking into account migrants' cultural backgrounds and attitudes toward debt and borrowing (Shostya Banai, 2023). He indicates a strong and robust negative relationship between in-group collectivism and debt, as well as a positive effect of performance orientation on debt in certain periods. Cultural values can lead to the creation of institutions that

may facilitate, rather than make obstacles, loan behaviour - historically Protestant cultures carrying the highest debt loans (Cohen et al., 2021).

AIMS AND OBJECTIVES

The aim of this research article is to analyse the financial patterns and challenges faced by Ukrainian citizens displaced due to the war in Ukraine, both within the country and in neighbouring nations like Poland, with a focus on identifying measures to adjust their financial behaviour to the new conditions.

METHODS

In this study of the characteristics of financial behaviour, the potential of survey methods was used to generate a set of data and explanatory features on the selected topics. The survey instrument was developed based on open-source media monitoring and secondary analysis of studies on the characteristics of migrant individuals' financial behaviour in Poland and Ukraine. Sample characteristics. The central criterion for the selection of respondents is their competence. In our case, this means the possession of specific information and experience of financial behaviour in Ukraine and Poland. Taking into account the peculiarities of forming the sample population when using the survey method, the sample was formed randomly to achieve the necessary saturation point of research information. The respondents were divided into equal quotas: 1) respondents who live in Ukraine and are considered IDPs and have the necessary information (N1 = 76); 2) respondents who migrated to Poland and have the necessary experience of financial behaviour (N2 = 73). These characteristics ensure the validity of the results. All participants were over 18 years old. The study was conducted in March 2023.

Specifics of the questionnaire. Identical questionnaires were used for respondents from Poland and Ukraine to allow for comparative characteristics (except for the question about respondents' income, which is expressed in hryvnia for Ukrainians and in zloty for Poles). The survey instrument used different typologies of questions to obtain a set of data: scale questions for a detailed assessment of a particular phenomenon or process; questions with a single answer option to capture a clear position of the respondent; questions with multiple-choice options to obtain a wide range of explanatory characteristics. The research indicators developed allow us to record:

- general trends in understanding and assessing the financial situation of respondents;
- features and characteristics of financial behaviour;
- identification of basic needs and financial problems;
- investment sentiment of Ukrainians in Poland and Ukraine.

Data collection and data analysis. Given the need to quickly obtain social information in the two countries and to provide respondents with a convenient platform for expressing their opinions, the survey was conducted using the Computer-Assisted Web Interviewing (CAWI) method with the functionality of the Google Forms survey tool. The study is comparative in nature, using a single research tool for both countries. The statistical processing of the empirical data was carried out using the IBM Statistical Package for the Social Sciences (SPSS).

RESULTS

The Russian war impacted Ukrainians and their financial behaviour.

Different insights on the changing financial situation of Ukrainians can be taken from different reports of surveys which were conducted after February 2022.

Ukraine

Independent Banking Ukrainian Association demonstrated that respondents receive their salaries from Ukrainian companies and temporary part-time jobs remain the main sources of income. Among external emigrants, the share of those who found a new job outside of Ukraine has increased. In the distribution of family income, 59% are necessities. Around, 22% are other types of expenses, and 12% are savings. Penetration of loan users in general remains unchanged at 32% (Sazonets et al., 2020; Onopriienko et al., 2023; Korobkova, 2022). The rating group claimed that the "number of those who indicated that they could influence their income decreased from 60% to 50%. A study of behavioural models of economic behaviour showed that in the event of a sharp reduction in income, 62% will look for additional sources of income, and 35% will reduce their expenses. Also, 53% want to live no worse than others, and 42% want to live better

than others" (Rating, 2023). According to the survey conducted in February-March 2023, as well as the assessment of the economic situation in the country, the assessment of the well-being of the households improved slightly and became close to the indicators recorded in May 2021: 35% assessed it as "very" or "fairly" bad, 50% as "neither bad nor good", 12% as "good" or "very good". Deuche Welle (2023) reported that 36 % of the Ukrainian respondents said that their salary has significantly decreased since the beginning of the war, 25 % - it has not changed, 16% - it has decreased insignificantly, and three - it has increased. At the same time, almost 18 % of the survey participants changed their city or country of residence because of the war, but 93 % of the respondents continue to work in the Ukrainian business. National Institute of Strategic Research (2023) reported that tokenized payment cards are popular among Ukrainians, the number of which has increased by 32% since the beginning of the year to 11.3 million. Among active payment cards, their share is 23% (in January – 19%).

Poland

The Russian war invasion in Ukraine impacted various aspects of political, economic, and societal areas in other countries as well. The displacement of people from war-affected areas has significantly increased the migration wave within Ukraine and in several European countries. According to official data, Ukrainian refugees spent USD 20 billion abroad in 2022 and signed 1.87 million labour contracts in 17 EU countries. Poland has been considered the primary destination for a lot of Ukrainian war refugees and that led to increasing Poland's GDP by 1%. (Business insider Polska, 2022).

According to the report of the National Bank of Ukraine (Tucha et al., 2022) after the full-scale Russian war in Ukraine, Ukrainian spending abroad total for 2022, amounting to USD 2 billion per month. It is more than three times increasing compared to the previous year. War refugees primarily spent their expenses from their savings held in Ukrainian banks, using payment cards for transactions and cash withdrawals.

According to the data of the EWL special report (Zymnin et. al, 2023) 82% of war refugees from Ukraine already obtained their job and about 27 % of them were employed during the first month of their arrival (more detailed see in Figure 1).

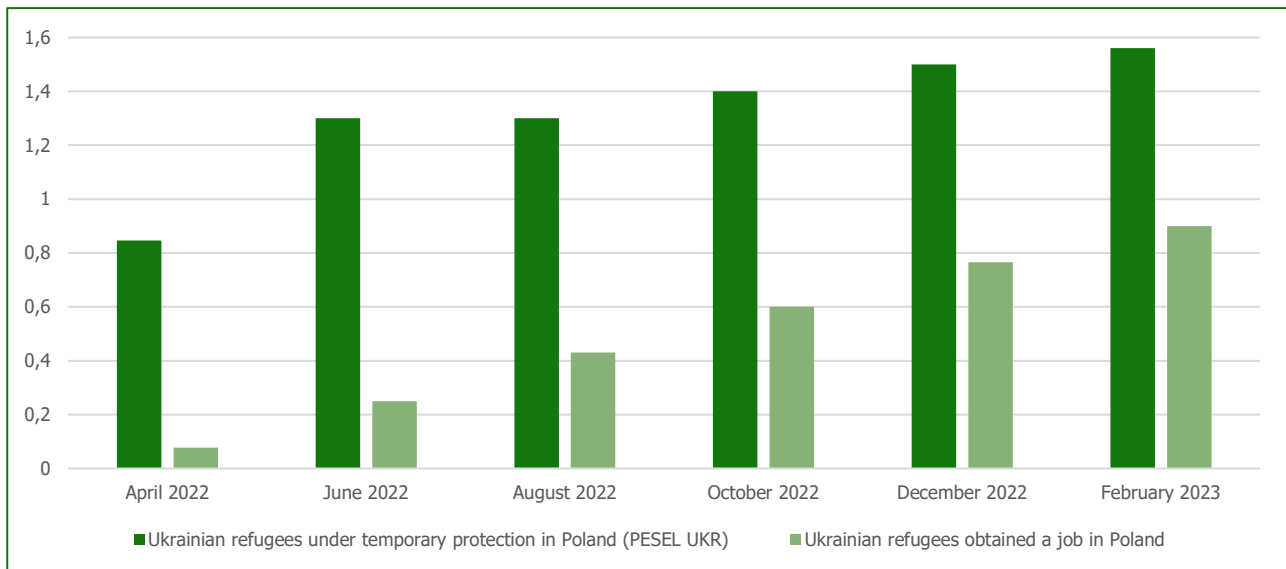


Figure 1. Number of Ukrainian war refugees according to their employment status in Poland for 2022 and the beginning of 2023, million people. (Source: compiled by the authors on the basis of EWL report)

According to Figure 1, the number of employed Ukrainian war migrants in Poland is permanently growing. To compare - the number of employed ones in February 2023 is almost 12 times higher than in April 2022).

At the same time, it is worth assessing not only the employment rate among Ukrainian war migrants in Poland but also their sources of income (Figure 2).

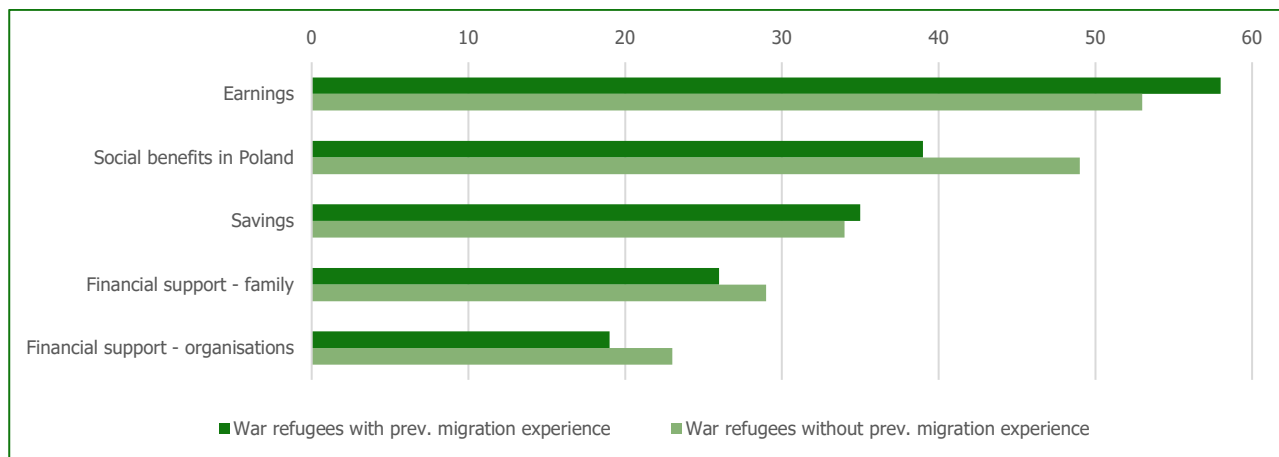


Figure 2. Sources of income obtained by Ukrainian war refugees in Poland taking into account existent migration experience for February 2023, % (the multiple possible answers stipulate that the final percentage does not sum up to 100 %). (Source: compiled by the authors on the basis of Centre of Migration Research Newsletter (Górny & Kaczmarczyk, 2023))

According to the data in Figure 2 the majority of Ukrainian war refugees in Poland (about 55%), regardless of their previous migration experience, have the main source of income in the form of earnings, which confirms the fact that a lot of them are employed. The social benefits in Poland as well as personal savings are in second and third place accordingly in the range of income sources. It should be noticed that the share of Ukrainian war refugees without previous migration experience is quite large compared to those with such experience (about a 10% difference). Spending of personal savings among Ukrainian war refugees in Poland is typical for about 35% of them. Financial support from families as well as from other organizations and institutions is one of the income sources for Ukrainian war refugees without previous migration experience 29% and 23% respectively. As for those with previous migration experience, this trend is quite lower and estimated at 26% and 19% respectively.

The internal migration flows in dynamics could be estimated at the level of almost 6,5 million IDPs for 16 March 2022 (IOM Round 1) and almost 5.1 million IDPs for 23 May 2023 (IOM Round 13). It should be emphasized that about 67% of IDPs according to IOM Round 13 (IOM, 2023) originated from the East of Ukraine and about 17% from the Southern regions, which are mostly under temporary military control under the Russian Federation.

Taking into consideration the current location of IDPs according to the IOM Report, 2023, it should be noticed that 33% of them are displaced into the Eastern regions, which could be migration within the same region to the cities which are under control of Ukrainian government, as well as 19%, 15% and 14 % of IDPs are moved to the Western, Northern and Central regions of Ukraine respectively.

Analysis of the financial behaviour of Ukrainians, who are internally displaced within the country not abroad, regarding their spending strategies is shown in Figure 3.

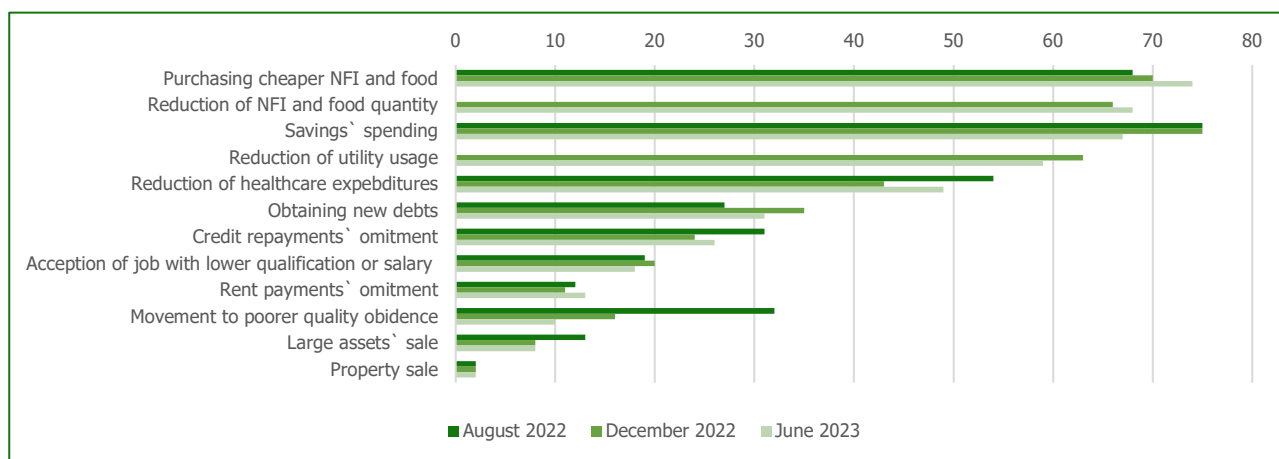


Figure 3. Diversification of the respondents among IDPs in Ukraine according to the features of financial behaviour in order to fulfil their basic needs, % (the multiple possible answers stipulate that the final percentage does not sum up to 100 %). (Source: compiled by the authors on the basis of IOM reports (2023))

As maintained by the answers in Figure 3, the majority of the respondents among IDPs were willing to worsen their household habits exemplified by buying cheaper food and NFIs (non-food items) – about 70% as well as reducing their general quantity (about 6%). One of the main sources of their social well-being and general dwelling was savings (about 67-75%), the shortage of their usage by IDPs in June 2023 could be the consequence of their lack during the war period.

The other features of financial coping mechanisms, which were typical for IDPs in Ukraine because of the full-scale war invasion, could be outlined as reduction of utility usage (about 61%); reduction of healthcare expenditures (about 49%) and obtaining new debt (about 3%). All the mentioned features of financial behaviour for Ukrainians, who were forced to internal migration within Ukrainian regions, confirmed the fact of the worsening of their financial and social welfare.

Patterns of financial behaviour of Ukrainians, permanently living in Ukraine and Poland, caused by the Russian full-scale war invasion

Research on patterns of financial behaviour is essential because it contributes to economic understanding, financial literacy, risk management, consumer protection, and various aspects of personal and societal well-being. It informs policy, business strategies, and individual financial decision-making, ultimately contributing to economic stability and financial prosperity.

Conducted expert survey underlined the main patterns of financial behaviour among Ukrainians in Ukraine and in Poland in order to reveal the main similarities in their behaviour as well as distinctions. The first criterion for analysis was the identification of the average monthly net income (Figure 4).

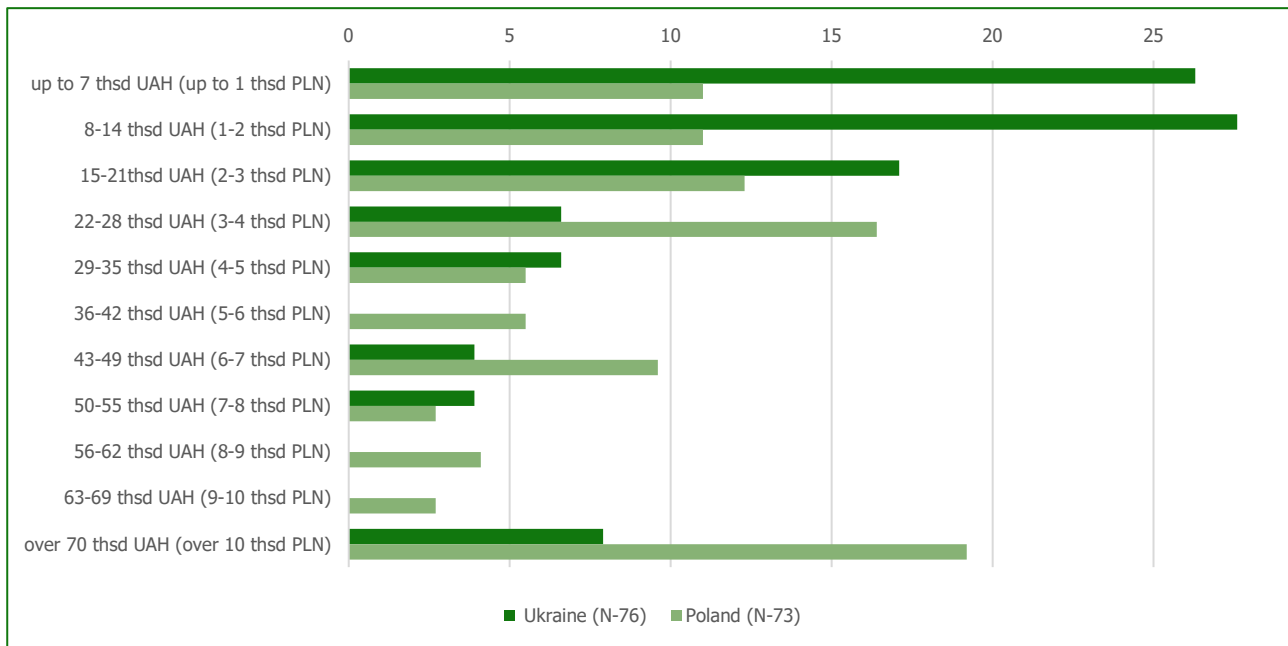


Figure 4. Monthly income of respondents. (Source: own expert survey)

Conducted analysis based on an expert survey revealed that level of the income among respondents in Ukraine is much lower in comparison with the ones in Poland. It should be emphasized that about 19.2% of those interviewed in Poland stated the level of their average monthly net income on the level of more than PLN 10 thousand (more than UAH 70 thousand), while for ones in Ukraine, the share of such income was claimed by 7.9% of the mentioned respondents. More detailed information on the level of income of Ukrainians.

The next criterion is the identification of the possibility of covering daily expenses with existing savings in case of income loss (Figure 5).

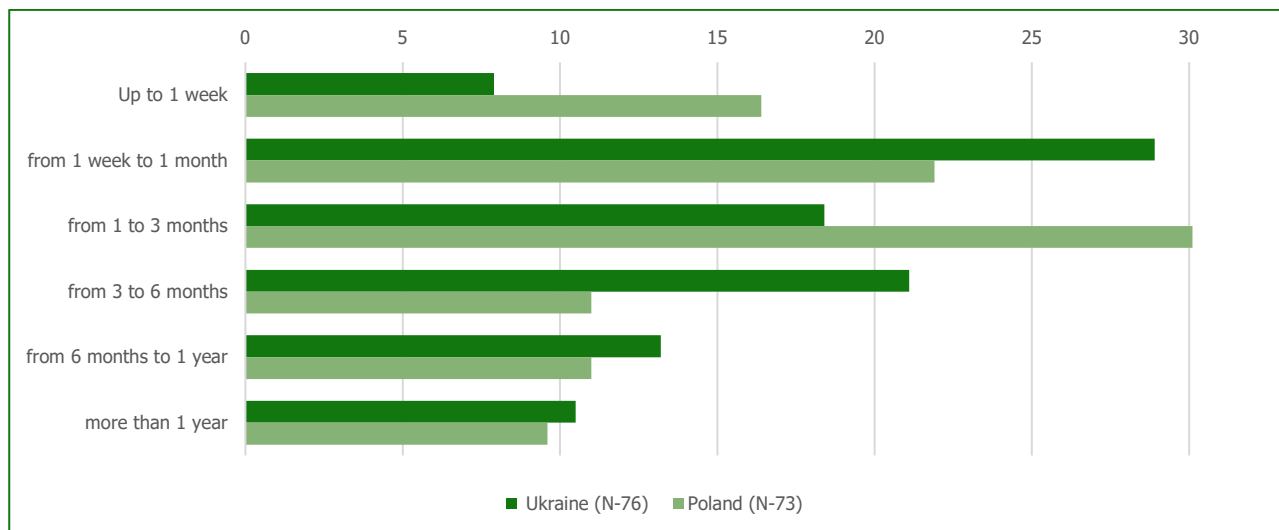


Figure 5. Differentiation of respondents according to the duration of the ability to cover your basic living expenses from the savings in case of losing the main source of income, % of respondents. (Source: own expert survey)

According to received data from the expert survey, there is the same trend for Ukrainians in Ukraine and in Poland, which means that the majority of respondents (47.3% for Ukraine and 52% for Poland) could cover their daily spending with their savings from 1 week till 3 months, in particular the share of respondents for the period from 1 to 3 months is more considerable for Poland with the level of 30.1% compared to ones in Ukraine with such indicator on the level of 18.4% (Figure 2). It is worth noting that Ukrainians living in Ukraine save more than those living in Poland.

The next measure in order to define the main patterns in the financial behaviour of Ukrainians who live in Ukraine and Poland is the differentiation of average monthly spending on food among the surveyed experts (Figure 6). A clear demonstration of the financial state is the indicator of the net income share spent on food (Figure 6). In Poland, the spending on food in the range from 10 to 30% was typical for the vast majority of respondents (more than 50% of Ukrainians in Poland), meanwhile, the same indicator was exemplary for almost 40% of respondents in Ukraine. It should be emphasized that about 35.5% of Ukrainians in Ukraine spend 30-50% of the budget on food.

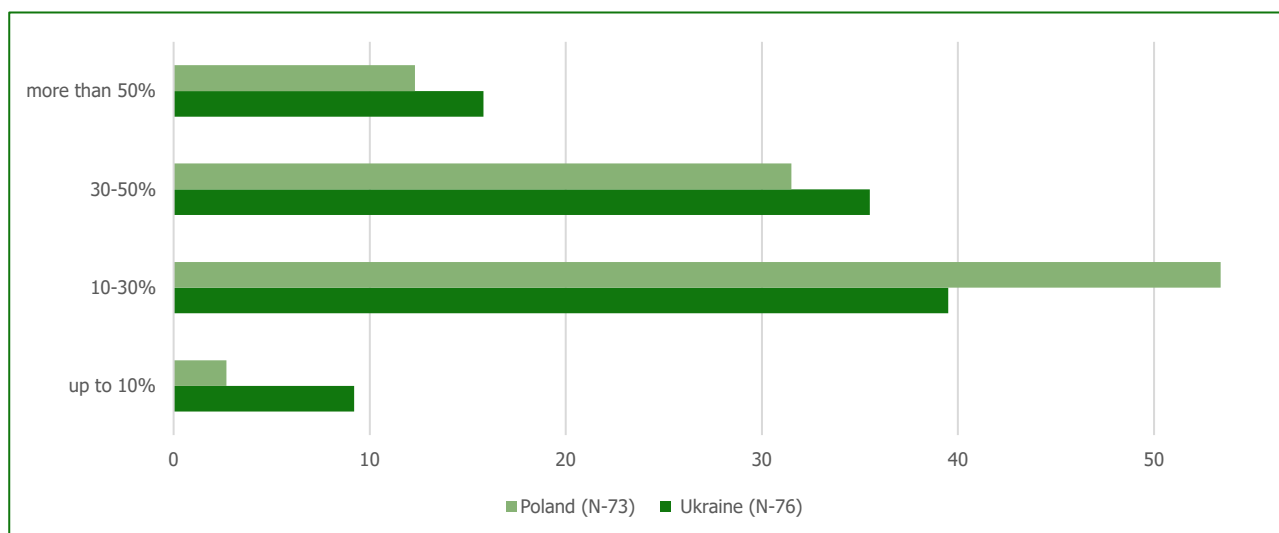


Figure 6. Respondents` disparity according to the share of their spending on food, % of respondents. (Source: own expert survey)

Monthly expenditures on housing, utilities, transport and other monthly payments (internet, mobile communication, loans, etc.) are shown in Figure 7.

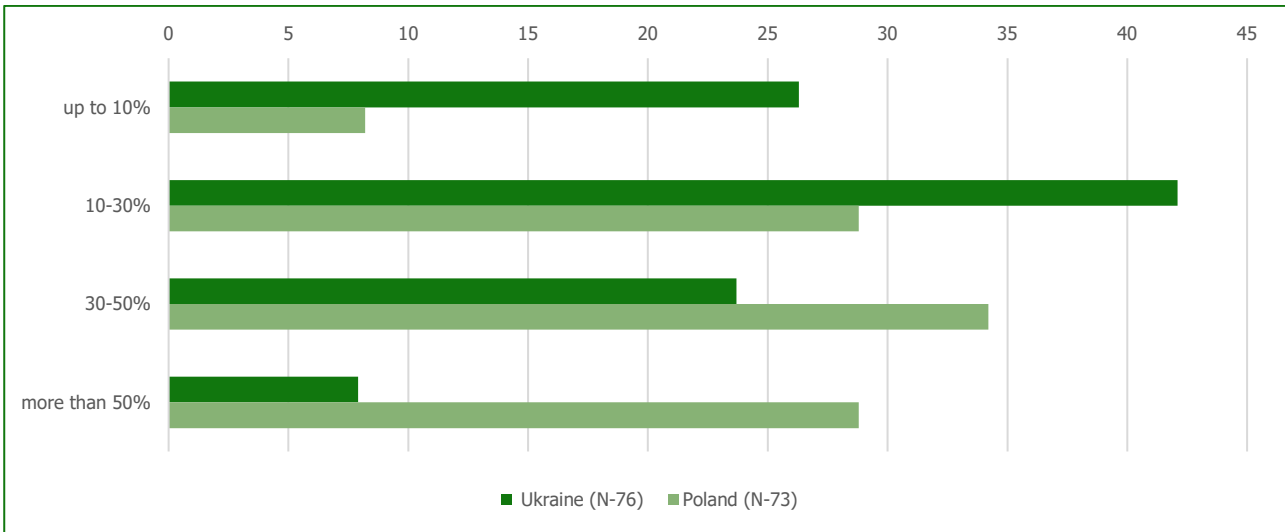


Figure 7. Structure of answers regarding the level of monthly expenditures on housing, utilities, transport and other monthly payments among the Ukrainian respondents, living in Ukraine and Poland. (Source: own expert survey)

“The share of net income that is spent monthly on housing, utilities, transport, other monthly mandatory payments such as the Internet, mobile communication, loans, etc., for most respondents, is from 10 to 50% of total expenses in both Ukraine and Poland (more than 65% of both respondents). However, 26% of respondents in Ukraine and 8.2% in Poland spend less than 10% of their income on the mentioned expenses. In Ukraine, the price level for utilities, transport, Internet, and mobile communication is lower. Almost 8% of respondents in Ukraine and almost 29% in Poland spend more than 50% of their income on those expenses” (Polishchuk et al., 2023).

The next criterion for financial behaviour assessment was the level of financial literacy among Ukrainians living in Ukraine and Poland (Figure 8).

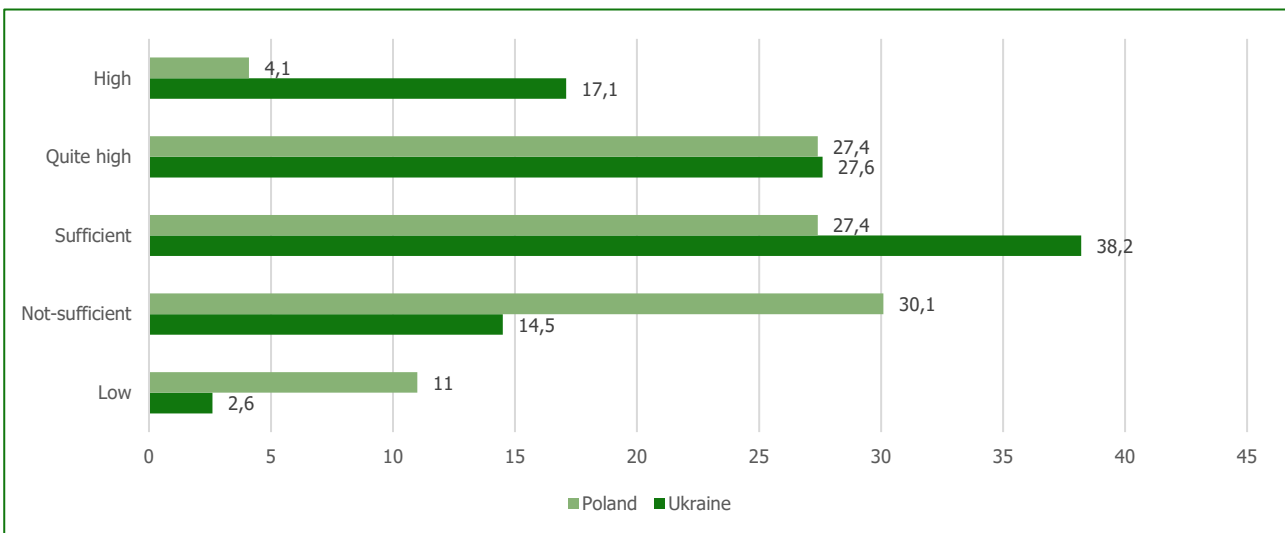


Figure 8. Distribution of respondents' answers according to their knowledge in finance, %. (Source: own expert survey)

“The respondents assessed their financial knowledge independently on a scale from 1 to 5, from low to high level, respectively” (Polishchuk et al., 2023). The majority of respondents assessed their knowledge as sufficient, quite high and high: in Poland - 58.9% of respondents, in Ukraine - 82.9%.

The level of on-time payments for rent, utility bills and other mandatory payments (for example, loans, etc.) among Ukrainians is shown in Figure 9.

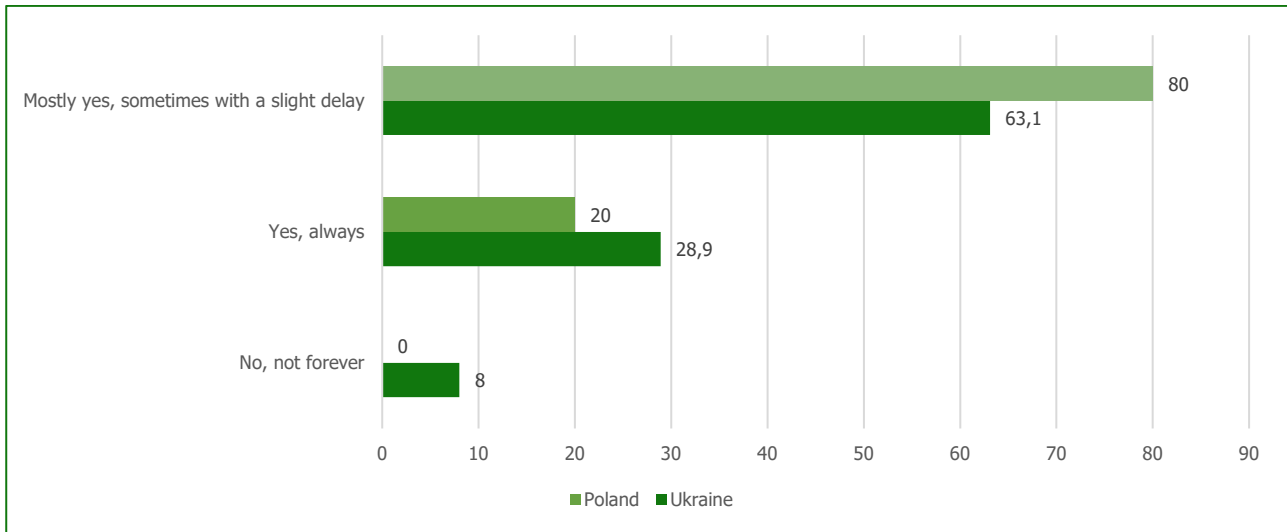


Figure 9. Respondents` diversification in regard to on-time payments for rent, utility bills and other mandatory payments (for example, loans, etc.) among Ukrainians, living in Poland and Ukraine, number of answers. (Source: own expert survey)

According to Figure 9, almost 8 % of Ukrainians in Ukraine do not pay the monthly obligatory payments on time, meanwhile, 28.9% of them pay these payments with a slight delay. The other trend is typical for Ukrainians in Poland, exemplified as 20% pay such payments with a slight delay and the majority of them (about 80%) perform timely payments (compared to 63% of Ukrainians in Ukraine). "Therefore, Ukrainians in Poland are more financially disciplined and used to paying mandatory payments, taxes, and other obligations on time" (Polishchuk et al., 2023).

Assessment of personal finance control in the conducted expert survey was performed by the identification of the main means for it (Figure 10).

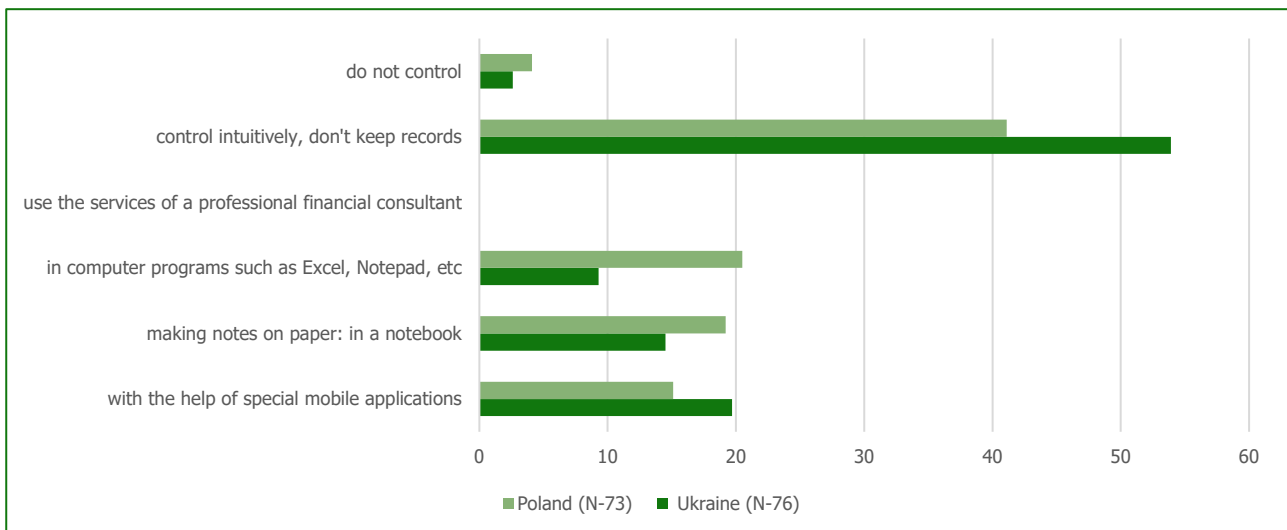


Figure 10. Answers of the respondents according to the used means for personal finance control, %. (Source: own expert survey)

Regarding the control of personal finance, using different applications, computer programs or making notes manually, the majority of Ukrainians both in Ukraine and Poland control their budget by the mentioned means (43.5% and 54.8% respectively), but a lot of Ukrainians do not record their income and expenses (53.9% and 41.1% for Ukrainians in Ukraine and Poland accordingly).

The next indicator for the assessment of financial behaviour patterns was the ability to cover unpredictable expenses on the level of monthly income by Ukrainians in Poland and in Ukraine (Figure 11).

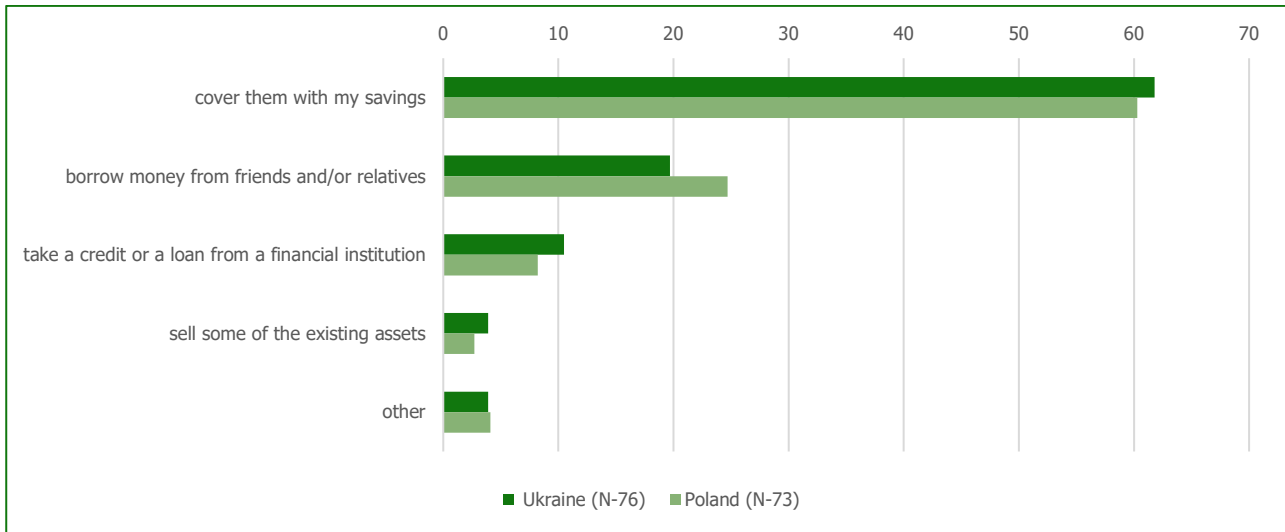


Figure 11. Distribution of the respondents' answers according to the source of their ability to cover additional expenses, %. (Source: own expert survey)

"Ukrainians in Poland are more inclined to private loans from friends and relatives than to use bank loans, only 8.2% would use loans in the case of an urgent need. In Ukraine, this indicator is quite higher and equals 10.5%. A lot of Ukrainians both in Poland and Ukraine" (Polishchuk et al., 2023) (60.3% and 61.8% respectively) have the ability to cover unpredictable expenses on the level of monthly income by their own savings. According to "The OECD (2021), the preference for private loans over loans from financial institutions is observed among the population with a low level of financial literacy and a low level of trust in financial institutions. Since the willingness to borrow money from friends and relatives is the same (24.7% and 19.7% of Ukrainians in Poland and Ukraine), the main difference in the behaviour of Ukrainians in Poland and Ukraine is that consumer lending is more accessible in Ukraine. In Poland, Ukrainians form more savings to cover unforeseen expenses. It can be concluded that reducing the availability of consumer loans can have a positive effect on financial behaviour and stimulate the formation of savings" (Polishchuk et al., 2023).

From the analysis of the most preferable financial instruments used during the last year in Ukraine and Poland, it can be seen that in Ukraine more respondents use bank loans (42.1%) and money transfers (57.9%), and in Poland - health insurance (34.2%) and life and disability insurance (21.9%). Medical insurance in Ukraine is not mandatory, more often it is typical for "employees of corporations, which is provided by employers. The situation is similar with life and disability insurance. The only type of insurance that is actively used in Ukraine is travel insurance. First, it is mandatory when preparing documents for going abroad. Secondly, the comparatively higher cost of medical services in other countries encourages Ukrainians to actively use this type of insurance" (Polishchuk et al., 2023). Also, in Ukraine, the percentage of respondents according to an expert survey who have property insurance and travel insurance is lower than in Poland.

The factors that are important for respondents when choosing financial services or instruments in Ukraine and Poland (the multiple possible answers stipulate that the final percentage does not sum up to 100). More than 75% of respondents and more than 51% in both countries consider the clarity of the service or instrument and projected income/interest to be an important factor respectively. However, there are certain differences in the importance of other factors for Ukrainians in Poland compared to Ukraine, such as online registration (64.4% for Poland), the professionalism of consultants (43.8% for Poland) and reviews on the Internet (23.3% for Poland).

In general, shows that in Ukraine, more respondents are ready to take risks to achieve financial profit, while in Poland, more people choose to preserve their assets and capital and feel less ready for maximum risk. That is, the primary priority is the guarantee of a refund, not the amount of income. The vast majority of respondents are not ready to take risks. The next criterion of the expert survey was to analyze the willingness of Ukrainian respondents both in Ukraine and in Poland rather to invest or not. The main reasons for not investing are similar in both countries, such as limited capital, lack of necessary knowledge and fear of losing money. However, in Ukraine, more respondents agree with the statement that they invest and plan to continue investing, while in Poland, fewer people mark this point.

The investment preferences of respondents in Ukraine and Poland during the last year where the purchase of securities: shares, bonds and investment in cryptocurrencies are among the popular types of investment (approximately 6.6% of respondents in Ukraine and 8.2% in Poland invested in securities; 15.8% of respondents in Ukraine and 8.2% in Poland invested in cryptocurrency). It is important to note that both markets have a large number of respondents who chose the

answer "none" (46.1% in Ukraine and 50.7% in Poland), which may indicate that a large part of the Ukrainians in both countries do not invest their funds in none of the above types of assets or instruments.

Regarding the sources of information that are the most influential on the financial decisions of respondents in Ukraine and Poland, respondents in both countries noted the importance of their own experience and the influence of information from professionals as well as from relatives. However, in Ukraine, more respondents trust their own experience, while in Poland, more respondents prefer the recommendations of financial institution consultants.

The level of the current financial state of Ukrainian respondents in Ukraine and Poland compared to February 2022 is shown in Figure 12.

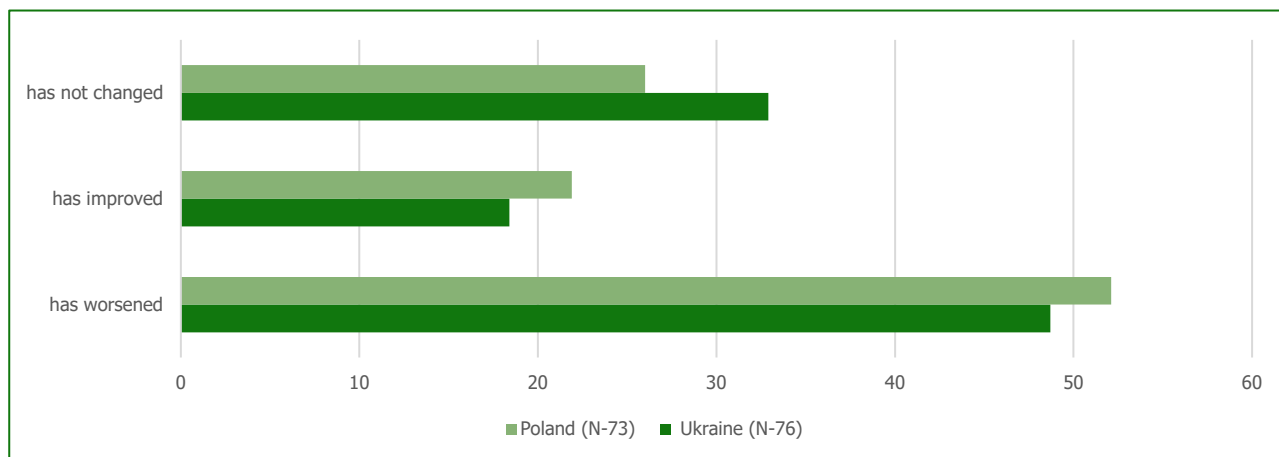


Figure 12. Distribution of respondents' answers according to their financial state compared to February 2022, %. (Source: own expert survey)

The general observation of data in Figure 12 is that the majority of respondents in both countries (48.7% in Ukraine and 52.1% in Poland) assess that their financial situation has worsened compared to February 2022. It is also important to note that in Poland this deterioration is even greater than in Ukraine. The level of improvement of the financial state is quite higher in Poland than in Ukraine by 3.5 percentage points. The majority of Ukrainian respondents in both countries (more than 50%) need to shorten their financial planning horizons after the start of a full-scale war in Ukraine. Such actions probably indicate greater instability and anxiety about future financial prospects among respondents in connection with the situation in Ukraine.

The last criterion for assessment of the financial behaviour of Ukrainians in Poland and Ukraine was a change of investment intentions since the start of the full-scale war in Ukraine (Figure 13).



Figure 13. Respondents' diversification regarding change of investment intentions since the start of the full-scale war in Ukraine, in %. (Source: own expert survey)

Data from Figure 13 indicate that the largest group of Ukrainian respondents both in Ukraine and in Poland (56.6% and 68.5% respectively) decided to postpone investing because of the situation in Ukraine. Only 18.4% and 12.3% of Ukrainians in Ukraine and Poland accordingly still invest but invest less because the risks have increased. For 11.8% and 15.1% of respondents in Ukraine and in Poland, it is typical to invest less because there is no investment potential. In general, the majority of respondents in both countries emphasized a reduction or stopping of investment due to the war in Ukraine, but some respondents in Ukraine (about 8%) noted an increase in investment because of new opportunities.

During the conducted survey of respondents, it was identified that the majority of respondents, both those in Poland and those in Ukraine, reported a deterioration in their financial situation due to the war. At the same time, approximately 25% in each group noted that the financial indicators have been improved. However, compared to the previous research with a larger sample conducted by Polishchuk et al (2023), it is worth noting that the trends remained relatively negatively stable from January 2022 to January 2023, with the majority of Ukrainians in Ukraine becoming poorer than their counterparts in Poland due to financial fluctuations.

In 2022 respondents in Ukraine demonstrated an ability for short-term financial independence, in particular, while in Poland in 2023 this ability was less pronounced on a longer horizon (more than 3 months). It signals on dynamic problems in adapting to financial difficulties in various fields of activity. However, analysing the general structure of expenses, the data show a stable distribution of income for food and housing with little change compared to the previous year in both countries. The level of financial literacy remains stable, although Ukrainians in Ukraine showed a higher level compared to their counterparts from Poland. This indicates a potential need for increased financial education in both groups. Despite the economic crisis the ability to make regular payments (utilities and rent), has increased in Ukraine.

A significant transformation of the sources of covering unforeseen expenses, in particular the increase of Ukrainians in Poland who turn to friends or relatives, indicates the expansion of the ethnic network of financial support. Appropriate adaptation indicates a response to a changing economic landscape, highlighting the importance of social connections in overcoming financial crises. Some respondents in Ukraine highlighted the emergence of new investment opportunities, likely due to limited options in traditional investment channels such as real estate. The obtained results call into question traditional ideas about financial behaviour during the crisis.

Based on these data, it is possible to note the difficulties faced by Ukrainians and to emphasize the need for a deeper understanding of the specifics of financial behaviour during the crisis, and the development of patterns of further actions.

DISCUSSION

As mentioned in the literature review, the consensus of the mentioned studies is that cultural difference plays a crucial role in financial behaviour. Kushnirovich (2016) used Bourdieu's concept to explain the behaviour of migrants and local investors, where it was proved that over time, they adjust their financial choices to the local environment. Kurian, Valenti and Sreedharan (2022) took two primary data sets (with Indian migrant workers and their household members) and proved that members of households eager to get power in their financial decisions at home and in host countries in an equal manner. Chen and Lemieux (2016) studied the well-being of Chinese migrant workers where they highlighted the importance of financial literacy programs for low-income migrants. The study of Filipino workers in South Korea by Kim, Koo and Jang (2023) exposes the poor complex financial management skills. Bertocchi, G., Bertocchi, M., and Zaiceva (2023) explored Italian local and migrant' households' financial behaviour – migrants are less risky in their choice for asset allocation, and at the same time migrants are more financially fragile. Haliassos, Jansson and Karabulut (2016) highlighted the cultural distinctions ("southern" and "northern" culture) between the financial behaviour of migrants and refugees in Sweden. Makina (2013) examined the access to financial services (remittances) of migrants in South Africa taking into account their migrant legal status, income level, savings and educational level. Didenko et al. (2020) related the financial behaviour of individual migrants to country safety. Zhavoronok et. al (2022) recommend applying digital financial services to mitigate the consequences of financial crises and shape the financial behaviour of individuals but those solutions are not adjusted to migrants.

Prior studies have focused their attention on migrants from the same ethnic group. However, the concrete results of their studies are impossible to apply to war migration as it was in our research. Moreover, previous studies didn't consider the differences of one ethnic group in other countries (they usually consider one host country). The next distinguishing feature of the current study is that it compared the answers of respondents from one ethnic group but in different countries (home and host). Also, this research showed the changes in intentions of investment in the war period, and the length of financial planning horizons. The notable difference is in receiving financial information – in Poland, Ukrainians use financial advisors'

recommendations more often than in Ukraine. At the same time, representatives of both groups trust their own experience, recommendations of friends and relatives, successful entrepreneurs etc.

Limitations of the current survey were in curacies of the currency exchange rate.

CONCLUSIONS

This study set out to identify changes in patterns of financial behaviour among two distinct groups from the same ethnic background residing in Ukraine and Poland because of the war.

This research has shown that there were changes in external conditions (inflation, currency exchange, political instability) which made Ukrainians prioritize spending on essential needs during wartime. Ukrainians in both countries reducing spending and increasing savings due to concerns about job security and income stability. This can be considered as one of the coping strategies because there were no significant changes in their financial behaviour patterns. Expenditure patterns persisted, with a continued focus on food and housing, emphasizing the need for consistent financial planning. The self-assessment of financial literacy remained the same, suggesting a consistent level of awareness.

Those Ukrainians in both countries who had invested before the war started to explore new investment opportunities, signalling a potential shift in financial behaviour. The most significant is the decline of investment in real estate and it is unusual for Ukrainians which before 2022 has been considered as the most popular way of investment.

The study also makes several noteworthy contributions to the highlighting of social connections, as evidenced by an increase in Ukrainians in Poland turning to friends or relatives for unforeseen expenses. This stable pattern suggests the significance of building and expanding networks for financial support based on ethnic origin.

Although the current study is based on small samples of participants, the findings illustrate that both groups showed increasing in using digital technologies in personal finance decision-making.

Therefore, personalized fintech solutions can adapt the financial behaviours of Ukrainian migrants to Poland's financial rules and traditions by offering tailored financial services, facilitating cost-effective cross-border transactions (including remittances), addressing language and cultural distinguishes, offering customized savings and investment tools (these solutions are important in terms of unequal future retire payments comparing to Polish individuals). Moreover, fintech can assist in shaping emergency financial plans for further crises.

Further scientific research will be focused on designing and conducting economic experiments of fintech solutions which can help to adjust patterns and behaviour of migrants to the host country environment.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

REFERENCES

1. Arendt, J. N. (2023). Welfare benefit generosity and Refugee Integration. *International Migration Review*, 58(2). <https://doi.org/10.1177/01979183231160713>
2. Bailey, H., & Kaplan, L. J. (2022). Volunteerism during humanitarian crises: A practical guide. *Critical Care*, 26(1). <https://doi.org/10.1186/s13054-022-03984-4>
3. Bazaluk, O., Rahman, M.A., Zayed, N.M., Faisal-E-Alam, Md., Nitsenko, V., & Kucher, L. (2024). Crowdsourcing review: the crowd workers' perspective. *J. Ind. Bus. Econ.* <https://doi.org/10.1007/s40812-023-00295-9>
4. Blair, G., Christensen, D., & Wirtschafter, V. (2022). How does armed conflict shape investment? evidence from the

- mining sector. *The Journal of Politics*, 84(1), 116–133. <https://doi.org/10.1086/715255>
5. Businessinsider. (2022, May 23). Tylu Uchodźców z Ukrainy znalazło pracę W polsce. Większość to kobiety. Businessinsider. <https://businessinsider.com.pl/gospodarka/tylu-uchodzcow-znalezlo-prace-w-polsce-wiekszosc-to-kobiety/9xmh9pq>
 6. Bertocchi, G., Brunetti, M., & Zaiceva, A. (2022). The financial decisions of immigrant and native households: Evidence from Italy. *Italian Economic Journal*, 9(1), 117–174. <https://doi.org/10.1007/s40797-022-00186-3>
 7. Cafiso, G. (2021). Loans to different groups and economic activity at times of crisis and growth. *Oxford Bulletin of Economics and Statistics*, 84(3), 594–623. <https://doi.org/10.1111/obes.12474>
 8. Calhoun, C. (2008). The Imperative to Reduce Suffering: Charity, Progress, and Emergencies in the Field of Humanitarian Action. In *Humanitarianism in question politics, Power, ethics*: essay, Cornell University Press. <https://doi.org/10.7591/9780801461538-005>
 9. Chang, C.-A. (2023). Beyond Social Capital: An examination of the sustaining and expansion of Turkey-based Syrian refugee businesspeople's business operations. *Journal of Immigrant & Refugee Studies*, 1–14. <https://doi.org/10.1080/15562948.2023.2196509>
 10. Chen, Z., & Lemieux, C. M. (2016). Financial knowledge and behaviours of Chinese migrant workers: An international perspective on a financially vulnerable population. *Journal of Community Practice*, 24(4), 462–486. <https://doi.org/10.1080/10705422.2016.1233475>
 11. Cohen, D., Shin, F., & Lawless, R. M. (2021). Attitudes, behaviour, and institutional inversion: The case of debt. *Journal of Personality and Social Psychology*, 120(5), 1117–1145. <https://doi.org/10.1037/pspa0000265>
 12. Cohen, J., Hachem, K., & Richardson, G. (2021). Relationship lending and the Great Depression. *The Review of Economics and Statistics*, 103(3), 505–520. https://doi.org/10.1162/rest_a_00899
 13. Council on Foreign Relations. (2024). Global conflict tracker L council on foreign relations. Council on Foreign Relations. <https://www.cfr.org/global-conflict-tracker>
 14. Duszczek, M., & Kaczmarczyk, P. (2022). The war in Ukraine and migration to Poland: Outlook and challenges. *Intereconomics*, 57(3), 164–170. <https://doi.org/10.1007/s10272-022-1053-6>
 15. Didenko, I., Volik, K., Vasylieva, T., Lyeonov, S., & Antoniuk, N. (2020). Migration, environment, and country safety: Analysis of touchpoints. *Paper presented at the E3S Web of Conferences*, 202. <https://doi.org/10.1051/e3sconf/202020203028>
 16. Didenko, I., Volik, K., Vasylieva, T., Lyeonov, S., & Antoniuk, N. (2021). Environmental migration and country security: Theoretical analysis and empirical research. *Paper presented at the E3S Web of Conferences*, 234. <https://doi.org/10.1051/e3sconf/202123400010>
 17. Ford, J. (2015). *Regulating Business for Peace*. Cambridge University Press. <https://doi.org/10.1017/cbo9781139583725>
 18. Fridman, A., Gershon, R., & Gneezy, A. (2022). Increased generosity under COVID-19 threat. *Sci Rep*, 12, 4886. <https://doi.org/10.1038/s41598-022-08748-2>
 19. Ghazali, M. S., & Leong, T. P. (2022). Financial profiling and possible financial inclusion of Rohingya refugees in Malaysia. *Lecture Notes in Networks and Systems*, 487, 671–688. https://doi.org/10.1007/978-3-031-08084-5_49
 20. Goes, C., & Bekkers, E. (2022). The impact of geopolitical conflicts on trade, growth, and innovation. *WTO Working Papers*. <https://doi.org/10.30875/25189808-2022-9>
 21. Hagstrom, P., & Pereira, J. (2021). Financial inclusion of individuals who arrived as refugees to the United States. *Journal of International Development*, 33(4), 752–779. <https://doi.org/10.1002/jid.3544>
 22. Hall, A., Scheving, A. S., & Zoega, G. (2021). The Effect of a Financial Crisis on Household Finances: A Case Study of Iceland's Financial Crisis. *Journal of Financial Crises*, 3(4), 1-24. <https://elischolar.library.yale.edu/journal-of-financial-crises/vol3/iss4/1>
 23. Hasso, T., Pelster, M., & Breitmayer, B. (2020). Terror attacks and individual investor behaviour: Evidence from the 2015–2017 European Terror attacks. *Journal of Behavioural and Experimental Finance*, 28, 100397. <https://doi.org/10.1016/j.jbef.2020.100397>
 24. Hiilamo, H. (2021). The Legacy of Economic Recession in Terms of Over-Indebtedness: A Framework and Review of the Evidence. *Social Policy and Society*, 20(1), 111-124. <https://doi.org/10.1017/S1474746420000354>
 25. Hutorov, A.O., Lupenko, Y.O., Zakharchuk, O.V., Hutorova, O.O., & Dorokhov, O.V. (2020). Inclusive Development of the Ukrainian Economy. *TEM Journal*, 9(1), 296–303. <https://dx.doi.org/10.18421/TEM91-41>
 26. Kelley, H. H., Lee, Y., LeBaron-Black, A., Dollahite, D. C., James, S., Marks, L. D., & Hall, T. (2022). Change in financial stress and relational wellbeing during COVID-19: Exacerbating and alleviating influences. *Journal of Family and Economic Issues*, 44(1), 34–52. <https://doi.org/10.1007/s10834-022-09822-7>
 27. Kim, M., Koo, H.-G., & Jang, J. (2022). Financial capabilities and financial behaviour of Overseas Filipino Workers in South Korea. *Asian and Pacific Migration Journal*, 31(2), 118–140. <https://doi.org/10.1177/01171968221113342>
 28. Kurian, V., Sreedharan, S., & Valenti, F. (2022b). Calling the shots: Determinants of financial decision-making and behaviour in domestic migrant households in India. *Journal of Emerging Market Finance*, 21(3), 317–342. <https://doi.org/10.1177/09726527221082005>
 29. Krupskiy, O., Sardak, S., Kolbushkin, Y., & Stasyuk, Y. (2019). Formation of the Economic Security System of Tourism and Hospitality Enterprises. *Journal Of Advanced Research in Law and Economics*, 10(4), 1159-1175. [https://doi.org/10.14505/jarle.v10.4\(42\).16](https://doi.org/10.14505/jarle.v10.4(42).16)

30. Kuznetsova, A., Azarenkova, G., & Olefir, Ie. (2017). Implementation of the "bail-in" mechanism in the banking system of Ukraine. *Banks and Bank Systems*, 12(3), 269-282. [http://dx.doi.org/10.21511/bbs.12\(3-1\).2017.11](http://dx.doi.org/10.21511/bbs.12(3-1).2017.11)
31. Kushnirovich, N. (2016). Immigrant investors in financial markets: Modes of financial behaviour. *Journal of Business Economics and Management*, 17(6), 992-1006. <https://doi.org/10.3846/16111699.2016.1171253>
32. Kwilinski, A., Lyulyov, O., Pimonenko, T., Dzwigol, H., Abazov, R., & Pudryk, D. (2022). International Migration Drivers: Economic, Environmental, Social, and Political Effects. *Sustainability*, 14, 6413. <https://doi.org/10.3390/su14116413>
33. Lee, H. (2014). Does Armed Conflict Reduce Foreign Direct Investment in the Petroleum Sector. *Foreign Policy Analysis*, 13(1), 188-214. <https://www.jstor.org/stable/26168141>
34. Litofcenko, J., Meyer, M., Neumayr, M. et al. (2023). Charitable Giving in Times of Covid-19: Do Crises Forward the Better or the Worse in Individuals? *Voluntas*, 34, 1322-1334. <https://doi.org/10.1007/s11266-023-00558-y>
35. Makina, D. (2012). Financial access for migrants and intermediation of remittances in South Africa. *International Migration*, 51(s1). <https://doi.org/10.1111/j.1468-2435.2012.00748.x>
36. Metzner, S., & De-Juan-Vigaray, M. D. (2023). The Role of Business Model Innovation in the IT Services Sector: a Comprehensive Mapping Review. *European Journal of Management Issues*, 31(3), 142-152. <https://doi.org/10.15421/192312>
37. Onoprienko, K., Lovciová, K., Mateášová, M., Kuznyetsova, A., & Vasylieva, T. (2023). Economic policy to support lifelong learning system development & SDG4 achievement: Bibliometric analysis. *Knowledge and Performance Management*, 7(1), 15-28. [http://dx.doi.org/10.21511/kpm.07\(1\).2023.02](http://dx.doi.org/10.21511/kpm.07(1).2023.02)
38. Polishchuk, Y., Maiurchenko, V., Tereshchenko, O., Budiaiev, M., & Onikiienko, S. (2023). Unveiling individuals' financial behaviour patterns: The Polish-Ukrainian case study in the pre-war period. *Investment Management and Financial Innovations*, 20(4), 242-256. [https://doi.org/10.21511/imfi.20\(4\).2023.20](https://doi.org/10.21511/imfi.20(4).2023.20)
39. Riepina, I., Ligonenko, L., Sadovnyk, O., Dzyubenko, L., & Kovtun, V. (2022). Identification of factors related to transport entrepreneurship influencing the economic development of Ukraine. *Transport Problems*, 17(4), 151-163. <https://doi.org/10.20858/tp.2022.17.4.13>
40. Sazonets, O., Los, Z., Perevozova, I., Samoiloov, P., & Zhadanova, Yu. (2020). Labor and assets optimization in the context of increasing the international information company efficiency. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*, 6, 155-161. <https://doi.org/10.33271/nvngu/2020-6/155>
41. Tepliuik, M., Sahaidak, M., Petrishyna, T., Fokina-Mezentseva, K., Fomenko, B., & Vasyliev, I. (2023). Managing of responsible consumption and sustainable production of enterprises in the globalization conditions. *Acta Innovations*, 48, 75-91. <https://doi.org/10.32933/ACTAINNOVATIONS.48.6>
42. Wellalage, N. H., & Locke, S. (2019). Remittance and financial inclusion in refugee migrants: Inverse probability of treatment weighting using the propensity score. *Applied Economics*, 52(9), 929-950. <https://doi.org/10.1080/00036846.2019.1646876>
43. Zhavoronok, A., Popelo, O., Shchur, R., Ostrovska, N., & Kordzaia, N. (2022). The role of digital technologies in the transformation of regional models of households' financial behaviour in the conditions of the National Innovative Economy Development. *Ingénierie Des Systèmes d'Information*, 27(4), 613-620. <https://doi.org/10.18280/isi.270411>

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УКРАЇНЦІ В ПОЛЬЩІ ТА УКРАЇНІ: ЧИ МОЖЕ ВОЄННА КРИЗА ЗМІНИТИ МОДЕЛІ ФІНАНСОВОЇ ПОВЕДІНКИ

Війна росії проти України спричинила велику хвилю переселенців і всередині країни, і за її межами. За даними УВКБ ООН, станом на 2023 рік понад 1,6 мільйона громадян України подали заявки на отримання статусу захисту в Польщі, а 4,9 мільйона людей отримали статус внутрішньо переміщених осіб в Україні. Метою цього дослідження є аналіз даних опитування внутрішньо переміщених осіб в Україні й тих, кого вважають біженцем у Польщі, щоб визначити, як змінилися їхні моделі фінансової поведінки та яких заходів можна вжити для адаптації до нових умов. Результати свідчать, що суттєвих змін у моделях фінансової поведінки немає, проте обидві групи демонструють стратегії подолання кризи: понад 50% в обох групах скорочують горизонти планування в персональних фінансах. Їхні витрати зосереджені переважно на нагальних потребах. В обох країнах українці інвестують менше через зменшення своїх доходів. Крім того, більшість в обох групах взагалі не інвестує. Найпопулярнішою інвестицією для українців залишаються банківські депозити (в Україні – понад 25%, а в Польщі – понад 15%). Об'єкти нерухомості в Україні менш привабливі через безпеку, як до 2022 року. Водночас українці шукають альтернативні шляхи інвестування. Українці демонструють високий рівень використання різних цифрових технологій для різних цілей, у тому числі для особистих фінансів. Фінтех-рішення рекомендуються для сприяння кращому ухваленню рішень у царині

особистих фінансів і зміні моделей фінансової поведінки. Фінтех може підвищити фінансову інклюзію ВПО України та мігрантів у Польщі й спрямувати грошові потоки для інвестицій для подальших пенсійних виплат.

Ключові слова: міграція, біженці, внутрішньо переміщені особи, фінансова поведінка, особисті фінанси, сталий розвиток, фінтех

JEL Класифікація: D14, D91, G02, G11