

## **КІЛЬКІСНІ МЕТОДИ В ЕКОНОМІЦІ. ЦИФРОВА ЕКОНОМІКА**

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### **THE RESILIENCE OF UKRAINE'S BANKING SECTOR AMID THE ONGOING WAR: EMPIRICAL EVIDENCE FROM HOUSEHOLD DEPOSITS**

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**Abstract.** Household deposits are among the critical factors contributing to the resilience of Ukraine's banking sector, playing a central role in sustaining liquidity and maintaining public confidence in financial institutions. This study aims to identify the key determinants of household deposit dynamics and to evaluate their impact on the stability of the Ukrainian banking sector amid the ongoing war. The empirical analysis relies on quantitative methods, employing multiple regression with Newey-West standard error correction to address potential autocorrelation. The dataset covers the period from January 2022 to June 2025 and comprises 42 monthly observations on household deposit volumes, combined with macroeconomic indicators such as the National Bank of Ukraine's policy rate, the volume of issued domestic government bonds, the consumer price index, and the exchange rate of the national currency against the US dollar. The empirical findings suggest that household deposit volumes exhibit significant responsiveness to macroeconomic determinants. While increases in the policy rate and inflation are negatively correlated with deposit accumulation, the expansion of domestic government bond issuance and exchange rate dynamics appear to foster deposit growth. Furthermore, the findings indicate structural shifts in household financial behaviour: the growing preference for on-demand and short-term deposits (up to one year) in both national and foreign currencies reflects a cautious and adaptive strategy aimed at preserving liquidity and mitigating currency risks.

Integrating macroeconomic variables with household behavioural patterns provides a more comprehensive understanding of the interaction between economic policy and household financial decisions. The findings contribute to a deeper understanding of depositor behaviour during wartime conditions and carry practical implications for the design of macroeconomic policy initiatives, the preservation of public trust in the banking sector, and the reinforcement of financial stability in Ukraine.

**Keywords:** banking sector, household behaviour, macroeconomic policy, resilience, regression analysis, war.

**Problem statement.** Ensuring the resilience of the banking sector amid the ongoing full-scale invasion of Ukraine by the Russian Federation constitutes a critical priority of contemporary economic policy. This imperative stems from the necessity to sustain public confidence in commercial banks, safeguard macro-financial stability, enable the uninterrupted functioning of financial institutions, and mitigate the risk of a destabilizing outflow of funds from Ukraine's banking system. The dynamics of household deposits, a key indicator of the banking sector stability, not only reflects the degree of public trust in the monetary system, but also act as a fundamental driver of overall economic confidence. This issue assumes particular importance in the light of profound economic, social, environmental, and security challenges precipitated by the Russian Federation's military aggression against Ukraine, including the large-scale destruction of infrastructure, mass internal and external displacement of the population, escalating defence expenditures, and the deterioration of household welfare.

In February 2022, due to the prudent policies of the National Bank of Ukraine (NBU) and the structural reforms undertaken in 2014–2016 aimed at enhancing the resilience of the banking sector, commercial banks successfully adapted to heightened military risks and fostered behavioural patterns among households that reinforced confidence in the banking system. As early as 2018, a regulatory and legal framework had been established to define the procedures, scope, and timelines for implementing policies to ensure the operational continuity of the banking system during a “special period”, officially recognised as a state of war [1]. Following the escalation in February 2022, the NBU enacted a new resolution introducing restrictions on cash withdrawals from commercial bank accounts, fixing the official exchange rate of the hryvnia, and ensuring the uninterrupted operation of bank branches, contingent on the absence of direct threats to life and public safety [2]. Furthermore, as part of its monetary policy initiatives to restore the full functioning of the foreign exchange market, the NBU intensified monitoring of the deposit market to assess shifts in household behaviour, particularly the reduced propensity to convert savings into foreign currency and the diminished incentives for capital outflows [3]. Collectively, these regulatory measures have played a crucial role in maintaining the stability of the banking sector amid the ongoing war, with household deposits serving as a key indicator of this resilience.

**Analysis of the latest research works and publications.** The resilience of a banking sector, public confidence in financial institutions, and the behaviour of economic agents in the banking services market under conditions of heightened uncertainty have attracted increasing scholarly attention. Employing a Bayesian panel VAR model, Anastasiou et al. [4] demonstrated the positive impact of consumer sentiment on household deposit flows across euro area member countries. Similarly, Ferrante and Gornemann [5], analysing the effects of currency devaluation in a model of heterogeneous households within a small open economy with banks subject to limited leverage, revealed that in contexts of high deposit dollarization, welfare gains are attainable, provided monetary policy remains effective. Examining the interaction between household deposits and equity markets, Lin [6] found that during periods of stock market expansion, household demand for retail deposits declines, resulting in reduced bank lending and, consequently, diminished real activity among bank-dependent firms.

Focusing on the 2000–2021 period, Krunic [7] identified key determinants of banking lending activity in the Western Balkan countries, underscoring the critical role of aggregate household deposits in sustaining banking sector operations. Taken together, these studies emphasise the pivotal contribution of household deposits to the resilience of the banking sector and their essential function in maintaining financial stability within national economies.

Conversely, the influence of household deposits on the banking sector and economic development exhibits a multidimensional nature. Drechsler, Savov, and Schnabl [8] demonstrate that household deposits underpin the strong link between the liquidity premium and the U.S. Federal Reserve rate, while simultaneously shaping bank lending behaviour. In contrast, Repullo [9], utilising a microeconomic framework of household deposit demand, challenges the theoretical underpinnings of the “deposit channel” in monetary policy transmission. Addressing the “excess savings” phenomenon, Bofinger and Ries [10] revealed a significant decline in both net and gross household savings rates in the United States since the 1980s. Furthermore, drawing on data from 281 Chinese prefecture-level cities, Peng et al. [11] provide empirical evidence that financial sector development reduces household cash holdings, increases bank deposits, and subsequently fosters economic growth.

Building on these insights, several studies have examined household deposit behaviour under crisis conditions. Grivec and Devjak [12] demonstrated that the COVID-19 pandemic influenced Slovenian households' bank savings, using the Euro Overnight Index Average (EONIA) as a proxy for returns and bitcoin prices as an alternative investment indicator. Similarly, Dursun-de Neef and Schandlbauer [13] showed that households' increased savings in deposit accounts during the pandemic enabled commercial banks to expand real estate lending. Basten and Juelsrud [14] found that banks strategically cross-sell deposits and loans to existing household depositors, incorporating this potential into deposit rate setting. Using multiple regression, Mamadiyarov et al. [15] highlighted that inflation control and digitalisation strengthen commercial banks' deposit bases, enhancing competitiveness and economic stability. Collectively, these findings confirm that household deposit behaviour is a critical determinant of banking sector resilience and plays a fundamental role in sustaining financial stability, particularly under conditions of high uncertainty or crisis.

Simultaneously, ongoing military hostilities have emerged as a key driver shaping household behaviour in the banking deposit market. In the framework of national economy recover, Ivanov et al. [16] identified patterns of organised household savings and examined the determinants influencing the development of this market, which aims to mobilise domestic investment resources to support Ukraine's economic growth. In prior studies, Kichurchak [17; 18; 19] analysed the principal drivers of the household bank deposit market in Ukraine, highlighting its structural and regional characteristics in the context of the 2008–2009 economic crisis and the wartime period of 2014–2020. The war in Ukraine has also affected neighbouring financial systems. Bernardelli et al. [20] identified direct and indirect channels through which commercial banks in Poland are impacted, emphasising the importance of cyber risk management and proposing a revised paradigm for assessing credit and market risks that incorporates geopolitical factors.

Drawing on survey data from Ukraine, Germany, Great Britain, and Poland, Piotrowska et al. [21] demonstrated that financial challenges substantially undermine public trust in financial institutions, while evaluating measures implemented in Ukraine to mitigate the mass outflow of deposits during the war. Furthermore, Meshcheriakov et al. [22] examined key trends in Ukraine's banking system under martial law and outlined strategies for transforming financial and credit relations in response of the pressures of globalisation. Exhibiting a persistent decline in the share of long-term deposits across both national and foreign currencies, Sokolovska [23] highlighted the need to address imbalances in deposit formation as a prerequisite for restoring bank lending and enhancing economic resilience in the post-war period. Assessing financial stress volatility and banking sector resilience amid countercyclical war shocks in Ukraine, Korneev et al. [24] found that adherence to economic standards and the behaviour of key financial stability indicators remained robust, with limited fluctuations. Recognising the critical role of post-war economic recovery, Becker et al. [25] identified core macroeconomic policy initiatives aimed at regulating capital flows and reinforcing depositor confidence. Emphasising sustainable development, Kichurchak [26] argued that maintaining the banking system resilience and promoting responsible depositor are crucial for Ukraine's post-war economic recovery. Accordingly, macroeconomic policy initiatives that facilitate the rapid adaptation of financial instruments to support banking sector resilience have provided a foundation for post-war recovery while mitigating the outflow of funds from the system.

Furthermore, institutional and regulatory frameworks aimed at restoring banking sector stability amid the war in Ukraine provide conditions conducive to economic recovery and the preservation of depositor confidence. In this context, Ukhnaletskiy et al. [27] assessed the capacity of the Ukrainian banking system to self-organise and adapt under unprecedented destructive challenges, identifying key avenues to strengthen institutional resilience in conditions of uncertainty. Examining the impact of the NBU's monetary policy, Dziamulych et al. [28] demonstrated that policy initiatives implemented during martial law mitigated economic risks and supported the stability of the banking system. Abramova et al. [29], drawing on an online survey of diverse citizen groups, concluded that establishing favourable conditions for the transformation of savings into investments – where the banking sector plays a central role – is crucial for Ukraine's post-war recovery. Building on a comprehensive analysis of wartime consequences, Dzhyhora et al. [30] identified essential instruments for maintaining the financial sector resilience, including the expansion of banks' resource base and the mobilisation of household deposits. In other words, these studies underscore that depositor behaviour is shaped not only by wartime and military-related risks but also by institutional measures designed to ensure the stability and resilience of the banking sector.

Given the growing academic attention to the interplay between the banking sector and household savings as a determinant of financial stability, and the availability of a robust theoretical framework and practical policy guidance, the factors driving deposit dynamics amid the ongoing war in Ukraine warrant further investigation. In this context, it is essential to conduct additional empirical analysis of banking sector resilience, with particular emphasis on how military hostilities influence the behaviour of household depositors.

**Statement of objectives.** This study aims to identify the key determinants of household deposit dynamics and to evaluate their impact on the stability of the Ukrainian banking sector amid the ongoing war. Accordingly, the following key hypotheses have been formulated:

- H1: The dynamics of household deposits between February 2022 and June 2025 serve as an indicator of the banking sector's capacity to maintain operational functionality under wartime conditions.
- H2: Household deposits dynamics are influenced by key macroeconomic factors, including the exchange rate, developments in the securities market, inflation expectations, and the monetary policy measures implemented by the NBU.
- H3: The effects of the war on the banking sector resilience are linked to the behavioural characteristics of households, particularly in their choice of deposit maturities.

**Research methods.** The study utilises official statistical data covering the period from February 2022 to June 2025, comprising a total of 42 monthly observations. Given this limited dataset, the application of classical multiple regression analysis is appropriate, and the results are expected to be robust and reliable. The choice of a multiple regression framework to investigate banking sector resilience, using household deposit dynamics as the dependent variable, is motivated by the need to account for linear relationships between the predictors and the outcome variable. This approach allows for a comprehensive evaluation of the influence of independent variables on the dependent variable, facilitating the modelling of complex interactions within the system.

Accordingly, to quantify the contribution of various factors to household deposit dynamics, a multiple linear regression model is employed, which can be expressed by the following equation:

$$Y_t = \beta_0 + \beta_1 \cdot X_{1t} + \beta_2 \cdot X_{2t} + \beta_3 \cdot X_{3t} + \dots + \beta_k \cdot X_{kt} + \varepsilon_t \quad (1)$$

where  $Y_t$  – the dependent variable for period  $t$ ;  $X_{1t}, X_{2t}, \dots, X_{kt}$  – the independent variables;  $\beta_0$  – a constant (intercept);  $\beta_1, \beta_2, \dots, \beta_k$  – regression coefficients indicating the impact of the respective factors;  $\varepsilon_t$  – random error term accounting for unobserved influences.

A suite of diagnostic tests is employed to evaluate the accuracy and reliability of the multiple linear regression model. Multicollinearity among the independent variables is assessed using the variance inflation factor (VIF), which measures the degree of interdependence among regressors. Heteroscedasticity, or the non-constant variance of the error terms, is examined using the Breusch-Pagan test. Autocorrelation of residuals is evaluated with the Durbin-Watson test, while the normality of residuals is assessed via the Shapiro-Wilk test. The comprehensive application of these diagnostic procedures ensures the robustness, validity, and interpretability of the regression analysis results.

**Presentation of principal material of the research.** Let the capacity of Ukraine's banking sector to maintain operational functionality during wartime be proxied by the volume of household deposits ( $Y_t$ , million UAH). The independent variables are defined as follows:  $X_1$  – the NBU policy rate, %;  $X_2$  – domestic government bonds denominated in hryvnia, placed

in the primary market (million UAH);  $X_3$  – the consumer price index, as of December of the previous year (%);  $X_4$  – the US dollar exchange rate (USD/UAH).

For the specified variables, the multivariate regression model is formulated as follows:

$$Y_t = \beta_0 + \beta_1 \cdot X_{1t} + \beta_2 \cdot X_{2t} + \beta_3 \cdot X_{3t} + \beta_4 \cdot X_{4t} + \varepsilon_t \quad (2)$$

where  $\beta_0$  – the intercept term; and  $\beta_1, \beta_2, \beta_3, \beta_4$  – the regression coefficients capturing the marginal effect of each independent variable on  $Y_t$ ;  $\varepsilon_t$  – the stochastic error term.

The results of the regression analysis of household deposit dynamics for the period January 2022 – first half of 2025 are presented in Table 1. The multiple regression model exhibits strong explanatory power, as evidenced by the coefficient of determination ( $R^2=0.9429$ ) and adjusted  $R^2=0.9367$ . The estimated regression coefficients indicate a statistically significant influence of the independent variables ( $X_{1t}-X_{4t}$ ) on household deposits volumes. The associated  $t$ -statistics and  $p$ -values confirm the significance of most coefficients at the 5% level, while 95% confidence intervals further substantiate the reliability of the parameter estimates. Additionally, the analysis of variance (ANOVA) demonstrates that the overall model is statistically significant ( $F=152.7$ ,  $p\text{-value}<2.2 \cdot 10^{-16}$ ), confirming the robustness of the model in explaining household deposit dynamics under wartime conditions.

To ensure the robustness of the regression model estimates, a comprehensive diagnostic analysis was conducted. The studentised Breusch–Pagan test did not detect heteroscedasticity in the model residuals, with a test statistic of  $BP=1.736$  (4 degrees of freedom) and a corresponding  $p$ -value of 0.784. As the  $p$ -value exceeds the 0.05 significance threshold, the null hypothesis of homoscedasticity cannot be rejected, indicating that the residual variance is constant. The normality of the residuals was assessed using the Shapiro–Wilk test ( $W=0.9345$ ,  $p\text{-value}=0.018$ ), which suggests a minor deviation from normality. Multicollinearity among the independent variables was assessed via the variance inflation factor (VIF), with values of 1.233, 1.434, 1.740, and 1.055 of  $X_{1t}-X_{4t}$ , respectively, indicating no significant multicollinearity ( $VIF < 5$ ). These diagnostic results confirm the reliability and interpretability of the regression model for analysing household deposit dynamics under wartime conditions.

Simultaneously, the Darbin–Watson test indicated the presence of moderate autocorrelation in the residuals ( $DW=0.815$ ). To ensure the robustness of coefficient estimates and the validity of standard errors, the Newey–West correction was applied, yielding the results presented in Table 2. According to Table 2, the standard errors,  $t$ -statistics, and  $p$ -values for the regression coefficients, including the intercept, were appropriately adjusted. The assessment of the forecast accuracy for the multiple regression model of household deposits, employing the Newey–West standard error correction, demonstrates the high quality of the model. Specifically, the mean absolute error (MAE) was 36,350.08 UAH, and the mean square error (MSE) amounted to 2,122,690,204 UAH<sup>2</sup>, indicating minimal deviation of actual deposit values from predicted values (Fig. 1). Furthermore, the root mean square error (RMSE) was 46,072.66 UAH, and the mean absolute percentage error (MAPE) was 3.21%, confirming the high accuracy of the forecast in relative terms.

Table 1

Regression Estimates and Diagnostics for Household Bank Deposits

Variables	Intercept and slope parameters	p-value	Standard error*	t-statistic low-level	Confidence interval, 95 %		DW
					high-level		
Y-meet	$-3.828 \cdot 10^5$	$1.88 \cdot 10^{-5}$	$7.801 \cdot 10^4$	-4.906	$-5.347 \cdot 10^5$	$-2.309 \cdot 10^5$	0.815
variable $X_1$	$-4.659 \cdot 10^3$	0.00345	$1.491 \cdot 10^3$	-3.125	$-8.328 \cdot 10^3$	$-9.902 \cdot 10^2$	
variable $X_2$	1.186	0.00628	0.4094	2.898	0.42510	1.94732	
variable $X_3$	$-4.799 \cdot 10^3$	0.00116	$1.363 \cdot 10^3$	-3.522	$-7.878 \cdot 10^3$	$-1.719 \cdot 10^3$	
variable $X_4$	$4.279 \cdot 10^4$	$<2 \cdot 10^{-16}$	$1.914 \cdot 10^3$	22.361	$3.769 \cdot 10^4$	$4.789 \cdot 10^4$	
Regression statistics			Analysis of variance				
R	0.9710			df	SS	MS	F
R <sup>2</sup>	0.9429		Regression	4	$1.471 \cdot 10^{12}$	$3.678 \cdot 10^{11}$	152.7 (p-value: $<2.2 \cdot 10^{-16}$ )
Adjusted R <sup>2</sup>	0.9367		Residual	37	$8.915 \cdot 10^{10}$	$2.410 \cdot 10^9$	
Standard error**	49090		Total	41	$1.560 \cdot 10^{12}$		

\* – the slope parameters and intercept; \*\* – the regression. Source: Calculated based on data by [31].

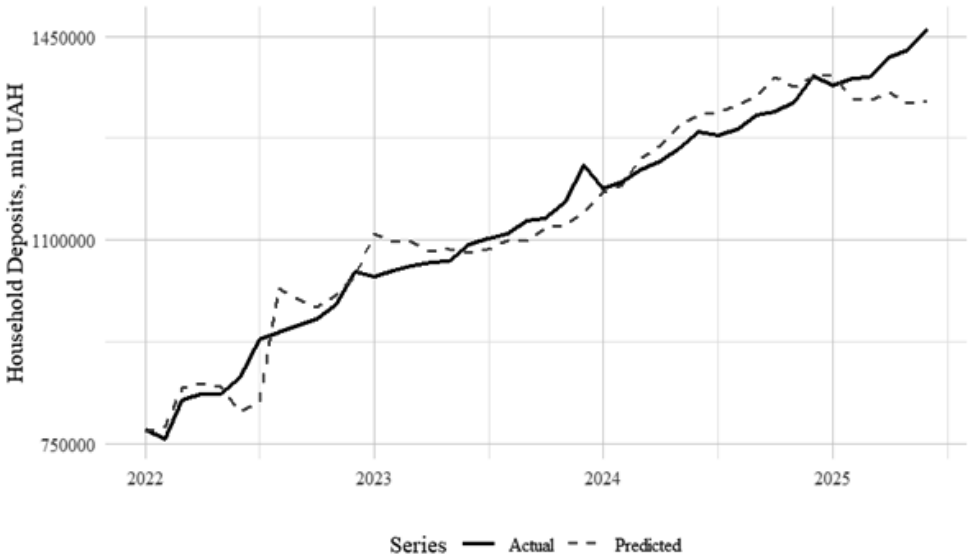


Figure 1. Actual and Predicted Household Deposits Dynamics in Ukraine, January 2022 – June 2025

Source: Calculated based on data by [31].

The results of the multiple regression analysis with Newey–West standard error correction indicate that the estimated model explains 94.29% of the variation in household deposits in Ukraine during the ongoing war. Among the key determinants, changes in the NBU policy rate,

the placement of hryvnia-denominated domestic government bonds on the primary market, the consumer price index, and the USD/UAH exchange rate exhibit statistically significant effects on deposit dynamics. Specifically, a 1% increase in the NBU policy rate is associated with an average decrease of UAH 4.659 million in household deposits. This finding suggests that higher policy rates may reduce the attractiveness of bank deposits relative to alternative investment opportunities, potentially encouraging households to retain cash or seek other financial instruments.

*Table 2*  
**Regression Results with Newey-West Robust Standard Errors for Household Bank Deposits**

Variables	Intercept and slope parameters	p-value	Standard error*	t-statistic	Confidence interval, 95 %	
					low-level	high-level
Y-meet	$-3.828 \cdot 10^5$	$1.02 \cdot 10^{-5}$	$7.49710^4$	-5.105	$-5.347 \cdot 10^5$	$-2.309 \cdot 10^5$
variable $X_1$	$-4.659 \cdot 10^3$	0.01423	$1.811 \cdot 10^3$	-2.573	$-8.328 \cdot 10^3$	$-9.902 \cdot 10^2$
variable $X_2$	1.186	0.003159	0.3764	3.158	0.42510	1.94732
variable $X_3$	$-4.799 \cdot 10^3$	0.003163	$1.520 \cdot 10^3$	-3.157	$-7.878 \cdot 10^3$	$-1.719 \cdot 10^3$
variable $X_4$	$4.279 \cdot 10^4$	$<2.2 \cdot 10^{-16}$	$2.517 \cdot 10^3$	16.998	$3.769 \cdot 10^4$	$4.789 \cdot 10^4$
Regression statistics			Analysis of variance			
R	0.9710			df	SS	MS
R <sup>2</sup>	0.9429	Regression	4		$1.471 \cdot 10^{12}$	$3.678 \cdot 10^{11}$
Adjusted R <sup>2</sup>	0.9367	Residual	37		$8.915 \cdot 10^{10}$	$2.410 \cdot 10^9$
Standard error**	49090	Total	41		$1.560 \cdot 10^{12}$	152.7 (p-value: $<2.2 \cdot 10^{-16}$ )

\* – the slope parameters and intercept; \*\* – the regression. Source: Calculated based on data by [31].

An increase of 1 million UAH in the placement of domestic government bonds is associated with an average growth of 1.186 million UAH in household bank deposits. These measures generate positive signals for households, reflecting investor confidence in government instruments during wartime, which fosters greater activity in the financial market and stimulates deposit growth. Moreover, commercial banks can mobilise additional resources through the purchase of domestic government bonds, thereby expanding the overall deposit base in the banking sector.

The results of the regression indicate that a 1% increase in the consumer price index is associated with an average reduction of 4.799 million UAH in household deposits. This finding suggests that inflation erodes the real value of funds held in deposit accounts, diminishing households' incentives to maintain their savings within the banking sector. Consequently, accelerating inflation drives changes in household behaviour, encouraging the transfer of funds to safer assets, particularly through the acquisition of foreign currency.

However, the regression analysis reveals that a one-hryvnia increase in the exchange rate against the U.S. dollar corresponds to an average rise of 42.79 million UAH in household bank



deposits. This relationship indicates that the devaluation of the national currency contributes to the revaluation of foreign currency-denominated deposits, thereby increasing their nominal value within the banking system. At the same time this dependency underscores the necessity of implementing more favourable conditions for deposits in the national currency to sustain customer confidence and ensure the resilience of the banking sector during wartime.

Additionally, the elasticities of household deposits with respect to the selected independent variables were calculated to quantitatively assess the responsiveness of deposits to marginal changes in these macroeconomic factors. The estimated elasticity coefficients are as follows: -0.073 for the NBU policy rate (%); 0.043 for domestic government bonds denominated in hryvnia (million UAH); -0.031 for the consumer price index (%); and 1.399 for the U.S. dollar to hryvnia exchange rate. These results reveal substantial heterogeneity in household deposit sensitivity across different predictors.

Specifically, the elasticity with respect to the USD/UAH exchange rate exceeds 1, indicating a highly elastic response, whereby household deposits adjust markedly in response to currency fluctuations. In contrast, the elasticities associated with the NBU policy rate, domestic government bonds nominated in the national currency, and the consumer price index are considerably lower, indicating inelastic behaviour, with deposits responding only modestly to changes in these variables. This differentiation underscores the predominant role of exchange rate dynamics in shaping household deposit behaviour during periods of heightened economic and geopolitical uncertainty, while other macroeconomic instruments exert comparatively moderate effects.

The regression-based empirical analysis of household deposits covering the period from February 2022 to June 2025 showed that the stability of Ukraine's banking sector is predominantly shaped by the NBU's policy rate and the inflation rate. Both factors exert a constraining effect on deposit accumulation by diminishing the incentives for households to retain their savings within commercial banks. Conversely, the sector's resilience is positively affected by domestic government bond placements and exchange rate fluctuations, indicating a strong interdependence between the banking system, the broader financial market, and household deposit dynamics.

Meanwhile, it is equally important to examine the internal composition of household deposits, as it reflects households' adaptive responses to shifts in the economic environment and plays a critical role in sustaining the resilience of the banking sector during the period from January 2022 to June 2025. Specifically, the full-scale invasion exerts a significant influence on the structure of household deposits within Ukraine's banking sector. As shown in Table 3, wartime conditions were accompanied by an increased share of demand deposits in both national and foreign currencies, while their absolute level remained relatively stable. This pattern underscores households' preference for maintaining high liquidity in their savings, thereby reinforcing the operational resource base of commercial banks, which is an essential factor in preserving financial resilience amid the ongoing war.

Throughout the examined period, the proportion of household deposits with maturities of one to two years and beyond exhibited a persistent downward trajectory, reflecting a pronounced shift towards conservative saving behaviour and heightened risk aversion among

households in wartime conditions. The sustained predominance of demand deposits, fluctuating within the range of 63–68%, may be interpreted as indicative of the banking sector's adaptive capacity to operate under conditions of elevated security uncertainty. Nevertheless, such deposits structure simultaneously entails inherent vulnerabilities, as the liquidity preference of depositors increases the potential for abrupt capital outflows, thereby posing a latent threat to the resilience of Ukraine's banking sector.

Further examination of the currency structure of household deposits indicates that national currency deposits are projected to remain dominant in 2022–2025. Persistently low interest rates on foreign currency deposits have limited their attractiveness, while the prevalence of hryvnia deposits likely reflects households' efforts to hedge against exchange rate volatility and heightened inflationary pressures in the domestic economy under wartime conditions. Seasonal variations in deposit structures are also evident. Specifically, January-February typically records a rise in short-term hryvnia deposits, whereas year-end periods witness a modest increase in medium-term deposits. These patterns underscore the adaptive financial strategies of the population in navigating economic uncertainty and elevated military risks, thereby mitigating adverse impacts and reinforcing the banking sector's overall resilience.

Accordingly, in addition to accounting for macroeconomic determinants of household deposits in Ukraine's banking sector, it is crucial to continuously monitor structural shifts in savings behaviour to safeguard the sector's resilience. Amid the ongoing war, households have exhibited prudent and relatively stable deposit behaviour concerning both the terms of placement and the choice of deposit currencies. The household deposit portfolio is characterised by a predominance of short-term deposits in the national currency, a deliberate strategy to mitigate currency risks while maintaining liquidity. These observed patterns correspond with the regression analysis results, highlighting the significant role of macroeconomic variables, particularly the NBU's policy rate, inflation, and the exchange rate, in shaping household deposit behaviour.

Conclusions and perspectives of further research work. This analysis advances the understanding of banking sector resilience in Ukraine by providing novel empirical evidence on the determinants of household deposits during the full-scale invasion (January 2022 – June 2025). Using regression-based inference, the findings reveal that household deposits, which are a crucial buffer underpinning the banking sector stability, are significantly driven by the NBU's policy rate, the volume of domestic government bonds issuance, consumer price movements, and exchange rate volatility.

The results demonstrate that monetary instruments remain pivotal in sustaining depositor confidence under extreme geopolitical shocks. Additionally, the observed structural shifts in household deposit behaviour – characterised by increased demand for on-call deposits and a renewed focus on short-term instruments – highlight households' adaptive response to heightened uncertainty and risk. While this behaviour enhances the liquidity of the banking sector, it concurrently exposes it to potential vulnerabilities, particularly in the event of a further deterioration in the security environment. This duality underscores the necessity of designing adaptive policy frameworks capable of balancing short-term stabilization with long-term financial resilience.

Table 3

Structure of Household Bank Deposits in Ukraine by Term and Currency, % of Total

Period	Total	Including by terms				Including				In foreign currency			
		1	2	3	4	In national currency				Including by terms			
						Total	1	2	3	4	Total	1	2
January 2022	100	58.47	26.86	13.32	1.35	62.27	36.45	17.23	8.37	0.22	37.73	22.02	9.63
February 2022	100	59.30	26.03	13.32	1.35	62.69	37.21	16.80	8.46	0.22	37.31	22.09	9.23
April 2022	100	66.09	21.27	11.47	1.16	66.25	44.55	13.98	7.52	0.20	33.75	21.54	7.29
July 2022	100	68.14	20.24	10.43	1.20	62.33	43.03	12.59	6.53	0.18	37.67	25.10	7.66
September 2022	100	67.94	21.27	9.65	1.14	62.51	43.57	12.59	6.17	0.18	37.49	24.37	8.68
December 2022	100	68.07	22.77	8.16	0.99	62.48	44.79	12.29	5.23	0.17	37.52	23.28	10.49
January 2023	100	66.64	24.16	8.18	1.01	61.24	43.05	12.69	5.31	0.20	38.76	23.60	11.48
February 2023	100	65.75	25.26	7.98	1.01	61.02	42.64	12.95	5.22	0.20	38.98	23.11	12.31
April 2023	100	65.53	27.89	5.64	0.93	61.73	42.17	15.73	3.66	0.17	38.27	23.37	12.16
July 2023	100	67.01	25.09	7.03	0.87	64.62	43.83	16.01	4.60	0.20	35.38	23.18	9.08
September 2023	100	63.52	28.64	6.98	0.86	64.90	42.05	18.09	4.53	0.22	35.10	21.46	10.55
December 2023	100	64.20	28.38	6.44	0.98	64.75	42.34	18.09	4.03	0.29	35.25	21.86	10.28
January 2024	100	63.02	29.36	6.64	0.98	64.54	40.99	19.08	4.18	0.29	35.46	22.02	10.28
February 2024	100	63.18	29.23	6.63	0.96	64.89	41.29	19.16	4.16	0.28	35.11	21.88	10.08
April 2024	100	63.44	29.22	6.45	0.90	64.70	41.11	19.42	3.91	0.26	35.30	22.33	9.80
July 2024	100	64.10	26.01	9.01	0.88	64.62	41.57	17.13	5.63	0.29	35.38	22.52	8.89
September 2024	100	64.77	25.74	8.65	0.84	64.69	42.13	16.85	5.41	0.30	35.31	22.65	8.89
December 2024	100	65.55	24.89	8.60	0.97	64.90	42.88	16.12	5.47	0.43	35.10	22.66	8.76
January 2025	100	65.16	25.13	8.81	0.90	64.47	42.05	16.38	5.62	0.42	35.53	23.11	8.76
February 2025	100	65.27	25.06	8.75	0.93	64.87	42.38	16.43	5.61	0.46	35.13	22.89	8.63
March 2025	100	65.14	25.19	8.74	0.93	64.44	41.72	16.61	5.63	0.48	35.56	23.42	8.58
April 2025	100	65.36	25.02	8.69	0.92	64.61	41.90	16.62	5.61	0.49	35.39	23.46	8.41
May 2025	100	65.30	25.05	8.72	0.93	65.05	42.11	16.77	5.66	0.51	34.95	23.19	8.28
June 2025	100	65.72	24.77	8.61	0.90	65.23	42.41	16.68	5.63	0.50	34.77	23.31	8.09

\*1 – on demand; 2 – up to 1 year; 3 – from 1 year to 2 years; 4 – more than 2 years. Source: Calculated based on data by [31].

By integrating an empirical examination of the banking sector's resilience with an analysis of household saving behaviour during a full-scale invasion, the research has provided a broader understanding of the dependencies between macroeconomic policy and the financial decision-making of the population. The findings have direct policy implications: calibrating interest rate policy to sustain confidence without undermining liquidity; enhancing domestic government debt securities as a safe-haven instrument to mitigate deposit volatility; and developing targeted mechanisms to incentivise longer-term savings. While constrained by the aggregated nature of the data and the limited temporal scope, this research sets a foundation for future comparative studies of war-driven regional disparities in household deposits and variations across social groups of depositors. Further investigation could focus on spatial dimensions of banking sector resilience and provide comparative assessment of household financial behaviour in countries experiencing armed conflict.

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## **СТІЙКІСТЬ БАНКІВСЬКОГО СЕКТОРУ УКРАЇНИ В УМОВАХ ТРИВАЮЧОЇ ВІЙНИ: ЕМПІРИЧНИЙ АНАЛІЗ ДЕПОЗИТІВ ДОМОГОСПОДАРСТВ**

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**Анотація.** До чинників, що сприяють стійкості банківського сектору України, належать депозити домогосподарств, які відіграють ключову роль у підтриманні ліквідності та довіри до фінансових установ. Метою даного дослідження є виявлення основних детермінант, що визначають динаміку депозитів домогосподарств та оцінка їхнього впливу на стійкість банківського сектору України в умовах триваючої війни. Для емпіричного аналізу застосовано кількісні методи, зокрема, багатфакторний регресійний аналіз із використанням корекції Ньюї-Веста. Досліджуваний період охоплює січень 2022 р. – червень 2025 р., що дозволило проаналізувати 42 щомісячних спостереження за обсягами депозитів домогосподарств та макроекономічних змінних, таких як облікова ставка НБУ, обсяги розміщених облігацій внутрішньої державної позики (ОВДП), індекс споживчих цін і курс національної валюти до долара США.

Результати регресійного аналізу показали, що обсяги депозитів домогосподарств є чутливими до зазначених макроекономічних факторів. Зокрема, підвищення облікової ставки та прискорення інфляції асоціюються зі зменшенням обсягів депозитів, тоді як збільшення обсягів ОВДП та девальвація гривні стимулюють зростання банківських вкладень населення. Дослідження також виявило структурні зміни у поведінці домогосподарств: підвищений попит на депозити на вимогу та короткострокові вклади (до одного року) у національній та іноземній валютах відображає обережну та адаптивну поведінку, орієнтовану на ліквідність і мінімізацію валютних ризиків.

Поєднання аналізу макроекономічних факторів із поведінковими аспектами домогосподарств дозволяє глибше зрозуміти взаємозв'язок між економічною політикою та фінансовими рішеннями населення. Отримані результати розширюють розуміння поведінки вкладників у кризових умовах та мають практичне значення для формування заходів макроекономічної політики, спрямованих на підтримку довіри до банківського сектору України та забезпечення його стійкості.

**Ключові слова:** банківський сектор, поведінка домогосподарств, макроекономічна політика, стійкість, регресійний аналіз, війна.

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