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The crowding-out effect of nbu deposit certificates on corporate lending in Ukraine

Abstract. The article examines the relationship between the volume of NBU deposit certificates and corporate lending in hryvnia over 2016–2025.

Problem statement. Following the onset of the full-scale war, the Ukrainian banking system has remained in a state of excess liquidity, yet lending to the real sector has stagnated. This raises the central question of the present study: do NBU deposit certificates crowd out corporate lending, and if so, through which channel?

Unresolved aspects of the problem. Existing literature examines the crowding-out effect predominantly through the channel of government borrowing. The Ukrainian case is distinctive because NBU deposit certificates are a voluntary instrument rather than sovereign debt. No formal econometric test of this hypothesis has been conducted on Ukrainian data, particularly over a long horizon, controlling for structural breaks.

Purpose of the article. To empirically substantiate the hypothesis that NBU deposit certificates crowd out corporate lending and to identify the specific channel of this effect under martial law conditions.

Presentation of the main material. The analysis draws on 120 monthly observations for 2016–2025. Four OLS specifications were estimated with dummy variables for COVID-19 and martial law, an interaction term, Granger causality tests, and the Chow structural break test. The findings reveal a distinctly wartime nature of the crowding-out effect: in the pre-war period, the relationship is statistically insignificant, whereas under martial law, the regression coefficient is -0.205 and the explanatory power is 87 %. The interaction term confirms that the effect intensifies specifically in wartime conditions.

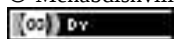
Conclusions. The opportunity-cost channel has been identified as the mechanism of crowding out, distinct from the classical resource-deficit pattern. Enterprises can use NBU deposit certificate dynamics as a leading indicator of credit availability under martial law and act proactively to seek alternative financing sources.

Keywords: *NBU deposit certificates, crowding-out effect, corporate lending, monetary policy, martial law, structural break, opportunity-cost channel.*

Formulas: 0; fig.: 3; tabl.: 1; bibl.: 20.

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Introduction. Russia's full-scale invasion of Ukraine in February 2022 produced significant structural shifts in the domestic banking sector. To contain mounting inflationary pressure and preserve the attractiveness of hryvnia-denominated instruments, the National Bank of Ukraine (hereinafter, the NBU) raised its key policy rate from 10% to 25% in June 2022 [16]. The volume of funds placed by commercial banks in NBU deposit certificates (hereinafter, DCs) climbed from UAH 95.3 billion in January 2022 to UAH 621.7 billion by the end of 2023, a more than sixfold increase [13, 14]. Over 2024–2025, DC volumes gradually receded amid successive policy rate reductions, settling at roughly UAH 500 billion by year-end 2025.

Corporate lending in hryvnia, by contrast, contracted by 24% relative to pre-war levels. Recovery has been driven primarily by government interest-rate subsidy programs, in particular “Affordable Loans 5-7-9%” [12]. The banking system thus found itself in a paradoxical state: liquidity was abundant while real-sector lending stagnated. The reason was simple. Banks could place funds in the NBU's risk-free instrument at a rate that exceeded the risk-adjusted return on their corporate loan portfolios.

Public discourse on this issue remains deeply contentious. The NBU denies the existence of a crowding-out effect, arguing that excess liquidity flows back into DCs regardless of lending volumes and that the certificates merely perform a sterilization and inflation-control function [17]. Several analysts argue the opposite, contending that banks deliberately prefer risk-free returns over lending to enterprises [5, 19]. Neither position, however, has yet been grounded in formal econometric testing on Ukrainian data, which motivates the present study.

The relevance of resolving this debate goes beyond academic interest. With international financial assistance to Ukraine remaining uncertain for 2026–2027, the domestic banking sector's capacity to channel funds to the real economy becomes critical for sustaining production, employment, and tax revenues. If a quantifiable crowding-out effect is established, the calibration of monetary operations and the design of complementary state support programs can be informed by evidence rather than competing narratives. Conversely, if no such effect exists, public debate could move past it and focus on alternative obstacles to lending, such as collateral availability, credit risk perception, and prudential capital requirements.

Literature review. Crowding out is a classical problem in macroeconomic theory. In M. Friedman's monetarist interpretation [7], government borrowing or the central bank's absorption of liquidity reduces the private-sector credit supply through the interest-rate mechanism. The Keynesian paradigm holds the opposite view: when liquidity is in excess, and the economy is caught in a liquidity trap, crowding out does not occur. Surplus funds are parked in the highest-yielding risk-free instrument.

Among contemporary contributions, the work of Y. Huang, M. Pagano, and U. Panizza, published in 2020 in *The Journal of Finance*, is particularly influential. Drawing on Chinese data for 2006–2013, the authors documented local crowding-out: the issuance of local government bonds tightened private firms' financial constraints and reduced their investment, while state-owned enterprises remained largely unaffected [9]. Their key finding showed that private firms invested less in cities with more public debt, and the effect was more pronounced for firms more dependent on external funding. M. Zhang, O. T. Brookins, and X. Huang [20] sharpened the analysis by identifying two separate channels of crowding out: a safety crowding-out effect (operating through corporate bonds) and a financial crowding-out effect (operating through bank loans). Central government debt primarily activates the first channel, while local government debt activates the second.

Using an international panel dataset spanning 69 countries and roughly 550,000 firms over 1998–2014, Y. Huang, U. Panizza, and R. Varghese [10] confirmed that crowding out occurs and demonstrated that public debt is particularly harmful to industries heavily dependent on external finance. Their firm-level regressions show that government debt increases the sensitivity of corporate investment to internal cash flow, indicating that the crowding-out mechanism operates through tightened credit constraints. F. Broner, A. Erce, A. Martin, and J. Ventura [3] documented creditor discrimination and crowding-out effects in sovereign debt markets during turbulent periods. They demonstrated that during sovereign distress, credit is reallocated from the private to the public sector, deepening recessions.

V. Acharya and S. Steffen [1] examined the eurozone crisis. They uncovered a striking pattern: European banks, undercapitalized in the wake of the 2008 financial crisis, used sovereign bond holdings to engage in carry trades. They borrowed cheaply (initially in short-term debt markets, later from the ECB) to invest in high-yield, risky sovereign debt, thereby displacing private lending. B. Becker and V. Ivashina [2] complemented this evidence by demonstrating financial repression during the eurozone sovereign debt crisis: domestic government debt held by the banking sector more than doubled between 2007 and 2013, leading to a measurable crowding-out of corporate lending. Government-owned banks increased their sovereign holdings disproportionately, thereby strengthening the channel.

The carry-trade interpretation found a follow-up application in the work on Lebanese commercial banks during the 2019–2020 sovereign distress. Researchers documented behavior resembling the eurozone pattern, in which deposits at the central bank effectively crowded out private credit, even when the formal channel was not direct sovereign debt. This precedent matters for the present study because it demonstrates that the displacement effect is not unique to a specific instrument but can emerge whenever the central bank offers a sufficiently attractive risk-free placement at the expense of corporate loan portfolios.

Domestic Ukrainian research on the topic remains comparatively limited. V. V. Kovalenko [11] systematized approaches to risk management in banks, which gives a useful basis for analyzing the trade-off between risk-free and risky placements. The monograph emphasizes that bank decisions on liquidity placement reflect risk-adjusted return calculations rather than balance-sheet capacity alone, a perspective directly relevant to interpreting the wartime expansion of DC holdings. O. V. Dziubliuk [6] addressed the problems of intensifying real-sector lending under martial law, arguing for a coordinated approach combining monetary, fiscal, and prudential instruments. He documented the contraction of corporate hryvnia lending after February 2022 and emphasized the need for targeted state support programs such as “Affordable Loans 5-7-9 %”. Analytical publications issued by the NBU itself [15, 17] elaborate on the operational design of monetary policy under wartime conditions, including the operational role of overnight DCs and three-month DCs introduced in April 2023. The literature thus identifies several distinct mechanisms of crowding out, but the specific case of voluntary central bank instruments under wartime stress has not been econometrically studied using Ukrainian data.

The literature reviewed above primarily focuses on three channels of crowding out: government borrowing, mandatory reserves, and the doom loop between sovereign distress and bank balance sheets. The Ukrainian case under martial law is structurally different. NBU DCs are neither sovereign debt nor mandatory reserves; they are a voluntary instrument. Here, crowding out operates through distorted incentives rather than a shortage of resources: a bank finds it more profitable to place funds with the NBU at zero risk than to lend to an enterprise exposed to default risk. This is a specific form of crowding out via the opportunity cost channel, which has not yet been adequately investigated in the specialized literature. A second gap concerns testing: no formal econometric test of this hypothesis has been conducted on Ukrainian data, particularly over a prolonged ten-year horizon with explicit controls for structural breaks. The present study addresses both gaps.

Purpose, objectives, and research methods. The purpose of this article is to empirically substantiate the hypothesis that NBU deposit certificates crowd out corporate lending in Ukraine, and to identify the specific channel through which this effect operates under wartime conditions. The objectives include: (i) constructing a coherent monthly dataset covering 2016–2025; (ii) estimating four OLS regression specifications that incorporate dummy variables for the COVID-19 pandemic and martial law, together with an interaction term that captures the war-specific intensification of the effect; (iii) supplementing the regression analysis with Granger causality tests and Chow structural break tests; and (iv) interpreting the results in the context of opportunity-cost theory and existing crowding-out literature.

The empirical strategy combines several complementary tools. The dataset covers 120 monthly observations from January 2016 to December 2025. Data sources include NBU monetary and financial statistics (Tables 1, 4, 8, and 12 of the monthly bulletins) [17]; NBU Banking Sector

Reviews [15]; NBU annual financial statements for 2022–2024 [13, 14]; CPI data from the State Statistics Service of Ukraine [18]; and the official UAH/USD exchange rate [17]. The dependent variable, g_loans , denotes the monthly growth rate of loan volume to non-financial corporations in hryvnia. The principal regressor g_cd captures the monthly growth rate of NBU deposit certificate volumes. Control variables include the NBU key policy rate, year-on-year CPI inflation, and structural dummies COVID (one for March 2020 to December 2021) and WAR (one from March 2022 onward).

Four specifications were estimated. Model 1 represents the full sample with COVID and WAR dummies. Model 2 adds an interaction term $g_cd \times WAR$, which permits a direct test of whether the effect intensifies specifically under wartime conditions. Model 3 is restricted to the wartime subsample, while Model 4 represents the pre-2022 baseline. The framework is supplemented by the Granger causality test [8] with lags from 1 to 6 months and by the Chow structural break test [4] applied to two candidate break points: the onset of COVID-19 (March 2020) and the outbreak of full-scale war (March 2022). All computations were performed in Python 3 using standard scientific libraries; the dataset and replication code are made available alongside the manuscript.

The choice of OLS as the principal estimator reflects the small sample size of the subsamples and the focus on coefficient interpretation rather than forecasting performance. The use of monthly observations provides sufficient resolution to capture intra-year monetary policy shifts while smoothing out daily noise. Robustness was assessed by re-estimating Models 1 and 2 with heteroscedasticity-consistent standard errors; the qualitative conclusions remained unchanged. The hypothesis under test can be stated formally as follows: under wartime conditions, an increase in the growth rate of NBU deposit certificates is associated with a statistically significant decrease in the growth rate of corporate lending, controlling for the key policy rate and inflation. The null hypothesis posits that there is no statistically significant association between the two growth rates, conditional on macroeconomic controls.

Research results. Over the study period, the volume of NBU DCs ranged from UAH 25 billion in April 2017 to a record UAH 621.7 billion in December 2023, with a mean of UAH 231.8 billion and a standard deviation of UAH 232.5 billion. The wartime shock largely drives this high volatility. The corporate loan portfolio (in hryvnia) ranged from UAH 378 billion to UAH 655 billion, with an average of UAH 462.1 billion. The key policy rate fluctuated between 6 % and 25 %, the overnight DC rate between 4 % and 23 %, and CPI inflation between 1.7 % and 40.3 %. The ten-year horizon thus captures several monetary cycles: from the tight policy of 2016–2018, through the easing of 2019–2020, to the extreme wartime tightening. The contrasting dynamics of NBU DC volumes and corporate lending in hryvnia are illustrated in Figure 1.

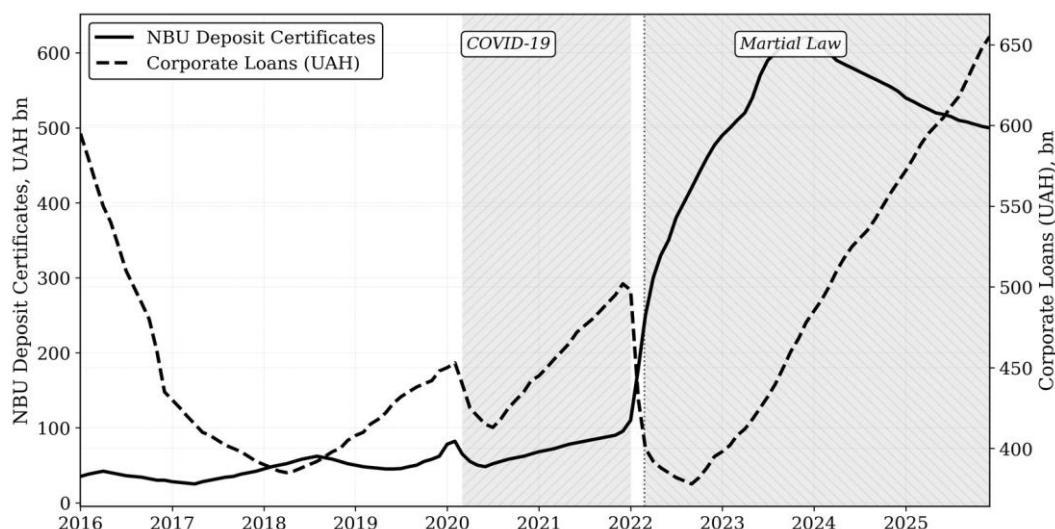


Figure 1. Dynamics of NBU DC volumes and corporate lending in hryvnia, 2016–2025
Source: constructed by the authors based on NBU data [13, 14, 15, 17].

Before 2022, DC volumes remained relatively stable at UAH 25–95 billion and showed no pronounced negative relationship with lending. The picture changed dramatically after February 2022, when a scissors effect set in: DC volumes surged while corporate lending contracted sharply. Before the war, DC volumes averaged 10–18% of the stock of hryvnia-denominated corporate loans; in 2022–2023, this ratio reached 130–160%. Put more simply, the funds accumulated in DCs substantially exceeded the entire credit portfolio. This phenomenon is unprecedented in the modern history of the Ukrainian banking system.

The interest-rate environment in which banks operated throughout the study period is depicted in Figure 2. In 2022–2023, the overnight DC rate (23 %) substantially exceeded the inflation rate in the second half of 2023 and the first half of 2024. This combination provided banks with a high real return on the risk-free instrument and preserved a powerful incentive to place funds in DCs rather than extend corporate loans.

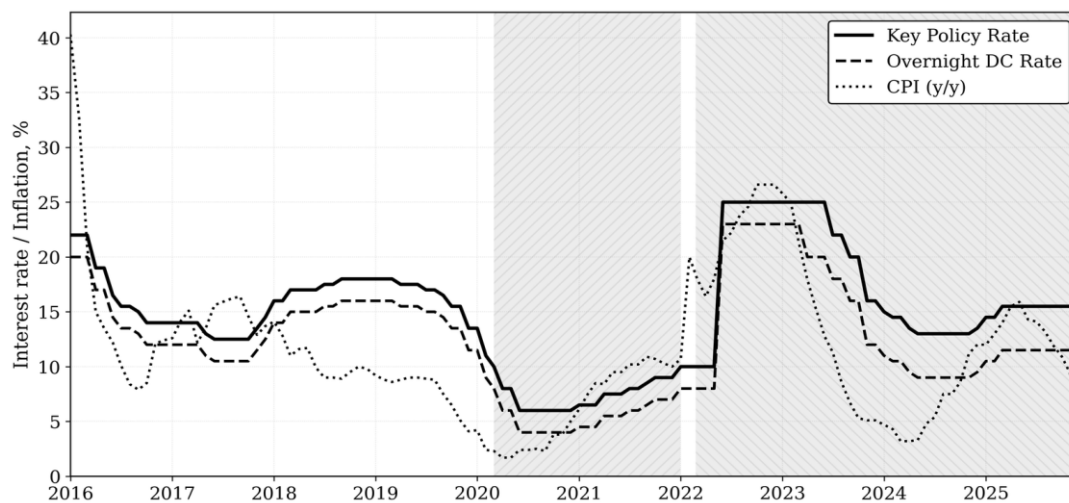


Figure 2. NBU key policy rate, overnight DC rate, and CPI inflation, 2016–2025

Source: constructed by the authors based on NBU and State Statistics Service of Ukraine data [15, 17, 18].

The four OLS specifications estimated to test the crowding-out hypothesis yield the results presented in Table 1. The descriptive statistics show that the regression sample for the wartime subsample includes 46 monthly observations, while the pre-war subsample contains 73 observations. The pandemic period contributes 22 observations.

Table 1. OLS regression results (dependent variable: *g_loans*)

Variable	Model 1 Full sample	Model 2 + Interaction	Model 3 Wartime	Model 4 Pre-2022
<i>g_cd</i>	−0.063***	−0.035	−0.205***	−0.018
<i>key_rate</i>	0.002***	0.002***	0.001***	0.003**
<i>cpi_yoy</i>	−0.001***	−0.001***	−0.001***	−0.002***
COVID	0.019***	0.020***	—	0.025**
WAR	0.016***	0.019***	—	—
<i>g_cd</i> × WAR	—	−0.138***	—	—
R ²	0.389	0.430	0.872	0.255
Durbin–Watson	0.800	1.089	1.327	0.807
N	119	119	46	73

Note: *** $p < 0.01$; ** $p < 0.05$. Models 1, 2: full sample; Model 3: March 2022 to December 2025; Model 4: January 2016 to February 2022.

Source: calculated by the authors.

The modeling results reveal a clear regime-dependent pattern: the crowding-out effect occurs specifically during wartime. In Model 1 (full sample with dummies), the coefficient on g_cd equals -0.063 ($t = -2.70$; $p = 0.008$), which is statistically significant though moderate in magnitude. Model 2, which adds the interaction term, tells a sharper story. The baseline effect on its own ($\beta = -0.035$) is insignificant ($p = 0.15$), whereas the interaction $g_cd \times WAR = -0.138$ ($t = -2.86$; $p = 0.005$) is highly significant. The reading is direct: crowding out is activated under martial law conditions, not before.

This finding is reinforced by Model 3 (wartime subsample), where the coefficient on g_cd reaches -0.205 ($t = -12.46$; $p < 0.001$) with high explanatory power ($R^2 = 0.87$). DC dynamics during wartime explain 87 % of the variation in monthly corporate lending growth. Model 4 (pre-2022 subsample), by contrast, yields a statistically insignificant relationship ($\beta = -0.018$; $p = 0.60$; $R^2 = 0.25$), confirming the absence of crowding out under normal conditions. One methodological detail should be addressed: the dummy variables COVID and WAR are set to 1, which at first glance appears counterintuitive. The explanation is that dummies control for different average levels of lending growth during the respective periods (lending tended to recover after shocks). In contrast, the crowding-out effect itself is captured by g_cd . The scatter plots in Figure 3 visualize the regime-specific nature of the relationship.

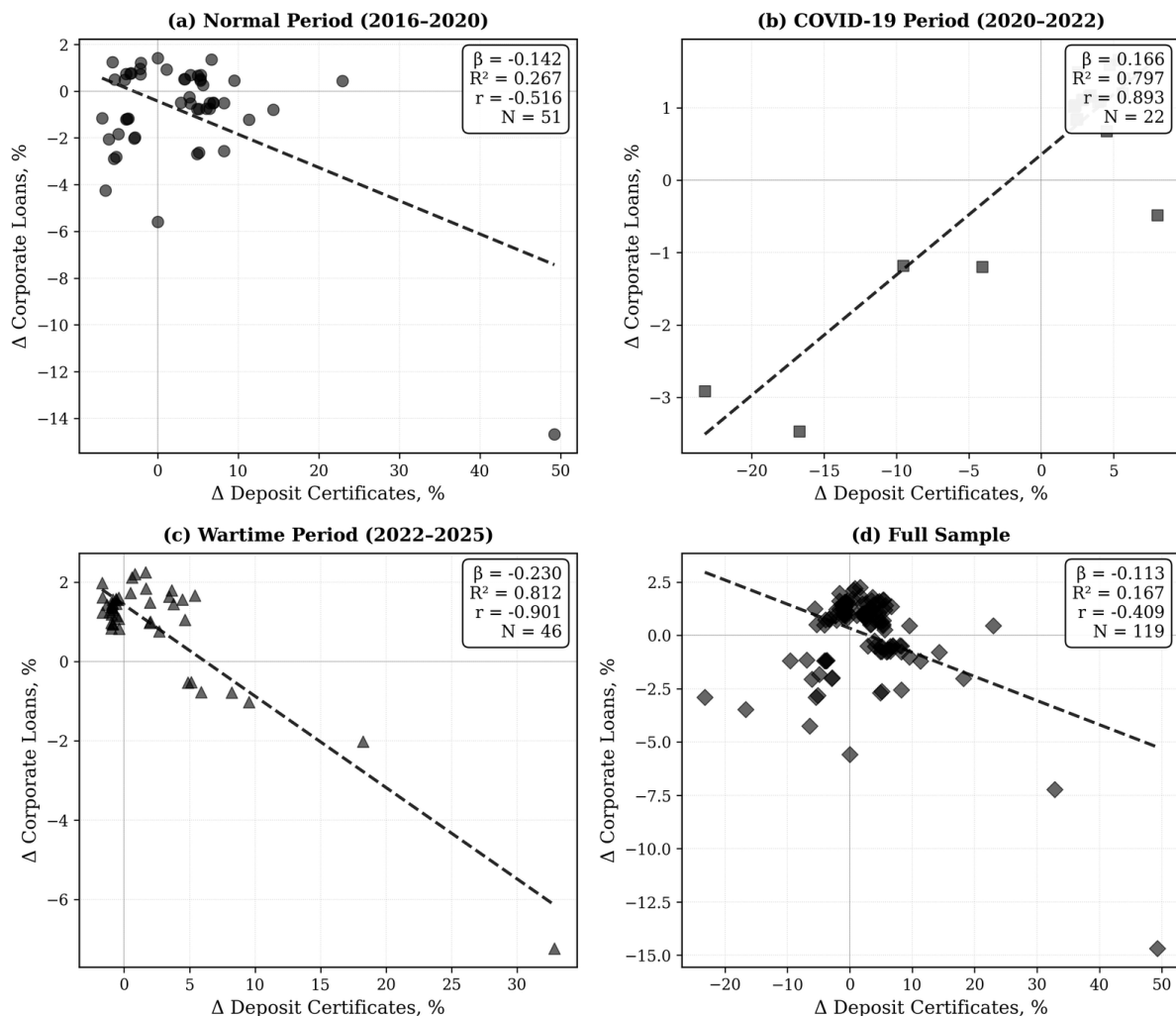


Figure 3. Scatter plots: DC growth vs corporate lending growth by regime
Source: constructed by the authors.

During the normal period, the scatter cloud is dispersed without a clear pattern ($R^2 = 0.27$, $r = -0.52$). The COVID-19 period shows a paradoxically positive association ($R^2 = 0.80$, $r = +0.89$).

because DC volumes and lending contracted simultaneously in response to a common macroeconomic shock. In the wartime period, however, the linear relationship emerges as clearly negative and tight ($R^2 = 0.81$, $r = -0.90$). The full-sample relationship is moderately negative ($r = -0.41$) but masks the regime-specific patterns clearly visible in the subsample plots.

The economic implications of these statistical patterns merit further consideration. During the normal period, monthly fluctuations in DC volumes reflected routine liquidity management by banks responding to short-term cash flow imbalances; lending decisions, in turn, were driven by client demand and credit risk assessment without a meaningful link to the marginal DC placement. The COVID-19 period altered this picture: simultaneous monetary easing and a shrinking real economy depressed both central bank placements and corporate loan portfolios, producing a co-movement that visually mimics but does not represent a positive structural relationship. The wartime period shows the mechanism more clearly than any other regime. Faced with elevated default risk on corporate loans, capital-control constraints on alternative placements, and an unusually high overnight DC rate, banks systematically reallocated marginal liquidity toward DCs at the expense of new lending. The resulting near-collinear pattern in subplot (c) of Figure 3 is the visual signature of this reallocation.

Chow tests confirm structural breaks both at the onset of the pandemic (March 2020, $F = 10.84$, $p < 0.001$) and at the outbreak of war (March 2022, $F = 7.89$, $p < 0.001$). The relationship between DC dynamics and corporate lending changed qualitatively during each crisis period. The Granger causality test applied to the full ten-year sample detected no significant causality from g_cd to g_loans at any lag from 1 to 6 months. This result is both expected and informative. Under normal conditions, which make up most of the sample, crowding out is absent, so the overall test is diluted. The crowding-out effect is primarily contemporaneous rather than a lagged process: banks make daily decisions on liquidity allocation between DCs and lending in response to shared monetary signals.

Discussion. The findings of this study refute the NBU's position that no crowding-out effect exists during wartime. A correlation coefficient of $r = -0.90$ and an R^2 of 0.87 in the wartime subsample point to a strong negative relationship. At the same time, the analysis confirms that in the pre-2022 period, the link between DCs and lending was indeed statistically insignificant, which is partly consistent with the regulator's position, but only under normal conditions.

Model 2, with its interaction term, proves the most informative of the four. It shows that the baseline crowding-out effect is insignificant, and that it is specifically the war that activates this channel. The mechanism identified differs from the classical one: crowding out operates not through a shortage of resources but through the opportunity-cost channel. The bank has enough liquidity to lend but opts for the NBU's risk-free instrument, since its risk-adjusted return exceeds that of the loan portfolio under elevated wartime risks. This finding aligns with the carry-trade behavior documented by Acharya and Steffen [1] for European banks during the eurozone crisis, although the underlying instrument differs (DCs rather than sovereign bonds). It also resonates with the financial repression mechanism described by Becker and Ivashina [2], where banks favor low-risk assets during crisis periods at the expense of corporate credit.

Compared with the international evidence on crowding out [9, 10, 20], the Ukrainian case introduces a novel dimension. In China, crowding out operates primarily through local public debt; in the Eurozone, through sovereign bond holdings; in international panels, through public debt accumulation. None of these mechanisms relies on a voluntary central bank instrument. The Ukrainian setting, where DCs are voluntary and explicitly designed to absorb excess liquidity, demonstrates that the crowding-out mechanism is more general than typically assumed. Distorted incentives can produce identical macroeconomic outcomes regardless of the formal nature of the displacing asset.

A further point of comparison concerns the duration and depth of the effect. In the eurozone literature [1, 2], crowding out was strongest during 2010–2011 and weakened as banks recapitalized and sovereign spreads narrowed. The Chinese evidence [9, 20] points to a persistent local crowding-out effect tied to the structural role of local government financing vehicles. The Ukrainian wartime case is distinctive in two respects: the magnitude of the effect ($R^2 = 0.87$, compared with the typical

R^2 of 0.10–0.30 in the cited studies) and its dependence on a single binary regime variable (martial law). The first feature suggests that the wartime monetary configuration produces a near-deterministic substitution between DC placements and corporate lending. The second feature implies that the effect should weaken or disappear once monetary conditions normalize, a hypothesis that is testable as the dataset is extended forward in time.

From the borrower's standpoint, the volume of DCs placed by banks can serve as a leading indicator of credit availability. A rise in DC volumes signals a deepening credit famine and the need to seek alternative sources of financing, such as international credit facilities, reconstruction grant programs, corporate bond issuance, and similar tools. The persistence of crowding out amplifies the risks of production stagnation in the real sector. Ongoing geopolitical tensions, including military operations in the Persian Gulf region, compound this threat: they deepen the energy-independence crisis and, looking ahead, may trigger broader food-security challenges. Such an interconnected risk landscape should prompt both entrepreneurs and insurers to take pre-emptive action by revising tariffs, reinsurance coverage levels, and other risk-mitigation mechanisms. Insurers will need to recalibrate their pricing models to account for the dual impact of constrained credit availability and geopolitical instability on enterprise default probabilities and sectoral loss frequencies.

From a policy perspective, the findings highlight a previously underappreciated trade-off in the operational design of monetary policy under wartime stress. While liquidity-absorption operations through DCs serve legitimate stabilization goals (anchoring inflation expectations, supporting exchange-rate stability, sterilizing surplus reserves), their second-order effect on corporate lending is non-trivial when the policy rate is elevated, and loan-market risk premia are wide. This tension is particularly pronounced in an economy where credit channels to small and medium-sized enterprises remain underdeveloped. Possible policy responses include: differential pricing of DCs to discourage excessive placement at the expense of lending; volume-linked refinancing facilities that reward incremental loan growth; and targeted state-backed guarantees that compensate banks for the credit risk premium they would otherwise avoid. The optimal mix of these instruments deserves dedicated research.

Several limitations of the study should be noted. The low Durbin–Watson statistic ($DW = 0.80$ – 1.09 in the full models) indicates residual autocorrelation. Further research should employ Newey–West standard error corrections or models with an autoregressive component. The monthly data on DC volumes were partially reconstructed from anchor points in NBU quarterly and annual reports, which adds a measurement error component. The analysis is also limited to the volume dimension and does not directly examine yield differentials at the bank level, which would require confidential supervisory data. Finally, the wartime subsample, although econometrically robust, covers a relatively short period and may evolve as macroeconomic conditions change.

Conclusions. The study confirms the existence of a statistically significant crowding-out effect on corporate lending exerted by NBU deposit certificates, an effect that constitutes a specifically wartime phenomenon. The scientific novelty of the research lies in three contributions. First, it provides the first formal econometric test of the crowding-out hypothesis on Ukrainian data over a long horizon (2016–2025) with explicit controls for structural breaks. Second, it identifies and labels a distinct opportunity-cost channel of crowding out, distinct from the classical resource-deficit pattern and the sovereign-debt channels documented in the international literature. Third, it demonstrates that the crowding-out mechanism extends beyond government borrowing instruments to include voluntary central bank tools when wartime risk distorts the incentive structure.

The theoretical significance consists in extending the classical taxonomy of crowding-out channels to encompass voluntary central-bank operations under macroeconomic stress. The practical significance is twofold. For enterprises, NBU DC volumes can serve as a leading indicator of credit availability, enabling timely diversification of funding sources. For policymakers, the findings highlight a tension between the legitimate stabilization objectives of liquidity-absorption operations and their unintended dampening effect on real-sector credit. Calibration of operational design should account for this trade-off, particularly during periods of acute geopolitical risk.

The socio-economic effects of implementing the research findings include a more informed allocation of risk among enterprises, banks, and insurers, as well as a stronger empirical basis for public policy debate on monetary-fiscal interaction in Ukraine. The empirical pattern uncovered here also has direct implications for international financial institutions and donor agencies supporting Ukraine's economic resilience: targeted instruments that compensate banks for the credit risk premium associated with corporate lending under wartime conditions are likely to deliver larger marginal effects on real-sector activity than blanket liquidity provision. Avenues for further research include the use of official monthly NBU data (Form 1D) to construct a more precise DC volume time series; the application of instrumental variables to address potential endogeneity; analysis of the introduction of three-month DCs in April 2023 as a natural experiment; and a comparative analysis with other countries employing analogous liquidity-sterilization instruments under wartime or emergency conditions.

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Ефект витіснення корпоративного кредитування депозитними сертифікатами НБУ

Анотація. Стаття присвячена дослідженню взаємозв'язку між обсягом депозитних сертифікатів НБУ та обсягом корпоративного кредитування у гривні впродовж 2016–2025 років.

Постановка проблеми. Після початку повномасштабної війни банківська система України перебуває у стані надлишкової ліквідності, тоді як кредитування реального сектору стагнує, а обсяг депозитних сертифікатів НБУ за два роки зріс більш ніж у шість разів. Це породжує фундаментальне питання: чи витісняє обсяг депозитних сертифікатів НБУ корпоративне кредитування, і якщо так, то через який канал?

Невирішені аспекти проблеми. Існуюча наукова література розглядає ефект витіснення переважно через державні запозичення. Натомість специфіка українського кейсу полягає у добровільному характері депозитних сертифікатів НБУ. Формальне економетричне тестування цієї гіпотези на українських даних не проводилося, особливо за тривалий період з контролем за структурними зламами.

Мета статті. Емпіричне обґрунтування гіпотези витіснення корпоративного кредитування депозитними сертифікатами НБУ та ідентифікація специфічного каналу його дії в умовах воєнного стану.

Виклад основного матеріалу. Аналіз ґрунтується на 120 місячних спостереженнях за період з 2016 по 2025 рік. Застосовано чотири OLS-специфікації з фіктивними змінними для пандемії COVID-19 та воєнного стану, інтеракційний член, тести Грейнджера на каузальність і Чоу-тест на структурний злам. Результати засвідчують виразно воєнну природу ефекту витіснення: у довоєнний період зв'язок є статистично незначущим, натомість у період воєнного стану коефіцієнт регресії досягає $-0,205$ за пояснювальної здатності 87%. Інтеракційний член, наявний у моделі, підтверджує посилення ефекту саме в умовах воєнного стану.

Висновки. Ідентифіковано канал альтернативних витрат як механізм витіснення, що відрізняється від класичного дефіциту ресурсів і характерний для країн з високою обліковою ставкою, надлишковою банківською ліквідністю та підвищеними воєнними ризиками. Підприємства можуть використовувати динаміку обсягу депозитних сертифікатів як випереджальний індикатор кредитної доступності в умовах воєнного стану та своєчасно діяти щодо пошуку альтернативного фінансування. Для регулятора результати свідчать про необхідність калібрування інструментів стерилізації ліквідності з огляду на їхній вплив на реальний сектор.

Ключові слова: депозитні сертифікати НБУ, ефект витіснення, корпоративне кредитування, монетарна політика, воєнний стан, структурний злам, канал альтернативних витрат.

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