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The National Bank of Ukraine During the War: The Preliminary Assessment of Actions and Effects

The article contains results of a study on the monetary policy of the National Bank of Ukraine (NBU) in time of the war. NBU does not have a crucial role in management of the crisis related with the war. But it plays a pivotal role in ensuring the proper operation of the national economy, cares about the price stability and supports the economic policy of the state. The NBU's role in mitigating the economic crisis in Ukraine stemming from the war and in sustaining the social stability is vitally important. It is stressed that the military action accompanied by the humanitarian crisis made NBU refocus the effort on monetary provision of the economy and sustaining the macroeconomic stability. The Russian invasion of Ukraine opened an historic opportunity for watching the monetary policy pursued by a central bank in the conditions of war.

Once the large-scale war broke out, the Ukrainian economy (and, hence, the government and NBU) had to encounter vast financial losses. Many citizens fled abroad amid the growing need to purchase imported goods for army supply. This boosted the public expenditures, including hard-currency ones. To keep the reserves, NBU had to impose tough currency restrictions, including ones on the purchase of uncritical imports. To prevent a potential immediate devaluation of hryvna (UAH) at the beginning of the war, NBU fixed UAH rate to foreign currencies on February 24, 2022 and suspended calculations of the reference rate UAH/USD.

It is emphasized that NBU has developed a set of potential measures to strengthen the monetary transmission and optimize the structural surplus of UAH liquidity. Details of these measures' design are being discussed as part of the current consultations of NBU and the Ministry of Finance of Ukraine with IMF. In the forthcoming period, NBU is expected to focus on implementing an updated structure of regulatory capital, updated approaches to determining the risk weights for selected types of assets, the leverage ratio, the limit of significant risks and the standards for information disclosure.

Key words: *bank system, currency restrictions, risks in financial sector, monetary policy, discount rate.*

Introduction. The RF war against Ukraine raised the priority of the reliable performance of the National Bank of Ukraine (NBU) in particular and the financial system as a whole for purposes of Ukraine' defense, support of the Armed Forces of Ukraine and critical infrastructures. The war has caused significant risks in the financial sector, which could not be eliminated by NBU in a magic manner, as each taken decision has positive and negative implications. Hence, the principal objective of NBU in decision-making pertaining to monetary and exchange rate policies is to outline priorities and minimize overall risks. Apart from hitting the Ukrainian economy, the war in Ukraine had implications for the neighboring Poland. Although the Polish economy could hold fast, but there have been serious problems that could not be avoided, especially in the long run, hence, the National Bank of Poland has to assess economic effects of the war, elaborate schemes for quick and sustainable economic recovery and outline the priorities of postwar renewal, along with providing support to Ukraine jointly with the international community and vigorously advocating the sanctions against the aggressor country.

Literature review. Domestic scholars O. Lupin and S. Nikolaychuk have studied the problems and peculiarities of the NBU's monetary policy implementation during the full-scale RF invasion. These authors agree that the introduction of fixed exchange rates by the NBU and the adjustment of the hryvnia exchange rate at the beginning of the war was the right decision [1; 2]. A. Zanuda and C. Szczepanski studied the measures taken by the National Bank of Poland to use instruments and measures to support the banking sector in order to increase its liquidity and solvency in the context of war in the neighboring country [3; 4]. B. Danylyshyn studied the role of the National Bank of Ukraine in providing commercial loans on favorable terms in times of uncertainty. In his opinion, this will contribute to the development of Ukrainian producers, secure the domestic market and support exports, thereby contributing to Ukraine's foreign trade balance [5].

In this study we aim at presenting the National Bank of Ukraine actions during the war and their interference with the economic results and macrofinancial stability. We also refer, to a lesser extent, to the National Bank of Poland's actions. The study covers the period of from February 24, 2022 to the first half of 2023. As the war is still on and time series describing the economic evolution is relatively short, the paper applies descriptive methods.

Results and discussion. Once the large-scale RF invasion was launched, the NBU's vision and mission were refined to meet the challenges of military aggression [6]. NBU focused the effort on fighting the panic among the population, sustaining support to the banking system and stability in the financial sector. The crucial decision of NBU at that time aimed at the trouble-free operation of the banking system, requiring to stop the national currency devaluation and the outflow of cash from Ukraine.

It was on February 24, 2022 that NBU changed the operational rules of the banking system in conformity with the martial law, to ensure the trouble-free operation of banks on secure territories, provide client access to safes and load ATMs with cash. No restrictions were imposed on cashless payments. But the bans were as follows (Figure 1, compiled based on [7]).

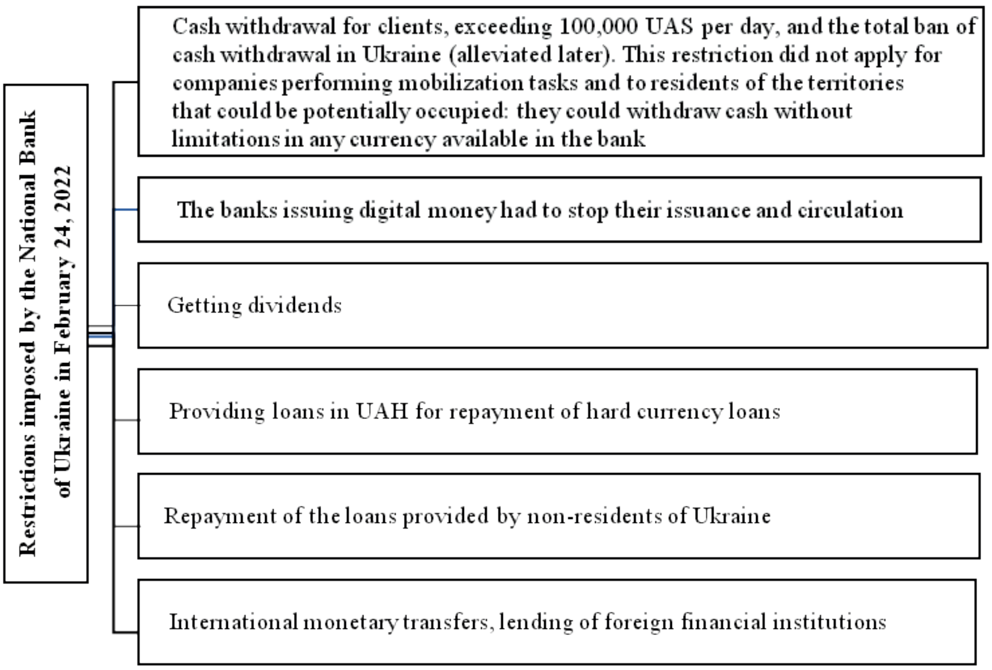

Figure 1. The restrictions imposed by the National Bank of Ukraine on February 24, 2022

To eliminate a probability of the immediate devaluation of UAH in early days of the war, NBU fixed its exchange rate on February, 24, 2022 and suspended estimations of UAH/USD reference rate. But the restrictions on setting exchange rates by banks for cash and card transactions were lifted on May, 21, 2022, being the first step to reestablishing the floating exchange rate (with the market-based exchange rate fully reinstated in a subsequent period).

The guidelines for the monetary policy in the conditions of martial law were approved by NBU on April, 15, 2022: it was the temporary use of the key rate as the principal tool for the monetary policy, allowing NBU to reduce inflation and publish own macroeconomic outlooks. It was on June, 2, 2022 that NBU changed the discount rate for the first time since the start of the war, with increasing it by 25% (against 10% in January). This step, as explained by NBU, was made for protecting residents' incomes and savings in UAH, and for increasing the attractiveness of assets in UAH, public bonds in particular.

NBU approved several decisions to adapt non-banking financial institutions (credit unions, insurance, leasing, factoring companies, pawnbrokers) to the martial law. The restrictions imposed by NBU were as follows:

– payment of bonuses, premiums and other supplementary payments to managers, except for fixed components of the compensation;

– access to open information (registers of non-banking financial institutions, collection companies, insurance brokers) [7].

Meanwhile, reliefs were introduced with respect to reporting deadlines; credit unions were allowed to suspend reimbursements of credit and share deposits to their members and to fix the maximum amount of withdrawn cash, not exceeding 100,000 UAH per day for each member.

With the beginning of the large-scale war, the Ukrainian economy (hence, the government and NBU) had to face vast financial losses. Physical destruction of some industrial facilities and disruptions of supply chains, suspension of sea exports, increased unemployment, reduced tax and hard currency returns were the strongest pressures for rapidly declining public revenues. Many Ukrainian residents fled abroad, while the need for imports to support the army increased, which boosted public spending, including the one in hard currency.

The principal hard currency restrictions related to the war and imposed by NBU at the beginning of the large-scale RF invasion are shown in Table 1 (compiled based on [7]).

Table 1

Hard currency restrictions imposed by the National Bank of Ukraine in February 24, 2022

<table>
<tr><th></th><th>Hard currency restriction</th><th>Since 24.02.2022</th><th>March 2022</th><th>May 2022</th><th>July 2022</th></tr>
<tr><td rowspan="6">Physical persons</td><td>Cash withdrawal</td><td>Banned</td><td colspan="3">⩽100,000 UAH per day</td></tr>
<tr><td>Withdrawal of UAH abroad</td><td>Unlimited</td><td>⩽100,000 UAH per day</td><td>⩽50,000 UAH per month</td><td>⩽12,500 UAH per week</td></tr>
<tr><td>Transactions in UAH abroad</td><td colspan="4">Unlimited</td></tr>
<tr><td>International transfers P2P</td><td>Unlimited</td><td>⩽100,000 UAH per month</td><td>⩽100,000 UAH per month</td><td>⩽30,000 UAH per month</td></tr>
<tr><td>Sales o hard currency by banks</td><td colspan="3">Banned</td><td>+50% of the hard currency bought from a physical person</td></tr>
<tr><td>International SWIFT payments</td><td colspan="4">Banned</td></tr>
<tr><td rowspan="3">Legal entities</td><td>Payments for imports</td><td>Critical imports (goods 65%, services 0%)</td><td>Critical imports (goods 90%, services 30%)</td><td>Critical imports (goods 90%, services 30%)</td><td>Critical imports (goods 100%, services 50%)</td></tr>
<tr><td>Deadline of payments in export/import transactions</td><td>365 days</td><td>365 days</td><td>120 days</td><td>180 days</td></tr>
<tr><td>Repayments of foreign debts</td><td colspan="4">Banned</td></tr>
<tr><td rowspan="2">Banks</td><td>Open currency position</td><td colspan="4">15%–5%</td></tr>
<tr><td>Repayment of debts to non-residents</td><td colspan="4">Ban on long-term repayment</td></tr>
</table>

Also, with the beginning of the large-scale invasion the role of NBU in balancing the hard currency market essentially increased (Figures 2, 3, compiled based on [7]).

As shown in Figure 1, prior to the large-scale war, the hard currency market, being sufficiently balanced, did not require heavy interventions of NBU. But upon the imposition of martial law, NBU had to cover 37% of the hard currency supply.

The demand for hard currency is now subject to significant impact of the negative net balance of banks' transactions by payment systems (via international transactions with cards of Ukrainian banks), whereas prior to the war this factor's impact has minor statistical significance.

When the hard currency revenues are decreasing along with the growing spending due to the warfare on the Ukrainian territory, the fixed UAH rate can be sustained only through spending hard currency reserves. It made NBU impose strict hard currency control to protect the reserves, including limitations on uncritical imports. In spite of the imposed restrictions, only in February-May 2022 NBU reserves decreased by 4,000,000 USD (from 29,100,000,000 to 25,100,000,000 USD given the inflow of the international assistance worth 6,700,000,000 USD), with the inflation grown up to 16.4%. In June 2023 the inflation index fell to annual 12.8% and more than twice for the earliest half of 2022. The basic inflation also slowed down

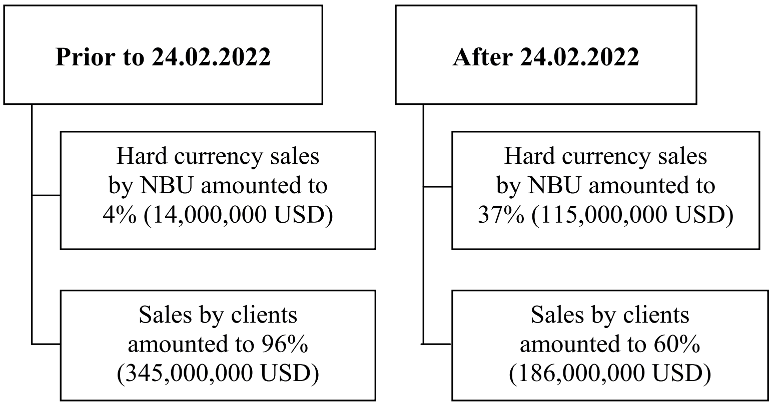

Figure 2. The supply structure of the cashless hard currency

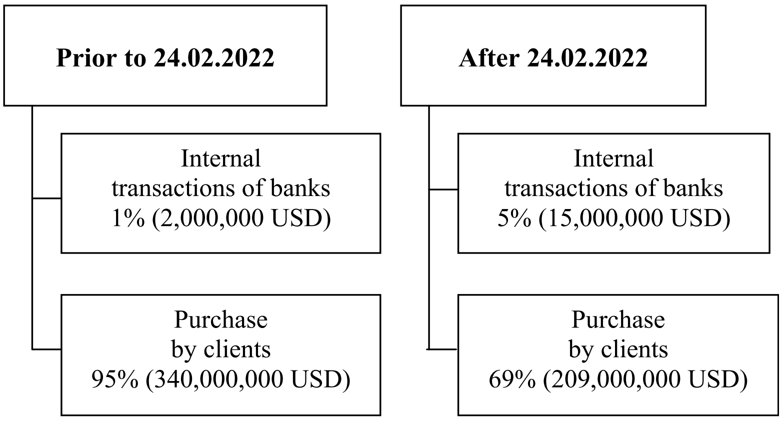

Figure 3. The demand structure for the cashless hard currency

considerably, e. g. to 13.7%. In addition, inflation and exchange rate expectations improved markedly between April and June 2023. These and other factors gave NBU good grounds to improve the outlook of price dynamics. The inflation is expected to be 8.5% at the end of 2024. Its downward trend is also expected in the forthcoming period: 6% in 2025 [7].

The policies of NUB that seemed economically unfriendly proved to be effective in times of the war.

– the fixed currency rate allowed to keep afloat the macroeconomic stability: the price dynamics and its expectations did aggravate but could be kept under control;

– in spite of the fixed rate UAH/USD, the rate of UAH to other currencies follows the dynamics of these currencies' rate to USD;

– the 25 percent adjustment of the official rate, made on July 21, 2023, being a response of NBU on the changed macroeconomic conditions, allowed it to mitigate the accumulated imbalances;

– easing restrictions on the transactions made by physical persons could reduce the tensions related to variations in the currency rate.

The significant support for macroeconomic sustainability has been provided by international partners. In January-June 2023, Ukraine received about 27,000,000,000 USD from them. The majority of these funds came in the form of grants. The commodity exports reached the maximum in autumn of 2022 since the beginning of the war due to the launch of "grain corridor" and the record high increase of energy supplies to EU. The adjusted official rate of UAH and abrogated privileged taxation have slowed the recovery of commodity exports.

As a result, the international reserves of Ukraine could be kept at the historical maximum (nearly 39,000,000,000 USD at the beginning of July 2023, with NBU being able to continue balancing the hard currency market through interventions. The latter could be substantially reduced (to 5,100,000,000 USD in the II quarter of 2023 against 7,200,000,000 USD in the I quarter) due to the measures taken by NUB and the overall adaptation of the economy to new challenges of the martial law. Also, the regularity of international assistance enables it to cover a significant budget deficit caused by the war without monetary financing. The continuity of this self-sufficiency and the timeliness of international assistance inflows are important for the macro-financial stability in future [7].

NBU has elaborated a set of potential measures to strengthen the monetary transmission and optimize the structural surplus of UAH liquidity. Details of these measures' design are subject to discussions in the course of the current consultations of NBU and the Ukrainian Ministry of Finance with IMF.

The main goal of the forecast is to significantly reduce financial security risks. Suppose the large-scale war is going to last longer than in the reference scenario of the current outlook. In that case, the depressed demand, low investment and export limitations related with logistics will be persisting, with a slower than expected economic recovery of Ukraine and a higher inflation. The actual and projected macroeconomic estimates are given in Table 2 (compiled based on [7]).

Table 2

Macroeconomic estimates of Ukraine in 2021–2024

Estimate	Period			
	2021	2022	2023	2024
Real GDP	3.4	-31.5	4.0	5.2
Inflation index	10	30	20.8	9.4
Balance of the current account, billion USD	–3.2	6.8	–8.0	3.0
International reserves, billion USD	30.9	26.0	21.7	27.4

As shown by estimations for 2023, the inflation in Ukraine rapidly slowed. This positive change could occur mainly due to NUB measures to achieve the resilience of the exchange rate, the sufficient internal supply of foods and fuels, the reducing prices on global commodity markets, including energy prices, and the rapid adaptation of domestic businesses to new challenges of the war. However, the warfare implies the risks of inflation pressures, particularly ones caused by the destruction of infrastructures and environmental terrorism on the part of Russia. Thus, the consequences of ruining the Kakhovska Hydropower Plant have not had implications yet for consumer prices, but they may have adverse effects over time. The pressure on consumer prices may also increase due to the volatile pricing on the electricity market for non-household consumers.

The scope of residents' deposits in Ukraine continues to grow. The term deposits in hard currencies, which became popular in winter 2023, showed a negative trend in spring 2023 due to the appreciation of UAH. The term deposits in hard currencies were an attractive tool for purchasing USD at a lower rate than the cash, although one had to wait three months to take these dollars back. Now, with the cash rate of UAH approaching the official one, opening of new three months long deposits has become less attractive.

The loans to residents have been down since the war began; a slight increase estimated in 2023 was demonstrated only by corporate loans in UAH. Because the war risks are still persisting, the situation with loans is unlikely to improve without government support or insurance of war risks.

There are other risks with importance in projecting; most part of them, if occur, will worsen the inflation dynamics and impede the economic recovery. They are as follows:

- the risk of the public finance imbalance due to the unpredictability of the war; although this risk could be in a way mitigated, problems related with the rapidity of getting international assistance and formulating additional budgetary needs are still probable. A specific problem may be the occurrence of high deficits in the energy supply given a high price of energy sources;
– terrorist attacks of Russia on energy infrastructures of Ukraine increase the risks related with the forthcoming winter. A shortage of facilities will cause the need to save electricity by temporary switching off both household and industrial consumers, with the consequent reduction in the output of goods and services;
– long duration and high intensity of the warfare in parallel with "energy terror" increases the risk of non-return of a large part of the residents that fled abroad and additional exodus from Ukraine. The demographic crisis will slow down the postwar recovery due to the shrinking consumer demand and the aggravating structural problems on the labor market;
– the suspension of "grain corridor" and blockade of Ukrainian sea ports complicates substantially food exports, thus reducing hard currency inflows to Ukraine and financial capabilities of farmers with respect to future sowing campaigns.

Statistical data provided by analysts shows that the liquidity of the Ukrainian banking system does not raise concerns. The average short-term liquidity ratios are thrice higher than the minimal criterion. The amount of residents' money on bank accounts is stable, with the increasing share of funds in term deposits. The inflow of business funds is being on, and the share of refinancing loans and external loans has reduced to minimum in bank liabilities.

The credit portfolio of businesses is constantly shrinking due to the poor demand: the amount of new loans is incapable to cover the repayment of earlier ones. In spite of this, banks are optimistic expecting that during 2024 the credit portfolio will increase by nearly 10%, mainly due to lending on line of government support programs.

The retail credit portfolio has recovered after a plummeting resulting from the increased demand for card credits, to meet current necessities. Random surges of mortgage lending occur due to the government program "eOselia" (eDwelling), but its funding is going to be partially suspended. The uncertainty will have long-lasting adverse effects for the expansion of realty market and mortgage lending.

Since the beginning of the large-scale war the banks have lost nearly 15% of the portfolio operated before the RF invasion. In 2023 the banks had to reduce the reserves after recording heavy losses due to the credit risk. Given a probability of further losses, the cumulative portfolio losses caused by the war are expected to approach 20%.

In spite of the war losses, the banks were profitable in 2022, and their incomes tended to grow in 2023. Because high interest margins create comfortable conditions for the banks irrespective of a probable reduction in interest rates, the profitability risks are insignificant. The operation efficiency is demonstrated by banks belonging to all the classic business models: corporate, retail and universal.

The market share of public banks has been growing, which is a conventional trend in times of crises. Privatization of public banks will be back on the domestic agenda in the postwar period. A crucial issue of today is to revise their strategies in in view of long-term uncertainties specific to security.

The banks will have to use accumulated earnings to fulfil deferred and new criteria for capital in conformity with European rules. Besides that, NBU may update the criteria for formation of capital reserves by banks with reference to bank resilience estimates. The restriction on capital allocation will remain valid until the implementation of these priority objectives.

Ranking of the uses of accumulated earnings in the banks in shown in Table 3 (compiled based on [7]).

Table 3

Ranking of the uses of accumulated earnings in the banks

Priority	Uses
Priority 1	Covering unexpected losses caused by the risks occurring in time of the war
Priority 2	Fulfilling the deterred criteria for covering risks by capital (operational risk, market risk)
Priority 3	Fulfilling the new norms (revised structure of regulatory capital, revised weights of credit risk of some categories of assets, leverage ratio)
Priority 4	Forming the capital conservation buffer and the systemic importance buffer
Priority 5	Distribution of dividends

NBU will be gradually revising the criteria for credit risk assessment, loosened temporarily since the beginning of the large-scale war. Decisions on abrogating other temporary normative reliefs will be taken with reference to bank resilience estimates.

In the 2024 NBU have focus on implementing a revised structure of regulatory capital, revised approaches to estimating weight ratios of risks by category of assets, leverage ratio, minimum significant risk and information disclosure standards. Also, a new package of regulatory requirements for the nonbank financial services market, the insurance market in particular, is being elaborated. The new solvency criteria for insurers came into force in early 2024.

The expected results of implementing a new hard currency tool by NBU for deposits in UAH are shown in Figure 4 (compiled based on [7]).

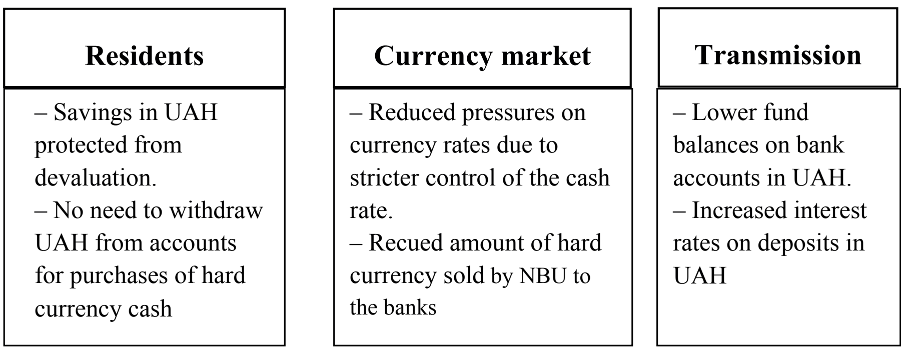

Figure 4. Results of the introduction of a new deposit instrument

The NBU outlook primary scenario is based on expectations of launching a new IMF program, implementing coordinated monetary and fiscal policies and gradually rectifying imbalances. The continuing cooperation with international partners remains an important factor of the economic stability in the conditions of a large-scale war and postwar recovery.

According to the World Bank, the Ukrainian GDP per capita reached 4,500,000 USD in 2021, the highest figure in the independence period. In 2022 in the period of the large-scale invasion, sales fell by 53% and employment was reduced by 26%. The war effects proved to be the most severe for large companies with more than 100 employees: 41% of them lost their assets (of the small enterprises with less than 20 employees, the assets were lost by only 15%).

The situation with sales is region-specific: 70% and 63% reduction in the Eastern and Southern regions of Ukraine, against 39 percent in the Western ones. Medium and small companies proved to be more resilient, because they had better abilities for readjustment and more flexible reaction [4].

Apart from industry and construction, tourism was the third sector most heavily hit by the war. The large-scale invasion accelerated the recession in steelmaking. It should be born in mind that many steel factories were located near the front line. In the 2nd quarter of 2023, steel production in Ukraine started growing again. At the same time, producers of wooden furniture located mostly in the Western part of Ukraine could earn the profit, mainly due to import substitution as russian and belarussian factories had to flee from the domestic market due to the sanctions.

Export limitations due to war effects, intense migration and substantial needs of the affected economy in imports will be factors creating a new current account deficit in the forthcoming years.

The Ukrainian government has to increase the effort in order to engage more resources on the bilateral basis on the basis of bilateral partnerships. More donor funds need to be attracted. NBU can establish its own swap lines with other central banks (NBU has already had this line with the National Bank of Poland). These resources are cheap for Ukraine, but Ukraine does not have direct control of them.

Apart from optimistic opinions, the World Bank in Europe and Central Asia expressed concern that in spite of the existing official programs for business support, including reduced interest rates on loans, small and medium companies are still marginalized from them, and sometimes a relevant information can hardly be found. A government support has been received by only 6% of the small companies with 9 to 19 employees, by 12% of the medium ones with 20 to 29 employees, and 17% of the large ones with more than 100 employees. By economic activity, it is 5% of the construction companies and 3% of the tourist ones. Nearly 30% of the companies have no information about government support [4].

It should be borne in mind that the economic front has significant importance for the victory on the battlefield. The macroeconomic stability is required for economic performance. A currency crisis, bank panic or high inflation can undermine the country's capacity for armed struggle.

However, the fiscal policy still remains unprecedentedly soft and will be stimulating till the end of the outlook period. It helps to support the economy in times of the war and will push the recovery as the security risks are declining. The budget deficit will be reduced in a gradual manner.

Unfortunately, the large-scale RF invasion, apart from Ukraine, affected the economy of neighboring Poland. The war resulted in the aggravating economic perspectives in Ukraine and Poland, boosting inflation and potential stagflation.

Only in the six months following the date of the RF invasion, the Polish government allocated more than 10,000,000,000 PLN for direct and indirect assistance (its largest share being the cost of the transferred armaments, nearly 7,000,000,000 PLN). All the Ukrainian refugees were permitted to stay and work in Poland for 18 months with free access to health care, subsidies for opening small businesses and aid for each child in the amount of 120 euro per month (just like for Polish citizens). Poland exempted the refugees from fares and granted them work permits. Polish schools accommodate more than 50,000 children of the refugees. The direct budget spending on these purposes amounts to nearly 3% of GDP.

During the Ukrainian war, the Polish economy had to face the challenge of inflation. In March 2022, retail sales grew by 2-digit number first since the end of 2000s, i. e. by 10.9%, against 8.5% in February 2022. This is primarily due to a significant increase in fuel prices (by 11.1% in March 2022 compared to February 2022). According to the National Bank of Poland data, the consumer inflation in 2022 made 10.8% [8].

According to NBU, the Ukrainians' monthly spending abroad made 2,000,000,000 USD in 2022, which is more than thrice higher than in the previous year. It should be noted that many Ukrainians were spending money from savings in Ukrainian banks. Poland was the leader by the number of cashless transactions made by Ukrainians: 28% of the total.

The food inflation in Poland is expected to reach 15% in 2023 due to the impact of the growing global prices on agricultural products and the increasing cost in the production of fertilizers.

The food inflation can be even higher if a shortage of foods from Russia or Ukraine occurs, because Poland exports more than 50% of the sunflower and soya oil from Ukraine. The dynamics of trade between Ukraine and Poland in 2018–2022 is shown in Figures 5, 6 (compiled based on [8]).

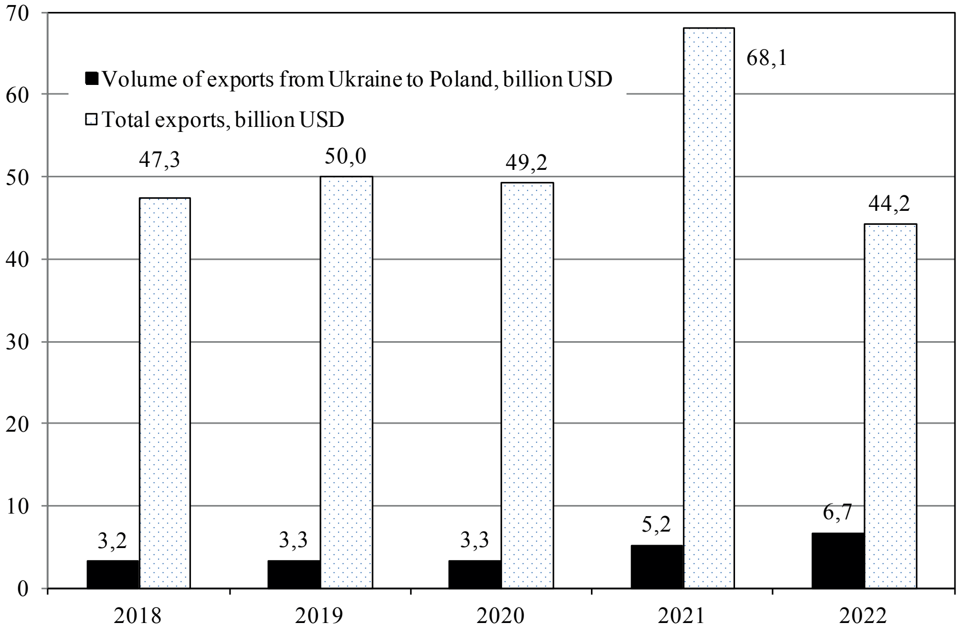

Figure 5. Ukrainian exports in 2018–2022

Figure 6. Polish exports in 2018–2022

The Polish imports made 5,500,000,000 USD in 2023, which is 12.2% more than in the previous year.

The impact of inflation on real household incomes and consumer expenditure could be reduced by tightening the monetary criteria imposed by the National Bank of Poland (NBP). NBP is fighting against inflation by increasing interest rates, which hits hard borrowers, physical persons with mortgage loans and legal entities alike. It does not raise great concerns now (as the corporate debt did not increase in time of the pandemic), but if the rates continue growing with the economy coming into recession, the situation can change.

Although direct effects hinder the economic growth in Poland, some compensatory factors also exist. Thus, the Polish government has softened the fiscal policy by reducing the rate of tax on income of individuals.

Since the beginning of the war, Ukrainians have registered 29,400 businesses in Poland, including 14,000 for the 1st half of 2023, which accounts for 67% of the total foreign businesses. More than 2,000 new Ukrainian businesses are registered monthly on the Polish territory during the war. Their largest shares are in construction (23%), information technologies (18%), and services (14%), with 85% of the Ukrainian entrepreneurs engaged in it providing baking and cosmetic services.

The Polish GDP grew by 4.9% in 2022. This rapid growth resulted from the inflow of refugees from the war-torn Ukraine [8].

As a country hosting investment, Poland takes advantage of the almost total exclusion of Russia from the list of host countries. According to experts, nearly 25% of the European companies choose Poland for relocation of production facilities. The investment attractiveness of Poland can be explained by its neighborhood with Germany, high labor productivity along with low salary, established market of skilled workforce and well performing infrastructures.

In the latest two years (2022 – 2023), the largest investment came to Poland from four countries: Luxemburg, Germany, the Netherlands and France. Poland is believed to be a good location by not only European companies: American firm Intel is intended to build a microchip factory in Wrocław, with the estimated investment of 4,200,000,000 euro [8].

It was on April, 11, 2022 that NBU and NBP signed Memorandum on agreements for intensifying cooperation in the conditions of the RF war against Ukraine. This Memorandum promotes information exchange and mutual support of the two central banks establishing closer relations between the countries in the financial and banking sectors.

Also, NBU and NBP signed the agreement on currency swap transactions UAH/PLN in the equivalent of 1,000,000,000 USD. The resolution on currency exchange with Ukraine was approved by the Board of Directors of NBP on the first day of the RF aggression, on February 24, 2022. Since then, there has been active preparation and settlement of technical aspects for the transaction. The funds received online from the currency swap allow Ukraine to increase international reserves and support macroeconomic resilience. NBU has not used these funds, but support like this from NBP could become a "safety cushion" for the financial sector of Ukraine. In 2023, the agreement between NBU and NBP on currency swap transactions UAH/PLN was prolonged for a year [7]. Another important kind of support for Ukrainian residents fleeing to Poland was a program for the exchange of UAH for PLN, approved. It allowed for 97,000 exchange transactions via Polish bank offices in the total of 690,000,000 UAH.

NBU and NBP issued memorial coins devoted to the Independence Day of Ukraine in 2023. The coins are decorated by the engraved coats of arms of both countries and images of human figures symbolizing the current state of affairs: while on the Ukrainian coin there are horrors of the war and the resistance of Ukrainian people, on the Polish one it is help, support and sympathy. NBP is intended to hand over to Ukraine the funds from the sales of a kit of silver collector coins "Friendship and brotherhood is the greatest wealth" in form of irrevocable humanitarian financial assistance.

Conclusions and recommendations. The analysis allows for the conclusion that once the large-scale RF invasion began, the National Bank of Ukraine streamlined its effort on eliminating panic among the population, supporting trust in the banking system and stability in the financial sector. A crucial decision of NBU at that time aimed at the trouble-free operation of the bank system, prevention of national currency devaluation and outflow of funds from Ukraine.

The significant support to the macroeconomic stability of Ukraine was provided by international partners. Since the beginning of the year Ukraine has received from them nearly 27,000,000,000 USD in form of loans, with the major share of these funds coming in form of grants in the latest months 2023. The commodity exports of Ukraine could reach a high level in autumn 2022 due to the launch of "grain corridor" and a record high increase of electricity supplies to EU. An adjustment of the official exchange rate of UAH and lifting of privileged taxation slowed the recovery of commodity imports.

Apart from Ukraine, the large-scale RF invasion hit the economy of the neighboring Poland. The Ukrainian war aggravated economic perspectives in Poland, with the boosting inflation being a new challenge for the Polish economy in time of the war. Although the war effects have become a barrier for growth of the Polish economy, some compensatory factors also exist: Polish government has softened the fiscal policy by decreasing the taxation rate for incomes of physical persons. As a country hosting investment, Poland takes advantage of the almost total exclusion of Russia from the list of host countries. According to experts, now nearly 25% of the European companies chose Poland for relocation of production facilities.

It is difficult to predict trends in a longer run, but monetary and fiscal policies should be implemented in a coherent and harmonized manner. The joint effort in facing problems related with structural gaps in the economy conforms to objectives of the government and the National Bank of Poland and require further research.

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Національний банк України під час війни: попередня оцінка дій та наслідків

У статті досліджено монетарну політику Національного банку України (НБУ) під час війни. НБУ не відіграє першочергової ролі в управлінні кризою, безпосередньо пов'язаною з війною. Однак він відіграє ключову роль у забезпеченні належного функціонування економіки країни, піклується про стабільність цін і підтримує економічну політику держави. Роль НБУ у пом'якшенні економічної кризи в Україні, що виникає внаслідок війни, та забезпеченні соціальної стабільності, є надзвичайно важливою. Зазначено, що військові дії з супутньою гуманітарною кризою змусили НБУ переорієнтувати свою увагу на забезпечення економіки грошима та забезпечення макроекономічної стабільності. Російське вторгнення в Україну створює історичну можливість спостерігати за монетарною політикою, що здійснюються центральним банком, в умовах війни.

З початком повномасштабної війни економіка України (а отже, уряд і НБУ) стикнулись з величезними фінансовими втратами. Багато громадян виїхали за кордон, а потреба купувати імпортні товари для постачання армії зросла. Це спричинило збільшення державних витрат, зокрема, й валютних. Для збереження резервів НБУ ввів жорсткі валютні обмеження, в тому числі обмеження на закупівлю некритичного імпорту. Для запобігання можливій раптовій девальвації гривні на початку війни НБУ зафіксував курс гривні до іноземних валют з 24 лютого 2022 року і припинив розрахунок довідкового курсу гривні до долара США.

Акцентовано увагу на тому, що НБУ напрацював комплекс можливих заходів для посилення монетарної трансмісії та оптимізації структурного профіциту гривневої ліквідності. Деталі дизайну цих заходів обговорюються в межах поточних консультацій НБУ та Міністерства фінансів України разом з МВФ. Найближчим часом основна увага НБУ буде зосереджена на запровадженні оновленої структури регулятивного капіталу, оновлених підходів до визначення вагових коефіцієнтів ризику для окремих видів активів, коефіцієнта левериджу, ліміту значного ризику та стандартів розкриття інформації.

Ключові слова: *банківська система, валютні обмеження, ризики у фінансовому секторі, міжнародна допомога, монетарна політика, облікова ставка.*

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