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PARADOXES OF MONETARY POLICY PROVIDED BY THE NATIONAL BANK OF UKRAINE (OR, FOLLOWING HONORE DE BALZAC "SHINE AND POVERTY OF COURTESANS")

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Abstract. The qualitative and quantitative characteristics of the monetary policy of the National Bank of Ukraine (NBU) have been analyzed. It has been proved that this policy, as a part of general regulatory policy of the state, is a set of measures in the area of money's circulation to be implemented in order to ensure the stability of the monetary and banking system of Ukraine.

The crisis in the country's economy, provoked by the war, became a serious challenge for the NBU that requires improvement of the state monetary policy and searching for effective mechanisms needed to be implemented.

In this situation, the NBU has to ensure not only the achievement of the national financial system relatively high level of stability, but also move in its regulatory banking policy, which main purpose is consisting now in supporting the value of money, to a comprehensive assessment of the money's functions in general.

Key words: approaches, management, monetary and banking system of Ukraine, tools, monetary policy, National Bank, stability of the methodology.

Introduction. The policy of monetary regulation of Ukraine, as an integral part of the economic policy of any state, is designed, in accordance with its main functions, to ensure a high level of price stability, creating on this basis the necessary conditions for the formation of a model with high and stable levels of economic development of optimal employment.

Taking this into account, the policy of regulating the money supply and monetary relations should constantly be in the center of attention not only of academic economists, but also of functionaries of central banks.

It should be emphasized that in the economic literature there are a number of unresolved problems concerning the interaction of various components of monetary and monetary policy in Ukraine, among which a special place is occupied by inflation targeting procedures and determining the impact of monetary and monetary policy on economic growth and maintenance unemployment rate at a level close to optimal.

In this regard, scientific research into the current situation in the development and implementation of monetary and monetary policy in Ukraine should be considered very relevant.

The authors believe that the National Bank of Ukraine in its activities should proceed from the priority of achieving and maintaining price stability in society. In turn, the authors propose to define price stability as maintaining the purchasing power of the national currency by maintaining low and stable inflation rates.

In order to achieve and maintain price stability, which, in turn, the authors propose to measure in the medium term through the consumer price index, the National Bank of Ukraine must apply a special inflation targeting regime. The essence of this regime is the public announcement of the maximum level of growth in the value of the consumer price index and the obligations of the National Bank to achieve these goals in the planning horizon under consideration.

As strategic tools for maintaining price stability, the National Bank of Ukraine proposes to use existing monetary instruments, the main of which, as is known, are the interest rate and the discount rate. At the same time, the operational goal of the National Bank's monetary policy is to maintain interbank rates in the national monetary unit at a level close to the key rate. As is known, an indicator of the level of interbank interest rates in national currency is the Ukrainian index of interbank rates on loans and deposits in national currency (IIS).

Having carried out an appropriate analysis, the authors dare to assert that as of today, the Ukrainian banking system has excess liquidity. At the same time, the authors emphasize, the analysis of emerging trends allows us to draw an extremely important conclusion that in the near future, the Ukrainian banking system will face a serious liquidity shortage.

In such a situation, in order to more flexibly respond to changes in the liquidity of the Ukrainian banking system, it is proposed to make changes regulating the flexibility of the monetary policy structure. Such modernization, according to the authors, will contribute to the effective implementation of the operational goals of the National Bank even in conditions of unstable liquidity.

The article provides an in-depth analysis of modern economic literature devoted to the development and implementation of monetary policy in developing countries, in particular in Ukraine. One of the key issues that the authors paid attention to was assessing the effectiveness of monetary policy.

This literature review allows us to draw an important conclusion that the activities of central banks in developing countries often do not correspond to existing economic models. And, most importantly, it does not take into account the influence of a large number of factors that determine the effectiveness of monetary and monetary policy in these countries.

Among these factors, the authors emphasize, special attention should be paid to the profitability of central banks, the level of independence of these banks in their operations, as well as the magnitude of lags, regulatory stringency and existing imbalances.

The empirical analysis carried out by the authors in this article demonstrates that even if bank rates are set at low levels, as a result of negligible inflation and low rates, they can be risk factors, exposing financial stability to the risk of recession and preventing the restoration of public confidence in the banking system itself.

This article offers an in-depth analysis of the literature on the interaction of monetary and prudential policies and, very importantly, issues of their coordination. At the same time, it is proved that monetary policy has an ambiguous impact on the profitability of banks, and then on their risk behavior, and also that despite the fact that monetary and prudential policies have different goals, they inevitably interact, creating problems faced by the leadership and management of central banks.

Based on this conceptual approach, the authors argue that monetary policy alone is not sufficient to maintain macroeconomic and financial stability. This policy and all its instruments must be coordinated with prudential policy.

The purpose of the article is to provide a comprehensive point pf view regarding current state of economic studies in this area, reflect the results of the scientific investigations curried out by the authors in this specific field and to identify directions for future scientific research.

Literature review and basic results of previous empirical studies. Since the end of the last century, there has been a serious theoretical discussion in the scientific literature about the interaction of central banks and governments, as well as about the coordination between monetary and fiscal authorities.

It is noted that central banks are more focused on limiting inflation, while governments are primarily concerned with the problems of economic growth, the level of public debt and its share in GDP. At the same time, the effectiveness of control over both variables depends on the level and effectiveness of coordination of actions of governments and central banks [32].

Unfortunately, this coordination does not always lead to the desired results.

The reason for this should be sought in the relationship between different government bodies in relation to each other. For example, Silva K.G. and Vieira F.V. [31] argued that when monetary policy dominates fiscal policy, the dominant role is played by those authorities whose responsibilities include controlling inflation and, accordingly, the volume of money emission. However, if fiscal policy dominates monetary policy, then the relevant authorities responsible for implementing this policy lose some of their influence in terms of regulating the level of inflation.

Developing this conceptual approach, scientists S. Ayyagari and M. Gertler introduced a distinction between Ricardian and non-Ricardian economic models that determine the economic policies of governments [2]. In the first conceptual model, the authority responsible for monetary policy determines the volume of the money supply and, accordingly, the price level. Thus, the government as a whole must achieve a budget surplus that can guarantee repayment of the original debt amount and, as a result, financial solvency.

Following the scientific position of Leeper, E. and Davig. Thus, government fiscal policy can be either “active” or “passive”. The level of activity of this policy depends on how intensely it influences the dynamics of the volume of public debt [23]. The “active body” of power avoids large amounts of this debt by defectively setting its maximum volume. The policy of the “passive body” depends on the current state of public debt. And it is aimed at eliminating negative consequences if this volume is extremely large and, as a result, puts the economy into a state of shock.

Economists Taylor and M. Haga assess the policy response to the so-called “Taylor rule”, which was in place to control inflation in the United States in the early 1990s. These scientists are joined by representatives of another school – Ghatak and Moore [16], which describe changes in the instruments that regulate inflation growth and its relationship with the dynamics of real GDP. The main purpose of these changes is to enable governments to succeed in limiting the price level and the gap with GDP dynamics.

Analyzing the results of studies in the field of fiscal policy and its sustainability, the authors conclude that they mainly analyzed two main indicators, namely, the size of the debt and the primary balance. For example, the economist Bona H. [8] proved that the US primary budget surplus is an increasing function that positively describes the ratio of public debt to GDP.

Researchers Gali J. and Perotti R. [14] analyzed how the Maastricht Treaty and the SGP changed fiscal policy in the EMU countries. Moreover, it was proven that EU governments increased their primary budget surpluses after increasing the outstanding amount of public debt. For this purpose, apparently, primary budget surpluses are used.

Polish economists Brzozowski M. and Siwiska-Gorzelak J. [9] assess the impact of the government's fiscal behavior on the level of volatility of the state's tax and budget policy. In particular, these authors find that fiscal balance and debt constraints have different effects on fiscal volatility. Thus, fiscal balance restrictions help increase volatility, while debt restrictions help reduce it.

All these results prove that a balanced tax and budget model is a factor in stabilizing monetary policy.

Analyzing monetary policy, authors note that the result of its activities is, first of all, interest rates of central banks.

This conclusion can be drawn, in particular, by analyzing the scientific position of Altavilla K., who assesses how the European Central Bank (ECB) controls the dynamics of interest rates when changing the volume of GDP, inflation and the exchange rate [3]. The scientist concluded that the ECB's reaction is more reasonable and effective if it begins to use a "lagged interest rate" and projected changes in the inflation rate.

Economists Reinhart K. and Rogoff K. [29] developed a panel reaction estimation model based on the already mentioned Taylor rule to analyze the quality and effectiveness of European monetary policy. As a result of applying this model, the authors find a significant change in interest rates only in cases of regional, that is, European inflation.

Financiers W. Clausen, B. Hayo and M. Husche also examine the short- and medium-term implications of asymmetric European monetary policy for Germany, Italy and France. Moreover, their research results lead to the conclusion that an uncoordinated change in monetary policy applied to the eight major EMU countries could lead to an asymmetric response due to differences in national economic structures [10, 19].

Latin American economists Andrade J.P. and Pires study the effectiveness of Brazilian monetary policy during the Real Plan. The results of their study provide new insights into how monetary policy might operate in the case of indexed bonds [4]. The authors argue that the wealth spillover effect acts as an important transmission channel for monetary policy, although a high proportion of indexed bonds may offset this role.

In order to study the interaction between monetary and fiscal policy, Beetsma R. and Jensen H. analyze the interaction between the components of these blocks, proving that a monetary union, using the concept of "sticky prices", simultaneously received the cumulative effect of several fiscal rules [6].

Financiers Leith K. and von Thadden L. study the interaction between different components of the financial policies of central banks within the framework of the already mentioned non-Ricardian model. [24]. As a result, the authors conclude that the volume of public debt plays an important role in the policy-making process. Moreover, without limiting the maximum level of this variable, it is impossible to determine the effectiveness of both fiscal and monetary policy rules in ensuring the dynamic level of economic equilibrium.

Portuguese professor-economist Sergio Lagoa, University of Lisbon, [22] assesses the reasons for differences in inflation rates between eurozone countries in the period 1998–2008 and shows that it is the levels of exchange rates, and not real indicators of labor costs, that are the main factor determining the dynamics of the inflation rate. In addition, based on the results of his research, the author also offers an interesting discussion regarding the interaction of monetary and fiscal policies and their level of effectiveness during the financial crisis and subsequent periods.

Ukrainian statistician I. Mantsurov [25, 26] considers it necessary to recommend that the National Bank of Ukraine introduce the following system of measures during the war. 1. All areas of the

NBU's work should be aimed at maintaining the stability of the national economy. 2. The regulatory policy system of the National Bank of Ukraine, including monetary policy, should be aimed at restoring lending to the economy, primarily its real sector. 3. Contribute to the further development of the financial services market.4. Increase the level of cyber protection of the financial sector. 5. Improve partnership and interaction with stakeholders of the National Bank and commercial banks.

American macroeconomists Leeper E. and Davis T. assess the effectiveness of the financial policies of the United States based on the use of Markov models [23]. The results of their paper highlight the fact that assessing the impact of fiscal stimulus is impossible without an aggregate study of monetary and fiscal policy.

American forecasters Bianchi F. and Ilut K., the John Hopkins University, also applied Markov models to the study of the US economy as a means of assessing changes in the interaction of monetary and fiscal policies. A "passive" monetary policy was proven during the 1960-1970s of the last century and a transition to a more "active" policy was demonstrated starting from the mid-1980s [7].

A similar approach was proposed by Portuguese professors A. Afonso and P. Toffano, University of Lisbon, who found that the UK had a more "active" fiscal model, while Germany's fiscal regimes were generally less active. As a result, a higher level of financial stability has been achieved in Germany. The same result was obtained in Italy, where, on the eve of the creation of the EMU, more passive fiscal behavior was observed [1].

Providing new insight into the highly relevant topic of the interaction of monetary and fiscal policies, Finish macroeconomist Haga M., Helsinki University, finds an inverse relationship between the level of dependence of central banks and the dynamics of budget cycles [18]. In other words, more dependent central banks simultaneously play a more passive monetary role in the face of fiscal policies pursued by national governments.

Methodology and data used. The study uses the annual time series data of annual bank rate of the National Bank of Ukraine and Consumer Price Index, 1992–2023. The variables used in the analysis were obtained from several official sources of information, particularly form Ministry of Economy of Ukraine [39], State Statistical Service of Ukraine [36], National Bank of Ukraine (NBU) [35], World Bank [40], European Central Bank (ECB) [41], Eurostat [42] as well.

Common types of research methodology include quantitative and qualitative research methods, mixed-method research, experimental and case study research have been used.

Results and discussion. According to the basic principles of the scientific research, it is necessary to start out with some classifications and definitions.

According to the scientific point of view of the authors, the financial, monetary and tax policies of the state are a system of regulatory instruments and procedures that are used by the country's central bank to control the volume of money supply, interest rates and stimulate economic growth. As a result of the use of such instruments, strategic decisions are made regarding the revision of interest rates, increasing or decreasing the volume of the country's gold and foreign exchange reserves.

In accordance with its powers, the National Bank of Ukraine (NBU), based on these strategic decisions, ensures price stability both through the use of an inflation targeting regime and through the use of a floating hryvnia exchange rate.

Thus, the NBU's monetary policy relies on the key rate as the main regulatory instrument, with the goal of maintaining price stability, which means low and stable inflation.

There are certain rules and procedures that are developed primarily for the implementation of monetary control. From a conceptual point of view, when we talk about banking control, we have to keep in mind regulation and supervision. This is precisely what is required by the so-called prudential rules, which regulate the safety, reliability and stability of the functioning of controlled institutions.

The main goal of these rules is to ensure that the banking sector and its institutions fulfill their functions in the economy. At the same time, all these institutions must remain solvent and sufficiently liquid.

This goal is achieved through the process of inspections of supervised institutions, when groups of inspection bodies annually visit and inspect commercial banks. The audit is carried out quite thoroughly and very detailed reports are compiled. Based on these reports, decisions are made and sometimes orders are made to these institutions to change their practices.

The bank (discount) rate is the key rate of the NBU, which is the main indicator of the effectiveness of monetary policy and a benchmark for the cost of attracted and placed funds for the state, commercial banks and other participants in the country's money market. .

The key rate is set on the basis of a comprehensive analysis and forecast of macroeconomic, monetary and financial events prepared by the NBU.

The decision on the key rate is approved by the NBU Board at a meeting on monetary policy based on proposals from the Department of Monetary Policy and Economic Analysis after discussion at a meeting of the Monetary Policy Committee and international partners. The NBU publishes the key rate on the official website of the NBU.

After each monetary policy briefing where a new key rate is announced, the media informs market participants about what to expect from lending rates.

Whenever measures to revive lending are discussed, a decision is made on the value of the NBU key rate. This is how the NBU directly influences the cost of loans and deposits through the discount rate.

The National Bank of Ukraine's priority is to ensure price stability, i.e. low and stable inflation. The key interest rate, also known as the discount rate, is the main instrument for this purpose. By setting it at a certain level, the central bank provides commercial banks with a benchmark for the cost of short-term resources. Based on this benchmark, banks then set the cost of deposits and loans for their customers.

The changes of NBU discount rate for the period of 1992-2023 are presented in the Table 1.

Table 1

Average annual discount rate of the national bank of Ukraine, %, 1992–2023

Year	Bank rate, %	Year	Bank rate, %	Year	Bank rate, %	Year	Bank rate, %
1992	55,0	2000	30,8	2008	11,0	2016	17,3
1993	170,0	2001	18,3	2009	10,6	2017	11,8
1994	211,4	2002	9,1	2010	8,6	2018	17,3
1995	114,4	2003	8,2	2011	7,5	2019	16,7
1996	75,1	2004	9,5	2012	3,3	2020	7,4
1997	24,0	2005	8,5	2013	7,3	2021	7,7
1998	53,8	2006	8,0	2014	26,6	2022	20,7
1999	50,7	2007	30,8	2015	11,0	2023	23,7

Source: National Bank of Ukraine [35].

As evidenced by the data in Table 1, for 30 years the NBU, focusing on the global situation on the world economy and the state of the national economy, has significantly changed the value of the discount rate.

The minimum annual average was recorded in 2013 (3.3%), and the maximum in 1994 (221.4%).

More visible the corresponding data are presented in the Graph 1.

Special attention should be given not so much to the isolated change in the discount rate but rather to the results of a qualitative analysis of these changes in relation to other indicators of bank activities and the overall economic performance.

Last year, the National Bank of Ukraine (NBU) sharply increased the discount rate from 10% to 25%. Consequently, interest rates on deposit certificates also increased. In 2022, commercial banks started receiving an interest rate of 23% on them (NBU's discount rate minus 2%).

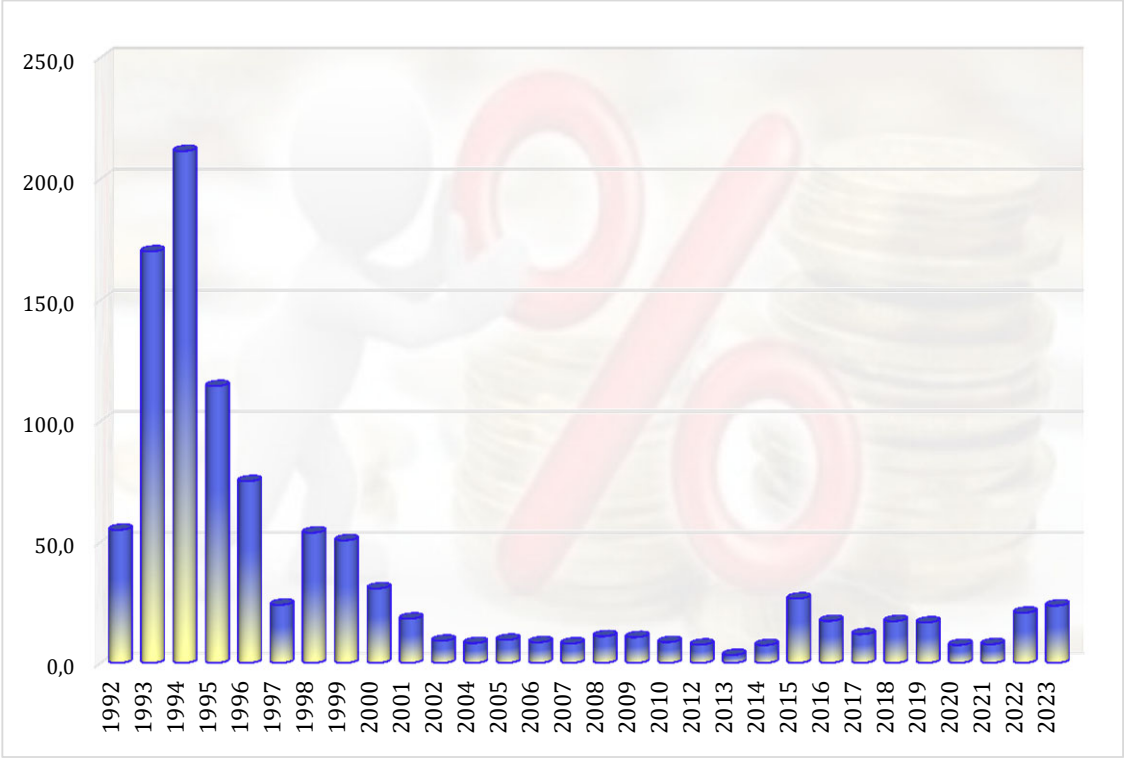

Fig. 1. Dynamics of the annual discount rate of the National Bank of Ukraine, %, 1992–2023

Source: National Bank of Ukraine [35].

In 2023, the NBU changed this model. Specifically, deposit certificates are now issued in two types.

The first type is overnight deposit certificates with a maturity of one day at the discount rate minus 5%. This means that banks receive 20%. The fact that these funds are "overnight" (deposited overnight at the NBU) should not mislead you regarding their short-term nature: banks can reinvest in these financial instruments daily, effectively turning "overnight" deposit certificates into "annual".

This is why the volume of bank investments in NBU deposit certificates increased in 2022 from 95 billion UAH at the beginning of the year to 456 billion UAH at the end, or nearly 5 times.

The authors emphasize that this money (almost half a trillion UAH, which is more than 10 billion USD) is liquidity withdrawn from the economy.

Additionally, the interest accrued on them (over 40 billion UAH last year) is the central bank's net issuance, carried out in the interests of a group of commercial banks. In other words, to pay interest on NBU deposit certificates, the NBU effectively "printed" 40 billion UAH.

There is also an interesting aspect in the context of the NBU's income formation. According to current legislation, this income is annually transferred to the state budget.

It is important to understand how this income is formed. Using the classical scheme: income minus expenses plus changes in reserves for assets. The NBU's expenses include payments for deposit certificates, while its income includes interest on refinancing loans, income from securities, and positive exchange rate differences from currency market operations.

By the way, the refinancing rate, i.e., the cost of loans provided by the NBU to banks, is also tied to the discount rate plus 2%, which is 27% annually. Banks practically do not use this channel to replenish their liquidity as the cost of resources is too high.

Essentially, due to the high profitability of NBU deposit certificates, the NBU operates as a “vacuum cleaner”, withdrawing “excess” money from the economy.

At the same time, by increasing the costs of servicing deposit certificates, the National Bank effectively reduces the amount of profit it has to transfer to the Government in the form of interest on these certificates. In other words, the “seigniorage”, namely the profit from printing money, is distributed not in favor of the society but in favor of a group of banks.

Starting from April 2023, for the convenience of banks, the NBU introduced another type of the mentioned securities: issuing deposit certificates for 90 days through tenders at the discount rate, which is 25%. This is the second type of deposit certificates.

This financial “iceberg” is only available to banks that accumulate certain amounts of individual deposits in their portfolios.

At present, the authors would like to draw the readers' attention to a very interesting and important circumstance. According to our calculations, an average of 320 billion UAH is held in “overnight” deposit certificates, bringing banks 175 million UAH in profit per day. In three-month certificates, the average is 160 billion UAH, which means an additional 110 million UAH in banks' daily profit.

Thus, in total, through deposit certificates using the excessively high NBU discount rate, 480 billion UAH of banking liquidity, which has been withdrawn from the economy, is “locked". This process costs the state 270 million UAH per day.

Attempting to justify their actions in a non-scientific manner, as mentioned above, the NBU explains this withdrawal of liquidity from the national economy as a measure to combat inflation. This “scientific” basis requires a deeper analysis.

According to official NBU statistics, in 2022, it purchased military bonds from the Ministry of Finance for more than 400 billion UAH (as part of so-called quasi-fiscal dominance). These funds entered the economy through budgetary financing and partially settled in banks. However, with the help of deposit certificates, 480 billion UAH has been withdrawn from the money circulation, which is 80 billion UAH more.

In other words, during the war and an unprecedented economic crisis, the NBU has a positive balance of operations in the liquidity market. Undoubtedly, this phenomenon is “unique” in modern, and not only modern, economic theory and historical practice. At least, the analysis shows that during the 20th century, in all countries that participated in wars in one way or another, the central bank became the lender of last resort for the market and the government.

But, as they say, the story doesn't end here. If we have mentioned government bonds, let's consider the scheme involving deposit certificates more broadly. So, the National Bank of Ukraine (NBU) purchases government bonds from the Ministry of Finance, and it does so conceptually correctly because during a war, it's necessary to finance the country's budget deficit. It's better to do this from one's own resources without resorting to external borrowing.

However, the yield rate on these bonds, according to NBU procedures, should be tied to the discount rate (25% in 2022 and 20% in the current year) that the National Bank of Ukraine unilaterally determines. In other words, bondholders set the yield level for the issuer, not the other way around.

Therefore, the Ministry of Finance accrues a yield of 25% on the portfolio of government bonds owned by the NBU (UAH 400 billion), and the National Bank accrues 20–25% on the portfolio of deposit certificates of commercial banks (UAH 480 billion). The value of these portfolios in NBU's assets (bonds) and liabilities (deposit certificates) does not differ significantly (400 billion versus 480 billion UAH).

This balanced approach results in the yield on assets/liabilities of the NBU: 25% is accrued on bonds in assets, and an average of 22% is accrued on deposit certificates in liabilities.

Thus, the authors draw an important conceptual conclusion that during a war, the National Bank becomes a transit node for transferring profits from the budget, which has a significant deficit, to the

banking system. The high yield on government bonds means that the Ministry of Finance accrues an annual yield of UAH 100 billion on them, which is a quarter of the principal, further increasing the already high government debt burden, emphasizing once again that it is deficit-driven.

Then, these funds flow into the commercial banking sector (including foreign and state-owned banks) through operations with the placement of NBU deposit certificates: UAH 40 billion in 2022 (when the discount rate of 25% was applied only from June to December) and already UAH 45 billion for the first five months of 2023. Of course, the actual accrual of income on government bonds and deposit certificates does not coincide in time. However, the main thing is that the balance is maintained between assets and liabilities.

Under such conditions, lending to the real sector of the economy has completely collapsed because there are virtually no business entities in the country (except for trade) that can take out loans at interest rates of 30% and above. Thus, actual lending to enterprises has now been reduced to the volume of programs for state compensation of interest rates on loans at 5–7–9%.

In this way, the state pays twice—first for government bonds and then by compensating business loan interest rates. The center of gravity of monetary policy is thus shifted from the financial system to the state budget and taxpayers.

We'll leave the impact of tight monetary policy on reducing inflation in parentheses. This is a topic for a separate article. Let's just note that inflation in Ukraine is predominantly non-monetary in nature and is not caused by an increase in household incomes, so it cannot be "cured" by raising the discount rate.

Furthermore, with inflation at 16%, we currently have a real positive interest rate (base rate minus inflation) of 9%, which is evidence of an overly tight monetary policy (in most countries, negative real interest rates are applied to overcome crises).

At the same time, businesses in Ukraine cannot thrive without credit support. For instance, a survey of business expectations in the first quarter of 2023 conducted by the NBU revealed that the proportion of companies planning to take bank loans stands at 35.4% (compared to 35.0% in the fourth quarter of 2022). As before, companies planning to attract loans prefer loans in the national currency – 79.7% (compared to 84.9% in the fourth quarter of 2022).

The most significant obstacle to obtaining new loans remains high interest rates on loans (48.1% of responses). There is an increasing impact of the "too complicated document processing procedure" factor (an increase of 3.0 percentage points to 23.4%).

Among the areas of lending are state orders, including in the defense industry, business relocation and recovery after de-occupation, adaptation to wartime conditions, and the energy crisis.

The current monetary transmission has introduced significant market distortions into the determination of loan rates.

If the average corporate lending rate is 18% (due to state subsidies to compensate for interest rates), in the household sector, it is already 36% (where such state programs to compensate interest rates are almost non-existent, except for mortgages). This means the gap is twice as large, and it's primarily borne by the population. Under the current monetary transmission, it's not only the state budget but also ordinary Ukrainians who are paying.

By the way, the volume of loans is decreasing. If as of 02.01.2022, the total loan portfolio was UAH 788 billion, as of 05.01.2023, it's already UAH 645 billion. Reductions have occurred across all portfolios: loans to legal entities have decreased from UAH 582 billion to UAH 514 billion, and to individuals, it has decreased from UAH 206 billion to UAH 131 billion.

And this is against the backdrop of the hryvnia devaluation from 25 to 36.6 UAH/USD and 25% inflation last year: devaluation increased the nominal value of foreign currency loans in hryvnia equivalent, while inflation led to an increase in the nominal value of new loans.

In other words, the 25% discount rate model has effectively led to a complete rupture of the credit cycle and the exclusion of the credit lever from the list of drivers aimed at crisis amortization.

Part of the money that the NBU "prints" for banks goes towards compensating problem loans: the volume of reserves for overdue debt of legal entities in banks has increased during the war from UAH 260 billion to UAH 271 billion, and for overdue debt of individuals – from UAH 43 billion to UAH 74 billion.

Considering the slight deterioration in the legal entities' portfolio, it would be much cheaper for the state to introduce a moratorium on consumer loan repayments during the war, compensating banks for lost liquidity through long-term refinancing at the term of such loans. However, this requires having a discount rate not exceeding 10%, so that the refinancing rate for banks is 12%, not 27% as it is now.

In the context of this topic, let's also consider two more myths that circulate in the context of the deposit certificate scheme. To do this, it's sufficient to analyze the data in Table 2, which indicate that the net income of commercial banks has grown rapidly this year, increasing by nearly 54 billion hryvnias in the first five months of the year. If the policy rate were lowered to 10%, the authors do not

Table 2

Revenues and expenditures of Ukrainian banks (UAH million)

Showcases	January 2023	January-February 2023	January-March 2023	January-April 2023	January-May 2023
INCOME	38 650	65 825	103 984	136 390	171 743
Interest income	23 765	44 436	68 138	91 349	***116 144***
Commission income	8 307	15 582	23 511	30 960	39 211
The result of the re-evaluation and operation of the purchase and sale	5 932	4 649	10 136	11 190	11 754
Other operating incomes	506	883	1 536	1 940	3 039
income	76	141	422	501	993
Return of write-offs of assets	64	133	242	451	602
Costs	23 956	44 347	69 928	92 393	118 154
Interest rates	7 245	14 000	21 932	29 942	***38 591***
Commission costs	3 895	7 487	10 511	14 004	18 398
Other Operating Costs	1 075	2 445	4 278	5 890	7 558
General administrative expenses	6 417	13 202	20 925	28 295	35 500
Others costs	561	1 182	1 755	2 386	3 071
Deduction to reserves	2 488	2 517	3 805	3 359	4 680
Tax on the butt	2 275	3 514	6 723	8 517	10 355
Net profit (loss)	14 694	21 478	34 056	43 997	**53 589**

Source: National Bank of Ukraine [35].

rule out that commercial banks would find that the income from NBU deposit certificates no longer covers their cost base.

However, more interesting conclusions can be drawn from the analysis of the ratio of interest income of banks, including those paid by the state (for domestic government bonds – by the Ministry of Finance, and for deposit certificates – by the NBU), which amounted to UAH 116 billion for the first five months of the current year, while interest expenses were only UAH 38.6 billion or 33% of interest income.

In addition, banks earned a significant commission of UAH 39 billion against low commission expenses of UAH 18 billion (while insisting that customers do not deposit "worn" or old dollar bills, demanding a 10–30% commission).

By the way, banks incur huge administrative expenses – UAH 35.5 billion, financed through NBU's printing press. In contrast, provisions are only UAH 4.6 billion. This last figure is essential: during the same period, banks received UAH 45 billion in profit from deposit certificates (excluding profit from domestic government bonds), while provisions for doubtful loans amounted to only UAH 4.6 billion.

Another important conclusion: for every hryvnia of banking interest expense, there are three hryvnias of interest income, and commission income minus expenses covers 60% of bank administrative expenses.

Provisions are insignificant and do not require additional financial stimulus from the state. As a result, amid a non-functioning economy, banks recorded a net profit of UAH 54 billion in January-May 2023, which was generated through the 'printing of profit' by the NBU in the amount of UAH 45 billion!

So, if we subtract the funds received by banks through deposit certificates from their income, their profitability would balance at zero. In fact, alongside the Ministry of Finance, the NBU has become perhaps the only source of stable income for banks.

Through income from NBU deposit certificates, banks can increase their portfolio of deposits from the public. Banks indeed hold about UAH 2 trillion of client funds, but in the context of time deposits, we are only interested in the deposits of individuals.

Table 3

Amounts of deposits of individuals in commercial banks of Ukraine, UAH, billion

Account type	As of 1.02.2022	As of 1.02.2023	As of 01.05.2023
Accounts on demand	399	591	587
Share of funds on demand	56%	64%	62%
Deposit accounts	315	338	360

Source: NBU [35], authors' calculations.

According to the data in Table 3, Ukrainian banks significantly increased the amount of demand deposits from UAH 399 billion to UAH 587 billion, on which they practically do not accrue interest (except for the salaries of military personnel, sometimes 3–5%).

These are the funds that the population simply keeps in banks as a storage for current card transactions. This is a behavioral pattern of individuals during the war, to avoid carrying cash around the country. Additionally, these cards are used to transfer funds for the maintenance of Ukrainian refugees abroad.

It should be noted that these funds would have been in banks even with a zero-interest rate. The owners of these funds prioritize the security of preservation and the convenience of transactions and card-to-card transfers over interest income. The share of funds available for demand increased during the war (from 56% to 62%), despite the increase in the policy rate from 10% to 25%.

The deposit accounts of the population increased from UAH 315 billion to UAH 360 billion, an increase of only UAH 45 billion. Moreover, the share of deposits even decreased, from 44% to 38%, a decrease of 6%.

Therefore, the authors conclude that, effectively, to attract one hryvnia in time deposits, the NBU paid banks two hryvnias in income for deposit certificates: the amount of public deposits increased by UAH 45 billion during the war period, while the NBU paid banks UAH 85 billion in profit for deposit certificates.

At the same time, banks are not in a hurry to share their income from NBU deposit certificates, which are earned precisely from the funds of individuals. For example, the weighted average interest rate on deposits of the population during the war increased from 8% to 13.8%, while the rate on deposit certificates increased from 8% to 25%.

In total, the combined amount of funds from the population in banks during the war increased to UAH 947 billion, an increase of 36%. However, this increase, often cited by supporters of the NBU's high-interest rate policy, was achieved either due to the growth of demand deposits, or due to an increase in foreign currency deposits by 9%, which means either through inflation, devaluation, or an increase in the defense sector's payroll to UAH 750 billion per year, or thanks to the behavioral model of the population during the war.

Thus, the authors make another important conclusion. None of the factors listed above are related to the NBU's strict monetary policy and the need to "print" profits for banks.

Of course, the state is interested in the stability of the banking system; no one wants a repeat of the liquidation of nearly 100 commercial banks that occurred in 2014–2015.

However, the state has other tools for this purpose: a group of state-owned banks that control over 50% of systemic assets, an increase in the reserve requirement on the correspondent account with the NBU for funds attracted from the public by banks to 50% and higher. During wartime, banking institutions are transformed into payment and cash centers, and the safekeeping of public funds is entrusted to the National Bank.

It is quite understandable that the current policy of the NBU essentially indulges commercial banks, which receive 85 billion UAH in income during the war practically out of thin air, at the expense of the targeted emission of the central bank (which, by the way, directly impacts inflation dynamics).

In such conditions, banks are not interested in lending or building quality loan portfolios (especially government institutions), as any losses on their balance sheets will be covered by the NBU.

The profit from the emission, or seigniorage, is not transferred to the government in the interest of the wartime economy, but to a group of commercial banks, concurrently forming a positive balance for themselves in liquidity market operations, which is unacceptable during such a deep economic crisis.

After all, many sectors of the economy suffered during the war: transportation, energy, but no one receives "printed" hryvnias from the NBU except for banks.

By the way, the 85 billion UAH transferred by the state to the banking system is almost equivalent to the annual funds allocated for increasing the salaries of military personnel to 30,000 UAH.

Of course, the practice of paying interest to financial institutions for their deposits with the central bank exists in other countries as well. However, such hyperbolic forms of this scheme have only developed in Ukraine.

Resuming all mentioned above, the authors came to conclusion that the National Bank of Ukraine's priority is to ensure price stability, i.e. low and stable inflation. The key interest rate, also known as the discount rate, is the main instrument for this purpose. By setting it at a certain level, the central bank provides commercial banks with a benchmark for the cost of short-term resources. Based on this benchmark, banks then set the cost of deposits and loans for their customers.

Since May 2019, due to moderate inflationary risks, the NBU has been gradually reducing the key policy rate, and today it is set at 6%. Accordingly, banks began to reduce deposit and loan rates. While in July last year the average interest rate on loans to businesses was 18%, in July this year the cost of borrowing for them fell to less than 10%. The cost of mortgage loans was also falling in response to the NBU's key policy rate cut. *So, the key policy rate does affect lending rates.*

In addition to the cost of resources for the bank, the level of risk on loans affects interest rates. *Credit risk – the risk of non-repayment of funds – is mainly taken into account*. Therefore, the cost of a loan will be different for different groups of borrowers, depending on the likelihood of their repayment.

For example, interest rates on loans to subsidiaries of international corporations, which, in addition to their strong financial position, also have the support of their parent companies, decreased the most – to 7% in August 2020. Since the risks of lending to such companies are insignificant for banks, they can set interest rates close to the discount rate. Of course, for small companies that sometimes do not have transparent financial statements or are more vulnerable to unfavorable economic conditions, the rates will be higher, and sometimes the bank may refuse to issue a loan if it considers the risk too high.

The term of the loan is also important, as by providing funds for a longer term, banks assume higher risks and therefore include compensation for these risks in the cost of the loan. The higher cost of long-term loans reflects the banks' uncertainty about macroeconomic development and the cost of borrowing in the future. For example, loans for up to 1 month are currently 6-8 percentage points cheaper for companies than loans for a longer term. Such short-term loans are mostly used by large companies to replenish working capital. Longer investment loans are more expensive.

longer investment loans will be more expensive.

Currently, households mostly take out loans for current needs (cash loans for household appliances, card loans, etc***).*** *There are two factors that play a major role in the cost of such loans: high risks and the balance of supply and demand.* The discount rate is less important for the cost of such loans. Due to the generally low volume and short maturity of the loans, their true high cost is not felt by borrowers, especially during periods of rapid income growth. And positive consumer sentiment is fueling the desire to use the loan to make desired purchases right now.

The high cost of short-term loans for current needs and its low correlation with the central bank rate is not unique to Ukraine. For example, in the United States, the average effective interest rate on card loans is currently above 15%, despite the fact that the Fed Funds rate (the equivalent of the NBU in the United States) is close to zero.

Thanks to favorable macroeconomic conditions, low and stable inflation, and a cut in the key policy rate, mortgage rates have already come down: rates have fallen from 18.7% in June 2019 to around 13% in August 2020. (See the Graph 2).

However, further reductions in mortgage rates will require progress in resolving real estate market problems, improving creditor protection, and reducing credit risks. The most notable risks are those in the primary housing market, where many unscrupulous developers operate. Banks will certainly include all credit risks in the cost of loans. At the same time, in the secondary market, where the bank receives ready-made housing as collateral, lenders are already offering rates close to 10% in some cases.

According to authors' point of view, there are no fundamental obstacles to further reduction in loan rates right now. At the same time, it is important to understand that it will take time for better macroeconomic conditions and changes in the key policy rate to finally affect the cost of loans for end users, whether businesses or individuals. For example, the key policy rate cut to 6% has not yet been fully reflected in bank rates.

Therefore, the cost of loans will continue to decline for some time, along with the cost of deposits. This will be facilitated by low and moderate inflation, which means a low-key policy rate, and the absence of threats of significant deposit outflow

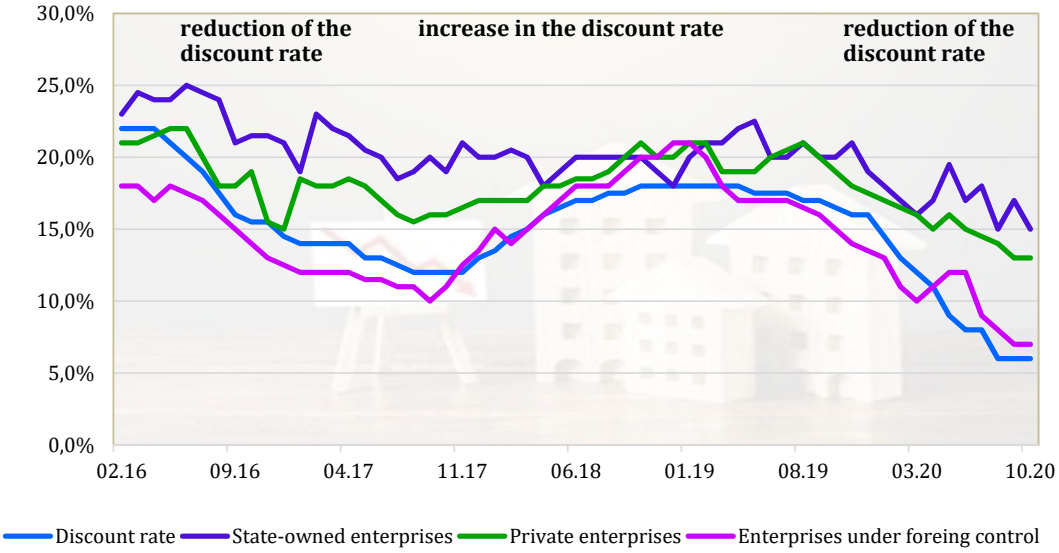

Fig. 2. Hryvnia loans to enterprises, % per annum

Source: NBU [35], authors' calculations.

Simultaneously with the introduction of the 25% (2022) or even 20% (2023) key policy rate, bank lending turned from growth to decline. Its level decreased by a tenth, and the latest monthly data showed a further decline due to the high cost of loans by another UAH 10 billion.

The NBU justifies itself by saying that such a cooling of the economy is a necessary sacrifice to overcome inflation, and that this rate is in line with the global trend of unprecedented rate hikes to combat global inflation.

However, the sacrifice has gone on for too long, and the NBU's policy compliance with international best practices contains many details where the devil is in the details.

Graph 3shows this using the typical example of the United States. Indeed, unprecedented rate increases have been observed in other countries as well.

However, the NBU is silent on the fact that the rates are raised in such a way that they still remain well below inflation, in order to avoid overcooling the economy and the risk of provoking a recession.

And with this policy, despite the NBU's arguments against lowering the rate, there is no increase in inflation in other countries. And in Ukraine, the key policy rate is still close to inflation (Graph 4).

To hide this blatant discrepancy with global practice from both the Ukrainian and international community, the NBU plots inflation and interest rates in the US and other countries on different scales rather than on the same one.

And it chooses the scale for the key policy rate in such a way that it is visually perceived not as significantly lower, as it is in Graph 4, but as close to inflation. Against this background, the fact that we have a rate of 25% roughly equal to inflation looks more or less decent.

By declaring the rate to be the main instrument for influencing inflation, the NBU has excluded the most textbook factor from its quantitative analysis – money supply. You won't find money supply charts like the ones in *Graph 3 and Graph 4* anywhere else.

These graphs clearly illustrate the dependence of prices on money, which means that the dynamics of inflation repeats the dynamics of the monetary base with a certain delay.

Numerous other factors distort the inflation curve (the most recent notable distortion was caused by the lockdowns, which caused an atypical easing of inflation due to a slowdown in the velocity of money), but the overall picture remains the same, and the dominant influence of the monetary base on inflation is still clearly visible.

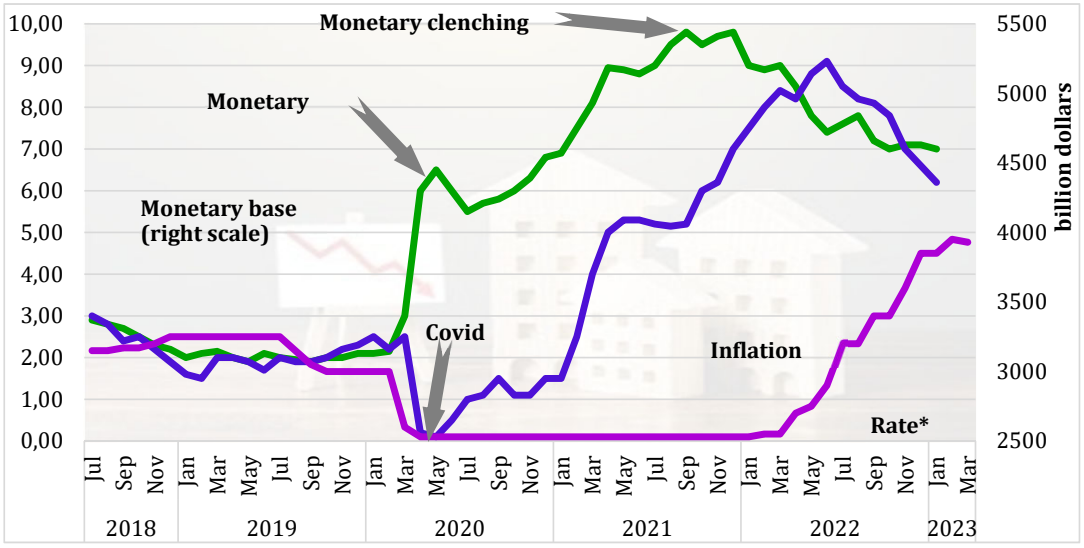

Fig. 3. United States. The dynamics of the monetary base determines the changes of inflation rate with a certain delay

Sources: Federal Reserve, USA [38].

** Federal funds rate (upper bound of the narrow rate band is shown).*

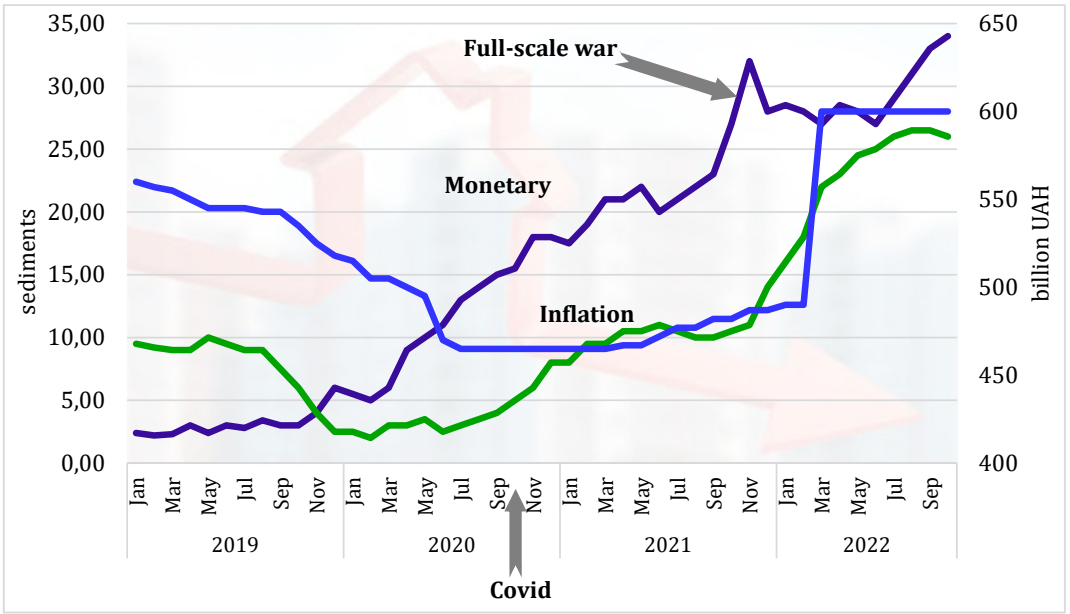

Fig. 4. Ukraine is no exception, and the monetary base has a significant impact on inflation rate

Sources: NBU [35], State Statistics Committee [36].

As for the key policy rate, it remained in a supporting role. This is evident from the fact that the relay race of rate hikes was launched much later than the monetary base turns (when monetary easing was followed by a tightening).

This explains the paradox that inflation turned from upward to downward when rates were still lagging inflation by a factor of five or more.

The answer is simple: those rate hikes had nothing to do with reducing inflation, and the downward reversal was dictated only by money supply compression. Moreover, there is a general conclusion that, in unstable force majeure situations, the standard rule of keeping the key policy rate above or at the level of inflation is no longer valid.

That is, throughout the entire transition period, and until inflation approaches the target under the influence of more powerful instruments, the key policy rate plays a minimal role. Only then can the weak effects of the rate "come back into play".

For example, in the United States, this means that the baton of rate hikes could have been stopped when the rate was returned to its pre-prime rate of 2% and left at that level. Then, it would be possible to continue to fight inflation using only the money supply instrument throughout the transition period. This would save from the risk of triggering a recession by the cooling effect of the key policy rate and from the negative consequences of higher yields and lower market values of government bonds and government securities.

Ukraine is no exception, and as Graph 4 shows, the current stabilization of inflation is largely due to the previous temporary stabilization of the monetary base, although the NBU was quick to attribute this to the "success" of the 25% rate.

This chart also suggests that, given the growth of the monetary base that has been going on for several months, we will see prices turn in the other direction rather than downward in late summer or early fall.

Where Ukraine is an exception is that, despite the textbook dependence of prices on money and its own extensive experience in this regard (the hyperinflation of the 1990s was not caused by the rate and was not overcome by the rate), the NBU demonstratively emphasizes the non-monetary nature of Ukrainian inflation, i.e., the absence or weakness of the money supply's influence on prices.

At the same time, the NBU exaggerates the impact of the key policy rate with the same persistence. The authors are absolutely sure that "tight" monetary policy has been mistakenly equated with a high key policy rate alone. This has resulted in the NBU using a high key policy rate to try in vain to block the more powerful countervailing effect of money, and inflation, which is in fact driven by money, is used as an excuse to keep the rate high. And this vicious circle has been going on for years.

In addition, the existence of the aforementioned force majeure in Ukraine, which offsets the impact of the key policy rate on prices, is doubly obvious: along with changes in the money supply, we also have a reduction in the commodity supply due to the destruction caused by the full-scale war.

Moreover, despite the declared goal of fighting inflation, the key policy rate is actually acting to increase inflation. First, hypothermia reduces the commodity mass in addition to the war-related reductions. Second, the UAH 40 billion issue of certificates increased the money supply and boosted inflation by about 5%.

And similarly, one cannot agree with the NBU's attempts to attribute to the current rate the same ability to stabilize the national currency as in developed countries. And this is when the exchange rate is now mainly dependent on the inflow of foreign currency aid.

What does the experience of other countries tell us?

Graph 5 once again shows the tendency for a "high" rate to be low relative to inflation, and this is true even in countries with almost the same inflation rate as Ukraine, such as Hungary or Moldova.

As for the inflexible principle of keeping the key policy rate at about the level of inflation, Ukraine is almost alone in the club of orthodox supporters of the old rules; and here the NBU risks getting into the wrong textbooks. There is nothing surprising in these "violations" of traditional recommendations. Both theory and practice have confirmed that in extreme force majeure situations, the principle of a "rate above or at the level of inflation" (a positive rate in real terms) loses its force, as inflation is dictated by the money supply and other powerful factors.

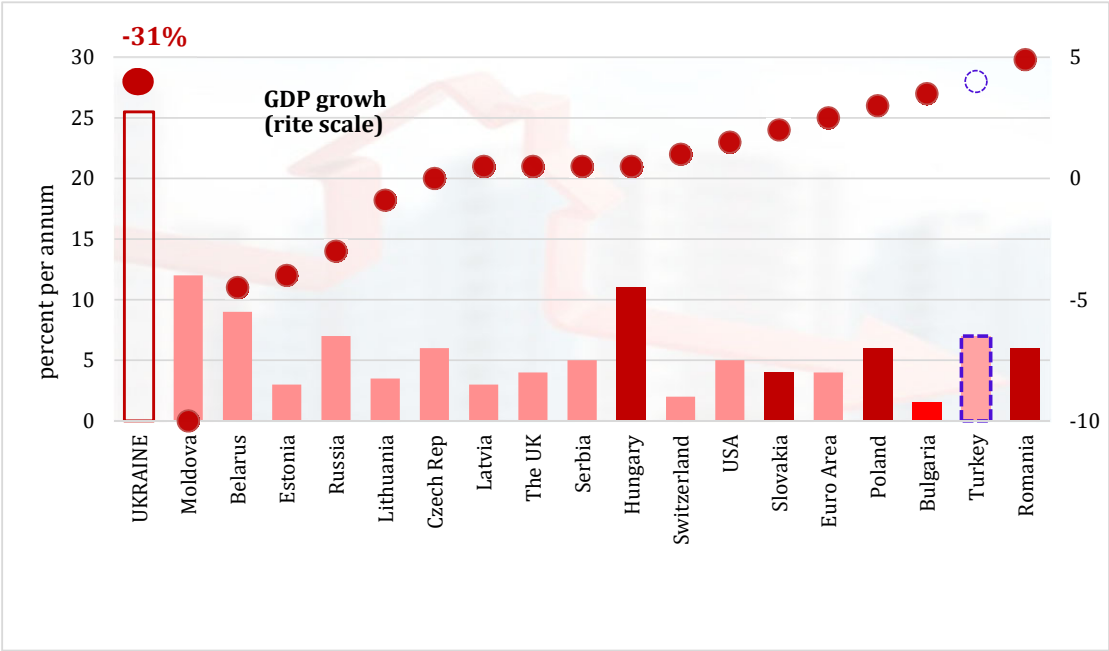

Fig. 5. GDP growth and the key policy rate in different European countries, February 2023

Source: International Monetary Fund [37].

However, for obvious reasons, the IMF cannot yet specify exactly what those extreme situations are that cancel the rate's impact on inflation, and each country determines the existence of such a situation at its own discretion. Obviously, the experience will be generalized and recommendations will be developed later.

The NBU has judged that we do not have an extreme situation; the key policy rate can remain the main tool for fighting inflation, and the rule "lower the rate, higher the inflation" also remains as firm as the law of physics.

Turkey's policy with 55% inflation, 8.5% interest rate, and 3.5% growth stands out, Graph 5 The fact is that the Turkish authorities deliberately allow inflation by financing investment projects with debt and achieving one of the fastest growth rates. Development in this way may look questionable, but what is certain is that Turkey's case cannot serve as proof that it is impossible to lower the interest rate in Ukraine.

We would also like to emphasize the example of Bulgaria, where the interest rate is only 1.4% with an inflation rate of 16%. It is possible that this is why Bulgaria's growth rate is one of the highest among this group of countries.

And if this hypothesis is confirmed, then soon all other countries will also discover the opportunity to move to ultra-low rates and low economic cooling even more boldly.

And Ukraine can take advantage of this like no other, since the reduction of the commodity mass by full-scale aggression has further paralyzed the impact of the discount rate on inflation and beyond; and now the rate can be determined solely on the basis of minimizing its destructive cooling effect.

The question remains: how much the key policy rate should be cut. The first option to start the discussion would be the previous 10% rate. What is certain is that a gradual reduction of the rate by 1–2% would be nothing more than a gradual chopping off of the tail.

We should also add that to ensure a smooth transition process after a radical rate cut, the need for external assistance is estimated at $10 billion. Such a turnaround would help solve numerous knots of problems listed below.

Expanding loan interest reduction programs and improving recovery and development strategies. The implementation of programs such as 5–7–9% has proven that, given the availability of loans, businesses are eager to develop despite Russia's full-scale aggression, and lending under such programs is growing, in contrast to the decline in lending on a general basis due to the high cost of loans.

The key policy rate cut will actually be a systemic macro expansion of local programs, which will be more effective than the current plans to expand the number of participants in these programs, as this path is limited by budgetary constraints.

This is most clearly seen in the intention to extend state support from small to large enterprises. For example, the project "Establishment of the National Fund for Structural Transformation..." envisages that interest will be compensated for loans with a total amount of up to UAH 700 billion.

This will cost the budget more than UAH 70 billion. In addition, the launch of a 9% loan program to rebuild war-ravaged businesses will unfortunately also require budgetary expenditures.

Therefore, the key policy rate cut will be a systematic continuation of the idea of cheaper loans, now at the national level, for everyone.

The dispute between the Ministry of Finance and the NBU over government bond yields. The Ministry of Finance is particularly interested in lowering the key policy rate, as, along with expanding the tax base, this will also help to reduce the yields on government bonds and interest costs. This means that "non-issue financing of the budget deficit" has contradictorily led to an increase in the deficit.

No less surprising are the attempts to combine the progressive requirement that the yield on government bonds be competitive and determined by the free market with a completely non-market-based discount rate of 25%, which administratively sets what the free market should voluntarily generate.

And now is the moment when a much lower rate, without the fear of inflation, will open up the possibility for government bonds and commercial loans to figure out how to compete in a real market.

Implementation of the 10–10–10 tax reform package. A tax rate cut will broaden the tax base and contribute to the success of these reforms. Increasing the level of cooperation with the IMF and other partners. The IMF's loans to the NBU are growing, but are still provided with some restraint. This stems from the IMF's position that in order to increase assistance to Ukraine, it should first "wait for greater stability" because at this time "it is unrealistic (unfair) to expect the Ukrainian authorities to develop and implement a far-reaching reform package".

And even the latest larger package of international aid worth $115 billion has so far materialized in the form of payments on the NBU's obligations to the IMF, leaving net aid of $1 billion.

In this context, the optimization of the key policy rate could accelerate the increase in foreign aid, as:

– this realistic measure would mark one of the turns from words to deeds in implementing reforms and fighting corruption;

– it will be not only European, but even global integration into truly best practices of setting the rate in extreme situations;

– and it will be a step towards creating a market environment favorable for recovery and development on a market basis.

In other words, the transition to a civilized interest rate policy will clear the way for the success of numerous accelerated recovery programs, as it is difficult to convince external donors and investors of anything when domestic investment is so slow, depressed, and far from being fully exhausted.

Conclusions. As conclusions and recommendations from this article, it is worth noting that the use of interest rate policy as a tool for regulating the banking system provides the National Bank and the Government with several advantages, including:

A. Simplicity of Implementation: To change the course of monetary policy, the National Bank of Ukraine (NBU) resorts to increasing or decreasing the discount rate.

B. Predictability of Results: When the discount rate is lowered, it leads to an increase in the liquidity level of the banking system, and vice versa.

C. Speed and Ease of Correcting Results: Corrections can be made quickly and easily by taking opposite actions.

The material presented allows for the following conceptual conclusions:

1. Interest rate policy is an effective tool for regulating the banking system, particularly a bank's credit potential.

Increases in interest rates change the attractiveness of certain investment strategies developed by the Government.

In Ukraine, as analysis shows, this leads to the withdrawal of funds from promising (direly needed by society) industries or the country as a whole.

In turn, such rapid repayment of funds leads to losses for asset holders. This inevitably results in further deleveraging by asset holders and a sharp increase in demand for liquidity.

According to the results of our analysis, this leads to inverters selling their most liquid assets, which will reduce the liquidity of their portfolios.

Although Ukraine's economic system has demonstrated resilience to higher interest rates at the aggregate level, the full impact of high interest rates (22–25%) remains uncertain as these rates have not yet fully impacted the economy.

In wartime conditions, high interest rates coupled with uncertain growth prospects could trigger a revaluation of asset prices and create the risk of further tightening of financial conditions for other investors, including foreign ones. This could pose risks to Ukraine's financial stability due to tightening financial conditions, sharp movements in asset prices and reduced confidence in the global banking system, as well as trade and financial spillovers.

The analysis shows that the measures taken by the NBU to hedge risks associated with higher interest rates are based on assumptions about the future path and volatility of interest rates and do not fully protect investors from the risks associated with higher and more volatile interest rates.

Losses resulting from high interest rates have already weakened the balance sheets of some large corporations and may continue to do so.

2. The decision to apply an expansionary or restrictive policy depends on the conjuncture of the financial market and the socio-economic situation in the country.

As is known, the main goal of expansionary policy is to increase aggregate demand to compensate for the shortfall in private demand. Expansionary policies aim to increase business investment and consumer spending by injecting money into the economy, either through direct spending on government deficits or by increasing lending to businesses and consumers.

Based on the results of the analysis carried out by the authors of this article, it is necessary to conclude that the Government of Ukraine (GoU) does not use the instrument of this policy. If only because the government is not pursuing policies that ensure people get more money. This could be achieved by reducing volumes, for example, of utility costs and direct taxes, which is envisaged by expansionary fiscal policy. This could help increase the money supply and stimulate global public demand.

Additionally, for example, the GoU could increase discretionary state’s spending by pumping more money into the economy through government contracts, such as for weapons production. Additionally, it can lower taxes and leave more money in the hands of people who will then continue to spend and invest.

At the end of the war, when Ukraine enters a phase of economic growth, the GoU may increase spending on infrastructure projects, social programs and other initiatives to increase demand and stimulate economic growth.

As the analysis showed, expansionary monetary policy works by increasing the money supply faster than usual or lowering short-term interest rates. For example, when the base rate on govern-

ment bonds decreases, the cost of borrowing from the NBU also decreases, giving commercial banks greater access to cash. This, in turn, allows banks to lend more of their capital to consumers and businesses. Obviously, when a central bank buys debt instruments, it injects capital directly into the economy.

3. The optimal discount rate should ensure the efficient resolution of tasks such as providing an adequate level of liquidity for banking institutions, balancing money supply and demand, stimulating bank credit issuance to the real sector of the economy, and enhancing the competitiveness of the domestic banking system.

It is necessary to develop the country's liquidity management strategy, including its foreign exchange reserves, should formulate specific policies on aspects of liquidity management, such as the size of assets, their structure, approach to liquidity management in different currencies, relative dependence on the use of certain financial instruments.

There should also be a strategy agreed with international creditors to restructure the debt and eliminate potential threats to both parties with loss of liquidity.

4. Given the negative side effects of interest rate caps, it is worth considering alternative ways to lower interest rates. The optimal solution always depends on the political goals that the country's top leadership sets for the NBU and the Government.

If the intended policy goal is to reduce the overall cost of credit in the economy or its individual sectors (types of economic activity), alternative solutions should be based on the reasons for causing excessively high rates, for example, lack of competition, the presence of excessive risk, a number of macroeconomic considerations.

To this end, the authors propose to create an effective credit monitoring mechanism, the activities of which will be aimed at analyzing data on the reasons for setting excessively high rates, as well as on trends occurring in other countries.

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