



National Bank
of Ukraine

The role of monetary policy in wartime and post-war recovery

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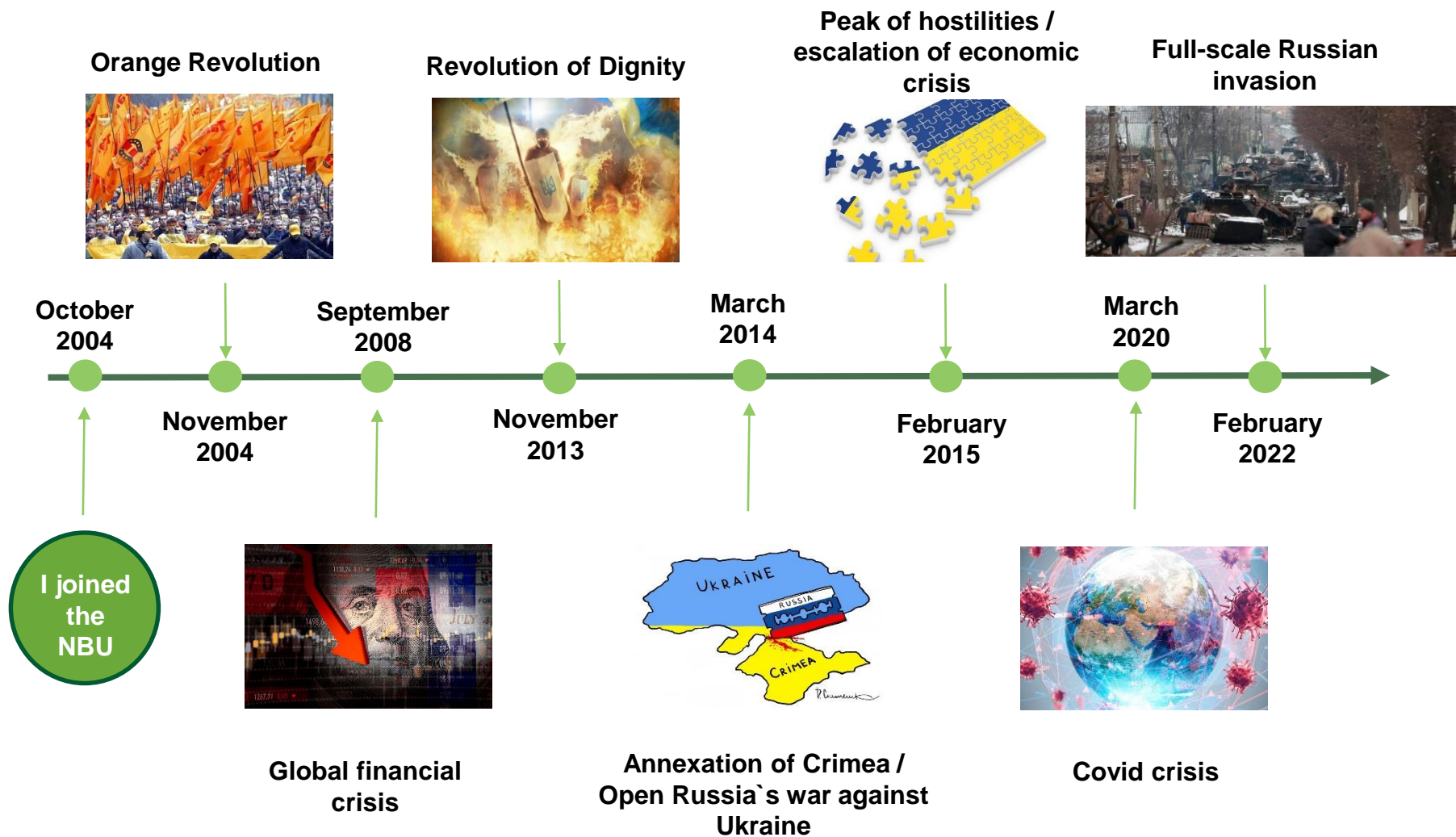
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Seminar: Designing the Institutional Setting for
Ukrainian Reconstruction

Disclaimer: the views and opinions are those of the author and
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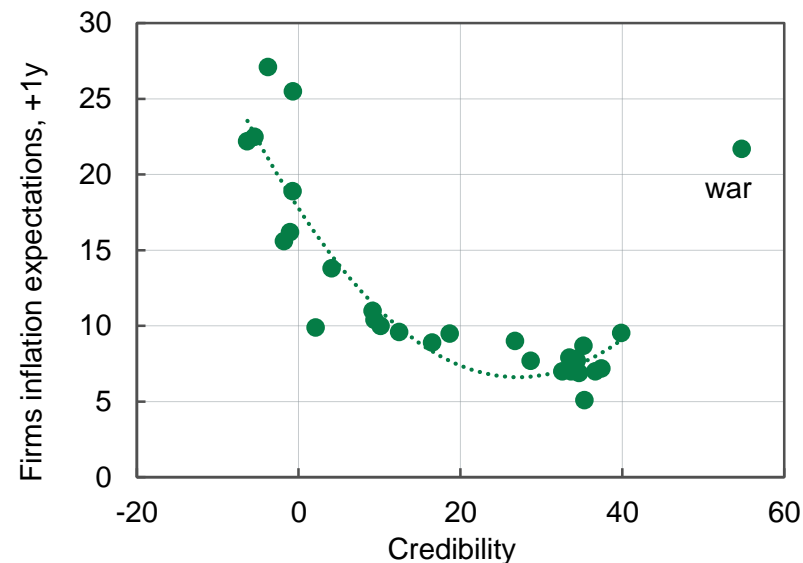
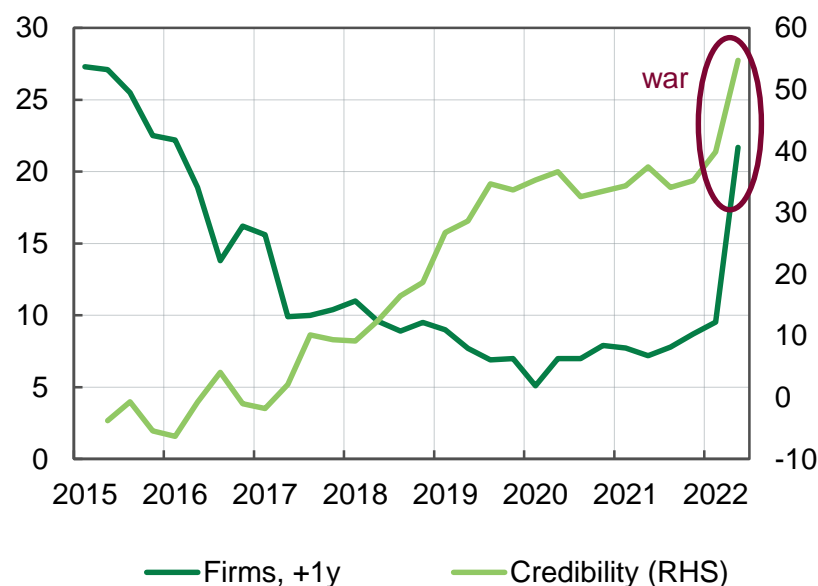


The general context of economic policy is hardly predictable. Monetary policy needs to be credible in order create predictability



Trust is the most valuable resource for the central bank

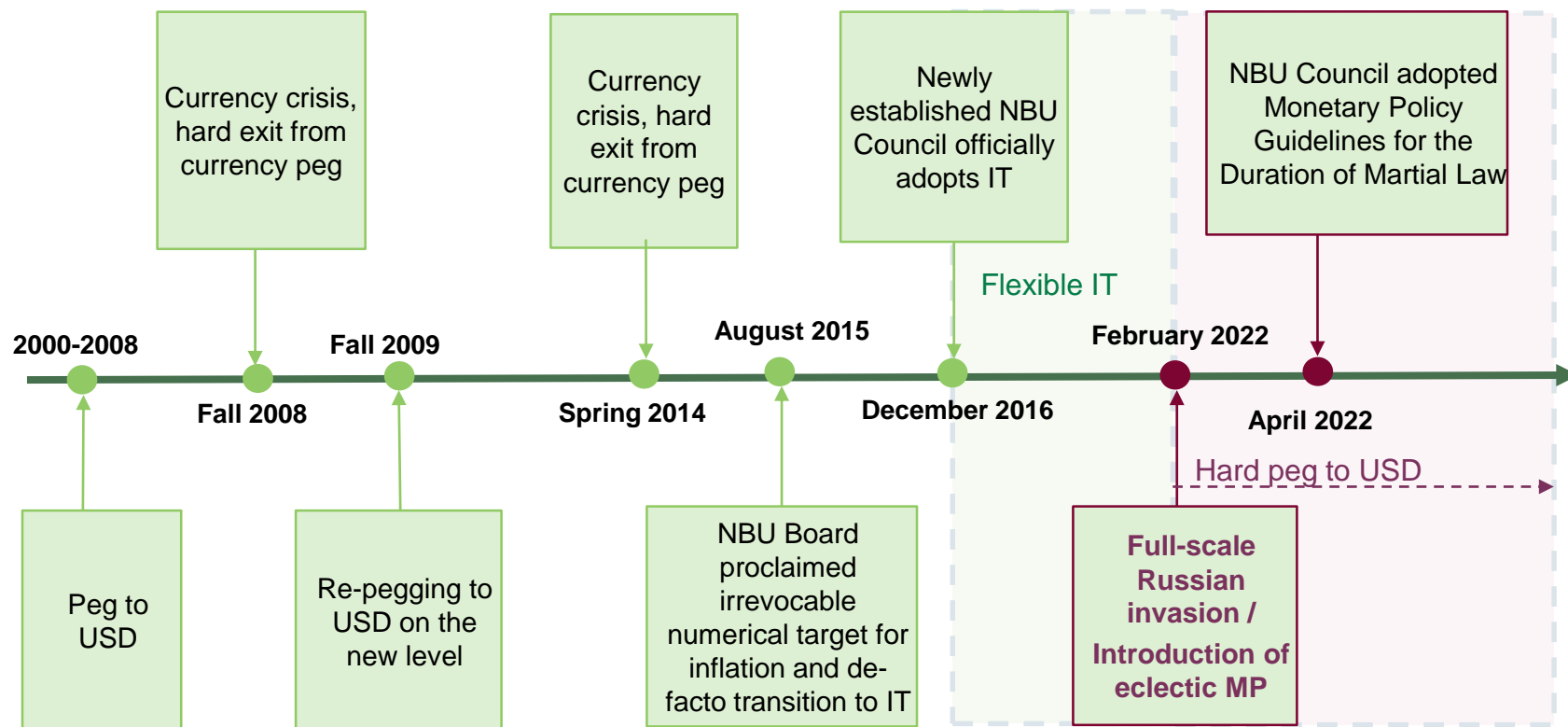
Firms' one-year-ahead inflation expectations and credibility*, %



*Credibility: the share of respondents that do not trust NBU is subtracted from the share of respondents that trust NBU.
Source: NBU

- CB's credibility is the most important factor in anchoring inflation expectations. In times of massive external shock (war), it helps to contain the panic

Evolution of monetary regimes in Ukraine





NBU's monetary policy during full-scale invasion

It impossible to develop universal monetary policy framework for the wartime. However, there are some common patterns

There is no universal recipe for anti-crisis policy

Each country has its own unique experience, which is determined by:

- different duration and scale of hostilities, their consequences
- pre-war state of the economy and its structure
- level of international reserves and public debt
- level of financial regulators and institutions development and level of confidence in them and in the national currency
- previous dynamic of inflation and degree of inflation expectations anchoring
- international military, political and financial support
- external conditions

Georgia → unfolding of the global financial crisis and decline in global commodity prices

Armenia → global disinflation caused by Covid-19

Iraq → rise in global oil prices

Ukraine → ongoing global spike in inflation, tightening of financial conditions in the world, decline in investors' risk appetite

There are certain patterns in the application of monetary policy instruments

1

Temporary pegging the exchange rate is a widespread and effective measure to stabilize the macro-financial situation and contain inflation → **Israel, Iraq, Georgia, Serbia**

BUT! **Pegging the exchange rate for a long time** may turn out to be unstable and lead to the accumulation of macroeconomic imbalances → **Libya** (in 2016–2020), **Lebanon** (in 2020)

2

Large-scale monetization of the budget deficit generates risks for financial and price stability → **Germany** (inflation 29,500% mom in October 1923), **Austria** (129% mom in August 1922), **Poland** (275% mom in October 1923), **South Korea** (213% yoy in 1951), **Serbia** ($1.16 \times 10^{14}\%$ yoy in January 1994), **Israel** (480 yoy in November 1984)

3

Successful stabilization plans mostly provides for **tight and independent monetary policy, fiscal consolidation, structural reforms and usage of market resources to cover the budget deficit** → **Israel** (inflation was reduced from 480% yoy to 18% yoy during 1985–1986; inflation declined to 5.4% yoy as of the end of 1998), **Croatia** (inflation declined from 1839% yoy in October 1993 to 4% yoy in October 1994)

Plan B: something that you always need to have on a shelf

The bombardment of Ukraine started at 4:00

At the beginning of business day, **9:00**, the NBU published
the list of measures it introduced to sustain financial stability

How Ukraine's Banking System and FX Market Will Work from 24 February 2022 Under Martial Law Throughout Ukraine



🕒 24 Feb 2022 9:52

The National Bank of Ukraine has passed a Resolution outlining how Ukrainian banks will operate now that martial law has been imposed throughout the country. Martial law is a special regime under which:

- Banks ensure the uninterrupted operation of their branches unless doing so puts at risk the lives and health of the public.
- Banks continue to operate subject to the restrictions stipulated by this Resolution.
- Banks provide uninterrupted access to safe deposit boxes.
- It is ensured that all cashless payments go through without limitation.
- ATM cash replenishment is carried out without restrictions.
- The NBU provides unlimited cash support.
- The NBU grants unlimited unsecured refinancing loans to banks, with up to one-year maturity and an option to extend the loan by another year, so that banks can maintain their liquidity.
- Payments to and by the Ukrainian government are made without restrictions, in accordance with legislation governing this special period.

The Resolution also imposes temporary restrictions, effective 24 February 2022. Those include measures that:

- suspend the operation of Ukraine's FX market, except for FX sales by customers
- fix the official exchange rate for 24 February 2022
- limit cash withdrawals from client accounts to UAH 100,000 per day (excluding salaries and social benefits), except for businesses and institutions that ensure the implementation of the government's mobilization plans (objectives) and entities that have the NBU's special permission to operate without paying commissions
- prohibit the release of cash from client accounts in foreign currency, except for businesses and institutions that ensure the implementation of the government's mobilization plans (objectives) and entities that have the NBU's special permission

....

These measures aim to ensure the reliable and stable operation of Ukraine's financial system and facilitate the fullest support for activity of the Armed Forces of Ukraine, as well as the smooth operation of critical infrastructure.

Complete reshuffle of the monetary policy in a wartime

Maintaining price and financial stability

In peacetime

The key policy rate is the main monetary policy instrument

Forward-looking monetary policy decisions

Monetary policy operational design is for **the effectiveness of key policy rate**

Floating exchange rate

FX interventions in order to smooth out excessive exchange rate fluctuations

Focus on **winding down FX restrictions and currency liberalization**

Prohibition on monetary financing of the state budget

During the martial law regime

Postponing the key rate decision (March-May).
Since June, rate plays a supportive role

Response to the rapidly changing environment

Market-maker's of last resort operational design: ensuring a proper level of liquidity and banks' flexibility in its management

Fixed exchange rate as a nominal anchor for expectations and an anti-inflationary tool

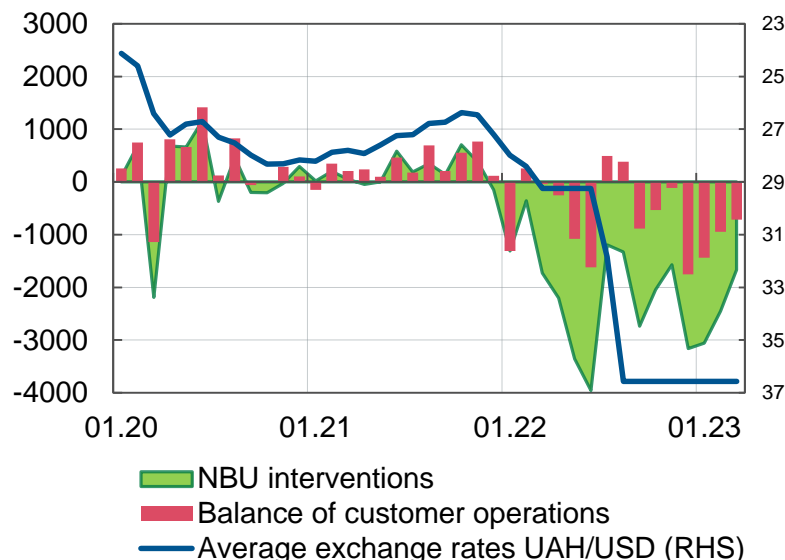
FX interventions as **the main monetary operation**

Restrictions on FX transactions and capital flight to maintain fixed exchange rate

Monetary financing of the state budget

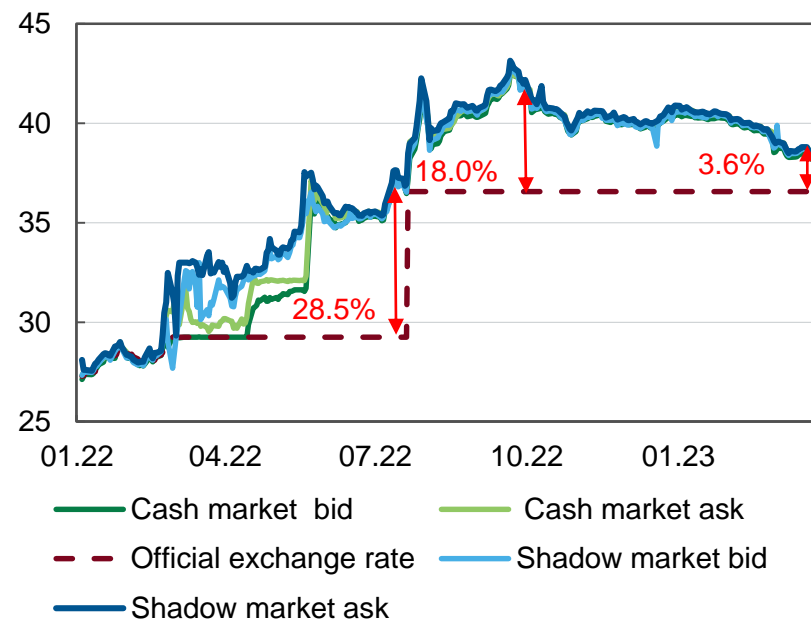
The exchange rate peg is a nominal anchor for expectations and an anti-inflationary tool. **Simple solutions are often the best**

Net sale and purchase of non-cash and cash foreign currency by bank customers, USD m, average exchange rate UAH/USD



Source: NBU.

Exchange rate UAH/USD*

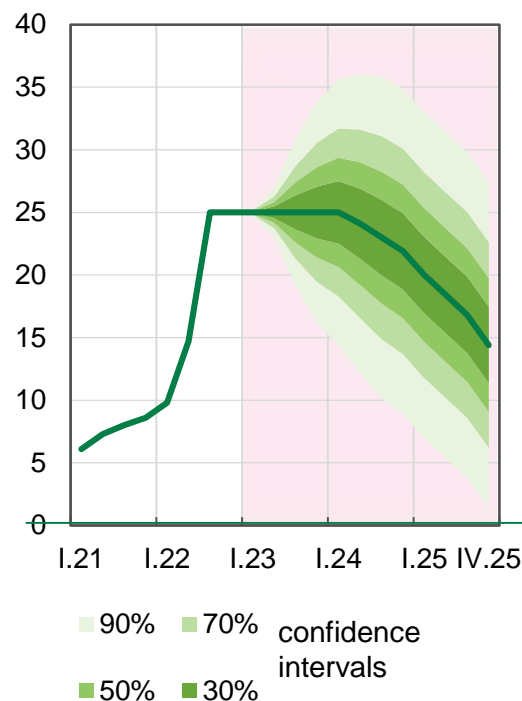


Source: NBU, open sources.

- On February 24, the NBU fixed the official exchange rate of the hryvnia against the US dollar at 29.25 UAH per USD → On July 21, the NBU adjusted the official exchange rate by 25% to 36.6 UAH per USD, taking into account changes in the fundamental parameters of the economy during the war and the strengthening of the dollar
- Under conditions of great uncertainty caused by the war, maintaining exchange rate stability remains the main anchor for stabilizing expectations and the key tool for attaining the NBU's priority goals. These goals are maintaining price and financial stability, which are a prerequisite for economic recovery.
- Fixing the exchange rate is supported by the NBU's interventions to sell foreign currency and a number of administrative restrictions, including those on FX transactions and capital movements

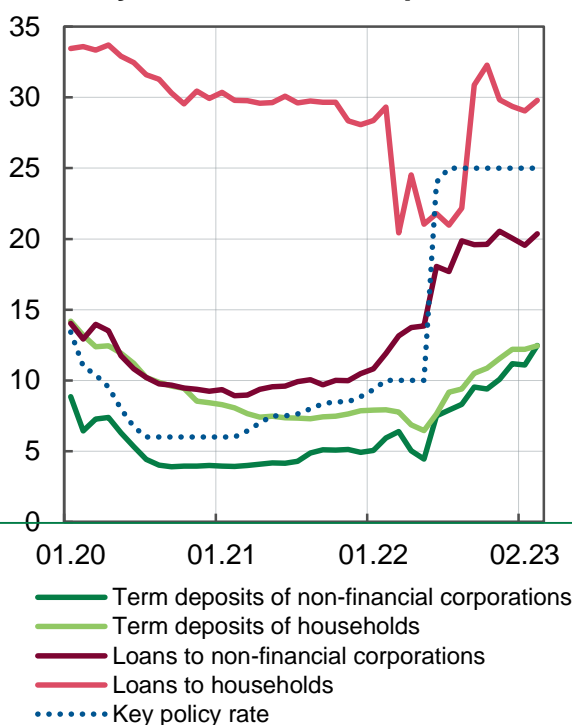
Relatively tight monetary conditions aim to support attractiveness of UAH assets and sustain ER stability

Key rate, %*



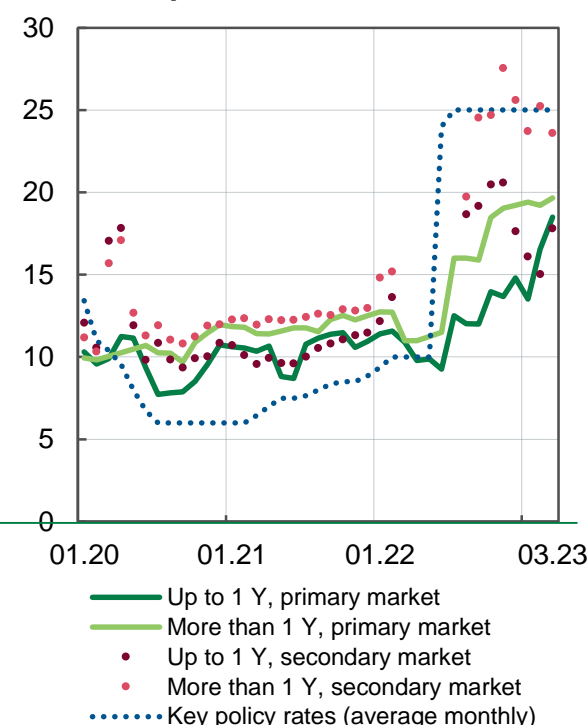
* As of Inflation Report, January 2023.
Source: SSSU, NBU staff estimates.

Weighted average interest rates on new hryvnia loans and deposits, %



Source: NBU.

The yields on hryvnia government bonds, % pa



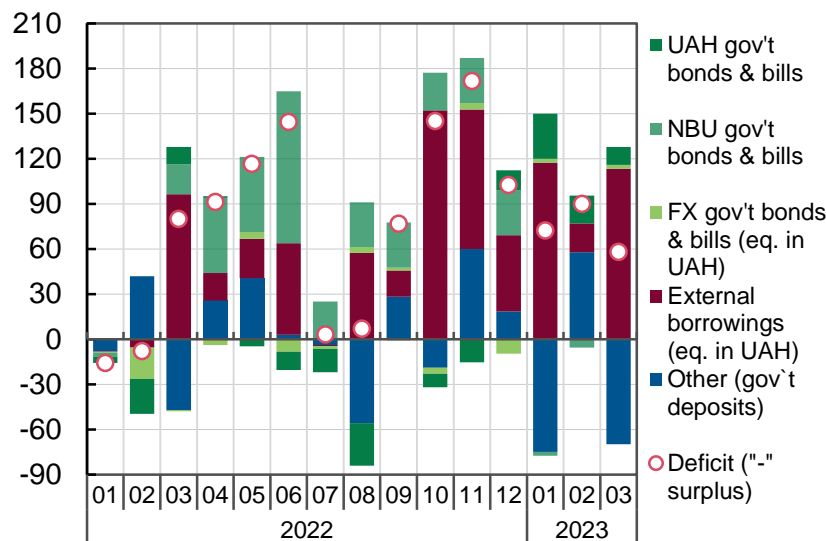
*As of 15.03.2023.
Source: NBU.

The NBU introduced FX restrictions that help to stabilize the market and prevent the unproductive capital outflow

	Feb-24	March	Apr	May	Jun	Jul	Aug	Sep	Oct
Individuals	➤ FX cash withdrawals from FX accounts	✗ Full ban	UAH 30K / day → UAH 100K / day						
	➤ FX cash withdrawals abroad from UAH accounts	✓ No limit	cap → UAH 100K / month	→ UAH 50K / month		→ UAH 12.5K / week			
	➤ FX payments from UAH card accounts	✓ No limit				cap → UAH 100K / month			
	➤ P2P card transfers	✓ No limit	cap → UAH 100K / month			→ UAH 30K / month			✗ Full ban
	➤ FX cash purchases from banks	✗ Full ban	cap → FX cash purchased by banks ER – official + 10%	ER - no restrictions		+ 50% of noncash FX purchased from individuals		+ 100% of noncash FX purchased from individuals	
	➤ Online FX purchases	✗ Full ban				cap → UAH 50K / month + depositing it for 3 months		cap → UAH 100K+3-months depositing → deposit to hedge ER risk for HH / unlimited amount	
	➤ ER for card payments	cap → official + 1%	→ official + 10%	→ no restrictions					
	➤ SWIFT payments abroad	✗ Full ban							
Corporates	➤ Imports payments	list of critical imports:	goods ~65% services 0%	← allowed →	~90% ~30%	→ 100% (no restrictions) → ~50%			
	➤ Deadline for settlement of export-import transactions	365 days	→ 90 days		→ 120 days	→ 180 days			
	➤ Repayments of debts abroad	✗ Full ban						transferring foreign currency to pay % is allowed	
Banks	➤ Transfer of FX funds to accounts of foreign units (there are certain requirements)	✗ Full ban						allowed for available FX currency; to sustain the operation of units; ¼ of the amount transferred in 2021	
	➤ FX open position			15% → 5%					
	➤ Repayments of loans to nonresidents		early repayments are prohibited						

Monetary financing helped to avoid collapse of state's finances at initial stage of invasion. It was ceased in 2023

State budget balance financing*, UAH bn



* Debt transactions are net borrowings. Other financing represents active operations (in particular, includes the change in volumes of gov't funds) and privatization.

March – preliminary and high-frequency data from the MFU website. NBU calculations based on the MoF's website information.

Source: Treasury. MoF. NBU staff estimates

The NBU will use monetary financing to meet only critical expenditures of the government. The central bank will seek to abandon this instrument as soon as possible.

- In wartime conditions, the National Bank decided to launch a **temporary** support mechanism for the state budget through purchases of government debt securities (war bonds) on the primary market
- The National Bank financed only **critical** budget expenditures in **limited volumes**
- The National Bank is set to maintain full transparency and inform society about these operations
- The monetary financing effort was kept within the limit agreed with the Ministry of Finance – to UAH 30 bn a month. Overall in 2022, volumes of war bonds purchased by the NBU stayed within the defined amount of UAH 400 bn
- Ukrainian authorities are committed to avoiding monetary financing of the budget deficit in 2023

MP Guidelines for the period of martial law

The main achievements so far

Despite full-scale invasion and terrorist attacks of russia, **the Ukrainian financial system and the NBU are well functioning and supporting war effort**

The hryvnia performing its functions despite the wartime and the worst scenario of demonetization of the economy had been avoided

That the result of **the NBU sticking to its mandate**: priority of ensuring price and financial stability. That's important basis for surviving in wartime, and then recovering rapidly in peacetime

To achieve its goals, **the NBU has in its toolkit combination of proven and effective tools** (ER-peg and capital controls) as well as **unorthodox ones** (e.g. hedging instruments for households)



Monetary policy at stage of reconstruction

The characteristics of economy on the stage of reconstruction

Highly uncertain environment

The high need for official financial support and private FDI`s

Need for cheap borrowings for private as well as government sector

Volatility of FX flows

Vulnerability to external and domestic shocks

Structural changes in the economy = adjustments in relative prices



The characteristics of MP regime satisfying the needs of reconstruction:

- Credible and predictable even in uncertain environment
- Standard and understandable for international partners and investors
- Able to cope with inflation to reduce borrowing costs
- At the same time, flexible enough to smooth economic cycle
- Adjustable and resilient FX market to deter shocks



The best candidate is: inflation targeting with flexible (however, manageable) exchange rate

The NBU's monetary policy has successful experience in maintaining of price stability based on the inflation targeting

The main principles of monetary policy under inflation targeting

Price stability priority

Key policy rate is the main monetary policy instrument

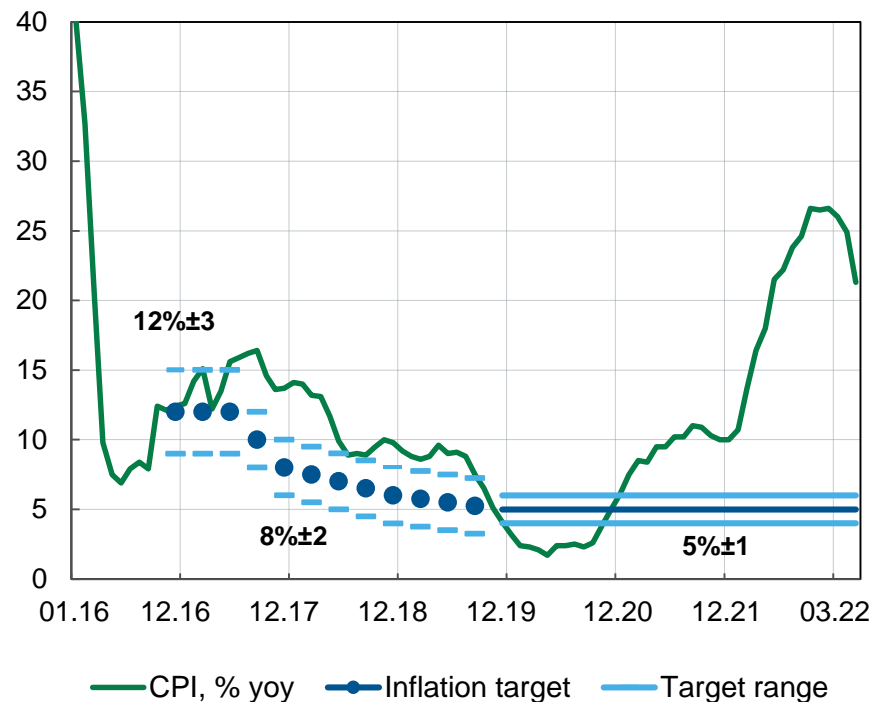
Forward-looking decision-making

Floating exchange rate

Transparency and accountability of the NBU's activities

Independence of the NBU

Evolution of CPI and inflation targets, %



Source: SSSU, NBU staff estimates.

TOP-5 NBU's achievements due to IT and floating exchange rate



Lower inflation and reducing its volatility



Shock-resistant foreign exchange market



Cheaper financing for households, businesses and government



Liquid and stable banking system



Supporting sustainable economic growth

AS A RESULT

1

The Ukrainian economy **entered the corona crisis with a greater margin of safety**, compared to previous crisis episodes



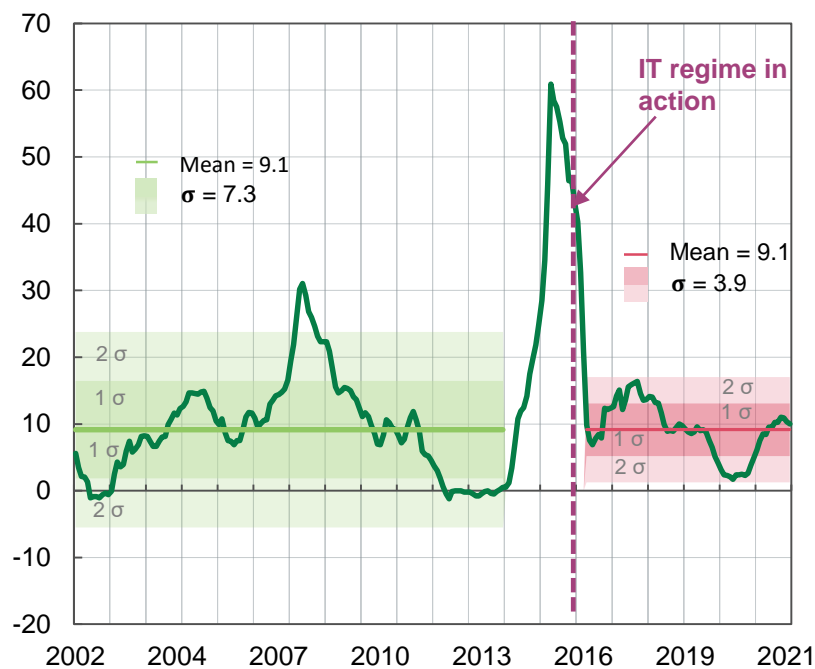
This, together with the measures of the NBU and the government, allowed the economy to emerge from the crisis in a growth trend with a moderate level of inflation, a stable currency, a sufficient level of international reserves and a sustainable banking sector

2

Thanks to the operative actions of the NBU, **the economy overcame the first difficult months of the war and was able to adapt to new conditions**

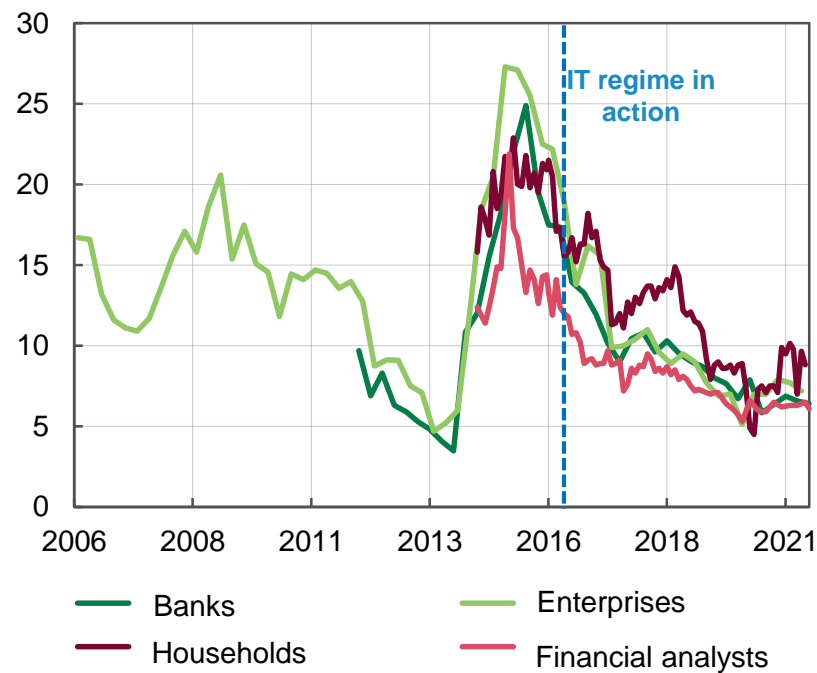
Inflation and its volatility declined, inflation expectations improved

Consumer inflation and its volatility, % yoy



Source: SSSU, NBU staff estimates.

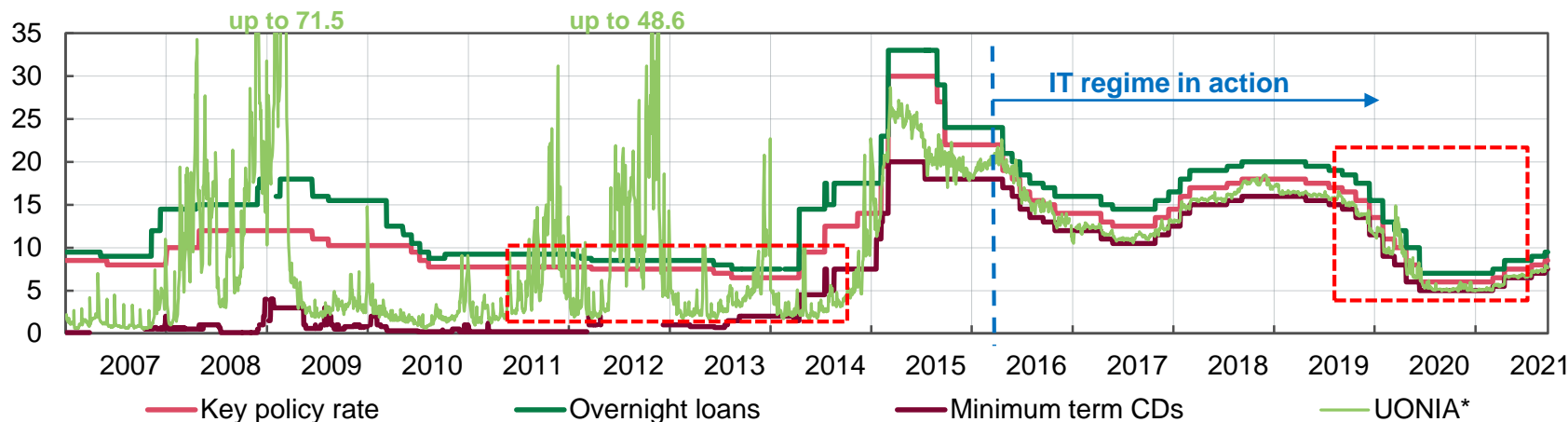
Inflation expectations for next 12 months, %



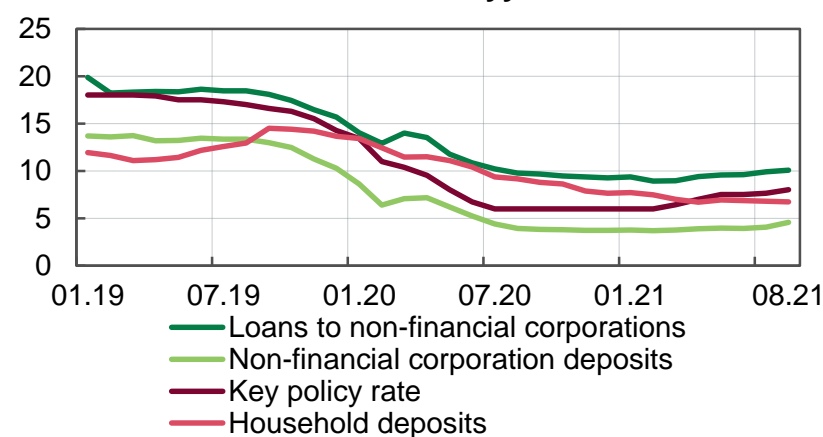
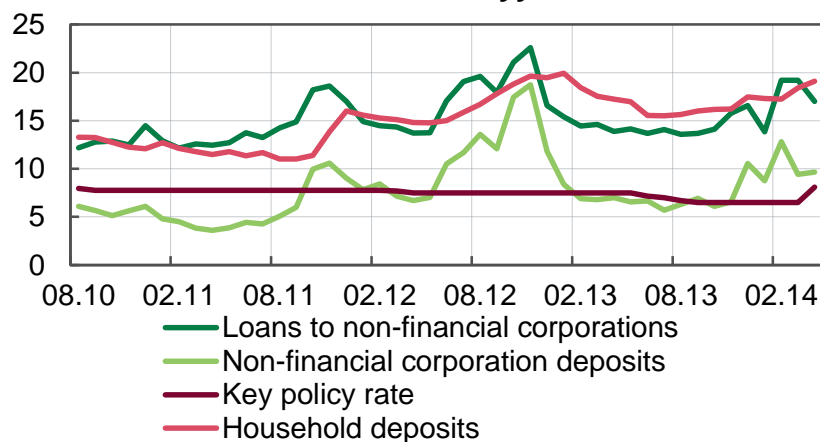
Source: NBU, GfK Ukraine, Info Sapiens.

Interest rates were lower and more stable

NBU policy rates and UIIR/UONIA, %

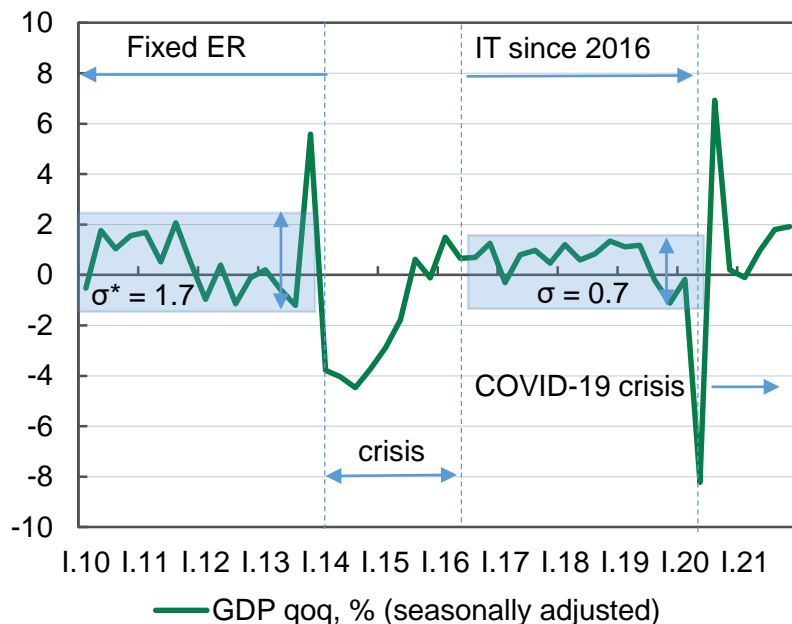


Monthly average key policy rate and weighted average interest rates on new hryvnia loans and deposits, %
2010 – 2014 yy. 2019 – 2021 yy.



Lower GDP volatility. Steady trend towards de-dollarization of the economy

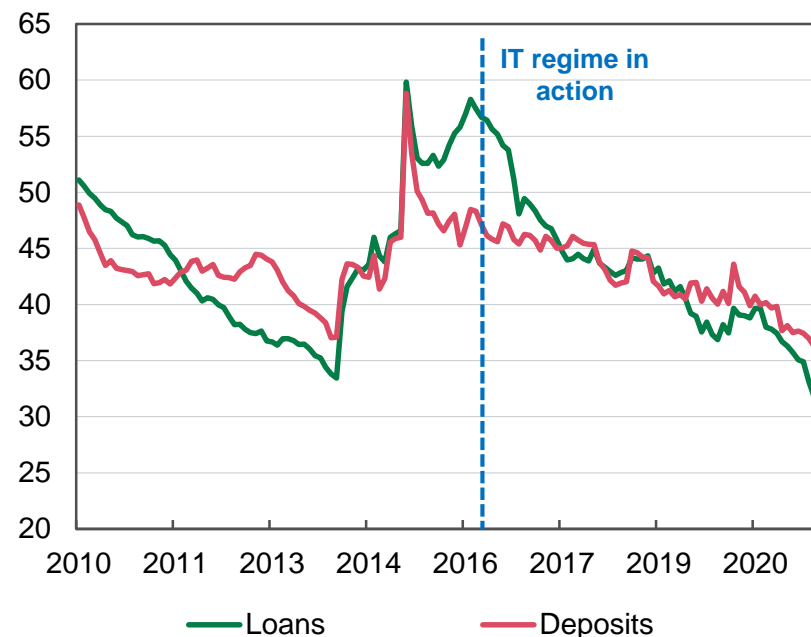
GDP volatility



* σ – standard deviation.

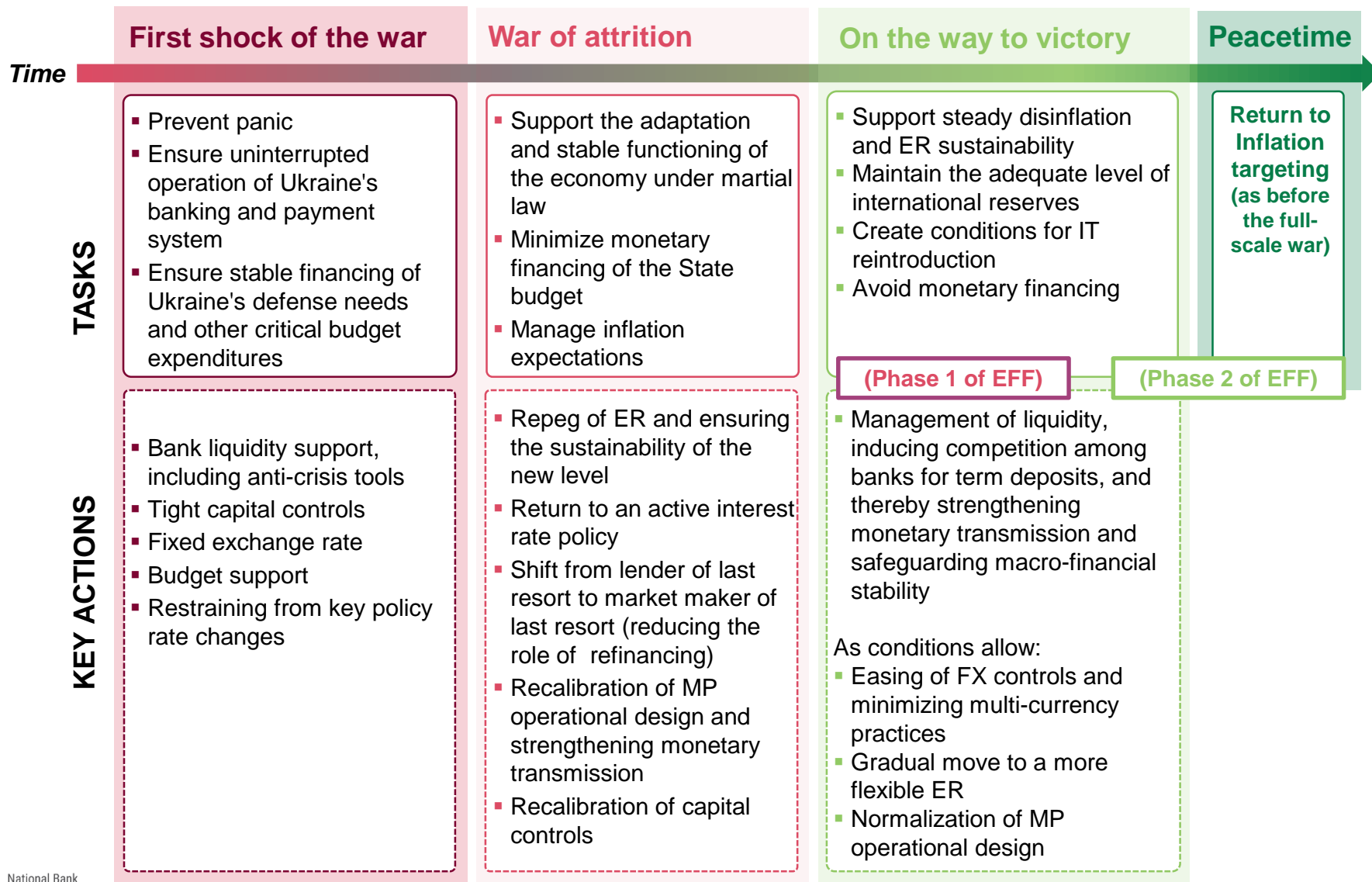
Source: SSSU, NBU staff estimates.

Share of loans and deposits in foreign currency, %



Source: NBU.

Evolution of the NBU's monetary policy from military monetary policy to inflation targeting



The NBU's has an ambition to return to inflation targeting and ER flexibility and creates preconditions to it

The key policy rate remains unchanged at high level (25%) since June 2022

Significant increase in required reserves ratios for banks on current accounts

Revitalizing domestic government debt securities by allowing banks to cover part of required reserve ratios with govies

Placements of long-term (3-month) CDs for banks conditional on success of banks in attracting term-deposits



Steady drop in inflation, improving inflation expectations, and supporting exchange rate sustainability via

- contributing to the attractiveness of hryvnia savings
- minimizing risks generated by a significant liquidity surplus
- abandoning monetary financing of the State budget
- encouraging the banks to step up their activity on the interbank market

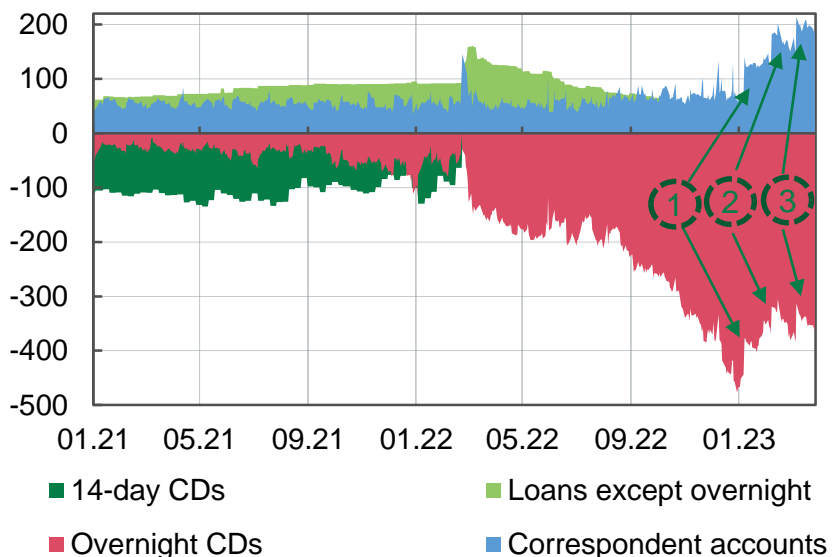


Laying the foundations for:

- gradual easing in FX restrictions
- ER flexibility
- Inflation Targeting reintroduction

NBU makes efforts to manage bank sector liquidity and induce competition among banks for term deposits

Indicators of banking sector liquidity, UAH bn

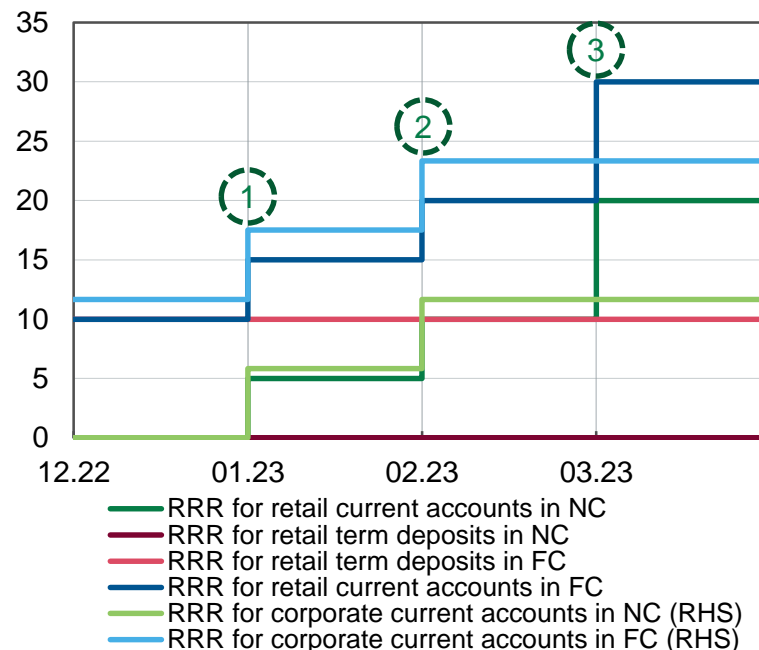


*Loans excluding insolvent banks and banks undergoing liquidation.

As of 31.03.2023.

Source: NBU.

Reserve requirements ratio (RRR), %



NC – in the national currency, FC – in the foreign currency.

Source: NBU.

(1) From 11.01 ↑ RRR, up to 50% RR benchmark G-bonds coverage

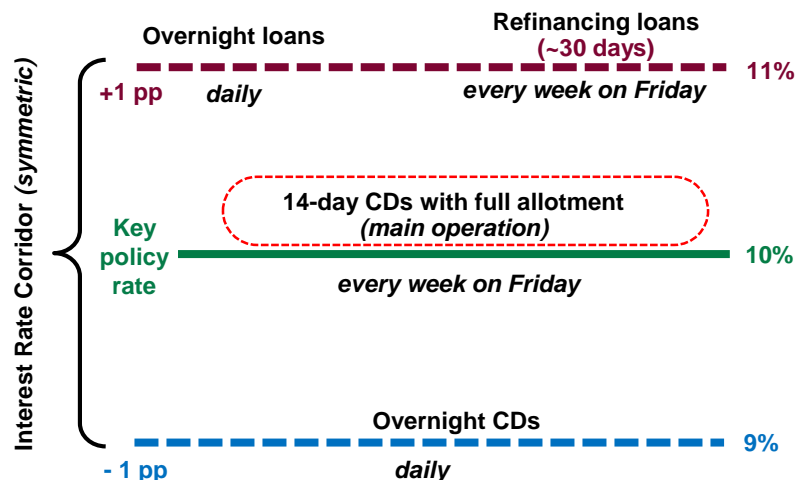
(2) From 11.02 ↑ RRR, list of benchmark G-bonds expanded

(3) From 11.03 ↑ RRR, without benchmark G-bonds coverage

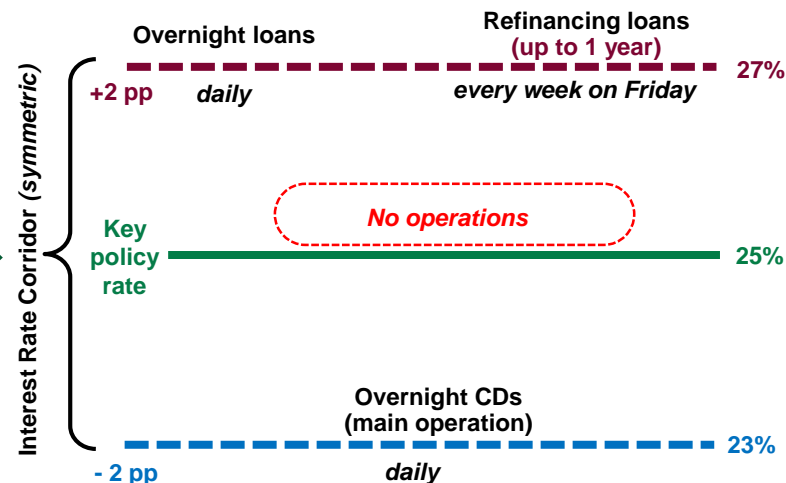
(4) From 11.05 preferential RRR for retail terms deposits from 3 months

The new monetary design is a temporary measure to enhance the investment appeal of hryvnia assets

MP operational design before the full-scale invasion

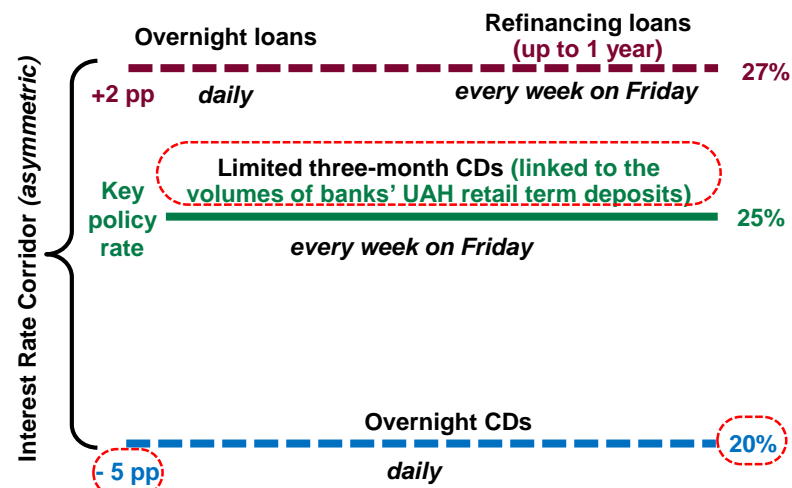


MP operational design after the full-scale invasion



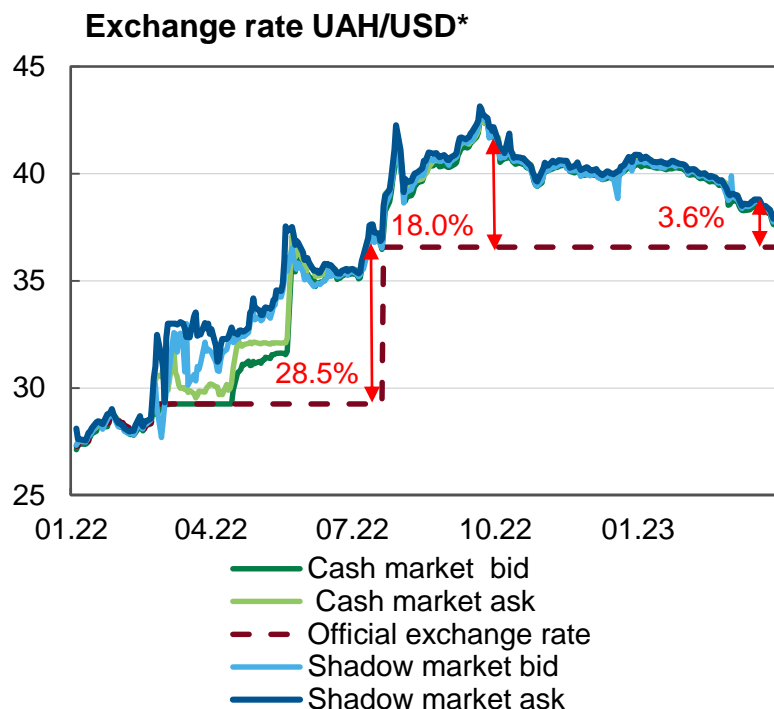
Initial adaptation of the MP operational design

New MP operational design, starting 7 April 2023



- As the economy and financial markets normalize, **the NBU expects to go back to the conventional operational design of monetary policy**
- In the conventional design, two-week CDs are placed at the key policy rate, the interest rate corridor for transactions to place overnight CDs and for refinancing transactions is symmetric around the key policy rate

NBU measures allowed to stabilize FX market, but conditions for exchange rate flexibility are not fulfilled yet



Source: NBU, open sources.

Factors of FX market stabilization:

- Stronger external position due to international aid acceleration, adjustment of the economy to war conditions and grain deal implementation
- Recalibration of capital controls
- Tighter monetary conditions
- Additional measures to lower demand and increase supply on cash market
- Decline in intensity of shelling (other than at frontline) and successes of Ukrainian Armed Forces
- Further stabilization of expectations

Preconditions to move to more flexible ER:

- Elimination of multiple currency practices
- Sufficient stock of international reserves
- Lower mismatches in the FX market
- Stronger monetary transmission
- Higher attractiveness of UAH assets and higher share of households term deposits
- Reliable alternative nominal anchor

Challenges for monetary policy on recovery phase

CHALLENGE	PROBLEM	SOLUTION
The need to revive the loan activity with implications for monetary transmission	Banks are hesitant to provide loans due to high risks	Military and political risks insurance. Loan guarantees
Appreciation pressure on exchange rate due to high FX inflows	Vulnerability of exporting sectors	FX interventions + controls on short-term capital
Surplus liquidity in the banking system	Weakening monetary transmission	Structural liquidity measures
Relative prices adjustments due to structural changes	Conflict between goal of price stability and economic recovery	Relatively high inflation target (5%) for longer



National Bank of Ukraine

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