TECHNICAL ASSISTANCE REPORT

UKRAINE

Foreign Exchange Derivatives Market Development

June 2025

Prepared By

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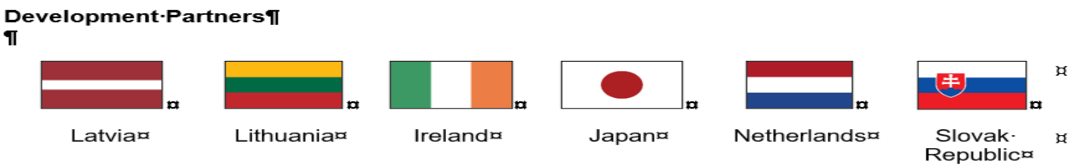

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Glossary

ARA	Assessing Reserve Adequacy
BIS	Bank for International Settlement
CCP	Central Counterparty
EME	Emerging Market Economy
FX	Foreign Exchange
FXI	Foreign Exchange Intervention
IMF	International Monetary Fund
ISDA	International Swaps and Derivatives Association
LCR	Liquidity Coverage Ratio
MCM	Monetary and Capital Markets Department
NBU	National Bank of Ukraine
NDF	Non-deliverable Forward
NOP	Net Open Position
RR	Reserve Requirement
UAH	Ukrainian Hryvnia
UONIA	Ukrainian Overnight Index Average
USD	United States Dollar

Preface

At the request of the National Bank of Ukraine (NBU), a Monetary and Capital Markets (MCM) Department mission engaged with the authorities using virtual meetings held September 25–26, 2024, and visited Vienna, Austria, during September 30, 2024, to October 4, 2024, to meet with officials from the NBU. The NBU contingent comprised Mr, Mykola Selekhman, Deputy Director of Open Market Operations (OMO) Department; Mr. Maksym Drobiazhin, Deputy Director of Financial Stability Department; Mr. Yaroslav Balytskyi, Head of Liquidity and Market Risk Competence Centre, Banking Supervision Department; and Ms. Nataliia Vagina, Head of Monetary Policy Implementation Tools Office, OMO Department. This mission aims to assist the authorities with reintroducing foreign exchange (FX) derivatives and supporting FX market development as part of Stage III measures for easing the temporary FX restrictions instituted under Martial Law.

The mission conducted virtual meetings with private sector institutions and gathered feedback from commercial banks using an interbank survey prior to meeting with the officials from the NBU. The mission thanks these counterparts for their cooperation, productive discussions, and their hospitality.

Executive Summary

The NBU is operating under challenging circumstances, while at the same time is exploring ways to continue implementing its FX liberalization strategy. At the onset of the war, FX restrictions were implemented, and permissible exchange transactions adhere to NBU Resolution No.18, which restricts FX forwards and limits FX swaps. The reintroduction of FX derivatives is part of the Stage 3 measures initiated as part of the framework for easing the temporary FX restrictions instituted under Martial Law.

This mission provides discussions on:

- The current functioning of the underlying money and foreign exchange markets.
- Whether there is a business need for FX derivative instruments in the current context where stability of the exchange rate underpins the flexible inflation targeting regime.
- The preconditions and opportunities to foster market depth and liquidity in FX derivative instruments.
- The conditions under which FX derivatives be (re)considered within the current context of Martial Law.

Although macroeconomic risks remain elevated, with a prolonged war continuing to challenge economic and financial market normalization, the mission discussed the preconditions that could support the reintroduction of FX derivatives. Key actions to manage the structural excess of Ukrainian hryvnia (UAH) liquidity more effectively should be considered among the priorities to credibly support conditions for further FX liberalization. In addition, adjusting the FX operational strategy may be needed to facilitate greater two-way exchange rate movements. In the current exchange rate context, FX volatility is limited, and NBU meets the structural shortfall of FX in the spot market, thereby mitigating apparent FX risks, and the need to hedge.

Notably, the market infrastructure, legal requirements, and prudential regulations for limiting banks' FX exposures and liquidity, which are key elements that support derivative trading, exist. Derivative trading was permitted and occurred (even in limited volumes) before the war. This would make reintroduction of derivatives—e.g., by reducing the restrictions—on a phased basis doable. Some challenges concerning the cost for derivatives have been identified by intermediaries, but these would likely be addressed over the long-term.

The more pertinent risk emerges from any backlog of FX demand attached to restricted transactions and these potentially can influence FX derivative market and spot markets immediately. Accordingly, the mission suggested that the NBU could start easing, with a controlled increase in risks and transaction volumes. For example, the control of forwards could be based on the direction of transactions, on absolute or relative limits, by requiring contracts and documentation (which exists for some spot transactions), or a combination of different methods.

The mission's key message is that in order to proceed with the further relaxation of FX restrictions, strong and consistent supporting policies should be combined with a prioritized sequenced approach. To this end, the mission endorses the NBU's commitment to articulate a Concept Note which can guide the approach, set out the steps, conditions, and timing for reintroducing FX derivatives.

Recommendations

Table 1. Key Recommendations

	Priority[1/]	Timeframe[1/]
Setting the Pre-Conditions for Re-introducing FX Derivatives		
1. Streamline monetary operations for effective structural liquidity management [¶32].	High	Near-term
2. Consolidate FX operations within specific period of trading day and expand allocation of FXI from sole use of Bloomberg Matching [¶32].	High	Near-term
Reintroduction and Market Development for FX Derivatives		
3. Articulate Concept Note with RoadMap for Reintroducing FX Derivatives, in line with TA advice [¶34].	Medium	Near-term
Monitoring and Evaluation of FX Derivative Trading		
4. Establish an internal follow-up process for monitoring, evaluation and fine-tuning in line with the principles detailed in the report [¶39].	Medium	Near-term
5. Define the key indicators to monitor and evaluate when assessing the preconditions of the possible next steps [¶41-42].	Medium	Near-term

[1/] Priority: High, Medium, Low; Near term: < 12 months; Medium term: 12 to 24 months.

Introduction

1. **The NBU is operating under challenging circumstances.** Risks remain elevated and with a prolonged period of war, which has challenged economic and financial market normalization. This technical assistance mission occurs amidst capital account restrictions and significant changes in monetary and foreign exchange frameworks. The NBU maintains exchange rate stability as a key mechanism for stabilizing inflation and inflationary expectations in the flexible inflation targeting regime. Monetary operations are largely overnight and used alongside active participation in the FX spot market, with the NBU meeting the structural FX shortfall through frequent operations. The money market currently operates with excess reserves and shows limited transactions.

2. **The NBU is exploring ways to continue implementing its strategy for easing the FX temporary FX restrictions instituted under Martial Law.** Although the derivative market was restricted at the onset of the war, key components are in place to support the resumption of derivative trading. The reintroduction of FX derivatives is part of the Stage 3 liberalization reforms. Currently, conditions for, and permissible exchange transactions adhere to NBU Resolution No. 18, including for restrictions on FX forwards and the extent which market participants can use FX swaps.

3. **The questions to be addressed by this mission are:**

    - Are the underlying markets functioning effectively to support derivative trading?
    - Whether there is a business need for FX derivative instruments in the current context where stability of the exchange rate underpins the flexible inflation targeting regime?
    - What are the preconditions and opportunities to foster market depth and liquidity in FX derivative instruments?
    - Under what conditions could FX derivative transactions be (re)considered within the current context of Martial Law?

4. **Perceptions and financial impact of FX risks are low.** Banks show relatively low net open FX positions in relation to capital. However, the level of unhedged FX exposures among corporates is unclear. The current stability in the exchange rate is underpinned by NBU's FX market presence that provides the assurance of FX availability through it fulfilling the structural FX deficit, which mitigates apparent FX risks.

5. **But reorienting monetary and foreign exchange operations are needed to credibly support further liberalization.** Firstly, there is potential demand that could spill immediately into spot and derivative markets once restrictions are lifted on some financial transactions. Secondly, with excess UAH liquidity and the current stability in the exchange rate, FX risks and costs related to speculation and/or position-taking against UAH would be quite low. Accordingly, the NBU could face a self-fulling depreciation spiral, which feeds on the initial perceptions of a weaker currency. With the possibility for these risks materializing, keeping UAH liquidity relatively lower and adjusting the FX operational strategy to facilitate greater two-way exchange rate movement, are actions that should precede the removal of FX forwards restrictions.

6. **The remaining sections of the report are organized as follows:** Section I outlines the foundation and contexts for using FX derivatives; including examining possible business needs and infrastructural pillars for FX derivatives. Section II discusses the potential risks and trade-offs

to be considered if FX restrictions are eased too quickly in the current macroeconomic context. Section III presents opportunities for reintroducing FX derivatives and fostering market development with suggested strategies for setting out a streamlined action plan for moving the foreign exchange market in this direction.

I. FX Hedging Market Development—Foundations

A. The Current Context of Foreign Exchange and Money Markets

7. **The exchange rate arrangement and the central bank's operations—including its intervention policy—play a critical role in determining the demand for hedging as it influences the degree of exchange rate risk.** After the introduction of the fixed exchange rate in February 2022, the NBH decided to devalue UAH by 25 percent in July 2022 to then release the fixed peg of the UAH to the USD. The NBU has committed to a *de facto* managed floating exchange rate regime since then, with an eventual reintroduction of a floating exchange rate regime. The NBU has developed and communicated the Strategy of its plans regarding the exchange rate and for FX restrictions.[1] This Strategy also outlines the preconditions for the transition to greater exchange rate flexibility and return to inflation targeting.

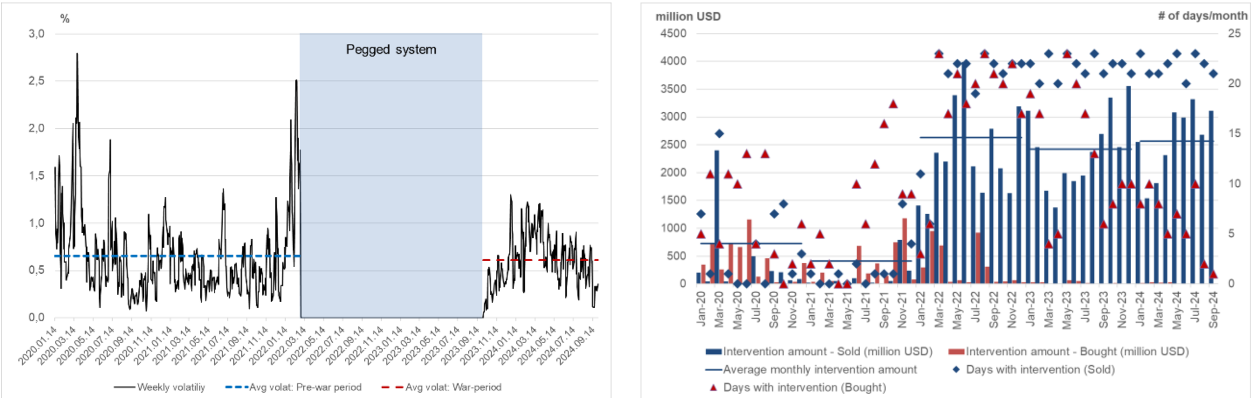
8. **The FX spot market functions reasonably well, although the NBU's footprint remains sizeable. NBU seeks to stabilize the exchange rate to keep inflation within the medium-term target and support macroeconomic stability amidst high economic uncertainty.** NBU trades account for on average one-third of the spot market turnover, as it continues to meet the structural net demand for foreign exchange. The current market stance is directly linked to the structure for foreign currency flows to the economy, as inflows predominantly originate from financing through official sources. A transactions-based reference exchange rate is published daily and is used as the official rate for all government transactions, including for transactions with companies providing defense services.[2]

9. **To date, the UAH remains in a generally predictable trading and volatility range relative to the USD in the past year, and volatility beyond 1.0 percent has been rare.** The NBU's FX footprint takes the form of interventions conducted to meet the structural shortfall in the market and reduce excessive exchange rate volatility which effectively underwrites the cost for exchange risk (Figure 1 and Figure 2).

[1] **National Bank of Ukraine.** "What Does the NBU Plan to Do with the Exchange Rate and FX Restrictions?" *National Bank of Ukraine*, 15 May 2024, https://bank.gov.ua/en/news/all/scho-nbu-planuye-robiti-z-kursom-ta-valyutnimi-obmejennyami.[1] Public version of the Strategy is available here: https://bank.gov.ua/en/files/YxBYMDyCsASmbCJ.

[2] While there is a multiplicity of exchange rates in the Ukrainian foreign exchange market—e.g., a cash rate that allows individuals unlimited access to US dollars that generally trades at a level weaker than the official rate—the market has gradually transitioned to show a reduction in the disparity between the cash rate and the official rate.

Figure 1. Exchange Rate Volatility and FX Intervention



Notes: Historical volatility calculated on a weekly basis. Pre-war period ends on 23-02-2022 (fixing of UAH). War-period starts from 03-Oct-2023 (de-pegging of UAH).

Notes: Sold/bought amounts mean USD sold/bought by the NBU, respectively.

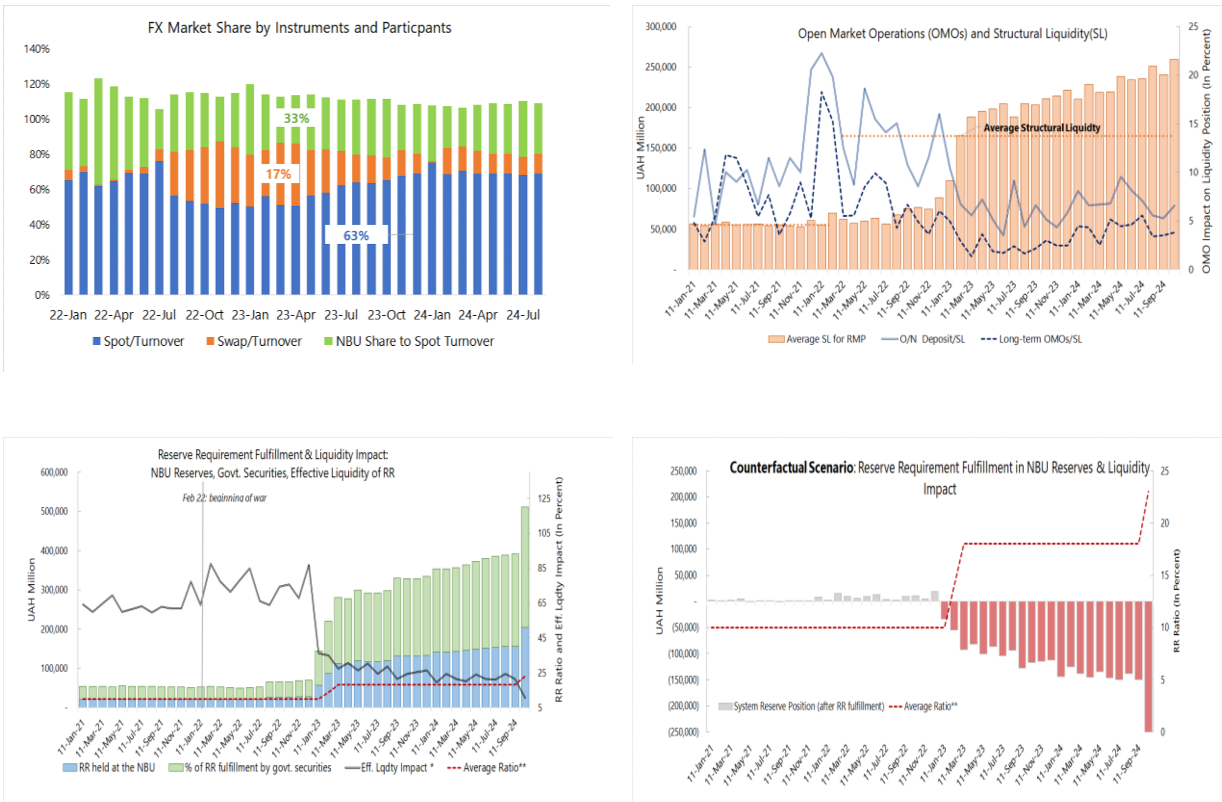
Source: National Bank of Ukraine, staff calculations.

10. **The effectiveness of the current exchange rate regime hinges on the use of capital flow measures—largely outflow measures.** Beginning February 2022, banks are prohibited from conducting certain transactions which are established by Resolution No.18.[3] Therefore, all permissible exchange transactions are being conducted in consideration of the limitations established in NBU Resolution No.18. For individuals and legal entities there is prohibition with respect to FX derivatives: for FX forwards generally, and for FX swaps only the sell side for foreign currency is allowed (buy-side of foreign currency using FX swaps are prohibited). Individuals have no limit on foreign exchange purchases of cash and can purchase FX instruments, including three-month FX deposits held with banks and six-month FX hedged deposits held with the NBU.

11. **Some monetary operations have remained largely subordinated to fiscal financing.** The banking system operates with large excess UAH reserves held in the overnight standing deposit facility that is remunerated at the key policy rate. Longer tenor operations that were previously used to incentivize UAH holdings show a declining relevance for managing the structural liquidity position. In addition, its main instrument—the reserve requirement (RR)—has a dual objective, as an increasing share of the requirement can be fulfilled with qualified government securities (60 percent currently). This therefore reduces the central bank's control over structural liquidity, as incremental adjustments in the RR—arising from increasing liabilities or changes in the RR ratio—have had a declining impact on adjusting the structural liquidity position (Figure 2).

[3] The list in Resolution No. 18, On Operation of Banking System Under Martial Law, is not exhaustive and is reviewed based on the current situation on the exchange market and the state's needs during a state of martial law, NBU.

Figure 2. NBU Operations and UAH Liquidity Management



Note: NBU interventions exclude amounts sold to directly to government and through banks for government related services.
Structural liquidity is defined as reserve balances for banks before NBU operations, reflecting the sum of opening balances and changes in autonomous factors.
* Effective liquidity impact is measured as the structural liquidity less the portion of RR fulfillment held as reserves at the NBU relative to the total RR
** Average RR ratio is the simple average of the RR ratios applicable to the different bank liabilities per currency (see Annex II)
Source: National Bank of Ukraine, staff calculations.

B. Business Needs for FX Derivatives

12. **The macroeconomic structure can amplify or constrain the use of FX derivatives.** *Ceteris paribus,* a higher degree of economic openness may provide scope for hedging. A diversified economy embedded within a deep and sophisticated financial system may amplify demand for financial hedges to redistribute financial risks. However, the reallocation of risks using financial instruments requires a group of heterogenous market participants that have different perspectives on the risk being managed.

13. **The expected rise of derivative instruments is a natural process in the evolution of foreign exchange markets.** International experience shows that in flexible exchange rate regimes, derivatives account for around two-thirds of foreign exchange market turnover and spot

transactions account for one-third. The shift in the ratio of spot transactions to derivatives in the foreign exchange market may be gradual following liberalization steps, and the share of derivatives in total turnover may stabilize after the increase. The transition could be supported by the gradual implementation of the liberalization of foreign exchange derivatives.

14. **Longer-term international trends also confirm both the need to develop derivative foreign exchange markets and the importance of a cautious and gradual approach to this process.** The triennial FX market survey conducted by BIS and other relevant literature such as Caballero et al. (2022) discuss a number of structural financial trends and their implications for the risk landscape and identify the following tendencies. Turnover in FX markets continued its upward march at the global level. Meanwhile, the environment characterized by volatile FX market conditions, evolving perceptions about the future path of interest rates for major currencies and the war in Ukraine brought FX risk management to the fore globally. FX swap markets are vulnerable to funding squeezes, given the short-term maturity of the off-balance sheet obligations. Trading of EME currencies has become increasingly international, the share of international transactions in the overall trading of EME currencies has approached that for advanced economy (AE) currencies. The greater internationalization of EME currencies poses policy challenges, e.g., it implies that monetary policy transmission is increasingly influenced by conditions in markets abroad and by the behavior of non-resident intermediaries, which are more difficult to monitor and steer.

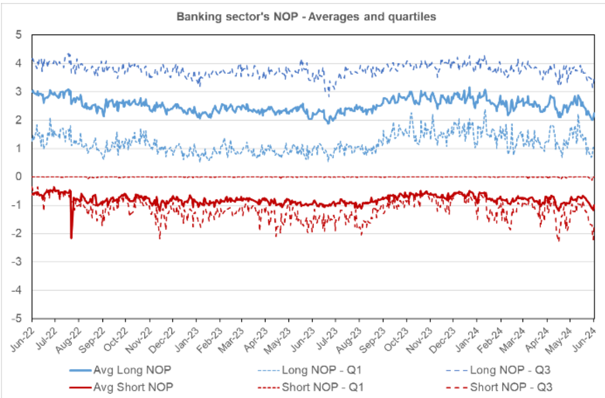
15. **Banks currently show limited appetite for taking FX risk.** Banks take very little exposure in foreign currency, the average net open position amounts to USD 50 million (as of beginning of June 2024), representing about 4.5 percent of capital relative to the maximum limit of 5.0 percent. The lower limit of -5.0 percent of capital is rarely tested (Figure 2). Moreover, banks indicate that typically any open position is immediately closed (same day) in the spot market.[4] The possibility for households to accumulate FX liabilities are restricted by law, and the NBU reports that FX lending has reduced by some 30 percent since the war. The share of FX loans in total loans is close to 30 percent, and with the higher expected credit loss assessments since full-scale war, banks have increased provisioning on such loans. In the context where the default rate of large borrowers on FX loans is close to 10 percent, it is useful for the NBU to determine the level of unhedged corporate exposures that may remain to fully evaluate the needs for FX hedging by intermediaries and corporates. In the meantime, the perceived FX risk is assessed to be low[5] given the relative stability in the exchange rate.

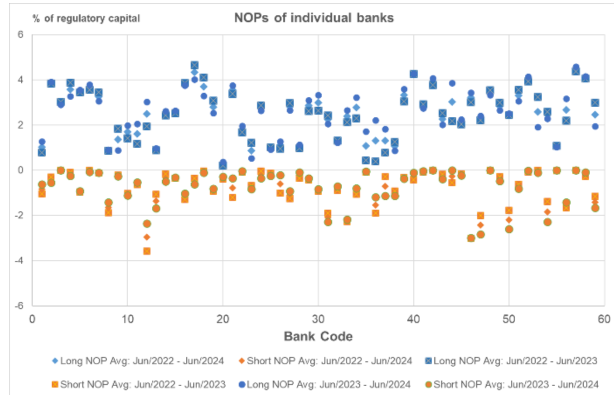
[4] Appendix I provides the summary from the survey of banks on FX derivatives market and products in Ukraine.

[5] The FX risk component for the financial stability assessed to be among the lowest risks for the past two quarters although the volatility of the UAH/USD exchange rate has slightly increased. The risk to banks was mitigated by a decrease in the net open foreign exchange position. Financial Stability Report, National Bank of Ukraine, June 2024.

Figure 3. Banks' FX Exposures and FX Risks

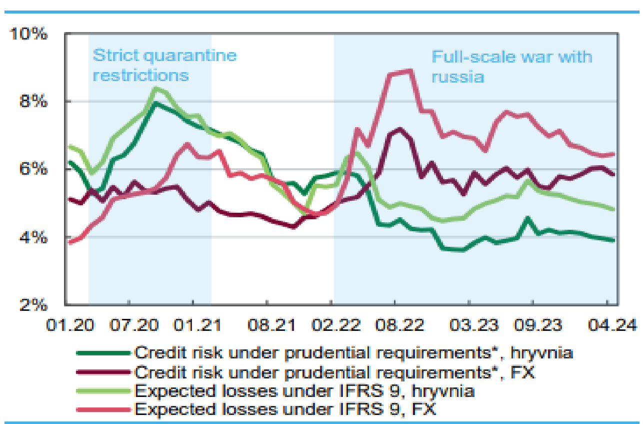
Banks show limited appetite to take on FX exposures.





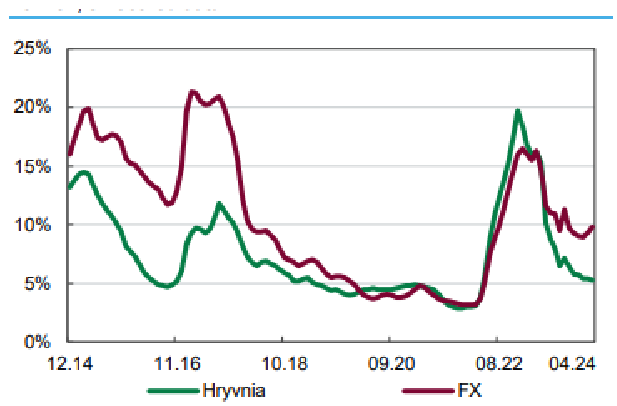
Some banks are subject to special rules that allow exemption from the 5 percent NOP limit, and therefore have been excluded from these calculations.

Provision coverage relative to performing corporate loans remains among the highest for FX loans …



* Credit risk according to Regulation No. 351.

… reflecting the higher default rate of large borrowers.



* Credit risk according to Regulation No. 351.

Source: National Bank of Ukraine, Financial Stability Report, staff calculations.

16. **Among corporates however, there is broad awareness of FX risks.** Yet, currently, the restrictions on the types of FX instruments could limit their ability to hedge exposures. The possibility to internalizing the FX risks across groups of companies exists with corporates recycling a portion of FX earnings intra-company with the rest sold into the spot market. However, starting from end-March 2022,[6] the NBU allowed the purchase of foreign currency for hryvnia under FX forwards concluded before February 23, 2022, and only transactions involving the sell-side for US dollars are allowed for FX swaps. Corporates can borrow in foreign currency, and while prudential regulations impose higher provisioning on FX loans, there is no requirement for natural hedges. Some corporates, however, indicate a business need for FX hedging instruments: (i) to manage lumpy FX transactions that are currently splintered into smaller lots for

[6] From February 24, 2022, to March 21, 2022, FX forwards were prohibited.

trading in the spot market; and (ii) to hedge import payments by purchasing foreign currency while selling UAH earnings forward.

17. **FX swap transactions are allowed for banks with resident banks (bilaterally) or using a central counterparty (CCP) that has the right to carry out clearing activities in accordance with the Law of Ukraine on Capital Markets and Regulated Commodity Markets.** The CCP is used for a small volume of FX swaps and facilitates the settlement for FX transactions on swap terms and other FX settlements, including for FX-denominated domestic government debt securities.

C. Enabling Conditions for FX Derivative Markets

18. In addition to the functioning of the core foreign exchange and money market, other key building blocks of derivatives markets' development include:

- An enabling ***regulatory environment*** that ensures legal certainty of the derivative contracts, covering aspects like close-out netting, regulation of eligible collateral, hedge accounting, and margin requirements.
- A ***diverse range of financial instruments***, available to serve as the source of the underlying product for derivatives (e.g., overnight interbank money market reference rates, reliable references for FX spot and FX forward transactions) as well as a potential tool for market participants to hedge their derivative positions if needed (i.e., suitable assets with fixed or floating rate coupons in different currencies).
- A robust ***market infrastructure***, encompassing payment and settlement systems, trading platforms, market data providers, trade repositories, and the treasury and risk management systems of market participants.
- A broad ***user base with heterogenous risk profiles***, possessing incentives and sufficient knowledge to manage financial risks.

19. **Based on the mission's assessment, most components contained in relation to the FX regulations and the market infrastructure can satisfactorily support derivate trading.** In respect of risk management practices and options, there may be some shortfalls relative to the ideal, which may limit the ability of financial actors to efficiently use derivate instruments. While these are observed, the current country context of operating under Martial Law will limit the extent to which these aspects may be addressed. The detail assessment for each building block in the Ukrainian context against these building blocks, individually, in the paragraphs that follow.

Regulations

20. **Ukrainian financial markets have prior experience with derivative trading.** With trading in instruments prior to April 2022 allowed, some of the key components in the regulatory framework exist:

- **Adequate regulatory environment which is essential for the supply of FX derivatives.** All regulations concerning the supply of derivatives, from the assessment of client appropriateness—the clients to whom derivatives could be sold and the maximum sellable amount—to accounting, valuation, and capital adequacy need to be clear and drafted in a balanced manner to establish the necessary limits and safeguards to ensure a sound market development without inhibiting the provision of derivatives.

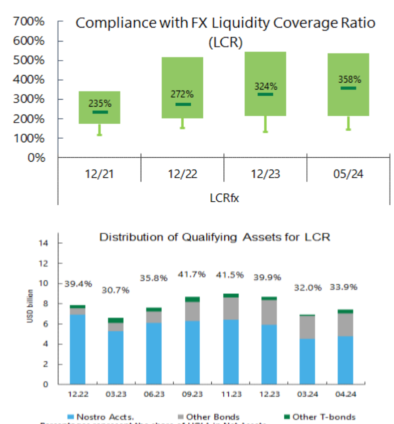
- **Also, standard, legally enforceable documentation to support the use of FX derivatives.** Legal certainty allows banks and corporates confidence about contract enforceability, netting, and collateral execution in case of an event of default. Ideally, the whole market should be based on common legal documentation, for example, a common standardized Master Agreement, consistent with international standards. Though the usage of ISDA Master Agreement is missing from the market, a local, country-specific version was developed before the war. Although it has not been formally adopted due to the war, documentation that has been subject to extensive consultation is available. Moreover, the authorities indicate that to date there are no reported instances about the enforceability (or lack thereof) of derivative contracts according to the national legislation.

Table 2. Status of FX Derivatives Market Regulation

Regulation type	**Requirement**	**Availability**	
		FX Forward	FX Swap
Close-out Netting	Essential	n/a	Yes
Hedge Accounting/Tax Rule	Good to have	Possible review	Possible review
Reporting Rules	Essential	In progress	In progress
Risk Management Guidelines	Essential	Yes	Yes

Source: IMF staff.

- **FX risk regulations and practices appear to provide sufficient limit for FX exposures and for banks' management of FX liquidity risks.** Based on the current prudential requirements, the net open position limits are relatively small, and were tightened at the onset of the war. Notional FX swaps exposures are included in the determination of the liquidity coverage ratio (LCR) that is denominated in foreign currency. The LCR in FX provides self-insurance for banks against FX liquidity risks, with banks maintaining on average close to 23 percent of net assets in nostro accounts for the first three months in 2024 (the equivalent of USD 4.8 billion in April 2024) as qualifying high-quality liquid assets (Text Chart).



Source: National Bank of Ukraine, staff calculations.

Market Infrastructure

21. Financial market infrastructures have been implemented to support market activity. These include a real-time gross settlement system and securities settlement system to facilitate delivery-versus-payment between counterparties. Bloomberg is widely used as the standard trading platform (B-Match); with the NBU's FX interventions implemented exclusively on this platform. The CCP is used by foreign-owned banks mainly to conduct FX swaps in limited quantities to enable the management of counterparty risks.

Table 3. Status of FX Market Infrastructure

	Requirement	Availability
Trading Platforms or Exchanges	Good to have	Blomberg, Reuters
Central Counterparty	Good to have	Yes
Payment and Settlement Systems	Essential	Yes
Market Data Providers	Essential	Bloomberg
Treasury and Risk Management Systems	Essential	Yes

Source: IMF staff.

Range of Financial Instruments

22. **Synthetic hedging depends on the functioning of the complementary markets.** It depends on the functioning; liquidity; depth; resilience of the FX spot market; and the market for short-term borrowing and lending in domestic and foreign currency. Investment and borrowing on a term basis in local currency are available, thereby providing opportunities for creating the synthetic hedges of the hryvnia leg. On the other hand, the lack of FX borrowing options at affordable terms may hinder the synthetic hedging of the foreign currency leg in the case of forward purchases. This is particularly important in Ukraine, considering the uneven balance between FX demand and supply, banks may need to hedge their own foreign exchange exposures synthetically. Otherwise, banks may revert to the spot market which may be counterproductive for market development.

23. **The functioning of the complementary markets is equally important for pricing.** Financial arbitrage should ensure that hedging is priced based on the synthetic hedging cost. If this were not the case, and regulation and credit risk limit constraints did not impede synthetic hedging, there would be an opportunity for a market risk-free profit by exploiting any pricing misalignment. The pricing in the complementary markets is generally available, with the UONIA providing a reference for short-term money market rates. In addition, benchmark zero coupon yields are estimated and published for other maturities using the limited bond trading. The reliability of these references for FX derivative pricing was not tested by the mission. In assisting to develop the market it may be useful for the NBU to provide relevant data to replicate the benchmark, and ensure that pricing discrimination between counterparties is limited, and that there is adequate market depth. These attributes for price references will need to be evaluated as the macroeconomic risks in Ukraine subside, as banks indicate that the lack of adequate pricing information and market depth for longer maturities are obstacles to providing FX derivatives.

Heterogeneity in Market Users

24. **Financial markets facilitate the transfer of financial risks between participants, but to function, markets require participants that gain from such trades.** With hedging markets, participants must first be able to assess the extent and probability of potential losses arising from their financial exposure. Then they should be able to price that risk to make an informed decision on engaging in a hedging transaction; if the price of hedging is assessed as too high, they will not

engage in the transaction. Important in this pricing is the extent to which there is another participant willing to take the other side—because they have an opposite exposure or they are willing to assume the risk in expectation of profiting from a favorable move in the price (i.e., an open or speculative trade). The greater the number of participants with dynamic, heterogenous risk profiles and appetites, the more liquid market activity will become.

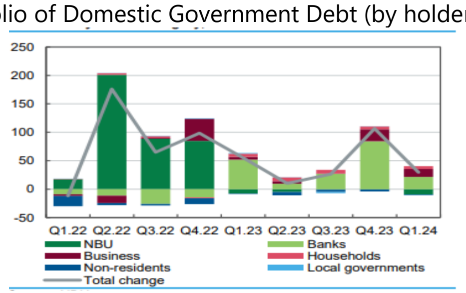
25. **Commercial banks are dominant financial market players, and they typically assess risk equivalently.** Currently, potential "gains" from derivative trade would be severely limited due to the bank-centered and highly concentrated nature of the financial sector. Moreover, banks are the captive financiers of the domestic debt portfolio, which in part arises from regulation and to some extent, the search for high-quality liquid assets. Non-residents—who could benefit from the positive carry-trade in UAH government bonds and support liquidity in FX derivative markets—are showing reduced appetite for government bonds over the past year (Figure 4).

26. **Interviews with large corporates indicate sufficient awareness about FX hedging instruments among potential users.** Yet, the majority of banks surveyed by the mission suggest that corporates (specifically the smaller ones) may have lack of awareness/inadequate knowledge as an obstacle of appropriate hedging by clients. Nevertheless, banks also acknowledge that current regulations (restrictions as per Regulation No.18) would be the dominant obstacle to appropriate hedging and forward market development. Otherwise, the cost for hedging and the inadequacy of price formation are equally important obstacles, though these could reflect the low market liquidity generally and fewer counterparties with which to trade the position using a similar type of instrument. (Figure 4).

Figure 4. Market Development Challenges

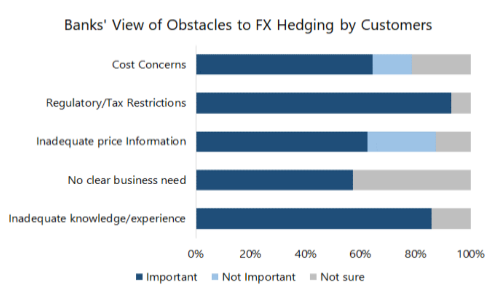
Absence of non-resident partcipation in government bond market can impede market development

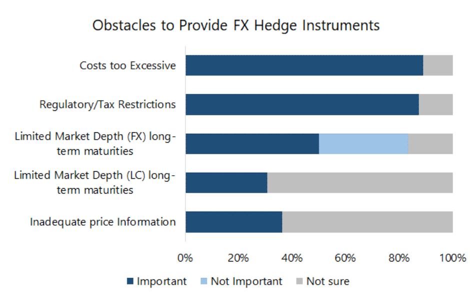
Change in Portfolio of Domestic Government Debt (by holder) in UAH billions



Source: Financial Stability Report, June 2024, National Bank of Ukraine.

... and induce higher hedging costs given fewer counterparties to offset the position.





Source: Staff calculations.

II. Reintroducing FX Derivatives in Ukraine

27. **A move to more flexibility in the exchange rate should increase awareness of exchange rate volatility and potential risks from currency exposures among all market participants, especially non-banks.** Low exchange rate volatility reduces the incentive to learn about and use currency hedging instruments. Although the UAH exchange rate volatility has increased moderately (at least up to July 2024), as long as tail risks remain negligible due to the NBU's organization and format for its operations conducted in the foreign exchange market, there is limited incentive for market participants to hedge. The lack of demand for hedging from the side of non-bank actors and the lack of financial knowledge may be hindering the development of healthy FX hedging markets. Therefore, banks should also be actively engaged to raise awareness of currency risks and currency hedging products.

A. Easing FX Restrictions and Re-introducing FX Derivatives

28. **The return to a more flexible exchange rate regime makes the liberalization of FX flows both desirable and less risky.** A more flexible exchange rate regime, such as a wider volatility band, allows greater scope for market processes to shape the equilibrium real exchange rate, while eliminating one-way exchange rate expectations and increasing the exchange rate risk for both financial investors and real economic agents. For this reason, the framework for the exchange rate regime should be amended at the same time as steps are taken to further liberalize foreign exchange market transactions so that derivative products suitable for hedging exchange rate risk are available in a liquid and deep market.

29. **Currently, the risks from easing restrictions too quickly and using FX derivates are evident.** The key near-term risk identified by the mission is the potential FX demand from the restricted payments that are currently restricted under Martial Law. The team was advised that close to USD 20 billion in FX payments remain under restrictions, including payments on legacy debt, refunds on prepayments, and repatriation of direct investments, which may generate substantial demand to sell the UAH either on the spot market or through derivatives once restrictions are eased. The downside risk to easing (too quickly or without pre-conditions in place) is that the expectation for depreciation of the UAH becomes a self-fulfilling outcome in the event that this potential demand is manifested; providing a gateway for speculation against the UAH at low cost, as long as the NBU in maintains the current FX operational stance.

30. **The transition to a more flexible exchange rate regime and the gradual lifting of FX restrictions on foreign exchange outflow transactions should be implemented in parallel.** These are mutually reinforcing actions aimed at protecting FX reserves while allowing the private sector to experience two-way exchange rate movements**.** Allowing more flexibility in exchange rate movements will create a greater need for hedging, and thus a need for a liquid, competitive market for financial derivatives. Increased liquidity in derivatives markets as a result of currency liberalization not only reduces the cost of exchange rate fluctuations by making it easier for companies to hedge, including with natural hedges, and reduces the risk of overshooting of the exchange rate itself. Following currency liberalization, partly through the increased presence of foreign players, the liquidity of these markets is increasing, the range of financial products available to manage risk is expanding, and the efficiency of the price discovery process is improving.

31. **The Strategy and the Roadmap have set out the framework and the place of the related necessary measures for foreign exchange market liberalization and the lifting of restrictions in the long-term process of returning to inflation targeting regime with a floating exchange rate.** According to the Strategy broad liberalization of capital flows had to be preceded by the abandonment of the fixed exchange rate. In turn, a further increase in exchange rate flexibility should be preceded by easing the majority of FX restrictions imposed on trade transactions and those that distort the functioning of the FX market. The Roadmap for the Gradual Easing of FX Restrictions sets out general stages for the process, and also states that the primary consideration for easing FX restrictions is the urgency of correcting market distortions and supporting economic recovery, taking into account the risks to exchange rate sustainability and international reserves.

32. **Further steps to remove restrictions are in line with the principles and indicators set out in the Strategy and the Roadmap.** In October 2023, the NBU abandoned the earlier practice of pegging the official exchange rate to the USD and shifted to managed flexibility of the exchange rate, meaning that in terms of the sequential steps of the Strategy the theoretical possibility for the phase of easing of FX restrictions has opened. Since October 2023, the exchange rate has shown a gradually depreciating trend (close to 13 percent devaluation over a year), with two-way fluctuations around the trend line. The pace and dynamics of depreciation can be considered controlled, and the degree of volatility has not been extreme (around 5 percent on a yearly basis). Reserves have been assessed as adequate at levels consistent with international standards (as of September 2024 the FX reserves were above 110 percent of IMF's ARA metrics and were sufficient to finance five months of future import). Nevertheless, overall risks related to exchange rate sustainability and international reserves do not rule out the cautious continuation of the easing process.

33. **To support the reintroduction of FX derivatives, in the context of moving towards greater exchange rate flexibility, the proposed measures should be implemented in a clear sequence.** The sequenced approach will allow for incremental adjustments while managing tail risks. Accordingly, the mission emphasized that that the Concept Note should take account of the first steps for re-orienting the monetary and FX operations framework as pre-conditions for further easing of restrictions. Thereafter, introducing forwards and NDFs in limited quantities would be advisable (see subsequent sections for details). With the other building blocks for derivative trading largely in place, the NBU could close pricing gaps by adjusting its operational strategy to include money market operations longer than overnight tenor.

B. Re-orienting Monetary Operations and FX Operations as Pre-conditions

34. **The experience with the relaxation of FX restrictions suggests the need for strong and consistent supporting policies combined with a prioritized sequenced approach.** The NBU has already committed to greater exchange rate flexibility and in support of that commitment, can pivot its monetary and FX operational frameworks to better support this transition and develop market-based incentives for FX derivative trading. As a priority, the NBU should:

- **Realign monetary instruments with their objective and streamline operations to effectively manage structural liquidity and keep UAH scarce relative to current levels.** This could entail the recalibration of the RR to focus on its liquidity management role, whereby for the same RR ratio, the NBU gradually eliminates the portion fulfilled using government bonds. Experience is that using a single instrument to achieve two objectives is sub-optimal, as their outcomes may result in countervailing influences.[7] For example, if the RR fulfillment was entirely in NBU reserves, the increase in the RR in January 2023 would have resulted in a liquidity shortfall which would allow UAH liquidity to remain sufficiently scarce and perhaps better reduce the subsequent buildup in bank liquidity (Figure 2). Additionally, the NBU could conduct weekly operations using longer-term instruments[8] that are priced using an auction for selective short-term tenors. The outturn from these auctions could serve as references for derivative instruments to close the information gap observed by corporates. Regaining control of the management of structural liquidity requires that the available instruments should be calibrated where they can deliver the desired impact for keeping the structural liquidity within levels that the weekly operation can successfully be used to steer interbank market liquidity conditions.

- **Reorient the FX operations strategy to enable two-way flexibility.** Firstly, using the existing intervention budget for a set window of the trading day to encourage more price variation in a wider volatility band and to stimulate FX liquidity. Secondly, using alternative methods for allocating the intervention budget could be helpful as it allows the market to display more intraday volatility. This could entail diversifying beyond the sole channel of currently using Bloomberg Matching for FX intervention.

III. Opportunities for Fostering Market Development

35. **Fostering market development under the current circumstances is a delicate issue, and addressing it requires an approach that can be more of an art than a science.** Easing restrictions has benefits and poses risks at the same time; with much of the process requiring the NBU to exercise a careful balance. According to the stakeholders concerned providing just slightly more room for maneuver—by allowing a few key products—could be of great help for market participants, especially to the export-import sector.

36. **The main purpose of the NBU is to examine how it could reintroduce FX hedging products without undermining the exchange rate regime, compromising the external balance, and reversing the progress under the IMF supported Program.** Rapid lifting of the 2022 FX derivative trading restriction could trigger speculative depreciation given the expected continuation of transition toward greater exchange rate flexibility, which risks are exacerbated if the war extends beyond 2025. The mission therefore endorses the NBU's commitment to articulate a Concept Note which can guide the approach, set out the steps, conditions and timing for reintroducing FX derivatives. The contents of this TA report will provide useful guidance to this end.

[7] Using a single instrument to achieve two objectives requires the consideration of the trade-offs between the option to configure the RR to maintain liquidity conditions that is supportive of maintaining exchange rate stability and how the government funds itself in the domestic market. Within the period of Martial Law, the incentives for banks to purchase government bonds may need to examine alternate requirements so as not to conflate the monetary policy framework or limit the NBU's ability to respond to quickly changing economic conditions.

[8] The use of longer-term instruments for selective short-term tenors should be organized as maybe weekly offers of small amounts and for tenors below the shortest tenor issued by the government. The amounts are really for reference pricing rather than full-scale reliance on them to sterilize the excess reserves.

A. Forward and NDF Transactions

37. **The most important area seems to be the easing of restrictions on forward transactions, for which there are several options.** Forward transactions are currently effectively prohibited, both in the bank-to-customer context and in the context of interbank trading. The scope of permitted forward transactions practically includes only transactions to close out contracts concluded before the war. There are different ways in which the NBU could start easing, with a controlled increase in risks and transaction volumes. The control of forward position taking can be based on the direction of transactions, on absolute or relative limits, by requiring contracts and documentation, or a combination of different methods can be used (Figure 4).

- ***Direction-based rules*:** A possible solution is, for example, to only allow forward deals in the UAH purchase direction. The advantage is that it is very simple and effective in terms of limiting positions against UAH, and the solution is well-known to market participants in the swaps market. On the other hand, it has the disadvantage of not addressing the issue of cash flows related to import payments and capital transactions (i.e., debt servicing).

- ***Limit-based rules:*** With limits, the total amount of FX forward deals is tightly controlled, which means the risk of excessive exchange rate pressure from forward sales of UAH can be managed. The limit can be a nominal value or a relative measure, linked to some easily available variable. If the latter is the case, a logical choice for the basis of the limit is regulatory capital, as in the case of the NOP limit. This approach is well-known for banks, and the NBU has the background database and infrastructure it needs. Flexibility is another advantage, as limits can be adjusted (or eliminated) after a certain period of time according to the circumstances/experiences. On the other hand, a limit based on for instance regulatory capital is linked to banks' characteristics, not to the needs of the corporate sector as an end user. However, competition among clients should force positions to be allocated to the player with the most relevant needs.

- ***Contract-based rules*:** Using the approach followed in the spot market as an analogy, similar rules could be (re)introduced for forward contracts concluded from now on. In this case, documentation of underlying business is required, by this means the quantity (especially quantity of UAH selling trades) is limited by the contracted amount, in addition the usage of the obtained FX amount is strictly regulated. Advantages are that the method is known from spot transaction, and the necessary background infrastructure for the permission and control processes is largely in place. The resource-intensive and time-consuming nature of the documentation process may be a drawback.

- ***Combination of methods:*** Of course, the previous methods can be combined, leading to a more sophisticated approach. For example, different rules and limits can be applied according to the direction of the trade: buying UAH forward is allowed freely or allowed with higher limits, while the forward trades selling UAH are not allowed or allowed with restrictions, stricter limits, etc. The great advantage of this method is that it can be easily fine-tuned and adapted to the circumstances. As a disadvantage, knowing and understanding of the rules can be a challenge for market participants at the beginning. So, due to the complexity of this methodology, communication should be a major focus to ensure that market players are aware of the details of the new system.

38. **For non-deliverable forwards similar approaches can be used as for the forwards.** In the Ukrainian FX market there is also a substantial demand for NDF transactions to cover open FX positions, based on pre-war experience and feedback from surveys and interviews. Since in NDF

transactions the notional amount is not delivered and cash-flow happens only to the extent of the P/L settlement, the impact on the exchange rate is moderate and less direct. This also means that the easing process can be started with less risk, while for some companies an NDF transaction may provide the same or even better benefits. While remaining on a conservative basis, it is advisable to consider the same position-limiting restrictions as for forward transactions. For example: (i) differentiating by the direction of the deal, only trades with UAH on the buy side can be allowed. The permission for NDF transactions may be linked to: (ii) a limit; or to the (iii) requirement of a real economic need, as evidenced by a contract. In this case, not only: (iv) some combination of the methods can be used; but (v) a wait-and-see approach can also be used, whereby no easing is applied to these transactions in the first instance, but only after experience of other easing, mainly in the forward market, has become available.

39. **In the case of NDFs some of the solutions can be implemented only in more complicated ways and/or would require more resources.** The cash-flow need of an NDF settlement is typically minimal, so the same notional position has a significantly different—and smaller—footprint on the FX market for an NDF than for a forward transaction. As a result, the way in which the potential limits should be calculated is less straightforward, and the connection between the volume of NDF positions and the risks stemming from them can be more complex. NDFs are not used by market participants to actually pay out the amount covered. So similarly, a limit-allocating method based on the requirement of a contract and the justification of the usage of FX funds obtained requires further examination, before being possibly applied.

Table 4. Re-introducing FX Derivatives: Possible New Guidelines

	New rules based on:				
Instrument:	(1) Direction	(2) Limits	(3) Contract	(4) Combination of methods	(5) No change
FX forward: buying UAH	Allowed without limitation	Allowed in limited amount	Allowed in limited amount and contract required	Allowed in limited amount	Not allowed
FX forward: selling UAH	Not allowed	Allowed in limited amount	Allowed in limited amount and contract required	Not allowed or allowed with lower limits	Not allowed
NDF: buying UAH	Allowed without limitation	Allowed in limited amount	Further investigation needed for rules	Allowed in limited amount	Not allowed
NDF: selling UAH	Not allowed	Allowed in limited amount	Further investigation needed for rules	Not allowed or allowed with lower limits	Not allowed

Legend:

Colour code	Description
Dark green	Allowed without limitation
Green	Allowed in limited amount
Light green	Allowed in limited amount and contract required
Pink	Not allowed or allowed with lower limits
Red	Not allowed
Grey	Further investigation needed for rules

Source: IMF staff illustration.

40. **Several advantages can be reached by the tailored combination of methods used for controlled easing of restrictions.** Different methods of easing measures/restrictions can be applied to different types of FX derivatives; thus, an appropriate combination can ensure the flexibility required by the high degree of uncertainty present in the Ukrainian market. For illustration, see the following example (Table 5). As buying UAH in the form of forward or NDF transaction does not pose relevant risks for exchange rate developments or FX outflows, lifting restrictions asymmetrically according to the trade direction can be an initial step. Forward transactions where UAH is sold can be allowed to a lesser extent, e.g., by requiring the existence of underlying contract or by setting limits on the quantity. These limits can be modified or eliminated within a short period of time, according to the circumstances. In this way, parameters, such as requirements or limits, can be linked to preconditions, by their finetuning gradual easing is feasible and risks remain controlled, while FX market conditions can be brought closer to normal.

Table 5. Options for the Combination of Restrictions on Hedging Instruments for Individuals and Legal Entities

Instrument:	Measure	Notes
FX forward: buying UAH	Allowed without limitation	-
FX forward: selling UAH	Allowed in limited amount **and** contract required	Limits can be increased, decreased, or eliminated
NDF: buying UAH	Allowed without limitation	-
NDF: selling UAH	Not allowed or allowed with lower limits	Limits can be increased, decreased, or eliminated

Note: The table is illustrative, showing a possible, but not necessarily the best considered or recommended solution.
Source: IMF staff illustration.

B. Follow-up Process of the Measures

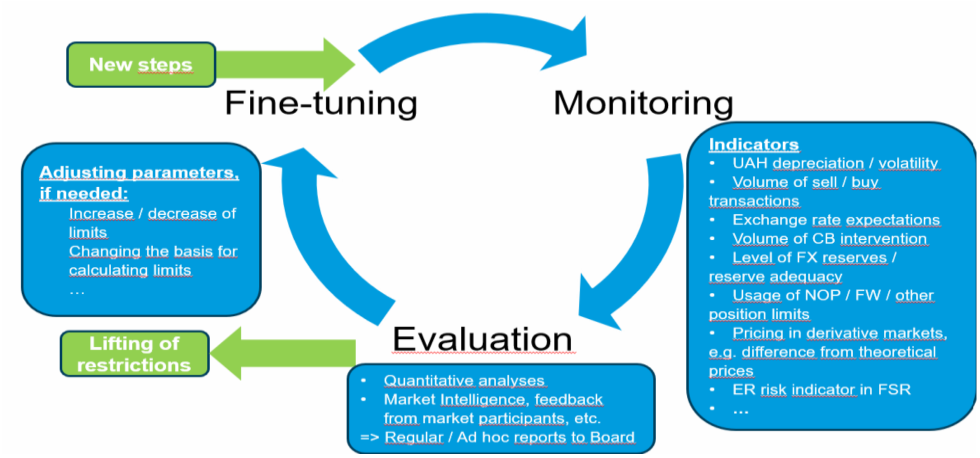
41. **The NBU should establish a multi-step follow-up process to support the back-testing of the impact of each liberalization measure and to make the appropriate adjustments when needed.** The Strategy's guiding principles require that moves towards foreign exchange liberalization and a more flexible exchange rate regime should be gradual, while minimizing risks and assessing preconditions. This purpose can be adequately supported by a comprehensive, iterative internal follow-up mechanism with the following main building blocks: (i) continuous monitoring of key indicators; (ii) regular evaluation based on these indicators and on some soft information, such as market intelligence practices and feedback from market participants; (iii) possible fine-tuning of the measures based on the evaluation phase (Figure 5). The different phases are mutually supportive and lead to continuous, gradual improvement.

42. **In the monitoring phase, as the first step in the process, the NBU should select a wide range of key variables that provide a comprehensive picture of the state of the foreign exchange market and the risks surrounding it.** Indicators should cover at least the following areas: exchange rate developments; exchange rate expectations; transactions and FX positions by sector and by instrument type; central bank presence in the FX market; reserve adequacy; financial stability risk indicators. Such variables may include, but are not limited to the following: UAH depreciation (appreciation) and volatility; volume of sell/buy transactions in spot and derivative markets; exchange rate expectations; volume of central bank interventions; usage of intervention budget (on a daily and longer term basis); level of FX reserves and reserve adequacy; usage of banks' NOP limits (or other position limits, e.g., forward, if introduced); exchange rate (sub)component(s) in Financial Stability Report; etc.

43. **In the next step, a regular evaluation of the implemented measure(s) should be carried out on the basis of the evolution of the selected variables.** The evolution of the selected key variables provides a starting point for the assessment. In addition to quantitative measurement, evaluation needs to be complemented by soft analytical methods, like feedback from market actors, market intelligence activity, etc. Analyses should be provided to the Board and the relevant decision-making bodies through regular and ad hoc reports. The assessment may lead to a decision on how to move forward in the process, i.e., further easing or lifting of the restriction(s), following a wait-and-see approach without relevant modification, or fine-tuning of the measures.

44. The process may naturally require more or less iteration, so measures can be fine-tuned in the next phase. Possible modifications could include, but are not limited to, changes to the size, nature or basis of the limits, stakeholders involved, etc. If the parameters are changed or a new action is taken, the process starts over with the monitoring part. In this way, key principles like graduality, meeting preconditions, safeguarding macroeconomic and financial stability, risk and preparedness assessment are ensured.

Figure 5. Follow-up Process of the Measures

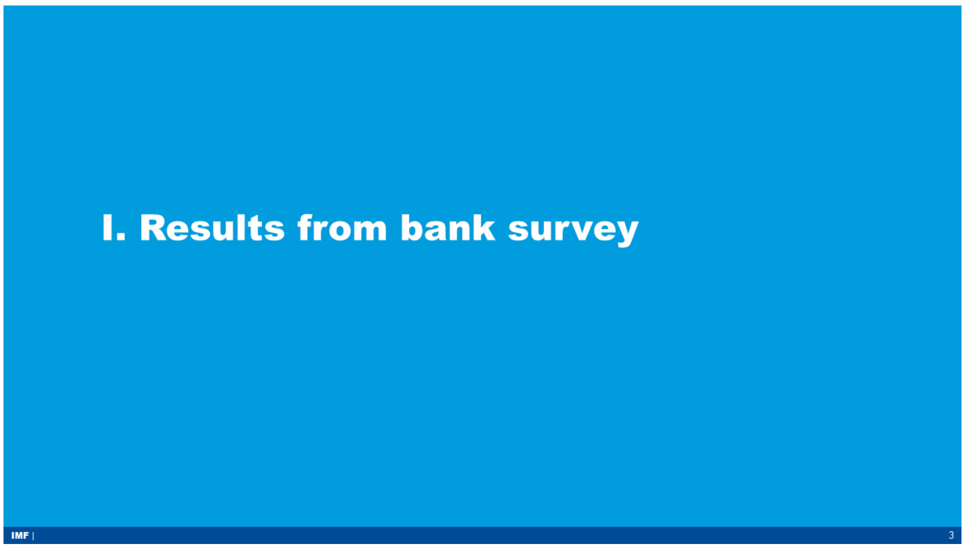


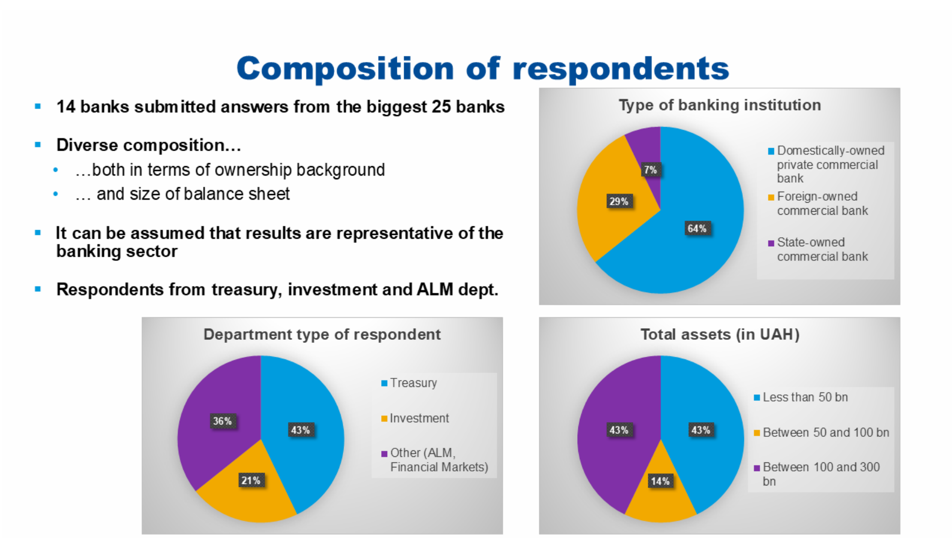
Source: IMF staff illustration.

Appendix I. Survey on FX Derivatives Market

The findings of the report were supported by a questionnaire and online interviews. In preparation for the TA mission, a detailed questionnaire was sent to major banks. In addition, interviews were conducted with several large non-financial corporations, which are characterized by active foreign exchange market participation and extensive export-import activity. The results of the survey and interviews are summarized in the following pages.

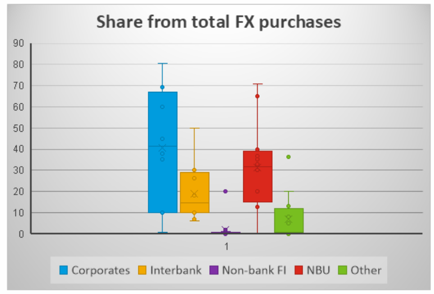
The findings from the survey and feedback were presented to the NBU staff (on September 30, 2024), with the majority of the feedback validating their experiences with market players.

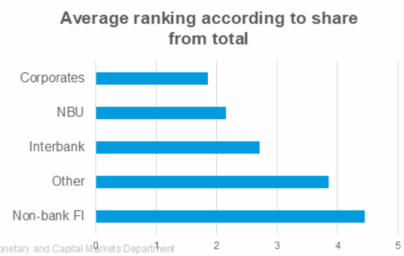




Composition of FX trading activity

- Corporates are the most important custumers
- NBU is also a relevant partner, but its share varies a lot
- Interbank activity is relatively low
- Non-bank FIs are not relavant
- Quartiles for corporates: Q1=10% and Q3=66%
- Quartiles for interbank: Q1=10% and Q3=29%





Share from total FX purchases	Corporates	Interbank	Non-bank FI	NBU	Other
Max	81	50	20	71	36
Average	41	19	2	31	7
Min	1	6	0	0	0

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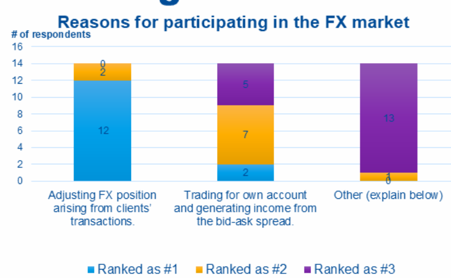
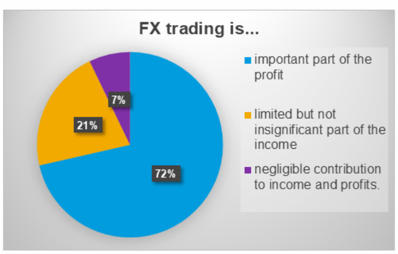
Reasons for FX trading

- Adjusting FX positions from client transactions is by far the most important reason for FX trading
- Trading for own account and income generating are modestly important
- „Other" reasons as explained: Hedging activity and supporting own operations
- FX trading is typically an important part of the profit





Other reasons explained
Hedging risks
Hedging currency risks
Buy-sell for own operations
To support bank's own operations
Own income/expenses, provisions, revaluation of bonds
Cashflow, reserves etc.
Adjusting FX position arising from other transactions

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Platforms and quoting activity

- Practically all the banks use Bloomberg and/or Reuters
- Phone trading and other electronic platforms are still in place, though to less extent
- ~2/3 of respondents are actively quoting with other banks
- Quoting for clients via platform is moderately present
- Quoting within maximum bid-ask spread is not common

Platform used	#
Bloomberg	14
Reuters	13
Phone trading (OTC only);	5
Other (UkrDealing, Jetstream, Integral)	5

Question:	Yes		No		Total	
	#	%	#	%	#	%
Are you accepting request for quote (RFQ) from corporate clients via a platform?	4	29%	10	71%	14	100%
Are you quoting other banks continuously on the platform	9	64%	5	36%	14	100%
Are you generally quoting/trading with all other banks?	9	64%	5	36%	14	100%
Are you quoting within a maximum bid-ask spread?	4	29%	10	71%	14	100%
If yes, is the maximum bid-ask spread agreed upon among market participants?	2	50%	2	50%	4	100%

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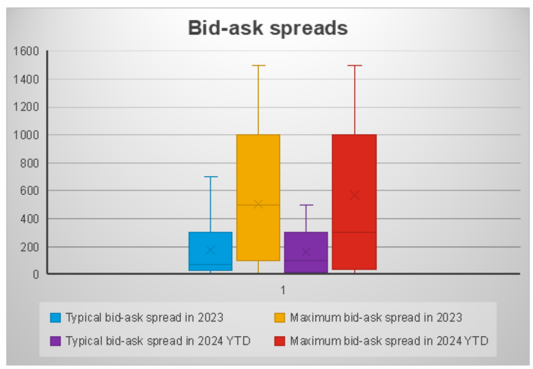
Spreads and amounts

- There was no significant change in spreads from 2023 to 2024
- Average of typical spread between 160-180 bp
- Not exceptional that maximum spread goes over 1000 bp
- The standard trade amount for banks is 500.000 USD (bids and offers) - this is the minimum amount for Matching platform
- The standard trade amount for large corporates is also 500.000 USD, but with more variation and with a lower average
- Minimum amount usually based on internal assessment
- Average minimum amount: ~125.000 USD, modus: 100.000 USD



	Yes	No
Are you quoting for a minimum amount?	11	3
	Internal assessment	Market assessment
How the minimum volume amount is determined?	10	4

	Average	Modus	Min	Max
Minimum amount	124 357	100 000	1 000	500 000

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Closing positions and limits

- Positions from clients are closed within a very short period of time (same day)…
- And by spot transaction, mainly with banks / NBU
- Usually there is internal FX position limit…
- … though it is typically not different from supervisor's limit
- No different limits for own trading book and clients' tradings…
- … and for FX derivatives exposures

Over what horizon do you typically close a position arising from clients' transactions?	#
Immediately	2
Same day - by the end of the business day	12
To close a position would you typically:	**#**
buy/sell spot with another bank	10
buy/sell spot with a client	3
buy/sell spot with the NBU	10

Question:	Yes		No		Total	
	#	%	#	%	#	%
Do you have an internal FX position limit?	12	86%	2	14%	14	100%
If yes, is the internal limit different from the supervisor's limit?	4	33%	8	67%	12	100%
Do you have a different limit for the position arising from clients' transactions and for own trading book?	0	0%	12	100%	12	100%
Do you have an internal limit on exposures to FX derivatives?	0	0%	12	100%	12	100%

Usage of derivatives

- Slight majority of the respondents trade in derivatives with banks (64%) / corporates (57%)
- Altogether 80% trade with either banks or corporates
- Usage of FW/NDF is very rare (due to restrictions)
- Swaps are more commonly used, frequency and currency pairs are very mixed
- USD/UAH is slightly the most used swap currency pair
- In overseas market there are no forward transactions…
- …swaps are used overseas, but by a limited number of banks

Types of FX derivatives used, and frequency of use in the domestic financial market	Not used	Used daily	Used quite frequently (weekly)	Used infrequently (less than 2x/month)
Forward/NDFs: USD/UA	11	0	0	0
Swaps: USD/UAH	0	3	4	5
Forward/NDF: EUR/USD	10	1	0	0
Swaps: EUR/USD	5	3	2	1
Forward/NDF: EUR/UAH	11	0	0	0
Swaps: EUR/UAH	3	3	2	3
Other currency pairs	10	0	1	0

Types of FX derivatives used, and frequency of use in the overseas financial market	Not used	Used daily	Used quite frequently (weekly)	Used infrequently (less than 2x/month)
Forward/NDF EUR/USD	8	0	0	1
Swaps EUR/USD	4	2	2	1
Other currency pairs	5	1	0	3

Forward spreads by tenors

- The *typical* fw bid-ask spread on longer maturities is over 150 bp…
- … on shorter maturities 25-50 bp also occurs
- The *maximum* spread is typically above 150 bp, in longer maturities for all respondents
- No significant difference between 2023 and 2024
- None of the respondents provide quotes for settlement longer than t+2
- The maturity of client forward transactions is mixed – answers vary from 1W to 6M

What is the *typical* bid-ask spread for forward transactions?	0-25 points	25-50 points	51-100 points	101-150 points	Can vary over 150 points
Up to one week	0	1	0	0	1
One month	0	1	0	0	1
Three months	0	1	0	0	1
Six months	0	0	0	0	2
Twelve months or more	0	0	0	0	2

What is the *maximum* bid-ask spread you recall for forward transactions *in the past year (2023)?*	0-25 points	25-50 points	51-100 points	101-150 points	Can vary over 150 points
Up to one week	0	0	1	1	4
One month	0	0	0	2	4
Three months	0	0	0	0	6
Six months	0	0	0	0	6
Twelve months or more	0	0	0	0	6

What is the *maximum* spread you recall for forward transactions in the *past six months (Jan - June 2024)*	0-25 points	25-50 points	51-100 points	101-150 points	Can vary over 150 points
Up to one week	0	0	1	1	4
One month	0	0	1	1	4
Three months	0	0	0	0	6
Six months	0	0	0	0	6
Twelve months or more	0	0	0	0	6

Forwards vs. NDFs

- If the terms of a forward and an NDF trade are the same, the majority would recommend entering a forward (9 banks), but the number of banks choosing NDF is not negligible either (5 banks)
- Opinions are divided on the relative merits of Forwards and NDFs
- The majority disagrees with the good liquidity of the NDF market
- According to a slight majority settlement procedures are slightly better for the forwards
- Opinions are mostly neutral on the impact on the financial position and the clarity of the regulation

Rationale for choosing between *forward and NDF*:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Forward contracts have better liquidity (tighter spread, more counterparties)	3	4	2	4	1
NDFs have good liquidity (tighter spread, many counterparties) in the domestic	4	5	3	2	0
Settlement procedures are clearer for forwards relative to NDFs.	1	2	4	5	2
Forwards have less impact on financial position relative to NDFs.	1	2	6	5	0
Regulations for forwards compared with NDFs are clearer.	1	1	7	4	1

Fw rate determination & covering a fw sale

- The key basis for determining the forward rate is the theoretical rate based on interest rate differential
- Benchmark used by fewer banks
- Forward sales are mainly covered by borrowing LCY and buying spot FX
- Forward contract in the opposite direction is rare

How do you determine a forward rate for a transaction with a client?	Never	Sometimes	Always
Use of a theoretical rate based on the interest rate differential.	0	2	7
Benchmark based on market forward reference rate.	4	2	2
Other (Market conditiones; Yields of long term bonds and Treasuries; Price of assets and liabilities)	5	3	0

How do you cover a forward sale?	Never	Sometimes	Always
Borrow local currency, immediately buy FX; and invest it in the local FX money market instrument.	0	3	8
Enter in the opposite contract with a counterparty in the forward market.	8	2	0
Other (Buy and sell bonds)	6	3	0

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Obstacles of appropriate hedging and fw markets

- The vast majority of banks say: (i) corporate clients do not hedge appropriately and (ii) the money market does not function well for providing forwards/swaps
- As for (i), most important reasons are…
  - Regulatory restrictions
  - Lack of risk awareness, inadequate knowledge/experience
- While further inhibiting factors can be identified

Which reasons would contribute to your clients not being able to hedge exchange risk appropraitely?	Not important	Somewhat important	Very Important	Not sure
Lack of risk awareness/inadequate knowledge/experience	0	10	2	2
No business needs for financial hedge	0	7	1	6
Accounting and tax treatment uncertain	0	7	3	4
Inadequate price information	4	5	3	2
Regulatory restrictions	0	1	12	1
Excessive cost of financial hedging	2	6	3	3

What are the main obstacles for you to provide forwards/FX swaps?	Not important	Somewhat important	Very Important	Not sure
Lack of adequate money market pricing information	1	4	7	2
Lack of deep enough local currency money market especially for longer maturities.	0	4	9	1
Lack of deep enough FX money market, especially for longer maturities.	1	6	6	1
Regulatory, accounting, and/or tax treatment of the forward.	1	5	7	1
Excessive cost of financial hedging	5	6	1	2

- As for (ii), the most important obstacle is the lack of deep LCY money markets
- However other obstacles are important, as well

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II. Non-financial corporates interviews

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Sources

- The questionnaires have not been returned
- Three interviews were conducted (25 September)
- Big holding companies in sectors of agriculture, energy, logistics with relevant EX-IM activities
- Different types of FX market activity, balance sheet openness, etc.

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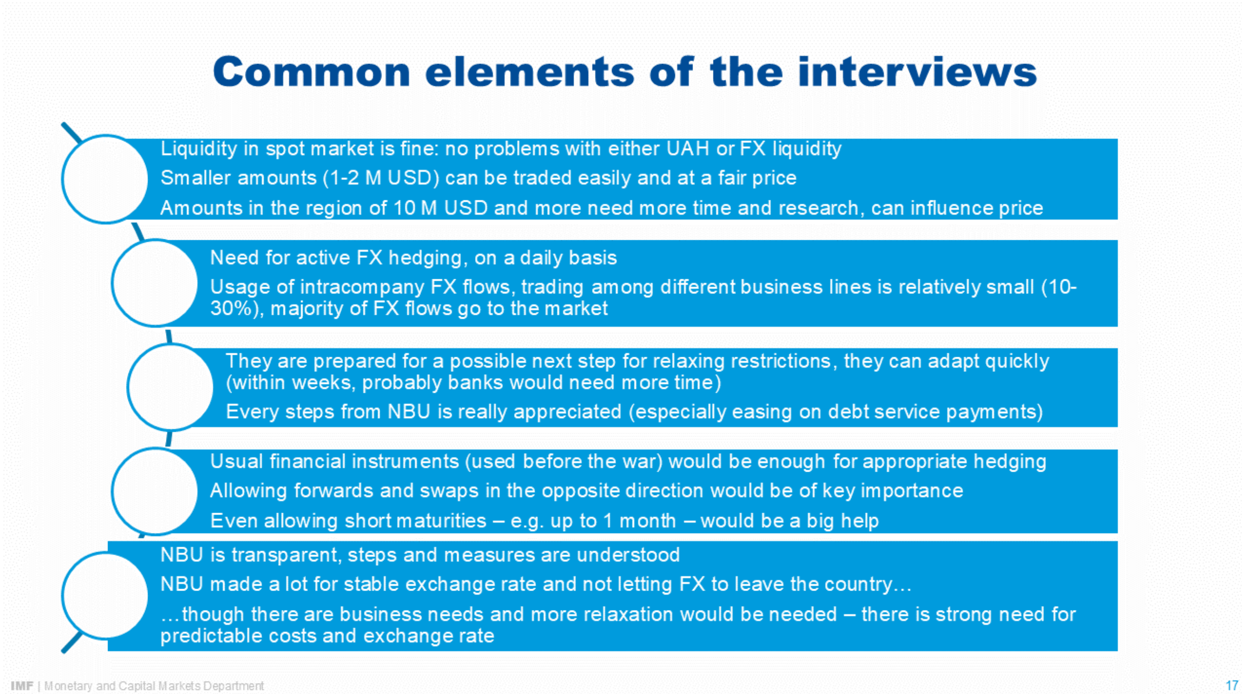
Common elements of the interviews
Liquidity in spot market is fine: no problems with either UAH or FX liquidity
Smaller amounts (1-2 M USD) can be traded easily and at a fair price
Amounts in the region of 10 M USD and more need more time and research, can influence price
Need for active FX hedging, on a daily basis
Usage of intracompany FX flows, trading among different business lines is relatively small (10-30%), majority of FX flows go to the market
They are prepared for a possible next step for relaxing restrictions, they can adapt quickly (within weeks, probably banks would need more time)
Every steps from NBU is really appreciated (especially easing on debt service payments)
Usual financial instruments (used before the war) would be enough for appropriate hedging
Allowing forwards and swaps in the opposite direction would be of key importance
Even allowing short maturities – e.g. up to 1 month – would be a big help
NBU is transparent, steps and measures are understood
NBU made a lot for stable exchange rate and not letting FX to leave the country…
…though there are business needs and more relaxation would be needed – there is strong need for predictable costs and exchange rate
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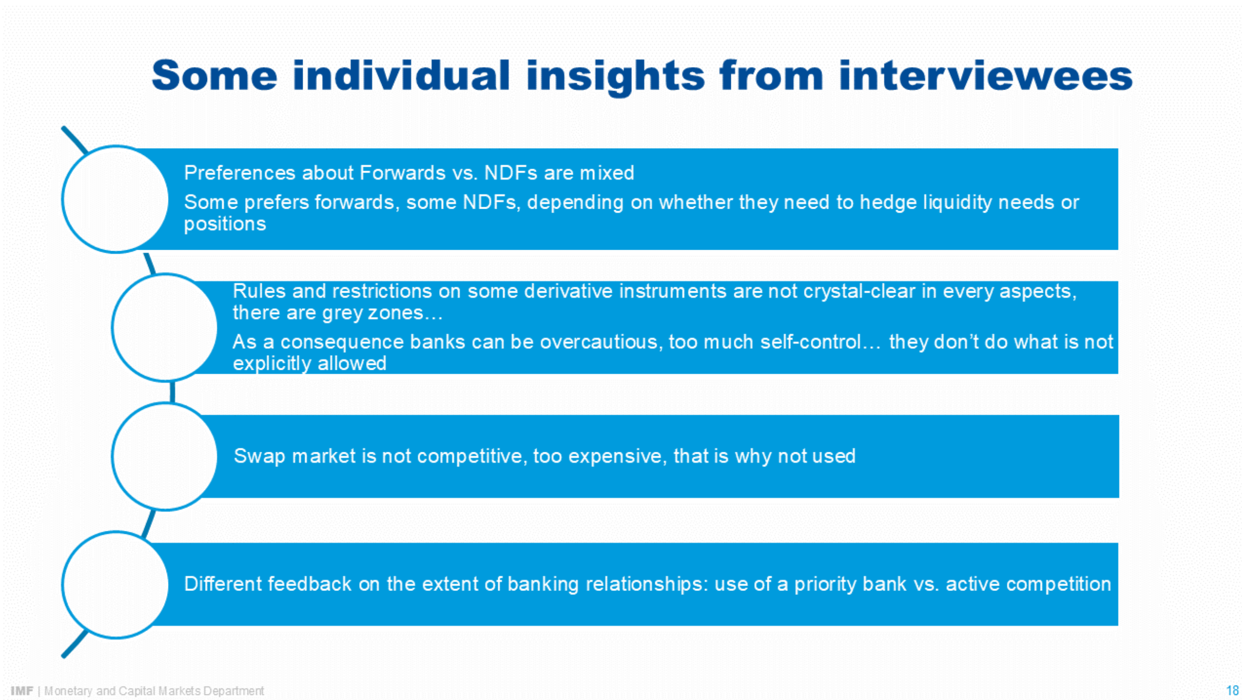
Some individual insights from interviewees
Preferences about Forwards vs. NDFs are mixed
Some prefers forwards, some NDFs, depending on whether they need to hedge liquidity needs or positions
Rules and restrictions on some derivative instruments are not crystal-clear in every aspects, there are grey zones…
As a consequence banks can be overcautious, too much self-control… they don't do what is not explicitly allowed
Swap market is not competitive, too expensive, that is why not used
Different feedback on the extent of banking relationships: use of a priority bank vs. active competition
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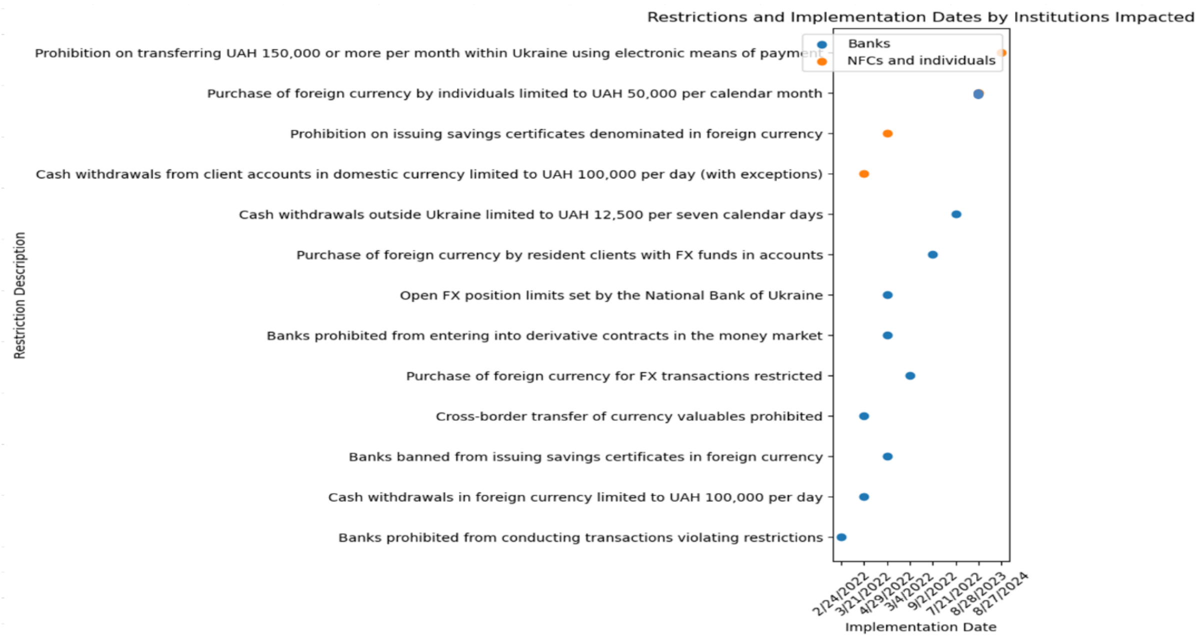
Annex I. Capital Account Restrictions and Liberalization Strategy



Source: Mission's illustration

Roadmap for Gradual Easing/Lifting Temporary FX Restrictions

No.	STAGE I	Minimizing the multiple currency practices (MCPs); trading transactions, new loans/investment
1		Sale of cash foreign currency by financial institutions
2		Sale of cashless foreign currency to households by banks
3		Transfer of foreign currency to import works and services
4		Corporate card transactions
5		Repayment of "new" external corporate debt
6		Repatriation of "new" dividends
7		Repayments of "old" loans and investments guaranteed by foreign ECAs and development banks
8		Payments under "new" lease, factoring and rent agreements

No.	STAGE II	Trade financing, banks' currency risks, interest on "old" debts and investments
1		Banks' purchases for currency position against provisions made
2		Payment of interest on "old" external loans
3		Payments under "old" lease, factoring, and rent agreements
4		Transfer under "old" customs declarations
5		Refund of prepayments made before the war
6		Repatriation of dividends
7		Changes in the currency of repayment of loans
8		Settlement deadlines

No.	STAGE III	Payments on loans and investments, household transactions, derivatives, investments abroad
1		Repatriation of proceeds from investments in domestic government debt securities
2		Repatriation of direct investments
3		Repayment of "old" external corporate debt
4		Purchase of foreign currency if it is available on the account
5		Banks' FX position limits
6		Households' transfers abroad
7		Card settlements abroad
8		P2P transfers and quasi -cash
9		Transfers abroad to nonresidents' own accounts
10		Conclusion of money market derivative contracts with customers
11		Issuing loans to nonresidents
12		Investments of residents in foreign assets

Completed In progress Not started

- Although the roadmap provides for a gradual lifting of restrictions, some steps may be taken earlier or later (specifically, within stages), provided the conditions emerge when deviating from the expected sequence will be beneficial for the economy.
- Each measure to ease/lift restrictions allows a gradual progression, in particular through changing limits, calibrating the levels, etc.

Source: National Bank of Ukraine

Annex II. Monetary Operations Instrument—Reserve Requirements

1.0 ***Reserve Requirements*:** The ratio is differentiated by currency. All RR is fulfilled in UAH.

Reserve requirement ratio changes

Дата	Deposits of legal entities and private individuals on demand and funds at current accounts				Term funds and deposits of legal entities and private individuals								Deposits and funds at current accounts of other non-resident banks and loans received from international (except financial) and other non-resident organizations		Funds raised by banks from non-resident banks and non-resident financial organizations			Нормативний акт
	UAH		Foreign currency		UAH				Foreign currency				UAH		UAH	Foreign currency		
					Short-term deposits (deposits up to 92 c.d.)**		Long-term deposits (deposits 93 c.d and more)		Short-term deposits (deposits up to 92 c.d.)**		Long-term deposits (deposits 93 c.d and more)					Foreign currency (except RUB)	RUB	
	Legal entities	Private individuals	Legal entities	Private individuals	Legal entities	Private individuals	Legal entities	Private individuals	Legal entities	Private individuals	Legal entities	Private individuals						
since 01.10.2004	8.0				7.0								-	-	-			NBU Board Resolution No.397 dd 18.08.04
since 01.12.2004	7.0				6.0								-	-	-			NBU Board Resolution No.576 dd 30.11.04
since 01.09.2005	8.0				6.0								-	-	-			NBU Board Resolution No. 275 dd 09.08.05
since 01.05.2006	8.0				6.0								-	-	-			NBU Board Resolution No.130 dd 04.04.06
since 10.05.2006	6.0				4.0								-	-	-			NBU Board Resolution No. 169 dd 28.04.06
since 01.08.2006	3.0		5.0		2.0				3.0				-	-	-			NBU Board Resolution No. 268 dd 17.07.06
since 01.10.2006	1.0		5.0		0.5				4.0				-	-	-			NBU Board Resolution No. 364 dd 15.09.06
since 05.12.2008	0		5.0		0				3.0				-	-	-			NBU Board Resolution No.396 dd 25.11.08
since 05.01.2009	0		7.0		0				4.0				-	-	-			NBU Board Resolution No. 442 dd 22.12.08
since 01.02.2009	0		7.0		0				4.0				-	-	2.0			NBU Board Resolution No. 33 dd 30.01.09
since 01.07.2011	0		8.0		0				6.0		2.0		-	-	0	2.0		NBU Board Resolution No.195 dd 16.06.2011
since 30.11.2011	0		8.0		0				7.5		2.0		-	-	0	2.0		NBU Board Resolution dd 15.11.2011 No.407
since 31.03.2012	0		8.5		0				8.0		2.0		-	-	0	2.0	0.0	NBU Board Resolution dd 21.03.2012 №102
since 30.06.2012	0		10.0		0				9.0		3.0		-	-	0	3.0	0.0	NBU Board Resolution dd 19.06.2012 №248
since 01.07.2013	0		10.0	15.0	0				10.0		5.0		-	-	0	5.0	0.0	NBU Board Resolution dd 20.06.2013 №241
since 30.09.2013	0		10.0	15.0	0				10.0		7.0		-	-	0	5.0	0.0	NBU Board Resolution dd 19.09.2013 №371
since 19.08.2014	0		10.0	15.0	0				10.0		7.0		-	-	0	5.0		NBU Board Resolution dd 08.08.2014 №480
since 31.12.2014	6.5				3.0								-	-	-			NBU Board Resolution dd 18.12.2014 №820
since 10.03.2020	0*		10,0*		0*				10,0*				0*	10,0*	-			NBU Board Decision dd 12.12.2019 No. 926-рш
since 11.01.2023	5.0		15.0		0				10.0				5.0	15.0	-			NBU Board Decision dd 16.12.2022 №587-рш та 05.01.2023 №7-рш
since 11.02.2023	10.0		20.0		0				10.0				10.0	20.0	-			NBU Board Decision dd 30.01.2023 №40-рш
since 11.03.2023	10.0	20.0	20.0	30.0	0				10.0				10.0	20.0	-			NBU Board Decision dd 23.02.2023 №71-рш та від 03.03.2023 №86-рш
since 11.05.2023	10.0	20.0	20.0	30.0		20.0			10.0	30.0	10.0		10.0	20.0	-			NBU Board Decision dd 24.03.2023 №115-рш
since 11.09.2023	10.0	20.0	20.0	30.0	10	20.0	10		20.0	30.0	20.0	10.0	10.0	20.0	-			NBU Board Decision dd 09.08.2023 №275-рш
since 11.10.2024	15.0	25.0	25.0	35.0	15.0	25.0	15.0	0.0	25.0	35.0	25.0	15.0	15.0	25.0	-			NBU Board Decision dd 20.09.2024 №345-рш
...															-			

* The decision to raise by 2 pp the required reserve ratio for current accounts denominated in UAH and current accounts and term FX deposits was approved by
NBU Board Decisions dd 01.02.22 року No. 44-рш and dd 09.02.22р. №63-рш on amendments to NBU Board Decision No. 752–D dated 23 November 2017.
However due to the beginning of the war and need to enable banks to use additional liquidity NBU approved decision to keep the required reserves ratios at the levels that were. Changes were approved by
NBU Board Decision No. 114–D On Amendments to NBU Board Decision No. 752–D dated 23 November 2017 dated 8 March 202
**In accordance with the changes introduced by the Resolution No. 30 dated March 24, 2023 to the Resolution of the NBU Board No. 806, the differentiation of reserve requirement ratio by the term of attraction of funds exclusively for short-term and long-term has been canceled.
However, with changes approved by NBU Board Decision odated March 24, 2023 No. 115-рш on amendments to the NBU Board Decision dated November 23, 2017 No. 752-рш (with amendments) the differentiation of reserve requirements ratio for term funds and deposits of private individuals with an initial repayment period up to 92 calendar days (inclusive)

Source : National Bank of Ukraine