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FEATURES OF THE UKRAINIAN SOVEREIGN SECURITIES MARKET DURING RUSSIAN INVASION

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Key talking points

PRESENTATION FRAMEWORK

- Overview of sovereign securities market of Ukraine
- Connecting the Ukrainian market to the Clearstream network
- Sensitivity to global risk
- Current political and economic conditions in Ukraine
- How Ukraine is funding its defense
- War bonds

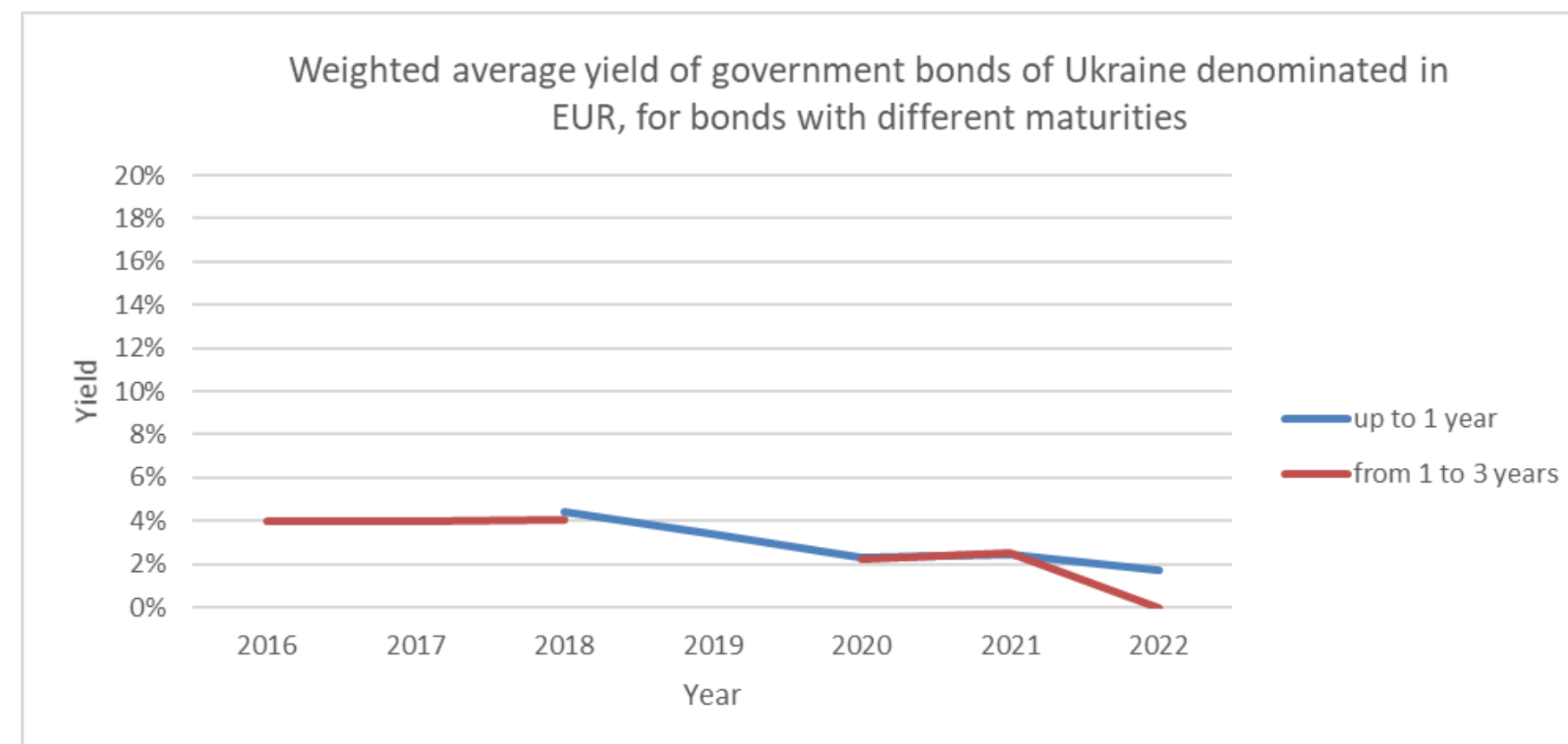
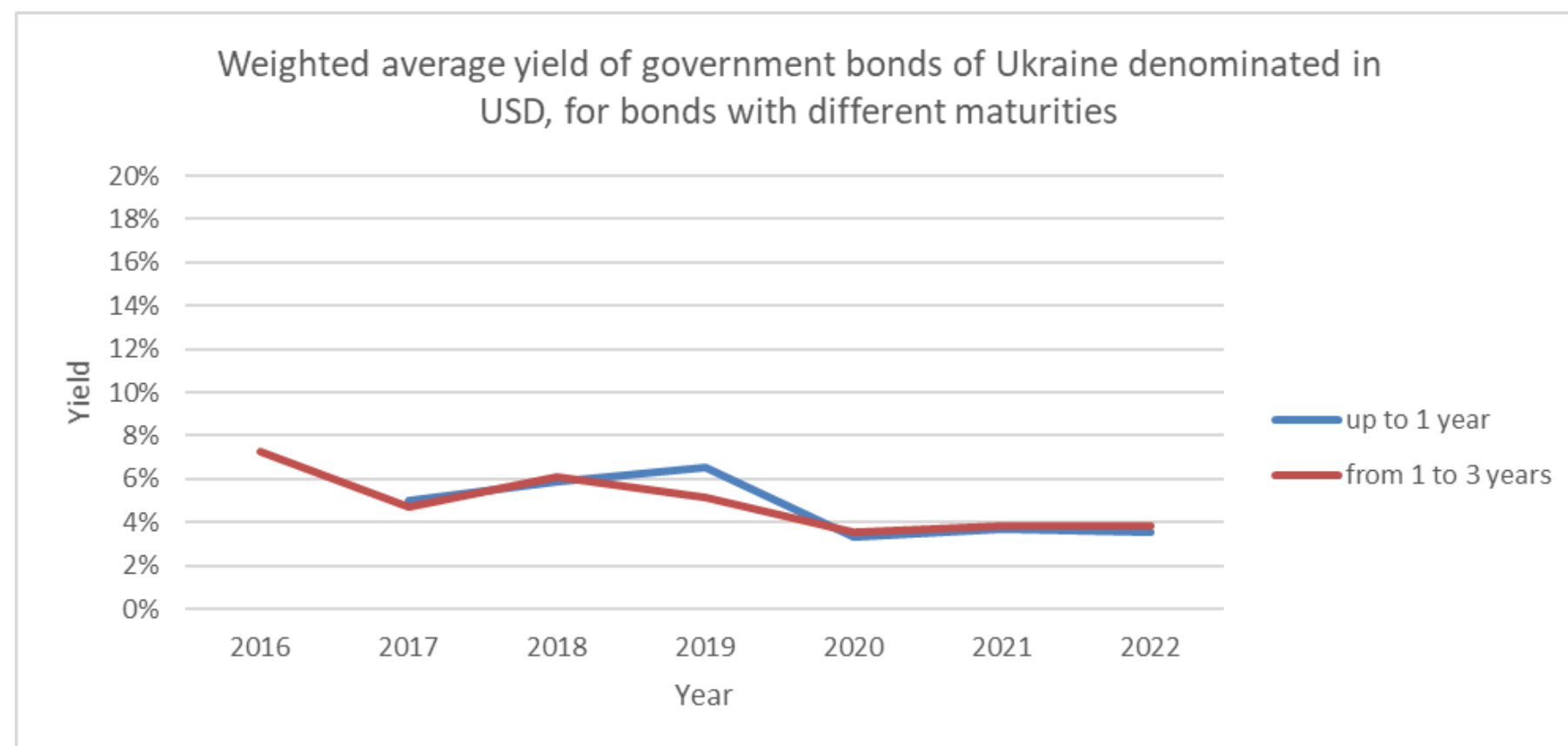
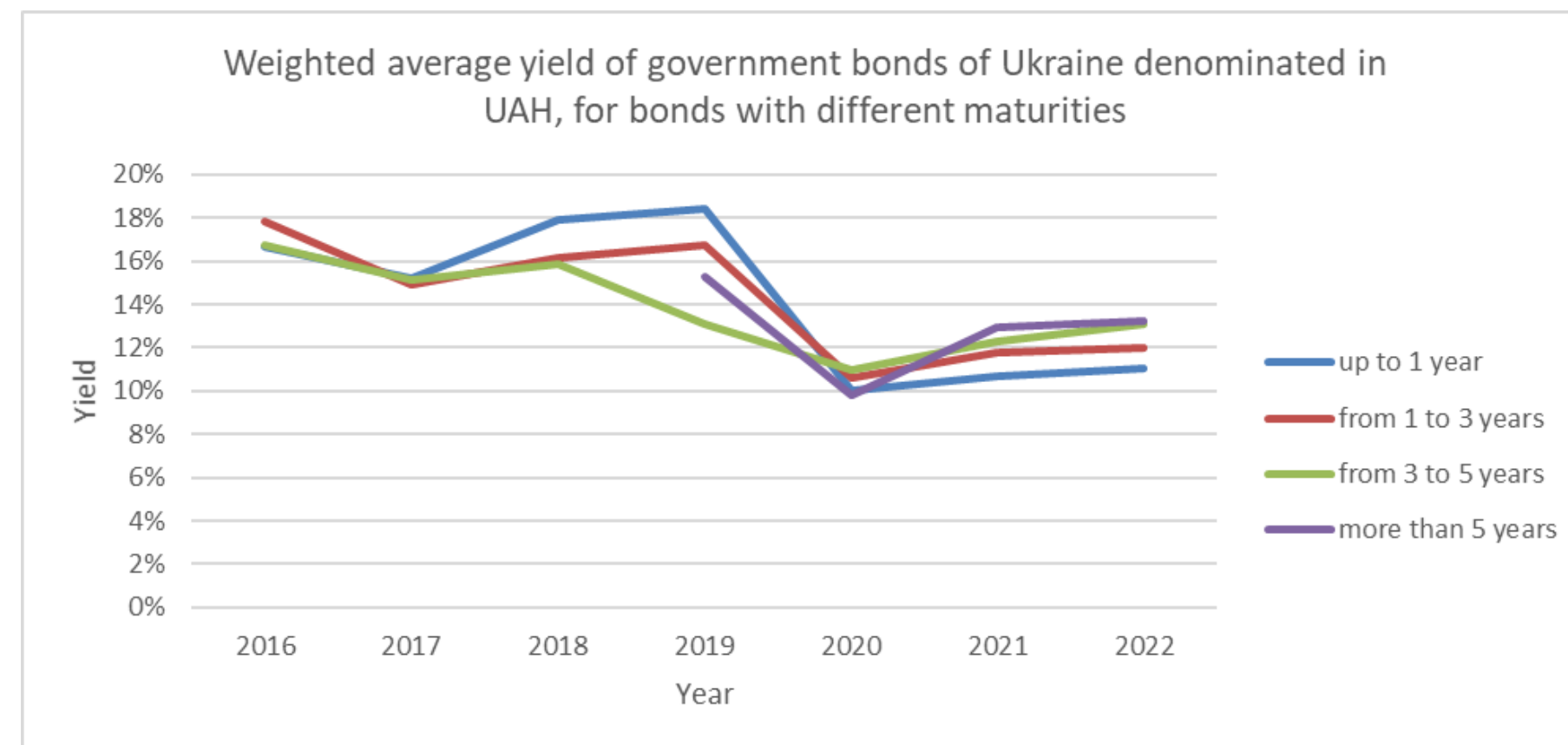
OVERVIEW OF SOVEREIGN SECURITIES MARKET OF UKRAINE

Ukrainian domestic government bonds are debt securities that the government sells to primary dealers and their clients in the primary market to cover the state budget financing needs.

Buying and selling of bonds in the secondary market occur between professional market participants and their clients (individuals, legal entities, non-residents).

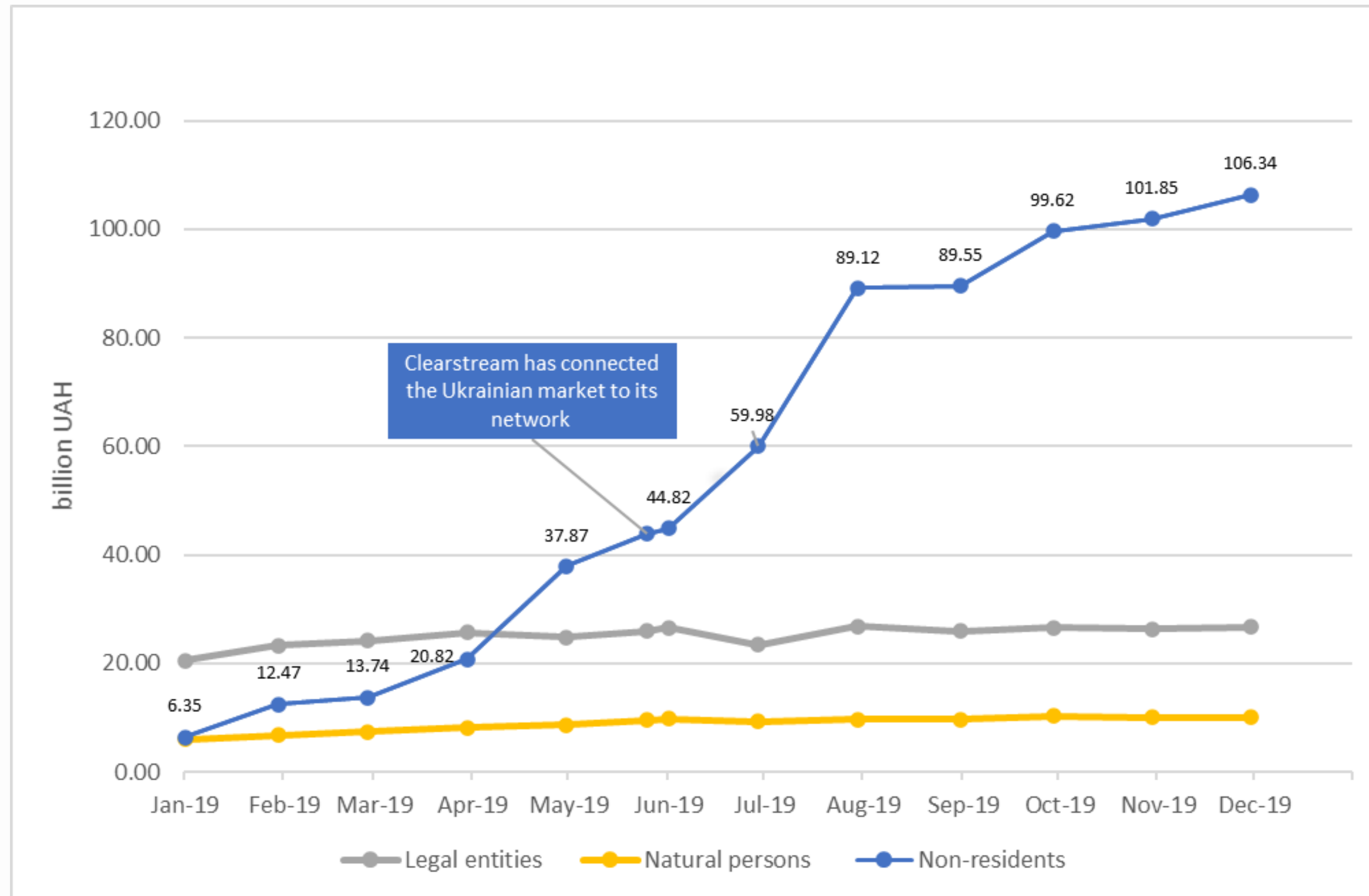


The yield on bonds denominated in hryvnia is much higher than the yield on bonds denominated in foreign currencies. The reason for this is currency risk.



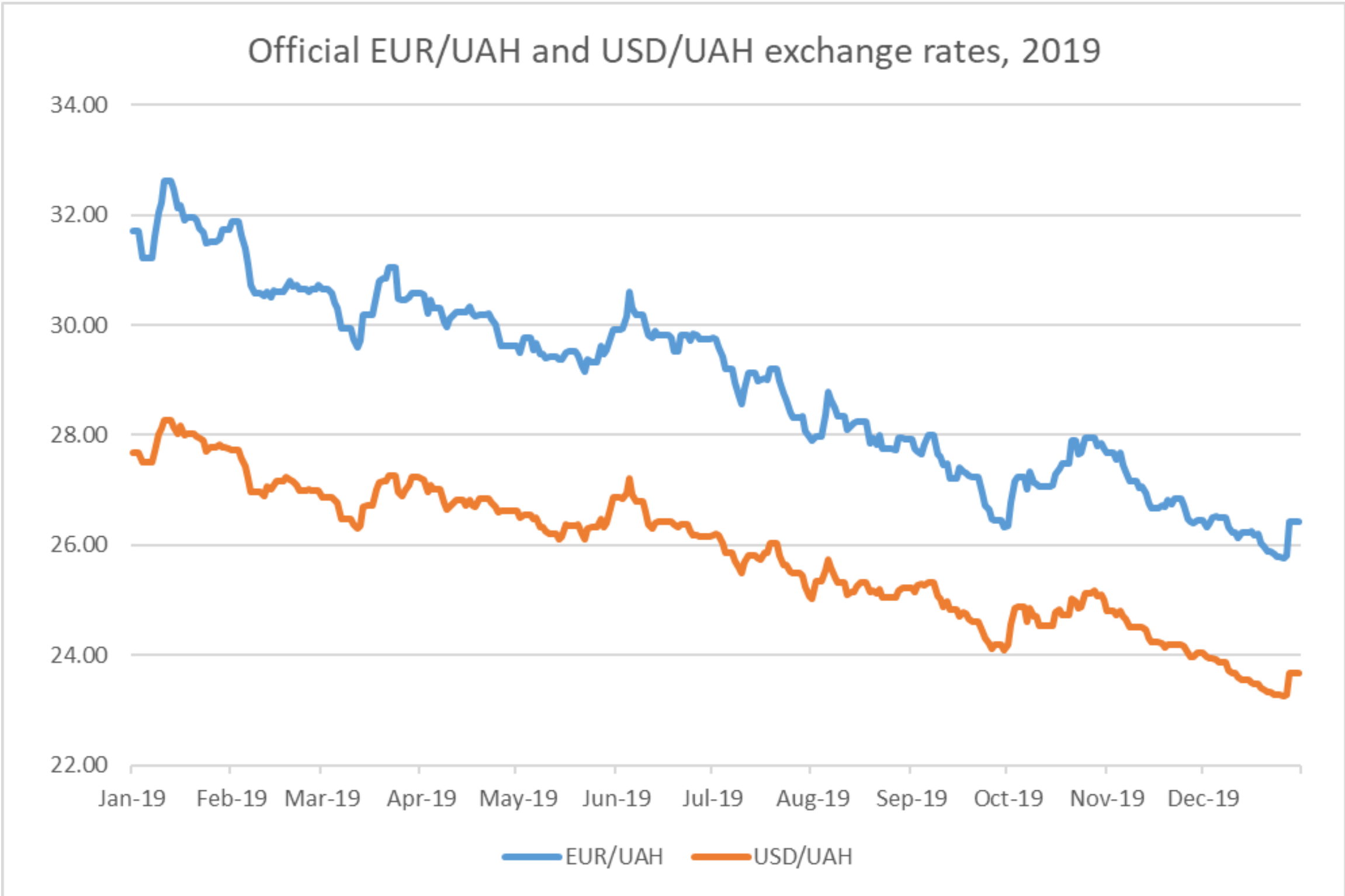
Data: NBU

INCREASE IN NON-RESIDENTS' PURCHASES OF UKRAINIAN HIGH-YIELD GOVERNMENT BONDS AS A RESULT OF CONNECTING THE UKRAINIAN MARKET TO THE CLEARSTREAM NETWORK ON MAY 27, 2019



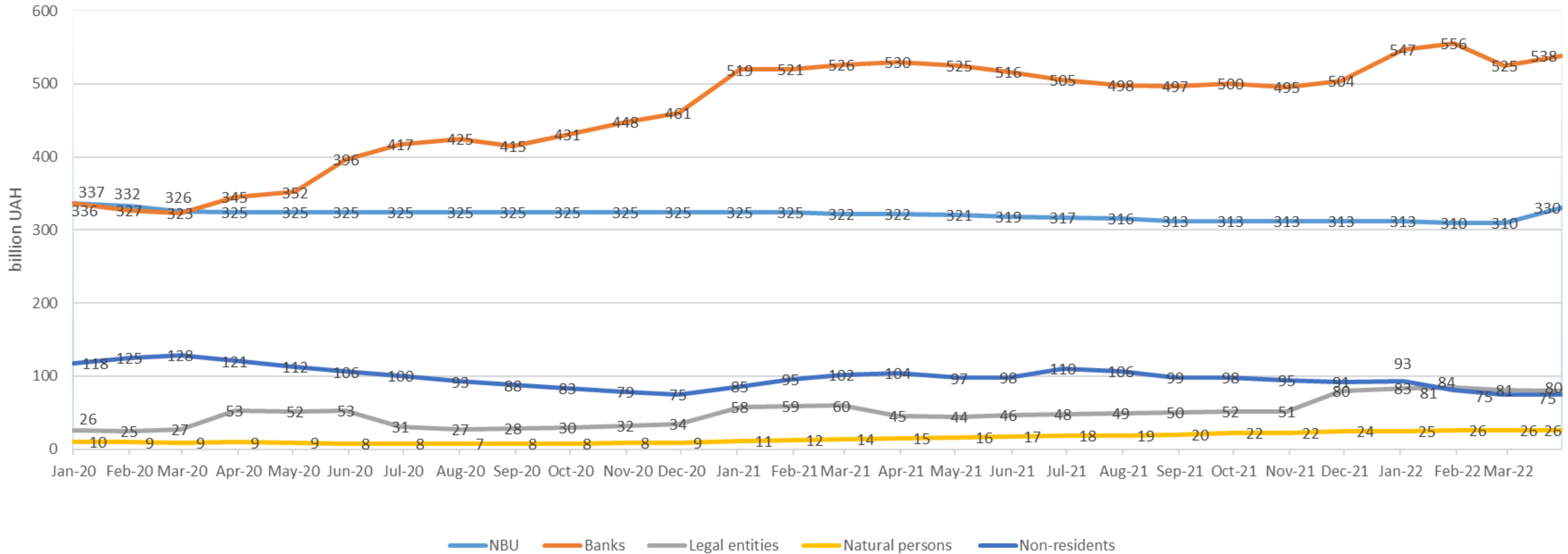
Data: NBU

The increase in the volume of foreigners buying Ukrainian high-yield domestic government bonds, respectively, increased the supply of currency in the market, which led to an even greater strengthening of the hryvnia.



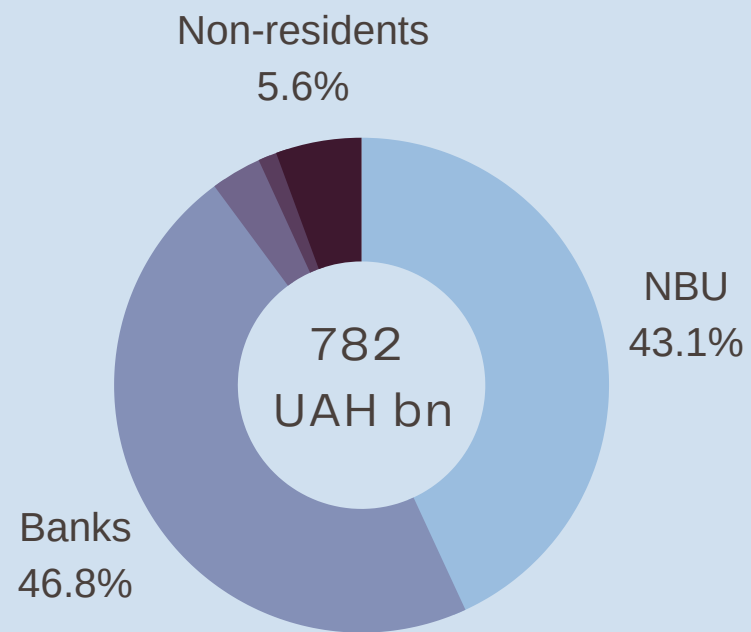
Data: NBU

During the crisis caused by COVID-19, there was a noticeable increase in the nominal value of bonds held by commercial banks, and a decrease in the nominal value of bonds held by non-residents.

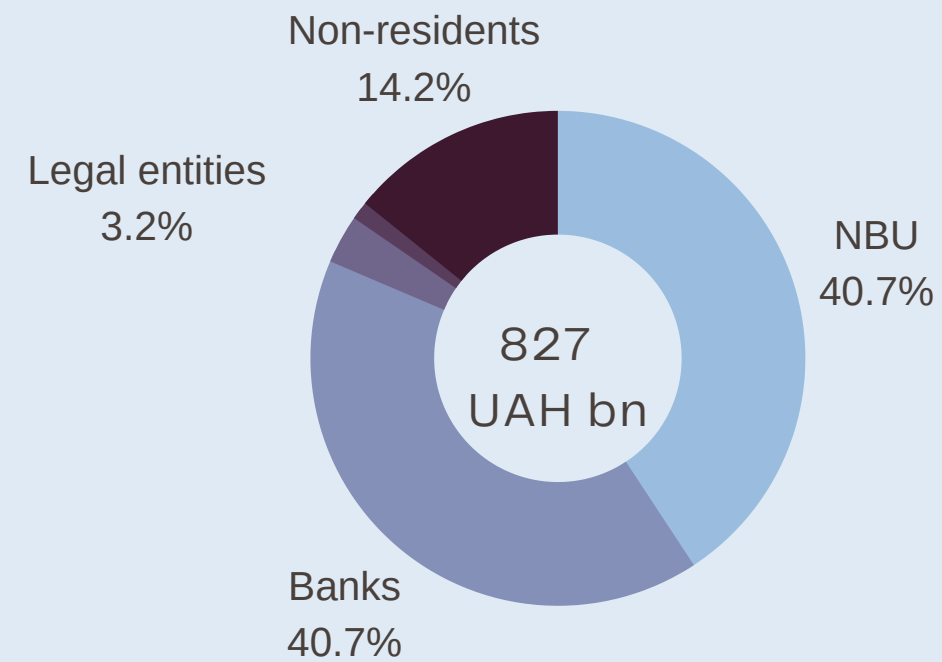


Data: NBU

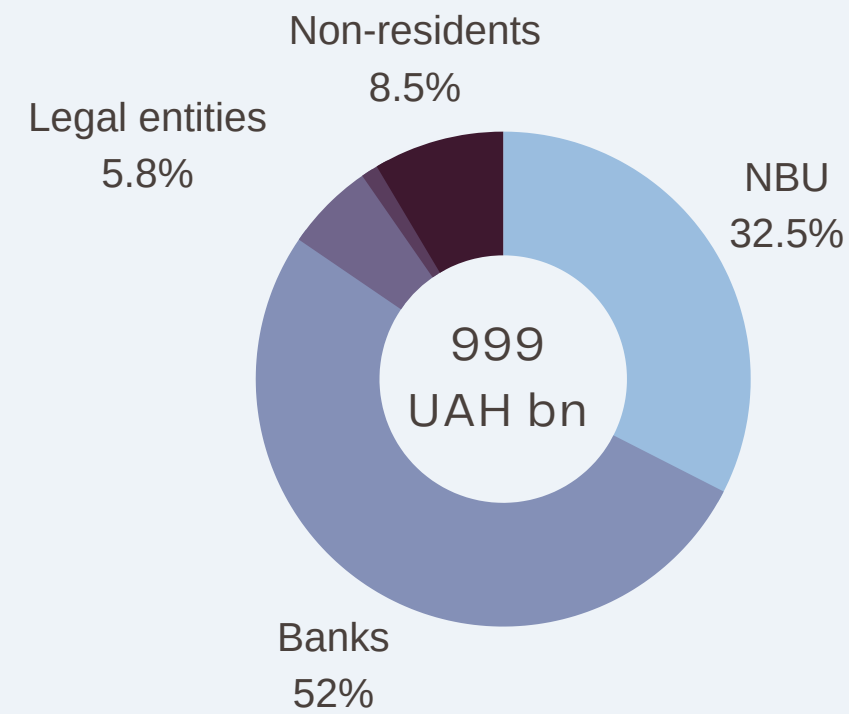
THE STRUCTURE OF DOMESTIC GOVERNMENT BONDS IN CIRCULATION



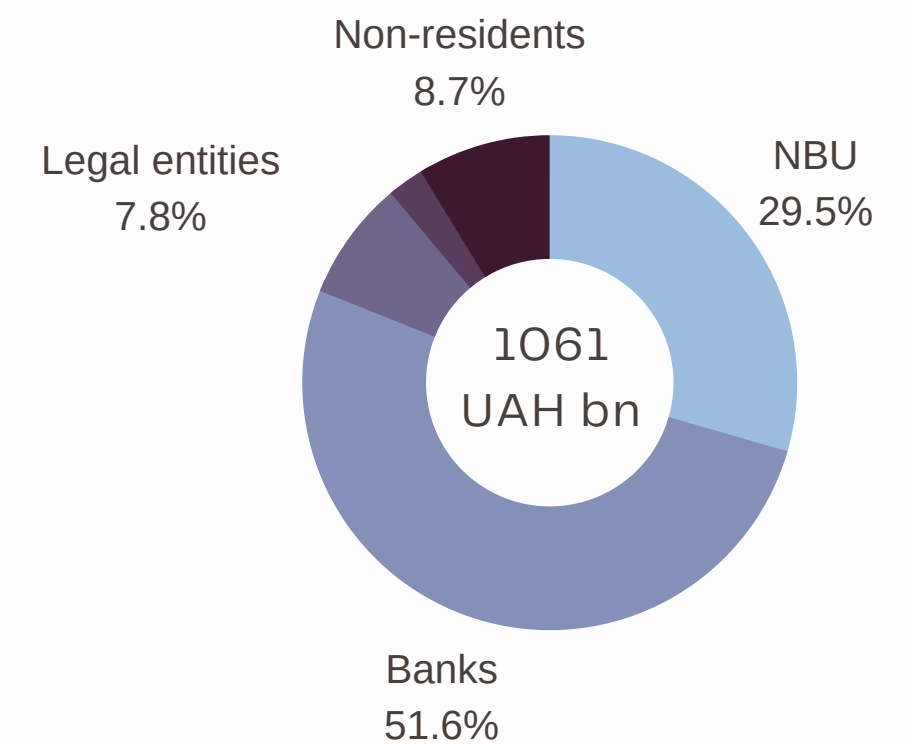
May 2019



January 2020



January 2021



January 2022

SENSITIVITY TO GLOBAL RISK

Sensitivity is measured by the slope coefficient from a linear regression of month-on-month changes in 10-year local currency sovereign yields on the log of monthly changes in the VIX index.

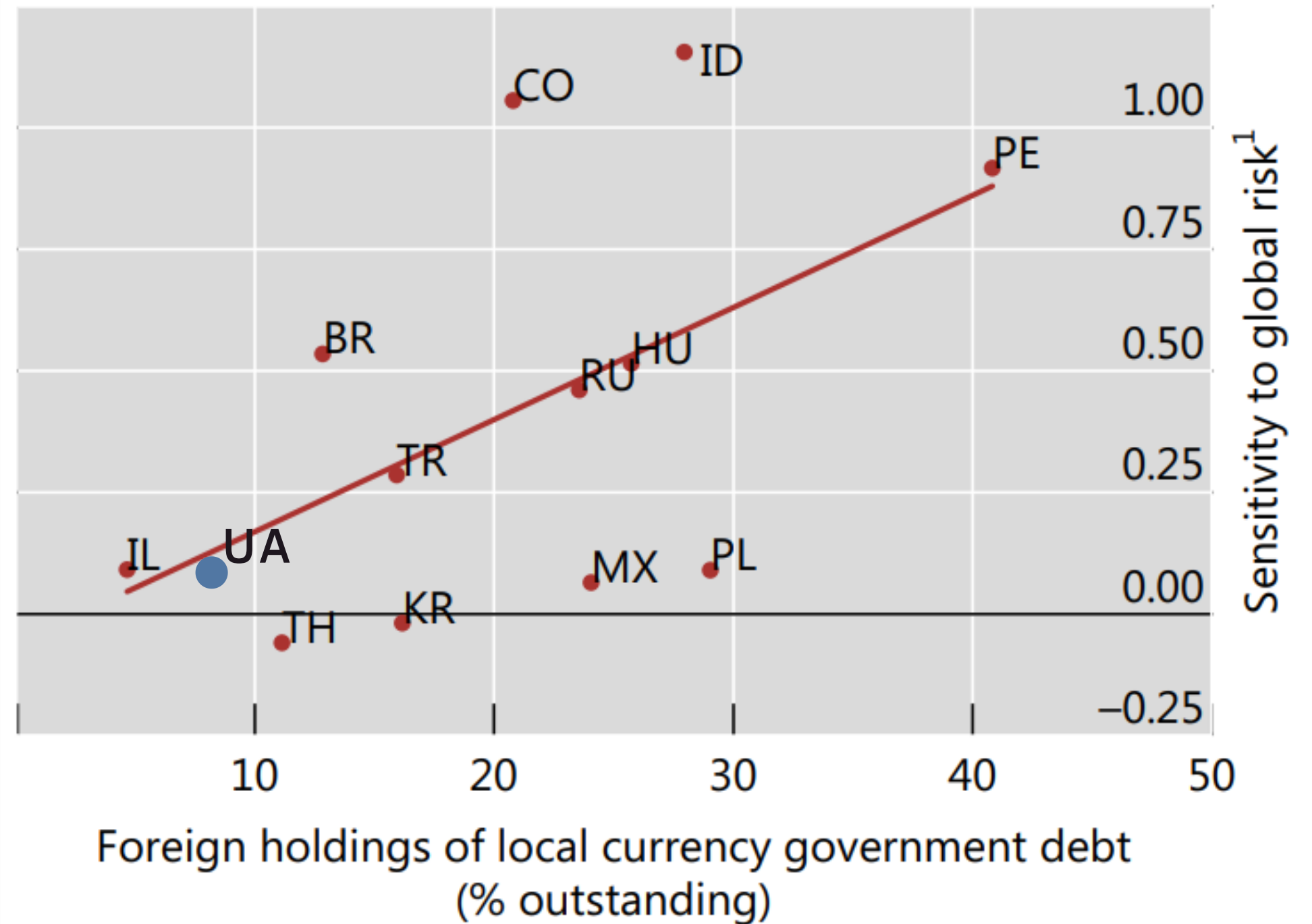
In recent years, the average share of non-residents in the Ukrainian sovereign bond market has been about 8%.

We estimated the sensitivity of Ukrainian bonds to global risk by building a regression model. The sensitivity factor is 0.0874.

$$y = 0.0874x + 1.0105$$

Our analysis confirms the conclusions made by BIS experts. At the same time, it should be noted that the comparative analysis of the Ukrainian sovereign bond market with the markets of other countries is not entirely correct. BIS experts took into account 10-year bonds, and since the NBU does not issue such bonds, we used the weighted average yield on all issues of Ukrainian bonds denominated in hryvnia.

* UA = Ukraine; BR = Brazil; CO = Colombia; HU = Hungary; ID = Indonesia; IL = Israel; KR = Korea; MX = Mexico; PE = Peru; PL = Poland; RU = Russia; TH = Thailand; TR = Turkey.



Foreign participation in local bond markets and sensitivity to global risk

Source: CGFS (Committee of the Global Financial System). "Changing Patterns of Capital Flows." CGFS Papers No. 66, Bank for International Settlements, May 2020

CURRENT POLITICAL AND ECONOMIC CONDITIONS IN UKRAINE

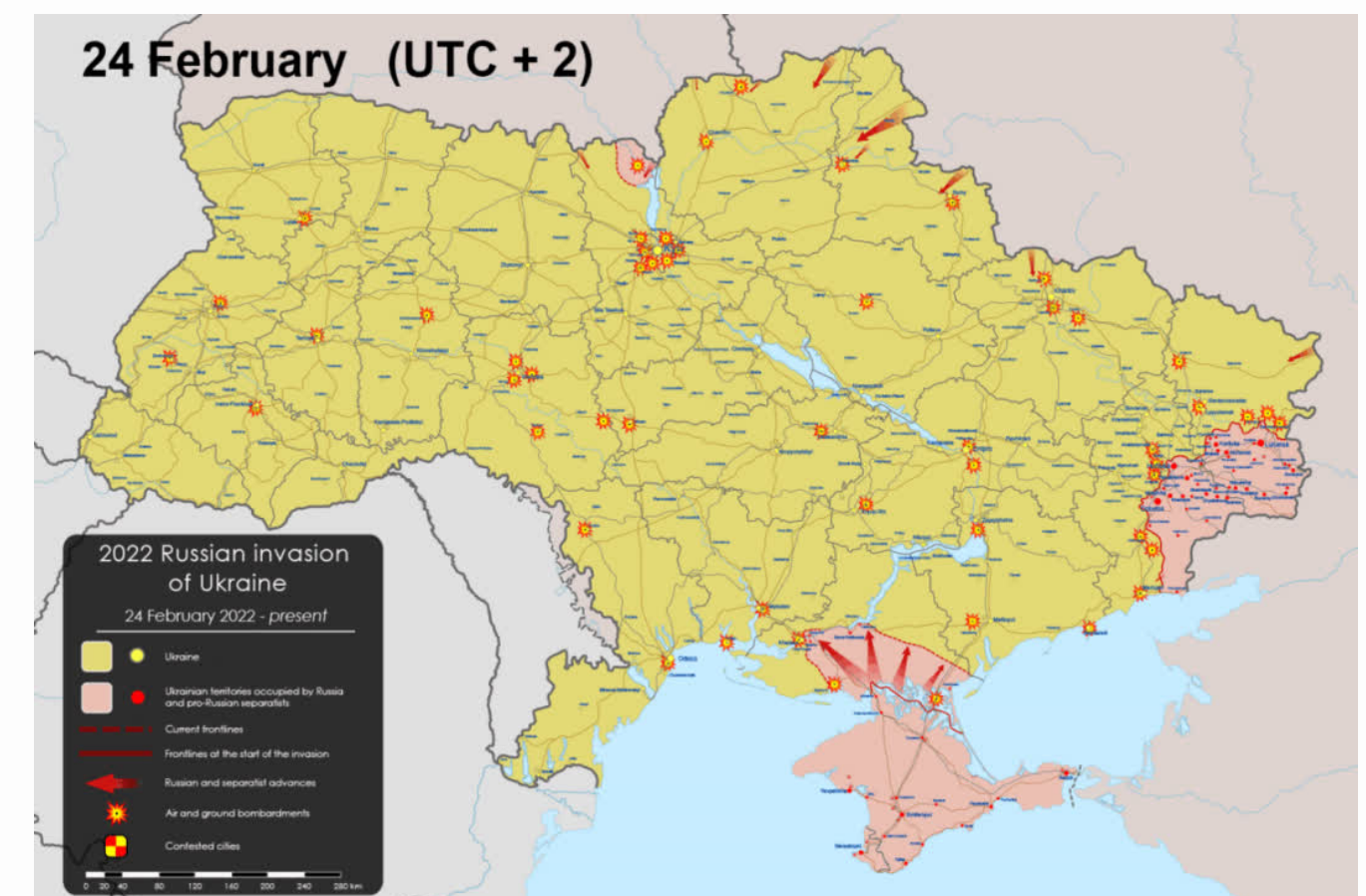
Russia invaded Ukraine on 24 February 2022 in an internationally condemned act of aggression.

Since the incursion began, vast swathes of Ukraine's infrastructure have been devastated, with many bridges and neighborhoods damaged or destroyed.

The World Bank estimated that the country's GDP could decline by 45.1% this year.

"The magnitude of the contraction will depend on the duration and intensity of the war"

The World Bank



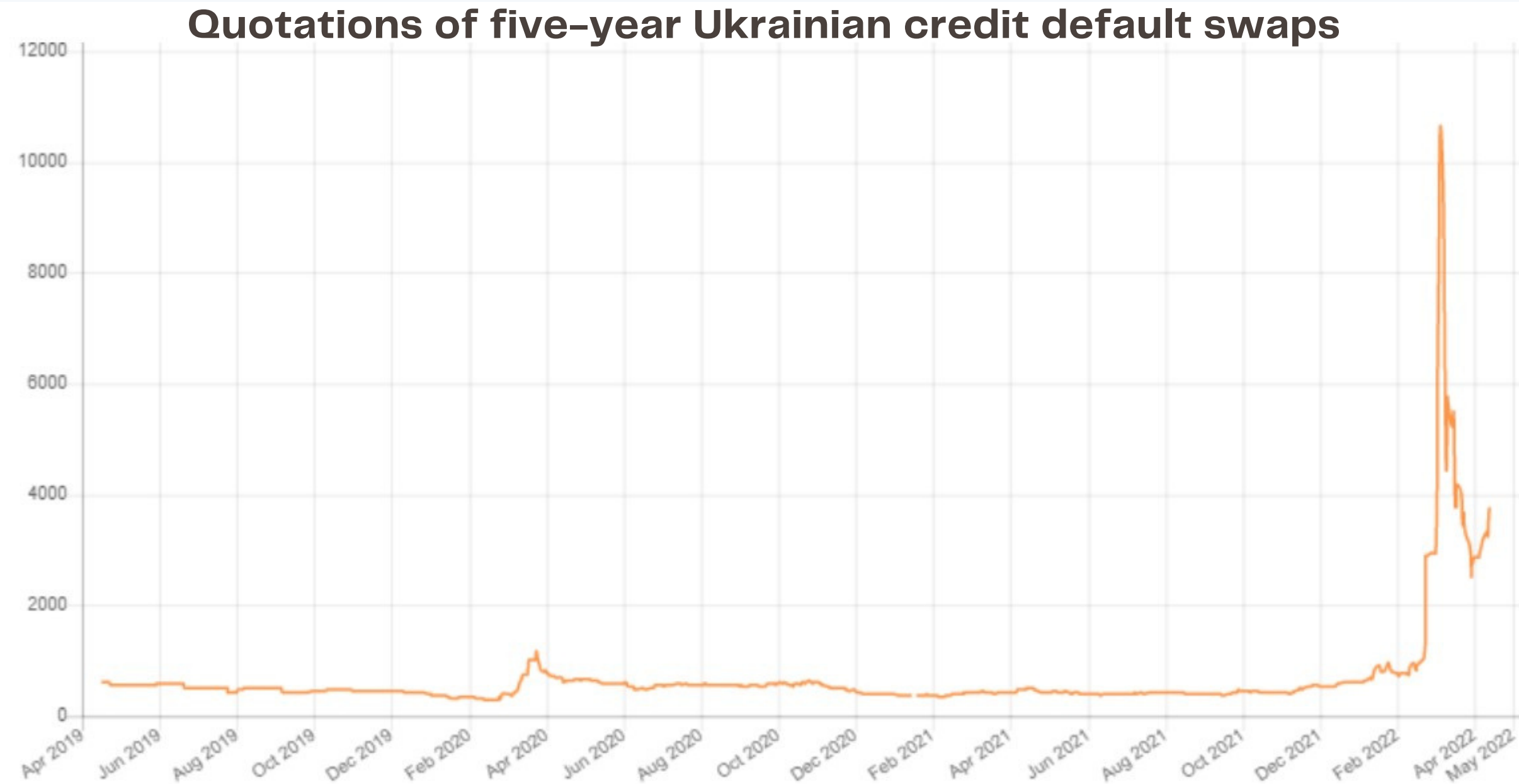
Source: 2022 Russian invasion of Ukraine (as of April 11th 2022)
https://commons.wikimedia.org/wiki/File:2022_Russian_invasion_of_Ukraine.svg

Central Bank Rate is 10.00% (last modification in January 2022).

The Ukraine credit rating is B-, according to Standard & Poor's agency.

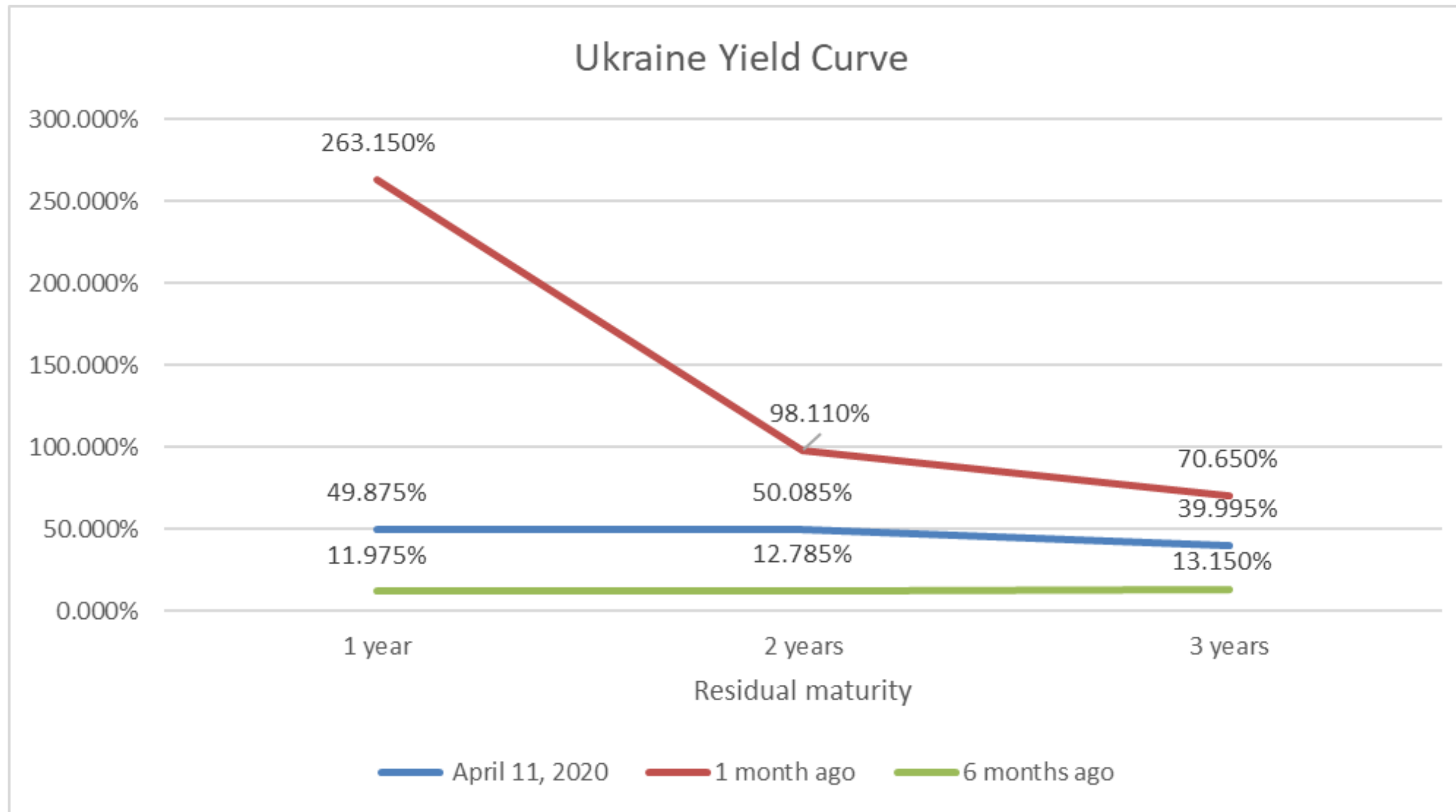
Current 5-Years Credit Default Swap quotation is 3744.55 b.p.

The Ukraine 5 Years Sovereign CDS reached a maximum value of 10630.36 b.p. (4 March 2022) and a minimum yield of 300.895 b.p. (20 February 2020).



Source: Dragon Capital research website
dragon-capital.com

INVERTED UKRAINE YIELD CURVE



Data: NBU

HOW UKRAINE IS FUNDING ITS DEFENSE

- Issuing war bonds
- Emergency financing from multilateral organizations, including the International Monetary Fund and World Bank
- NFT sale
- Donation in cryptocurrencies to the government's official donation platform
- Contributions to the charity fund "Come back alive" and others.

Innovative tools for raising funds to the state budget

Volodymyr Zelenskyy signed a law “On virtual assets”, bringing the crypto “out of the shadows” and legalizing it.

The community has already raised more than \$60 million.

The NFT sale saw collectors from Los Angeles to Barcelona rush to participate in what they saw as a major moment for both Ukraine and the crypto world.

An NFT of Ukraine's flag has raised over \$6.7 million for the country's defenses as cryptocurrency donations.

The screenshot shows the website donate.thedigital.gov.ua. The header includes the Ministry of Digital Transformation of Ukraine logo and navigation links for "Why donate", "Send cash", and "FAQ". The main heading reads "Help Ukraine with **crypto**, don't leave us alone with the enemy". Below this, it states "The community has already raised more than \$60 million" and lists various cryptocurrencies: 449,435 BTC, 9,356,882 ETH, 434,228,132 DOT, 9,365,769 USDT, 7,634,646 SOL, and 1,779,986 USDC. A sidebar titled "Donate crypto to Ukraine to support people in their fight for freedom" lists options for Bitcoin (BTC), Ethereum (ETH), Tether (USDT ERC-20), Tether (USDT TRC-20), Terra (LUNA), Solana (SOL), Polkadot (DOT), NEAR Protocol (NEAR), Cardano (ADA), and Dogecoin (DOGE).

Source: website <https://donate.thedigital.gov.ua/>
As of April 12.



WAR BONDS

What is a war bond?

A war bond is a debt security issued by a government to finance military operations during times of war or conflict. Because war bonds offered a rate of return below the market rate, investment was achieved by making emotional appeals to patriotic citizens to lend the government money.



THE MAIN
CONDITIONS
OF WAR
BONDS ARE
AS FOLLOWS:

- nominal value of one bond – UAH 1,000;
- Term of circulation – 1 year;
- The first auction was held on March 1
- The rate of return was determined at auction.

WHERE CAN YOU BUY WAR BONDS?

Minimum investment 

from **UAH 1 thousand**

 Primary dealer banks


 Licensed brokers

 **ukrзиббанк** 

 **ПУМБ**   of the custodian and broker



 **YHIBEP**    of the broker

 for securities account opening and maintenance; of the broker

 **банк ПІВДЕННИЙ**  

 **EXIM BANK**   for securities account opening and maintenance; of the broker

 **Dragon Capital**  

 **BTC broker**  

from **UAH 50 thousand** 

from **UAH 100 thousand** 

from **UAH 300 thousand** 

from **UAH 500 thousand** 

 **ОЩАДБАНК**  

 **ПриватБанк** 

 **TAC** 

 **KredoBank**  for the purchase of the custodian

 **otpbank**   of the custodian and broker

 **Raiffeisen BANK**   of the custodian

 Domestic government bonds are available for purchase via mobile app

 Fees have been cancelled  Simplified procedure

* For war domestic government bonds: securities account opening fee is UAH 1; security transaction (crediting) fee is UAH 1

** Via Wotan app

Source:

\$1,195 BILLIONS

in general, this amount have been raised through the state budget from the sale of war bonds since the beginning of the war

*As of April 12, 2020

3,7% YIELD

Dollar-denominated bonds with a maturity of 1 year

10% YIELD

six-month hryvnia bonds

11% YIELD

with a maturity of 1 year

GLOBAL DEPOSITARY NOTES

The government is in constant talks with its “primary dealers,” the 11 international and local banks that can place bids on Ukrainian debt, to widen access via instruments called global depositary notes, or GDNs.

This is dollar-denominated debt that’s tied to local currency bonds—which can greatly increase access, though even GDNs are directly available only to institutional investors, and retail clients would be required to buy them through brokers or other intermediaries.

THANK YOU FOR
YOUR
ATTENTION!

"UKRAINIANS HAVE SHOWN COURAGE AND SOLIDARITY THAT HAS INSPIRED THE WHOLE WORLD! THE COUNTRY IS SHOWING ITS RESILIENCE ON MANY FRONTS, INCLUDING FINANCIAL. EVERYONE HAS THE OPPORTUNITY TO SUPPORT THE FINANCING OF THE NEEDS OF THE ARMY AND THE COUNTRY'S BUDGET BY PURCHASING OUR MILITARY BONDS."

Serhiy Marchenko, Minister of Finance of Ukraine

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