

MINISTRY OF FINANCE

**GOVERNMENT DEBT MANAGEMENT
STRATEGY**

2022-2024

General Directorate of Treasury and Public Debt

Bucharest 2022

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ATM	Average time to maturity (years)
ASF	Financial Supervisory Authority
ATR	Average time to re-fixing (years)
ECB	European Central Bank
CEDB	Council of Europe Development Bank
EIB	European Investment Bank
EBRD	European Bank for Reconstruction and Development
IBRD	International Bank for Reconstruction and Development
NBR	National Bank of Romania
NCSP	National Commission of Strategy and Prognosis
PD	Primary Dealers
EMBIG	JP Morgan Emerging Markets Bond Spread
FED	The Federal Reserve System of the United States of America
IMF	International Monetary Fund
MTN	Medium-term government bond issue framework program on foreign markets
IFI	International Financial Institutions
NIS	National Institute of Statistics
MF	Ministry of Finance
GDP	Gross Domestic Product
PNRR	The National Recovery and Resilience Program of Romania
EU	European Union

1. Introduction

This Government debt management strategy corresponding to the period of 2022-2024 (hereinafter referred to as the "Strategy") represents a continuation of the Government debt management strategy for the period of 2021-2023 and was elaborated in accordance with international best practices defined in the Directory Guidelines of The World Bank and the IMF regarding the development of public debt strategies¹ and through consultation with the NBR.

As in previous editions, the revised Strategy for the 2022-2024 time horizon is in line with the budgetary indicators set out in the Fiscal-Budgetary Strategy 2022-2024 and focuses exclusively on the structure of the government debt portfolio, with particular emphasis on those aspects that fall within the competence and responsibility of the government debt manager². The Strategy therefore provides the direction in which the authorities intend to act to ensure financing and to improve the structure of the government debt portfolio in order to fulfill the *Ministry of Finance's government debt management objectives*, namely:

- Ensuring the financing needs of the central government, while minimizing the medium- and long-term costs;
- Limiting the risks associated with the government debt portfolio; and
- Developing the domestic government securities market.

Implementation of the Management Strategy of the Government Debt in 2021 and the first four months of 2022

In the period 2021 to April 2022, all risk indicators were within the limits set through the Government Debt Management Strategy 2021 - 2023, as shown by the presentation of financial risks from the table below:

Table 1: Risk indicators

Indicators *	31/12/2021	30/04/2022	Indicative targets according to the 2021-2023 Strategy
A. Currency Risk			
Share of debt in Lei in total debt (% of total)	47.7%	45.4%	45% (minimum) – 60%
Share of government public debt in EUR in total debt in foreign currency (% of total)	85.4%	85.7%	80% (minimum) – 95%
B. Refinancing risk			
Share of debt due within 1 year (% of total)	12%	10%	10% - 20% (maximum)
Share of debt in Lei due within 1 year (% of total)	18%	17%	15% - 25% (maximum)
Average time to maturity for total debt (years)	7.5	7.6	7.0 years (minimum) – 8.5 years
Average time to maturity of the debt maturity in Lei (years)	4.2	4.2	4.0 years (minimum) – 6.0 years
C. Interest rate risk			
Share of debt that changes its interest rate within one year (% of total)	14%	11%	10% - 20% (maximum)
Share of debt in lei that changes its interest rate within one year (% of total)	18%	17%	15% - 25% (maximum)
Average time to re-fixing for the total debt (years)	7.5	7.6	7.0 years (minimum) – 8.5 years
Average time to re-fixing for the debt in the national currency (years)	4.2	4.2	4.0 years (minimum) – 6.0 years

* do not include loans from the availability of the general current account of the State Treasury
Source: MF

¹ See "Elaboration of the medium term public debt strategy" — a guide for government authorities, prepared by the World Bank and the International Monetary Fund, 24 February 2009.

² Therefore, this document avoids assuming fiscal policy targets of the type of share of debt in GDP or debt cost in GDP, because the first indicator depends on the budget deficit targets and the second one depends on the budget deficit targets and the market evolution, both being outside the scope of control of public debt managers.

Strategic guidelines for the period 2022-2024

The following principles shall form the basis of financing decisions in 2022 - 2024:

1. Ensuring financing mainly in national currency, with the objective of ensuring net financing (covering the budget deficit) mainly from domestic sources from 2024 onwards. Issuance in EUR on the domestic market will be considered in the context of the specific demand expressed by local investors, at medium maturities, depending on market conditions and the appetite of the investment environment, on the basis of an advantageous maturity/cost ratio.
2. Achieving a profile as uniform as possible of debt repayment, including through the use of liability management operations (early redemptions or switches of government securities).
3. Mitigation of refinancing risk and liquidity risk through maintaining a reserve in foreign currency³.
4. In the external financing process, shall be considered the contracting of debt mostly in EUR and USD, taking into account the cost/risk ratio, as well as the evolution of the interest differential between the two currencies.
5. The introduction of green bond issues, through the creation of the General Framework for green bonds at the sovereign level, through coordinated efforts at the level of line ministries and the identification of expenses/projects which shall be subject to financing through these bonds.
6. Keeping under control the exposure to interest rate risk through limitation of the share of debt which changes its interest rate within one year and of the average time to re-fixing for the entire debt portfolio.
7. Using the financing instruments offered by the international financial institutions (IBRD, EIB, BDCE, EBRD, etc.), including those established in the European Union to support the recovery and resilience process at the level of the member states, taking into account the terms and conditions advantageous offered by them.

These principles are expressed as indicative target intervals⁴ for the main risk indicators to allow the necessary flexibility in the administration of the government's public debt in order to respond to changing conditions on the financial markets.

³ The foreign currency reserve must cover a number of months related to the gross financing requirement.

⁴ The limit mentioned as minimum or maximum cannot be exceeded during the period covered by the strategy (hard bound), while the other limit represents the limit towards which it tends and which can be exceeded (soft bound).

The risk indicators for the period 2022-2024 are presented as follows:

Indicators *	Indicative targets Strategy 2022-2024
A. Currency Risk	
Share of debt in Lei in total debt (% of total)	45% (minimum) – 60%
Share of government public debt in EUR in total debt in foreign currency (% of total)	80% (minimum) – 95%
B. Refinancing risk	
Share of debt due within 1 year (% of total)	10% - 20% (maximum)
Share of debt in Lei due within 1 year (% of total)	10% - 20% (maximum)
Average time to maturity for total debt (years)	7.0 years (minimum) – 8.5 years
Average time to maturity of the debt maturity in Lei (years)	4.0 years (minimum) – 6.0 years
C. Interest rate risk	
Share of debt that changes its interest rate within one year (% of total)	10% - 20% (maximum)
Share of debt in lei that changes its interest rate within one year (% of total)	10% - 20% (maximum)
Average time to re-fixing for the total debt (years)	7.5 years (minimum) – 8.5 years
Average time to re-fixing for the debt in the national currency (years)	4.0 years (minimum) – 6.0 years

* do not include loans from the availability of the general current account of the State Treasury.
Source: MF

2. Objectives and scope

This Strategy is the policy document for government public debt management and the Ministry of Finance seeks to fulfill the following objectives in this regard:

- Securing the financing needs of the central government, while minimizing the medium- and long-term costs;
- Limiting the risks associated with the government public debt portfolio;
- Developing the domestic securities market.

The first two objectives are set out in EOG 64/2007 and are supplemented by the objective of developing the domestic market for government securities, which was also mentioned out in previous Strategies. The development of a liquid government securities market and the construction and consolidation of a yield curve in national currency are important objectives both for achieving the first two objectives of the Strategy and for the development of the Romanian financial market to sustain the assurance of financial resources necessary to cover the financing needs during economic and financial crisis or during periods of high volatility on international markets.

The scope of the Strategy is limited to debt contracted directly or guaranteed by the Government through the MF, but does not include t from the general current account of the State Treasury ("temporary financing") or cash management instruments. Temporary financing and cash management instruments are liquidity management instruments and cannot be considered as medium-term financing instruments. However, given the importance of coordinating the government debt management strategy with the liquidity management policy, including temporary financing, and the interference between them, the Annex 2⁵ covers the liquidity management strategy.

⁵It will be noted, however, that major changes in the level of temporary financing may have an impact on the issuance of government securities and may affect the development plans of the internal market of government securities.

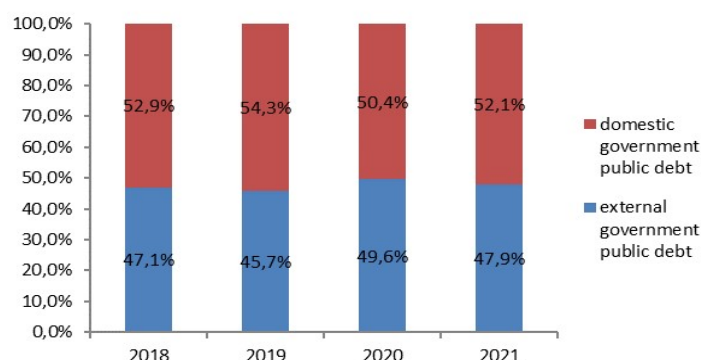
1. Description of the government public debt portfolio⁶

The evolution of government public debt

At the end of 2021, government public debt was 589.5 billion lei, representing 49.9% of GDP, the context of an economic of economic growth of 5.9% of GDP⁷ and under the conditions of a general consolidated budget deficit of 6.77% of GDP⁸.

The structure of government debt by residence shows that domestic government debt increased at the end of 2021 compared to 2020⁹, the government public debt contracted with resident creditors representing 52.1%, and that with non-resident creditors 47.9%.

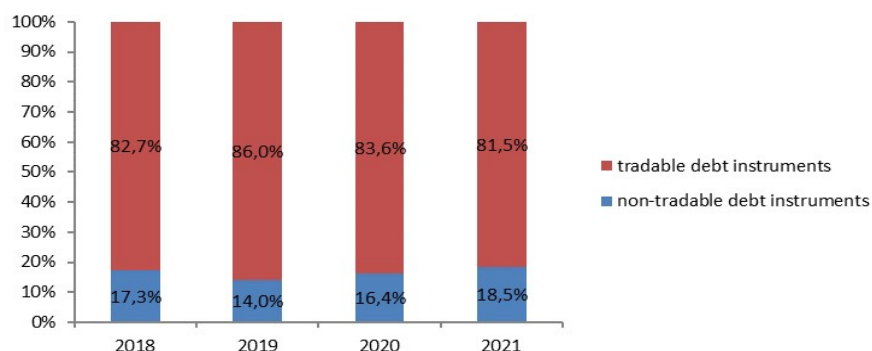
Chart 1: Government public debt by creditor residence criterion (% of total government debt)



Source: MF

In terms of structure by type of instrument, government public debt is mainly made of tradable debt instruments. Thus, government securities issued on the domestic market accounted for 44.4%, those issued on the external market for 37.1%, and the share of government loans, non-marketable instruments, was 18.5% - see Chart 2.

Chart 2: Marketable debt instruments vs. non-marketable debt instruments (% of total government debt)



Source: MFP

⁶Preliminary data according to national legislation, nu does not include temporary financing nor cash management tools.

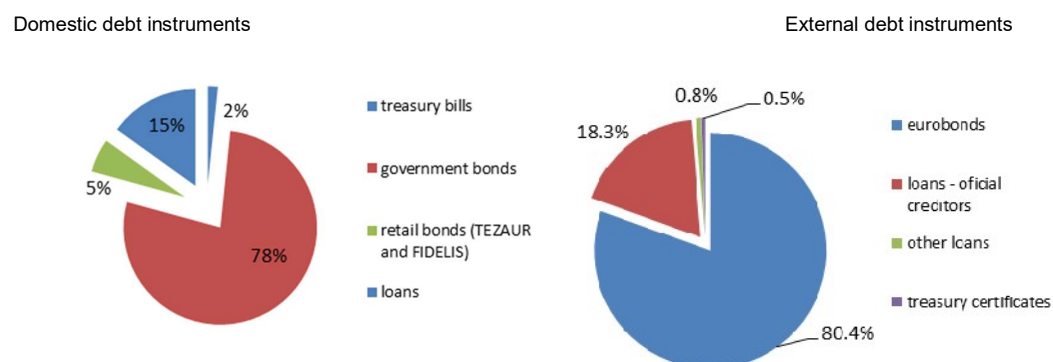
⁷CNSP - spring forecast of the main macroeconomic indicators - April 28, 2022

⁸ The consolidated general budget deficit according to operative execution at the end of 2021 was in nominal value of 80.0 billion lei representing 6.77% of GDP. GDP related to 2021 according to the spring forecast of the CNSP - April 28, 2022

⁹The figures presented in the graph for the year 2020 were revised compared to those presented in the 2021-2023 Strategy on the occasion of the Fiscal Notification of the deficit and public debt from April 2022 when the public debt data for the year 2020 were also revised.

As shown in Chart 3, in the domestic debt structure, government securities are the major instrument, i.e. treasury certificates and government bonds; similarly, the external debt is mainly made up of bonds issued on international financial markets, complemented by borrowings from international financial institutions, from the European Union and other creditors. The structure of external debt also includes domestically issued government securities held by non-residents, while the structure of domestic debt includes Eurobonds held by residents.

Chart 3: Debt structure according to the creditor's residence criteria and debt instruments



Source: MF

In 2021, costs, expressed as average interest rates¹⁰, have slightly decreased due to lower interest rates, especially on domestic debt. At the end of 2021, domestic currency debt remains more costly than foreign currency debt¹¹ as shown in Table 2.

Table 2: The cost of the debt contracted directly by the Government, through the MF, by types of instruments¹²

	31.12.2020	31.12.2021
Average interest rate on government public debt (%)	3.3	3.1
1. in the national currency, from which	4.1	3.8
a. Treasury certificates with a maturity of 1 year	3.2	2.7
b. Government bonds with fixed rate and maturity between 1 and 5 years	3.9	3.9
c. Government bonds with fixed rate and maturity between 5 and 10 years	5.1	4.8
2. in currencies, of which:	2.6	2.4
a. Bonds in EUR with a maturity of 10 years	2.9	2.7
b. Bonds in EUR with a maturity of 5 years	1.3	1.2
c. Bonds in EUR with a maturity of 30 years	3.6	3.3
d. EUR Multilateral	1.6	1.5
e. Bonds in USD with a maturity of 30 years	4.9	4.3
f. USD Multilateral	1.3	1.3

Source: MF

The share of loans from international financial institutions and the European Union contracted at favorable interest rates explains the lower cost of external financing. In addition, bonds

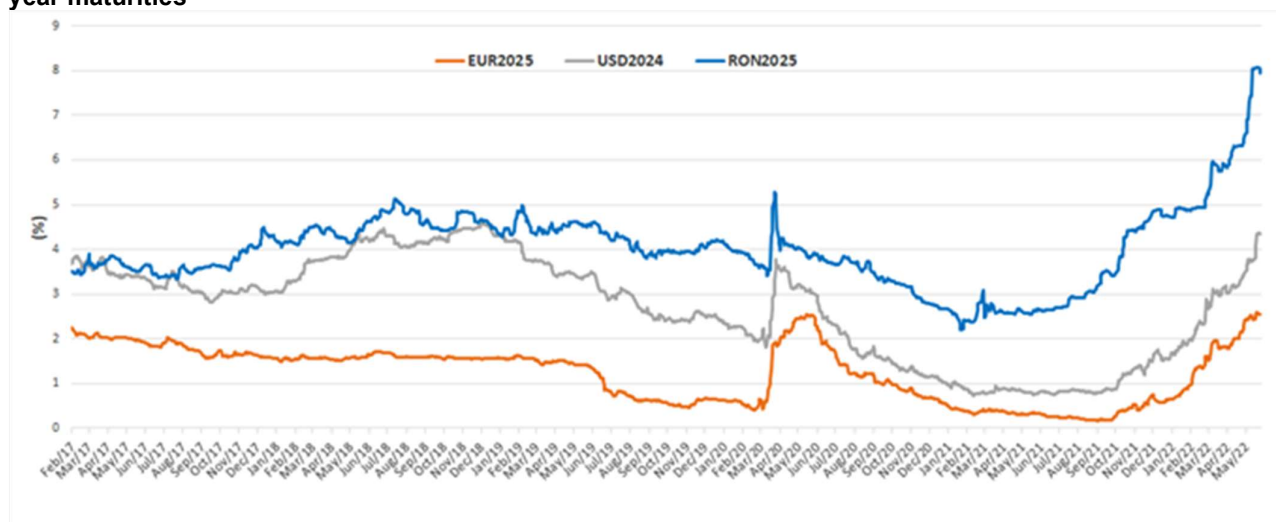
¹⁰ They were calculated as the ratio of expected interest payments for 2022 to the existing balance at the end of 2021 for each debt instrument.

¹¹ Excluding influences due to currency risk that may change the cost of foreign currency debt (interest on foreign currency debt) significantly in the event of a currency depreciation.

¹² The table shows average interest rates for selected debt instruments, aggregated across all debt instruments making up the government debt portfolio.

issued on international financial markets denominated in EUR are issued at lower nominal yields compared to government securities issued in domestic currency and in USD (without taking into account the impact of currency risk on costs), as shown in Chart 4. Throughout 2020-2021 and the first 4 months of 2022, the costs corresponding to financing in Lei on the domestic market remained above the levels of USD and EUR funding for similar maturities, with the interest rate differential widening from the second part of 2021 onwards. Given MF's objective of maintaining the share of EUR-denominated debt in total foreign currency debt in the range of 80% (minimum) - 95%, the issuance on the external markets in 2021 was in EUR, which has the advantage of lower costs compared to USD issuance. In the first 4 months of 2022, in the context of the global increase in interest rates and the constraints on international markets in the context of the Russia-Ukraine conflict, resources from the external market were attracted both in EUR and USD, which offers the necessary flexibility in the implementation of the financing plan on the external markets, as well as ensuring the diversification of the investor base in debt instruments issued by Romania.

Chart 4: Yield of a benchmark domestic bond vs. yields of external Eurobonds (EUR and USD) with 5-year maturities



Source: MF

After the minimum levels recorded at the end of 2020, in the first half of 2021, yields on government securities issued on the domestic and foreign markets remained at relatively constant levels and, starting from the fourth quarter of 2021, they returned to an upward trend, a trend that became more pronounced in 2022 amid the acceleration of the inflationary context and the Russia-Ukraine conflict.

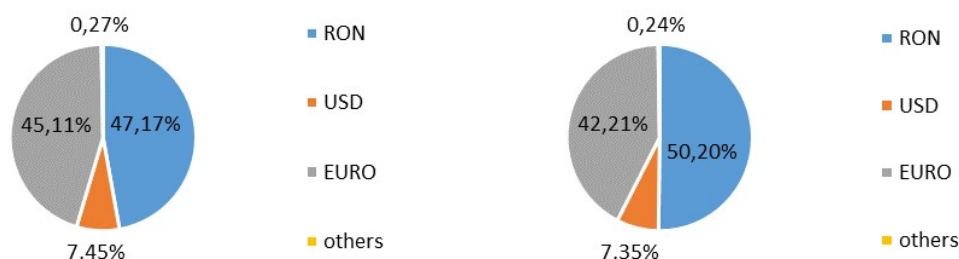
Risks associated with the government debt portfolio at the end of 2021

Currency risk

At the end of 2021, respectively April 2022, 52.8% and 54.6% of the government debt portfolio was denominated in foreign currency, a high share both compared to other EU Member States which have not adopted the single European currency and to other countries in the same rating category as Romania. The significant exposure to currency risk can be managed taking into

account the relatively low volatility of the leu/EUR exchange rate and as a result of foreign currency debt issued predominantly in EUR¹³ in the long term (chart 5).

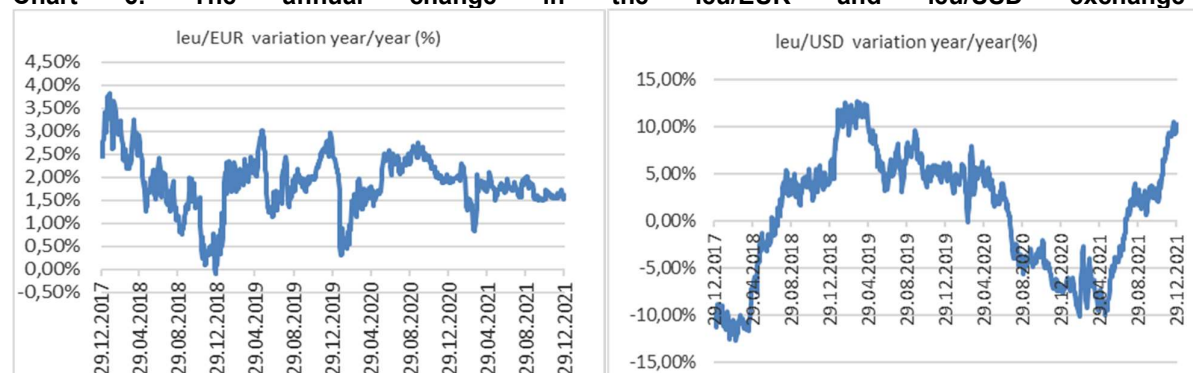
Chart 5: Debt structure by types of currencies



Source: MF

Given that about 7.5% of the debt portfolio is denominated in USD, and the volatility of the leu/USD exchange rate has been about three times higher than that of the leu/EUR exchange rate in recent years, debt contracted in USD presents a much higher degree of risk than that contracted in EUR, as shown in Chart 6.

Chart 6: The annual change in the leu/EUR and leu/USD exchange rates



Source: MF, NBR

In case of pessimistic scenarios in 2022, e.g. depreciation of the national currency by 5% against the EUR and 15% against the USD, the debt stock would increase by 18.3 billion Lei or by 1.4% of GDP, and debt service payments (representing principal repayments/refinancing of government securities and interest payments) would increase by 2.6 billion Lei or by 0.7% in central government revenue¹⁴.

Therefore, the exposure to foreign exchange risk can be considered moderate. Moreover, the policy of maintaining a foreign currency reserve at the disposal of the State Treasury considers at limiting the foreign exchange risk related to foreign currency debt repayments, this reserve being used directly for the payments of government foreign currency debt.

Refinancing risk

The structure of principal repayments and refinancing of government securities, shown in Chart 7, indicates an accumulation of repayments over the next 5 years, with a tendency for refinancing risk to decrease in the medium to long term. The concentration of repayments in the first 5 years

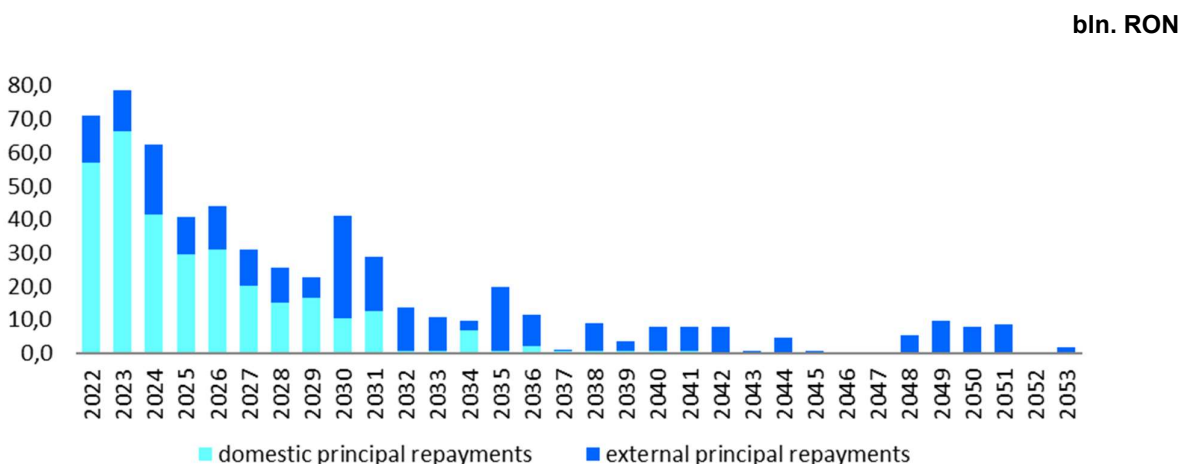
¹³ EUR-denominated debt issued for long and very long maturities (currently with maturities of up to 30 years for Eurobonds) with bullet repayment implies a repayment of the financing within a timeframe where the adoption of the EUR is feasible and therefore a reduced implicit currency risk.

¹⁴ Budget revenues calculated on the basis of cash data by applying the EU methodology.

is mainly observed in domestic debt¹⁵ reflecting investors' preference for government securities with an average remaining maturity of up to 5 years. In order to manage this risk, it is envisaged to continue the policy of building liquid benchmark bond series, up to around EUR 2.5 billion equivalent for each series of government securities, in the medium and long maturity segment, correlated with the use of liability management operations (buy-back and bond-exchange), measures that will support the consolidation and extension of the yield curve in Lei and shall ensure both the reduction of the exposure of the debt portfolio to refinancing and liquidity risk, as well as the possibility of making in advance the refinancing of the financing needs from the following years from the domestic market, to the extent market conditions allow it. Expectations for demand for government securities during 2022 and in the medium term are influenced by the extremely complicated global economic environment both as a result of the post-COVID recovery process and as a result of the geopolitical crisis generated by the conflict in Ukraine which has fueled rising fuel and raw material costs, disruptions in supply chains and rising inflation. A continued difficult geopolitical climate may amplify investor uncertainty and generate significant fluctuations in investor demand for government securities in a global economic environment characterized by rising interest rates and volatile market conditions. For example, in 2021, were due government securities with a total value of approx. RON 48 billion. The refinancing of these obligations could have been a challenge in the domestic market financing process, given that commercial banks, which are still the most important investment segment for government securities (holding approx. 51.2% of the nominal value of government securities, a level increasing compared to 2020) would have used other placements of available resources.

With respect to foreign debt, the refinancing risk is reduced due to the repayment structure of borrowings from international financial institutions and from the European Union (in a single installment, on long and very long terms), but also due to the extension of the average remaining maturity of the external public debt portfolio following the issuance of Eurobonds with long and very long maturities (up to 30 years).

Chart 7: Repayments of capital installments related to government public debt at the end of 2021



Source: MF

The debt repayment profile determines an average time to maturity (ATM) of 7.5 years at the end of 2021, respectively 4.2 years for the debt denominated in national currency and 10.2 years for the debt denominated in foreign currency.

¹⁵ After the emission market.

Chart 3: Indicators regarding refinancing risk

indicator	2020			2021		
	Denominated debt in national currency	Denominated debt Foreign currency	Total	Denominated debt in national currency	Denominated debt Foreign currency	Total
Share of debt due within 1 year (% of total)	16	6	10	18	5.0	12
Average time to maturity (years)	4.2	10.3	7.3	4.2	10.2	7.5

Source: MF

In order to improve public debt management and to avoid seasonal pressures in ensuring the financing sources of budget deficit and refinancing government public debt, as well as to manage refinancing and liquidity risk, starting in 2010, the MF has constituted and consolidated the financial reserve (buffer) in foreign currency at the disposal of the State Treasury, and the current policy is to maintain this reserve at a level that covers up to 4 months of gross financing needs.

Interest rate risk

Given that only a small part of the debt is debt contracted with variable interest rate (see Table 4) and following the strategy of extending the duration of the debt portfolio, the interest rate risk and the refinancing risk are moderate, with different characteristics in terms of the specific indicators of these risks, if the debt portfolios in Lei and foreign currency are separately considered. On the other hand, interest rate risk exposure is decreased for the foreign currency debt portfolio as a result of the fact that Eurobond issues and borrowings from international financial institutions, including the European Union, with long and very long maturities and fixed interest rates represented the majority of this debt at the end of 2021. Thus, a 1 percentage point increase in interest rates in 2022 will lead to an increase in debt service payments by about 2.8 billion Lei, respectively by 0.8% of central government revenues for debt in national currency¹⁶, and by about 3.1 billion Lei, respectively by approximately 0.9% of central government revenues for debt in foreign currency.

Table 4: Interest rate risk indicators

indicators	2020			2021		
	Debt denominated in the national currency	Debt denominated in foreign currency	Total	Denominated debt in the national currency	Debt denominated in foreign currency	Total
Share of debt with fixed interest rate (% of total)	89.8	92.5	91.2	79.3	95.3	87.6
Share of debt that changes its interest within one year (% of total)	15.0	5.0	12.0	18.0	4.0	14.0
Average time to re-fixing (years)	4.2	10.6	7.4	4.2	10.4	7.5

Source: MF

Given the things presented above, it can be concluded that the refinancing risk and the interest rate risk corresponding to the debt denominated in the national currency, even if they have been stayed at a relatively constant level throughout the entire year 2021, continue to be risks associated with the government debt portfolio which should not be neglected and which must be

¹⁶ Budget revenue calculated on the basis of cash data using the EU methodology.

correlated with the third objective of the Government debt management strategy on medium term, namely that of development of the domestic market of government securities. In order to limit the refinancing and liquidity risk, the policy of maintaining a financial reserve in foreign currency at the disposal of the State Treasury covering up to 4 months of the gross financing needs will be pursued. This policy will have to be correlated with the financing needs and with the measures to be taken by the Romanian authorities to correct the excessive budget deficit, as well as those to support the economy in the economic recovery process.

4. Domestic and external financing in the context of domestic and international financial market developments between 2021 and April 2022 and medium-term expectations

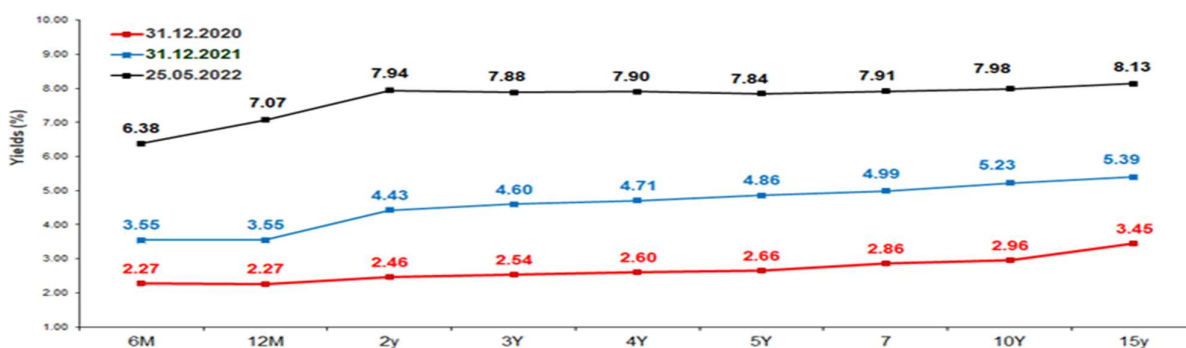
Internal market

In early 2021, developments in the external environment, the slowdown in global economic growth at global level as well as the continuance of quantitative relaxation policies at the level of the main central banks of the Fed and ECB were reflected in the decrease of the yields for sovereign government securities in advanced economies and in the CEE area.

Since the second half of 2021, significant inflationary pressures in the global economy have triggered strong reactions from the financial and monetary authorities of major economies (US-FED, EU-ECB, UK-Bank of England, etc.) as well as central banks in the central and eastern European region, which have taken steps to end the net asset purchase programs promoted during the pandemic and have initiated cycles of increasing benchmark rates. In this context, against the backdrop of high inflation projections, starting in October 2021, the NBR raised the Leu's benchmark interest rate 6 times from 1.25% to 3.75% at the end of May 2022, which led to heightened investor expectations of higher yields on Romanian government securities on the local market. Moreover, Romania's proximity to the conflict zone has supported the upward trend in sovereign bond yields including through higher inflation due to higher fuel and commodity prices.

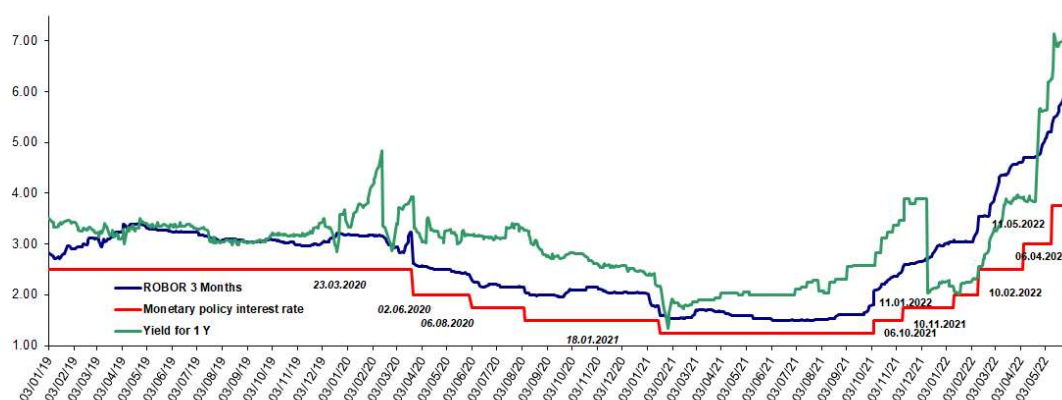
At the end of 2021, the yield curve for sovereign bonds issued by the Romanian state on the domestic market shows a significant annual increase of about 150-220 bps across all maturity bands, especially for the segment with maturities of over 5 years, an increase that has increased in the first part of 2022. Thus, since the beginning of 2022, yields have seen a relatively steady increase across the curve of around 270 - 350 bps.

Chart 8: Evolution of yields on the domestic secondary market



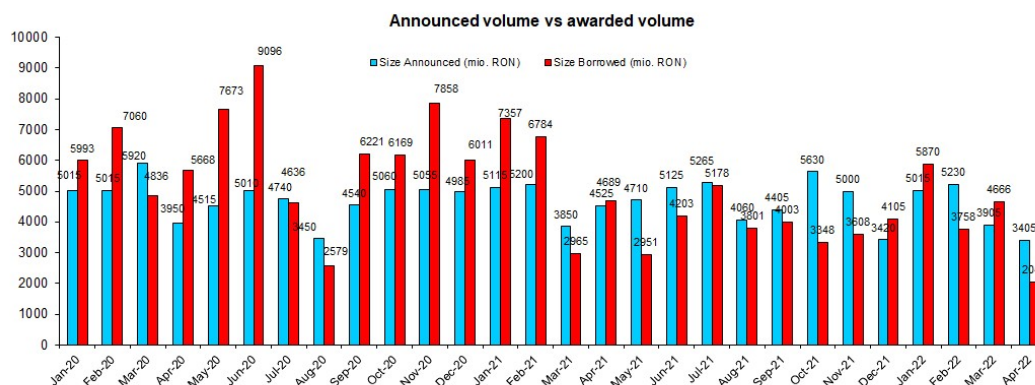
Source: Bloomberg

Chart 9: Monetary policy interest rate vs ROBOR at 3 months and yields at 1 year



Source: MF, NBR

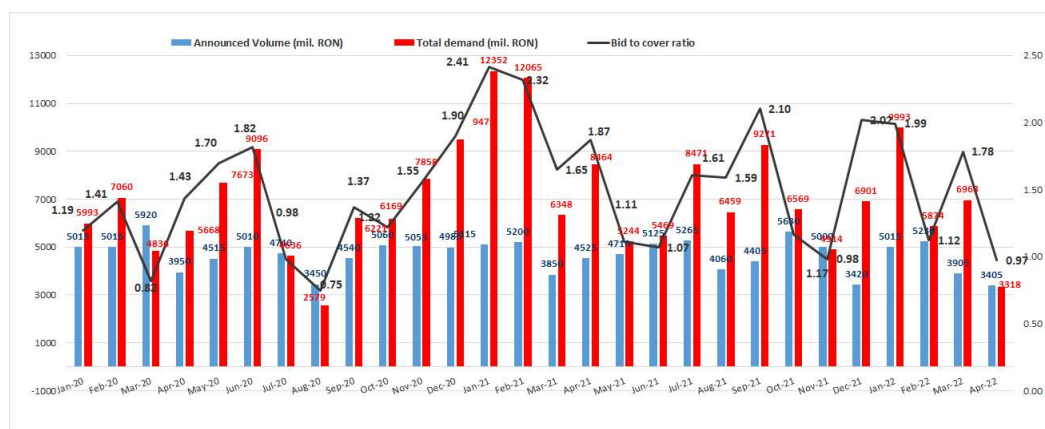
Chart 10: Announced volume vs awarded volume in the period January 2020-April 2022



Source: MF

During 2020, the volumes auctioned at government securities auctions were significantly higher than those announced, a trend that reversed from March 2021 and continued throughout the year, with average monthly auction volumes lower than those achieved in 2020. Although 2022 started with a higher level of auctioned amounts compared to the previous period, developments in government securities auctions were subsequently adjusted in relation to the level of liquidity in a domestic market sensitive to international geopolitical and economic developments.

Chart 11: Demand and supply of government bonds on the primary market in the period January 2020–April 2022



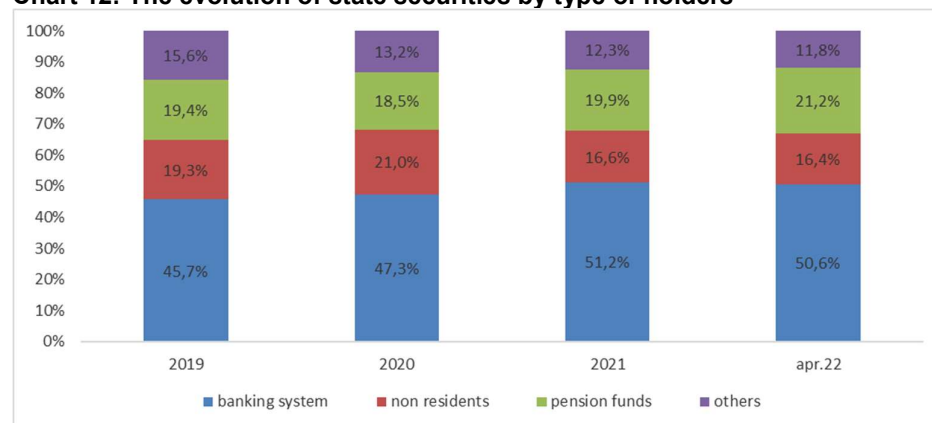
Investor demand for government securities in the domestic market, shown graphically by the total bid and the bid-to-cover ratio, declined significantly during 2021 compared to the previous year, and the beginning of 2022 did not bring significant changes in investor bidding, the trend being a decrease in total bids, which correlates with the evolution of auctioned volume over the analysis period (January 2020-April 2022).

Investor base

Commercial banks continued to be the main investors in the domestic government securities market, holding about 51% of the total volume of government securities issued in the domestic market at the end of 2021, up from 47.3% at the end of 2020, followed by pension funds, which increased their holdings to 19.9% at the end of 2021 from 18.5% at the end of 2020.

Within the institutional investor segment, local funds of administration of assets and private pension funds, although they still hold a relatively low share on the market of Government securities, represented a stable participant to the process of government financing. The investment structure of private pension funds continued to be maintained with a majority share of government securities in total assets. Thus, government securities represent 44% in the investment portfolios of collective investment bodies, 66% in the investment structure of private pension funds, and about 76% in the assets of insurance companies.¹⁷

Chart 12: The evolution of state securities by type of holders



Source: NBR

At the end of April 2022¹⁸, the share of government securities in the investment structure of private pension funds was about 60%, slightly decreasing compared to the end of 2021.

Non-resident investors continue to represent an important segment of the government securities market, providing additional demand to that of local investors through their interest in long maturities in particular, leading to a diversified investor base. At end-April 2022 holdings were around 16.4%, decreasing compared to the level of 21% at end-2020.

Relatively low non-resident holdings over the period 2020 to April 2022 limited the vulnerability of the domestic market to periods of volatility, when investors have the tendency to liquidate or reduce their exposures to emerging countries.

At the same time, the increase in the presence of non-resident investors could be influenced by internal factors, such as: the development of a more liquid swap market in Romania for longer

¹⁷According to the ASF report on the stability of non-banking financial markets 2/2021

¹⁸Source: ASF monthly trend monitoring report on non-banking financial markets, March 2022

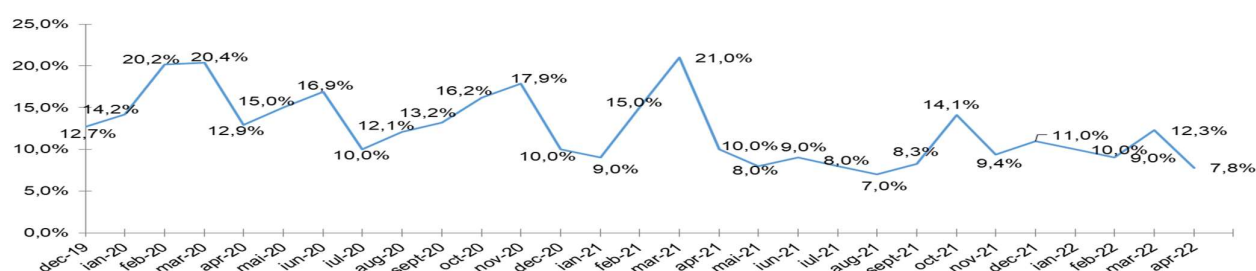
maturities, the increase in the liquidity of government securities in all segments, the introduction of liability management operations, the increase of the share of Romanian government securities in international indices (EMBIG - JP Morgan/Barclays) given that most institutional investors have an investment policy based on the structure of these indices.

The presence of Romanian government securities in the JPMorgan and Barclays regional indices continues to have a positive influence on the local market. At the end of May 2021, 18 series of Romanian government bonds were included in the GBI-EM Global Diversified Investment Grade Index, with a weight of around 3.5%, and 21 series in the Barclays EM Local Currency Government Index, with a weight of 0.90%.

The secondary market

The liquidity of government securities on the secondary market is an important indicator of the level of development of the government securities market. During 2021, the degree of liquidity, calculated as the ratio of the total monthly trading volume on the secondary market to the total volume of government securities, had an oscillating trend, reaching higher volumes in March (21.0%), October (14.1%) and December (11.0%) and minimum levels in May (8.0%) and August (7.0%), when investors' interest was mainly directed to the primary market due to high government financing needs.

Chart 13: Evolution of the degree of liquidity of government securities Lei in the period 2019 - April 2022



Source: MF

At the end of the fifth year of operation of the electronic platform of quotation and trading of Romanian government securities (E-bond platform - provided by Bloomberg), it can be noticed the positive impact thereof on the government securities' market. In the period 2020-2021 there was a decrease in trading volumes with the emergence of the effects of the COVID - 19 pandemic, which has remained at a similar level to date. In relation to the minimum daily quotation obligations on the electronic quotation and trading platform¹⁹, primary dealers quoted several series of government securities, over a longer period of a day, at a lower margin between bid and ask quotations.

Implementation of the financing plan on the domestic market

During 2021, MF maintained a predictable and flexible issuance policy adapted to the requirements of the investment environment, especially on the basis of the increase of financing

¹⁹The minimum daily quotation obligations on the electronic quotation and trading platform provided for in Article 28 of the Order of the Minister of Public Finance no. 318/2022 for the approval of the Framework Regulation on market operations with government securities on the domestic market, which must be met cumulatively, are the following: a) the provision of bid and offer quotations for the series of government securities specified in letter d), for a minimum of 5 hours daily, between 9.00 a.m. and 5.30 p.m.; b) the maximum spread between bid and offer quotations must be 25 basis points;

c) the minimum volume for each series of government securities quoted shall be 10 million lei, both for the bid and the ask quotations; d) a minimum of 4 series of government securities shall be quoted among those periodically established by the Market Committee, as follows: two series with a residual maturity of less than 5 years and two series with a residual maturity of 5 years or more.

needs in the context of the pandemic and of the evolution of the conditions on the domestic market which had considerable fluctuations.

In 2021, government were issued government securities on the domestic market for a total amount of 70.4 billion Lei equivalent, including EUR-denominated government securities denominated in EUR of 1.7 billion EUR and government securities dedicated to the population of RON 9.3 billion, representing 52.2% of the gross financing needs of the central public administration.²⁰.

Government securities issued on the interbank market had the following structure:

- a) 13.4% represent treasury bills issues with a discount and benchmark bond issues with residual maturities up to 1 year;
- b) 28.4% represent benchmark bond issues with residual maturities between 1 and 5 years; and
- c) 58.2% represent benchmark bond issues with residual maturities between 5 and 14 years.

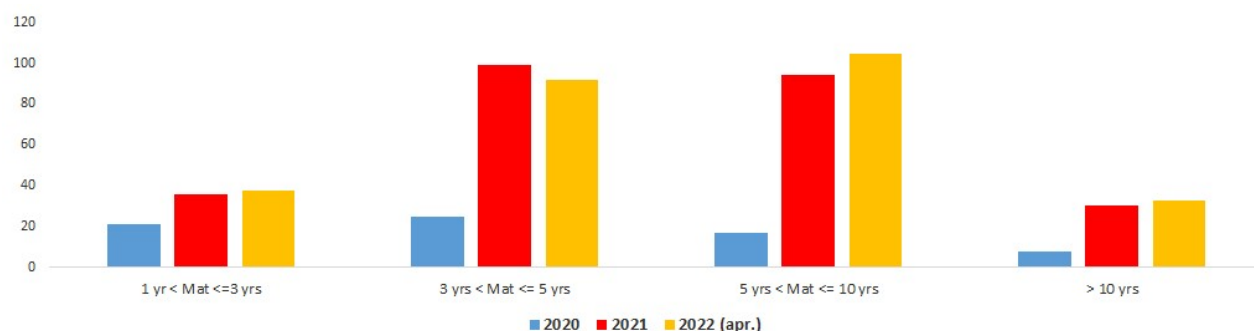
Benchmark government bonds denominated in lei with maturities of 3, 4, 5, 7, 10 and 15 years were issued and reopened almost every month. MF's policy has been to extend the average time to maturity of government securities, with a large part of the issues being issued in the medium and long maturity segment.

In 2021, continued the issuance dedicated to the population through the two programs TEZAUR and FIDELIS. Under the TEZAUR Program, which is carried out through the operational units of the State Treasury, as well as through the postal sub-units of the National Post Company of Romania S.A., 11 issues were launched with maturities ranging from 1 to 5 years, in which more than 114,467 individuals invested RON 5.1 billion. Within the FIDELIS Program, in 2021, four issues, both in RON (maturities between 1 and 3 years) and in EUR (maturities between 2 and 5 years), were carried out through the selected syndicate of banks formed by Banca Transilvania/BT Capital Partners, BCR and BRD, with an attracted value of RON 4.3 billion equivalent.

For the year 2022, the estimated amount to be raised through the issuance of government securities for the population through the Tezaur and FIDELIS programs is about 10 billion lei equivalent.

In the first four months of 2022, a total of 24.8 billion lei equivalent of debt was contracted on the domestic market, including 4.7 billion lei equivalent of government securities issues for the population under the TEZAUR and FIDELIS programs.

**Chart 14: Structure of government bond issues by maturity (initial maturity, billions of lei)
2020 – April 2022**



Source: MF

²⁰Presented in Chapter 5

Also, as of May 2022, the group of primary dealers on the domestic market has been extended by accepting CEC Bank, along with the 7 existing dealers - Banca Comerciala Romana S.A., Banca Romana pentru Dezvoltare - Groupe Societe Generale S.A., Banca Transilvania S.A., Citibank Europe Plc. Dublin - Romania Branch, ING Bank N.V. Amsterdam - Bucharest Branch, Raiffeisen Bank S.A., UniCredit Bank S.A.

Foreign market

Evolutions of the foreign markets and of Romanian Eurobonds in 2020

Expectations of a gradual return to normal economic activity in a post-pandemic context, as well as global inflationary pressures felt from the second half of 2021 onwards, have prompted central banks and monetary authorities to promote measures to tighten market liquidity by tapering in order to end net asset purchase programs (quantitative easing) carried out to support economies affected by the COVID-19 pandemic.

Central banks in the Central and Eastern European (CEE) zone have reacted most quickly to the inflationary phenomenon, raising monetary policy interest rates as early as June 2021. Thus, the Central Bank of Hungary raised its reference interest rate from a low of 0.6% in June 2021 to 5.9% in May 2022, the Central Bank of Poland from 0.5% in October 2021 to 6% in June 2022, the Central Bank of the Czech Republic from 0.5% to 5.75% and the National Bank of Romania from 1.5% in October 2021 to 3.75% in May 2022.

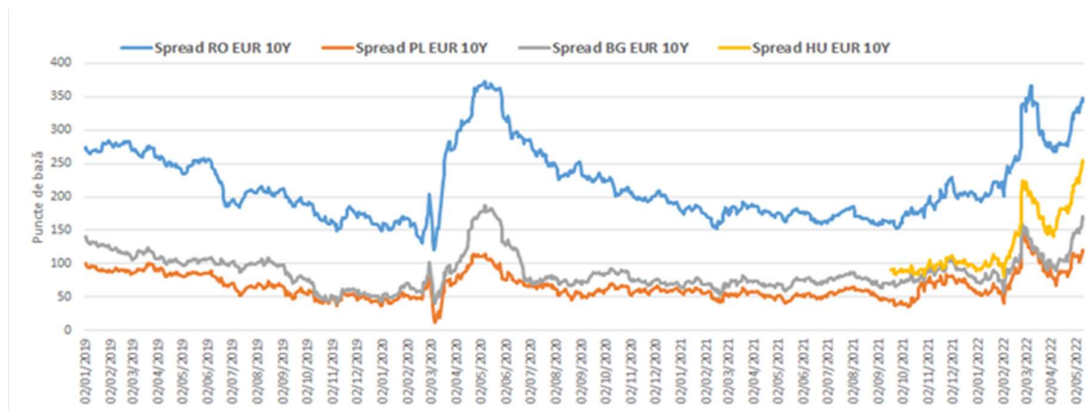
The perspective of rising reference interest rates as a central monetary policy tool to fight inflation has led to an upward trend in global interest rates that has continued during 2022. The military conflict in Ukraine that started at the end of February 2022 added further volatility to interest rate dynamics, with countries in the region CEE²¹ recording the acceleration of interest rate growth as a result of the proximity of the conflict zone as investors have shifted their portfolios into safe haven in anticipation of rising benchmark interest rates. Thus, the yield curves of the CEE4 countries have been inverted as a result of the accelerated rise in short and medium-term yields, which have outpaced long-term yields.

Inflationary countermeasures adopted both globally and domestically, in the context of the difficult conditions created by the conflict in Ukraine which have led to accelerated increases in energy and food costs, are generating unfavorable financial conditions globally, requiring the implementation of a flexible public debt management strategy adapted to the new conditions.

In the period following of the COVID-19 shock, the spread of Romanian Eurobonds against the German Bund has been on a downward trend, slightly more pronounced than that of similar Eurobonds issued in the region. Currently, the spread of Romanian Eurobonds against the Bund is at the highest levels in the region, reflecting perceptions of vulnerability of the economy with an impact on financing costs in external markets.

Chart 15: The evolution of the spread of Eurobonds in EUR with 10 year maturity of Romania, Poland, Hungary, and Bulgaria relative to the German Bund

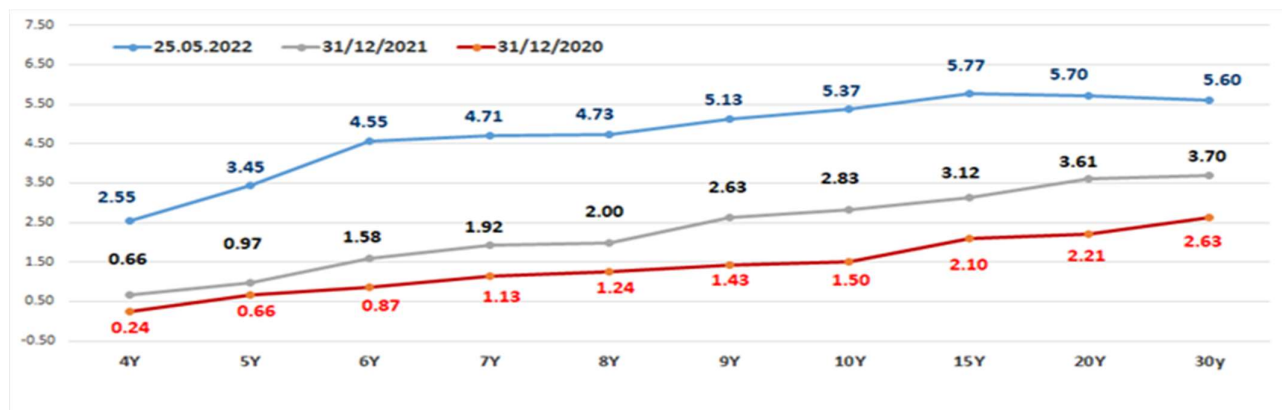
²¹Poland, Hungary, Slovakia, Czech Republic



Source: MF

The yields on euro-denominated government bonds denominated in EUR increased across the board during 2021, and increased further during 2022 under the impact of the above developments.

Chart 16: The evolution of the yield curve of Romania's Eurobonds issued in EUR on the foreign market



Source: MF

Yields on Romanian Eurobonds issued in USD on the external market were relatively stable with minimum levels between September 2020 and October 2021 and then on an upward trajectory.

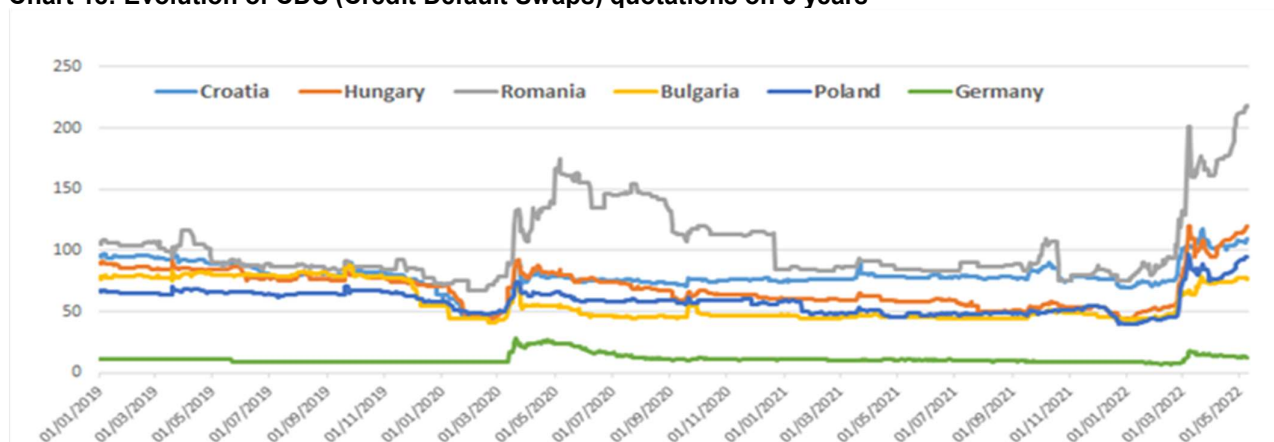
Chart 17: The yields of Romania's Eurobonds issued in USD on the foreign market with maturity in 2024 and 2044



Source: Bloomberg

Romania's CDS (credit default swap)²² quotations, which represent the price of insurance against the risk of default, increased between February and April 2022, reflecting the highest level in the region due to the amplification of general investor risk perception in the context of the Russian military intervention in Ukraine.

Chart 18: Evolution of CDS (Credit Default Swaps) quotations on 5 years



Source: Bloomberg

Implementation of the financing plan from foreign markets

In 2021, the sum of EUR 7 billion was raised from foreign markets through Eurobond issues, as follows:

- on April 14th - EUR 3.5 billion in a two-tranche Eurobond issue, of which EUR 2 billion with a 12-year maturity (yield of 2.104%, coupon 2.000%) and EUR 1.5 billion with a 20-year maturity (yield 2.773%, coupon 2.750%);
- on July 13th - EUR 3.5 billion in a two-tranche Eurobond issue, of which EUR 2 billion with a maturity of 9 years (yield 1.756%, coupon 1.750%) and EUR 1.5 billion with a maturity of 20 years (yield 2.992%, coupon 2.875%).

The operations on the foreign market in 2021 also included drawings amounting to a total of approximately EUR 0.3 billion corresponding to the loans contracted from international financial institutions (EIB, IBRD, etc.).

In the first 5 months of 2022, the MF attracted the amount of USD 4.2 billion and EUR 2.5 billion, as follows:

- on January 27th - USD 2.44 billion in a two-tranche Eurobond issue, of which USD 1.35 billion with a 5-year maturity (yield 3.130%, coupon 3.000%) and USD 1.095 billion with a 10-year maturity (yield 3.699%, coupon 3.625%). Offers for the 10-year issue were also accepted to exchange government securities issued by Romania into USD with maturities in 2023 and 2024.
- - on February 7th - EUR 2.5 billion in a two-tranche Eurobond issue, of which EUR 1.25 billion with a 6-year maturity (yield 2.135%, coupon 2.125%) and EUR 1.25 billion with a 12-year maturity (yield 3.779%, coupon 3.75%).

²²The evolution of CDS reflects investors' perception of country risk and impacts the financing costs of the country concerned.

- - on May 25th - USD 1.75 billion in a two-tranche Eurobond issue, of which USD 1 billion with a 5-year maturity (yield 5.300%, coupon 5.250%) and USD 0.75 billion with a 12-year maturity (yield 6.019%, coupon 6.00%).

The sovereign rating

In April 2022, Fitch, the rating agencies Standard & Poor's and Moody's maintained Romania's rating in the recommended investment grade category (Fitch BBB-/F-3, with a negative outlook, Standard & Poor's - BBB-/A-3 and Moody's - Baa3/A-3, with a stable outlook). The decisions took into account Romania's status as a member of the European Union and the flow of funds from the European Union supporting the country's investment and macroeconomic stability, as well as its GDP per capita and governance and human development indicators which are above those of countries in the same rating category²³. At the same time, the rating agencies' decisions took into account Romania's solid economic growth potential and robust access to financing from international capital markets, but flagged a number of risks that could affect the sovereign rating in the coming period, such as the failure to achieve a sustained reduction of fiscal imbalances or a structural deterioration of public finances, a widening of the current account deficit, as well as the escalation of the military conflict in Ukraine.

Expectations regarding the evolution of financial markets in the period 2022-2024

The elimination of the effects of the economic crisis generated by the global pandemic caused by COVID-19, combined with measures to combat inflation and geopolitical risks at unprecedented levels due to the military conflict in Ukraine are medium to long-term challenges and will focus government efforts globally. Rising global financing costs, coupled with unprecedented increases in commodity and energy prices - also affected by the military conflict - and food prices are factors that will characterise the economic environment and financial markets in the period ahead. In this context, interest rates are likely to remain high both globally and domestically, with the NBR's inflation projections²⁴ indicating CPI levels of 12.5% at the end of 2022, forecast to enter a downward trend of 6.7% at the end of 2023.

Financial markets will continue to react to the uncertainties generated by the economic and geopolitical environment of this period with fluctuations in interest rates and safe haven asset prices, caused by changes in the perception of financial markets that will generate capital migration to other assets. Stock markets could suffer significant corrections under the possible impact of increased volatility of financial flows under the impact of specific risks.

In the context of amplification of vulnerabilities at international level, but also depending on domestic economic and political developments, sharp corrections in the government bond yield curve can be expected.

The medium-term financing process

On medium term, the financing of the state budget deficit and the refinancing of government debt shall be made from domestic and external sources. MF will continue to maintain a flexible approach in the implementation of the financing process, both in terms of access to domestic and external markets and the debt instruments used, aiming at ensuring the predictability and

²³Bulgaria, Kazakhstan, Indonesia, Philippines, Thailand, Peru, Uruguay

²⁴NBR Inflation Report, May 2022, - page 56

transparency of the supply of government securities, in order to be able to react promptly and appropriately to potential changes in market trends and investor behavior.

According to the market conditions, the MF is considering partial pre-financing of financing needs, a policy it intends to continue in the coming years depending on conditions and windows of opportunity on the foreign financial markets. This is a common practice of assurance of the financing needs of debt management agencies at EU level, reducing in this manner the pressure of assurance of sources for coverage of financing needs during the current year, given that there are bigger volumes of debt redemption in the first part of the year.

On the domestic market, in order to reduce financing costs and to promote an improved operation of the secondary market, the MF intends to continue the policy of building liquid benchmark government bond series on the entire yield curve, in conjunction with a transparent government issuance policy, seeking to reach volumes per issuance/series with an equivalent value of approximately 2.5 billion EUR, with prior information of the market with respect to the volumes, the frequency of launching/reopening of certain categories of maturities. The MF may issue government securities denominated in EUR on the domestic market if an important demand for such instruments coming from the local investors is found, in the absence of alternative instruments, this creating the assumptions for an advantageous maturity/cost ratio.

Also, according to the completion of the procedural and operational framework together with the NBR²⁵, from June 2022, specific liability management operations such as early redemptions or buybacks of government securities will be used to facilitate the refinancing process of large accumulated volumes of maturing series and accelerating the process of creation of series of government securities of liquid benchmark type up to 2.5 billion in EUR equivalent.

Correlated with the attracted volumes, the financing process shall consider a flexible structure of maturities, to ensure that the state's financing needs are covered and which would continue to allow the extension of the debt portfolio duration and the reduction of the refinancing risk on medium term. In this sense, it is important the structure of the local investment base, in which the share of holdings of government securities of commercial banks is still maintained at a high level.

Thus, in the context of rising interest rates for emerging markets including Romania, government securities holdings have a negative effect on banks' profitability and capitalization due to the recognition of mark-to-market losses on fixed income instruments held, which affects demand at government securities auctions, although government securities holdings are an important source of liquidity for the banking system, being accepted as eligible assets for monetary policy operations.

To the same extent, it is important the evolution of the level of participation to the market of government securities of the other categories of local investors, namely investment funds, private pension funds, with an important potential in supporting the development of the domestic market of government securities.

In this context, in the implementation of the medium-term financing plan, MF is considering measures to diversify holdings of government securities with the effect of decreasing concentration risk and decreasing pressure on yields in the primary market. For this purpose, as well as in order to increase the accessibility of natural persons and the diversification of sales channels of government securities, as saving instruments, MF will maintain the offer of government securities dedicated to individuals by continuing to issue government securities to the general public under the two dedicated programs Tezaur and FIDELIS, within an indicative annual ceiling.

²⁵The auctions related to buy back and switch operations on the domestic market will be carried out using the electronic platform developed by the NBR for primary market auctions.

With respect to accessing the foreign market, the MF intends to maintain a constant presence on the international financial markets and to continue its liability management operations (early redemption/redemption) depending on the market conditions that allow the Romanian state to obtain advantageous costs.

MF will keep flexibility in terms of timing of access to international markets, volume and currency of external issuance, taking into account associated costs, risk considerations, potential implications of central bank policies, as well as local market developments.

At the same time, in the medium term, the EU financial support package, which will also benefit Romania through the Recovery and Resilience Mechanism, will play an important role both in achieving the budgetary correction and in delivering key programs and investments to support the resilience and adaptability of the economy in the context of the recovery from the COVID-19 crisis, as well as the growth potential through major reforms and key investments to facilitate the green and digital transition. For the implementation of the NPRR, Romania is receiving €29.2 billion of funding, of which €14.24 billion is grant funding and €14.94 billion is loan support. The use of the loan component will have a positive impact in reducing financing costs at sovereign level, given the very advantageous costs of borrowing (i.e. in financial terms at which the EC borrows on behalf of the EU on the financial markets, plus the costs incurred by the EC in obtaining and managing that financing), which will be reflected in reduced interest expenditure on public debt and thus on the budget deficit in the years following the drawdown of this loan.

In the medium term, MF intends to continue its partnership with international financial institutions, including the European Union, in order to benefit from the financial advantages related to their products in limiting the costs and extending the maturity of the debt portfolio through the cost and maturity terms offered, for the purpose of financing the budget deficit and refinancing the government debt, the amounts being made available on the basis of the implementation of certain measures and/or other actions necessary in the field of sector reforms.

Table 7: Financing sources corresponding to the estimated financing needs *)

Funding sources	Maturity (years)	Value (billions)		
Internal market		2022	2023	2024
1. Treasury certificates (billions of Lei)	up to 1 year	6	6	6
2. Benchmark bonds in Lei and EUR (billions of Lei)	over 1 year	54	58	54
3.State securities for the population (billions of lei)	1-5 years	10	12	12
The external market				
1. Eurobond issues under the MTN Program (equiv. EUR billions)				
- EURO/USD	Over 10 years	10.0	8.5	4.8
2. Loans from international financial institutions (billions of EUR):				
a) EIB loans (incl. SPL), IBRD, BDCE, etc	vary according to the financier and the status of the loan (some are already in repayment, and for others the terms are set at the time of drawing, depending on the MF option)	1.1	1.3	0.8
	on average 15/20 years of which 4-5 years the grace period			
b) Loans from the European Union within the loan component of the PNRR of approx. 14.9 billion EURO	On average, about 20 years	3.7**)	2.1	3.5

*) correlated with maintaining a financial reserve in foreign currency at the disposal of the State Treasury for up to 4 months.

**) includes the pre-financing of 13% of the loan component of the NPRR

Source: MF

5. The macroeconomic framework²⁶ in Romania

In 2021 Romania's economy returned to pre-pandemic levels earlier than expected. Active economic and fiscal measures have been effective in sustaining economic activity: economic growth of 5.9% in 2021 reflects a full economic recovery, driven on the demand side mainly by private consumption and investment, with an average annual growth rate of about 4.2% forecast for 2022-2024.

Romania ended 2021 with an annual inflation rate of 8.19% (increased by 6.13 percentage points from 2.06% in December 2020), with inflation reaching a high of 14.5% in May 2022²⁷. For the end of 2022, an inflation rate of 9.7%²⁸, to gradually decrease, for the end of 2024 a level of 2.7% is projected²⁹.

The BIM unemployment rate was 5.6% at the end of 2021, 0.5 percentage points lower than in the previous year (6.1% in December 2020). In the medium term, a downward projection of the unemployment rate is expected, with a level of 5.4% forecast for the end of 2022 and 4.8% in 2024.

In 2021, the current account deficit increased to 7.0% of GDP, compared with 5.0% in 2020, with a projected level of 6.9% of GDP in 2022 and 6.3% of GDP in 2024.

The macroeconomic framework configured for the period 2022-2024 was based on considerations such as economic developments in 2021, the evolution of economic growth mainly driven by investment and consumption - in a domestic environment favored by the stability and predictability of macroeconomic policies as well as effective government policies with a mitigating effect on the COVID crisis, the European and global context characterized by a post-COVID recovery. Unfortunately, the economic effects of the conflict between Russia and Ukraine will contribute to a slowdown in global economic growth in 2022 and higher inflation. Moreover, the IMF has revised global economic growth downwards to 3.6% in 2022 and 2023.

The budget planning for 2022 - 2024 was based on the measures taken by the Romanian Government in 2020 and 2021 to recover the economy and stop the negative effects of the pandemic, in addition new measures to be taken in 2022, which will influence the macroeconomic framework and budget indicators over the 2022-2024 horizon, as well as the financing priorities in the national budget and the expectations of a real GDP growth of 2.9% for 2022.

The budget plan for 2022 is influenced by the fiscal-budgetary policy geared towards adopting fiscal measures for economic recovery and preparing for the challenges and opportunities offered by the transition to a green and digital economy. The EU financial envelope will be able to finance projects in the areas of digitization, anti-pollution, infrastructure, health, education, structural reforms, better governance of the public sector, development of competitive advantages resulting in higher potential GDP. The approval by the European Commission of Romania's National Recovery and Resilience Plan (NPRR) at the end of September 2021 represents an economic and financial opportunity to mitigate the economic and social impact of the COVID-19 pandemic and to prepare for the challenges and opportunities offered by the transition to a green economy and the digital transition.

Starting in 2021, Romania has been on a path of gradual deficit adjustment towards the target recommended by the European Commission, but with sustainable economic growth throughout the forecast horizon. The measures underpinning the budgetary construction for 2022, as well as the medium-term projections, ensure the reduction of the structural deficit in the period 2022-2024. In the medium term, Romania aims to achieve fiscal consolidation through measures that

²⁶The chapter is developed based on the projection of macroeconomic indicators published by CNSP - Spring Forecast, April 28th, 2022

²⁷May 2022 inflation rate compared to May 2021 - source INS press release no. 143/10.06.2022

https://insse.ro/cms/sites/default/files/com_presa/com_pdf/pc05r22.pdf

²⁸CNSP- Projection of the main macroeconomic indicators, spring forecast, April 28th, 2022.

²⁹CNSP- Projection of the main macroeconomic indicators, spring forecast, April 28th, 2022.

will allow it to reach the budget deficit target set by European regulations by the end of 2024 to a level below the 3% of GDP limit, in line with the Maastricht Treaty, which will allow it to exit from the Excessive Deficit Procedure. The overall medium-term objective of fiscal-budgetary policy is to gradually reduce the deficit without jeopardizing the prospects for economic recovery.

In the medium term (2022–2024), under conditions of fiscal consolidation, the reduction of the budget deficit will determine the reduction of financing needs at the governmental level and implicitly of the public debt.

Table 8: Forecast of financing needs

Index	2021 operational execution	2022 prog	2023 program	2024 program
Central public administration revenues (billions of Lei) ³⁰	306.7	363.1	406.4	449.8
Central public administration expenses (billions of Lei) ³¹	389.8	443.1	470.7	496.3
Budget deficit related to the central public administration (I) (billions of Lei) ³²	83.1	80.0	64.3	46.5
Refinancing the government's public debt ³³ (II) (billions of Lei)	51.8	68.4	71.8	65.5
Gross financing requirement (I+II) (billions of Lei)	134.9	148.4	136.1	112.0

Source: MF

At the end of 2021, the share of government debt ratio, calculated according to the EU methodology, was at 48.8% of GDP, falling within the ceiling of 49.5% of GDP provided for in GEO no. 97/2021 on the adjustment of the state budget for 2021, as a result of public debt borrowing to cover the financing needs of the general consolidated budget deficit (6.77% of GDP)³⁴, consolidating the financial reserve in foreign currency at the disposal of the State Treasury and ensuring the refinancing of the public debt from 2021.

According to the medium-term fiscal strategy (2022 - 2024), under conditions of fiscal consolidation, the estimates for the evolution of gross government debt, according to the EU methodology, are for this indicator to be at a sustainable level.

The government debt ratio calculated according to the European Union methodology, based on preliminary data, expressed as a percentage of GDP, stands at 49.2% of GDP at the end of April 2022 and includes the pre-financing of the loan component for the implementation of the PNRR as well as the debt incurred to finance the approved budget deficit for 2022 and the refinancing of maturing public debt. **For the end of 2022, the forecast of government debt as a percentage of GDP is 49.4% of GDP**, calculated on the basis of the 2.9% economic growth forecast for 2022³⁵ and the level of the consolidated general budget deficit of 5.84% of GDP.

The macroeconomic assumptions of the Strategy for the period 2022-2024 are presented in the table below.

³⁰Calculated based on cash data by applying the EU methodology.

³¹Idem 28

³²Idem 28

³³The volume of repayments of capital installments and refinancing of government bonds in the account of the government public debt, according to national legislation, calculated on the basis of the debt balance at the end of 2021 (includes state guarantees, but does not include temporary financing).

³⁴ According to operative data regarding budget execution on December 31st, 2021. The consolidated general budget deficit according to operative execution at the end of 2021 was in nominal value of 80.0 billion lei representing 6.77% of GDP. GDP related to 2021 according to the spring forecast of the CNSP - April 28th, 2022

³⁵ CNSP spring forecast, April 28th, 2022, MF

Table 9: Baseline scenario of macroeconomic projections

indicator	2021	2022 prog.	2023 program	2024 program
Nominal GDP (billions of Lei)	1,181.9	1,327.9	1,460.7	1,581.8
GDP growth (%)	5.9	2.9	4.4	4.8
The budget deficit related to the central public administration ³⁶ (% of GDP)	-7.0*)	-6.0	-4.4	-2.9
Current account deficit (% of GDP)	-7.0	-6.9	-6.7	-6.3
Inflation (end of year %)	8.19	9.7	3.5	2.7
Inflation (annual average %)	5.05	10.1	5.4	3.0
Average exchange rate Lei/EUR	4.9481	4.97	5.03	5.08
Average exchange rate Lei/USD	4.3707	4.47	4.49	4.54

Source: CNSP spring forecast, April 28th, 2022, MF

*) operative execution according to preliminary data on December 31, 2021

Risks corresponding to initial projections

Budgetary estimates and economic forecasts may deviate from the baseline scenario levels due to the possible materialization of risks that may arise both internally and externally, with different implications for the evolution of public finances.

The damage caused by the COVID-19 pandemic has been more pronounced than expected and consumers and business may behave more restrictively, affecting consumption and investment.

In addition, the continuation of the Russia-Ukraine war and the international sanctions in place, which are likely to affect domestic macroeconomic and financial developments through a worsening energy crisis and bottlenecks in production and supply chains, as well as developments in the international financial market, together with the conduct of central banks' monetary policy, are important benchmarks that may lead to volatility affecting investment appetite for financial assets issued by emerging economies.

During 2021, the Fed kept benchmark interest rates in the current minimum range of 0-0.25%, signaling that it will keep interest rates near zero for as long as necessary until US inflation rises above the 2% target, pushing markets' expectations of the first rate increase to 2023.

Expectations of a gradual return to normal economic activity in the post-pandemic context, as well as the globally manifested inflationary pressures that have been felt since the second half of 2021 as a result of adverse global supply-side shocks, have prompted central banks and monetary authorities to promote measures to end the net asset purchase (quantitative easing) programs that have been activated to support economies affected by the COVID-19 pandemic.

Thus, starting in November 2021, the US Federal Reserve (Fed), against the backdrop of a rapid return of employment to strategic coordinates and a rapid rise in inflation, proceeded to reduce net asset purchases as part of the quantitative easing process, a process that was completed in March 2022 when the FED also made its first increase in benchmark interest rates, a process which continued in May 2022 with an increase to 0.75-1.00% and in June with an interest rate increase to 1.5-1.75%, while signaling the intention to maintain a sustained pace of successive increases until the end of 2022, with an anticipated level of 3.25%-3.5% by the end of the year.

The Bank of England proceeded to raise the reference sterling interest rate to 0.25% in December 2021, following up with four further increases of 25 bps each bringing the benchmark British pound interest rate to 1.25% in June 2022.

³⁶ Calculated based on cash data by applying the EU methodology.

The ECB will also end its net asset purchase program (NPP) as of July 1st, 2022, announcing the possibility of raising the benchmark interest rate by 25 bps in July 2022 and thereafter in September, depending on the updated medium-term inflation outlook.

Russia's military invasion of Ukraine is generating additional pressure on the global economy through the major disruptions caused by the removal of the two economies from the global trading circuit - Ukraine by blocking specific exports and Russia by the economic blockade whose immediate effects are felt in the energy market. As a result of rising energy and raw material costs, including Ukrainian grain prices, the foreseeable effects will manifest themselves in fueling global inflation, the transitory nature of which is fading, requiring firm action by national and supranational monetary authorities.

With respect to the domestic market, it shall be influenced by both the unpredictability of the economic and political environment at international level, and by the evolutions at domestic level.

Given excessive budget deficits on medium term (above 3% of GDP), the issuance of new debt to cover high financing needs in the domestic market needs to take into account the absorption capacity of the domestic market and the characteristics of the holders of government securities issued in this market (the banking sector is still the main holder). This risk factor can be diminished in the longer term by increasing demand from institutional investors such as pension funds or other capital market participants such as local asset management funds and insurance companies. Since the beginning of 2022, the nominal value of holdings of government securities in the portfolios of privately managed pension funds and voluntary pension funds has been on an upward trend, while their share of total assets has declined marginally over the same period. The Ministry of Finance will continue the dialogue with Romanian and foreign institutional investors with a view to strengthening the holdings of Romanian government securities in their portfolios.

Political implications at macroeconomic level

The macroeconomic projections in the baseline scenario indicate an increase in central government borrowing requirements in 2022 compared to 2021 and a gradual decrease in the following years as the budget deficit gradually declines to 2.95% of GDP in 2024. Thus, financing strategies will have to be implemented taking into account the volume of debt refinancing and budget deficits above 3% of GDP, but decreasing in the medium term, in parallel with increasing financial risk tolerance. In the medium-term financing process, the MoF will take into account the achievement of its specific objectives, but will also take into account the macroeconomic context and changes in demand in the domestic and external investment base.

In conclusion, the main risks associated with the macroeconomic assumptions in the baseline scenario show that, in terms of anticipated/estimated monetary policy decisions both internally and externally, a very vulnerable and volatile market environment is expected to persist at least for the year 2022.

6. Analysis and strategic guidelines

The strategic guidelines related to government debt management in Romania reflect the cost-risk relationship associated with the current government debt portfolio³⁷, the development plans for the domestic market of government securities and the macroeconomic framework on medium term.

Implications of the analysis of the existing government debt portfolio, of the macroeconomic framework and of the market framework over government debt management

³⁷The government public debt portfolio at the end of 2021 was taken into account.

Although it is decreasing compared to previous years, **the exposure to refinancing risk and implicitly to interest rate risk on domestically issued debt continues to represent the main sources of risk for the current government debt portfolio.**

Currency risk is moderate, being mitigated by the share of long-term foreign currency debt issued (denominated in Euro) as well as by the maintenance of the financial reserve in foreign currency at the disposal of the State Treasury. The advantage of long and very long maturities and the diversification of the investor base also further justify the option of issuing USD-denominated Eurobonds, particularly in the context of the use of FX swaps, following the conclusion of ISDA documentation with potential counterparties in the coming period. Currently, the analysis shows that in the absence of the necessary framework for the use of derivatives to manage the risks of funding in other currencies, funding in USD for maturities up to 10 years remains more costly and riskier than funding in EUR³⁸. Nevertheless, it must be considered the cost associated to the use of long and very long term hedging instruments.

In order to limit refinancing risk, MF intends to use specific liability management operations, such as early redemptions or buybacks of government securities, from June 2022 onwards following the completion, in collaboration with the NBR, of the applicable legal framework.

Based on these considerations, MF has assessed funding alternatives that facilitate limiting exposure to refinancing and interest rate risk.

Two approaches have been used: i) issuing government securities in domestic currency for as long maturities as possible, and ii) replacing the financing by government securities denominated in lei on the domestic market with financing by government bonds denominated in EUR issued for a longer term. In addition, in order to examine the cost-risk relationship following the issuance of long-term bonds in USD, several financing strategies with different currency structures (EUR versus USD) were simulated.

Alternative financing strategies were compared on the basis of debt service projections using different alternative scenarios for exchange rates and interest rates. The baseline scenario, determined as the most likely, was used to calculate the estimated cost of the different strategies. The risk was calculated by relating the increase in cost resulting from the application of shocks to the market rates used³⁹ in the baseline scenario at the cost in the baseline scenario. Two cost and risk indicators were used: the debt-to-GDP ratio and the interest payments-to-GDP ratio, both calculated for the end of the third year of analysis, namely 2024. The results of the cost-risk analysis are supplemented by macroeconomic considerations and those related to the development of the domestic government securities market, as follows.

Results of the analysis related to the alternative public debt management strategy

Extending the average time to maturity (ATM) for the debt in the national currency: Managing the exposures to the refinancing risk which characterize the debt in national currency using more instruments denominated in Lei with medium and long term maturities is still more favorable. Under these circumstances, the cost corresponding to the extension of the average time to maturity is relatively small from the perspective of the debt in GDP and of the share of interest payments in GDP. Therefore, the analysis of the scenario supports the strategies which increase the average time to maturity, because the cost increase is relatively small compared to the improvement of the profile of debt refunds/redemptions and the protection they offer relative to the unexpected and sustained increase of short term interest rates.

³⁸ Current yields (as of 18 May 2022) on EUR-denominated Eurobonds due April 2027 are approx. 4.0% while yields on USD-denominated Eurobonds due November 2027 are approx. 5.3%.

³⁹For the analysis, the forward reference rates for Euro su USD taken from Bloomberg on 16 May 2022 were used.

This strategy may contribute to market development by increasing the liquidity of government securities issued in the medium and long term, with an impact on the development of the secondary market. Improved liquidity may come both through increasing the share of Romanian government securities in regional reference indices, through the use of the electronic trading platform on the secondary market (E-bond) and for the use of liability management operations (early redemptions and buybacks). Nevertheless, the simulations of the costs which correspond to this strategy do not take into account the limitation generated by the absorption capacity of an increased volume of government securities on medium and long term by the domestic market. Thus, this scenario must take into account a reasonable increase of the net volume of issues of government securities on medium and long term on the domestic market, correlated with the high exposure on government securities of the banking sector.

Reducing refinancing risk by refinancing maturing domestic lei debt with 10-year EUR-denominated government securities: Managing exposures to refinancing risk on domestic currency debt through financing in EUR is advantageous from a debt cost perspective, but if the analysis focuses on stocks, currency risk dominates and increasing the share of EUR debt amplifies the portfolio's exposure to a possible depreciation of the domestic currency. When using the share of interest payments in GDP as a cost indicator, strategies with a predominant financing in EUR have a lower cost at a lower associated risk comparable to predominantly domestic currency financing. The analysis focuses on cost differential is driven by the fact that domestic interest rates are higher than those in EUR by about 2.5% at present for the 10-year maturity.

Structure of the portfolio in foreign currency: The simulation results show medium-term preference for EUR funding over USD funding. The quantitative analysis shows that, from the perspective of current and forward yield curves, USD funding implies higher costs compared to EUR funding. This reflects higher USD interest rate expectations as well as a significantly more volatile leu/USD exchange rate than leu/EUR, as the US currency appreciates against the EUR.

Although traditionally the USD market is much more liquid, with a diversified investor base and has allowed Romania to borrow with long and very long maturities the favorable conditions in the EUR market in recent years have allowed the maturity of Romanian government securities to be extended to 30 years and are an additional argument for issuing Eurobonds in the EUR market. In 2022, with continued high funding needs from external markets and volatile investor demand, the USD market with maturities of 5, 10 and 12 years was also accessed, providing diversification of the investor base. Although in the medium term the intention is to keep the external debt exposure predominantly in EUR, however, if opportunities exist in terms of cost/maturity, in conjunction with managing the risk of exposure in other currencies through the use of currency swap instruments, and taking into account the cost associated with the use of long and very long-term hedging instruments, the issuance of instruments in other currencies may be considered.

In this respect, in order to reduce the exposure to foreign exchange and interest rate risk associated with the government debt portfolio, MF is considering the use of derivatives financial instruments (especially currency swap considering the exposure of the current debt portfolio), and is in the process of concluding ISDA Master Agreements with a number of counterparties.

On the medium term, it is envisaged to diversify financing instruments by issuing green bonds, in this regard a first step is the creation of a general framework for green bond issues at the sovereign level, with the identification of green investment/expenditure projects in the state budget with the support of line ministries and the Ministry of Investment and European Projects, as coordinating authority of the National Resilience and Recovery Plan.

At the same time, in order to improve public debt management and avoid seasonal pressures in the assurance of sources of financing the budget deficit and refinancing of government public

debt, with a view to reducing refinancing and liquidity risk, the Ministry of Finance is considering to maintain a financial reserve (buffer) in foreign currency at the disposal of the State Treasury, in an amount equivalent to covering the financing needs of the budget deficit and refinancing of public debt covering up to 4 months of the gross financing needs.

To conclude, under the conditions of excessive budget deficits (over 3% of GDP) on the medium term, the MF intends to ensure the financing of the budget deficit and the refinancing of public debt mainly in national currency in order to continue the process of development of the domestic market in line with the absorption capacity of the domestic market for government securities in Lei, in parallel with access to foreign capital markets in EUR and USD, as well as borrowing from IFIs in order to ensure robust financing sources, in case of obtaining a cost/risk ratio advantageous for the Romanian State, diversifying the investor base and using derivative financial instruments (currency swaps).

MF will continue to promote the development of the domestic government securities market through the measures and actions presented in Annex 1.

Strategic guidelines

The following principles shall form the basis of financing decisions in 2022 - 2024:

1. Financing mainly in the national currency that further facilitates the development of the domestic government securities market and also support the decrease of foreign exchange risk exposure considering at the same time the limited absorption capacity of the domestic market, and in general the demand for debt instruments in Lei⁴⁰, as well as the needs to diversify the investor base for government securities. In the case of high financing needs due to excessive budget deficits, the net financing (budget deficit) shall be achieved both from domestic and external sources, and mainly from domestic sources from 2024 onwards. Issuance in EUR on the domestic market will be considered only in the context of specific demand expressed by local investors, at medium maturities, depending on market conditions and the appetite of the investment community, with a favorable maturity/cost ratio.
2. Achieving a profile as uniform as possible of debt repayment, avoiding as far as possible the concentration of principal repayments/short-term government bond refinancing, including through liability management operations (early redemptions or government bond buybacks).
3. Mitigate refinancing and liquidity risk through maintaining of a reserve in foreign currency at the disposal of the State Treasury⁴¹ to provide the necessary protection in case of volatile periods in the financial markets.
4. In the foreign financing process, consideration will be given to contracting debt predominantly in EUR and USD, taking into account the associated cost/risk ratio, the contribution to the diversification of the investment base, and the evolution of the interest differential between the two currencies. The conclusion of ISDA framework agreements with several counterparties will also allow the use of derivatives such as foreign exchange swaps to better manage exposure to foreign exchange risk.
5. The introduction of green bond issues will be made after the creation of the General Framework for green bonds at the sovereign level, which involves coordinated efforts at the level of line ministries to identify the expenses/projects that will be the object of financing through these bonds.
6. Keep interest rate risk exposure under control by limiting the share of debt that changes interest rate in a year and the average period until the next interest rate change for the entire debt portfolio.

⁴⁰ In addition to domestic demand for lei government securities, non-residents can play an important role both in terms of volumes placed in the domestic market and the maturity structure in the funding process, given their high appetite for government securities with medium and long-term maturities.

⁴¹ The foreign currency reserve must cover a number of months corresponding to the gross financing needs.

7. 8. Using the financing instruments offered by the international financial institutions, (IBRD, EIB, EBRD, EBRD, etc.), including those set up at EU level to support the recovery and resilience process at Member State level, considering the advantageous terms and conditions they offer.

These principles are expressed as indicative target ranges for key risk indicators, reflecting the desired composition of the government debt portfolio, as follows:

Currency risk:

1. Ensuring a higher share of net financing from domestic sources and maintaining the share of debt denominated in the national currency in the total government debt between 45% (minimum) and 60%. This financing strategy shall consider the absorption capacity of the domestic market of government securities and the cost associated thereto.
2. Keeping the share of debt denominated in EUR in the total debt denominated in foreign currency in the interval of 80% (minimum) and 95%. At the time of use of derivative financial instruments, this indicator shall be calculated after assessing the debt as a result of the use of currency swaps.

Refinancing risk

1. Keeping the share of debt falling due within 1 year in the range of 10% to 20% (maximum) for domestic currency debt and 10% to 20% (maximum) for total debt.
2. Keeping the average time to maturity in the range of 4.0 years (minimum) and 6.0 years for debt in national currency and between 7.0 years (minimum) and 8.5 years for total debt.
3. Maintaining a financial reserve in foreign currency at a comfortable level, so as to mitigate the risks corresponding to the periods characterized by high volatility on the financial markets.

Interest rate risk

1. Maintaining the share of debt that changes its interest rate in a year in the range of 10% to 20% (maximum) for domestic currency debt and between 10% and 20% (maximum) for total debt.
2. Maintaining the average time to re-fixing between 4.0 years (minimum) and 6.0 years for the debt in national currency and between 7.5 years (minimum) and 8.5 years for the total debt.

Table 10: Targets for the main risk indicators

Risk exposure	Indicator	Indicative targets for 2022-2024
Currency risk	Share of debt in the national currency in total debt (% of total) Share of debt denominated in EUR in total debt in foreign currency debt (% of total)	45% (minimum) - 60% 80% (minimum) - 95%
Refinancing risk	Share of debt due within 1 year (% of total) Share of debt in the national currency due within 1 year (% of total) Average time to maturity for the total debt (years) Average time to maturity for the debt in the national currency (years)	10% - 20% (maximum) 10% - 20% (maximum) 7.0 years (minimum) - 8.5 years 4.0 years (minimum) - 6.0 years
Interest rate risk	Share of debt that changes its interest rate within one year (% of total) Share of debt in Lei that changes its interest rate within one year (% of total) Average time to re-fixing for the total debt (years) Average time to re-fixing for the debt in the national currency (years)	10% - 20% (maximum) 10% - 20% (maximum) 7.5 years (minimum) – 8.5 years 4.0 years (minimum) – 6.0 years

Source: MF

The implementation of the Strategy for the period 2022 - 2024 shall be monitored on a monthly basis, by following the debt indicators to be in the limits of the established targets and the

publication thereof in the monthly bulletin of the MF available on the website of the Ministry of Finance. According to Government Emergency Ordinance no. 64/2007 on public debt, as subsequently amended and supplemented, the strategy is revisable yearly or anytime market conditions and/or financing requirements impose it.

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Developing the domestic government securities market

The medium-term strategic objectives for the development of the domestic government securities market aim at increasing the efficiency of this market by improving liquidity, transparency and strengthening the yield curve. In order to achieve the above objectives, MF has planned a set of actions, some of which will be implemented in the near future, as follows:

1. *Increasing efficiency in the government securities market by strengthening and widening the yield curve in the domestic government securities market:*
 - 1.1. Defining a policy of creation and maintaining of the government securities of liquid benchmark type amounting to up to 2.5 billion EUR equivalent, as the main financing instrument on the domestic market;
 - 1.2. Using liability management operations for the purpose of accelerating the process of creation of government securities of the type of liquid benchmark from June 2022, in parallel with managing refinancing risk and supporting the implementation of the Strategy.
 - 1.3. Issuance of short-term treasury certificates for liquidity management purposes in line with investor demand.
2. *Development of government securities programs for the population*
 - 2.1. Continued issuances of government securities to the population under the TEZAUR and "FIDELIS" programmes and distribution thereof through different distribution channels, respectively through the territorial units of the State Treasury, of the Romanian Post and of credit institutions.
 - 2.2. Measures to increase the attractiveness of these instruments in order to facilitate online subscriptions and repayments of amounts due to investors at maturity.
3. *Diversification and expansion of the investor base by:*
 - 3.1. Issuance of a series as large as possible of instruments, with different maturities, by considering the different investment needs of the local and international investment environments;
 - 3.2. Balancing the rights and obligations of primary dealers and increasing competition among primary dealers by attracting new primary dealers which would lead to the increase of the distribution, intermediation and trading of government securities at the same time as increasing transparency in price formation;
 - 3.3. Examine the opportunity to issue new debt instruments requested by market participants (such as index-linked or floating rate bonds) in line with the development of the government securities market and avoid fragmentation of this market;
 - 3.4. Continued organization of promotional tours for the investors of "non-deal roadshow" type.
4. *Measures of increasing the liquidity of the state securities market:*
 - 4.1. Monitoring the electronic platform of quotation and trading of government securities by primary dealers (E-Bond) in order to improve liquidity and transparency of government securities prices and reduce the risks associated with trading activities, and promote improvements to allow investors to obtain quotes through it from each primary dealer;

- 4.2. Concentrate government securities liquidity in a small number of benchmark government securities with an equivalent value of up to EUR 2.5 billion per issue;
 - 4.3. Use liability management operations (such as early redemptions or buybacks) to reduce refinancing risk, build liquid benchmark government bonds, increase liquidity and support MF efforts to implement the Strategy;
5. *Measures taken into account to increase transparency and predictability* of the government securities market include:
- 5.1. A transparent government securities issuance policy through the publication of the annual government securities issuance calendar, quarterly announcements and monthly prospectuses and, where appropriate, the flexible and timely disclosure of changes due to changing market conditions;
 - 5.2. Continuous dialogue with the participants from the domestic market in order to ensure timely communication of the actions considered by the MF;
 - 5.3. Regular publication on the institution's website in the Public Debt section of information relevant to investors regarding the amount and structure of public debt;
 - 5.4. Manage the Bloomberg page dedicated to MF, taking into account its wide use by domestic and international investors;

**Policy of improvement of liquidity management and
the measures that shall be taken**

In order to optimize the management of liquidities, the MF aims to implement the following measures:

1. Continue to pursue the objective of developing and strengthening the State Treasury's cash flow forecast by forecasting the State Treasury's general current account balance for *three months in advance* and improving cooperation with other entities to provide them with forecast information.
2. Adopt active liquidity management to reduce fluctuations in balances, both by issuing treasury certificates or borrowing short-term, depending on budget execution and the evolution of the budget deficit, and by actively managing current surplus balances, either in the form of term deposits or, preferably, reverse repo transactions.

Thus, depending on the evolution of the budget execution, as well as the demand coming from primary dealers, the intention of the State Treasury is to issue treasury certificates or to contract short-term loans⁴².

The introduction of treasury bills and short-term borrowing will be done in a manner that does not affect the key objective of developing the domestic government securities market in terms of extending the average maturity of the government debt portfolio outlined in the Medium-Term Government Debt Management Strategy. At the same time, the possibility of adopting a more active approach to the placement of liquid assets (if the forecast of the general current account balance of the State Treasury allows it), predominantly in the form of reverse repo⁴³ transactions, will be considered, based on prior consultation with the NBR.

3. In order to strengthen the institutional framework, to ensure better coordination of the process of financing the budget deficit, managing the government's public debt and managing the State's liquidity, monthly meetings of the State Treasury's Financial Flow Planning Commission were held, with the participation of representatives of the MF, ANAF and the NBR⁴⁴, and will continue to be held in the coming period.
4. Due to the gap between budget receipts and payments during a month, the State Treasury will continue to resort to cash management operations, by attracting very short-term deposits from credit institutions, in order to cover temporary cash gaps, depending on the evolution of budget execution.
5. Another short-term deficit financing instrument is represented by loans from the State Treasury's general current account, amounting to MDL 83.6 billion at the end of December 2021, contracted in accordance with the provisions of Government Emergency Ordinance No. 146/2002 on the formation and use of resources channeled through the State Treasury, as

⁴² Under 1 year

⁴³ Reverse transaction has the advantage of fast execution and automatic collateralisation and will contribute to money market activity

⁴⁴ having the capacity of guest

subsequently amended, which provides for the use of funds available from the State Treasury's general current account to finance, through temporary loans, the budget deficits of previous and current years.

Despite the advantage of using this instrument, which allows for low-cost financing of the state budget deficit, as the average interest rate on these loans was below 0.11% in 2021, this instrument has the disadvantage that it depends on the funds available in the account. If the funds available in the General Current Account of the State Treasury are low, other solutions are used, such as attracting deposits at market conditions from credit institutions or selling existing foreign currency holdings in the foreign currency reserve at the disposal of the MF.

Therefore, the use of this debt instrument entails uncertainty and refinancing risk (even if no deadline for loan repayment is set), with a negative impact on government debt management. Thus, MF's intention is to gradually refinance this debt instrument over the long term through the issuance of government securities, but only under the conditions of a reduction in gross borrowing requirements as a result of fiscal consolidation and a reduction of the budget deficit below 3% of GDP in the medium term.

It is important to note that the funds currently available in the General Current Account of the State Treasury also include revenues in lei from privatization activities, and the use of these revenues reduces the funds available in the account.