Ministry of Finance

Debt and Financial Assets Management Department



# THE CZECH REPUBLIC GOVERNMENT DEBT MANAGEMENT ANNUAL REPORT 2022



## **Ministry of Finance**

The Czech Republic Government Debt Management Annual Report for 2022

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28 February 2023

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#### **List of Abbreviations**

APEI bn CaR CCY CSD	Aggregate Performance Evaluation Index Billion Cost-at-Risk Currency Central Securities Depository Prague
CHF CNB	Swiss franc currency code Czech National Bank
CPI	Consumer price index
CZK	Czech koruna currency code
CZSO	Czech Statistical Office
DETS	Designated Electronic Trading System
EA19	Euro area (19 countries)
EA20	Euro area (20 countries including Croatia)
ESA 2010	European System of Accounts 2010
EU	European Union
EUR	Euro currency code
EURIBOR	Euro Interbank Offered Rate
FIX	Fixed-rate
FX	Foreign-exchange
GDP	Gross domestic product
ISIN JPY	International Securities Identification Number
mil	Japanese yen currency code Million
MoF	Ministry of Finance
MTS	Ministry of Finance Mercato Telematico Secondario
OECD	Organization for Economic Co-operation and Development
p.a.	Per annum
p.p.	Percentage point
PRIBOR	Prague Interbank Offered Rate
SEK	Swedish krona currency code
T-Bills	State treasury bills
T-Bonds	Medium-term and long-term government bonds
thous	Thousands
USD	United States dollar currency code
VAR	Variable-rate

Published aggregate data in the tables and in the text may not correspond in the last decimal place to the sum of respective indicators due to rounding in some cases.

## Summary

Ministry of Finance (hereinafter Ministry or MoF) presents to the public, in accordance with the calendar of published information for the first half of 2023 planned within the Czech Republic Funding and Debt Management Strategy for 2023 published on 3 January 2023, the Czech Republic Government Debt Management Annual Report for 2022 (hereinafter the Report), which contains a detailed evaluation of the dynamics and structure of state debt, issuance activity of state and the secondary government bond market, the development of state budget interest expenditure, monitoring of debt portfolio risk management and the annual evaluation of primary dealers of Czech government securities. The Report, which deals primarily with events in 2022, also includes more detailed quantification of the prediction of interest expenditure on state debt service in 2023 through the application of the Cost-at-Risk methodology.

The total financing needs in 2022, or the net borrowing requirement, was significantly affected by the development of the state budget performance, which had a direct impact on the increase in the state debt. Due to increased issuance activity during 2022, state debt increased by CZK 429.1 billion year-on-year from CZK 2,465.7 billion to CZK 2,894.8 billion. In relative terms to GDP, there was an increase from 40.4% to 42.9%, i.e. by 2.5 p.p.

Despite the increased growth of state debt in the previous years and developments of the conflict in Ukraine and the related energy crisis, all major rating agencies with the international scope of activity maintained their high ratings in 2022. In 2022, S&P Global Ratings and JCR confirmed the Czech Republic's current rating, while maintaining a stable outlook at AA for long-term liabilities denominated in local currency and AA- for long-term liabilities denominated in foreign currencies. In 2022, Moody's, Fitch Ratings, R&I and Scope Ratings also confirmed the current ratings, changing the outlook from stable to negative, mainly due to the increased risk of gas supply disruptions from Russia, which could have negative impact on economic growth.

The financing of gross borrowing requirement, which amounted to CZK 712.0 billion in 2022, was carried out mainly through the sale of CZK-denominated medium-term and long-term government bonds on the domestic bond market, which currently represents the primary instrument to cover the financing needs of the Czech Republic and accounts for almost 90% of the total state debt. The gross issue of CZK-denominated medium-term and long-term government bonds on the primary and secondary markets amounted to CZK 431.3

billion, with an average yield to maturity of 4.81% p.a. and an average time to maturity of 7.7 years. The lower average time to maturity of newly issued government bonds also affected the average time to maturity of the total state debt to the level of 6.2 years at the end of 2022 and was thus below the medium-term target, which was increased from 6.0 years to 6.5 years, i.e. by 0.5 years, set in the Czech Republic Funding and Debt Management Strategy for 2022 published on 6 January 2022. In addition, the Ministry also monitors the indicator of the average time to maturity after taking into account cash resources from short-term reserve operations on the money market, respectively taking into the total available state treasury liquidity against the nearest state debt redemptions. There are not set medium-term target values for these adjusted indicators of the average time to maturity. However, by the end of 2022, the levels of these adjusted indicators amounted to 6.5 years, respectively 7.4 years, which confirms the continuation of stable refinancing and liquidity position of the Czech Republic.

The sales of CZK-denominated medium-term and long-term government bonds on the primary market in total nominal value of CZK 378.0 billion were supplemented by operations on the secondary market in the form of tap sales and exchange operations. The aim of these operations, among other things, is to manage refinancing risk, support the liquidity of Czech government bond issues and the efficient functioning of the secondary market. Through the electronic trading platform MTS Czech Republic, the Ministry sold government bonds in total nominal value of CZK 46.3 billion in tap sales from its own asset account and government bonds in the total nominal value of CZK 7.0 billion in exchange operations.

The net issue of CZK-denominated medium-term and long-term government bonds amounted to CZK 277.8 billion, when in 2022 three regular redemptions of CZK-denominated medium-term and long-term government bonds in total nominal value of CZK 145.4 billion have been carried out and government bonds in total nominal value of CZK 8.1 billion have been bought back.

In order to cover the euro financing needs, the Ministry issued the Government EUR-Bond of the Czech Republic, 2022–2024, 0.00% under Czech law in total nominal value of EUR 1.0 billion with an average yield to maturity of 0.91% p.a. in the first half of the year 2022. The main motivation for the issuance of the new EUR-denominated bond was the achieved eligibility of the securities registered in the Central Securities Depository Prague for credit operations with the Eurosystem. Another channel of long-term euro financing was to receive credits and loans from international institutions. Under instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) was drawn loan from the European Commission in a total nominal value of EUR 2.5 billion. During 2022, the Ministry did not conduct any borrowing operations on the foreign markets, but in May it duly redeemed the last issue of euro-denominated government bonds issued on the foreign markets in 2012 in total nominal value of EUR 2.75 billion. In 2022, the euro funding needs were also covered in the short term by money market instruments, namely deposit operations or foreign exchange swaps.

During 2022, the Ministry proceeded to operationally and preventively strengthen available liquidity of the Czech koruna treasury single account through the short-term money market operations in the form of increased sales of state treasury bills. During 2022, state treasury bills in total nominal value of CZK 503.0 billion were sold in thirty-three auctions and state treasury bills in total nominal value of CZK 536.3 billion were redeemed. The net issue of state treasury bills including revolving was CZK -33.0 billion.

In 2022, as part of the project of direct sale government bonds to citizens, two issues of the "Dluhopis Republiky" government bonds were sold in total amount of CZK 41.1 billion, which citizens could subscribe through electronic access to asset account management or at branches of contractual distributors. In the form of reinvestment of the yield, government bonds in a total nominal value of CZK 3.8 billion were issued. In 2022, no regular redemptions of government bonds were made, but only redemptions before the set maturity date based on the exercise of holders' rights in total nominal value of CZK 0.4 billion were made. The net issuance of government bonds for citizens reached total nominal value of CZK 44.5 billion.

Net expenditure on state debt service reached CZK 49.7 billion in 2022, which represents to a year-onyear increase of CZK 7.5 billion. The nominal value of state debt, which has increased significantly in the last three years, and the continued increase in key interest rates of Czech National Bank affecting the level of government bond yields, which have been reflected in higher expenditure on state debt service.

Net revenue from state treasury liquidity management operations amounted to CZK 22.1 billion in 2022, which is CZK 19.7 billion more than in the year 2021, when the increase in money market rates had a positive effect. The sum of state budget revenue from operations within the liquidity management of the state treasury, government bonds lending, and from borrowing operations with a negative yield reached CZK 22.6 billion in 2022. This was the highest amount of this type of state budget revenue in history, which is netted against realised interest expenditure on state debt service.

## 1 – Macroeconomic Framework and Financial Markets

#### **Economic Development**

In 2022, the real GDP growth of the Czech economy is estimated at 2.3%. Economic growth was mainly driven by investment in fixed capital and increased inventory accumulation. Despite a number of fiscal stimulus measures, household final consumption expenditure fell slightly, due to a sharp increase in the cost of living, especially energy prices, as well as the tightening of the monetary policy of the Czech National Bank.

#### Table 1: Main Macroeconomic Indicators of the Czech Republic

	2016	2017	2018	2019	2020	2021	2022F
Real GDP growth (%)	2.5	5.2	3.2	3.0	-5.5	3.6	2.3
Household consumption growth (%) <sup>1</sup>	3.8	4.0	3.5	2.7	-7.2	4.1	-0.7
Government consumption growth (%)	2.5	1.8	3.9	2.5	4.2	1.4	0.8
Growth of gross fixed capital formation (%)	-3.0	4.9	10.0	5.9	-6.0	0.8	5.4
Contribution of foreign trade to GDP growth (p.p.)	1.4	1.2	-1.2	0.0	-0.4	-3.6	0.2
Average inflation rate (%)	0.7	2.5	2.1	2.8	3.2	3.8	15.1 <sup>2</sup>
Unemployment rate (%) <sup>3</sup>	4.0	2.9	2.2	2.0	2.6	2.8	2.4
Nominal wage and salary growth (%)	5.7	9.2	9.6	7.8	0.1	5.9	9.3
Current account balance on GDP (%)	1.8	1.5	0.4	0.3	2.0	-0.8	-5.8
CZK/EUR exchange rate <sup>₄</sup>	27.0	26.3	25.6	25.7	26.4	25.6	24.6 <sup>2</sup>
Real Eurozone GDP growth (%)⁵	1.8	2.8	1.8	1.6	-6.3	5.3	3.3

Incl. non-profit institutions serving households.

<sup>2</sup> Officially published figure, not forecasted. <sup>3</sup> Average unemployment rate based on the method of Labour Force Survey. <sup>4</sup> Average annual exchange rate.

EA19.

Source: MoF, CZSO

High inflation was a major macroeconomic problem for the Czech Republic in 2022. Not only food, fuel, electricity, natural gas and imputed rents, but also other categories of goods and services (especially high import prices of minerals and production inputs) contributed significantly to the exceptionally strong growth in consumer prices. Domestic demand pressures also contributed to inflation, but these were dampened by increased monetary policy rates of the Czech National Bank and the appreciation of the Czech koruna. Thanks to the energy-saving package, annual inflation fell significantly towards the end of the year, but still averaged 15.1% for the whole year, the second highest in the history of the independent Czech Republic. Annual consumer price inflation was thus well above the upper band of the Czech National Bank's inflation target, which is set at one percentage point in either direction around 2%, in the whole of 2022. Inflation last year was mainly influenced by market factors. The main supply-side factors included high prices of energy, food, oil and many materials, which largely resulted from supply frictions and global uncertainty. Firms' costs were increasing, mainly due to import prices of energy and industrial inputs.

On the other hand, the strengthening of the exchange rate of the Czech koruna against the euro started to have an anti-inflationary effect, which was mainly caused by the increase in key interest rates by the Czech National Bank. The strengthening of the koruna against the euro had an anti-inflationary effect, while the weakening of the currency against the dollar created a proinflationary factor through the increase in the price of certain imports, such as oil and electronics. In 2022, the average exchange rate of the Czech koruna against the euro was 24.6 CZK/EUR, which means a year-onyear strengthening of approximately 4.4%. During the year, the development of the exchange rate of the Czech koruna against the euro was stable around the value of 24.6 CZK/EUR. In contrast, the exchange rate of the Czech koruna against the US dollar developed differently. While in the first quarter of 2022 the exchange rate was at the level of 22.0 CZK/USD, in the third quarter the koruna depreciated to 24.4 CZK/USD. For the whole year, the average exchange rate of the Czech koruna against the dollar was 23.4 CZK/USD. The average three-month PRIBOR rate reached 6.3% p.a. in 2022, compared with 1.1% p.a. in 2021.

The decline in economic activity did not have a significant impact on the labor market in 2022. Despite a slightly downward trajectory, the number of job vacancies continued to be noticeably higher than the number of available job seekers. This factor, together with the growing number of employed foreigners, especially newly arrived workers from Ukraine, dampened any potential upward pressure on unemployment. The average unemployment rate in 2022 reached 2.4%.

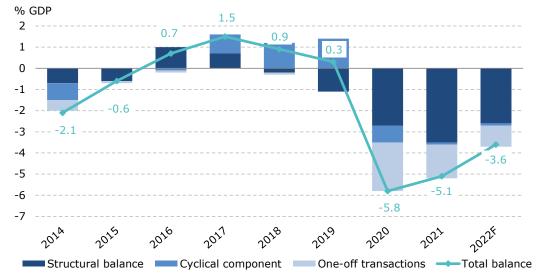
The current account of the balance of payments is preliminarily projected to be in deficit by 5.8% of GDP in 2022. The deterioration of the current account balance was caused by slowing economic growth

abroad, a decline in export orders and rising prices of production inputs and energy. As a proportion of GDP, this would be the highest deficit since 1996, and in absolute terms it would be the biggest deficit in history.

#### **General Government Sector Finances**

The performance of the general government sector in 2022 was mainly influenced by developments in the security and geopolitical situation in Europe. At the same time, public finances were burdened by measures that significantly and permanently reduced the tax burden during the COVID-19 epidemic. Due to the expansionary fiscal policy, the public finances ended with a deficit of 3.6% of GDP in 2022. The deficit was partly the result of the permanent reduction of the tax burden during the COVID-19 epidemic. It also reflects the economic and financial consequences of the conflict in Ukraine and the related humanitarian aid and support to households and firms burdened by huge price increases. The expected value of the structural balance of the general government sector last year was 2.6% of GDP. The impact of one-off operations, which were mainly linked to high energy prices last year, was 1.0% of GDP. The deficit performance of the general government sector was reflected in the level of debt, which is currently estimated to increase by 2.6 percentage points to 44.6% of GDP in 2022.





Note: The source of data is Macroeconomic Forecast of the Czech Republic – January 2023. Source: MoF

In 2022, the state budget in the national cash methodology resulted in a deficit of CZK 360.4 billion. The state budget deficit decreased by CZK 59.3 billion year-on-year and was lower by CZK 14.6 billion compared to the planned amount. The state budget performance in 2022 was significantly affected by the government supportive or stimulating measures in connection with the rise in inflation due to frictions in international trade and price developments in the energy sector. These included expenditure on extraordinary pension indexation, the electricity and gas tariff for households, the supplementary payment of the renewable energy allowance for households and firms, increased housing and material need allowances, and one-off child allowances and humanitarian aid.

Total revenue of the state budget in 2022 amounted to CZK 1,624.4 billion, which represented a year-on-year increase of CZK 137.2 billion, i.e. 9.2% more than in the previous year. The main contributors to this result

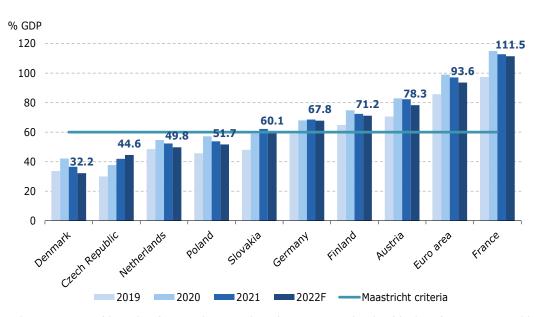
were social security contributions and tax revenue, which increased by CZK 131.7 billion, i.e. by 10.2% year-on-year. Dividend income increased by CZK 14 billion. On the other hand, last year's extraordinary revenue of CZK 5.6 billion from the auctions for rights to use radio frequencies distorted the year-on-year comparison. By contrast, revenue from the European Union and financial mechanisms fell by CZK 8.3 billion.

The total expenditure of the state budget in 2022 was CZK 1,984.8 billion, which was a year-on-year increase of CZK 77.9 billion, i.e. 4.1% more than in the previous year. The growth rate of total expenditure was mainly determined by the development of current expenditure, which increased by CZK 68.2 billion, i.e. by 3.9%. Capital expenditure increased by almost CZK 10 billion, i.e. by 5.5%. Social benefits had the largest impact on the year-on-year increase in current expenditure, with pensions being the largest component by volume, increased by 5.2% by the January indexation, 6.3%

by the extraordinary June indexation and 4.0% by the September indexation.

According to the October notification, the general government consolidated gross debt in relation to GDP increased by 4.3 percentage points to 42.0% of GDP in 2021. In 2022, the debt ratio increased

by 2.6 percentage points to 44.6% of GDP. In terms of meeting the Maastricht convergence criteria and the Stability and Growth Pact rules for debt, the indicator is thus below the 60% of GDP threshold, as well as below the national debt rule 55% of GDP threshold, which entered into force in February 2017 (Act No. 23/2017 Coll., on Budgetary Responsibility Rules).

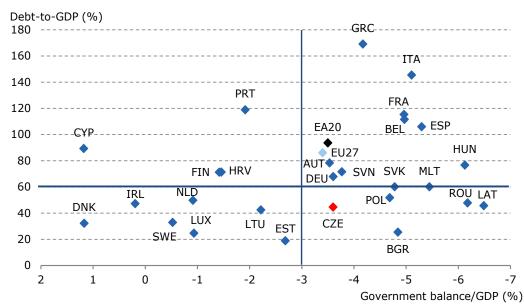


#### Figure 2: Government Sector Debt in Selected European Union Countries

Note: The Maastricht criterion is a part of the condition for EU members to join the single currency union. The value of the share of government sector debt to GDP should not exceed 60%. Eurozone is stated in conception comprising 20 countries (including Croatia). Data sources are Fiscal Outlook of the Czech Republic – November 2022, European Economic Forecast – Autumn 2022 and Macroeconomic Forecast of the Czech Republic - January 2023. Source: MoF, Eurostat, European Commission

In the case of general government debt, the Czech Republic has the seventh lowest relative debt in the EU in 2022. Lower indebtedness can be seen in Estonia, Bulgaria, Luxembourg, Sweden, Denmark and Lithuania. Despite the expected increase in general government debt in 2022, the Czech Republic remains one of the least indebted countries in the European Union.

#### Figure 3: Government Sector Deficit and Debt in European Union Countries in 2022



Note: Eurozone is stated in conception comprising 20 countries (including Croatia). Data sources are Fiscal Outlook of the Czech Republic – November 2022, European Economic Forecast – Autumn 2022 and Macroeconomic Forecast of the Czech Republic - January 2023. Source: MoF, European Commission

#### **Financial Markets**

The development of Czech government bond yields in 2022 reflected the situation on the global government bond market and the Czech National Bank's monetary policy decisions. In 2022, the Czech National Bank continued the cycle of interest rate increases it had started, with the 2W repo rate increasing by 0.75 percentage points to 4.50% p.a. in February and by 0.50 percentage points to 5.00% p.a. in April. In May, the 2W repo rate was increased by 0.75 percentage points to 5.75%. At the June monetary policy meeting, the 2W repo rate was raised by 1.25 percentage points to 7.00%. The rates remained the same in the second half of 2022. The key interest rate thus reached the highest since 1999, which means that the fundamental divergence of domestic monetary policy is continuing, especially compared to the euro area. The reason for the increase in rates is high inflation and the related efforts by the central bank to dampen inflation expectations.

The significant growth of key interest rates by the Czech National Bank during 2022 had a negative impact on government bond prices. As a result, the Czech government bond yield curve continued to have an inverted shape. Czech government bonds followed developments in the world, i.e. their yields rose. However, the long end of the curve rose significantly more on the Czech bond market. The reason was the expectation that the new personal composition of the Bank Board would not raise rates further. The short end stagnated due to the stabilisation of expectations regarding the further development of interest rates. As a result, the inversion of the yield curve was diminishing.

At the beginning of 2022, the yield on 3-year, 5-year and 10-year government bond was 3.7% p.a., 3.4% p.a. and 3.0% p.a. In the first half of the year, the yields on these bonds rose due continued increases in the 2W repo rate by the Czech National Bank and uncertainties arising from the current developments in Ukraine and their impact on the domestic economy, given the Czech Republic's high dependence on Russian energy resources, especially natural gas. However, from a long-term perspective, the nominal yields of government bonds are still negative in real terms due to the development of inflation.

The situation on the Czech government bond market was strongly influenced by the reaction to developments in the Czech National Bank's monetary policy and to personal changes in the Bank Board of the Czech National Bank. In the second half of 2022, there were no changes to key interest rates. Government bond yields at the shorter end of the yield curve reacted more sensitively to this development in the third quarter of 2022. The stabilization of expectations regarding the further development of interest rates gradually led to a reduction in the yield curve inversion, with the yields on 3-year, 5-year and 10-year government bonds at the end of the year amounting to 5.5% p.a., 5.3% p.a. and 5.1% p.a. Demand in government bond auctions remained strong in 2022. The continued interest in government bonds from domestic and foreign investors is underlined by the ratio of accepted orders to total orders for medium-term and long-term government bonds in primary auctions, the bid-to-cover ratio, at an average of 1.9.

#### Figure 4: Development of Czech Government Bonds Yields and CNB 2W Repo Rate



Source: CNB, Refinitiv

Domestic factors in particular had an impact on the development of the term premium. It reached negative values throughout 2022, when government bond yields at the shorter end of the yield curve had higher values than at its longer end, while the government bond yield curve had an inverted shape. The volatility of the term premium in 2022 was mainly influenced by development of key interest rates by the Czech National Bank, the situation in Ukraine and the related energy crisis, and the medium-term and long-term outlook for the Czech economy.

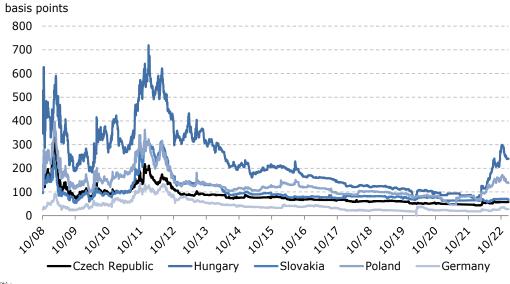


Figure 5: Development of Czech Government Bonds Yields and Term Premium

Source: Refinitiv

Czech 10-year bond yields in 2022 reacted mainly to domestic factors in the form of a continuing cycle of key rate increases by the Czech National Bank and the impact of the conflict in Ukraine on the Czech economy and the related energy crisis. In 2022, the Czech Republic's risk premium was the lowest among countries of the the Visegrad Group. While the Czech Republic's credit default swap premium was 54 basis points, the premiums for Slovakia, Poland and Hungary were 67, 124 and 182 basis points respectively. The government's fiscal policy and conservative approach to state debt management remain an important long-term factor in the dynamics of government bond yields, with a positive impact on investor confidence. The Czech Republic continues to maintain an excellent reputation in the financial markets, which is reflected in the high demand for medium-term and long-term government bonds at auctions. The wide range of debt instruments in each segment of the risk-free yield curve creates a sufficient range for investors to diversify their debt portfolio.

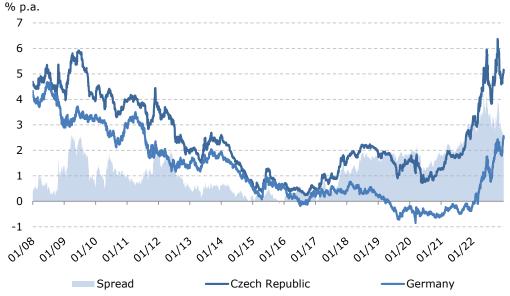
#### Figure 6: Premiums on Credit Default Swaps in Selected Countries (10-year)



Source: Refinitiv

The gradual convergence of the 10-year Czech government bond yields and German "bunds", which has begun in 2012 and peaked in January 2017 when the Czech government bond yield fell below the German "bund" for a short period of time, was replaced by a widening of their spread. In 2022, the spread between the 10-year Czech government bond and the German "Bund" averaged 3.2 percentage points, while in December the spread narrowed to 2.7 percentage points. The Czech National Bank continued its restrictive monetary policy phase in 2022 through a sharp increase in key interest rates, which peaked at the end of the first half of the year when the key rate was raised to 7%. In contrast, the European Central Bank only started raising interest rates in the second half of the year. The European Central Bank first raised the interest rate for its main refinancing operations in July, from 0.00% to 0.50%. In September, the European Central Bank increase the main interest rate by 0.75 percentage points to 1.25%. In November, the main rate was increased again by 0.75 percentage points to 2.00%. In December, the European Central Bank increased the rate by 0.50 percentage points to 2.50%. Although the yields on the German 10-year bond were in positive values for most of 2022, there is still a wider interest rate differential on the bond markets than in previous years, compared to the yield on the 10-year Czech government bond, which rose more dynamically.

#### Figure 7: Comparison of Yields of the Czech and German 10-year Government Bonds



Source: Refinitiv, CNB

The global economy was significantly affected in 2022 by the start of the military conflict in Ukraine and the subsequent energy crisis, which hit European businesses and households hard. In the Chinese economy, prolonged closures of major economic centres continued due to the application of strict anti-epidemic restrictions, which had a negative impact on global demand and supply. Inflation rates in a number of countries were at their highest since the 1980s in 2022, and main central banks, led by the Fed and the European Central Bank, began to dynamically tighten monetary policy settings by raising key interest rates. Czech government bonds continued to provide an investment alternative compared to interbank interest rates in foreign markets. While the share of non-residents in government bonds continued to exceed one quarter, the absolute amount of holdings increased by around CZK 21.3 billion. In the context of a slight appreciation of the Czech koruna, high credit ratings and a persistent interest rate differential, foreign investors have no incentive to close positions quickly. On the contrary, they have maintained their positions even after the redemptions of the government bonds they hold, which should continue to have a positive impact on the demand for Czech government bonds.

### **Czech Republic's Sovereign Credit Rating**

The Czech Republic has the highest overall credit rating of all Central and Eastern European countries and has been above the average rating of euro area member countries for several years. The Czech Republic belongs among the exceptionally reliable issuers and enjoys considerable interest from domestic and foreign investors, as confirmed by its high credit rating with a stable outlook from all the major international credit rating agencies. In 2022, S&P Global Ratings and JCR confirmed the Czech Republic's current rating, while maintaining a stable outlook at AA for long-term liabilities denominated in domestic currency and AA- for longterm liabilities denominated in foreign currencies. In 2022, Moody's, Fitch Ratings, R&I and Scope Ratings also confirmed the current ratings, changing the outlook from stable to negative, mainly due to the increased risk of gas supply disruptions from Russia, which could have negative implications for economic growth.

Rating Agency	Local currency long-term liabilities	Outlook	Foreign currency long-term liabilities	Outlook	Affirmed
Moody's	Aa3	Negative	Aa3	Negative	5/8/2022
S&P Global Ratings	AA	Stable	AA-	Stable	14/10/2022
Fitch Ratings	AA-	Negative	AA-	Negative	21/10/2022
JCR	AA	Stable	AA-	Stable	14/4/2022
R&I	AA-	Negative	AA-	Negative	19/12/2022
Scope Ratings	AA	Negative	AA	Negative	8/7/2022
ACRA	AA	Stable	AA	Stable	27/1/2023

#### Table 2: Czech Republic's Credit Rating

Source: Moody's, S&P Global Rating, Fitch Ratings, JCR, R&I, Scope Ratings, ACRA

## 2 - Borrowing Requirement and Development of State Debt

The borrowing requirement represents a key quantity in the system of public finances of a national economy, which determines the amount of financial resources that the government needed to obtain over the course of the respective calendar year through borrowing operations primarily on financial markets, in order to ensure that the planned annual financing needs are covered as a necessary condition for a smooth realization of expenditure of the state budget and government economic policy.

In addition to these borrowing operations which are the main determinant of the changes in the value of the state debt, the financing needs may also be covered by the operations with state financial assets or by the management of other state assets in extrabudgetary balance sheet operations, or through the involvement of available state treasury cash resources through refinancing mechanisms.

#### **Financing Needs and Sources**

The financing needs are determined by the standard components that must be covered by cash resources in a given year, i.e. the state budget cash deficit and regular redemptions, redemptions before the maturity date, buy-backs and exchanges of nominal values of state debt, including the related derivatives. Financing operations on the side of state financial assets and within the treasury single accounts then take place on the side of cash resources that can be involved into the covering of the financing needs simultaneously with the state's realized borrowing operations on the financial markets and through borrowings and loans, in particular from international institutions.

#### **Table 3: Financing Needs and Sources**

CZK bn	2016	2017	2018	2019	2020	2021	2022
						-	
Primary balance of state budget	-102.4	-33.6	-43.7	-11.0	327.3	377.5	310.7
Net expenditure on state debt <sup>1</sup>	40.7	39.8	40.7	39.6	40.1	42.2	49.7
T-Bonds redemptions <sup>2</sup>	157.8	209.4	238.9	238.5	215.8	238.8	221.4
Redemptions and early redemptions on savings government bonds	30.2	16.9	16.4	2.7	2.8	0.5	0.4
T-Bills and other money market instruments redemptions $\!\!^3$	86.6	4.2	44.0	43.5	18.4	25.4	49.0
Repayments on credits and loans <sup>4</sup>	1.7	5.1	8.0	4.7	5.8	6.0	4.4
Total financing needs	214.5	241.7	304.4	317.9	610.2	690.4	635.6
Gross T-Bills issue and other money market instruments $^{\scriptscriptstyle 3,5}$	4.2	44.0	43.7	18.0	25.4	49.6	150.5
Received collateral in cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross issue of T-Bonds on domestic market <sup>₅</sup>	211.6	213.1	259.2	280.9	600.3	577.8	455.9
Gross issue of T-Bonds on foreign markets <sup>5</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross issue of savings government bonds <sup>6</sup>	1.0	0.6	0.1	10.5	15.3	13.8	45.0
Received credits and loans <sup>4</sup>	0.0	0.0	0.0	0.0	5.3	54.9	60.7
Financial asset and liquidity management	-2.3	-16.1	1.3	8.5	-36.1	-5.6	-76.5
Total financing sources	214.5	241.7	304.4	317.9	610.2	690.4	635.6
Gross borrowing requirement	216.9	257.7	303.1	309.4	646.3	696.0	712.0

Balance of the budgetary chapter 396 - State Debt.

<sup>2</sup> Incl. effect of buy-backs and exchange operations.
<sup>3</sup> Excl. T-Bills issued and redeemed within respective year, and roll-over of other money market instruments.
<sup>4</sup> Credits and loans received from international financial institutions and European Commission.

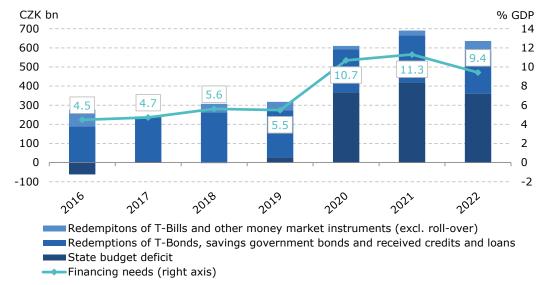
<sup>5</sup> Nominal value; premiums and discounts included in the net expenditure on state debt, i.e. they are included in the net borrowing requirement. <sup>6</sup> Incl. the reinvestment of yields. Source: MoF

The financing needs in 2022 reached the level of CZK 635.6 billion and its amount was very significantly affected by the state budget deficit of CZK 360.4 billion. The total financing need is adjusted in accordance with the recommended

OECD international methodology for roll-over operations with treasury bills and for refinancing operations with other money market instruments, which take place within a calendar year and do not affect the net year-on-year change of these

components relative to the end of individual years. Thus, only the stocks of these short-term instruments at the end of the previous year enter into the total annual financing needs in a given year.

The following figure shows the components of financing needs, including the state treasury bills and other money market instruments outstanding at the end of the previous period, which also need to be refinanced in the current year, and the share of financing needs and gross borrowing requirement in GDP.



#### **Figure 8: Financing Needs**

Note: GDP in the ESA 2010 methodology. The source of data for 2016 to 2021 is CZSO, for 2022 the Macroeconomic Forecast of the Czech Republic - January 2023. T-Bonds redemptions including effect of buy-backs and exchange operations. Credits and loans received from international financial institutions and European Commission. Source: MoF, CZSO

#### Financing of the Gross Borrowing Requirement

The gross borrowing requirement determines that part of the sources covering financing needs, which are ensured by the borrowing operations of the state, i.e. determines the total amount of financial resources the government must obtain mainly through the issuance and sale of government bonds and the through received loans and credits. The resulting gross borrowing requirement may be lower than the annual financing needs if financial assets or liquidity management operations are actively involved as a source of funding and, conversely, may be higher if financial assets are accumulated through government borrowing operations.

#### **Table 4: Financing of the Gross Borrowing Requirement**

CZK bn	2016	2017	2018	2019	2020	2021	2022
Gross borrowing requirement	216.9	257.7	303.1	309.4	646.3	696.0	712.0
Gross T-Bills issue and other money market instruments <sup>1,2</sup>	4.2	44.0	43.7	18.0	25.4	49.6	150.5
Received collateral in cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross issue of T-Bonds on domestic market <sup>2</sup>	211.6	213.1	259.2	280.9	600.3	577.8	455.9
Gross issue of T-Bonds on domestic market up to 5 years $^{\!\!2,3}$	119.6	84.2	45.0	48.1	268.2	113.6	168.5
Gross issue of T-Bonds on domestic market from 5 to 10 years $^{\!\!2,\!\!3}$	48.4	70.9	94.9	71.7	178.9	239.8	185.5
Gross issue of T-Bonds on domestic market over 10 years $^{\scriptscriptstyle\!2,3}$	43.7	58.0	119.3	161.1	153.1	224.4	101.8
Gross issue of T-Bonds on foreign markets <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross issue of savings government bonds <sup>4</sup>	1.0	0.6	0.1	10.5	15.3	13.8	45.0
Received credits and loans <sup>5</sup>	0.0	0.0	0.0	0.0	5.3	54.9	60.7
Total financing of gross borrowing requirement	216.9	257.7	303.1	309.4	646.3	696.0	712.0

<sup>1</sup> Excl. T-Bills issued and redeemed within respective year, and roll-over of other money market instruments

<sup>2</sup> Nominal value; premiums and discounts are included in net expenditure on state debt service, i.e. they are included in the net borrowing requirement. <sup>3</sup> Remaining time to maturity at the transaction settlement date.

Incl. reinvestment of vields

Source: MoF

#### Net Borrowing Requirement, Change and Structure of State Debt

The net borrowing requirement is the major factor in the change in the nominal value of state debt and is determined by the difference between gross borrowing requirement and the total redemptions of state debt, including related derivatives. In the case of zero net change in state financial assets, the net borrowing requirement corresponds to the sum of state budget deficit and any potential extra-budgetary financing needs. The net borrowing requirement thus shows the amount of financial resources the government will have to borrow in addition to the already borrowed financial resources in previous years due in the current year.

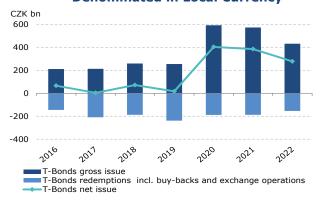
#### **Table 5: Net Borrowing Requirement**

CZK bn	2016	2017	2018	2019	2020	2021	2022
Gross borrowing requirement	216.9	257.7	303.1	309.4	646.3	696.0	712.0
T-Bonds redemptions <sup>1</sup>	157.8	209.4	238.9	238.5	215.8	238.8	221.4
Redemptions and early redemptions on savings government bonds	30.2	16.9	16.4	2.7	2.8	0.5	0.4
T-Bills and other money market instrument redemptions <sup>2</sup>	86.6	4.2	44.0	43.5	18.4	25.4	49.0
Repayments on credits and loans <sup>3</sup>	1.7	5.1	8.0	4.7	5.8	6.0	4.4
Net borrowing requirement	-59.4	22.2	-4.2	20.0	403.5	425.3	436.9

<sup>1</sup> Incl. effect of buy-backs and exchange operations.
 <sup>2</sup> Excl. T-Bills issued and redeemed within respective year, and roll-over of other money market instruments.
 <sup>3</sup> Credits and loans received from international financial institutions and European Commission.

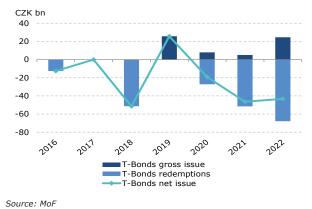
Source: MoF

#### Figure 9: Net Issue of Government Bonds **Denominated in Local Currency**



Source: MoF

#### Figure 10: Net Issue of Government Bonds **Denominated in Foreign Currency**

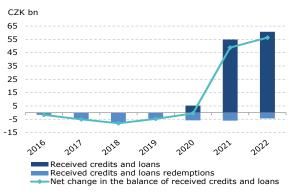






Source: MoF

#### **Balance** Figure 12: Net Change in the of Received Credits and Loans



Note: Credits and loans received from international financial institutions and European Commission. Source: MoF

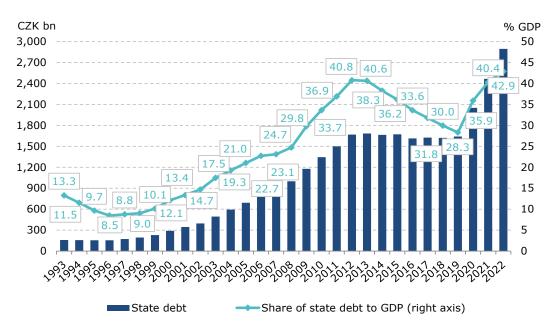
#### **Table 6: Net Borrowing Requirement and Change in State Debt**

CZK bn	2016	2017	2018	2019	2020	2021	2022
Gross state debt as at 1 January	1,673.0	1,613.4	1,624.7	1,622.0	1,640.2	2,049.7	2,465.8
Primary state budget balance	-102.4	-33.6	-43.7	-11.0	327.3	377.5	310.7
Net expenditure on state debt service <sup>1</sup>	40.7	39.8	40.7	39.6	40.1	42.2	49.7
Financial asset and liquidity management operations	2.3	16.1	-1.3	-8.5	36.1	5.6	76.5
Net borrowing requirement	-59.4	22.2	-4.2	20.0	403.5	425.3	436.9
T-Bills net issue and net change in the balance of other money market instruments	-82.4	39.8	-0.3	-25.5	7.1	24.2	101.5
T-Bonds net issue on domestic market	66.4	3.8	71.7	42.4	411.7	389.5	302.4
T-Bonds net issue on foreign markets	-12.6	0.0	-51.4	0.0	-27.2	-50.5	-67.8
Savings government bonds net issue	-29.2	-16.3	-16.3	7.8	12.6	13.3	44.5
Net change in balance of received credits and $loans^2$	-1.7	-5.1	-8.0	-4.7	-0.6	48.8	56.3
Financing of net borrowing requirement	-59.4	22.2	-4.2	20.0	403.5	425.3	436.9
Revaluation of state debt <sup>3</sup>	-0.2	-10.9	1.5	-1.8	6.0	-9.3	-7.8
Promissory notes and unpaid principals of government securities net change	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Gross state debt change	-59.6	11.3	-2.7	18.2	409.5	416.0	429.1
Gross state debt as at 31 December	1,613.4	1,624.7	1,622.0	1,640.2	2,049.7	2,465.7	2,894.8
Share of GDP (%) <sup>4</sup>	33.6	31.8	30.0	28.3	35.9	40.4	42.9

<sup>1</sup> Balance of budgetary chapter 396 – State debt.

balance of purgetary chapter 390 - State dept.
 2 Credits and loans received from international financial institutions and European Commission.
 3 Incl. the revaluation of foreign currency denominated debt due to exchange rate differences and the consolidation of state debt from bonds that were initially recorded on the asset account maintained by the Ministry in the relevant records for as long as they are registered in the account as well own bonds acquired by the state as their issuer prior to their maturity date, and financial resources received or repaid under the lending facilities provided from the nuclear portfolio.
 <sup>4</sup> GDP in the ESA 2010 methodology. The source of data for 2016 to 2021 is CZSO, for 2022 the Macroeconomic Forecast of the Czech Republic – January 2023. Source: MoF, CZSO

#### Figure 13: Czech Republic's State Debt Development



Note: GDP in the ESA 2010 methodology. The source of data for 1993 to 2021 is CZSO, for 2022 the Macroeconomic Forecast of the Czech Republic – January 2023. Source: MoF, CZSO

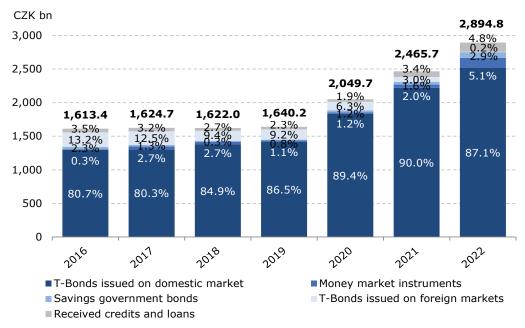
#### **Table 7: Balance and Structure of the Debt Portfolio**

CZK bn	2016	2017	2018	2019	2020	2021	2022
Gross state debt	1,613.4	1,624.7	1,622.0	1,640.2	2,049.7	2,465.7	2,894.8
T-Bills and other money market instruments	4.2	44.0	43.6	18.0	25.4	49.2	147.1
Received collateral in cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T-Bonds issued on domestic market	1,301.6	1,305.4	1,377.1	1,419.2	1,831.6	2,219.8	2,521.3
T-Bonds issued on foreign markets	213.5	202.6	152.9	151.5	129.2	74.1	5.1
Savings government bonds	37.8	21.5	5.2	13.0	25.6	38.9	83.4
Received credits and loans <sup>1</sup>	56.3	51.2	43.2	38.5	38.0	83.7	137.8
Promissory notes and unpaid principals of government securities	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Liquid state financial assets	62.2	60.5	61.9	83.6	81.7	63.1	47.7
Nuclear portfolio	25.6	27.2	28.7	30.5	32.1	33.6	36.7
Pension portfolio	23.0	23.1	23.2	41.9	38.5	18.6	0.3
Special-purpose state financial assets accounts	10.7	10.1	9.8	11.1	11.1	10.9	10.7
On-lending over 1 year <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash reserve <sup>3</sup>	2.9	0.2	0.2	0.0	0.0	0.0	0.0
State financial assets	62.2	60.5	61.9	83.6	81.7	63.1	71.8
Liquid state financial assets	62.2	60.5	61.9	83.6	81.7	63.1	47.7
On-lending <sup>4</sup>	0.0	0.0	0.0	0.0	0.0	0.0	24.1
Net debt portfolio	1,551.2	1,564.2	1,560.1	1,556.6	1,968.1	2,402.6	2,823.0

<sup>1</sup> Credits and loans received from international financial institutions and European Commission.
 <sup>2</sup> Extra-budgetary loans with original maturity of over 1 year and the estimated remaining time to maturity shorter than 12 months granted to other countries and domestic legal entities.
 <sup>3</sup> Available cash resources created according to Section 35(4) of Act No. 218/2000 Coll. incl. the impact of exchange rate difference of the CZK value of the part of the oracle receiver in foreign currenzing.

of the cash reserve in foreign currencies. <sup>4</sup> Extra-budgetary loans with original maturity of over 1 year and the estimated remaining time to maturity longer than 12 months granted to other countries

and domestic legal entities. Source: MoF



#### Figure 14: Structure of the Debt Portfolio by Instrument

Note: Credits and loans received from international financial institutions and European Commission. Source: MoF

#### State Treasury Liquidity Management

In the context of rising koruna and euro interest rates, the Ministry continued to rationalize the free liquidity of the state treasury in accordance with state-of-the art government finance management principles.

The Ministry, in cooperation with the Czech National Bank, continued the project of term deposits in the domestic currency and in euro. Term deposits are intended for clients of the state treasury in accordance with Section 33(11) of Act No. 218/2000 Coll., on Budget Rules and on Amendments to

Certain Related Acts (Budgetary Rules), who are allowed to keep funds in an account subordinated to the state treasury in an agreed amount and for a predetermined period of time, for which they will receive an interest-replacing cash payment from the Ministry. This instrument supports the stabilization of the state treasury funds, which can thus be used for the purpose of state debt and available state treasury liquidity management over a period of more than one year, or in the case of euro for the purpose of state debt and available state treasury liquidity management in euro for up to one year.

#### Table 8: State and Structure of Resources and Investment Position of the State Treasury

CZK bn, EUR bn	2020		2021		20	22
	CZK	EUR	CZK	EUR	CZK	EUR
Liquid state financial assets	81.7	0.0	63.1	0.0	47.7	0.0
Mandatory clients of state treasury <sup>1</sup>	239.7	0.2	291.4	0.4	331.9	0.6
Optional clients of state treasury	126.8	0.0	168.8	0.0	191.0	0.0
Liabilities to the state treasury (-)	-63.2	-0.2	-33.7	-0.4	-93.8	2.8
Total liquidity position of the state treasury <sup>2</sup>	385.0	0.0	489.6	0.0	476.9	3.3
Reverse repo operations (T-Bills collateral)	0.0	0.0	0.0	0.0	0.0	0.0
Reverse repo operations (T-Bonds collateral)	0.0	0.0	0.0	0.0	0.0	0.3
Reverse repo operations (CNB bills collateral)	0.0	0.0	0.0	0.0	35.0	1.1
Reverse repo operations (foreign securities collateral)	0.0	0.0	0.0	0.0	0.0	0.0
Provided deposits and short-term borrowings and loans	12.0	0.0	6.0	0.0	15.0	0.0
On-lending <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	0.0
Investment in securities	2.6	0.0	2.6	0.0	2.6	0.0
Provided collateral in cash	0.0	0.0	0.0	0.0	0.0	0.0
Cash resources in treasury single account	370.4	0.0	481.0	0.0	424.2	1.9
Ministry's cash resources in commercial banks accounts <sup>4</sup>	0.0	0.0	0.0	0.0	0.0	0.0
Total investment position of the state treasury	385.0	0.0	489.6	0.0	476.9	3.3

<sup>1</sup> Excl. quasi-clients of the state treasury (state debt and state financial assets).
<sup>2</sup> Available liquidity of the state treasury incl. investments outside state treasury liquidity management accounts.

<sup>a</sup> Incl. cash resources in transit.

Source: MoF

In 2022, the Ministry's income from state treasury liquidity management and negative yield operations amounted to CZK 22,611.0 million. The year-on-year increase was mainly due to an increase in key interest rates by the Czech National Bank in the first half of the year and a rise in euro interest rates in the second half of the year. The 2W repo rate of the Czech National Bank increased from the original 3.75% p.a. to 7.00% p.a., while the deposit rate of the European Central Bank increased from -0.50% p.a. to 2.00% p.a. during the year. This was reflected in the increase in income from investment operations in the framework of the liquidity management of the Czech koruna and the euro state treasury.

As part of the koruna state treasury liquidity management and investment operations for the nuclear portfolio financial assets management, shortterm investments using Czech National Bank bills or government bonds as collateral were made in 2022, in total nominal value of CZK 13,984.3 billion. The average interest rate achieved when investing with the use of this collateral increased compared to the previous year, rising to 5.7% p.a.

Loans granted in accordance with Article 35(5) of the Budgetary Rules were in the total amount of EUR 15,080.8 million. The total income from these loans amounted to CZK 5.2 million. The interest-replacing cash payments amounted to CZK 149.0 million. At the same time, interest on current bank account balances generated an income of CZK 1.7 million.

A total of CZK 22,054.3 million was transferred to the state budget in 2022 from the proceeds of the koruna state treasury liquidity management.

As part of the euro state treasury liquidity management, short-term investments were made in 2022 using collateral of Czech National Bank bills or government bonds with total nominal value of EUR 11,155 million. These operations achieved an average interest rate of 1.1% p.a.

The Ministry continued to carry out short-term borrowing operations in euro during the year. Interest on borrowing operations carried out at positive rates amounted to CZK 41.1 million. In addition, in accordance with Article 35(5) of the Budgetary Rules the Ministry provided loans to producers operating on the energy market in accordance with Czech Government Resolution No. 586 of 29 June 2022. The total income from this loan amounted to CZK 784.6 million. A total of CZK 855.1 million was transferred to the state budget in 2022 from the proceeds of the euro state treasury liquidity management.

The total income from the borrowing operations in foreign currency with a negative yield amounted to CZK 58.5 million.

The Ministry achieves further savings of the state budget by conducting operations on the foreign exchange market, which are intended for mediation of foreign currency payments from and to the state budget (e.g. the chapter of the Ministry of Transport, the Ministry of Defense, the Ministry of Education, Youth and Sports, the Ministry of Environment, the Ministry of Foreign Affairs and the General Treasury Management) and also mediation of foreign currency revenue to the state budget for the General Financial Directorate. The Ministry is able to achieve a more advantageous exchange rate than that offered by the Czech National Bank, which would mediate the operation on the basis of its current exchange rate ticket. In 2022, the Ministry thus saved CZK 121.4 million when trades worth CZK 28.5 billion were settled.

#### Table 9: Net Revenue from Operations within State Treasury Liquidity Management and Operations with Negative Yields

CZK mil	2020	2021	2022	2021/2020	2022/2021
CZK operations	1,775.8	2,381.9	22,054.3	1.3	9.3
EUR operations	0.2	0.0	855.1	0.0	83,529.3
Lending facilities	4.9	10.9	3.3	2.2	0.3
FX swaps	32.0	75.1	-360.1	2.3	-4.8
Issuance with negative yield <sup>1</sup>	8.4	54.3	0.0	6.5	0.0
Borrowing operations in foreign currency with a negative yield	86.3	653.0	58.5	7.6	0.1
Total	1,907.7	3,175.3	22,611.0	1.7	7.1

<sup>1</sup> Adjusted for future expenditure on coupon payments related to the bonds until their maturity, unless they were zero-coupon bonds. Source: MoF

## 3 - Funding Program and Issuance Activity

The funding program for the given year defines the scope for the execution of borrowing operations and quantifies the value of cash resources acquired from borrowing operations on the financial markets or from the international financial institutions. The structure of funding program consists of debt sources, which are used for financing of the gross borrowing requirement, i.e. the issuance and sale of government bonds on domestic and foreign markets and receiving of loans and credits from international financial institutions.

Regular quarterly evaluation of the actual debt portfolio structure in relation to the declared strategic

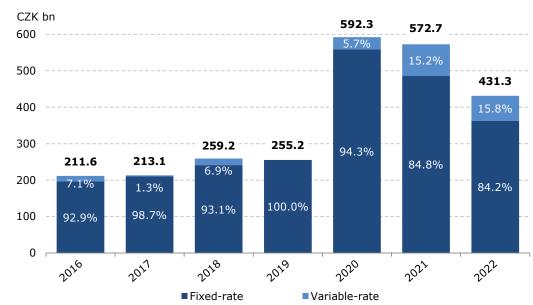
targets and limits that constitute the key parameters of the publicly defined strategic benchmark portfolio communicated in particular through the Czech Republic Funding and Debt Management Strategy and its possible revisions, and the quarterly update of gross borrowing requirement and funding program contained in the Debt Portfolio Management Quarterly Reports are the Ministry's main tools to support the credibility and transparency of the entire process of state debt and the related state financial assets management and the execution of borrowing operations on financial markets in accordance with best international practice and recommended standards.

#### **CZK-denominated Medium-Term and Long-Term Government Bonds**

For 2022, The Czech Republic Funding and Debt Management Strategy for 2022 set out an issuance plan for medium-term and long-term government bonds denominated in the local currency in the amount of at least CZK 350 to 400 billion to cover the koruna financing needs. In connection with the approval of Act No. 57/2022 Coll., State Budget of the Czech Republic for 2022, which came into effect on 19 March 2022, the Ministry published an update of the Czech Republic Funding and Debt Management Strategy for 2022 on 1 April 2022, where the issuance plan was confirmed. The adjustment to the issuance financing plan was made in the Czech Republic Funding and Debt Management Strategy for 2022 - Second Half Update, where the amount of the issuance plan was increased to CZK 450 billion due to the approval of the draft law amending Act No. 57/2022 Coll., on the state budget of the Czech Republic for the year 2022, based

on Resolution No. 637 of the Government of the Czech Republic on 27 July 2022.

Actual gross issuance on the primary and secondary markets amounted to CZK 431.3 billion. The Ministry thus complied with the framework issuance plan and successfully covered the needs for financing with increased issuance activities. Despite the high issuance activity, the associated growth of government debt and uncertainty in the financial markets during the year, the Ministry did not have to revise or shortterm modify and loosen the strategic goals and limits applicable for the medium-term horizon. In 2022, a total of 72 primary auctions were held in 25 auction days, which were further supplemented by secondary market operations. Up to three different fixed-rate or variable-rate government bonds were offered per auction day.



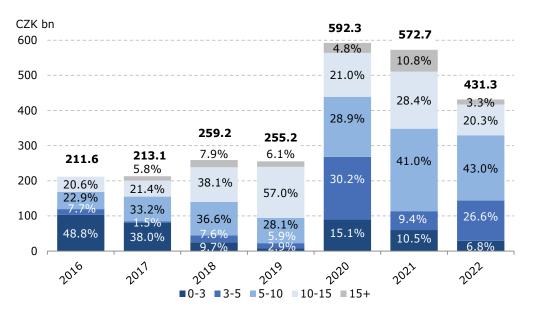
#### Figure 15: Interest Structure of Sold CZK-denominated Government Bonds

Source: MoF

In 2022, the Ministry reopened fixed-rate and variable-rate issues, especially in the segments with a residual time to maturity of 5 to 15 years, where the Ministry sold more than 63% of the total nominal value. The shape of the yield curve also contributed to the issuance of government bonds with interest rates mainly at the middle and longer end of the yield curve, when the Czech National Bank continued the cycle of interest rate increases that began in the second half of 2021. In particular, the shorter end of the yield curve initially responded to this development, while yields on government bonds with longer maturities increased

at a slower pace. The result is still an inverted shape of the yield curve, where government bonds with shorter maturities carry a higher interest yield than government bonds with longer maturities. In the segment with a residual time to maturity of up to 5 years, government bonds in a total nominal value of CZK 143.9 billion were sold, in the segment with a residual time to maturity of 5 to 10 years, government bonds in a total nominal value of CZK 185.6 billion were sold and the Ministry placed government bonds with maturity of over 10 years in a total nominal value of CZK 101.8 billion were sold.

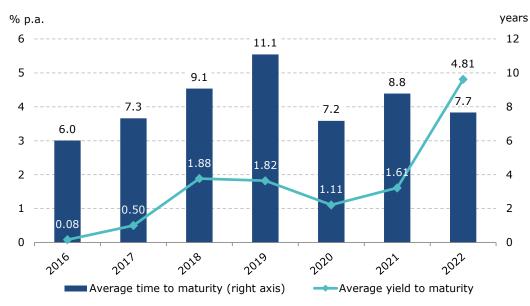
#### Figure 16: Maturity Structure of Sold CZK-denominated Government Bonds



Note:Residual time to maturity related to the issue date. Source: MoF

The average yield on CZK-denominated mediumterm and long-term government bonds sold on the primary and secondary markets in 2022 was 4.81% p.a. An increase in government bond yields was mainly due to the Czech National Bank's monetary policy decisions regarding an increase in key interest rates, with the 2W repo rate rising from 3.75% p.a. to 7.00% p.a. in the first half of 2022. The significant Czech National Bank's increase in key interest rates during 2022 had a negative impact on government bond yields and prices. Due to the inverse character of the yield curve, investors were particularly interested in buying government bonds with longer maturities or variable-rate government bonds. A total of five new fixed-rate government bonds with maturities ranging from two to thirteen years and one two-year variable-rate government bond were issued during 2022.

The average time to maturity of the sold CZKdenominated government bonds fell to 7.7 years, which is by 1.1 years less compared to 2021. The average time to maturity of newly sold government bonds was above the medium-term strategic target set for the average maturity of state debt at 6.5 years, which has a positive impact on the refinancing risk of the state debt portfolio.



#### Figure 17: Average Yield and Time to Maturity of Sold CZK-denominated Government Bonds

Note: Average residual time to maturity is related to the issue date. Source: MoF

In 2022, CZK-denominated medium-term and longterm government bonds in a total nominal value of CZK 378.0 billion were placed on the primary market. The Ministry sold or exchanged CZK-denominated medium-term and long-term government bonds in a total nominal value of CZK 53.3 billion on the secondary market. The total nominal value of the gross issue of CZK-denominated medium-term and long-term government bonds amounted to CZK 431.3 billion. In the area of tap sales, government bonds in a total nominal value of CZK 46.3 billion were sold with maturities along the entire length of the yield curve, especially in 2026, 2032 and 2035. In exchange operations, medium-term and long-term government bonds with a relatively short residual time to maturity or a relatively high coupon rate are usually bought back, and government bonds with a longer remaining time to maturity or a relatively lower coupon rate are sold, thereby reducing future redemptions and thus also refinancing risk. These operations have the effect of extending the average maturity of the debt portfolio and may also have a positive effect on the government budget due to savings from not making higher future coupon payments. The Ministry exchanged government bonds maturing in 2023 mainly for government bonds maturing from 2026. As part of the exchange operations, the Ministry sold government bonds in a total nominal

value of CZK 7.0 billion and bought-back mediumterm and long-term government bonds in a total nominal value of CZK 8.1 billion.

Thus, in 2022, the Ministry reacted flexibly to the unfavourable economic and security situation and secured additional funds for financing the gross borrowing needs and for the smooth implementation of the government's fiscal and budgetary policy.

In 2022, there were three regular redemptions of medium-term and long-term government bonds. The Government Bond of the Czech Republic, 2017-2022, 0.00% was redeemed in February in a total nominal value of CZK 5.8 billion. The Government Bond of the Czech Republic, 2020-2022, 0.10%, was redeemed in April in total nominal value of CZK 69.0 billion. And furthermore in September, the Czech Republic Treasury Bond, 2007-2022, 4.70% in a total nominal value of CZK 70.5 billion was redeemed. In addition, as part of the buy-backs, the Ministry bought-back government bonds in a total nominal value of CZK 8.1 billion maturing in 2023. Thus, CZK-denominated medium-term and longterm government bonds in a total nominal value of CZK 153.5 billion were redeemed in 2022. The total nominal value of the net issue of CZK-denominated medium-term and long-term government bonds was therefore CZK 277.8 billion.



#### Figure 18: Average Nominal Value of CZK-denominated Government Bonds per Issue

Source: MoF

#### **Refinancing of Foreign Currency State Debt**

The Ministry used a wide range of financial operations on the euro money and capital markets to refinance euro-denominated debt during 2022. In the first half of the year, the Ministry issued the Government EUR-Bond of the Czech Republic, 2022-2024, 0.00% under Czech law in a total nominal value of EUR 743.2 million on the domestic primary market. Furthermore this government EUR-bond was sold on the secondary market as tap sales in a total nominal value of EUR 256.8 million and due to this the sale increased the total nominal value outstanding up to the target benchmark nominal value of EUR 1.0 billion with an average yield to maturity of 0.91% p.a.

The main motivation for the issuance of the new EUR-denominated bond was the achieved eligibility of the securities registered in the Central Securities Depository Prague for credit operations with the Eurosystem. On 16 March 2022, the European Central Bank announced the approval of its linking to the foreign depositary Euroclear Bank in Belgium, which allows primarily the inclusion of EUR-bonds issued on the domestic market under Czech law among eligible assets under Eurosystem credit operations. This makes these government bonds competitive with bonds issued in euro area countries. The Czech Republic is only the second non-euro area country in Europe after Denmark,

whose local central depository has achieved this status.

The Ministry prefers this type of financing over issuing activities on foreign markets under foreign law, which are usually associated with higher costs, especially in the area of administration and fees for senior issuers. The lower administrative burden allows the Ministry to respond more flexibly to the financial market situation and the current financing needs. As a result, the Ministry has issued a total nominal value of EUR 2.5 billion of government EUR-bonds on the domestic market since 2019.

During 2022, the Ministry did not conduct any borrowing operations on the foreign bond markets, but in May it duly redeemed the last eurodenominated government bond issue issued on foreign markets in 2012 in a total nominal value of EUR 2.75 billion. This redemption was covered by loans received from the European Commission under the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) in total amount of EUR 2.5 billion maturing in 2037 and by issuing a new issue of government EUR-bond maturing in 2024. During 2022, the euro funding needs were also covered by money market instruments, namely deposit operations or foreign exchange swaps.

#### **Direct Sale of Government Bonds to Citizens**

On 3 January 2022, two issues of the "Dluhopis Republiky" government bonds were issued within the last 13th subscription period, which started on 20 September 2021 and ended on 23 December 2021, in the total amount of CZK 41.1 billion. The Ministry issued new tranches of already issued government bonds intended for citizens in the form of reinvested yields in a total nominal value of CZK 3.8 billion. In 2022, the total nominal value of the gross issue of government bonds intended for citizens thus reached CZK 45.0 billion. In 2022, no regular redemptions of government bonds was made, but the issuance conditions of these government bonds allow citizens to request their redemptions before the set maturity date. In 2022, bonds in a total nominal value of CZK 0.4 billion were requested to be redeemed within all submitting periods.

In connection with a record total nominal value of the issue of the "Dluhopis Republiky" government bonds issued on 3 January 2022 and the second highest nominal value of these bonds outstanding, the Ministry temporarily suspended the start of the next subscription period, as the issuance of these bonds made it possible to cover more than one quarter of the total redemptions of CZK-denominated mediumterm and long-term government bonds in 2022.

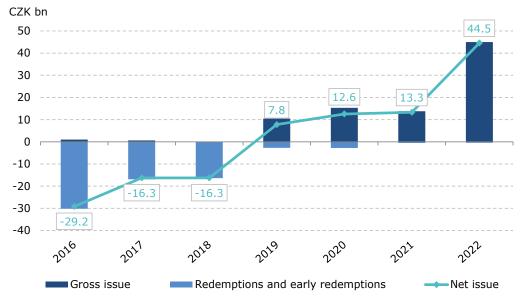
#### **Table 10: Issues and Redemptions of Government Bonds for Citizens**

CZK bn	2016	2017	2018	2019	2020	2021	2022
Total nominal value of issued government bonds	0.0	0.0	0.0	10.4	15.1	13.0	41.1
Reinvestment of yields	1.0	0.6	0.1	0.1	0.2	0.8	3.8
Early redemptions	0.1	0.1	0.0	0.0	0.1	0.5	0.4
Early redemptions (% outstanding as at the end of the previous year)	0.2	0.2	0.1	0.2	1.0	1.9	1.1
Regular redemptions	30.0	16.8	16.3	2.7	2.6	0.0	0.0
Total redemptions	30.2	16.9	16.4	2.7	2.8	0.5	0.4
Outstanding	37.8	21.5	5.2	13.0	25.6	38.9	83.4
Share of government bonds to state debt (%)	2.3	1.3	0.3	0.8	1.2	1.6	2.9

Source: MoF

The net issuance of government bonds for citizens reached a total nominal value of CZK 44.5 billion and thus contributed to an increase in the share of government bonds intended for citizens in state debt from 1.6% at the end of 2021 to 2.9% at the end of 2022. The total nominal value

outstanding thus amounted to CZK 83.4 billion. The share of government bonds for citizens in state debt increased despite a significant increase in government debt due to increased issuance activity by the Ministry.



#### Figure 19: Issues and Redemptions of Government Bonds for Citizens

Note: Incl. savings government bonds issued in 2011 to 2014 and reinvestment of yields. Source: MoF

#### **Money Market Instruments and Other Debt Instruments**

In 2022, the total nominal value of the gross issue of state treasury bills without roll-over within the year was zero. Due to the uncertainty on the domestic and foreign financial markets caused by the development of the world economy, the energy crisis and persistent geopolitical risks, and the development of the state budget, the Ministry proceeded to operationally and preventively strengthen available liquidity of the Czech koruna treasury single account through the short-term money market operations in the form of increased sales of state treasury bills. A total of 33 auctions were carried out in 33 auction days. The gross issue of state treasury bills including rollover in the year amounted to CZK 503.0 billion with a total demand of CZK 914.0 billion and an average auction yield

of 5.85% p.a. The net issue of state treasury bills without revolving in 2022 was CZK -33.0 billion, when state treasury bills in a total nominal value of CZK 33.0 billion were redeemed.

In the area of loans and credits from international financial institutions, the Ministry has received loans from the European Commission under the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) in a total nominal value of EUR 2.5 billion maturing in 2037. In addition, there were no loans from European Investment Bank during the year, only repayments of tranches of loans from the European Investment Bank amounting to CZK 4.4 billion were repaid in 2022.

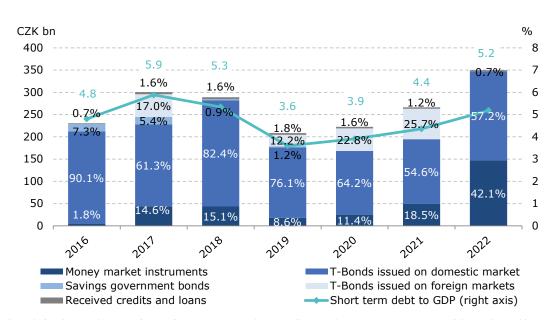
## 4 - Risk Management and Portfolio Strategy

The declaration of strategic goals and limits is the main tool for increasing the transparency of the Ministry's debt policy in line with the best international practice. The objectives are set up based on the requirements of a prudent approach to the management of financial and credit risks while minimizing economic costs in the long run. The main risks to which the debt portfolio is exposed in the long term are refinancing, interest rate, and currency risks. All the objectives defined below are applied to the portfolio of the state debt as a whole, including derivative operations. In connection with streamlining and modernizing state treasury liquidity management, refinancing and interest risk strategic targets and limits are announced in the medium-term horizon, which allows the Ministry a flexible response to short-term market conditions and investors' interest in instruments in a certain segment of time to maturity or re-fixing.

A short-term deviation from the set medium-term strategic limits and targets for the debt portfolio's risk parameters for refinancing and interest rate risk is possible but the medium-term issuance activity will be planned in such a way that the limits and targets defined in the strategy for the relevant year are met in the medium-term horizon.

#### **Refinancing Risk**

Refinancing risk is managed by a system of three quantitative indicators: the share of short-term state debt, the share of medium-term state debt, and the average time to maturity of the state debt taking into account the structure of the maturity profile and the effort to achieve a balance of state debt redemptions in individual years of the medium-term and longterm horizon. These indicators are to be considered as a comprehensive system, focusing only on one of them may pose a potential risk. The share of short-term state debt (i.e. the share of debt due within one year in total state debt) is a key indicator of the refinancing risk in the shortterm horizon. For the medium-term horizon, the limit for the short-term state debt is set at 20.0%. The share of short-term state debt at the end of 2022 was 12.1% of the total state debt and it is still below the limit set for the medium-term horizon.



#### Figure 20: Structure of Short-Term State Debt by Instrument

Note: As at the end of each year. The source for GDP for 2016 to 2021 is the CZSO, for 2022 the Macroeconomic Forecast of the Czech Republic – January 2023. Credits and loans received from international financial institutions and European Commission. Source: MoF, CZSO

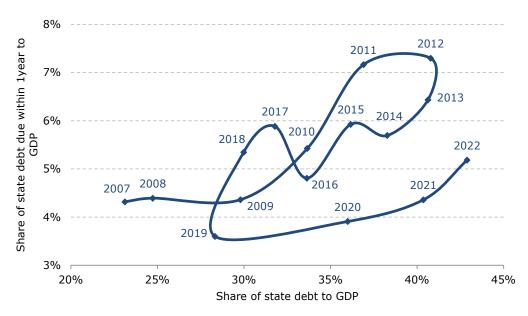
At the end of 2022, the absolute value of shortterm state debt increased by CZK 83.6 billion year-on-year to CZK 349.8 billion. Compared to the end of 2021, the monetary structure of shortterm debt has changed, especially in mediumterm and long-term government bonds and money market instruments. In the case of medium-term and long-term government bonds issued on the domestic market maturing within one year, there was a year-on-year absolute increase of CZK 54.8 billion, which represents an increase of 2.6 p.p. in relative terms. The share of medium-term and long-term government bonds issued on the foreign markets decreased by 25.7 p.p. due to the regular redemption of the foreign issue of government bonds denominated in the euro in May 2022 in a total nominal value of EUR 2.75 billion. The share of money market instruments, on the other hand, increased by 23.6 p.p., mainly due to closure of short-term euro deposit operations through the end of 2022. The lower regular repayments of loans

received from international financial institutions by CZK 0.7 billion in 2023 compared to 2022 did not have a significant effect on the change in the share of received credits and loans in short-term state debt.

The share of money market instruments in the total state debt at the end of 2022 was 5.1%, which represents a year-on-year increase of 3.1 p.p. At the end of 2022, the balance of medium-term and long-term government bonds issued on domestic and foreign markets, including savings government bonds maturing within one year, exceeds the balance of money market instruments outstanding.

The share of short-term debt in GDP slightly increased by 0.8 p.p. in 2022 compared to 2021 to 5.2%, but there is no significant deviation from previous years, on the other hand, the share of GDP remains relatively low.

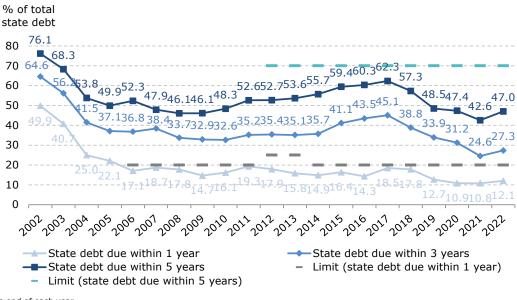
#### Figure 21: Short-Term State Debt and Total State Debt to GDP



Note: As at the end of each year. The source for GDP for 2007 to 2021 is the CZSO, for 2022 the Macroeconomic Forecast of the Czech Republic – January 2023. Source: MoF, CZSO

In the area of medium-term refinancing risk, the Ministry monitors and manages the share of debt due within three and five years. The debt due within five years is managed by the share of the mediumterm debt to the total state debt, for which the Ministry has set an explicit limit in the medium-term horizon of 70.0% of the total state debt. The value of the share of medium-term state debt in total state debt at the end of 2022 is 47.0% and it is still below the limit set for the medium-term horizon. The share of state debt maturing within three years amounts to 27.3% at the end of 2022.

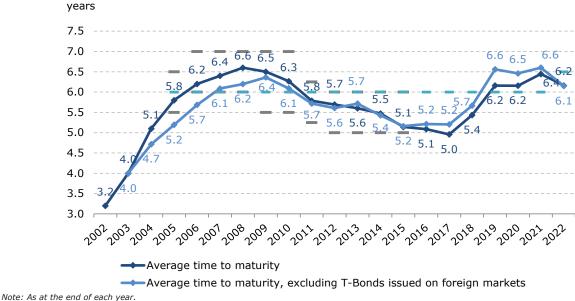
#### Figure 22: State Debt by Maturity Baskets



Note: As at the end of each year. Source: MoF

Another indicator used in the management of refinancing risk is the average time to maturity of the state debt, for which the target value for the medium-term horizon was set at 6.5 years as a part of the Czech Republic Funding and Debt Management Strategy for 2022. The average time to maturity, as well as the structure of state debt portfolio maturity profile, belongs among the fundamental indicators that determine the time and volume structure of government bond issues on the domestic and foreign markets and the repayment schedules of loans received from international financial institutions.

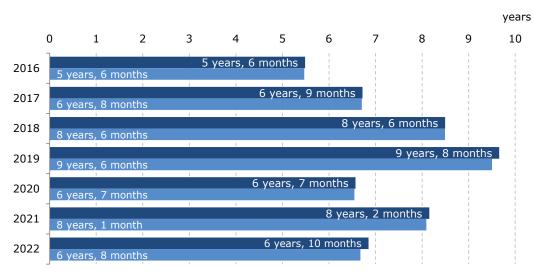
The average time to maturity of state debt at the end of 2022 is 6.2 years, which represents a year-on-year decrease of approximately 0.3 years. This decrease is mainly due to increased issuance activity at the short end of the yield curve in the second quarter of 2022 as a result of the crisis situation in Ukraine and its negative impact on the domestic and foreign financial markets. In addition, the Ministry also monitors the indicator of the average time to maturity after offsetting the nearest state debt redemptions against cash resources from short-term reserve operations on the money market and the total available state treasury liquidity. There are not set medium-term target values for these adjusted indicators of the average time to maturity. However, by the end of 2022, the levels of these adjusted indicators amounted to 6.5 years, respectively 7.4 years, which confirms stable refinancing and liquidity position of the Czech Republic.



#### Figure 23: Average Maturity of State Debt and Declared Targets

Source: MoF

Figure 24: Average Residual Time to Maturity of Newly Sold Government Bonds at the End of the Year



T-Bonds T-Bonds and savings government bonds

Note: Residual time to maturity of government bonds issued on domestic market during the respective calendar year calculated relative to the end of the year. Source: MoF

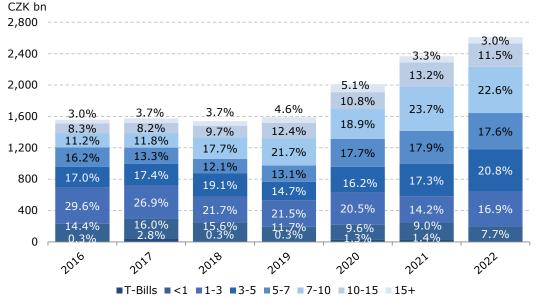
The Ministry monitors not only the average time to maturity of the total debt portfolio but also the average time to maturity of its individual components. The average time to maturity of medium-term and long-term government bonds issued on the domestic market at the end of 2022 amounts to 6.3 years. Medium-term and long-term government bonds issued on the domestic market account almost for 90% of state debt and therefore significantly determine the average residual time to maturity of the entire debt portfolio. The average time to maturity of foreign issues increased to 13.1 years compared to the end of 2021 due to the regular redemption of the last foreign issue of government bonds denominated in the euro in May 2022 in a total nominal value of EUR 2.75 billion. The average time to maturity of savings government bonds decreased to 4.3 years compared to the end of 2021, and the average time to maturity of received credit and loans increased to 11.0 years, mainly due to the drawing of new loan from the European Commission through the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) with maturity in 2037.

years	2016	2017	2018	2019	2020	2021	2022
T-Bonds issued on domestic market	5.2	5.3	5.8	6.6	6.5	6.7	6.3
T-Bonds issued on foreign markets	4.3	3.2	3.2	2.2	1.6	1.4	13.1
Savings government bonds	1.5	1.1	1.1	4.5	5.1	4.6	4.3
Money market instruments	0.1	0.3	0.3	0.1	0.2	0.0	0.2
Received credits and loans, promissory notes	9.1	7.9	7.5	7.4	7.3	8.5	11.0

#### Table 11: Average Time to Maturity of Individual Components of the State Debt

Note: Residual time to maturity as at the end of each year. Credits and loans received from international financial institutions and European Commission. Source: MoF

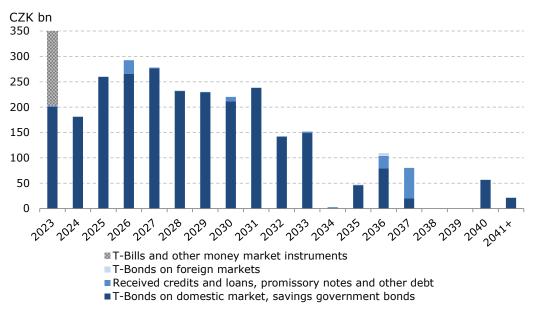
In 2022, the share of government bonds with a residual time to maturity of up to 5 years increased by CZK 189.5 billion due to increased issuance activity at the short end of the yield curve in the second quarter of 2022 as a result of the crisis situation in Ukraine and its negative impact on the domestic and foreign financial markets. The share increased year-on-year, especially in the 1 to 3 years and 3 to 5 years segments, by CZK 104.4 billion, respectively CZK 132.0 billion. The share of government bonds with a residual time to maturity of over than 5 years amounted to 54.7% at the end of the year, which represents a year-on-year decrease of 3.3 p.p. The share increased year-on-year, especially in the 5 to 7 years and 7 to 10 years segments, by CZK 37.7 billion, respectively CZK 30.3 billion.



#### Figure 25: Structure of Government Bonds by Time to Maturity

Note: Residual time to maturity as at the end of each year. Includes T-Bonds issued on domestic and foreign markets, savings government bonds and T-Bills. Source: MoF

The sales of government bonds on the domestic primary and secondary markets, the possible issuance on the foreign markets and the drawing of long-term loans from international institutions will continue to be managed in accordance with the fulfilment of another key objective in stabilizing and smoothing the state debt maturity profile over time.

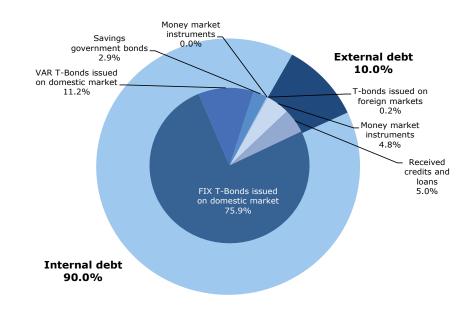


#### Figure 26: Maturity Profile of State Debt

Note: As at the end of 2022. Received credits and loans include credits and loans received from international financial institutions and European Commission. Other debt includes unpaid principals of government securities. Source: MoF With regard to refinancing risk, the Ministry monitors the debt portfolio structure by individual instruments. Fixed-rate medium-term and long-term government bonds issued on the domestic market, cover the largest share in the long run, with a share of 75.9% of total state debt at the end of 2022, and thus remaining stable compared to the previous year. The share of variable-rate medium-term and long-term government bonds issued on the domestic market in total state debt is 11.2% at the end of 2022, which represents an increase of 0.8 p.p. compared to the end of 2021.

The share of the total nominal value of foreign issues in the total state debt reached 0.2% at the

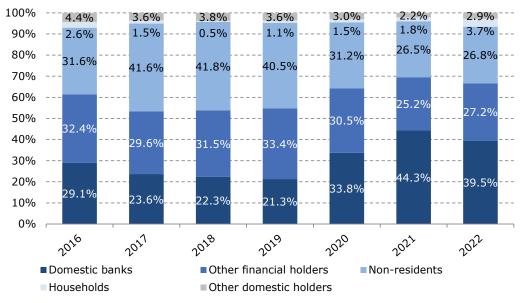
end of 2022, which represents a decrease of 2.8 p.p. compared to the end of 2021 due to the regular redemption of the foreign issue of government bonds denominated in the euro in May 2022 in the total nominal value of EUR 2.75 billion. The share of money market instruments in the total state debt reached 4.8% at the end of 2022, which represents a year-on-year increase of 2.8 p.p. The share of savings government bonds also increased slightly as a result of new issues of the "Dluhopis Republiky" government bonds and the share of loans received from international institutions also increased slightly due to the drawing of new loan from European Commission in a total nominal value of EUR 2.5 billion.



#### Figure 27: Structure of State Debt by Instrument

Note: As at the end of 2022. Credits and loans received from international financial institutions and European Commission. Source: MoF

The structure of holders of government bonds issued on the domestic market remained relatively stable compared to 2021, when the shares of individual sectors changed only slightly. The highest share of holdings of government bonds issued on the domestic market thus remains with the domestic banking sector, when they held approximately 39.5% of government bonds issued on the domestic market at the end of 2022. The sector of other financial holders is relatively stable over time, representing approximately 27.2% of holders of government bonds issued on the domestic market, while the sector of non-residents accounts for approximately 26.8%. The increase in the household sector to the level of 3.7%, i.e. by 1.9 p.p. compared to the previous year, is mainly due to the issuance of two new issues of the "Dluhopis Republiky" government bonds in a record total nominal value of CZK 41.1 billion in January 2022.

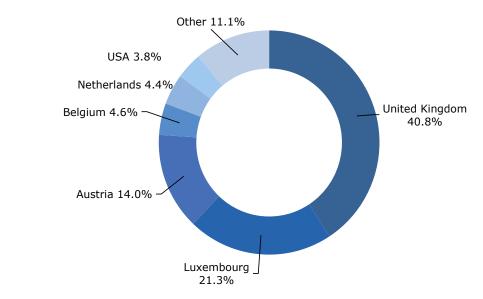


#### Figure 28: Structure of Government Bonds Sold on Domestic Market by Type of Holder

Note: As at the end of each year. Source: MoF, CSD, CNB

In terms of the geographical structure of nonresidents holding government bonds issued on the domestic market, investors from the United Kingdom and Luxembourg continue to dominate, accounting for more than 62% of all non-resident holders at the end of 2022. After the withdrawal of the United Kingdom from the European Union, more than 51% of non-resident holders come from member states. Holders from European countries outside the European Union together reach more than 42%, and to a lesser extent, government bonds are held by investors based in North America and Southeast Asia.

#### Figure 29: Structure of Non-Resident Holders of Government Bonds Sold on Domestic Market



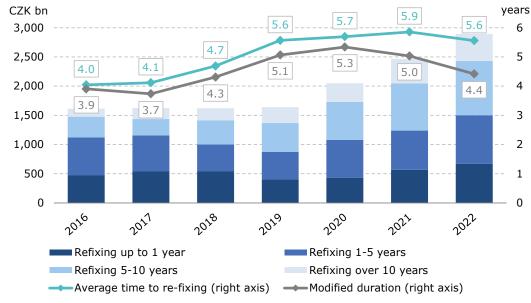
Note: As at the end of 2022. Excluding T-Bills. Source: MoF, CSD

#### **Interest Rate Risk**

The most important market risk of state debt management remains interest rate risk, which the Ministry manages through the strategic indicator of average time to re-fixing of state debt, for which it sets a medium-term target value.

The average time to re-fixing of the state debt at the end of 2022 is 5.6 years and it is thus in the middle of the target band set for the medium-term horizon of 5.0 to 6.0 years. The year-on-year decrease in the average time to re-fixing by approximately 0.3 years is related to the decrease in the average time to maturity of the state debt and, at the same time, to a higher issue of variable-rate government bonds. Compared to the end of 2019 and 2020, the value of this indicator is approximately at the same level.

Variable-rate medium-term and long-term government bonds in the total nominal value of CZK 68.2 billion were issued on primary and secondary market in 2022, which is 15.8% of the total gross issue of medium-term and long-term government bonds issued on the domestic market. A new variable-rate issue of medium-term government bonds maturing in 2024 was also contributed to a higher issuance of variable-rate government bonds.

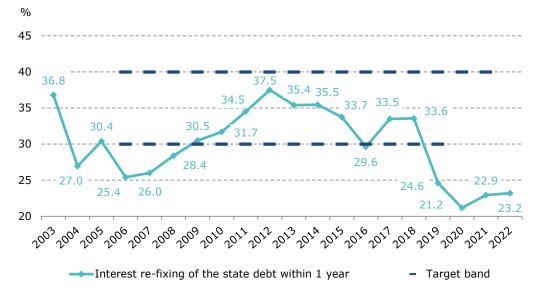


#### Figure 30: Interest Re-fixing of State Debt

Note: As at the end of each year. Source: MoF

Another indicator monitored by the Ministry in relation to interest rate risk management and for which the Ministry sets a strategic goal is the interest rate re-fixing of the debt portfolio within one year, which is the proportion of state debt that is sensitive to fluctuations in financial market interest rates in the following year. For the medium-term horizon, the target limit was set at 40.0% of the total state debt. At the end of 2022, the year-on-year increase in this indicator is 0.3 p.p. and amounts to 23.2%. The structure of interest rate re-fixing within one year is important not only for expressing short-term interest rate risk but also affects the longer-term

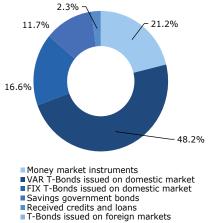
interest rate risk expressed by the average time to re-fixing indicator. The debt portfolio, which is sensitive to interest rate fluctuations in the financial market in 2023, consists mainly of variable-rate medium-term and long-term government bonds issued on the domestic market (48.2%) and other money market instruments (21.2%). Fixed-rate medium-term and long-term government bonds issued on the domestic market account for 16.6% of this portfolio, savings government bonds account for 11.7% and credits and loans received from international institutions represent 2.3% of this portfolio.



#### Figure 31: Interest Re-fixing of State Debt within 1 Year

Note: As at the end of each year. Source: MoF



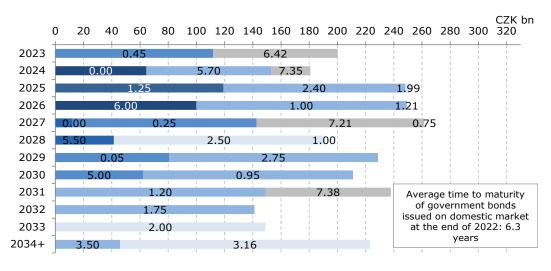


Note: As at the end of 2022. Credits and loans received from international financial institutions and European Commission. Source: MoF

The Ministry also monitors the structure of mediumterm and long-term government bonds issued on the domestic market according to current and original time to maturity and coupon rates. Such constructed government bond structure allows for a detailed breakdown of interest expenditure on state debt service generated by fixed-rate mediumterm and long-term government bonds issued on the domestic market. At the end of 2022, these bonds have an average coupon rate of 2.14% p.a.; bonds maturing in 2023 have an average coupon rate of 0.45% p.a. In the segment of 2 to 4 years of the original time to maturity, these bonds have an average coupon rate of 3.65% p.a., in the segment of 4 to 6 years an average coupon rate is 1.25% p.a., in the segment of 6 to 8 years an average coupon rate is 4.26% p.a., in the segment of 8 to 10 an average coupon rate is 1.03% p.a., in the segment of 10 to 15 years an average coupon rate is 2.10% p.a., and in the segment of over 15 years of the original time to maturity, these bonds have an average coupon rate is 2.59% p.a.

The Ministry also monitors the structure of fixedrate medium-term and long-term government bonds issued on the domestic market according to the current time to maturity, time to maturity at the moment of sale, and yield to maturity at the moment of sale. Such constructed government bonds structure reflects the average annual cost of these bonds in individual segments of the current time to maturity and time to maturity at the moment of sale of the bonds. At the end of 2022, the average annual cost of fixed-rate medium-term and long-term government bonds issued on the domestic market is 2.18% p.a. In 2023, bonds with an average annual cost of 0.88% p.a. are redeemed in the following structure: bonds sold as 2- to 4-year with an average annual cost of 1.11% p.a., bonds sold as 4- to 6-year with an average annual cost of 1.10% p.a., bonds sold as 6- to 8-year with an average annual cost of 0.33% p.a., and bonds sold as 8- to 10-year with an average annual cost of 0.31% p.a. In the remaining segments of the residual time to maturity there is no bond included.

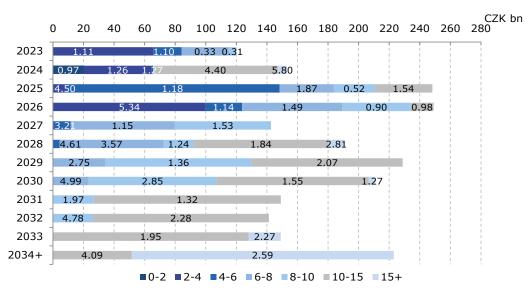
## Figure 33: Maturity Profile of Government Bonds Sold on Domestic Market by Time to Maturity and Coupon Rate



■ 2-4 ■ 4-6 ■ 6-8 ■ 8-10 ■ 10-15 ■ 15+ ■ CZK VAR T-Bonds ■ Savings government bonds

Note: Maturity profile as at the end of 2022. Segments represent original maturity. Data in individual segments represents the average coupon rate in % p.a. Excl. inflation-linked savings government bonds and T-Bills. Source: MoF

## Figure 34: Maturity Profile of Government Bonds Sold on Domestic Market By Achieved Yield to Maturity



Note: As at the end 2022. Maturity profile of fixed-rate T-Bonds issued on domestic market by time to maturity at the moment of sale, excl. effect of buy-backs. Data in the individual segments represents the average yield to maturity at the moment of the sale of the T-Bonds in % p.a. Source: MoF

#### Table 12: Average Coupon Rates and Costs of Government Bonds Sold on Domestic Market by Year of Maturity

% p.a.	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034+	Average
Average coupon rate <sup>1</sup>	0.45	3.30	1.85	3.01	0.23	3.15	1.80	2.14	1.20	1.75	2.00	3.23	2.14
Average costs <sup>1</sup>	0.88	3.07	1.37	2.87	1.48	2.51	1.88	2.44	1.43	2.74	1.99	2.94	2.18

<sup>1</sup> Incl. only fixed-rate medium-term and long-term government bonds. In the case of average costs excl. effect of buy-backs. Note: Balance as at the end of 2022. Source: MoF

#### **Currency Risk**

In connection to currency risk, the Ministry monitors the development of the net foreign-currency exposure that measures the market risk to which state financial assets and liabilities are exposed in the context of state debt management and state treasury liquidity management in term of foreigncurrency exchange rate movement, in the form of the impact on the level of total state debt expressed in koruna equivalent or increased koruna equivalent of cash resources needed to refinance debt in local currency in case of impossibility to do so in the original currency. Foreign-currency debt represents the total nominal value of the debt portfolio denominated in the foreign currency. The net foreign-currency exposure of the state debt is stated net of the foreign currency exposure of government financial assets and it is also affected by derivative operations, which hedge a part of the foreign-currency debt against the unfavourable development of currency exchange rates, and by refinancing from state treasury and foreign exchange swaps, which foreign-currency debt may be covered within the available liquidity of the state treasury management. The key indicators introduced in relation to currency risk management are the share of net foreign-currency exposure with an impact on state debt level and the share of net short-term foreign-currency exposure with the impact on the level of interest expenditure on state

#### **Benchmark Portfolio**

In order to assess the structure of issuance calendars and the ability to profit on the development of government bond yields over the year and the shape of the yield curve, the Ministry has developed a so-called synthetic benchmark portfolio consisting only of fixed-rate government bonds issued on domestic market.

The bonds in the benchmark portfolio are issued on the auction day at the same nominal value as the bonds actually issued. All benchmark portfolio bonds are issued with the same residual time to maturity guaranteeing the same average time to maturity of the synthetic debt portfolio containing benchmark portfolio as the average time to maturity of the actual debt portfolio at the yearend. The average time to maturity of the state debt at the end of 2022 is 6.2 years. If the actual issues of medium-term and long-term government bonds issued on domestic market are replaced by fixed-rate bonds from benchmark portfolio with a time to maturity of 7.4 years at the time of the auction, the required average time maturity of the synthetic state debt portfolio will be 6.2 years at the end of 2022.

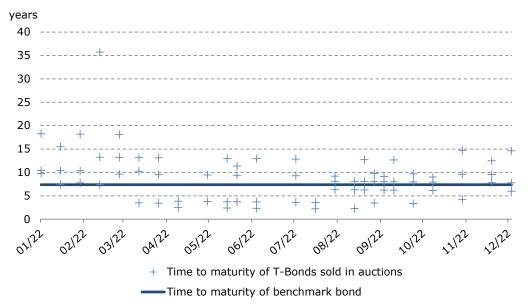
debt service. For both indicators, a strategic limit of 15% + 2 p.p. was set for 2022, while the longterm exceeding of the 15% limit is not possible; exceeding by 2 p.p. serves only for the short-term overcoming of unexpected deprecation of the local currency.

At the end of 2022, the share of net foreign-currency exposure with the impact on state debt amounts to 5.8% of total state debt and is thus below its limit. Compared to the end of 2021, the indicator decreased by 1.2 p.p. The share of net short-term foreign-currency exposure with an impact on the level of interest expenditure on state debt is 3.6% of total state debt at the end of 2022 and is below its limit. Compared to the end of 2021, there was a decrease by 1.7 p.p.

The sensitivity of interest expenditure on state debt service to the change of the koruna's exchange rate is relatively low, even in comparison to the sensitivity of interest expenditure to the shift in the yield curve. At the end of 2022, the net shortterm foreign currency exposure with an impact on the interest expenditure on state debt service is denominated almost exclusively in the euro. The share of the foreign currency state debt in the total state debt at the end of 2022 is 10.6%.

The weighted average yield of the portfolio of CZK-denominated medium-term and long-term government bonds sold in actual auctions on the domestic market during 2022 using the average yield to maturity of the auction for fixed-rate bonds and the average spread over the reference interest rate at auction and the relevant PRIBOR forward rate for variable-rate bonds was 4.87% p.a. The weighted average yield of the benchmark portfolio bonds derived from the theoretical yield curve modelled using the Svensson model reached 4.48% p.a. in 2022, i.e. 39 basis points less than the weighted average yield of actual portfolio.

To assess the actual savings achieved in 2022, it is necessary to express the accrued interest cost of each bond issued in both the actual and benchmark portfolios and then compare these total accrued costs in the individual portfolios. The total annual cost in accrual terms of all CZK-denominated medium-term and long-term government bonds sold in auctions on the domestic market during the year 2022 is CZK 18.4 billion. The total annual cost in accrual terms generated in the benchmark portfolio is also CZK 16.9 billion.

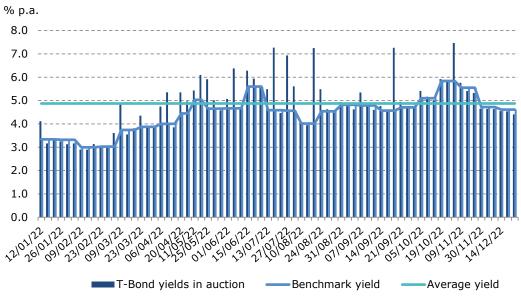


#### Figure 35: Time to Maturity of Government Bonds Sold in Auctions and Benchmark Bond

Note: Residual time to maturity. Incl. T-Bonds denominated in local currency. Source:  $\mathit{MoF}$ 

Over the course of 2022, 59 auctions of fixedrate CZK-denominated medium-term and longterm government bonds in total nominal value of CZK 312.3 billion and 13 auctions of variablerate CZK-denominated medium-term and longterm government bonds in a total nominal value of CZK 65.7 billion were carried out on primary market. The weighted average time to maturity of all CZK-denominated medium-term and longterm government bonds sold in auctions on primary domestic market during the year 2022 was 7.4 years and is the same as the maturity of the benchmark bond.

#### Figure 36: Yields of Government Bonds Sold in Auctions and Benchmark Bond



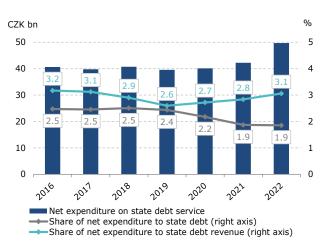
Note: Incl. T-Bonds denominated in local currency. Source: MoF

### 5 – State Debt Service Expenditure

#### **Cash and Accrued Expression**

Net state debt service expenditure represent the difference between gross state debt service expenditure and revenue, which are based on a cash principle, as well as the whole state budget, and are not accrued according to ESA 2010 methodology, which only takes place when preparing data for notification. The share of net state debt service expenditure in both state budget revenue and state debt was stabilized in the years 2016 to 2019 to the level of 2.6% of state budget revenue and 2.4% of state debt. In the years 2021 and 2022, there was an increase in net state debt service expenditure as a result of the crisis issuance activity in the previous years. In 2022, the issuance activity from 2020 and 2021 was fully reflected, as well as the increase of government bond yields along the entire length of the yield curve. In 2022, the share of this expenditure in the state budget revenue reached the level of 3.1%, while the share of this expenditure in the state debt was stabilized at the level of 1.9%.

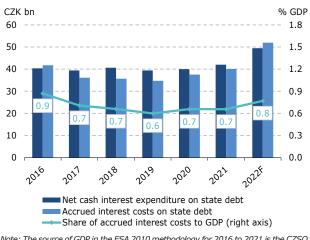
## Figure 37: Net Expenditure on State Debt Service



Note: The revenue of state budget is adjusted of the revenue of chapter 396 – State Debt. Source: MoF

Monitoring the development of revenue and expenditure as well as net expenditure on state debt service does not always have to provide accurate information on what economic costs are associated with state debt in a given period. For this purpose, accrual-based costs, which are based on a gradual accumulation of interest costs on a daily basis, are more appropriate. Thus, the development of accrued interest costs tends to show significantly less volatility than the development of interest costs on a cash basis, as it is not affected by the time discrepancies between the period in which the net interest expense arises and the date of realization of the related expense or revenue. The decrease in accrued costs between 2016 and 2019 is due to the concurrent decline in state debt and the low level of government bond yields in the long run. In 2022, accrued costs increased by CZK 11.9 billion year-on-year. In contrast, net cash interest expenditure on state debt service increased by CZK 7.5 billion year-on-year, which is due to the abovementioned disproportion, when sales of government bonds on a cash basis will be reflected a greater extent in the following years.

#### Figure 38: Net Cash Expenditure and Accrued Costs on State Debt Service



Note: The source of GDP in the ESA 2010 methodology for 2016 to 2021 is the CZSO, for 2022 the Macroeconomic Forecast of the Czech Republic – January 2023. Source: MoF, CZSO

Factors influencing the relationship between cash budget expenditure and accrued costs include the development of the balance of individual debt instruments. When the balance increases, the interest payments paid out at the end of the calculation period, i.e. mainly coupon payments of koruna and foreign currency-denominated medium-term and long-term government bonds, interest payments on loans received from international institutions, and swap interest payments, will initially show on the accrual basis and, eventually, at the end of this period on a cash basis. As the state debt increases, accrual costs predominate in this period. On the other hand, in the case of discounted debt instruments, the interest is settled with the state budget at the date of issue, which means that the discounts are first fully reflected in cash expenditure and only gradually over the entire duration of the instrument on an accrual basis. The same principle applies to the received premiums of medium-term and long-term government bonds.

The development of interest rates also plays a key role in the ratio between cash expenditure and accrued costs. In the case of the growth of interest rates, the accrued costs prevail over cash expenditure for payments made at the end of the calculation period, and cash expenditure for payments made at the beginning of the calculation period prevails over accrued costs. The same principles apply in the opposite sense in the case of interest rates decreasing.

Similarly, there may be a significant disproportion between cash expenditure and accrued costs in the

calculation period, if the instrument with a high-interest rate is due in that period, which is fully projected in cash expenditure but only partly in accrued interest, and is replaced with an instrument with a low-interest rate, whose accrued cost starts being continually accounted for from the issue or acceptance date, while it may not be reflected in cash expenditure in the given period at all.

 Table 13: Cash Premiums and Discounts and Difference Between Cash Expenditure and Accrued

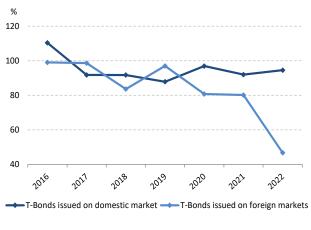
 Costs

CZK bn	2016	2017	2018	2019	2020	2021	2022
Cash premiums	8.6	8.4	8.4	11.4	10.5	13.8	6.1
Cash discounts	0.0	3.0	8.0	10.3	9.0	15.8	22.3
Difference between cash discounts and premiums	-8.6	-5.4	-0.4	-1.1	-1.5	2.0	16.2
Difference between cash expenditure and accrued costs	-2.8	2.4	2.7	4.3	1.0	3.2	3.3

Note: T-Bonds issued on the domestic market. Source: MoF

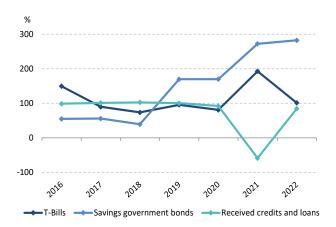
The underlying trends in cash expenditure and accrued costs are largely given by the development of these indicators for medium-term and long-term government bonds issued on the domestic market, which form the dominant part of state debt. For medium-term and long-term government bonds issued on the domestic market, cash interest expenditure outweighs the accrual costs. For medium-term and long-term government bonds issued on foreign markets, cash interest expenditure also outweighs accrued costs, which is mainly due to the regular redemptions of the foreign issue of government bonds denominated in the euro in May 2022 in a total nominal value of EUR 2.75 billion. In the case of savings government bonds, accrued costs outweigh the cash interest expenditure, which is mainly due to the issuance of new issues of the "Dluhopis Republiky" government bonds at the

Figure 39: Share of Accrued Costs in Net Cash Interest Expenditure of Government Bonds



#### Source: MoF

Figure 40: Share of Accrued Costs in Net Cash Interest Expenditure of Other Components of State Debt



Note: Credits and loans received from international financial institutions and European Commission. Source: MoF

billion, which were reflected during 2022 in accrued costs, but they will be reflected in cash expenditure until the beginning of 2023, and also by the calculation methodology, wherein the case of savings government bonds with increasing, predetermined coupons in individual coupon periods, the average yield is used for accrualisation in accordance with the ESA 2010 methodology. Given the short maturity of most received credits and loans in the form of lending facilities as well as state treasury bills, the differences between cash expenditure and accrued costs are not significant. The same applies to short-term borrowings and, in most cases, to loans received from the international institutions due to the generally short time to refixing.

beginning of 2022 in a total nominal value of CZK 41.1

#### **Budget for the Chapter – State Debt**

The budget of Chapter 396 – State debt is compiled annually on the basis of a Cost-at-Risk analysis. The expected net expenditure amounted to CZK 48.7 billion, whereas the actual net expenditure of the chapter amounted to CZK 49.7 billion in 2022, i.e. 0.7% of GDP. As part of the approval of the amendment to Act No. 57/2022 Coll., on the State Budget of the Czech Republic for 2022, the budgeted expenditure of Chapter 396 – State Debt was increased by CZK 4.0 billion to CZK 54.0 billion during the year 2022. The difference between actual net expenditure and the approved budget is CZK 4.3 billion, which partially contributed to better-than-expected state budget performance in 2022. The difference between actual and budgeted net expenditure is due to lower expenditure compared to the approved budget while the actual revenue was zero as well as the approved one. Compared to 2021, net expenditure increased by CZK 7.5 billion.

	Actual	Budget	t 2022	Actual	%	2022/2021
CZK mil	2021	Approved	After changes	2022	Execution	(%)
1. Total interest expenditure	42,004	53,367	51,094	49,459	96.8	117.8
and revenue	-	-	-	-	-	-
Internal debt	37,792	48,817	46,544	45,100	96.9	119.3
Internal debt	-	-	-	-	-	-
Manay manifest in structure ante	(-) 2,462	1,000	(-) 1,273	(-) 19,257	1,512.7	782.2
Money market instruments	-	-	-	-	-	-
	919	2,250	2,250	4,220	187.6	459.4
Savings government bonds	-	-	-	-	-	-
	39,335	45,567	45,567	60,137	132.0	152.9
T-Bonds on domestic market	-	-	-	-	-	-
	4,094	4,300	4,300	4,212	98.0	102.9
External debt	-	-	-	-	-	-
	4,408	3,500	3,500	3,112	88.9	70.6
T-Bonds on foreign markets	-	-	-	-	-	-
	(-) 314	800	800	1,100	137.5	-350.3
Received credits and loans <sup>1</sup>	-	-	-	-	-	-
	118	250	250	147	58.9	125.3
Payment accounts	-	-	-	-	-	-
	230	600	600	246	41.0	106.8
2. Fees	-	-	-	-	-	-
Total chapter balance	42,234	53,967	51,694	49,705	-	117.7

#### Table 14: Budget Expenditure and Revenue of the State Debt Chapter

<sup>1</sup> Credits and loans received from international financial institutions and European Commission. Note: (-) means revenue (gains). Source: MoF In 2022, three budgetary transfers were realized in Chapter 396 – State Debt, of which two budgetary transfers were debited and one was in favour of Chapter 396 – State Debt. As a result of these budgetary transfers, the approved chapter's expenditure was increased by CZK 2.3 billion. The resulting difference between actual net expenditure and the final budget after including the impact of budgetary transfers amounts to CZK 2.0 billion.

The difference between actual and budgeted expenditure is due to several factors. The main factor is in particular the nature of the construction of the budgeted expenditure of the chapter. The budgeted expenditure represents the boundary of expenditure that is to be exceeded only with a certain probability. Due to higher budgeted expenditure than the expected expenditure, it is possible, among other things, to hold part of the state debt in the form of variable-rate instruments, which on average usually bear lower interest rates than fixed-rate government bonds, thereby achieving savings on state budget expenditure.

In 2022, interest costs on state debt service amounted to CZK 52.0 billion on the accrual basis, of which interest costs on government bonds issued in 2022 amount to approximately CZK 19.5 billion. The total nominal value of government bonds issued in 2022 amounts to CZK 1,000.0 billion, including state treasury bills issued and redeemed in the year. Compared to 2021, the accrued costs related to government bonds issued in 2022 are about CZK 14.1 billion higher, mainly due to continued increase in key interest rates by the Czech National Bank in the first half of 2022, which was fully reflected in the growth of interest rates on the interbank deposit market, and also due to the persistently high inflation rate.

#### Table 15: Interest Expenditure and Accrued Costs of the Newly Issued State Debt

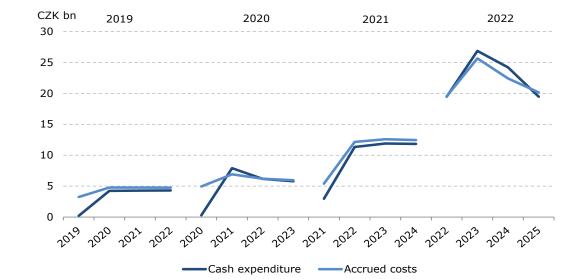
CZK bn	Nominal	Net interest expenditure / accrued costs					
	value	2022F	2023F	2024F	2025F		
Cash basis expression	1,000.0	19.5	26.9	24.2	19.5		
Accrued basis expression	1,000.0	19.5	25.7	22.4	20.2		
Gross issuance of T-Bonds	455.9	9.9	21.4	20.8	19.0		
Gross issuance of T-Bills	503.0	3.5	-	-	-		
Gross issuance of savings government bonds	$41.1^{1}$	6.2	4.3	1.6	1.2		

<sup>1</sup> Does not include the reinvestment of yields of already issued savings government bonds. Source: MoF

A similar development is shown by net interest expenditure on the same debt on a cash basis when the amount of this expenditure in 2022 amounted to CZK 19.5 billion. In the years 2023 to 2025, net interest expenditure on newly issued government bonds are expected at the level of CZK 19.5 to 26.9 billion, which confirms that the lower cash state budget expenditure of newly issued government bonds in 2022 are offset by higher cash expenditure in the following years, mainly due to the payment of nominal coupons.

The total net cash interest expenditure and total accrued costs of the newly issued state debt will

eventually equal each other in the course of the existence of the debt. Only if new government bond issues with market coupon rates and coupons paid at the end of the year were issued each year, accrued costs and net cash interest expenditure would be the same in the year of issue. For this reason, the accrual expression of state debt costs is more accurate and more meaningful as it is not affected by the re-opening of issues with other than the market coupon rate, which cannot be avoided in the real world, because small volumes of bond issues render these bonds illiquid cause and may cause increased interest costs due to the illiquidity premium.

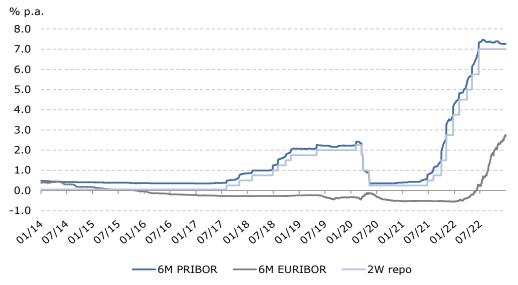


#### Figure 41: Net Cash Interest Expenditure and Accrued Interest Costs of Newly Issued Debt

Source: MoF

In 2022, the euro money market yield curves had a relatively volatile course compared to previous years. The six-month EURIBOR rate was relatively stable in the first half of 2022, but as a result of the restrictive monetary policy of the European Central Bank in the form of a gradual increase in key interest rates, it significantly increased in the second half of 2022 to the level of 2.75% p.a. The koruna money market yield curves during 2022 also copied other monetary policy decisions of the Czech National Bank, which increased the key interest rate (2W repo rate) four times during the first half of 2022, from 3.75% p.a. to 7.00% p.a. In response to these changes, the sixmonth PRIBOR rate continued to rise with significantly higher volatility during the first half of 2022. As a result of the stabilization of the key interest rate (2W repo rate), the six-month PRIBOR rate in the second half of 2022 was relatively stable with very low volatility.

#### Figure 42: Development of Rates: 6M PRIBOR, 6M EURIBOR a 2W Repo

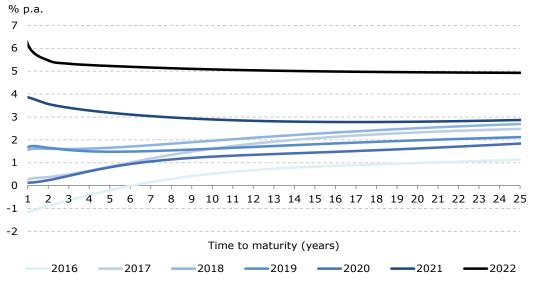


Source: CNB, MTS, Refinitiv

Compared to the end of 2021, CZK-denominated government bond yields increased along the whole yield curve. During the first half of 2022, government bond yields at the shorter end of the yield curve reacted more sensitively to the monetary policy decisions of the Czech National Bank in the form of increasing key interest rates. The most significant increase in government bond yields at the shorter end of the yield curve was during the first half of 2022, when the Czech National Bank increased its 2W repo rate four times, from 3.75% p.a. to 7.00% p.a.

Government bond yields at the longer end of the yield curve also responded to the monetary policy decisions of the Czech National Bank and to inflationary expectations in the medium-term, while during 2022, it remained to be the true that short-term government bonds achieved higher yields than medium-term and long-term government bonds.

#### **Figure 43: Yield Curve of Government Bonds**



Note: "Par" yield curve of CZK-denominated fixed-rate government bonds is constructed on the basis the extended Nelson-Siegel model, called Svensson model. Source: MoF, Bloomberg, MTS

The difference between the swap rate and the yield of the government bond, the so-called swap spread, remained at the zero level with relatively low volatility during 2022 in the case of a ten-year maturity, which continues to confirm the attractiveness of the Czech Republic as an issuer of government bonds among investors. It reached its highest values mainly in the fourth quarter, especially at the end of October when it fell to -70 basis points.

#### Figure 44: Swap Rate and T-Bond Yield to Maturity



Source: MoF, Refinitiv

#### Cost-at-Risk of State Debt

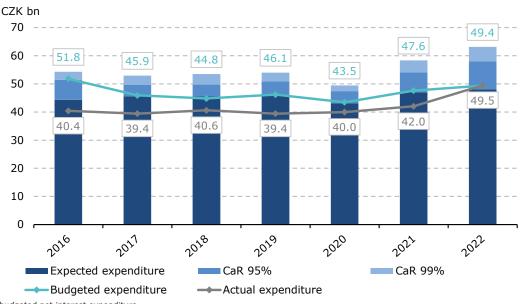
Since 2005, the Ministry has applied a model framework called Cost-at-Risk (CaR) based on the Value-at-Risk methodology, simulating future expected and maximum interest expenditure at a given degree of risk, which is derived from the volatility of the interest rate term structure. The stochastic element of the CaR model is the yield curve, the deterministic element is the dynamic structure of the state debt portfolio, which is based on the baseline scenario of the financing program respecting the stipulated strategic objectives of financial risk management.

The primary objective of the model is to determine the maximum interest expenditure on state debt, which with 95% or 99% probability will not be exceeded (CaR 95% and CaR 99%). The secondary objective of the model is to estimate the actual interest expenditure on state debt. The outcomes of the applied CaR analysis are not just the values of CaR 95% and CaR 99% percentiles, but also whole probabilistic distributions of interest expenditure at any moment, which makes this analysis a powerful tool for analysis of state budget expenditure in relation to the issuance and the financial market conditions.

The simulation framework operates separately with interest expenditure and interest revenue. The outcome of aggregation of interest expenditure and interest revenue is the net interest expenditure on state debt. Interest expenditure does not include fees related to state debt service, which are of a deterministic nature.

Overall the years in which the CaR methodology has been applied, the model has fulfilled the primary objective, since the predicted maximum interest expenditure was not exceeded in any of those years.

#### Figure 45: Net Interest Expenditure and Cost-at-Risk



Note: Original budgeted net interest expenditure. Source: MoF

CZK bn	2016	2017	2018	2019	2020	2021	2022
Budgeted expenditure <sup>1</sup>	51.8	45.9	44.8	46.1	43.5	47.6	49.4
Actual expenditure	40.4	39.4	40.6	39.4	40.0	42.0	49.5
Expected expenditure	44.3	45.6	45.5	45.8	43.1	47.0	48.1
CaR 95%	51.4	49.6	49.7	50.9	47.4	54.1	58.0
CaR 99%	54.3	52.9	53.5	54.0	49.4	58.3	63.1

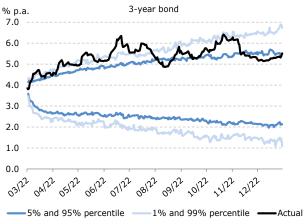
<sup>1</sup> The original budgeted net interest expenditure. Source: MoF

#### Cost-at-Risk for 2022

On 1 April 2022, the Cost-at-Risk of state debt for 2022 was published in the Czech Republic Funding and Debt Management Strategy for 2022 - Update. Calculation of the CaR indicator was based on the initially state budget deficit in the amount of CZK 280.0 billion and on simulations of the time structure of interest rates as of 1 March 2022.

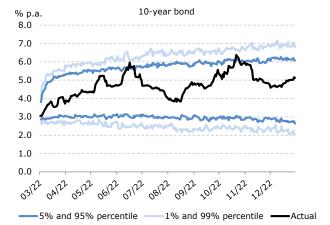
The following figures show a comparison of the actual development of interest rates on 3-year and

10-year bonds with their simulations for the period from 1 March 2022 to 31 December 2022. It is clear from them that the development of government bond yields, which could be observed after repeated increases in key interest rates by the Czech National Bank, could not be completely predicted by the model, because for example 3-year maturity yields, especially in the first half of 2022, were outside 99% confidence interval. In the case of 10-year maturity, the deviation from the forecast was not so significant.



#### Figure 46: Actual vs. Simulated of CZK-denominated Government Bond Yields in 2022

A comparison of the actual net interest expenditure on state debt service with the simulated values of expected expenditure (simulation average) and interest expenditure in CaR (95% and 99% percentile of simulations) in 2021 and 2022 is

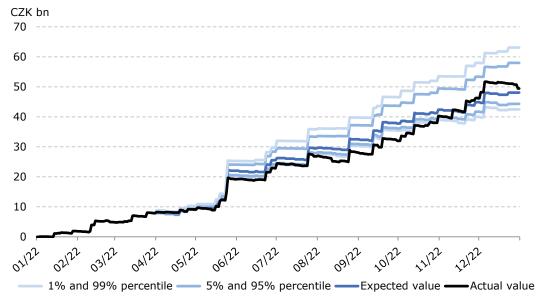


shown in the following table. In 2022 the net interest expenditure amounted to CZK 49.5 billion, the expected net interest expenditure predicted by the model amounted to CZK 48.1 billion.

#### **Table 17: Expected vs. Actual Net Interest Expenditure**

CZK bn	2021	2022
Actual expenditure	42.0	49.5
Expected expenditure	47.0	48.1
CaR 95%	54.1	58.0
CaR 99%	58.3	63.1
Difference between expectation and actuality	5.0	-1.4
Source: MoF	-	

Source: MoF, Refinitiv



#### Figure 47: Actual vs. Simulated Net Interest Expenditure in 2022

Note: Interest expenditure are calculated using the cash principle according to the current state budget methodology. Source: MoF

The net interest expenditure in 2022 remained below the CaR 95% and CaR 99% level, which were estimated at CZK 58.0 billion, respectively CZK 63.1 billion. The expected net interest expenditure predicted by the model are approximately CZK 1.4 billion lower than the actual one.

The difference in expected net interest expenditure in the amount of CZK 10.9 billion is due to higherthan-expected state budget revenue from state treasury liquidity management operations in connection with rising key interest rates of the Czech

#### Cost-at-Risk for 2023

Net interest expenditure expected by the model in 2023 amounts to CZK 68.1 billion. Net interest expenditure at risk, i.e. CaR 99% amounts to CZK 85.5 billion (CaR 95% amounts to CZK 79.8 billion). Thus, the actual net interest expenditure in 2023 will not be higher by about CZK 17.4 billion compared to the expected expenditure with 99% probability. The budgeted interest expenditure on state debt service in 2023 amounts to CZK 69.0 National Bank. Regarding to this fact, the Ministry responded flexibly in the second half of 2022 by changing the structure of issuance calendars of medium-term and long-term government bonds and state treasury bills, when it offered for sale to a greater extent medium-term and long-term government bonds with a lower coupon rate so that interest expenditure in the following years will not be significantly burdened by this issuance activity. The difference from this title amounts to a total of CZK 8.8 billion.

billion, i.e. by CZK 0.9 billion above expected net interest expenditure and by CZK 10.8 billion below the 95% percentile of the CaR indicator.

The following table shows in detail the development of cumulative net interest expenditure on state debt in 2023 predicted by the model always at the end of the month. It also contains the respective critical values of CaR 95% and CaR 99%.

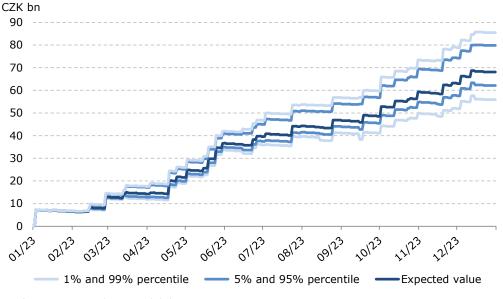
#### Table 18: Monthly Development of Cumulative Net Interest Expenditure in 2023

CZK bn	1	2	3	4	5	6	7	8	9	10	11	12
Expected expenditure	6.5	13.0	14.2	21.5	36.7	39.5	44.3	46.9	48.5	59.3	63.2	68.1
CaR 95%	6.7	14.4	17.1	25.1	40.9	44.9	51.0	54.2	56.7	69.4	74.4	79.8
CaR 99%	6.7	14.6	17.5	25.9	42.0	46.7	53.7	56.9	59.7	73.4	79.1	85.5
Source: MoE												

The graphic presentation of simulations of cumulative net interest expenditure on the state debt service in 2023 stipulated on a daily basis is shown in the following figure. The figure also shows

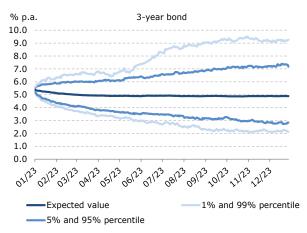
the expected values of net expenditure and the respective 5% and 95%, 1% and 99% percentiles of simulated values.

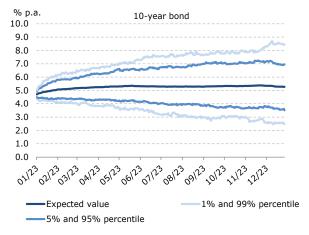
#### Figure 48: Simulation of Net Interest Expenditure of State Debt in 2023



Note: Development of net interest expenditure on a daily basis. Source: MoF

#### Figure 49: Simulation of CZK-denominated Government Bond Yields in 2023





Source: MoF

The Ministry also deals with the problem of interest rates hikes, which could occur e.g. via a sharp increase in the Czech National Bank key interest rate, sudden deterioration of the economic situation in the euro area, a sharp increase of the risk premium of government bonds, etc. The Ministry strives to quantify the impact of these circumstances on net interest expenditure on the state debt service. Each economic event has an effect on a certain part of the yield curve, which is why it is important for the Ministry to observe the shift in the individual parts of the yield curves separately. The following table quantifies the consequences of a potential increase in interest rates at the short end of the yield curve, at the long end of the yield curve and along the entire curve evenly. This analysis also enables the uneven shifting of the short and long end of the yield curve and arbitrary selection of the date of this shift.

#### Table 19: Development of Net Interest Expenditure in Case of Sudden Interest Rate Hikes

CZK bn	Current model	Shift of rates at the short end of the yield curve by 1 p.p.	Shift of rates at the long end of the yield curve by 1 p.p.	Shift of the whole yield curve by 1 p.p.
Expected expenditure	68.1	69.7	68.6	70.2
CaR 95%	79.8	81.4	80.5	82.1
CaR 99%	85.5	87.1	86.3	87.9

Note: The shock in the form of a one-time shift in the yield curve will occur at the beginning of 2023. Source: MoF

Assuming the financing of the gross borrowing requirement with an unchanged issuance calendar, a 1 p.p. upward shift in the yield curve of CZK-denominated government bonds at its short end would lead to an increase in expected net interest expenditure of CZK 1.6 billion in 2023. In the case of a 1 p.p. increase in rates at the long end of the yield curve, the expected net interest expenditure would increase by CZK 0.5 billion. A shift of the whole yield curve of government bonds by 1 p.p. upwards would result in an increase in expected net interest expenditure by approximately CZK 2.1 billion.

The Ministry also quantifies the sensitivity of net interest expenditure on state debt service to changes in the koruna's exchange rate. This sensitivity is relatively low, even when compared to the sensitivity of interest expenditure to the shift in the yield curve.

# Table 20: The Increase of Net InterestExpenditure in Case of EURCZK FXRate Hike

CZK bn	EURCZK FX rate shift				
CZK DII	by 1%	by 10%			
Expected expenditure	0.039	0.390			
CaR 95%	0.046	0.457			
CaR 99%	0.049	0.490			

Note: The shock in form of a one-off depreciation of CZK FX rate will occur at the beginning of 2023. Source: MoF If the EURCZK FX rate depreciated by 1% at the beginning of 2023 compared to the level as at the end of 2022, i.e. from 24.115 to 24.356 and remained unchanged during the whole 2023, then the expected net interest expenditure on state debt service would increase approx. by CZK 39 million.

The Ministry also quantifies the impacts of the unplanned increase in the state budget deficit on interest expenditure on state debt service. If the state budget deficit increased by CZK 10.0 billion in 2023 assuming its financing by a uniform increase in the nominal values of CZK-denominated mediumterm and long-term government bonds issued in auctions according to the current issue calendar, this change would mean an increase in expected net interest expenditure on state debt service by CZK 0.4 billion. However, the impact on the state budget based on the cash basis is very sensitive to the selected way of financing the deficit increase. In the case of an issuance of bond with premium, i.e. price above par, the increased gross issue may not result in an increase in interest expenditure due to the cash principle of the state budget and will result in a reduction in net interest expenditure. In the case of an accrual approach, an increase in gross issue would take effect immediately.

### 6 - Evaluation of Primary Dealers and Secondary Government Bond Market

#### **Primary Dealers and Recognized Dealers in Czech Government Securities**

The status of a primary dealer in Czech government securities was contractually formalized on 1 October 2011, when the Primary Dealer Agreement for Czech Government Securities (hereinafter the Agreement), became valid. According to best international practice, the Agreement specifies the rights and obligations of individual members of the group of primary dealers, and provides an institutional framework for cooperation between the Ministry and financial institutions in funding and state debt management.

A new two-stage institutional framework of cooperation was established starting from 1 January 2019, by adding the status of Recognized Dealer in Czech Government Securities. Thus, Ministry had responded flexibly to increasing regulatory costs and changes of market makers business strategies of foreign market makers in Czech government securities, when Goldman Sachs International (now Goldman Sachs Bank Europe SE) became the first recognized dealer.

Recognized Dealer in Czech Government Securities has limited rights and obligation compared to Primary Dealer, clearly specified in Recognized Dealer Agreement for Czech Government Securities. Only Primary Dealer together with Recognized Dealer is granted access to primary auctions of government bonds according to valid Rules for the Primary Sale of Government Securities organized by the Czech National Bank. Recognized Dealer has right to be participant only in the competitive part of the primary auction of Czech government securities. Compared to Primary Dealer, there is no access to the non-competitive part of the primary auctions for Recognized Dealer.

Primary dealers and recognized dealers may participate in the Ministry's operations on the secondary market, such as tap sales, buy-backs and exchange operations of government bonds, tap sales or lending facilities. Primary dealers are also the Ministry's counterparts for foreign issues, private placements and other state's financial operations. Primary dealers also have an exclusive right to participate in regular meetings with the representatives of the Ministry, at least twice a year, and to be involved among others in the preparation of issuance calendars for government bonds as well as to propose alternative instruments for financing the borrowing requirement, including follow-up operations for risk management purposes. A primary dealer's obligation is to purchase at least 3% of the total nominal value of medium-term and long-term government bonds sold in the primary auctions (including non-competitive parts) during four consecutive guarters. Another important obligation is for the participant to fulfil the quoting obligations on a secondary market through the Designated Electronic Trading System (DETS) with the aim of achieving a highly liquid secondary market of government bonds. For 2022 and 2023, MTS Czech Republic was chosen as such platform once again based on the decision taken by the Primary Dealers Committee on 28 June 2021.

Recognized dealer is not compulsory to fulfill quoting obligation on the secondary market and does not have the obligation to purchase not less than 3% of the total nominal amount of government bonds in primary auctions. The main obligation of recognized dealer is to be active market participant on the DETS, act in accordance with its market rules and contribute on best effort basis to liquidity of secondary market trading of the government bonds.

The group of primary dealers and recognized dealers in Czech government securities is confirmed by the Ministry for every calendar year. In 2022, the Czech Republic had a total of 9 primary dealers, and the number did not change compared to the previous year. In 2022, in justified cases, these Agreements were concluded as tripartite, thus ensuring a wider formalized coverage of all business relationships and activities, implemented through multiple entities within the respective financial groups. This setting applied to 6 primary dealers in the year 2022. System of primary dealership ran smoothly in 2022 and the Ministry did not receive any proposals to amend the current institutional arrangement of the market.

#### Table 21: List of Primary Dealers and Recognized Dealers in Czech Government Securities in 2022

Primary Dealers								
Citibank Europe plc	J.P. Morgan SE							
Erste Group Bank AG / Česká spořitelna, a.s.	PPF banka a.s.							
KBC Bank NV / Československá obchodní banka, a. s.	Société Générale / Komerční banka, a.s.							
ING Bank Śląski S.A. / ING Bank N.V.	UniCredit Bank AG / UniCredit Bank Czech Republic and Slovakia, a.s.							
Raiffeisen Bank International AG / Raiffeisenbank a.s.								

**Recognized Dealers** 

Goldman Sachs Bank Europe SE

Source: MoF

#### **Evaluation Results of the Primary Dealers**

The long-term objective of the state debt management is also to support the maximum possible liquidity and transparency of the secondary market for Czech government bonds. In order to achieve this objective, the interdealer over-the-counter electronic trading platform of the regulated market MTS Czech Republic for the secondary government bond market (DETS - Designated Electronic Trading System) was implemented. To support the secondary market liquidity the Ministry may consider executing secondary market operations such as tap sales, exchange operations of illiquid short term bonds for benchmark bonds with longer time to maturity and buybacks of illiquid bonds with short time to maturity. The platform provides real-time executive prices of benchmark bonds and thus enables indisputable monitoring of the behaviour of market participants, which can also be used as a basis for subsequent evaluation of their performance. It provides market participants with transparent information on the price development of Czech government bonds and continuous access to their supply. The implementation of this platform has also made it possible to expand the circle of primary dealers to include new foreign participants and domestic market makers.

#### **Table 22: Overall Evaluation of Primary Dealers**

Ranking	Primary Dealer	Points
1.	KBC Bank NV / Československá obchodní banka, a. s.	83.3
2.	PPF banka a.s.	61.2
3.	Société Générale / Komerční banka, a.s.	50.5
4.	Erste Group Bank AG / Česká spořitelna, a.s.	48.2
5.	J. P. Morgan SE	32.2
Note: Maximur Source: MoF	n possible number of points in overall evaluation is 100.	

Table 23: Evaluation of Primary Dealers on Primary Market

Ranking	Primary Dealer	Points
1.	KBC Bank NV / Československá obchodní banka, a. s.	42.9
2.	PPF banka a.s.	36.5
3.	Société Générale / Komerční banka, a.s.	26.2
4.	Erste Group Bank AG / Česká spořitelna, a.s.	25.6
5.	UniCredit Bank AG / UniCredit Bank Czech Republic and Slovakia, a.s.	14.1

Note: Maximum possible number of points in this criterion is 55. Source: MoF

## Table 24: EvaluationofPrimaryDealerson Secondary Market

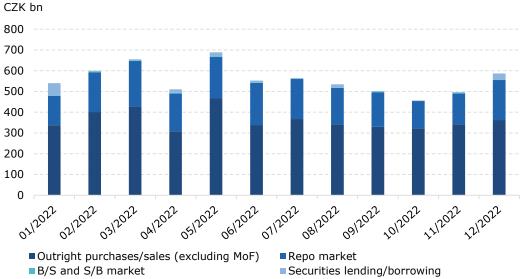
Ranking	Primary Dealer	Points
1.	KBC Bank NV / Československá obchodní banka, a. s.	40.5
2.	PPF banka a.s.	24.7
3.	Société Générale / Komerční banka, a.s.	24.2
4.	J. P. Morgan SE	24.1
5.	Erste Group Bank AG / Česká spořitelna, a.s.	22.6

Note: Maximum possible number of points in this criterion is 45. Source:  $\it MoF$ 

#### **MTS Czech Republic and Secondary Government Bond Market**

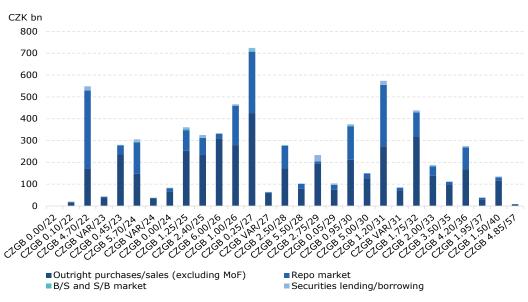
The long-term objective of the state debt management is also to support the maximum possible liquidity of Czech government bonds traded on the secondary market. In order to achieve this objective, the inter-dealer electronic OTC trading platform of the regulated market MTS Czech Republic for the secondary government bond market is also used for its fulfilment. On July 11, 2011, the pilot operation was launched, which was followed by full operation after three months. To support the liquidity of the MTS Czech Republic secondary market, the Ministry can also use secondary market operations in the form of tap sales, exchanges of short-maturity government bonds for longer-maturity bonds, as well as repurchases of illiquid short-term bonds. The MTS Czech Republic platform also enables monitoring of market participants' behaviour and compliance with the set rules in real time as a basis for subsequent evaluation of their performance and bonuses. The implementation of this platform has also enabled the expansion of the circle of primary dealers to include new foreign domestic market makers. Since its establishment, the official MTS Czech Republic market has become an integral part of the overall secondary market for government bonds. It provides market participants with transparent information on the price development of government bonds issued on the domestic market and continuous access to their supply.





Note: Expressed in nominal value of traded medium-term and long-term government bonds denominated in the domestic currency settled in CSD. Outright purchases/sales by the Ministry are not included. Repo market and buy/sell market adjusted for double-counting of transactions. Source: MoF, CSD





Note: Expressed in nominal value of traded medium-term and long-term government bonds denominated in the domestic currency settled in CSD. Outright purchases/sales by the Ministry are not included. Repo market and buy/sell market adjusted for double-counting of transactions. Source: MoF, CSD

The year 2022 was similar to the years 2020 and 2021 in terms of trading activity on the government bond market and largely corresponded to the Ministry's issuance activity, when it was necessary to cover higher financing needs on the primary and secondary markets, while the Ministry issued five new issues of CZK-denominated medium-term and long-term government bonds.

The highest traded nominal values were reached on fixed coupon bonds with maturities from 2025 to 2027, especially the Government Bond of the Czech Republic, 2017-2027, 0.25% and then with maturities from 2030 to 2032. The most traded bond in repo operations was the Czech Republic Treasury Bond, 2007-2022, 4.70% maturing in September 2022.

An effective secondary market in terms of minimizing transaction costs and maintaining market depth and price stability is a necessary condition for the issuance activity and smooth and cost-effective funding over the long term. At the same time, a liquid and deep secondary market is important in order to sufficiently absorb potential financial market shocks. In order to meet this task, the Ministry established, from 1 January 2023, on the basis of a previous discussion with primary dealers at a meeting of the Primary Dealers Committee, a list of benchmark government bond issues whose nominal value in circulation is sufficient to enable the market maker to meet its listing obligations. These benchmark issues with lower outstanding amount will be also reopened, which will have another positive impact on the liquidity of new benchmark bonds.

Compared to 2022, four new issues issued in 2022 were included in the list of benchmark list for 2023, namely the Government Bond of the Czech Republic, 2022-2026, 6.00%, the Government Bond of the Czech Republic, 2022-2038, 5.50%, the Government Bond of the Czech Republic, 2022-2030, 5.00%, the Government Bond of the Czech Republic, 2022-2035, 3.50% and one issue issued in 2021 the Government Bond of the Czech Republic, 2021-2037, 1.95%. Due to the short remaining time to maturity, the Government Bond of the Czech Republic, 2015-2023, 0.45% and the Czech Republic Treasury Bond, 2009-2024, 5.70% were removed.

As a result of the changes in benchmark issues, since January 2023 the total number of bonds subjected to quoting obligation has increased by 3 benchmark bonds, in total 19.

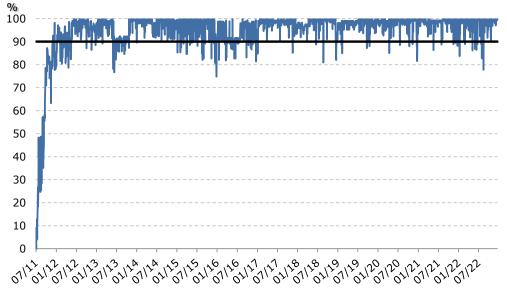
Issue no.	Issue	ISIN	Coupon	Maturity date	Maturity basket	Minimum quoted nominal value (CZK mil)
135	ČR, 0.00 %, 24	CZ0001006167	0.00%	12/12/2024	А	50
120	ČR, 1.25 %, 25	CZ0001005870	1.25%	14/2/2025	А	50
89	ČR, 2.40 %, 25	CZ0001004253	2.40%	17/9/2025	А	50
148	ČR, 6.00 %, 26	CZ0001006506	6.00%	26/2/2026	А	50
95	ČR, 1.00 %, 26	CZ0001004469	1.00%	26/6/2026	А	50
100	ČR, 0.25 %, 27	CZ0001005037	0.25%	10/2/2027	В	50
78	ČR, 2.50 %, 28	CZ0001003859	2.50%	25/8/2028	В	50
149	ČR, 5.50 %, 28	CZ0001006696	5.50%	12/12/2028	В	50
105	ČR, 2.75 %, 29	CZ0001005375	2.75%	23/7/2029	С	40
130	ČR, 0.05 %, 29	CZ0001006076	0.05%	29/11/2029	С	40
94	ČR, 0.95 %, 30	CZ0001004477	0.95%	15/5/2030	С	40
150	ČR, 5.00 %, 30	CZ0001006688	5.00%	30/9/2030	С	40
121	ČR, 1.20 %, 31	CZ0001005888	1.20%	13/3/2031	С	40
138	ČR, 1.75 %, 32	CZ0001006233	1.75%	23/6/2032	С	40
103	ČR, 2.00 %, 33	CZ0001005243	2.00%	13/10/2033	С	40
145	ČR, 3.50 %, 35	CZ0001006431	3.50%	30/5/2035	С	40
49	ČR, 4.20 %, 36	CZ0001001796	4.20%	4/12/2036	D	30
142	ČR, 1.95 %, 37	CZ0001006316	1.95%	30/7/2037	D	10 <sup>1</sup>
125	ČR, 1.50 %, 40	CZ0001005920	1.50%	24/4/2020	D	101

#### Table 25: Benchmark Issues of Government Bonds as at 1 January 2023

<sup>1</sup> Minimum traded volume of government bonds was reduced at CZK 10 mil, based on agreement with primary dealers. Source: MoF The primary dealer who fulfils the role of marketmaker on the secondary market quotes the bid and offer prices for all bonds subject to quoting obligations in the minimum quoted total nominal value, which varies depending on the time to maturity, and at least 5 hours during a single trading day.

However, the quoted prices must be within the competitive spread, which is set on a daily basis for each government bond subject to quoting obligations as the weighted average of the quoted spreads of all primary dealers multiplied by the coefficient of k =1.5. This method and the quantitative criteria were set up following mutual discussion in the MTS Czech Republic Committee, and the respective calculations are available to all participants in the system. The Ministry monitors compliance with quoting obligation on a daily basis, the evaluation of the performance and activity of participants takes place on a monthly basis.



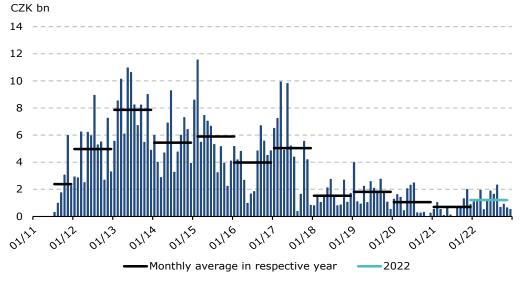


#### Source: MoF, MTS

In 2022, trading activity on MTS Czech Republic increased slightly compared to 2020 and 2021, when the average monthly traded nominal value excluding the Ministry's operations reached CZK 1.2 billion. Primary dealers and recognized dealers trade with each other primarily in the unregulated OTC markets that are characteristic of bond trading. However, due to the quotation obligations, the MTS Czech Republic platform provides market participants, investors and the general public with transparent information on daily quotations of government bond prices, including their historical development and it provides the Ministry a picture of the current market situation.

One of the reasons for the entrance of Ministry to operations and taps sales on the MTS Czech Republic was the active support of the liquidity of the Czech government bonds and the activity of primary dealers and recognized dealers.

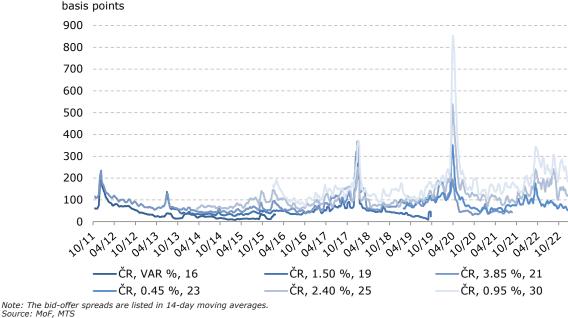




Note: Excl. trades of the Ministry on the secondary market. Source: MoF, MTS

The uncertainty on the domestic and foreign financial markets caused by the development of the world economy, the energy crisis and persistent geopolitical risks was also reflected in the significant volatility of bid-offer spreads for government bonds, which fluctuated briefly by over 400 basis points during 2022. The fact that the mandatory bid and offer spreads are based on a relative basis to the market average of all primary dealers contributes to market stability, smooth fulfilment of quotation obligations and longterm low price spreads. This allows for a significant degree of flexibility and adaptation to a constantly changing and difficult to predict market environment compared to fixed spreads.

#### Figure 54: Bid-Offer Spreads of Selected Government Bonds on MTS Czech Republic



#### **Operations on the Secondary Market**

The Ministry enters the secondary market mainly through the electronic trading platform MTS Czech Republic. In order to ensure maximum transparency, the Ministry informs all primary dealers and dealers of its intention to carry out a repurchase, exchange or tap sale on the secondary market (type of transaction, government bonds, maximum nominal value of transactions, time when offers will be accepted, conversion ratio for government bond exchanges, settlement date, contact person) at least one trading day before the day on which the transaction is to take place. The Ministry regularly publishes the results of transactions (the total nominal value of completed transactions within one repurchase, tap sale or exchange of government bonds, the number of counterparties and the weighted average price) on its website. All operations on the secondary market are carried out flexibly depending on the needs of the Ministry and the situation on the financial markets. During 2022, the Ministry continued its activity in the secondary market, primarily in order to flexibly fine-tune cover the increased needs for financing as a complement to primary market operations and to prepay bonds with shorter maturities.



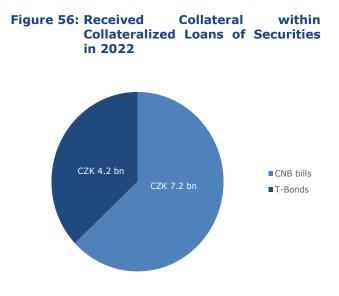
#### Figure 55: Nominal Value of Tap Sales, Exchange Operations and Buy-Backs

In 2022, the Ministry offered government bonds in tap sales mainly from January to August with a total nominal value of CZK 46.3 billion with an average remaining time to maturity of 9.8 years. The Ministry's main focus in selling was on the Government Bond of the Czech Republic, 2022– 2026, 6.00% with a total nominal value of CZK 11.5 billion, the Government Bond of the Czech Republic, 2021-2032, 1.75% with a total nominal value of CZK 8.7 billion and the Government Bond of the Czech Republic, 2022-2035, 3.50% with a total nominal value of CZK 12.4 billion. In June, the Ministry sold the Government EUR-Bond of the Czech Republic, 2022-2024, 0.00% with a total nominal value of EUR 256.8 million.

The Ministry realized exchange operations at the end of the year, in November and in December. The main focus was on the Government Bond of the Czech Republic, 2015–2023, 0.45% against bonds with maturities between 2026 and 2040. The Ministry bought back the Government Bond of the Czech Republic, 2015–2023, 0.45% with a total nominal value of CZK 8.1 billion with an average remaining time to maturity of 0.9 year. Against this, the Ministry sold bonds with a total nominal value of CZK 7.0 billion with an average remaining time to maturity of 8.2 years. During 2022, the Ministry continued executing shortterm medium-term and long-term government bond lending facilities for primary dealers and dealers primarily in the form of loans of securities. In the case of securities lending, primary dealer and recognized dealer may borrow securities from Ministry's asset accounts for a fee for a period up to 90 days against the non-cash collateral in the form of state treasury bills, Czech National Bank bills or medium-term and long-term government bonds. The advantage of loans of securities is the bidirectional support of liquidity on the secondary market with no impact on the gross borrowing requirement of the Ministry and the debt portfolio's risk indicators.

Parallel market in the form of loans of securities has its importance when the repo market freezes or if some dysfunctions occurs, which could result in an increase in bid-offer spreads. Loans of securities are fully covered by the standard contractual documentation, i.e. the relevant Annex to the Master agreement for financial transactions and the international Global Master Securities Lending Agreement. Loans of securities also help primary dealers and recognized dealers to optimize their business portfolio irrespective of their liquidity position as well as significantly reduce their dependence on the repo market.

Source: MoF, MTS



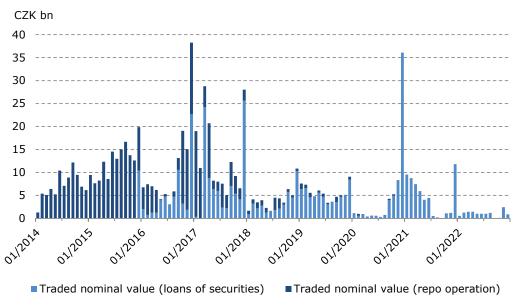
*Note: Excl.T-Bonds issued on the foreign markets. Source: MoF* 

From the primary dealers' point of view, the Ministry's short-term lending facilities enable to cover their short positions and thus contribute to the smooth fulfilment of quoting obligations, maintaining sufficient depth of market and liquidity of government bonds even at times of unusual fluctuations on financial markets. Lending facilities thus form an important alternative for obtaining government bonds in the case of worsened conditions on the secondary market and contribute significantly to the business activity of primary dealers. It enables stabilization of the market spread of quoted bonds, which is directly reflected in the reduction of the illiquidity premium as well as the end-investors' demand for Czech government bonds. The total volume of the lending facilities, expressed as the nominal value of the bond provided, decreased from CZK 55.0 billion in 2021 to CZK 12.4 billion in 2022. All lending facilities in 2022 consisted of securities lending. In 2022, the largest part of the lending facilities, expressed in terms of the nominal value of the bond provided, consisted mainly of the Czech Republic Treasury Bond, 2006-2036, 4.20% (CZK 5.0 billion), and the Government Bond of the Czech Republic, 2020-2040, 1.50% (CZK 2.6 billion).

Although the primary objective of these operations is to increase the liquidity of government bonds on secondary market, especially in case of the shortterm excess of demand over the supply of the particular bond, income from lending facilities has a positive impact on revenue of the state budget. The cash resources obtained from the repo operations, unless they are cash-neutral, are further invested for higher return on the money market within the efficient state treasury liquidity management. This enables increase in the investment income of the Ministry. In 2022, the contribution of the lending facilities to the total revenue from the investment activity amounted CZK 3.3 million.

In connection with the lending facilities and secondary market operations, the Ministry actively manages the balance of government bonds in its asset accounts with respect to the demand of primary dealers and recognized dealers.

#### Figure 57: Nominal Value of Carried out Lending Facilities



Note: The medium-term and long-term government bonds lending facilities are stated in the nominal value of collateral provided from the Ministry's asset account. Source: MoF

### **Appendix I**

#### **Evaluation Methodology for Primary Dealers Valid for 2022**

In order to support the participation of primary dealers in the sale of medium-term and long-term government bonds denominated in foreign currency, the Ministry newly decided to define different weights for government bonds in domestic and foreign currency.

As part of criterion A. Primary market participation, the share of the particular primary dealer in the primary market of government bonds, meaning the share of accepted bids at auctions of government bonds for the evaluated period, is monitored. Using the ratio of the accepted bids to the total nominal value of the submitted bids, the Ministry monitors the willingness of investors to hold medium-term and long-term government bonds. The important aspects of evaluating participation on the primary market include the auction pricing strategy, in which the Ministry evaluates the willingness of primary dealers to pay the highest price weighted by the nominal value of a government bond auction. In another subcriterion, a primary dealer is evaluated with more points if he is a regular participant at auctions, regardless of the evaluation period. The maximum number of points in the final sub-criterion is received by the primary dealer who subscribes the largest share of state treasury bills sold by the Ministry during the particular period.

Quantitative assessment under criterion B. Secondary market participation and market transactions, which is based primarily on the available statistical and monitoring tools of the MTS Czech Republic electronic trading platform, focuses on quotation activity, its quality, traded nominal values and operations carried out with the Ministry. The evaluation of the fulfilment of quoting obligations is further subject to the first sub-criterion. The quality of quotation activity means the evaluation of the average guoted spread weighted by time and total nominal value, which is further adjusted for the time to maturity of the given bond. Similarly, another sub-criterion that monitors the total traded nominal value is weighted by the time to maturity of the bond. In the following sub-criterion, the primary dealer is evaluated on the basis of the nominal value of the trades carried out by him within four groups of instrument types traded on the secondary market. The overall rating for the sub-criterion is then determined by the weighted average of these shares for the four groups identified. The fifth sub-criterion assesses the willingness of primary dealers to pay the highest price or receive the lowest price weighted by the total nominal value and the time to maturity of tap sales, buy-backs or exchanges of government bonds on the secondary market.

This methodology of primary dealers evaluation valid for 2022 remains unchanged for 2023.

A. Primary Market Participation	55 points	B. Secondary Market Participation and Market Transactions	45 points
A.1. Primary Auctions Share – T-Bonds	30 points	B.1. Quoting Obligations Performance on DETS	10 points
A.2. Dependability	5 points	B.2. Qualitative Performance on DETS	10 points
A.3. Auction Pricing Strategy	5 points	B.3. Traded Volume on DETS	10 points
A.4. Auction Participation	5 points	B.4. Ministry of Finance Market Transactions	10 points
A.5. Primary Auctions Share – T-Bills	10 points	B.5. Tap Issuance, Buy-Backs and Exchanges	5 points
		Pricing Strategy	

#### Table 26: Criteria for Evaluation of Primary Dealers Valid for 2022

Source: MoF

### Appendix II

#### Table 27: State Debt and State Financial Assets Portfolios Parameters

	31/12/ 2021	31/3/ 2022	30/6/ 2022	30/9/ 2022	31/12/ 2022
Total state debt (CZK bn)	2,465.7	2,593.9	2,707.7	2,890.4	2,894.8
Market value of state debt (CZK bn)	2,364.2	2,399.7	2,391.6	2,553.6	2,590.0
Short-term state debt (%)	10.8	10.2	11.9	12.7	12.1
Medium-term state debt (%)	42.6	45.3	46.6	47.1	47.0
T-Bills and other money market instruments (%)	2.0	2.1	6.0	9.6	5.1
Average time to maturity (years)	6.4	6.4	6.2	5.9	6.2
Interest re-fixing up to 1 year (%)	22.9	23.6	22.9	23.7	23.2
Average time to re-fixing (years)	5.9	5.7	5.5	5.2	5.6
Variable-rate state debt (%)	12.4	13.7	14.6	14.3	14.4
Modified duration (years)	5.0	4.7	4.3	4.1	4.4
Net foreign-currency exposure with the impact on the state debt level (%)	7.0	6.5	6.3	5.9	5.8
Net short-term foreign-currency exposure with the impact on the level of interest expenditure on state debt service (%)	5.3	4.9	4.1	3.6	3.6
Foreign currency state debt (%)	6.6	6.1	7.6	9.5	10.6
Share of EUR in state debt level net foreign currency exposure (%)	90.1	90.2	90.1	89.8	90.1
Share of EUR in interest expenditure on state debt net short-term foreign currency exposure (%)	91.2	91.2	89.5	88.4	88.8
Non-marketable state debt (%) <sup>1</sup>	4.0	3.7	7.1	8.8	9.8
Share of savings government bonds on state debt (%)	1.6	3.1	3.0	2.8	2.9
Marketable state debt (CZK bn)	2,327.2	2,417.3	2,436.0	2,554.8	2,526.4
Market value of marketable state debt (CZK bn)	2,227.8	2,229.7	2,131.2	2,232.1	2,236.8
Short-term marketable state debt (%)	10.6	10.1	8.6	7.5	7.9
Medium-term marketable state debt (%)	41.8	45.5	44.6	43.8	45.1
T-Bills and other money market instruments (%)	1.4	1.6	2.1	4.1	0.0
Average time to maturity (years)	6.4	6.4	6.4	6.2	6.3
Interest re-fixing up to 1 year (%)	21.4	20.9	17.2	16.4	17.1
Average time to re-fixing (years)	5.9	5.9	5.9	5.7	5.8
Variable-rate marketable state debt (%)	11.0	11.0	12.5	12.5	12.8
Modified duration (years)	5.1	4.8	4.6	4.4	4.6
Net foreign-currency exposure with the impact on the marketable state debt level (%)	4.1	3.9	1.9	0.2	0.2
Net short-term foreign-currency exposure with the impact on the level of interest expenditure on marketable state debt service (%)	3.8	3.6	0.9	0.2	0.2
Foreign-currency marketable state debt (%)	3.7	3.5	1.5	1.6	1.6
Share of EUR in marketable state debt level net foreign currency exposure (%)	94.1	94.3	88.6	0.0	0.0
Share of EUR in interest expenditure on marketable state debt net short-term foreign currency exposure (%)	100.0	100.0	100.0	100.0	100.0
Investment portfolios (CZK bn) <sup>2</sup>	52.2	52.9	53.8	54.7	37.0
Share of assets up to one year on total state debt (%)	2.1	2.0	2.0	1.9	1.3
Average yield (%)	2.0	4.0	5.6	6.8	6.8
Average time to maturity (years)	0.1	0.1	0.1	0.1	0.1
Modified duration (years)	0.1	0.1	0.1	0.1	0.1
<sup>1</sup> Excl. savings government bonds. <sup>2</sup> Incl. nuclear and pension portfolio. Source: MoF					

Issue name	Issue no.	ISIN	Maturity date	Nominal value outstanding	Nominal value booked on MoF's asset accounts
ČR, VAR %, 23	63	CZ0001003123	18/4/2023	88,309,000,000	900,000,000
ČR, 0.45 %, 23	97	CZ0001004600	25/10/2023	111,855,340,000	1,000,000,000
ČR, 5.70 %, 24	58	CZ0001002547	25/5/2024	88,600,000,000	1,400,000,000
ČR, VAR %, 24	147	CZ0001006498	22/10/2024	27,740,620,000	2,259,380,000
ČR, 0.00 %, 24	135	CZ0001006167	12/12/2024	40,390,380,000	10,609,620,000
ČR, 1.25 %, 25	120	CZ0001005870	14/2/2025	119,000,000,000	1,000,000,000
ČR, 2.40 %, 25	89	CZ0001004253	17/9/2025	129,180,000,000	6,820,000,000
ČR, 6.00 %, 26	148	CZ0001006506	26/2/2026	100,000,000,000	1,000,000,000
ČR, 1.00 %, 26	95	CZ0001004469	26/6/2026	149,000,000,000	1,000,000,000
ČR, 0.25 %, 27	100	CZ0001005037	10/2/2027	130,574,860,000	4,425,140,000
ČR, VAR %, 27	90	CZ0001004105	19/11/2027	119,000,000,000	1,000,000,000
ČR, 2.50 %, 28	78	CZ0001003859	25/8/2028	149,000,000,000	1,000,000,000
ČR, 5.50 %, 28	149	CZ0001006696	12/12/2028	41,502,560,000	4,650,920,000
ČR, 2.75 %, 29	105	CZ0001005375	23/7/2029	148,204,430,000	1,795,570,000
ČR, 0.05 %, 29	130	CZ0001006076	29/11/2029	80,571,600,000	4,428,400,000
ČR, 0.95 %, 30	94	CZ0001004477	15/5/2030	149,000,000,000	1,000,000,000
ČR, 5.00 %, 30	150	CZ0001006688	30/9/2030	62,084,790,000	5,096,390,000
ČR, 1.20 %, 31	121	CZ0001005888	13/3/2031	149,000,000,000	1,000,000,000
ČR, VAR %, 31	139	CZ0001006241	31/10/2031	88,941,760,000	1,194,820,000
ČR, 1.75 %, 32	138	CZ0001006233	23/6/2032	141,202,880,000	8,797,120,000
ČR, 2.00 %, 33	103	CZ0001005243	13/10/2033	149,000,000,000	1,000,000,000
ČR, 3.50 %, 35	145	CZ0001006431	30/5/2035	45,918,450,000	4,081,550,000
ČR, 4.20 %, 36	49	CZ0001001796	4/12/2036	79,000,000,000	1,000,000,000
ČR, 1.95 %, 37	142	CZ0001006316	30/7/2037	19,893,910,000	106,090,000
ČR, 1.50 %, 40	125	CZ0001005920	24/4/2040	56,739,200,000	3,260,800,000
ČR, 4.85 %, 57	53	CZ0001002059	26/11/2057	21,420,000,000	580,000,000
	То	tal CZK		2,485,129,780,000	70,405,800,000
ČR, 0.00 %, 24 II	146	CZ0001006480	24/4/2024	1,000,000,000	0
ČR, 0.00 %, 27	129	CZ0001006043	27/7/2027	500,000,000	0
	То	tal EUR		1,500,000,000	0

#### Table 28: Overview of Medium-Term and Long-Term Government Bonds on Domestic Market as at 31/12/2022

Note: Excl. nominal values of government bonds provided and/or received by the Ministry as collateral when realizing repo operations under treasury single accounts liquidity management and/or under lending facilities. Source: MoF

#### Table 29: Overview of Medium-Term and Long-Term Government Bonds on Foreign Markets as at 31/12/2022

ISIN	Currency	Maturity date	Nominal value outstanding	Nominal value booked on MoF's asset accounts
XS0240954361	JPY	16/1/2036	30,000,000,000	0
	Total JPY		30,000,000,000	0

Note: Excl. nominal values of government bonds provided and/or received by the Ministry as collateral when realizing repo operations under treasury single accounts liquidity management and/or under lending facilities. Source: MoF

#### Table 30: Overview of State Treasury Bills as at 31/12/2022

Issue no.	Maturity (weeks)	ISIN	Maturity date	Nominal value outstanding	Nominal value booked on MoF's asset accounts
872	52	CZ0001006803	1/12/2023	0	100,000,000,000
		Total		0	100,000,000,000

 U
 100,000,000,000

 Note: Excl. nominal values of government bonds provided and/or received by the Ministry as collateral when realizing repo operations under treasury single accounts liquidity management and/or under lending facilities. Source: MoF

#### Table 31: Oveview of Savings Government Bonds as at 31/12/2022

Issue name	Issue no.	ISIN	Maturity date	Nominal value outstanding	Nominal value booked on MoF's asset accounts
SD-R ČR, FIX %, 25	106	CZ0001005623	1/2/2025	2,885,901,830	0
SD-R ČR, FIX %, 25 II	107	CZ0001005631	1/4/2025	888,193,194	0
SD-R ČR, FIX %, 25 III	108	CZ0001005649	1/7/2025	365,371,184	0
SD-I ČR, CPI %, 25	110	CZ0001005714	1/7/2025	5,692,187,282	0
SD-R ČR, FIX %, 25 IV	111	CZ0001005730	1/10/2025	54,003,618	0
SD-I ČR, CPI %, 25 II	112	CZ0001005722	1/10/2025	1,324,465,625	0
SD-F ČR, 1.50 %, 25	113	CZ0001005748	1/10/2025	16,823,180	0
SD-R ČR, FIX %, 26	114	CZ0001005763	2/1/2026	50,966,758	0
SD-I ČR, CPI %, 26	115	CZ0001005771	2/1/2026	1,688,779,893	0
SD-F ČR, 1.25 %, 26	116	CZ0001005789	2/1/2026	16,050,938	0
SD-R ČR, FIX %, 26 II	117	CZ0001005813	1/4/2026	45,422,975	0
SD-I ČR, CPI %, 26 II	118	CZ0001005821	1/4/2026	2,203,957,632	0
SD-F ČR, 1.50 %, 26 II	119	CZ0001005805	1/4/2026	18,559,115	0
SD-R ČR, FIX %, 26 III	122	CZ0001005896	1/7/2026	111,211,295	0
SD-I ČR, CPI %, 26 III	123	CZ0001005904	1/7/2026	2,254,854,796	0
SD-F ČR, 1.30 %, 26 III	124	CZ0001005912	1/7/2026	59,949,387	0
SD-R ČR, FIX %, 26 IV	127	CZ0001006019	1/10/2026	40,185,616	0
SD-I ČR, CPI %, 26 IV	128	CZ0001006001	1/10/2026	4,594,370,204	0
SD-R ČR, FIX %, 26 V	131	CZ0001006092	31/12/2026	46,391,887	0
SD-I ČR, CPI %, 26 V	132	CZ0001006100	31/12/2026	5,153,651,333	0
SD-R ČR, FIX %, 27	133	CZ0001006134	1/4/2027	37,144,550	0
SD-I ČR, CPI %, 27	134	CZ0001006142	1/4/2027	3,474,048,682	0
SD-R ČR, FIX %, 27 II	136	CZ0001006209	1/7/2027	58,419,996	0
SD-I ČR, CPI %, 27 II	137	CZ0001006217	1/7/2027	4,853,640,930	0
SD-R ČR, FIX %, 27 III	140	CZ0001006282	1/10/2027	51,151,332	0
SD-I ČR, CPI %, 27 III	141	CZ0001006290	1/10/2027	6,288,468,268	0
SD-R ČR, FIX %, 28	143	CZ0001006324	3/1/2028	112,546,379	0
SD-I ČR, CPI %, 28	144	CZ0001006332	3/1/2028	41,018,523,912	0
	Tota	I		83,405,241,791	0

Source: MoF

#### Table 32a: Medium-Term and Long-Term Government Bonds Issued in 2022

Issue name	Issu trane no	che	Auction date	Settlement date	Maturity date	ССҮ	Max. nominal value offered in the competitive part of auction	Total nominal value sold
ČR, VAR %, 31	139	10	12/1	14/1	31/10/2031	CZK	4,000,000,000	4,141,720,000
ČR, 1.75 %, 32	138	12	12/1	14/1	23/6/2032	CZK	4,000,000,000	6,971,370,000
ČR, 1.50 %, 40	125	20	12/1	14/1	24/4/2040	CZK	2,000,000,000	2,305,190,000
ČR, 2.75 %, 29	105	20	26/1	28/1	23/7/2029	CZK	4,000,000,000	4,000,000,000
ČR, 1.75 %, 32	138	13	26/1	28/1	23/6/2032	CZK	4,000,000,000	4,063,390,000
ČR, 1.95 %, 37	142	3	26/1	28/1	30/7/2037	CZK	2,000,000,000	2,410,000,000
ČR, 0.05 %, 29	130	13	9/2	11/2	29/11/2029	CZK	4,000,000,000	4,475,000,000
ČR, 1.75 %, 32	138	14	9/2	11/2	23/6/2032	CZK	6,000,000,000	9,720,000,000
ČR, 1.50 %, 40	125	21	9/2	11/2	24/4/2040	CZK	2,000,000,000	2,000,000,000
ČR, 2.75 %, 29	105	21	23/2	25/2	23/7/2029	CZK	4,000,000,000	4,201,000,000
ČR, 3.50 %, 35	145	1	23/2	25/2	30/5/2035	CZK	6,000,000,000	6,105,000,000
ČR, 4.85 %, 57 ČR, VAR %, 31	53	13	23/2	25/2	26/11/2057	CZK	500,000,000	335,000,000 5,028,280,000
ČR, 3.50 %, 35	139 145	11 2	9/3 9/3	11/3	31/10/2031	CZK CZK	4,000,000,000 8,000,000,000	
ČR, 1.50 %, 40	145	2 22	9/3 9/3	11/3 11/3	30/5/2035 24/4/2040	CZK	2,000,000,000	9,260,050,000 1,274,420,000
ČR, 2.40 %, 25	89	22	23/3	25/3	17/9/2025	CZK	4,000,000,000	5,080,000,000
ČR, 1.75 %, 32	138	15	23/3	25/3	23/6/2032	CZK	6,000,000,000	6,175,300,000
ČR, 3.50 %, 35	145	3	23/3	25/3	30/5/2035	CZK	3,000,000,000	3,652,300,000
ČR, 2.40 %, 25	89	24	6/4	8/4	17/9/2025	CZK	3,000,000,000	3,100,000,000
ČR, VAR %, 31	139	12	6/4	8/4	31/10/2031	CZK	3,000,000,000	3,173,610,000
ČR, 3.50 %, 35	145	4	6/4	8/4	30/5/2035	CZK	1,000,000,000	1,170,000,000
ČR, VAR %, 24	147	1	20/4	22/4	22/10/2024	CZK	6,000,000,000	13,712,970,000
ČR, 6.00 %, 26	148	1	20/4	22/4	26/2/2026	CZK	6,000,000,000	6,879,040,000
ČR, 6.00 %, 26	148	2	11/5	13/5	26/2/2026	CZK	6,000,000,000	15,004,200,000
ČR, VAR %, 31	139	13	11/5	13/5	31/10/2031	CZK	4,000,000,000	3,999,610,000
ČR, VAR %, 24	147	2	25/5	27/5	22/10/2024	CZK	4,000,000,000	4,442,960,000
ČR, 6.00 %, 26	148	3	25/5	27/5	26/2/2026	CZK	6,000,000,000	14,912,700,000
ČR, 3.50 %, 35	145	5	25/5	27/5	30/5/2035	CZK	2,000,000,000	4,026,590,000
ČR, 6.00 %, 26	148	4	1/6	3/6	26/2/2026	CZK	7,000,000,000	11,250,310,000
ČR, VAR %, 31	139	14	1/6	3/6	31/10/2031	CZK	3,000,000,000	4,447,790,000
ČR, 2.00 %, 33	103	34	1/6	3/6	13/10/2033	CZK	2,000,000,000	2,858,990,000
ČR, VAR %, 24	147	3	15/6	17/6	22/10/2024	CZK	3,000,000,000	6,386,000,000
ČR, 6.00 %, 26	148	5	15/6	17/6	26/2/2026	CZK	7,000,000,000	6,571,000,000
ČR, 3.50 %, 35	145	6	15/6	17/6	30/5/2035	CZK	2,000,000,000	2,174,000,000
ČR, 6.00 %, 26	148	6	13/7	15/7	26/2/2026	CZK	6,000,000,000	6,000,000,000
ČR, VAR %, 31	139	15	13/7	15/7	31/10/2031	CZK	3,000,000,000	5,150,910,000
ČR, 3.50 %, 35	145	7	13/7	15/7	30/5/2035	CZK	2,000,000,000	2,445,000,000
ČR, VAR %, 24	147	4	27/7	29/7	22/10/2024	CZK	3,000,000,000	3,198,690,000
ČR, 6.00 %, 26	148 140	7	27/7	29/7	26/2/2026	CZK	10,000,000,000	12,452,390,000
ČR, 5.50 %, 28 ČR, 5.00 %, 30	149 150	1	10/8	12/8	12/12/2028	CZK	6,000,000,000	7,497,780,000
ČR, 5.00 %, 30 ČR, VAR %, 31	150 139	1 16	10/8 10/8	12/8 12/8	30/9/2030 31/10/2031	CZK	5,000,000,000 3,000,000,000	5,644,580,000 4,377,870,000
ČR, 0.00 %, 24	139 135	16 7	10/8 24/8	26/8	31/10/2031 12/12/2024	CZK CZK	3,000,000,000	4,377,870,000 1,425,000,000
ČR, 5.50 %, 28	135 149	2	24/8 24/8	26/8		CZK	6,000,000,000	5,470,000,000
UR, J.JU %, 28	149	2	24/ð	20/0	12/12/2028	CΖK	0,000,000,000	5,470,000,000

Issue name	Issı tran nc	che	Auction date	Settlement date	Maturity date	ССҮ	Max. nominal value offered in the competitive part of auction	Total nominal value sold
ČR, 5.00 %, 30	150	2	24/8	26/8	30/9/2030	CZK	6,000,000,000	6,000,000,000
ČR, 5.50 %, 28	149	3	31/8	2/9	12/12/2028	CZK	6,000,000,000	2,274,560,000
ČR, 5.00 %, 30	150	3	31/8	2/9	30/9/2030	CZK	6,000,000,000	6,010,000,000
ČR, 3.50 %, 35	145	8	31/8	2/9	30/5/2035	CZK	2,000,000,000	2,073,210,000
ČR, 6.00 %, 26	148	8	7/9	9/9	26/2/2026	CZK	6,000,000,000	8,008,390,000
ČR, 5.00 %, 30	150	4	7/9	9/9	30/9/2030	CZK	6,000,000,000	7,534,700,000
ČR, 1.75 %, 32	138	16	7/9	9/9	23/6/2032	CZK	2,000,000,000	2,105,900,000
ČR, 5.50 %, 28	149	4	14/9	16/9	12/12/2028	CZK	6,000,000,000	6,280,000,000
ČR, 5.00 %, 30	150	5	14/9	16/9	30/9/2030	CZK	6,000,000,000	6,694,900,000
ČR, VAR %, 31	139	17	14/9	16/9	31/10/2031	CZK	4,000,000,000	4,136,580,000
ČR, 5.50 %, 28	149	5	21/9	23/9	12/12/2028	CZK	6,000,000,000	7,100,000,000
ČR, 5.00 %, 30	150	6	21/9	23/9	30/9/2030	CZK	6,000,000,000	6,000,000,000
ČR, 3.50 %, 35	145	9	21/9	23/9	30/5/2035	CZK	2,000,000,000	911,700,000
ČR, 6.00 %, 26	148	9	5/10	7/10	26/2/2026	CZK	5,000,000,000	6,407,000,000
ČR, 5.00 %, 30	150	7	5/10	7/10	30/9/2030	CZK	6,000,000,000	6,195,000,000
ČR, 1.75 %, 32	138	17	5/10	7/10	23/6/2032	CZK	4,000,000,000	5,602,000,000
ČR, 5.50 %, 28	149	6	19/10	21/10	12/12/2028	CZK	6,000,000,000	5,760,000,000
ČR, 5.00 %, 30	150	8	19/10	21/10	30/9/2030	CZK	6,000,000,000	4,385,000,000
ČR, VAR %, 31	139	18	19/10	21/10	31/10/2031	CZK	3,000,000,000	3,482,830,000
ČR, 0.25 %, 27	100	28	9/11	11/11	10/2/2027	CZK	5,000,000,000	5,965,910,000
ČR, 1.75 %, 32	138	18	9/11	11/11	23/6/2032	CZK	4,000,000,000	5,073,940,000
ČR, 1.95 %, 37	142	4	9/11	11/11	30/7/2037	CZK	1,000,000,000	1,312,460,000
ČR, 5.00 %, 30	150	9	30/11	2/12	30/9/2030	CZK	3,000,000,000	4,914,430,000
ČR, 1.75 %, 32	138	19	30/11	2/12	23/6/2032	CZK	6,000,000,000	10,833,700,000
ČR, 3.50 %, 35	145	10	30/11	2/12	30/5/2035	CZK	1,000,000,000	1,720,600,000
ČR, 5.50 %, 28	149	7	14/12	16/12	12/12/2028	CZK	3,000,000,000	3,293,480,000
ČR, 5.00 %, 30	150	10	14/12	16/12	30/9/2030	CZK	6,000,000,000	6,796,180,000
ČR, 1.95 %, 37	142	5	14/12	16/12	30/7/2037	CZK	1,000,000,000	2,125,070,000
				Total CZK				377,967,550,00
ČR, 0.00 %, 24 II	146	1	20/4	22/4	24/4/2024	EUR	100,000,000	170,500,000
ČR, 0.00 %, 24 II	146	2	18/5	20/5	24/4/2024	EUR	200,000,000	572,700,000
				Total EUR				743,200,000

Source: MoF, CNB

#### Table 32b: Medium-Term and Long-Term Government Bonds Issued in 2022

Issue name	Issu tran ne		Coupon	Average net price	Average yield to maturity (% p.a.) <sup>1</sup>	Bid- to- cover ratio	Sold in the competitive part of the auction/ Max. nominal value offered (%)	Sold in the non- competitive part of the auction/ Max. nominal value offered (%)
ČR, VAR %, 31	139	10	VAR%	101.721	-28.517	1.16	97.25	6.29
ČR, 1.75 %, 32	138	12	1.75%	87.591	3.163	2.28	148.73	25.55
ČR, 1.50 %, 40	125	20	1.50%	75.395	3.317	2.17	101.50	13.76
ČR, 2.75 %, 29	105	20	2.75%	96.705	3.252	1.76	100.00	0.00
ČR, 1.75 %, 32	138	13	1.75%	87.900	3.130	2.61	100.00	1.58
ČR, 1.95 %, 37	142	3	1.95%	85.292	3.165	1.87	120.50	0.00
ČR, 0.05 %, 29	130	13	0.05%	80.356	2.901	2.92	111.88	0.00
ČR, 1.75 %, 32	138	14	1.75%	89.838	2.898	1.28	162.00	0.00
ČR, 1.50 %, 40	125	21	1.50%	77.630	3.131	2.25	100.00	0.00
ČR, 2.75 %, 29	105	21	2.75%	98.301	3.008	1.39	101.85	3.18
ČR, 3.50 %, 35	145	1	3.50%	105.555	2.985	1.63	101.75	0.00
ČR, 4.85 %, 57	53	13	4.85%	124.696	3.609	1.76	67.00	0.00
ČR, VAR %, 31	139	11	VAR%	100.576	-12.169	1.22	109.63	16.08
ČR, 3.50 %, 35	145	2	3.50%	99.462	3.550	1.17	100.00	15.75
ČR, 1.50 %, 40	125	22	1.50%	70.160	3.810	2.32	55.00	8.72
ČR, 2.40 %, 25	89	23	2.40%	93.808	4.351	2.10	127.00	0.00
ČR, 1.75 %, 32	138	15	1.75%	82.660	3.826	1.47	102.92	0.00
ČR, 3.50 %, 35	145	3	3.50%	95.811	3.910	2.53	121.74	0.00
ČR, 2.40 %, 25	89	24	2.40%	92.698	4.744	1.94	103.33	0.00
ČR, VAR %, 31	139	12	VAR%	100.986	-15.745	2.94	100.00	5.79
ČR, 3.50 %, 35	145	4	3.50%	96.360	3.856	2.23	117.00	0.00
ČR, VAR %, 24	147	1	VAR%	100.677	-29.738	2.26	214.17	14.38
ČR, 6.00 %, 26	148	1	6.00%	103.567	4.964	3.46	102.50	12.15
ČR, 6.00 %, 26	148	2	6.00%	101.909	5.433	2.01	234.00	16.07
ČR, VAR %, 31	139	13	VAR%	100.428	-9.436	2.95	98.53	1.47
ČR, VAR %, 24	147	2	VAR%	100.721	-46.516	3.79	109.20	1.87
ČR, 6.00 %, 26	148	3	6.00%	103.301	5.015	1.82	230.42	18.13
ČR, 3.50 %, 35	145	5	3.50%	89.571	4.578	2.36	190.02	11.31
ČR, 6.00 %, 26	148	4	6.00%	103.100	5.069	1.76	155.17	5.55
ČR, VAR %, 31	139	14	VAR%	100.439	-11.172	2.42	141.00	7.26
ČR, 2.00 %, 33	103	34	2.00%	76.860	4.669	2.30	134.10	8.85
ČR, VAR %, 24	147	3	VAR%	100.653	-49.146	2.53	209.17	3.70
ČR, 6.00 %, 26	148	5	6.00%	100.197	5.939	1.15	93.87	0.00
ČR, 3.50 %, 35	145	6	3.50%	81.037	5.591	1.37	108.70	0.00
ČR, 6.00 %, 26	148	6	6.00%	101.625	5.490	2.01	100.00	0.00
ČR, VAR %, 31	139	15	VAR%	100.341	-13.015	1.87	160.53	11.17
ČR, 3.50 %, 35	145	7	3.50%	90.658	4.465	1.53	121.00	1.25
ČR, VAR %, 24	147	4	VAR%	100.593	-50.499	2.18	96.00	10.62
ČR, 6.00 %, 26	148	7	6.00%	101.232	5.607	2.80	104.16	20.36
ČR, 5.50 %, 28	149	1	5.50%	107.395	4.140	1.91	111.58	13.38
ČR, 5.00 %, 30	150	1	5.00%	107.210	3.945	2.63	100.80	12.09
ČR, VAR %, 31	139	16	VAR%	100.417	-12.178	2.60	133.37	12.56
ČR, 0.00 %, 24	135	7	0.00%	88.461	5.486	1.72	47.50	0.00
ČR, 5.50 %, 28	149	2	5.50%	104.596	4.631	1.13	91.17	0.00

Issue name	Issue / tranche no.		Coupon	Average net price	Average yield to maturity (% p.a.) <sup>1</sup>	Bid- to- cover ratio	Sold in the competitive part of the auction/ Max. nominal value offered (%)	Sold in the non- competitive part of the auction/ Max. nominal value offered (%)
ČR, 5.00 %, 30	150	2	5.00%	103.432	4.482	1.19	100.00	0.00
ČR, 5.50 %, 28	149	3	5.50%	102.906	4.938	2.42	36.42	1.49
ČR, 5.00 %, 30	150	3	5.00%	101.521	4.765	1.06	100.17	0.00
ČR, 3.50 %, 35	145	8	3.50%	89.339	4.621	1.15	101.37	2.30
ČR, 6.00 %, 26	148	8	6.00%	101.992	5.350	1.35	124.85	8.63
ČR, 5.00 %, 30	150	4	5.00%	101.421	4.780	1.83	116.25	9.33
ČR, 1.75 %, 32	138	16	1.75%	77.957	4.596	4.81	100.50	4.80
ČR, 5.50 %, 28	149	4	5.50%	103.851	4.760	1.49	104.67	0.00
ČR, 5.00 %, 30	150	5	5.00%	102.718	4.584	1.45	111.58	0.00
ČR, VAR %, 31	139	17	VAR%	100.352	-8.731	1.74	102.00	1.41
ČR, 5.50 %, 28	149	5	5.50%	102.851	4.943	1.55	118.33	0.00
ČR, 5.00 %, 30	150	6	5.00%	101.487	4.768	1.41	100.00	0.00
ČR, 3.50 %, 35	145	9	3.50%	89.033	4.660	3.30	45.59	0.00
ČR, 6.00 %, 26	148	9	6.00%	101.755	5.413	2.07	128.14	0.00
ČR, 5.00 %, 30	150	7	5.00%	98.914	5.164	1.22	103.25	0.00
ČR, 1.75 %, 32	138	17	1.75%	75.391	5.012	1.92	140.05	0.00
ČR, 5.50 %, 28	149	6	5.50%	97.801	5.919	1.10	96.00	0.00
ČR, 5.00 %, 30	150	8	5.00%	94.469	5.885	1.23	73.08	0.00
ČR, VAR %, 31	139	18	VAR%	99.288	10.156	1.89	107.67	8.43
ČR, 0.25 %, 27	100	28	0.25%	79.735	5.762	2.61	100.00	19.32
ČR, 1.75 %, 32	138	18	1.75%	73.102	5.410	2.51	106.31	20.54
ČR, 1.95 %, 37	142	4	1.95%	66.182	5.321	4.36	110.00	21.25
ČR, 5.00 %, 30	150	9	5.00%	102.215	4.650	2.32	144.96	18.85
ČR, 1.75 %, 32	138	19	1.75%	78.074	4.641	1.41	159.97	20.59
ČR, 3.50 %, 35	145	10	3.50%	89.407	4.632	1.38	153.68	18.38
ČR, 5.50 %, 28	149	7	5.50%	104.820	4.547	2.71	105.00	4.78
ČR, 5.00 %, 30	150	10	5.00%	102.958	4.534	1.96	102.94	10.33
ČR, 1.95 %, 37	142	5	1.95%	73.900	4.409	2.73	200.00	12.51
			rage CZK			2.05	117.07	6.41
ČR, 0.00 %, 24 II	146	1	0.00%	98.757	0.626	1.73	170.50	-
ČR, 0.00 %, 24 II	146	2	0.00%	98.550	0.760	2.02	286.35	-
		Ave	rage EUR			1.88	228.43	-

<sup>1</sup> In case of variable-rate T-Bonds, average spread to PRIBOR in basis points (discount margin) is stated. Source: MoF, CNB

#### Table 33: State Treasury Bills Issued in 2022

Issue no.	Maturity (weeks)	Auction date	Issue date	Maturity date	Max. nominal value offered	Total nominal value sold	Yield to maturity (% p.a.)
839	4	13/1	14/1	11/2/2022	10,000,000,000	6,810,000,000	3.600
840	26	20/1	21/1	22/7/2022	10,000,000,000	0	-
841	4	27/1	28/1	25/2/2022	10,000,000,000	3,125,000,000	4.000
842	4	10/2	11/2	11/3/2022	10,000,000,000	9,826,000,000	4.240
843	4	24/2	25/2	25/3/2022	10,000,000,000	17,923,000,000	4.240
844	4	10/3	11/3	8/4/2022	10,000,000,000	18,151,000,000	4.470
845	4	24/3	25/3	22/4/2022	10,000,000,000	19,965,000,000	4.680
846	4	7/4	8/4	6/5/2022	10,000,000,000	18,617,000,000	4.790
847	4	21/4	22/4	20/5/2022	10,000,000,000	17,495,000,000	4.880
848	4	28/4	29/4	27/5/2022	10,000,000,000	6,360,000,000	4.990
849	4	5/5	6/5	3/6/2022	5,000,000,000	11,175,000,000	5.190
850	4	12/5	13/5	10/6/2022	5,000,000,000	12,136,000,000	5.490
851	4	19/5	20/5	17/6/2022	5,000,000,000	34,075,000,000	5.490
852	4	26/5	27/5	24/6/2022	5,000,000,000	11,447,000,000	5.460
853	4	2/6	3/6	1/7/2022	5,000,000,000	11,064,000,000	5.480
854	4	9/6	10/6	8/7/2022	5,000,000,000	12,070,000,000	5.590
855	4	16/6	17/6	15/7/2022	5,000,000,000	12,007,000,000	5.890
856	4	23/6	24/6	22/7/2022	5,000,000,000	15,358,000,000	6.450
857	4	30/6	1/7	29/7/2022	5,000,000,000	9,250,000,000	6.500
858	13	7/7	8/7	7/10/2022	5,000,000,000	12,136,000,000	6.650
859	4	14/7	15/7	12/8/2022	5,000,000,000	10,097,000,000	6.500
860	13	21/7	22/7	21/10/2022	5,000,000,000	13,565,000,000	6.650
861	4	28/7	29/7	26/8/2022	5,000,000,000	13,155,000,000	6.500
862	4	11/8	12/8	9/9/2022	5,000,000,000	31,210,000,000	6.500
863	13	18/8	19/8	18/11/2022	5,000,000,000	14,746,000,000	6.600
864	4	25/8	26/8	23/9/2022	5,000,000,000	16,355,000,000	6.500
865	13	8/9	9/9	9/12/2022	5,000,000,000	25,218,000,000	6.600
866	4	15/9	16/9	14/10/2022	5,000,000,000	15,655,000,000	6.500
867	13	22/9	23/9	23/12/2022	5,000,000,000	22,715,000,000	6.590
868	12	6/10	7/10	30/12/2022	5,000,000,000	14,352,000,000	6.550
869	4	13/10	14/10	11/11/2022	5,000,000,000	23,718,000,000	6.490
870	8	20/10	21/10	16/12/2022	5,000,000,000	16,144,000,000	6.490
871	4	3/11	4/11	2/12/2022	10,000,000,000	27,041,000,000	6.480
872 <sup>1</sup>	52	-	2/12	1/12/2023	-	-	-
			Tota	l		502,961,000,000	5.850 <sup>2</sup>

<sup>1</sup> Technical issue of state treasury bills. <sup>2</sup> Average weighted yield to maturity. Source: MoF, CNB

#### Table 34: Savings Government Bonds Issued in 2022

Issue name	Issue no.	Settlement date	Maturity date	Original maturity (years)	Total nominal value sold
SD-R ČR, FIX %, 261	114	2/1	2/1/2026	6.0	429,750
SD-I ČR, CPI %, 261	115	2/1	2/1/2026	6.0	85,838,964
SD-F ČR, 1.25 %, 26¹	116	2/1	2/1/2026	6.0	168,764
SD-R ČR, FIX %, 28	143	3/1	3/1/2028	6.0	112,546,379
SD-I ČR, CPI %, 28	144	3/1	3/1/2028	6.0	41,018,523,912
SD-R ČR, FIX %, 251	106	1/2	1/2/2025	6.0	36,336,344
SD-R ČR, FIX %, 25 $II^1$	107	1/4	1/4/2025	6.0	11,180,008
SD-R ČR, FIX %, 26 $II^1$	117	1/4	1/4/2026	6.0	382,974
SD-I ČR, CPI %, 26 II1	118	1/4	1/4/2026	6.0	178,634,920
SD-F ČR, 1.50 %, 26 II¹	119	1/4	1/4/2026	6.0	233,685
SD-R ČR, FIX %, 271	133	1/4	1/4/2027	6.0	184,799
SD-I ČR, CPI %, 271	134	1/4	1/4/2027	6.0	312,276,004
SD-R ČR, FIX %, 25 III¹	108	1/7	1/7/2025	6.0	4,600,426
SD-I ČR, CPI %, 251	110	1/7	1/7/2025	6.0	630,888,960
SD-R ČR, FIX %, 26 III¹	122	1/7	1/7/2026	6.0	937,422
SD-I ČR, CPI %, 26 III¹	123	1/7	1/7/2026	6.0	250,059,666
SD-F ČR, 1.30 %, 26 III¹	124	1/7	1/7/2026	6.0	655,256
SD-R ČR, FIX %, 27 $II^1$	136	1/7	1/7/2027	6.0	290,648
SD-I ČR, CPI %, 27 II¹	137	1/7	1/7/2027	6.0	602,061,801
SD-R ČR, FIX %, 25 IV1	111	1/10	1/10/2025	6.0	567,865
SD-I ČR, CPI %, 25 II¹	112	1/10	1/10/2025	6.0	175,958,104
SD-F ČR, 1.50 %, 25¹	113	1/10	1/10/2025	6.0	211,829
SD-R ČR, FIX %, 26 IV1	127	1/10	1/10/2026	6.0	254,637
SD-I ČR, CPI %, 26 IV1	128	1/10	1/10/2026	6.0	610,566,506
SD-R ČR, FIX %, 27 III <sup>1</sup>	140	1/10	1/10/2027	6.0	254,485
SD-I ČR, CPI %, 27 III¹	141	1/10	1/10/2027	6.0	937,756,220
		44,971,800,328			

<sup>1</sup> Incl. tranches issued in the form of reinvestment of yields. Source: MoF

#### Table 35a: Realized Lending Facilities of Government Bonds in the Form of Repo Operations in 2022

Issue name	ISIN	Collateral nominal value	Financial resources received	Financial resources paid <sup>1</sup>	
-			-	-	
Tota	al	-	-	-	

<sup>1</sup> Incl. financial resources from lending facilities realized in 2022, which has not been paid during this period. Source: MoF

## Table 35b: Realized Lending Facilities of Government Bonds in the Form of Collateralized Loans of Securities in 2022

Issue name	ISIN	Nominal value	<b>Revenue</b> <sup>1</sup>
ČR, VAR %, 24	CZ0001006498	250,000,000	39,809
ČR, 0.00 %, 24	CZ0001006167	300,000,000	29,383
ČR, 1.25 %, 25	CZ0001005870	100,000,000	7,019
ČR, 0.25 %, 27	CZ0001005037	1,000,000,000	298,758
ČR, 5.50 %, 28	CZ0001006696	700,000,000	116,692
ČR, 5.00 %, 30	CZ0001006688	1,000,000,000	172,441
ČR, 1.20 %, 31	CZ0001005888	640,000,000	171,120
ČR, VAR %, 31	CZ0001006241	150,000,000	23,634
ČR, 2.00 %, 33	CZ0001005243	568,000,000	74,414
ČR, 4.20 %, 36	CZ0001001796	5,000,000,000	855,424
ČR, 1.50 %, 40	CZ0001005920	2,647,000,000	379,265
То	tal	12,355,000,000	2,167,957

<sup>1</sup> Incl. financial resources from lending facilities realized in 2022, which has not been terminated during this period. <sup>2</sup> Incl. lending facility in the form of collateralized loans of securities from nuclear portfolio. Source: MoF

#### Table 36: Realized Exchange Operations of Government Bonds in 2022

Settlement		Tap-sale		Buy-back			
date	Issue name	Nominal value	Average price	Issue name	Nominal value	Average price	
28/11/2022	ČR, 6.00 %, 26	969,210,000	103.000	ČR, 0.45 %, 23	969,210,000	94.900	
29/11/2022	ČR, 0.95 %, 30	614,760,000	76.675	ČR, 0.45 %, 23	614,760,000	94.925	
30/11/2022	ČR, 2.75 %, 29	100,000,000	88.150	ČR, 0.45 %, 23	100,000,000	94.950	
30/11/2022	ČR, 0.05 %, 29	100,000,000	72.400	ČR, 0.45 %, 23	100,000,000	94.950	
5/12/2022	ČR, 1.95 %, 37	940,880,000	72.700	ČR, 0.45 %, 23	940,880,000	95.050	
5/12/2022	ČR, 1.50 %, 40	300,000,000	63.180	ČR, 0.45 %, 23	300,000,000	95.050	
6/12/2022	ČR, 2.75 %, 29	500,000,000	89.350	ČR, 0.45 %, 23	500,000,000	95.125	
6/12/2022	ČR, 1.20 %, 31	640,170,000	77.600	ČR, 0.45 %, 23	640,170,000	95.125	
7/12/2022	ČR, 5.50 %, 28	351,740,000	104.350	ČR, 0.45 %, 23	351,740,000	95.175	
21/12/2022	ČR, 5.50 %, 28	1,000,000,000	103.300	ČR, 0.45 %, 23	1,000,000,000	95.275	
22/12/2022	ČR, 5.00 %, 30	410,000,000	101.050	ČR, 0.45 %, 23	410,000,000	95.275	
22/12/2022	ČR, 1.95 %, 37	500,000,000	70.490	ČR, 0.45 %, 23	1,000,000,000	95.275	
29/12/2022	ČR, 0.25 %, 27	608,950,000	82.400	ČR, 0.45 %, 23	1,217,900,000	95.300	
Total 7,035,710,000 8,144,660,000							

Source: MoF

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#### Table 37: Buy-Backs of Government Bonds in 2022

Issue name	Issue no.	Settlement date	Maturity date	Average price	Currency	Nominal value
-	-	-	-	-		
		Total				
Source: MoF						

#### Table 38: Tap Sales of Government Bonds in 2022

Issue name	Issue no.	Settlement date	Maturity date	Average price	ССҮ	Nominal value
ČR, 1.75 %, 32	138	19/1/2022	23/6/2032	88.500	CZK	1,450,000,000
ČR, 1.50 %, 40	125	19/1/2022	24/4/2040	76.650	CZK	500,000,000
ČR, 1.50 %, 40	125	2/2/2022	24/4/2040	75.200	CZK	250,000,000
ČR, 1.50 %, 40	125	18/2/2022	24/4/2040	77.400	CZK	300,000,000
ČR, 1.95 %, 37	142	21/2/2022	30/7/2037	86.320	CZK	1,450,000,000
ČR, 1.50 %, 40	125	22/2/2022	24/4/2040	77.700	CZK	1,100,000,000
ČR, 1.75 %, 32	138	3/3/2022	23/6/2032	89.891	CZK	1,500,000,000
ČR, 1.95 %, 37	142	4/3/2022	30/7/2037	86.000	CZK	1,600,000,000
ČR, 2.75 %, 29	105	7/3/2022	23/7/2029	97.700	CZK	480,000,000
ČR, 1.75 %, 32	138	8/3/2022	23/6/2032	89.000	CZK	3,150,000,000
ČR, 3.50 %, 35	145	4/4/2022	30/5/2035	97.200	CZK	1,685,000,000
ČR, 3.50 %, 35	145	5/4/2022	30/5/2035	97.200	CZK	270,000,000
ČR, 3.50 %, 35	145	6/4/2022	30/5/2035	97.200	CZK	1,400,000,000
ČR, 6.00 %, 26	148	26/4/2022	26/2/2026	103.750	CZK	1,300,000,000
ČR, VAR %, 31	139	26/4/2022	31/10/2031	101.050	CZK	1,000,000,000
ČR, 3.50 %, 35	145	28/4/2022	30/5/2035	92.700	CZK	750,000,000
ČR, 6.00 %, 26	148	5/5/2022	26/2/2026	103.540	CZK	1,800,000,000
ČR, 6.00 %, 26	148	10/5/2022	26/2/2026	101.900	CZK	1,500,000,000
ČR, 3.50 %, 35	145	10/5/2022	30/5/2035	90.060	CZK	150,000,000
ČR, 3.50 %, 35	145	16/5/2022	30/5/2035	85.978	CZK	500,000,000
ČR, 6.00 %, 26	148	17/5/2022	26/2/2026	101.909	CZK	1,700,000,000
ČR, 6.00 %, 26	148	18/5/2022	26/2/2026	101.909	CZK	1,200,000,000
ČR, 6.00 %, 26	148	19/5/2022	26/2/2026	102.070	CZK	616,760,000
ČR, VAR %, 31	139	9/6/2022	31/10/2031	100.440	CZK	1,544,000,000
ČR, 6.00 %, 26	148	27/6/2022	26/2/2026	100.450	CZK	3,429,000,000
ČR, 3.50 %, 35	145	28/6/2022	30/5/2035	87.010	CZK	1,050,000,000
ČR, 3.50 %, 35	145	11/7/2022	30/5/2035	90.050	CZK	1,575,000,000
ČR, 2.00 %, 33	103	12/7/2022	13/10/2033	78.400	CZK	230,000,000
ČR, 3.50 %, 35	145	12/7/2022	30/5/2035	90.100	CZK	1,550,000,000
ČR, 3.50 %, 35	145	16/8/2022	30/5/2035	97.000	CZK	500,000,000
ČR, 2.00 %, 33	103	17/8/2022	13/10/2033	83.932	CZK	94,770,000
ČR, 3.50 %, 35	145	17/8/2022	30/5/2035	97.000	CZK	1,300,000,000
ČR, 1.75 %, 32	138	18/8/2022	23/6/2032	83.800	CZK	2,600,000,000
ČR, 3.50 %, 35	145	18/8/2022	30/5/2035	97.230	CZK	1,650,000,000
ČR, 5.00 %, 30	150	19/8/2022	30/9/2030	106.820	CZK	1,500,000,000
ČR, 5.50 %, 28	149	16/11/2022	12/12/2028	102.500	CZK	2,475,000,000
ČR, 1.20 %, 31	121	16/11/2022	13/3/2031	75.044	CZK	150,000,000
ČR, 1.95 %, 37	142	25/11/2022	30/7/2037	71.500	CZK	500,000,000
ČR, 1.50 %, 40	125	25/11/2022	24/4/2040	62.070	CZK	500,000,000
		Tota	I CZK			46,299,530,000
ČR, 0.00 %, 24 II	146	1/7/2022	24/4/2024	97.426	EUR	256,800,000
		Tota	I EUR			256,800,000

Source: MoF

#### Table 39: Detailed Overview of Budgetary Transfers from the State Debt Chapter Realized in 2022

Chapter number	Chapter	Funds allocation	Amount (CZK)
374	State Material Reserves Administration	Purchase and protection of state material reserves	4,000,000,000
398	General Treasury Management	Strengthening the reserve for crisis situations	272,995,181
307	Ministry of Defence	Increase in expenditure of Chapter 396 – State debt	(-) 2,000,000,000
		Total	2,272,995,181

Note: (-) means budgetary transfers in favour of Chapter 396 – State debt Source: MoF

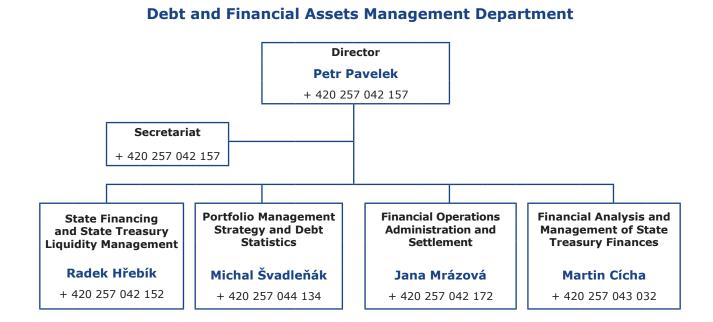
#### Table 40: FX Market Operations in 2022

Counterparty	EUR (thous)	USD (thous)	CHF (thous)	SEK (thous)	CZK (mil)	Savings (CZK) <sup>1</sup>	Share of savings (%)
Komerční banka, a.s.	205,127.6	160,726.5	17,135.0	8,139.2	9,296.6	39.5	39.1
Česká spořitelna, a.s.	131,269.6	175,592.2	0.0	0.0	7,333.5	27.2	26.9
Deutsche Bank AG, Prague Branch	89,114.3	886.8	0.0	447,900.0	3,265.9	15.2	15.0
PPF banka a.s.	52,077.7	5,559.0	0.0	0.0	1,401.7	6.3	6.2
Citibank Europe plc	37,231.9	10,773.2	0.0	0.0	1,150.1	5.2	5.1
Československá obchodní banka, a. s.	48,380.9	4,828.1	122.0	0.0	1,315.8	5.1	5.1
UniCredit Bank AG	10,053.6	2,438.5	370.8	0.0	313.3	1.4	1.4
ING Bank N.V.	7,332.5	0.0	406.1	0.0	190.6	0.9	0.9
HSBC Continental Europe	645.2	0.0	0.0	0.0	15.7	0.1	0.1
J.P. Morgan SE	0.0	0.0	677.8	0.0	16.0	0.1	0.1
Total	581,233.4	360,804.3	18,711.6	456,039.2	24,299.2	101.0	100.0

<sup>1</sup> State budget savings made through the intermediation of foreign currency payments from and to the state budget given by the exchange rate announced by the CNB and the exchange rate on FX market Source: MoF

### **Key Information 2022**

- State debt at the level of CZK 2,894.8 bn, i.e. 42.9% GDP
- Financing needs: CZK 635.6 bn
- Gross borrowing requirement: CZK 712.0 bn
- Gross issue of T-Bonds on domestic market denominated in local currency: CZK 431.3 bn
- Gross issue of T-Bonds on domestic market denominated in euro: EUR 1.0 bn
- Gross issue of T-Bonds on foreign markets: CZK 0.0 bn
- Gross issue of savings government bonds: CZK 45.0 bn
- Redemptions of T-Bonds issued on domestic market denominated in local currency: CZK 153.5 bn
- Redemptions of T-Bonds issued on foreign markets: EUR 2.75 bn
- Redemptions of savings government bonds: CZK 0.4 bn
- Average weighted time to maturity of sold T-Bonds denominated in local currency: 7.7 years
- Average weighted yield to maturity of sold T-Bonds denominated in local currency: 4.81% p.a.
- Net revenue within liquidity management and borrowing operations with negative yield: CZK 22.6 bn
- Average time to maturity of state debt: 6.2 years
- Short-term state debt: 12.1%
- Average time to re-fixing of state debt: 5.6 years
- Interest re-fixing of the debt portfolio within 1 year: 23.2%



### Contacts

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The publication was prepared based on the information available on 28 February 2023 and is also available online at:

#### www.mfcr.cz/statedebt

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