GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

ÁKK

GOVERNMENT SECURITIES MARKET

MONTHLY REPORT
NOVEMBER 2022

The Central Government Debt increased by HUF 4,094.3 billion to HUF 44,791.4 billion in 2022. Total net issuance was HUF 2,965.8 billion; out of which net HUF denominated issuance including repos was HUF 1,003.1 billion and net foreign currency denominated issuance was HUF 1,962.6 billion in 2022.

CENTRAL GOVERNMENT DEBT

(HUF billion)	2021		2022		Change	
	December	%	November	%	HUF billion	%
HUF denominated debt	32,121.2	78.9	33,124.4	74.0	1,003.1	3.1
Loans	1,307.7	3.2	1,077.3	2.4	-230.4	-17.6
Government bonds	20,220.0	49.7	21,798.2	48.7	1,578.2	7.8
Retail securities	10,010.3	24.6	8,646.2	19.3	-1,364.0	-13.6
Discount treasury bills	583.2	1.4	1,602.6	3.6	1,019.4	174.8
Foreign exchange denominated debt	8,395.2	20.6	11,304.3	25.2	2,909.1	34.7
Total	40,516.4	99.6	44,428.6	99.2	3,912.3	9.7
Other obligations	180.6	0.4	362.7	0.8	182.1	100.8
Total central government debt	40,697.0	100.0	44,791.4	100.0	4,094.3	10.1

The HUF denominated debt of the central government increased by HUF 1,003.1 billion in 2022. The increase in domestic debt was the result of the net government bond issuance of HUF 1,578.2 billion and the increase of discount Treasury bills by HUF 1,019.4 billion. The total amount of retail government securities decreased by HUF 1,364.0 billion. The majority of the demand for retail government securities was the sale of Premium Hungarian Government Securities with a maturity of more than one year. The volume of HUF loans decreased by HUF 230.4 billion in 2022.

The foreign currency debt of the central government increased by HUF 2,909.1 billion in 2022. The increase was mainly due to the foreign currency bonds issuance in February, June and November. The issuance of Japanese yen-denominated Samurai bonds was in total amount of 205.4 billion forints (75.3 billion yen) in February, and the foreign currency bonds issuance was in total amount of 1,441.3 billion forints (3 billion USD and 750 million EUR) in June. In November, the foreign currency Green Bonds in the amount of 410.5 billion forints (1 million EUR) and Green Panda Bonds in the amount of 110.9 billion forints (2 million yuan) were issued. The drawdown of foreign currency loans further increased the foreign currency debt by HUF 346.5 billion and the issuance of domestic foreign currency bonds grew by HUF 126.1 billion. The exchange rate revaluations totalling HUF 946.5 billion increased the Hungarian forint value of the foreign currency debt. Foreign currency debt was decreased by the redemptions of domestic foreign currency bond by HUF 232.0 billion, the foreign currency bond repayments by HUF 414.3 billion and the foreign currency loan redemptions by HUF 31.9 billion.
The total amount of other liabilities increased by HUF 182.1 billion in 2022.

BENCHMARK YIELDS

Maturity	30.12.2021	30.09.2022	30.11.2022	Change in November basis point
3-month	2.16	11.57	11.47	12
6-month	2.61	12.37	13.43	53
1-year	3.57	13.34	12.92	-40
3-year	4.19	11.70	9.16	-291
5-year	4.35	10.26	8.74	-277
10-year	4.51	9.78	8.18	-190
15-year	4.72	9.44	7.85	-146
20-year	4.75	9.45	7.86	-135

Monthly OTC turnover of government securities increased by 2% to HUF 9,726.5 billion in November. Primary dealers, who account for the decisive part of all secondary government securities trading, made 71% of their secondary government securities deals with non-resident investors.

The volume of non-residents' holdings of Hungarian government securities decreased altogether by HUF 331.1 billion in November and mounted to HUF 5,582.6 billion at the end of November. This volume represented 17.4% of the total amount of domestic government securities.

The EUR/HUF exchange rate according to the National Bank of Hungary was 407.67 on the last working day of November.

The credit rating of the long-term foreign currency debt of Hungary is as follows on the last working day of November:

BBB (Standard & Poor's);
Baa2 (Moody's);
BBB (Fitch).

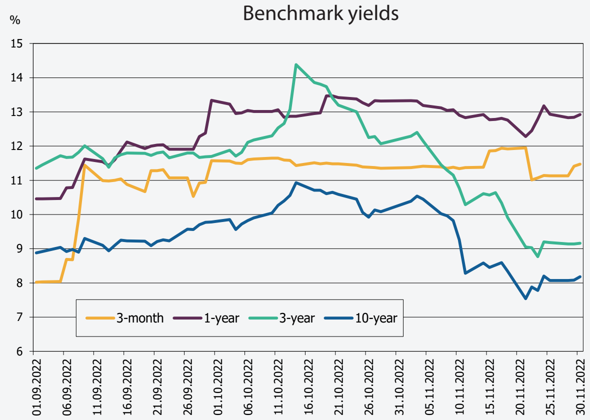
CENTRAL GOVERNMENT GROSS DEBT

HUF BILLION

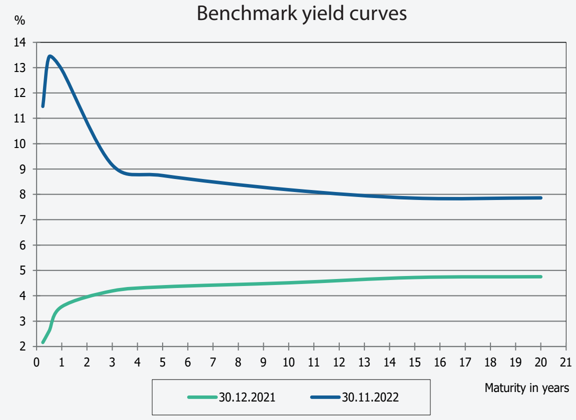
	2017	2018	2019	2020	2021	2022 September	2022 October	2022 November
1. Forint denominated debt	20,689.4	22,796.0	24,357.1	29,237.3	32,121.2	33,147.4	32,994.7	33,124.4
1.1. Loans	1,041.1	1,167.7	1,208.1	1,161.6	1,307.7	1,213.2	1,189.2	1,077.3
1.2. Government securities	19,648.3	21,628.3	23,149.0	28,075.7	30,813.5	31,934.1	31,805.5	32,047.0
1.2.1. Public issues	19,609.2	21,589.1	23,109.8	28,036.5	30,813.5	31,934.1	31,805.5	32,047.0
1.2.1.1. Bonds	11,767.1	12,836.1	13,378.5	18,206.6	20,220.0	21,905.9	21,557.2	21,798.2
1.2.1.2. Discount T-bills	1,039.2	1,237.3	657.3	658.2	583.2	1,072.9	1,250.4	1,602.6
1.2.1.3. Retail securities	6,802.9	7,515.7	9,074.0	9,171.7	10,010.2	8,955.3	8,997.9	8,646.2
1.2.2. Private placements	39.2	39.2	39.2	39.2	0.0	0.0	0.0	0.0
2. Foreign currency denominated debt*	5,782.5	5,724.8	5,121.2	7,318.2	8,395.2	10,965.1	10,771.5	11,304.3
2.1. Loans	929.1	795.0	825.4	1,291.1	1,345.2	1,697.3	1,705.8	1,809.1
2.1.1. Foreign loans	929.1	795.0	825.4	1,291.1	1,345.2	1,697.3	1,705.8	1,809.1
2.1.2. Domestic loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.2. Government securities	4,853.5	4,929.8	4,295.8	6,027.1	7,049.9	9,267.8	9,065.7	9,495.2
2.2.1. Issued abroad	4,145.9	4,246.2	3,713.5	5,481.3	6,594.9	8,868.5	8,670.5	9,096.4
2.2.2. Issued domestically	707.6	683.6	582.3	545.9	455.0	399.3	395.2	398.8
Total	26,472.0	28,520.7	29,478.3	36,555.5	40,516.4	44,112.4	43,766.2	44,428.6
Other liabilities	274.20	167.40	203.70	128.80	180.60	644.50	525.20	362.70
Total central government debt	26,746.2	28,688.2	29,682.0	36,684.3	40,697.0	44,756.9	44,291.5	44,791.4
Marketable HUF debt (1.2.1.1+1.2.1.2+1.2.2)	12,845.5	14,112.6	14,075.0	18,904.0	20,803.2	22,978.8	22,807.6	23,400.8
Gross debt/GDP	68.1%	66.1%	62.3%	75.8%	73.8%			

* Foreign exchange debt is recorded at the mid exchange rate of the NBH at the end of the year/month.

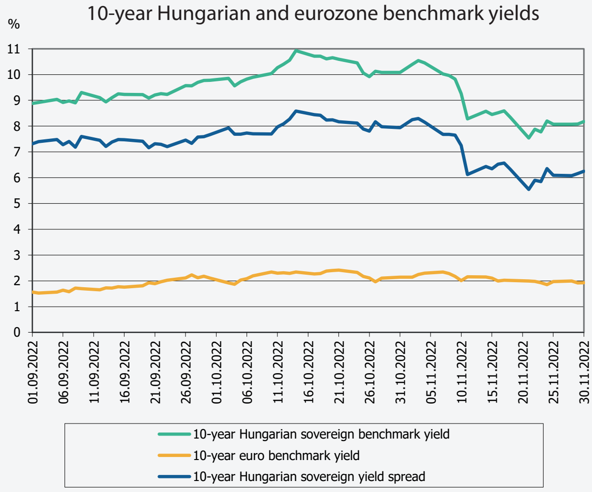
Benchmark yields



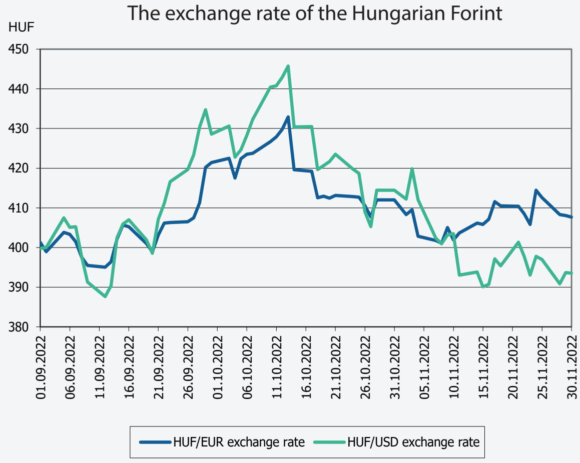
Benchmark yield curves



10-year Hungarian and eurozone benchmark yields



The exchange rate of the Hungarian Forint

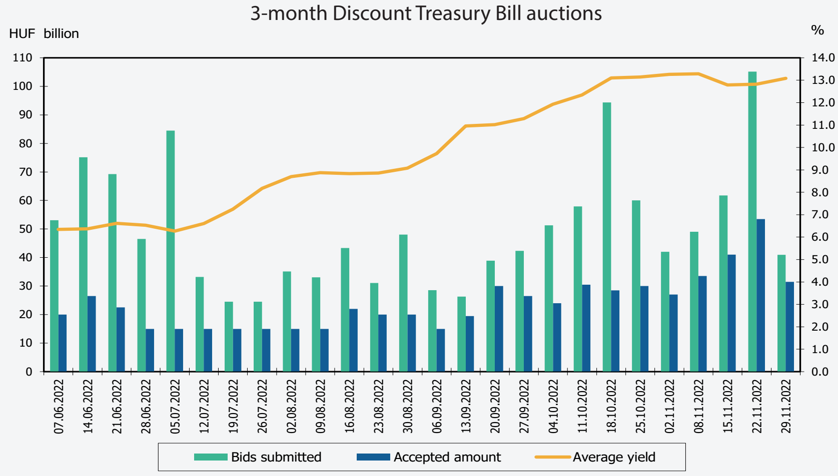


DISCOUNT TREASURY BILL AUCTION RESULTS

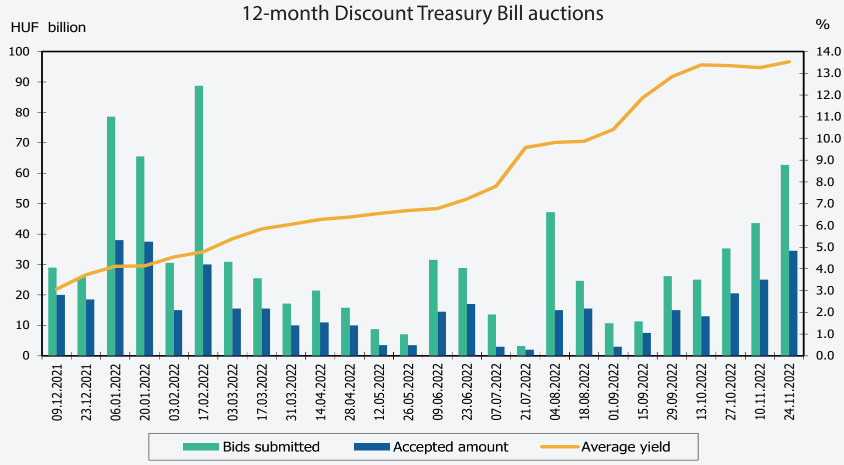
	3-month Discount T-bills					6-month Discount T-bills*					12-month Discount T-bills	
Code of T-bills	D230208	D230215	D230222	D230301	D230308	D230517	D230517	D230517	D230517	D230517	D231018	D231018
ISIN code	HU0000524400	HU0000524418	HU0000524038	HU0000524426	HU0000524434	HU0000524483	HU0000524483	HU0000524483	HU0000524483	HU0000524483	HU0000524376	HU0000524376
Maturity in days	91	91	91	91	91	189	182	175	168	161	336	322
Date of auction	02.11.2022	08.11.2022	15.11.2022	22.11.2022	29.11.2022	02.11.2022	09.11.2022	16.11.2022	23.11.2022	30.11.2022	10.11.2022	24.11.2022
Date of financial settlement	09.11.2022	16.11.2022	23.11.2022	30.11.2022	07.12.2022	09.11.2022	16.11.2022	23.11.2022	30.11.2022	07.12.2022	16.11.2022	30.11.2022
Redemption date	08.02.2023	15.02.2023	22.02.2023	01.03.2023	08.03.2023	17.05.2023	17.05.2023	17.05.2023	17.05.2023	17.05.2023	18.10.2023	18.10.2023
Maximum yield (%) - ISMA	13.49	13.60	13.25	13.50	13.50	13.58	13.99	13.85	13.75	14.00	13.59	13.79
Minimum yield (%) - ISMA	11.50	11.30	11.79	11.50	10.00	12.82	13.00	13.00	12.00	12.00	12.50	12.80
Average yield (%) - ISMA	13.26	13.28	12.79	12.82	13.09	13.31	13.56	13.60	13.43	13.62	13.26	13.53
Maximum yield (%) - EHM	13.68	13.79	13.43	13.69	13.69	13.77	14.18	14.04	13.94	14.19	13.78	13.98
Minimum yield (%) - EHM	11.66	11.46	11.95	11.66	10.14	13.00	13.18	13.18	12.17	12.17	12.67	12.98
Average yield (%) - EHM	13.45	13.47	12.97	13.00	13.27	13.50	13.75	13.79	13.61	13.81	13.44	13.72
Average selling price (%)	96.7565	96.7513	96.8676	96.8608	96.7977	93.4667	93.5858	93.7986	94.1030	94.2582	88.9883	89.2022
Amount offered for sale (HUF million)	20,000.00	20,000.00	20,000.00	25,000.00	25,000.00	15,000.00	20,000.00	20,000.00	20,000.00	20,000.00	15,000.00	15,000.00
Amount of bids submitted (HUF million)	41,985.26	49,046.98	61,744.08	105,119.55	40,948.79	15,565.64	17,519.37	33,974.37	42,370.15	25,731.73	43,625.98	62,711.29
Amount of bids accepted (HUF million)	26,999.98	33,500.00	40,999.97	53,500.00	31,499.98	12,000.00	15,000.00	20,000.00	31,000.00	20,000.00	24,999.99	34,499.99
Bid-to-cover ratio	1.56	1.46	1.51	1.96	1.30	1.30	1.17	1.70	1.37	1.29	1.75	1.82
Bids submitted (pcs)	81	94	107	101	72	36	50	69	75	56	67	72
Bids accepted (pcs)	67	85	49	92	65	35	47	58	62	52	50	47
Market sales (HUF million)	26,999.98	33,500.00	40,999.97	53,500.00	31,499.98	12,000.00	15,000.00	20,000.00	31,000.00	20,000.00	24,999.99	34,499.99
Retained on ÁKK's own account (HUF million)	20,000.02	20,000.00	0.03	20,000.00	20,000.02	-	4,500.00	-	3,000.00	11,500.00	12,000.01	13,800.01
Total amount issued (HUF million)	47,000.00	53,500.00	41,000.00	73,500.00	51,500.00	12,000.00	19,500.00	20,000.00	34,000.00	31,500.00	37,000.00	48,300.00

* ÁKK introduced the 6-month Discount Treasury Bill from the end of September 2022.

3-month Discount Treasury Bill auctions



12-month Discount Treasury Bill auctions

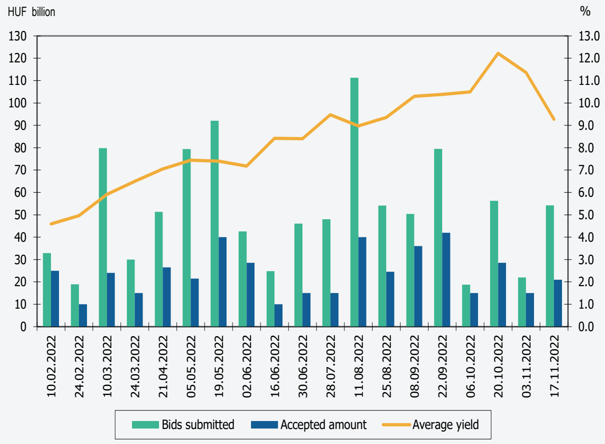


GOVERNMENT BOND AUCTION RESULTS

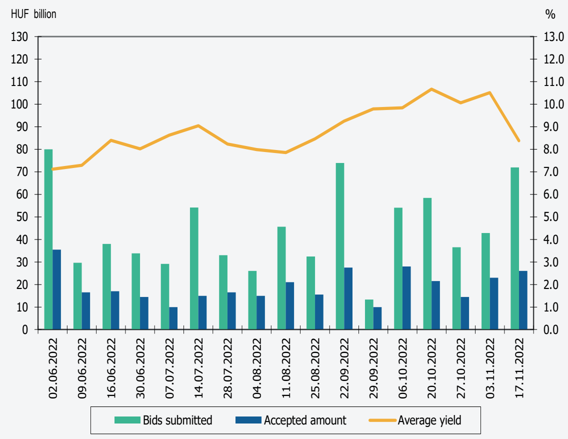
Government Bond	2028/B	2032/A	2041/A	2032/B
ISIN code	HU0000405543	HU0000405550	HU0000404165	HU0000406087
Maturity (in years)	5	10	20	10
Coupon	4.50%	4.75%	3.00%	13.78%
Auction	20th auction	22nd auction	41st auction	3rd auction
Date of auction	03.11.2022	03.11.2022	03.11.2022	10.11.2022
Date of financial settlement	09.11.2022	09.11.2022	09.11.2022	16.11.2022
Redemption date	23.03.2028	24.11.2032	25.04.2041	25.08.2032
Maximum annual yield (%) - ISMA	11.87	10.56	9.86	-
Minimum annual yield (%) - ISMA	10.86	10.15	9.55	-
Average annual yield (%) - ISMA	11.35	10.51	9.80	-
Maximum annual yield (%) - EHM	11.86	10.55	9.85	-
Minimum annual yield (%) - EHM	10.85	10.14	9.54	-
Average annual yield (%) - EHM	11.34	10.50	9.80	-
Maximum price (%)	75.0410	66.9444	44.1173	97.0000
Minimum price (%)	71.8364	65.0522	42.6554	96.4400
Average price (%)	73.4474	65.2935	42.9108	96.6500
Amount offered for sale (HUF million)	15,000.00	10,000.00	5,000.00	15,000.00
Amount of bids submitted (HUF million)	21,966.08	42,858.52	25,030.00	31,860.00
Amount of bids accepted (HUF million)	15,000.00	22,999.99	6,499.98	21,000.00
Bid-to-cover ratio	1.46	1.86	3.85	1.52
Bids submitted (pcs)	27	47	42	33
Bids accepted (pcs)	14	32	21	25
Tail (%) (average price - minimum price)	1.61	0.24	0.26	0.21
Market sales (HUF million)	15,000.00	22,999.99	6,499.98	21,000.00
Non-competitive offer (HUF million)	0.00	5,338.92	1,584.43	3,668.00
Total amount sales (HUF million)	15,000.00	28,338.91	8,084.41	24,668.00

Government Bond	2025/C	2028/B	2032/A	2032/B
ISIN code	HU0000404058	HU0000405543	HU0000405550	HU0000406087
Maturity (in years)	3	5	10	10
Coupon	1.00%	4.50%	4.75%	13.78%
Auction	32nd auction	21st auction	23rd auction	4th auction
Date of auction	17.11.2022	17.11.2022	17.11.2022	24.11.2022
Date of financial settlement	23.11.2022	23.11.2022	23.11.2022	30.11.2022
Redemption date	26.11.2025	23.03.2028	24.11.2032	25.08.2032
Maximum annual yield (%) - ISMA	10.21	9.28	8.40	-
Minimum annual yield (%) - ISMA	10.15	9.23	8.35	-
Average annual yield (%) - ISMA	10.18	9.27	8.38	-
Maximum annual yield (%) - EHM	10.20	9.27	8.39	-
Minimum annual yield (%) - EHM	10.14	9.22	8.34	-
Average annual yield (%) - EHM	10.17	9.26	8.38	-
Maximum price (%)	77.2513	80.7053	76.2103	96.7500
Minimum price (%)	77.1263	80.5280	75.9272	96.4500
Average price (%)	77.1844	80.5738	76.0223	96.5400
Amount offered for sale (HUF million)	30,000.00	10,000.00	15,000.00	15,000.00
Amount of bids submitted (HUF million)	84,345.17	54,251.00	71,977.40	23,805.00
Amount of bids accepted (HUF million)	52,000.00	21,000.00	25,999.99	18,000.00
Bid-to-cover ratio	1.62	2.58	2.77	1.32
Bids submitted (pcs)	60	48	51	20
Bids accepted (pcs)	20	17	18	13
Tail (%) (average price - minimum price)	0.06	0.05	0.10	0.09
Market sales (HUF million)	52,000.00	21,000.00	25,999.99	18,000.00
Non-competitive offer (HUF million)	2,000.00	280.00	120.00	6,202.00
Total amount sales (HUF million)	54,000.00	21,280.00	26,119.99	24,202.00

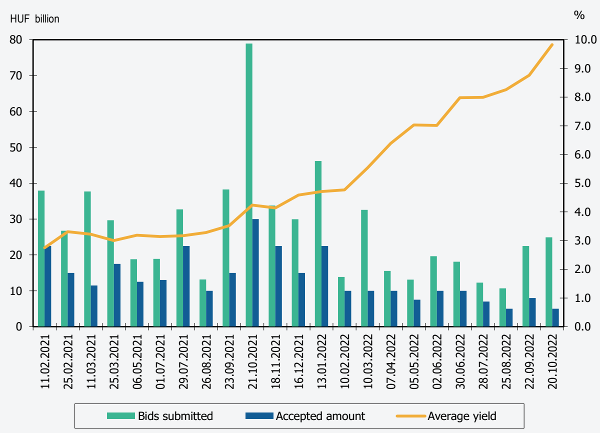
5-year government bond auctions



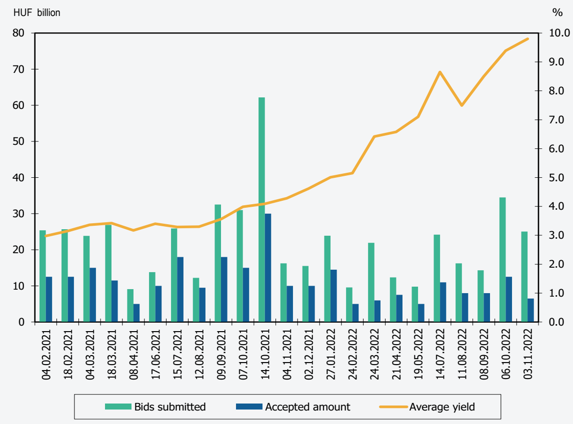
10-year government bond auctions



15-year government bond auction



20-year government bond auctions



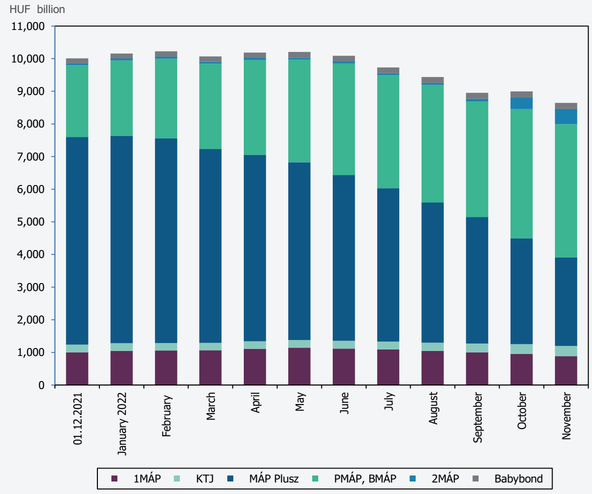
INTEREST RATE RESETS OF FLOATING RATE GOVERNMENT BONDS IN NOVEMBER 2022

Government bond	Date of interest rate reset	Interest period		Date of interest payment	Reset interest rate	Interest payable
2032/S	29.11.2022	02.12.2022	02.12.2023	04.12.2023	8.10%	8.10%
2029/B	17.11.2022	22.11.2022	22.02.2023	22.02.2023	15.62%	3.99%

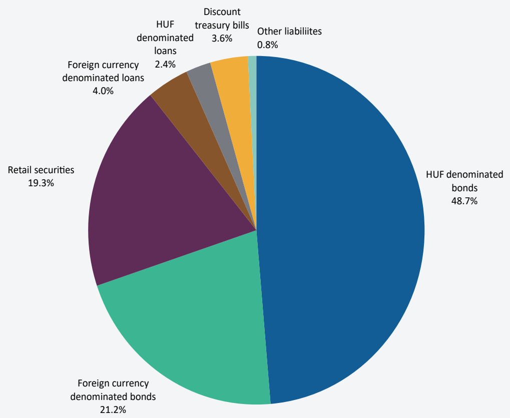
OUTSTANDING AMOUNT OF RETAIL SECURITIES

Retail securities	HUF billion		
	31.12.2021	30.11.2022	Change
1-year Hungarian Government Security / 1MÁP	1,001.6	884.0	-117.5
Treasury Saving Bills / KTJ	234.8	315.6	80.9
Hungarian Government Security Plus / MÁP Plusz	6,361.5	2,712.3	-3,649.2
Premium Hungarian Government Security / PMÁP	2,202.7	4,080.6	1,877.9
Bonus Hungarian Government Security / BMÁP	60.8	466.1	405.3
Babybond	148.8	187.4	38.7
Total	10,010.2	8,646.2	-1,364.0

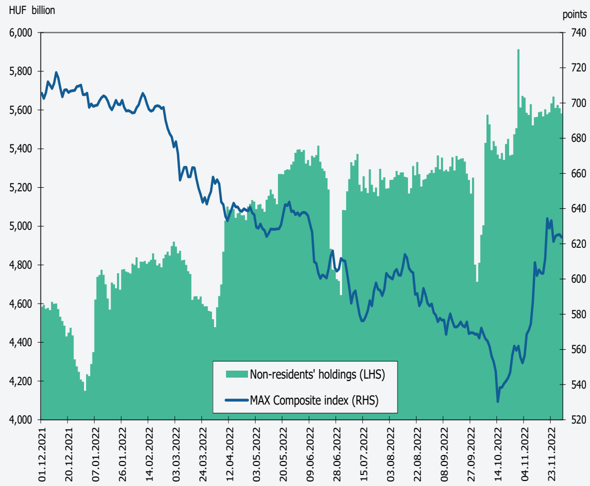
Changes in the stock of retail securities



Debt structure at 30.11.2022



Non-residents' holdings of Hungarian government securities and the MAX index



HUNGARIAN GOVERNMENT SECURITIES INDICES

	MAX index	HMAX index	MAX Composite index	RMAX index	ZMAX index
Value as at 30.11.2022	648.8414	74.6574	623.7056	568.4089	566.6942
Changes compared to the end of the prevoius month	66.8736	9.1156	61.8647	5.7382	4.7670
Annual yield earned on the index portfolio (%)	-13.25	-16.28	-12.11	3.03	5.06

Government bonds with the highest secondary market turnover in November 2022

Government bond	Date of redemption	Turnover (HUF billion)
2032/A	24.11.2032	539.0
2033/A	20.04.2033	297.4
2028/B	23.03.2028	282.4
2025/C	26.11.2025	235.4
2031/A	22.10.2031	207.4
2027/A	27.10.2027	205.9
2023/A	24.11.2023	176.8
2030/A	21.08.2030	156.4
2029/B	22.08.2029	153.0
2023/C	23.08.2023	141.2

The outstanding volume of government bonds with benchmark status at the end of November 2022

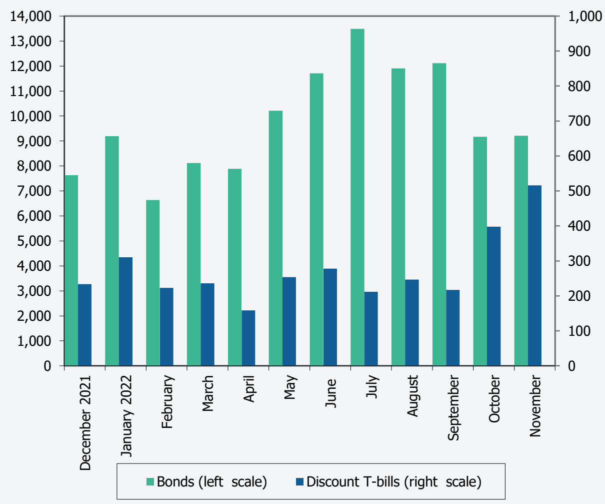
Government bond	HUF billion	
	31.10.2022	30.11.2022
2025/C	1,345.41	1,399.50
2028/B	572.13	608.81
2032/A	579.87	636.67
2038/A	901.67	901.70
2041/A	510.75	519.20

The outstanding volume of the three largest government bonds at the end of November 2022

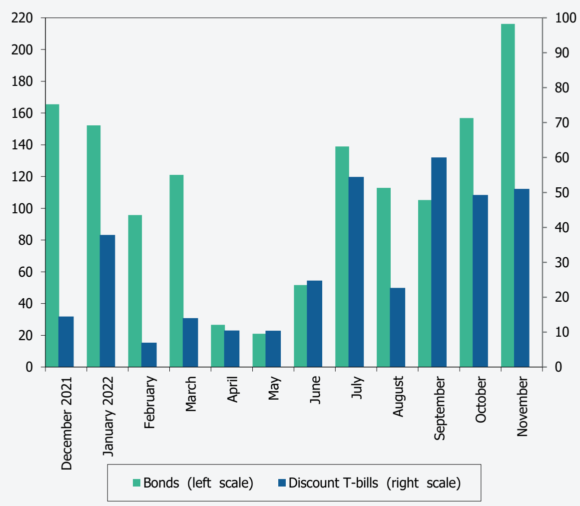
Government bond	HUF billion
2031/A	1,529.55
2025/C	1,345.41
2033/A	1,314.59

Secondary market trading of Hungarian government securities (HUF billion)

OTC

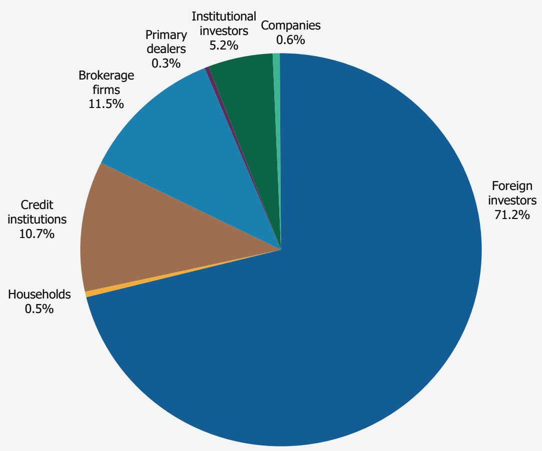


MTS Hungary



Breakdown of primary dealers' secondary market turnover by investor groups in November 2022

Government Bonds



Discount Treasury Bills