



GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

Á | K | K

GOVERNMENT SECURITIES MARKET

QUARTERLY REPORT
Q2 2023



Summary

The deficit of the central government amounted to HUF 2,896.0 billion (about EUR 7.8 billion) in Q2 2023. The net financing need was decreased by HUF 260.3 billion of the net balance of transfers from the European Union and other sources. Thus, the total net financing need amounted to HUF 2,635.7 billion. Net issuance was HUF 3,521.5 billion, out of which net HUF denominated issuance was HUF 1,908.3 billion and net foreign currency denominated issuance was HUF 1,613.3 billion. The total amount of other liabilities decreased by HUF 213.2 billion in 2023.

ÁKK had set up benchmarks to maintain the optimal cost-risk characteristics of public debt. The 90-day moving average values of those benchmarks at the end of Q2 2023 were as follows:

- The share of foreign currency denominated debt within the total debt was 25.3%.
- 100% of the foreign currency debt was denominated in euro.
- The fixed-floating mix of the total (foreign currency and HUF-denominated) debt portfolio was 69.8% and 30.2%.
- The average time to refixing (ATR) of the total debt portfolio was 5.1 years.
- The average term to maturity (ATM) of the total debt was 6.1 years.
- The share of retail government securities held by the households within total debt was 19.5%.

All benchmark targets were met in Q2 2023, apart from the share of retail government securities held by the households within total debt. The target value was not met during the second quarter, as the large amount of foreign currency issuance at the beginning of the year significantly reduced the benchmark value. The amount of total debt increased relative to the stock of retail government securities held by retail investors, and the purchase of discount Treasury bills by retail investors had also a negative impact on the benchmark.

The short term and the long term secondary market yields also decreased in Q2. The 3-6 month yields decreased by 445-517 basis points and the 12 month yields decreased by 411 basis points compared to March. The 3-5 year yields decreased by 174-171 basis points, the 10 year yield decreased by 146 basis points and the 15-20 year yields decreased by 132-110 basis points. At the end of June the 1-year benchmark yield stood at 10.46%, the 5-year yield at 7.65% and the 10-year yield at 6.98% respectively. The yield of 20-year government bond was 6.82% at the last day of the second quarter.

In January 2023 5-year foreign currency bond in the amount of USD 1.5 billion (HUF 558.1 billion) and 10-year foreign currency bond in the amount of USD 1.5 billion (HUF 558.1 billion), and 30-year foreign currency bond in the amount of 1.25 billion USD (HUF 465.1 billion) foreign currency bonds were issued. The foreign currency debt was further increased by the private placement in March. The 5- and 10-year foreign currency bonds issued in January were increased in the amounts of USD 150 million (HUF 54.3 billion) and USD 300 million (HUF 108.6 billion). A part of the January's issuance was used to repurchase two USD bonds maturing between 2023-24, together with the closing of the related swaps, at a face value of USD 1.0 billion (HUF 289.9 billion).

The liquidity in the secondary market was higher by 10% in Q2 compared to the previous quarter. OTC turnover of government securities amounted to HUF 29,685.4 billion. Primary dealers, who account for the decisive part of all secondary government securities trading, made 78% of their secondary government securities deals with non-resident investors.

The volume of non-resident holdings of Hungarian government securities decreased by HUF 54.4 billion from end-March and amounted to HUF 6,523.9 billion at the end of June. This amount represented 18.8% of domestic government securities.

The EUR/HUF exchange rate according to the National Bank of Hungary was 371.13 on the last working day of June.

The credit rating of the long-term foreign currency denominated debt of Hungary was: BBB- (Standard & Poor's); BBB (Fitch); Baa2 (Moody's) as at 30 June 2023.

MACROECONOMIC INDICATORS

	2017	2018	2019	2020	2021	2022	Q1 2023	Q2 2023
GDP growth (yearly average) ¹	4.3	5.4	4.6	-4.5	7.1	4.6	-1.1	-2.2
Industrial production ¹	4.6	3.5	5.6	-6.0	9.5	5.8	-4.3	-5.6
Unemployment rate (%) (3-month average)	4.0	3.6	3.3	4.1	4.1	3.7	4.1	3.8
Consumer price index (yearly change) ²	2.1	2.7	4.0	2.7	7.4	24.5	25.4	21.9
Consumer price index (yearly average)	2.4	2.8	3.4	3.3	5.1	14.5		
Producer price index (yearly change) ²	3.9	4.7	2.4	6.8	22.3	34.9	28.1	11.2
Producer price index (yearly average)	3.3	5.5	2.1	4.2	13.5	33.7		
Net lending position of households (HUF Bn) ³	1,922.8	2,715.5	2,390.7	3,235.2	3,597.7	2,654.2	1,434.4	
Current account of balance of payments (EUR M) ⁴	2,535.9	215.9	-1,148.0	-1,569.9	-6,252.2	-13,729.9	-773.8	
Net direct investments (EUR M) ⁵	-2,036.8	-2,611.8	-954.5	-2,350.1	-2,958.7	-4 186,3	2,405.8	
Balance of the central government budget (HUF Bn)	-1,763.0	-1,375.5	-1,023.8	-4,953.5	-4,662.3	-4,611.5	-2,019.0	
Balance of the central government budget (GFS, per cent of GDP) ⁶	-3.3	-2.8	-2.5	-11.2	-8.5	-7.2		
Balance of the state budget (ESA, percent of GDP) ⁶	-2.5	-2.1	-2.0	-7.5	-7.1	-6.2		
Central government gross debt (HUF Bn)	26,746.2	28,688.2	29,682.0	36,684.3	40,697.0	45,562.4	47,375.9	47,927.5
Central government gross debt (per cent of GDP)	68.1	66.1	62.3	75.8	73.8	68.4		
Net foreign debt (EUR M) ⁷	17,221.0	11,919.1	11,463.5	11,298.6	16,497.7	20,833.1		
Net foreign debt (per cent of GDP) ⁸	13.6	8.8	7.8	8.3	10.7	12.2		
HUF/USD mid exchange rate at the end of period	258.82	280.94	294.74	297.36	325.71	375.68	349.85	342.40
HUF/EUR mid exchange rate at the end of period	310.14	321.51	330.52	365.13	369.00	400.25	380.99	371.13

¹ Same period of previous year = 100%, working day adjusted

² In case of yearly data: December/previous December, otherwise month/same month of the previous year

³ Non-consolidated data

⁴ Data compiled in accordance with the methodology used by the NBH from 2004

⁵ Including intercompany loans

⁶ Proportion of seasonally adjusted GDP

⁷ Excluding intercompany loans

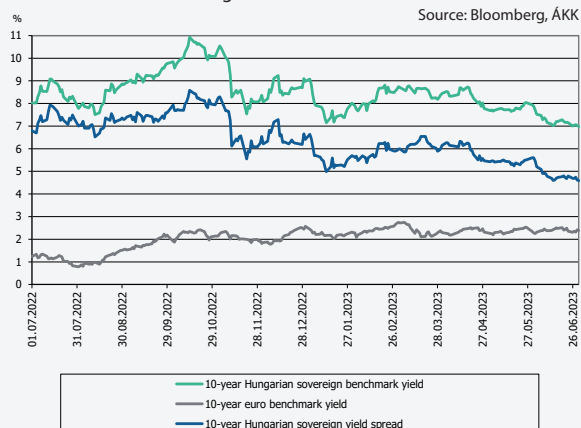
⁸ 2021 value based on HUF data

Source: ÁKK, KSH, MNB, PM

ÁKK - Government Debt Management Agency
KSH - Hungarian Central Statistical Office
MNB - National Bank of Hungary
PM - Finance Ministry

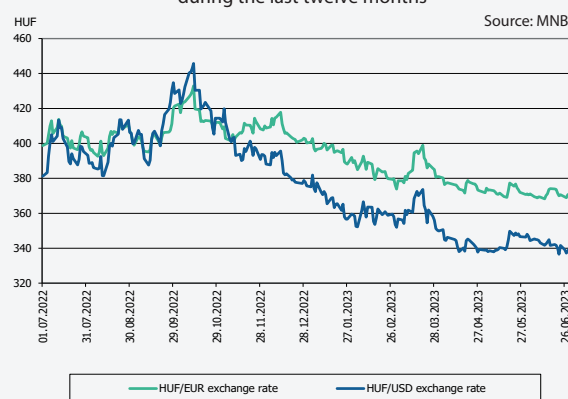
10-year Hungarian and eurozone benchmark yields during the last twelve months

Source: Bloomberg, ÁKK



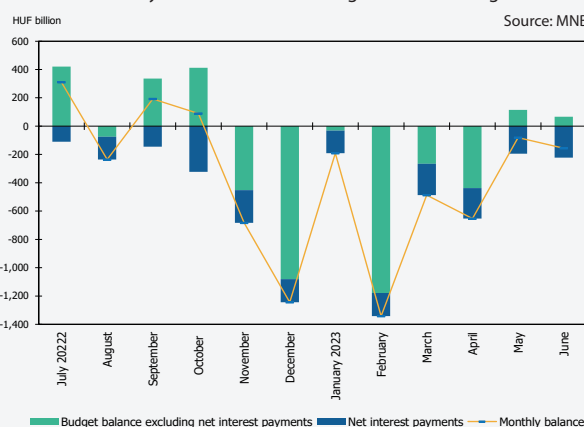
The exchange rate of the Hungarian Forint during the last twelve months

Source: MNB



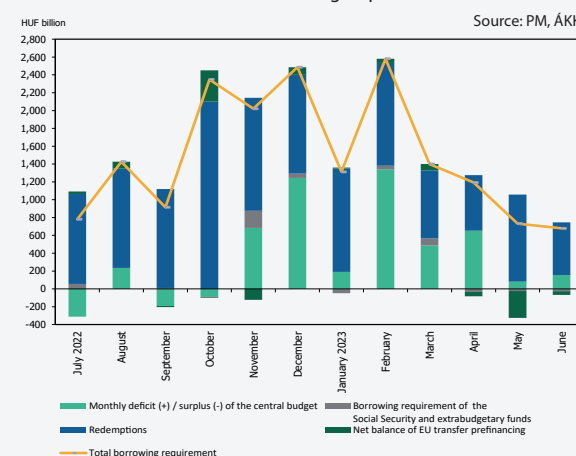
Monthly balance of the central government budget

Source: MNB



Gross borrowing requirement

Source: PM, ÁKK



CENTRAL GOVERNMENT GROSS DEBT

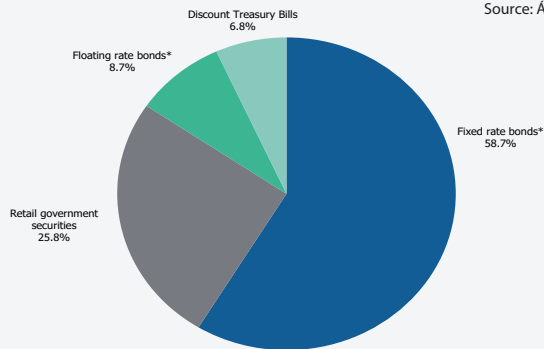
HUF BILLION

	2017	2018	2019	2020	2021	2022	Q1 2023	Q2 2023
1. Forint denominated debt	20,689.4	22,796.0	24,357.1	29,237.3	32,121.2	33,775.6	34,878.7	35,683.9
1.1. Loans	1,041.1	1,167.7	1,208.1	1,161.6	1,307.7	1,024.2	964.7	921.8
1.2. Government securities	19,648.3	21,628.3	23,149.0	28,075.7	30,813.5	32,751.4	33,914.0	34,762.1
1.2.1. Public issues	19,609.2	21,589.1	23,109.8	28,036.5	30,813.5	32,751.4	33,914.0	34,762.1
1.2.1.1. Bonds	11,767.1	12,836.1	13,378.5	18,206.6	20,220.0	22,346.3	23,012.5	23,224.3
1.2.1.2. Discount T-bills	1,039.2	1,237.3	657.3	658.2	583.2	1,785.8	2,016.4	2,401.1
1.2.1.3. Retail securities	6,802.9	7,515.7	9,074.0	9,171.7	10,010.2	8,619.4	8,885.1	9,136.7
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	11,397.3	12,177.0	12,067.4
2.1. Loans	929.1	795.0	825.4	1,291.1	1,345.2	1,959.1	1,960.7	2,093.4
2.1.1. Foreign loans	929.1	795.0	825.4	1,291.1	1,345.2	1,959.1	1,960.7	2,093.4
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	9,438.2	10,216.3	9,974.0
2.2.1. Issued abroad	4,145.9	4,246.2	3,713.5	5,481.3	6,594.9	9,085.5	9,795.3	9,541.9
2.2.2. Issued domestically	707.6	683.6	582.3	545.9	455.0	352.8	420.9	432.1
Total	26,472.0	28,520.7	29,478.3	36,555.5	40,516.4	45,173.0	47,055.7	47,751.3
Other liabilities	274.2	167.4	203.7	128.8	180.6	389.4	320.2	176.2
Total central government debt	26,746.2	28,688.2	29,682.0	36,684.3	40,697.0	45,562.4	47,375.9	47,927.5
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	24,132.1	25,028.9	25,625.4
Gross debt/GDP	68.1%	66.1%	62.3%	75.8%	73.8%	68.1%		

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

Composition of HUF government securities as at 30.06.2023

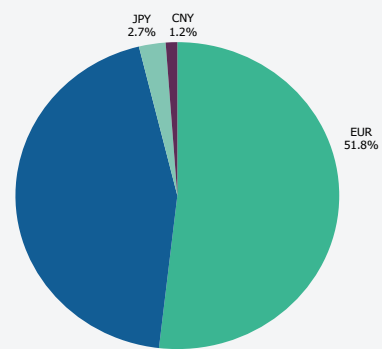
Source: ÁKK



* Without retail government securities.

Currency composition of the foreign exchange debt portfolio before swaps as at 30.06.2023*

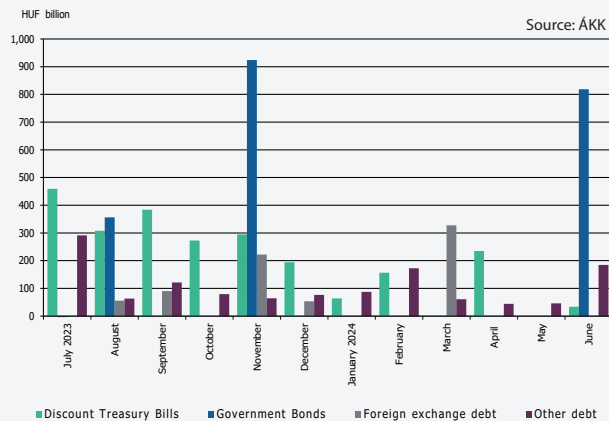
Source: ÁKK



* Composition before swaps. By using cross-currency swaps, 100% of the actual foreign exchange debt of the central government was due in euros.

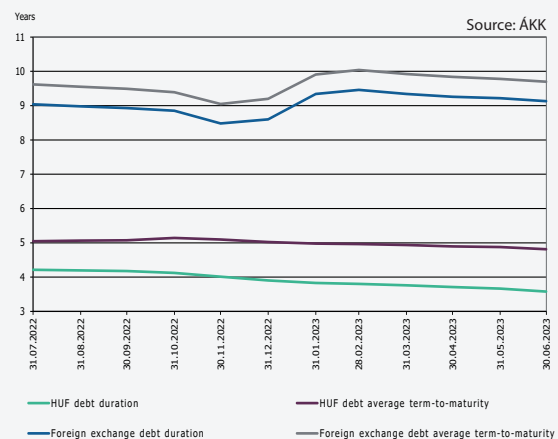
Maturity profile of the central government gross debt over the next 12 months, as at 30.06.2023

Source: ÁKK



Average term-to-maturity of the HUF and foreign currency debt portfolios

Source: ÁKK



GOVERNMENT BOND AUCTION RESULTS

Government Bond	2026/H	2028/A	2032/A	2026/F	2041/A	2026/H	2028/A	2032/A	2030/A	2032/B
ISIN code	HU0000406160	HU0000402532	HU0000405550	HU0000404934	HU0000404165	HU0000406160	HU0000402532	HU0000405550	HU0000403696	HU0000406087
Maturity (in years)	3	5	10	3	20	3	5	10	7	10
Coupon	9.50%	6.75%	4.75%	1.50%	3.00%	9.50%	6.75%	4.75%	3.00%	16.29%
Auction	7th auction	54th auction	32nd auction	27th auction	43rd auction	8th auction	55th auction	33rd auction	51st auction	11th auction
Date of auction	06.04.2023	06.04.2023	06.04.2023	13.04.2023	13.04.2023	20.04.2023	20.04.2023	20.04.2023	27.04.2023	27.04.2023
Date of financial settlement	12.04.2023	12.04.2023	12.04.2023	19.04.2023	19.04.2023	26.04.2023	26.04.2023	26.04.2023	03.05.2023	03.05.2023
Redemption date	21.10.2026	22.10.2028	24.11.2032	26.08.2026	25.04.2041	21.10.2026	22.10.2028	24.11.2032	21.08.2030	25.08.2032
Maximum annual yield (%) - ISMA	10.38	9.23	8.31	10.69	8.04	10.55	9.25	8.35	7.98	-
Minimum annual yield (%) - ISMA	10.28	9.18	8.26	10.60	7.99	10.40	9.20	8.30	7.95	-
Average annual yield (%) - ISMA	10.34	9.21	8.30	10.66	8.02	10.49	9.23	8.34	7.96	-
Maximum annual yield (%) - EHM	10.37	9.22	8.31	10.68	8.03	10.54	9.24	8.34	7.97	-
Minimum annual yield (%) - EHM	10.27	9.17	8.25	10.59	7.98	10.39	9.19	8.29	7.94	-
Average annual yield (%) - EHM	10.34	9.20	8.29	10.65	8.02	10.49	9.22	8.33	7.95	-
Maximum price (%)	97.7830	89.7441	77.2667	75.3701	53.1900	97.4628	89.7213	77.1071	73.3294	95.7500
Minimum price (%)	97.5041	89.5487	76.9714	75.1681	52.8748	97.0504	89.5200	76.8352	73.1962	95.5000
Average price (%)	97.6020	89.6256	77.0606	75.2414	52.9760	97.2016	89.6010	76.9050	73.2939	95.5900
Amount offered for sale (HUF million)	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	10,000.00	10,000.00	10,000.00	10,000.00	5,000.00
Amount of bids submitted (HUF million)	9,600.00	72,792.81	82,650.00	14,600.00	38,012.70	40,470.00	64,905.00	68,630.00	71,856.00	23,400.00
Amount of bids accepted (HUF million)	4,500.00	41,000.00	42,000.00	6,999.99	24,999.99	22,499.99	32,000.00	40,499.98	28,999.96	9,499.98
Bid-to-cover ratio	2.13	1.78	1.97	2.09	1.52	1.80	2.03	1.69	2.48	2.46
Bids submitted (pcs)	14	39	68	26	58	50	76	77	54	38
Bids accepted (pcs)	13	11	37	17	33	28	39	36	23	16
Tail (average price - minimum price)	0.10	0.08	0.09	0.07	0.10	0.15	0.08	0.07	0.10	0.09
Market sales (HUF million)	4,500.00	41,000.00	42,000.00	6,999.99	24,999.99	22,499.99	32,000.00	40,499.98	28,999.96	9,499.98
Non-competitive offer (HUF million)	0.00	8,156.40	6,800.00	0.00	0.00	2,426.66	11,040.00	13,691.98	3,192.07	1,452.00
Total amount sales (HUF million)	4,500.00	49,156.40	48,800.00	6,999.99	24,999.99	24,926.65	43,040.00	54,191.96	32,192.03	10,951.98

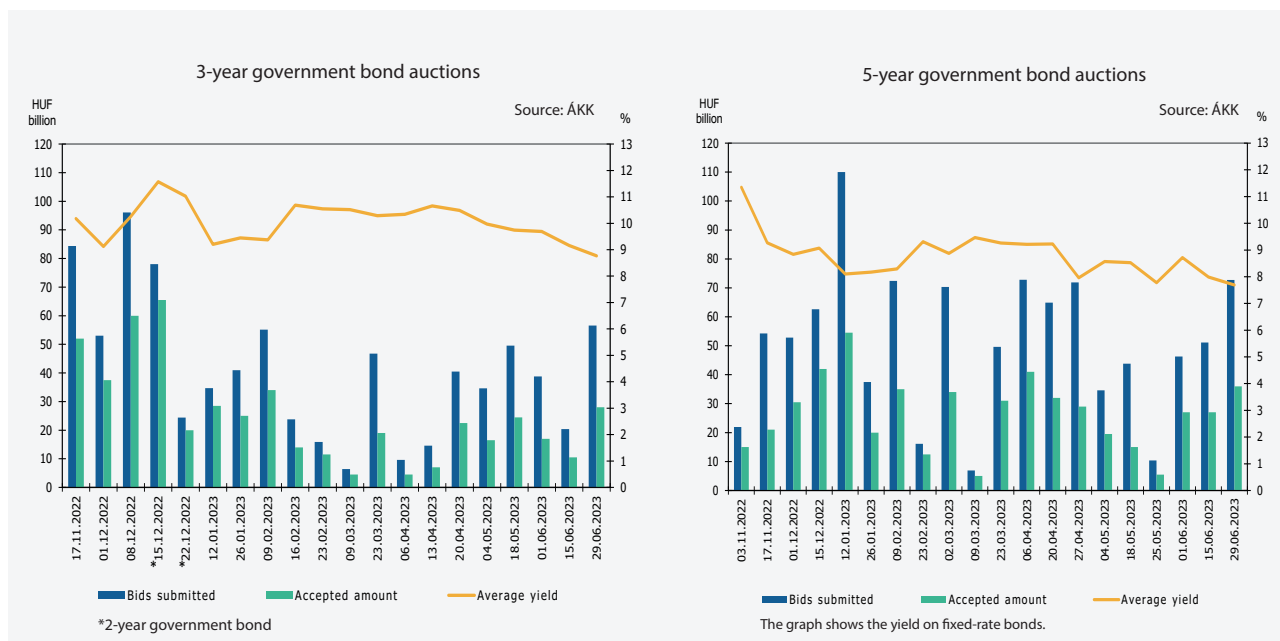
Government Bond	2026/H	2028/A	2032/A	2038/A	2051/G	2026/H	2028/A	2032/A	2030/A	2032/B	2026/H
ISIN code	HU0000406160	HU0000402532	HU0000405550	HU0000403555	HU0000404991	HU0000406160	HU0000402532	HU0000405550	HU0000403696	HU0000406087	HU0000406160
Maturity (in years)	3	5	10	15	30	3	5	10	7	10	3
Coupon	9.50%	6.75%	4.75%	3.00%	4.00%	9.50%	6.75%	4.75%	3.00%	16.06%	9.50%
Auction	9th auction	56th auction	34th auction	61st auction	7th auction	10th auction	57th auction	35th auction	52nd auction	12th auction	11th auction
Date of auction	04.05.2023	04.05.2023	04.05.2023	11.05.2023	11.05.2023	18.05.2023	18.05.2023	18.05.2023	25.05.2023	25.05.2023	01.06.2023
Date of financial settlement	10.05.2023	10.05.2023	10.05.2023	17.05.2023	17.05.2023	24.05.2023	24.05.2023	24.05.2023	31.05.2023	31.05.2023	07.06.2023
Redemption date	21.10.2026	22.10.2028	24.11.2032	27.10.2038	28.04.2051	21.10.2026	22.10.2028	24.11.2032	21.08.2030	25.08.2032	21.10.2026
Maximum annual yield (%) - ISMA	9.99	8.59	7.67	7.52	7.47	9.76	8.55	7.78	7.80	-	9.76
Minimum annual yield (%) - ISMA	9.93	8.51	7.60	7.51	7.44	9.68	8.48	7.74	7.74	-	9.61
Average annual yield (%) - ISMA	9.97	8.57	7.64	7.51	7.45	9.74	8.53	7.76	7.78	-	9.69
Maximum annual yield (%) - EHM	9.98	8.58	7.66	7.51	7.46	9.75	8.54	7.77	7.79	-	9.75
Minimum annual yield (%) - EHM	9.92	8.50	7.59	7.50	7.43	9.67	8.47	7.73	7.73	-	9.60
Average annual yield (%) - EHM	9.96	8.56	7.64	7.51	7.44	9.73	8.52	7.75	7.78	-	9.69
Maximum price (%)	98.7752	92.5001	81.0986	59.5500	59.9803	99.4736	92.6627	80.3458	74.4777	95.5600	99.6675
Minimum price (%)	98.6083	92.1785	80.6933	59.4786	59.7453	99.2512	92.3827	80.1180	74.2092	95.4000	99.2538
Average price (%)	98.6623	92.2554	80.8380	59.5145	59.8990	99.3040	92.4699	80.2450	74.2783	95.4900	99.4332
Amount offered for sale (HUF million)	10,000.00	10,000.00	10,000.00	15,000.00	5,000.00	15,000.00	15,000.00	10,000.00	10,000.00	5,000.00	10,000.00
Amount of bids submitted (HUF million)	34,600.00	34,600.00	60,000.00	91,572.05	15,530.00	49,556.00	43,800.00	47,429.50	10,361.20	36,270.00	38,800.00
Amount of bids accepted (HUF million)	16,499.99	19,499.97	32,499.99	35,999.99	5,000.00	24,500.00	14,999.99	20,000.00	5,499.99	18,499.99	17,000.00
Bid-to-cover ratio	2.10	1.77	1.85	2.54	3.11	2.02	2.92	2.37	1.88	1.96	2.28
Bids submitted (pcs)	33	35	58	65	36	53	50	43	20	41	49
Bids accepted (pcs)	18	25	38	14	13	25	15	15	13	22	20
Tail (average price - minimum price)	0.05	0.08	0.14	0.04	0.15	0.05	0.09	0.13	0.07	0.09	0.18
Market sales (HUF million)	16,499.99	19,499.97	32,499.99	35,999.99	5,000.00	24,500.00	14,999.99	20,000.00	5,499.99	18,499.99	17,000.00
Non-competitive offer (HUF million)	4,004.54	3,921.54	6,879.99	13,919.98	1,600.00	7,711.20	5,759.99	7,760.00	0.00	5,226.66	6,240.00
Total amount sales (HUF million)	20,504.53	23,421.51	39,379.98	49,919.97	6,600.00	32,211.20	20,759.98	27,760.00	5,499.99	23,726.65	23,240.00

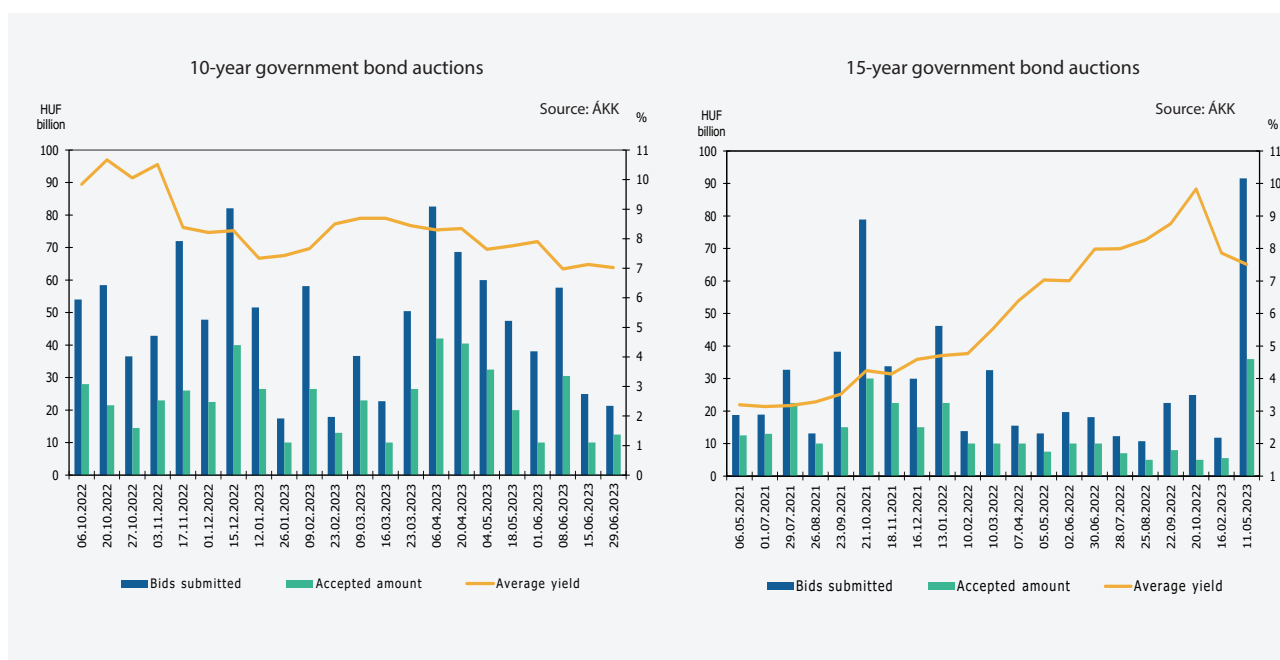
Source: ÁKK

GOVERNMENT BOND AUCTION RESULTS

Government Bond	2028/A	2032/A	2027/B	2033/A	2026/H	2028/A	2032/A	2027/B	2026/H	2028/A	2032/A
ISIN code	HU00000402532	HU00000405550	HU00000404157	HU00000404744	HU00000406160	HU00000402532	HU00000405550	HU00000404157	HU00000406160	HU00000402532	HU00000405550
Maturity (in years)	5	10	3	10	3	5	10	3	3	5	10
Coupon	6.75%	4.75%	16.29%	2.25%	9.50%	6.75%	4.75%	16.29%	9.50%	6.75%	4.75%
Auction	58th auction	36th auction	40th auction	55th auction	12th auction	59th auction	37th auction	41st auction	13th auction	60th auction	38th auction
Date of auction	01.06.2023	01.06.2023	08.06.2023	08.06.2023	15.06.2023	15.06.2023	15.06.2023	22.06.2023	29.06.2023	29.06.2023	29.06.2023
Date of financial settlement	07.06.2023	07.06.2023	14.06.2023	14.06.2023	21.06.2023	21.06.2023	21.06.2023	28.06.2023	05.07.2023	05.07.2023	05.07.2023
Redemption date	22.10.2028	24.11.2032	22.04.2027	20.04.2033	21.10.2026	22.10.2028	24.11.2032	22.04.2027	21.10.2026	22.10.2028	24.11.2032
Maximum annual yield (%) - ISMA	8.73	7.90	-	7.00	9.19	8.01	7.14	-	8.80	7.71	7.03
Minimum annual yield (%) - ISMA	8.65	7.89	-	6.93	9.14	7.96	7.09	-	8.74	7.68	7.00
Average annual yield (%) - ISMA	8.72	7.90	-	6.98	9.16	7.99	7.13	-	8.77	7.69	7.02
Maximum annual yield (%) - EHM	8.72	7.90	-	6.99	9.18	8.00	7.13	-	8.79	7.70	7.02
Minimum annual yield (%) - EHM	8.64	7.88	-	6.92	9.13	7.95	7.08	-	8.73	7.67	6.99
Average annual yield (%) - EHM	8.71	7.89	-	6.97	9.16	7.98	7.13	-	8.76	7.69	7.01
Maximum price (%)	92.0314	79.5516	101.0500	67.3703	100.9667	94.8520	84.2591	100.8100	102.0682	96.0204	84.8503
Minimum price (%)	91.7162	79.4729	100.4600	66.9809	100.8303	94.6379	83.9581	100.4500	101.9000	95.9000	84.6667
Average price (%)	91.7648	79.4959	100.5500	67.0978	100.8971	94.7253	84.0067	100.5100	101.9883	95.9640	84.7281
Amount offered for sale (HUF million)	10,000.00	10,000.00	20,000.00	10,000.00	15,000.00	15,000.00	10,000.00	15,000.00	10,000.00	15,000.00	10,000.00
Amount of bids submitted (HUF million)	46,258.00	38,100.00	84,420.00	57,650.00	20,415.00	51,100.00	24,950.00	68,080.00	56,600.00	72,700.00	21,306.46
Amount of bids accepted (HUF million)	26,999.97	10,000.00	43,500.00	30,499.98	10,500.00	26,999.98	9,999.99	35,999.99	28,000.00	36,000.00	12,499.99
Bid-to-cover ratio	1.71	3.81	1.94	1.89	1.94	1.89	2.50	1.89	2.02	2.02	1.70
Bids submitted (pcs)	58	53	31	38	29	52	38	31	35	46	30
Bids accepted (pcs)	32	16	23	21	19	30	21	13	20	15	19
Tail (average price - minimum price)	0.05	0.02	0.09	0.12	0.07	0.09	0.05	0.06	0.09	0.06	0.06
Market sales (HUF million)	26,999.97	10,000.00	43,500.00	30,499.98	10,500.00	26,999.98	9,999.99	35,999.99	28,000.00	36,000.00	12,499.99
Non-competitive offer (HUF million)	10,079.97	3,440.00	16,720.00	2,906.24	0.00	0.00	0.00	14,159.99	9,960.00	14,080.00	1,766.13
Total amount sales (HUF million)	37,079.94	13,440.00	60,220.00	33,406.22	10,500.00	26,999.98	9,999.99	50,159.98	37,960.00	50,080.00	14,266.12

Source: ÁKK





INTEREST RATE RESETS OF FLOATING RATE GOVERNMENT BONDS IN Q2 2023

Government bond	Date of interest rate reset	Interest period		Date of interest payment	Reset interest rate	Interest payable
2023/B	21.04.2023	26.04.2023	26.07.2023	26.07.2023	16.25%	4.11%
2024/O	18.04.2023	24.04.2023	24.04.2024	24.04.2024	17.36%	17.65%
2024/P	18.04.2023	24.04.2023	24.04.2024	24.04.2024	17.36%	17.65%
2026/O	17.04.2023	21.04.2023	21.07.2023	21.07.2023	15.90%	4.02%
2027/B	19.04.2023	22.04.2023	22.07.2023	24.07.2023	16.29%	4.12%
2028/J	14.04.2023	20.04.2023	20.04.2024	22.04.2024	16.00%	16.00%
2025/J	16.05.2023	21.05.2023	21.05.2024	21.05.2024	15.90%	15.90%
2028/L	24.05.2023	02.06.2023	26.07.2024	26.07.2024	14.75%	16.93%
2029/B	17.05.2023	22.05.2023	22.08.2023	22.08.2023	16.14%	4.12%
2031/I	24.05.2023	02.06.2023	21.05.2024	21.05.2024	15.50%	14.99%
2032/B	22.05.2023	25.05.2023	25.08.2023	25.08.2023	16.06%	4.10%
2025/N	26.06.2023	30.06.2023	30.09.2023	02.10.2023	13.92%	3.56%
2028/K	14.06.2023	20.06.2023	20.06.2024	20.06.2024	16.00%	16.00%

Source: ÁKK

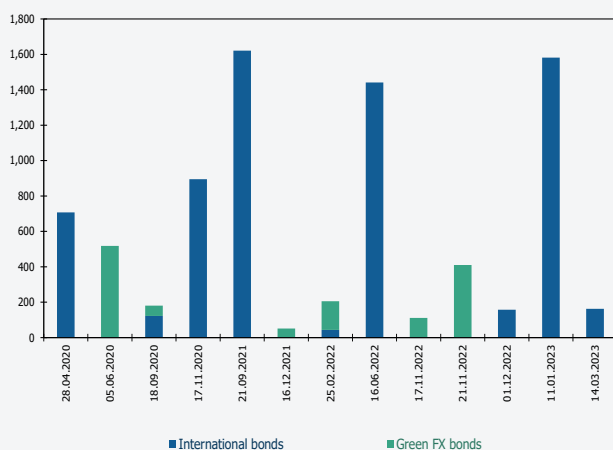
GREEN BOND ISSUANCE

In line with international efforts, Hungary, through ÁKK Zrt., intends to actively contribute to sustainable financing internationally as well as on the Hungarian domestic capital market by issuing green bonds. Within the ESG (Environmental, Social, and Governance) system, a green bond is an innovative financial product that specifically targets resources to support green investment. Green bond is issued to finance and refinance environmentally friendly projects that also take sustainability into account.

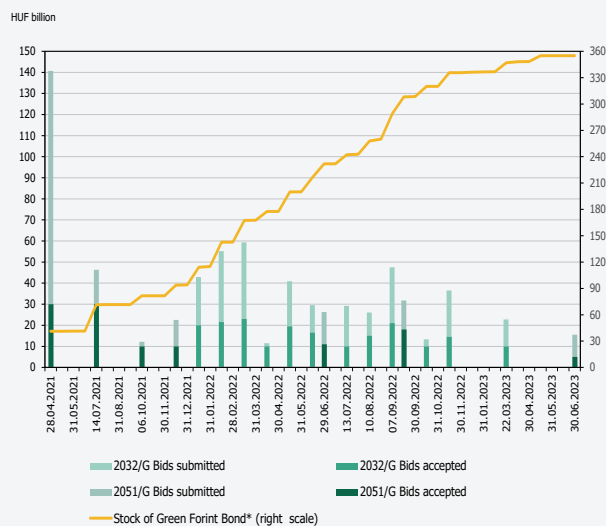
Hungary's first international euro Green Bond was issued on 2 June 2020 in the amount of EUR 1.5 billion (HUF 518.4 billion). The next green bond issue was in September 2020 denominated in Japanese yen. It was a Samurai bond in the amount of JPY 20.0 billion (HUF 57.5 billion), making Hungary the first foreign state to issue green bond in Japan. In December 2021, the first green Panda bond was also issued in the amount of CNY 1.0 billion (HUF 50 billion). The investors' interest was strong in the Chinese yuan-denominated green bond. The interest rate on the euro was below 0% (-0.013%) through the conversion to the euro in a fixed rate foreign exchange swap, making it the cheapest foreign currency bond issuance ever. In February 2022, Samurai bonds denominated in Japanese yen were issued again in the total amount of JPY 59.3 billion (HUF 161.8 billion). In November 2022, EUR 1 billion (HUF 410.5 billion) of Green Bonds and CNY 2 billion (HUF 110.9 billion) of Green Panda Bonds were issued.

The Green Bond Framework Program was expanded to the HUF government bond market too. In April 2021 a 30-year green bond was issued, followed by the sale of a 10-year green forint bond in January 2022. By the end of June 2023, via the auctions, the green HUF bond portfolio reached HUF 354.9 billion (EUR 1.0 billion).

Foreign currency bond issuance
2020-Q2 2023
(HUF billion)

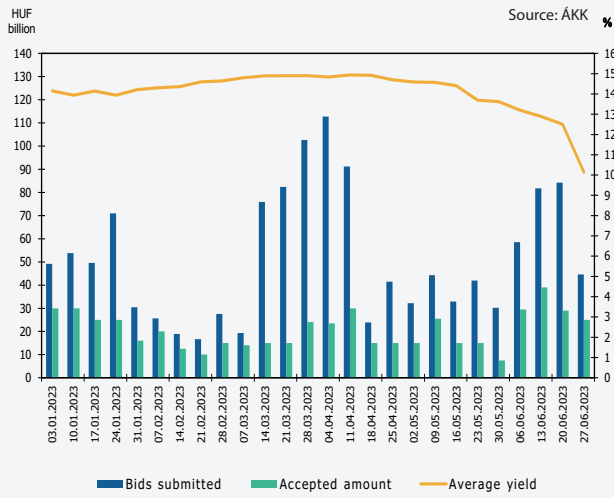


Green forint bond auctions
2021-Q2 2023
(HUF billion)

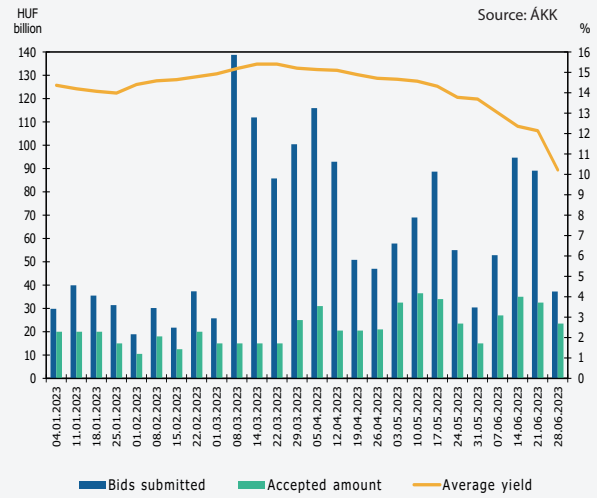


* Includes the stock of non-competitive tenders.

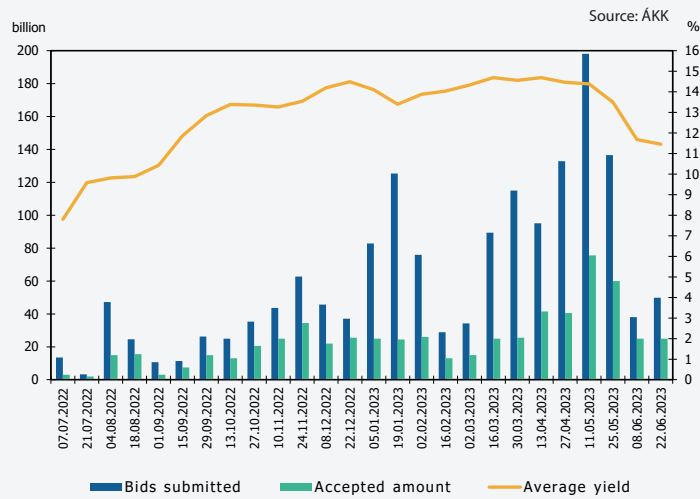
3-month Discount Treasury Bill auctions



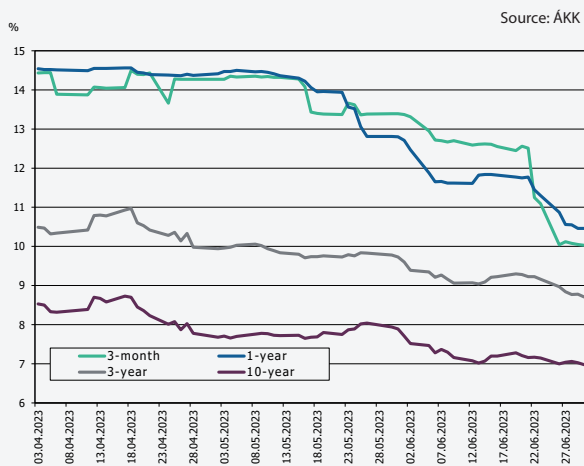
6-month Discount Treasury Bill auctions



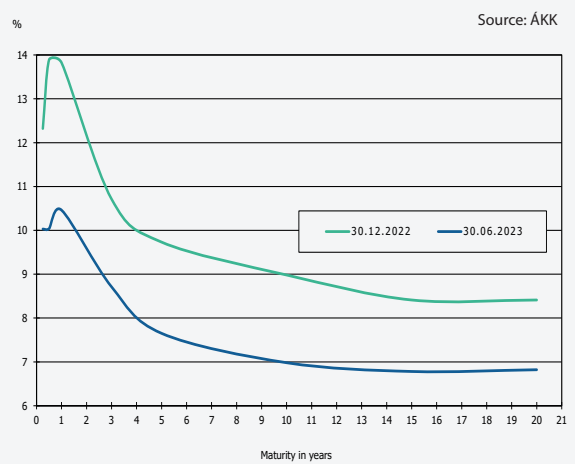
12-month Discount Treasury Bill auctions



Benchmark yields in the past three months

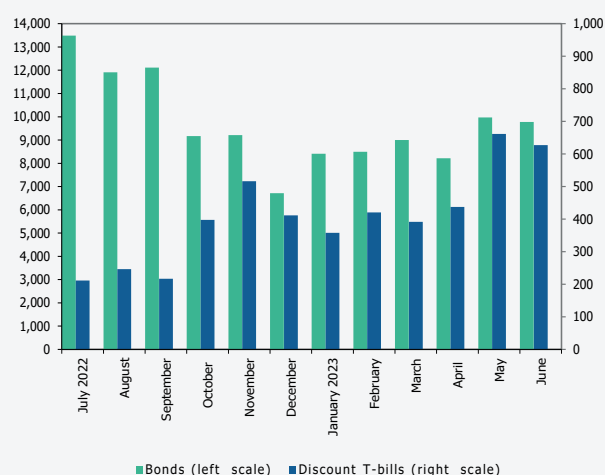


Benchmark yield curves



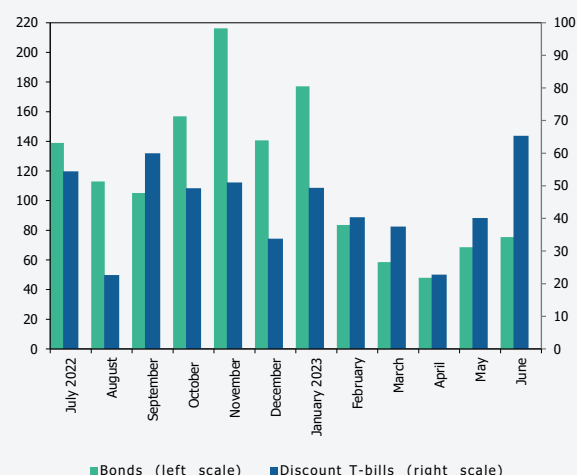
OTC
Secondary market trading of Hungarian government securities
(HUF billion)

Source: KELER, ÁKK



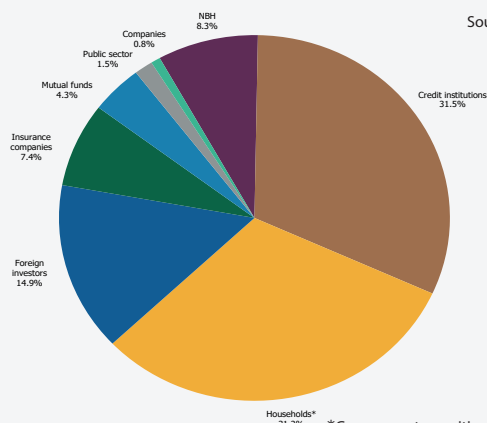
MTS Hungary trading
Secondary market trading of Hungarian government securities
(HUF billion)

Source: ÁKK, MTS Hungary



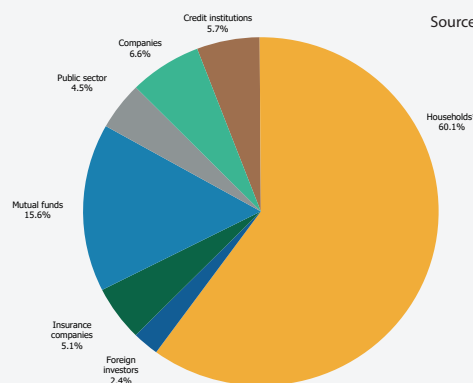
Breakdown of government securities with a maturity of over one year
by investor sector in Q2 2023

Source: ÁKK



Breakdown of government securities with maturity up to one year
by investor sector in Q2 2023

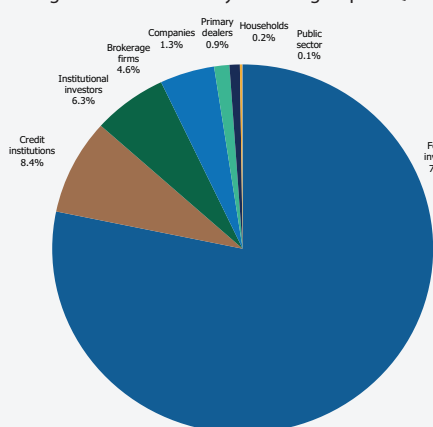
Source: ÁKK



*Government securities with a maturity of up to one year and with a maturity of over one year, the stock of Households also includes the stock of non-profit institutions serving households.

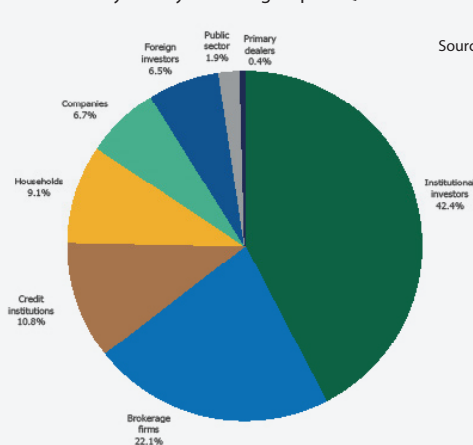
Breakdown of primary dealers' secondary market turnover in government bonds by investor groups in Q2 2023

Source: ÁKK



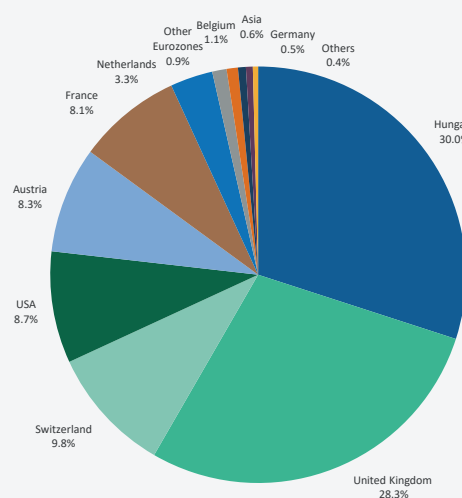
Breakdown of primary dealers' secondary market turnover in Discount Treasury Bills by investor groups in Q2 2023

Source: ÁKK



Geographical breakdown of gross turnover* of primary dealers in Q2 2023

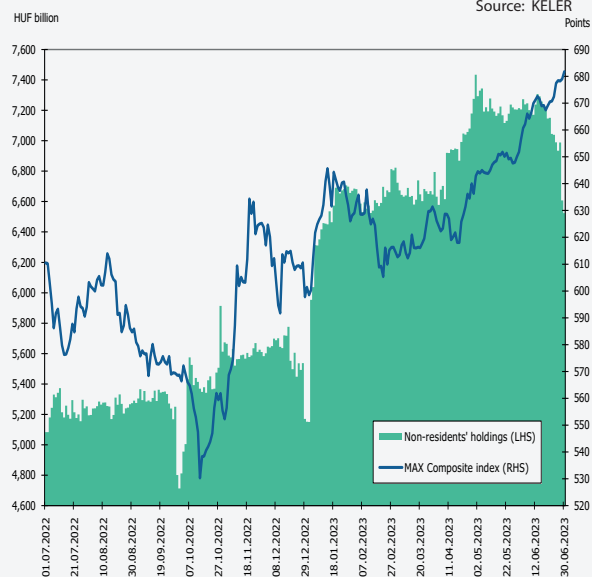
Source: Primary Dealers



*Government bonds, Discount T-bills, OTC markets, MTS

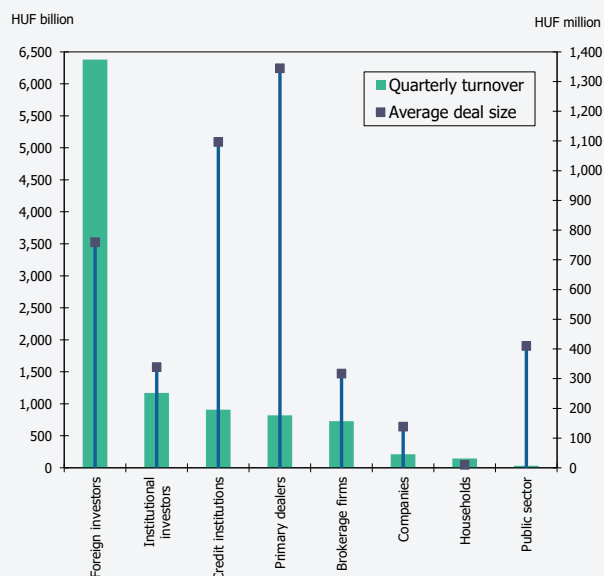
Non-residents' holdings of Hungarian government securities and the MAX Composite index during the last year

Source: KELLER



Primary dealers' trading with different investor groups in Q2 2023

Source: ÁKK



Government securities with the highest secondary market turnover in Q2 2023

Government security	Date of redemption	Turnover (HUF billion)
2028/A	22.10.2028	1,156.6
2032/A	24.11.2032	1,156.1
2033/A	20.04.2033	626.4
2024/B	26.06.2024	482.7
2025/B	24.06.2025	482.0
2028/B	23.03.2028	469.5
2026/H	21.10.2026	371.2
2024/C	24.10.2024	336.7
2026/E	22.04.2026	332.9
2038/A	27.10.2038	328.6

Source: ÁKK

HUNGARIAN GOVERNMENT SECURITIES INDICES

	Value of the index					Annual yield earned on the index portfolio (%)				
	MAX index	HMAX index	MAX Composite index	RMAX index	ZMAX index	MAX index	HMAX index	MAX Composite index	RMAX index	ZMAX index
2023.03.31.	647.4880	74.5776	624.1902	586.1561	590.1889	-5.95	-7.54	-5.13	6.23	8.98
2023.04.28.	668.1734	77.7020	642.8628	592.8638	596.8847	-0.16	0.06	0.31	7.12	9.79
2023.05.31.	677.5748	78.7837	651.8424	600.9185	604.4352	1.84	2.55	2.23	8.20	10.73
2023.06.30.	710.2455	83.2908	681.7572	616.1465	616.5396	11.56	14.40	11.45	10.41	12.33

Source: ÁKK

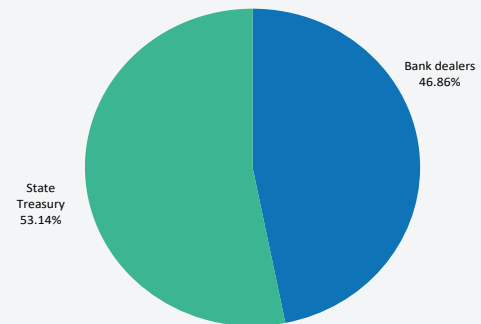
Outstanding amount of benchmark government bond series in Q2 2023

Source: ÁKK

Government bond	HUF billion		
	2023.04.30	2023.05.31	2023.06.30
2026/H	169.26	222.30	256.19
2028/A	1,010.32	1,054.47	1,118.50
2032/A	965.91	1,033.05	1,056.48
2038/A	907.18	957.11	957.12
2041/A	565.37	565.36	565.35

Breakdown of retail securities stock by distributors in Q2 2023

Source: ÁKK



PRIMARY DEALERS - AS AT 30 JUNE 2023

BNP Paribas	J.P. Morgan Securities SE
CIB Bank Zrt.	K&H Bank Zrt.
Citibank Europe plc Hungarian Branch	MBH Bank Nyrt.
Deutsche Bank AG	OTP Bank Nyrt.
Erste Befektetési Zrt.	Raiffeisen Bank Zrt.
Goldman Sachs Bank Europe SE	UniCredit Bank AG
ING Bank N.V. Hungarian Branch	

REUTERS PAGES (CODES)

main page: HUTREASURY

Auction results are available from 11.30 (CET)	
HUISSUE	Publication of the following issues and 1-year Hungarian Government Security underwriting and results
HUAUCTION01	Discount T-bill auction result
HUAUCTION02	Government Bond auction results
HUAUCTION03	Non-competitive fixed rate benchmark bonds offer
HUAUCTION04	Non-competitive floating rate bonds offer's result
HUAUCTION05	Non-competitive fixed rate non-benchmark bonds offer
HUBUYBACK	Government Bond buyback auction results
HUEXCHANGE	Government Bond exchange auction results
Secondary market data	
HUBONDFIX	Benchmark yield fixing
HUBONDAKK, HUBONDAKK4	Best morning secondary market quotations
HUBONDAKK2, HUBONDAKK3	Best afternoon secondary market quotations
HUBONDINDEX1	Hungarian Government Total Return Index (MAX)
HUMAXCOMP, HUMAXCOMP2	MAX Composite Index
HUAKK01,HUAKK02,HUAKK03, HUAKK04, HUAKK05	Hungarian Government Total Return Index (MAX) statistics
Other	
HUFLOATER	Interest rate reset of floating rate bonds

FURTHER INFORMATION PAGES:

Bloomberg pages (code): GDMA

Homepage: www.akk.hu

www.allampapir.hu