



DIRECTORATE MONETARY POLICY AND FINANCIAL MARKET ANALYSIS

FINANCIAL MARKET ANALYSIS DEPARTMENT

CHART-PACK ON RECENT ECONOMIC AND FINANCIAL MARKET DEVELOPMENTS

2020

SEPTEMBER



Chart-pack on recent economic and financial market developments *

22 September 2020

As of the 30th of June, 2005 the Magyar Nemzeti Bank (the central bank of Hungary) publishes a comprehensive chart-pack about the latest information in financial markets and the macro-economy. Our aim is to provide analysts and the public with a frequently updated, easy-to-use, clear-cut data set, in order to promote better knowledge and understanding of the current economic and financial market situation. The updated chart-pack is published on the day of each rate-setting meeting at 5 pm.

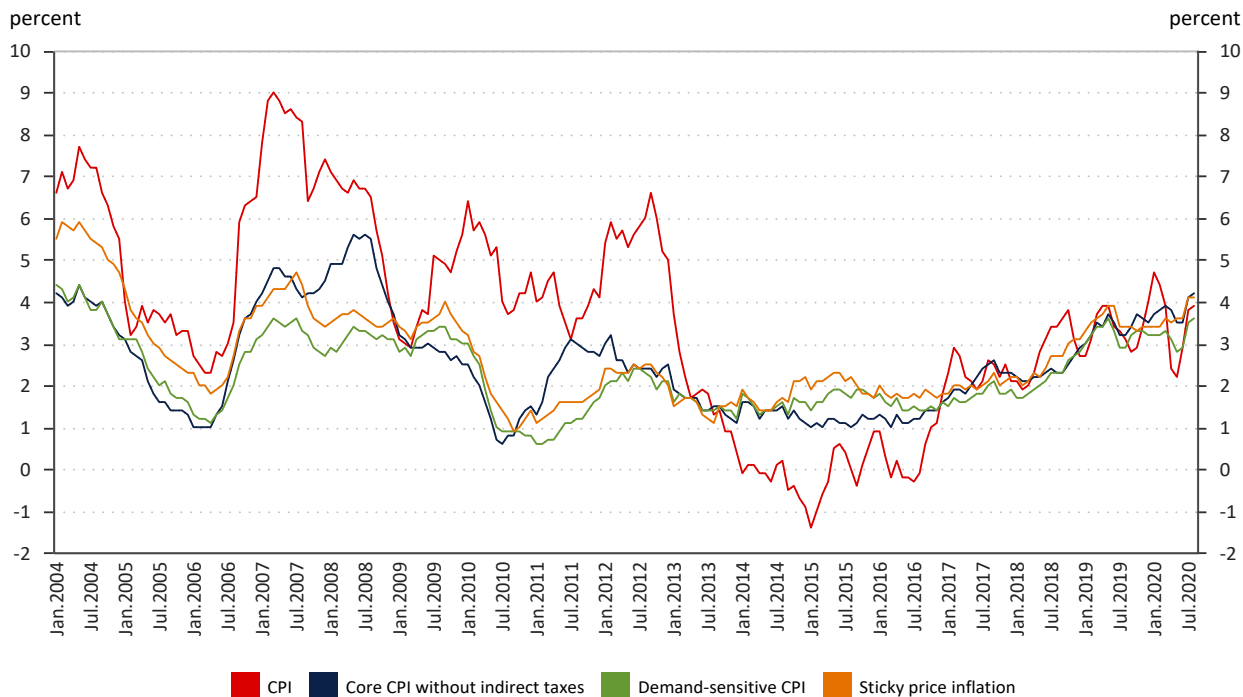
Earlier versions of the chart-pack are accessible on the website of Magyar Nemzeti Bank via the following address.

<http://www.mnb.hu/en/publications/studies-publications-statistics/chart-pack-on-recent-economic-and-financial-market-developments>

Questions and comments are welcome, and should be addressed to info@mnb.hu.

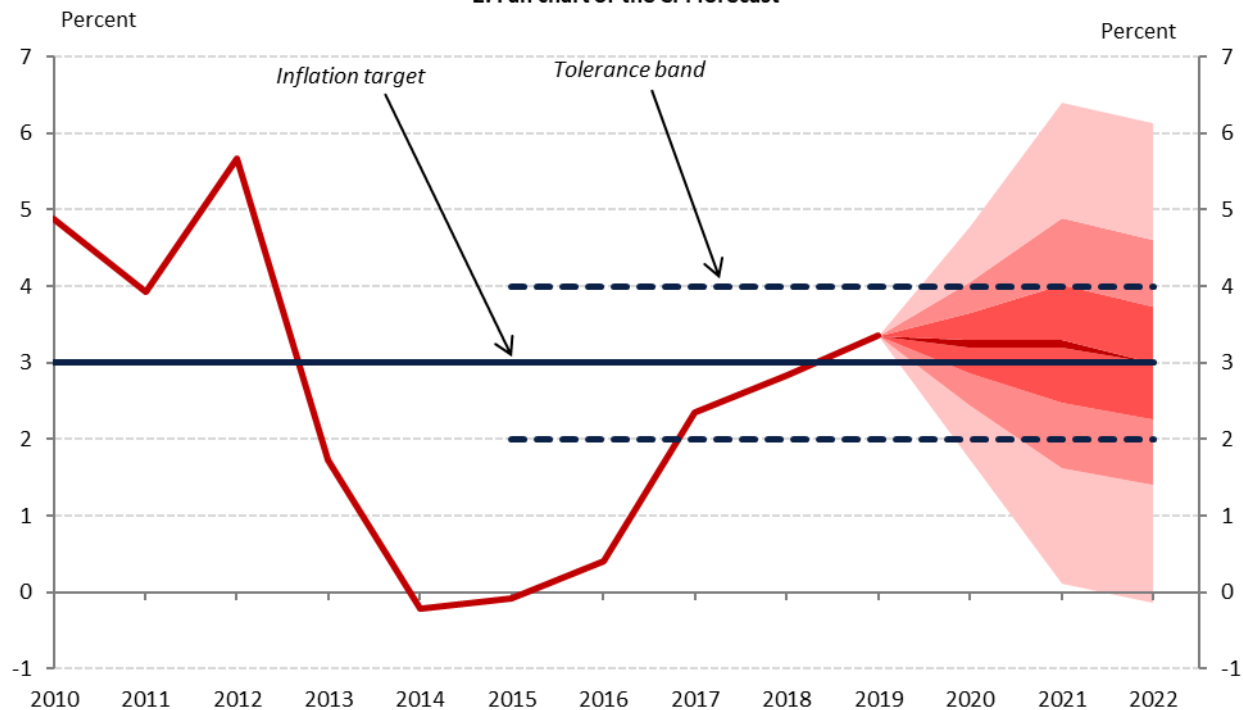
* The data sources of this document, in whole or in part, do not fall within the scope of Act XLVI of 1993 on statistics, therefore the data contained in the tables and charts are not to be considered as official statistical data. Magyar Nemzeti Bank excludes all liability for any damage caused by the usage of the herein published non-official statistical data.

1. Development of inflation and underlying inflation indicators



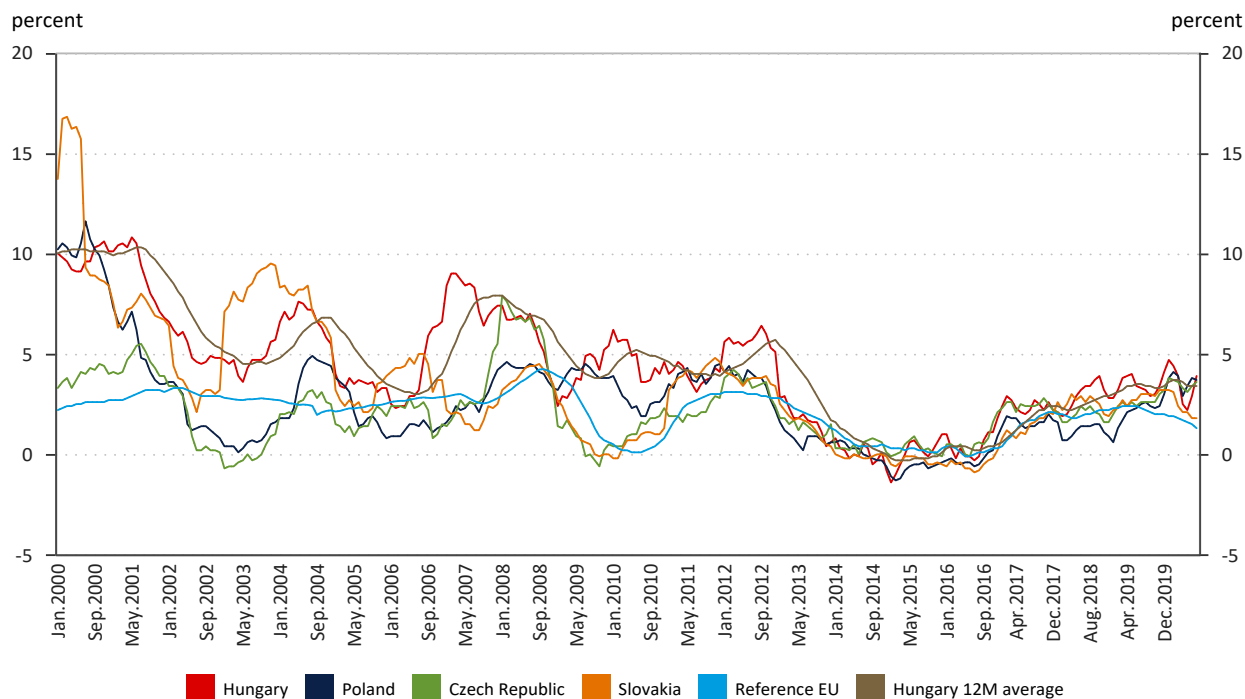
Source: HSCO, MNB
 Note: Seasonally adjusted year-on-year growth rates.

2. Fan chart of the CPI forecast



Source: MNB, HSCO. Note: Based on seasonally unadjusted data.

3. Harmonised index of consumer prices



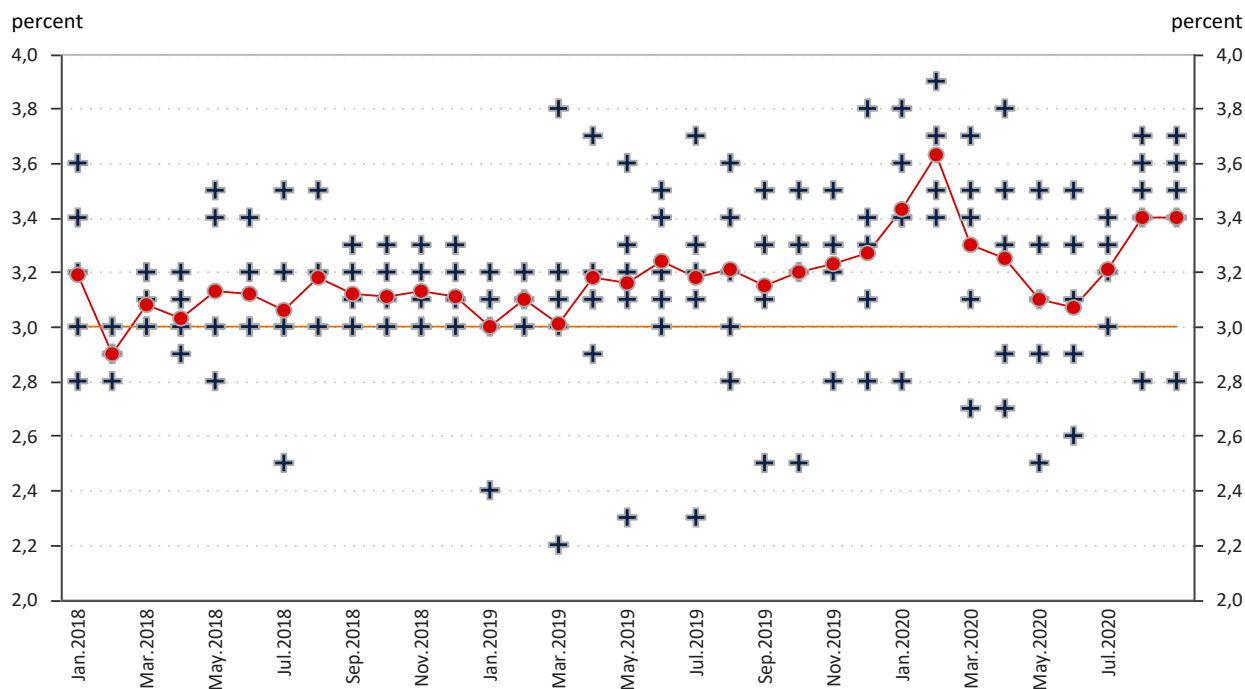
Source: Eurostat
 Note: annual growth rate.

4. Decomposition of the Consumer Price Index

	Weight 2020	May 2020	Jun 2020	Jul 2020	Aug 2020
Consumer Price Index	100.0	2.2	2.9	3.8	3.9
Thereof:					
- Unprocessed food	6.5	15.4	13.9	12.4	11.9
- Processed food	13.0	6.6	6.1	6.5	6.9
- Manufactured goods	23.9	0.6	0.9	2.1	2.1
- Market services	23.5	4.8	4.7	4.9	5.0
- Non-regulated household energy	0.9	2.3	2.1	1.9	2.0
- Alcohol, tobacco	10.3	6.7	6.7	6.3	6.8
- Gasoline prices	6.7	-22.0	-11.6	-4.1	-4.7
- Regulated prices	15.3	-0.1	-0.4	1.0	1.0
Core Consumer Price Index	70.6	4.0	4.0	4.5	4.7
CPI without tax changes	100.0	2.2	2.8	3.7	3.7

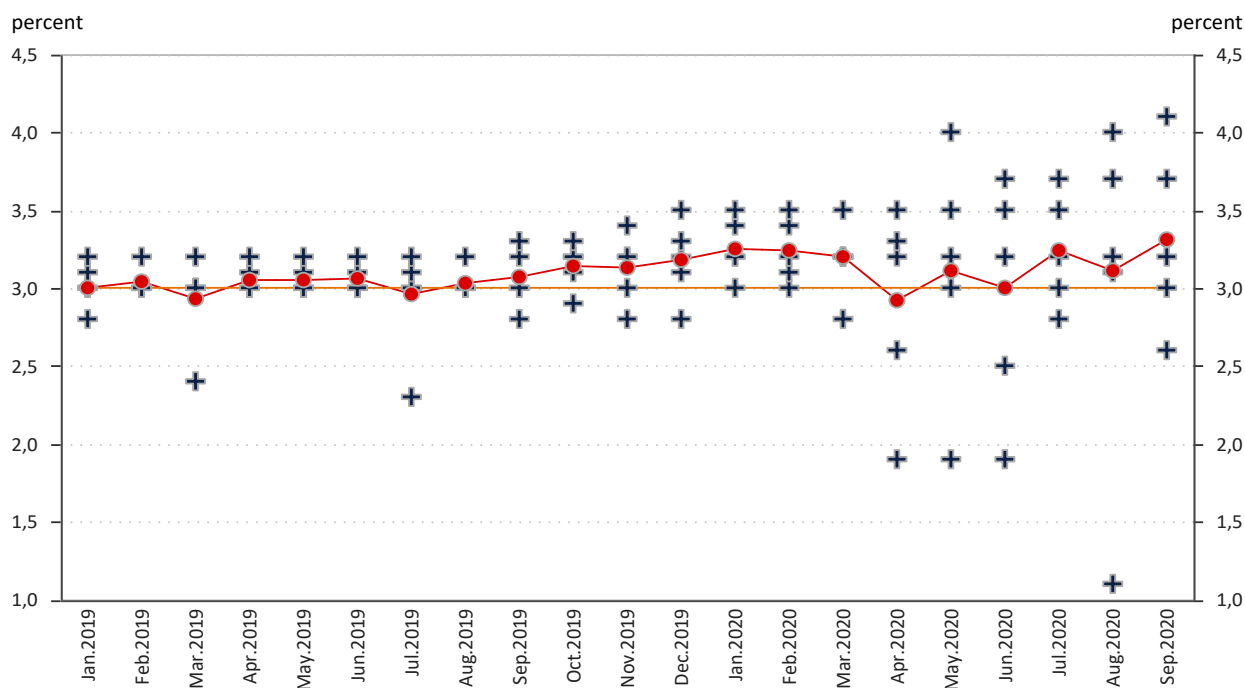
Source HCSO, MNB decomposition
 Notes: annual growth rates (%). Seasonally not adjusted data.

5. Market expectations for the inflation rate in current year



Source: Refinitiv
 Note: crosses mark the quartiles of the analyst forecasts and the minimum and maximum values, the red continuous line represents the mean calculated by values, the brown line shows the inflation target of MNB.

6. Market expectations for the inflation rate next year



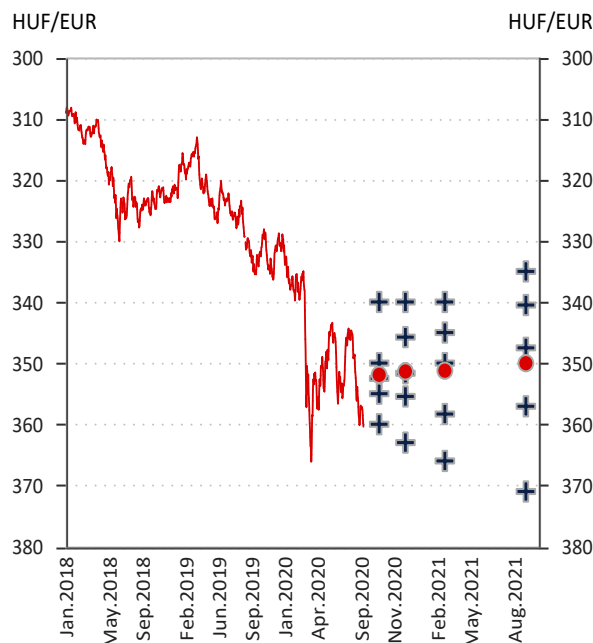
Source: Refinitiv
 Note: crosses mark the quartiles of the analyst forecasts and the minimum and maximum values, the red continuous line represents the mean calculated by values, the brown line shows the inflation target of MNB.

7. Expectations for HUF/EUR exchange rate (Bloomberg collection)



Source: Bloomberg
 Note: Bloomberg collection; based on new FX forecasts. 2-weeks moving average, reverse scale.

8. Expectations for HUF/EUR exchange rate



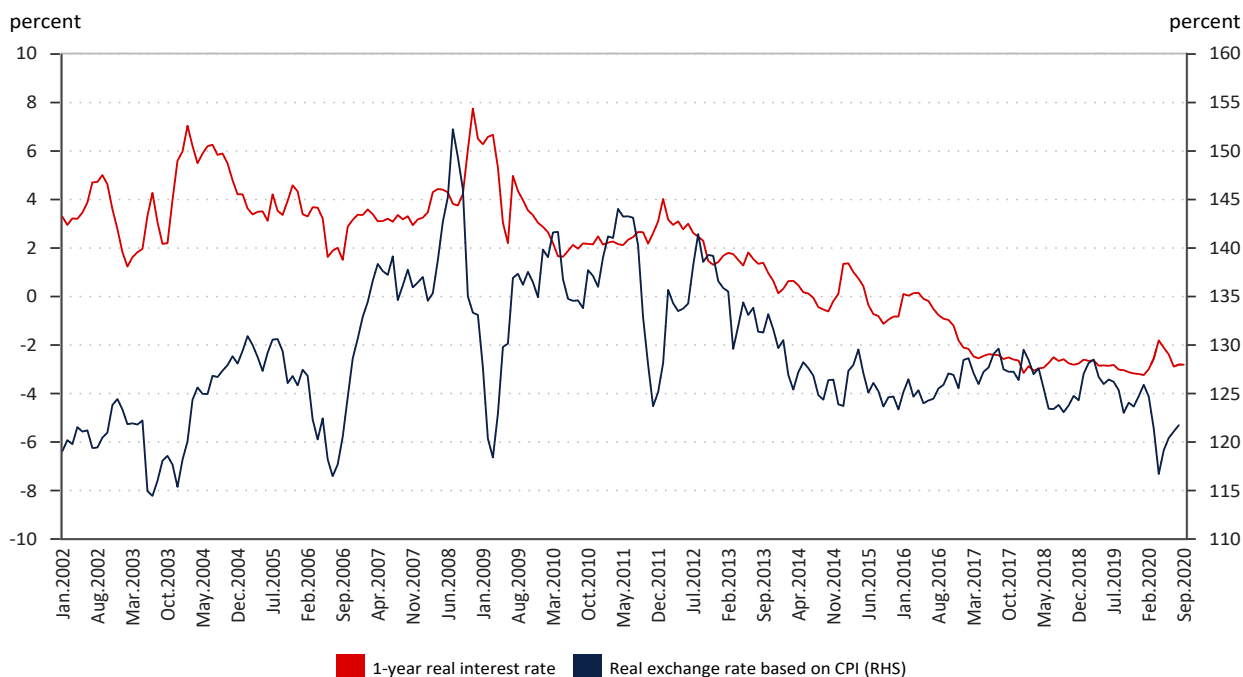
Source: Refinitiv, MNB.
 Note: reverse scale, the crosses mark the quartiles of the analyst forecasts and the minimum and maximum values, the red continuous line represents the mean calculated by values.

9. Spot and futures Brent crude oil price



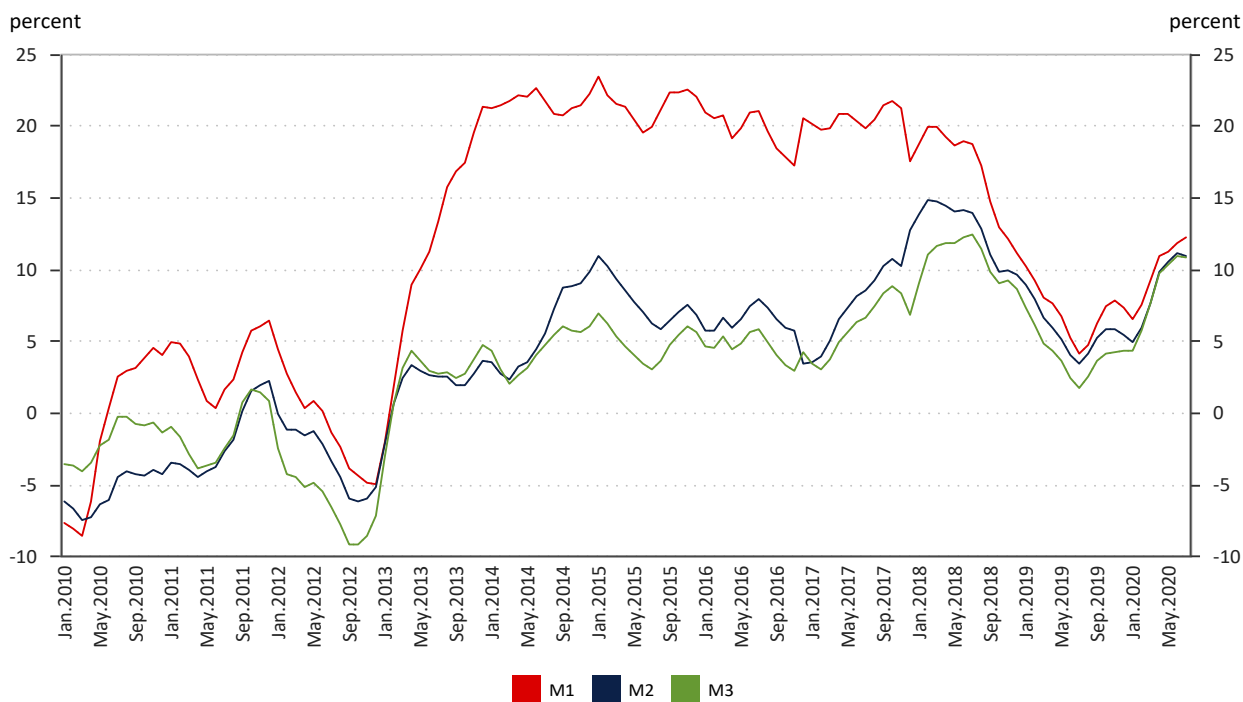
Source: Bloomberg, MNB.
 Futures are based on the latest available futures prices. Technical assumption underlying is used in our inflation forecast published in the most recent Inflation Report

10. Monetary conditions



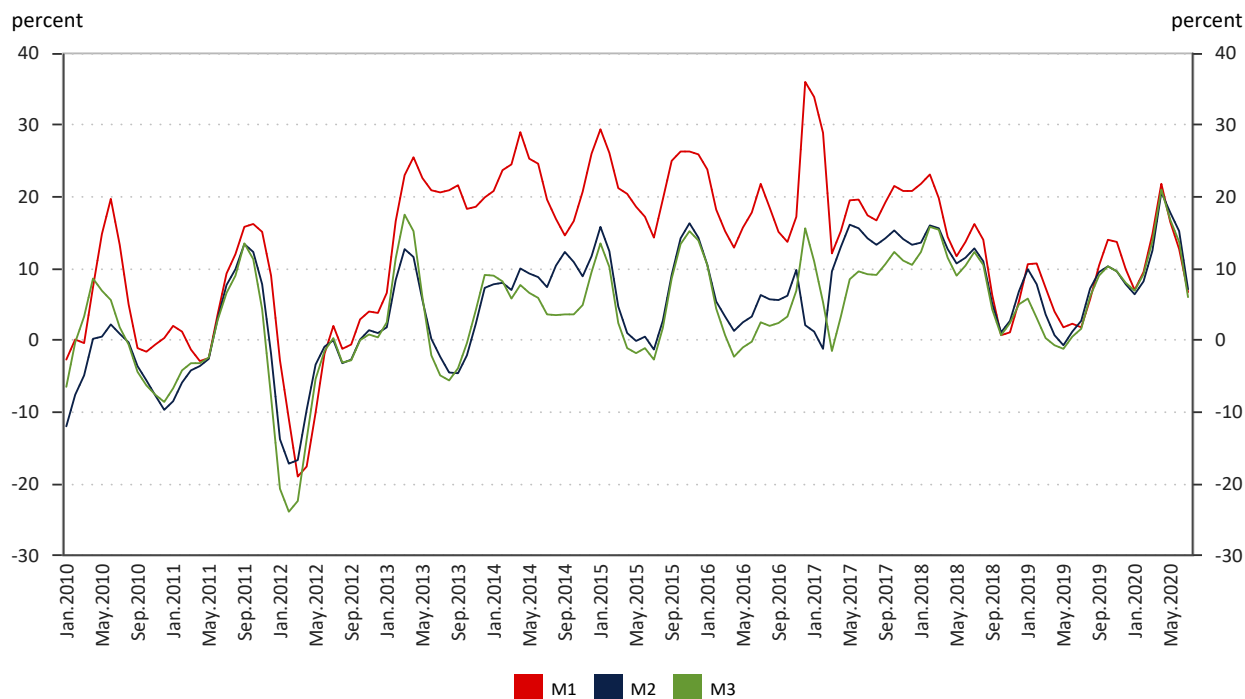
Source: Refinitiv, HCSO, Eurostat, ÁKK, MNB
 Note: Real interest rate is calculated from 1-year zero coupon yield and analysts corresponding 1-year forward inflation expectations derived from the Reuters-poll by the MNB. Real exchange rate is calculated from the change of the forint relative to euro, adjusted by the corresponding Hungarian CPI and the EMU is HICP. (1 January 2000=100%, increase represents appreciation)

11. Real growth rate of monetary aggregates (year-on-year basis)



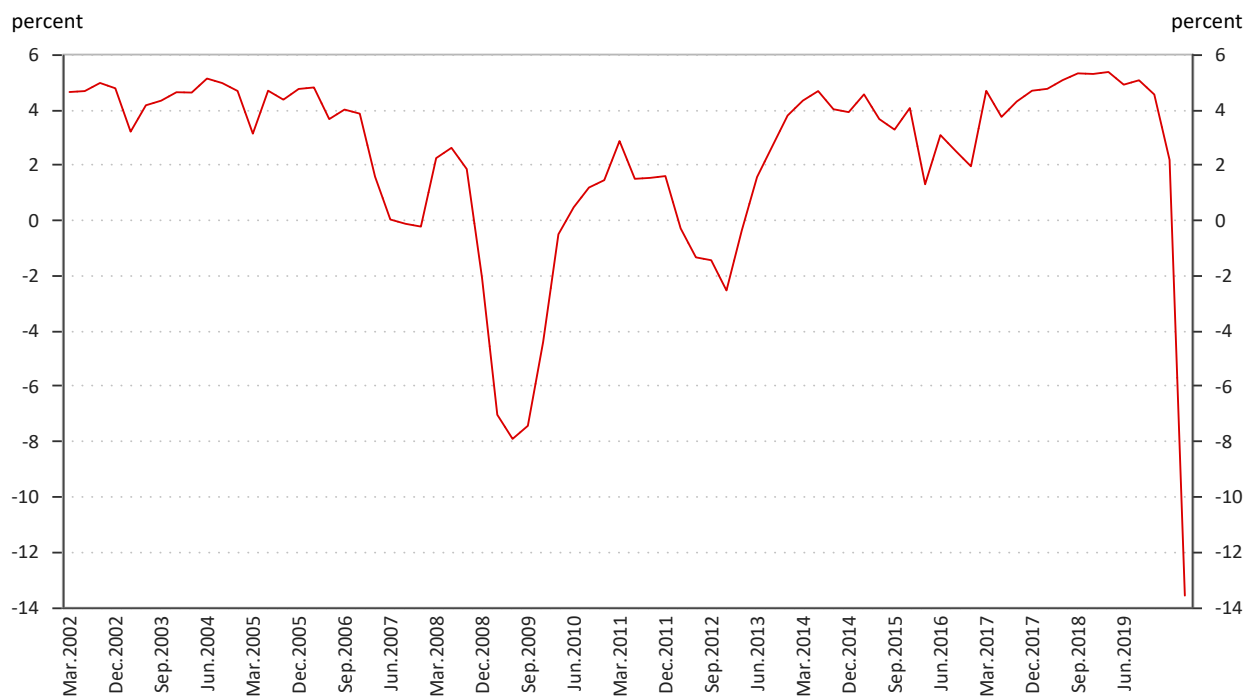
Source: MNB.

12. Real growth rate of monetary aggregates (annualized from quarterly rates)



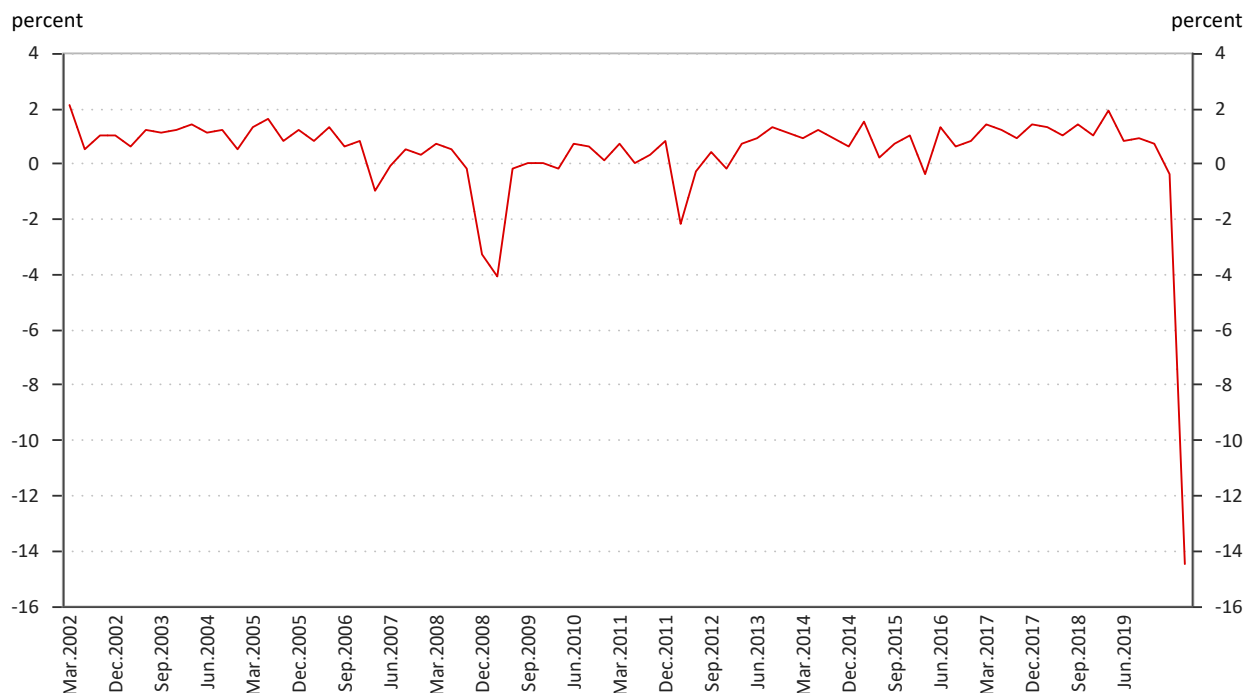
Source: MNB.

13. Change in annual GDP



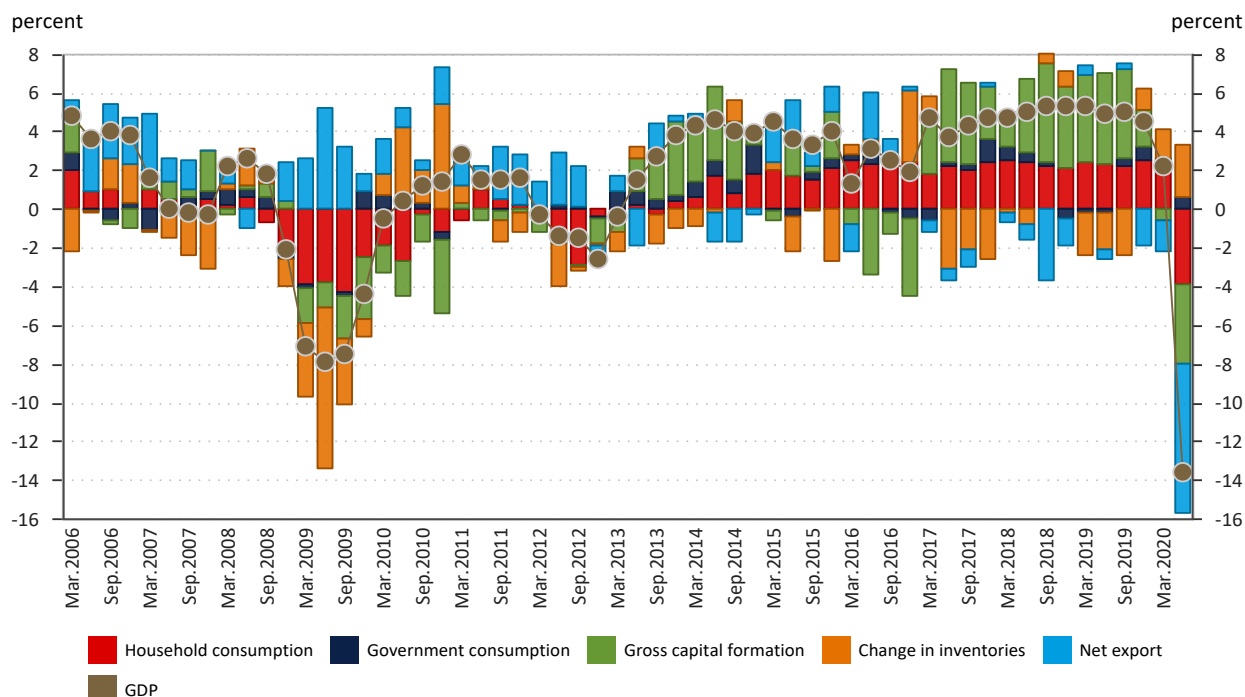
Source: HSCO

14. Quarterly GDP change



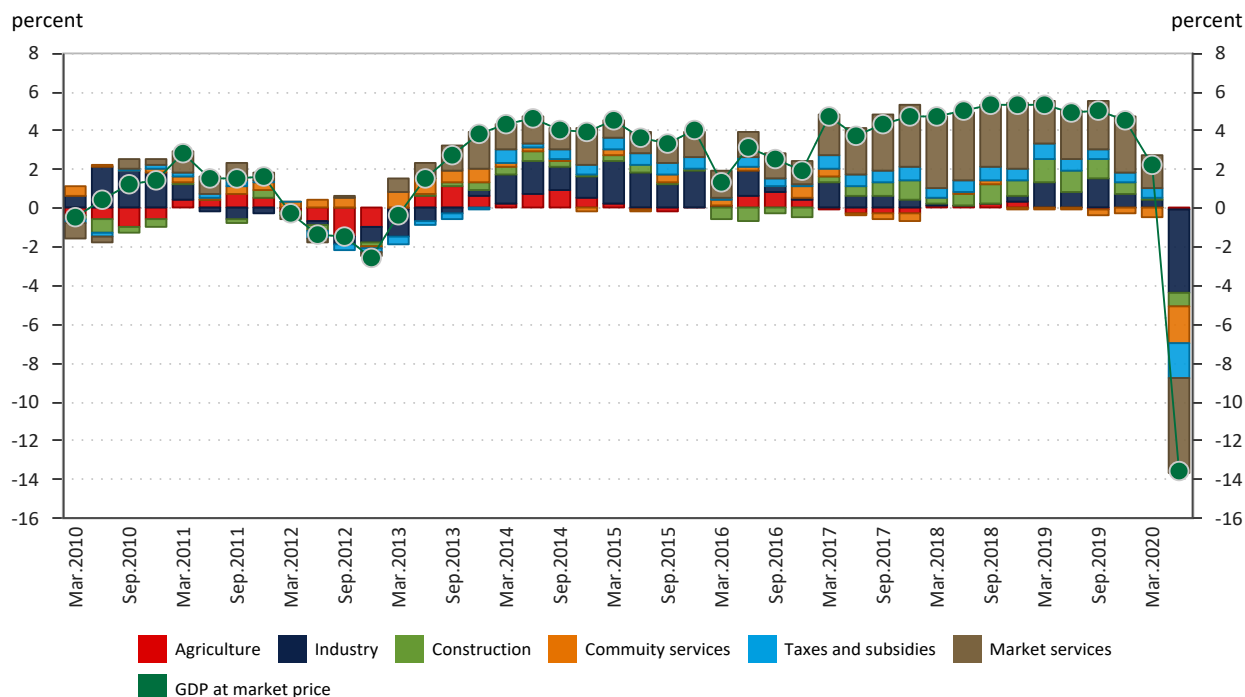
Source: MNB, HSCO.

15. Contribution to annual GDP growth



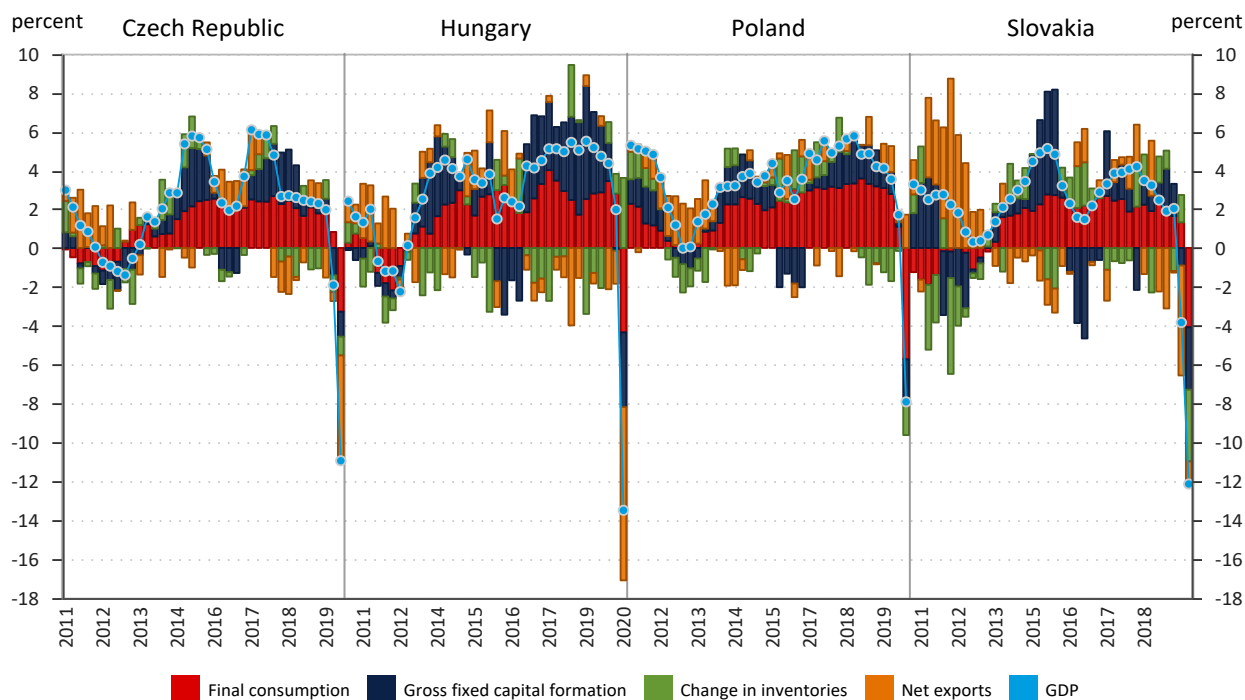
Source: MNB, HSCO.

16. Decomposition of GDP growth



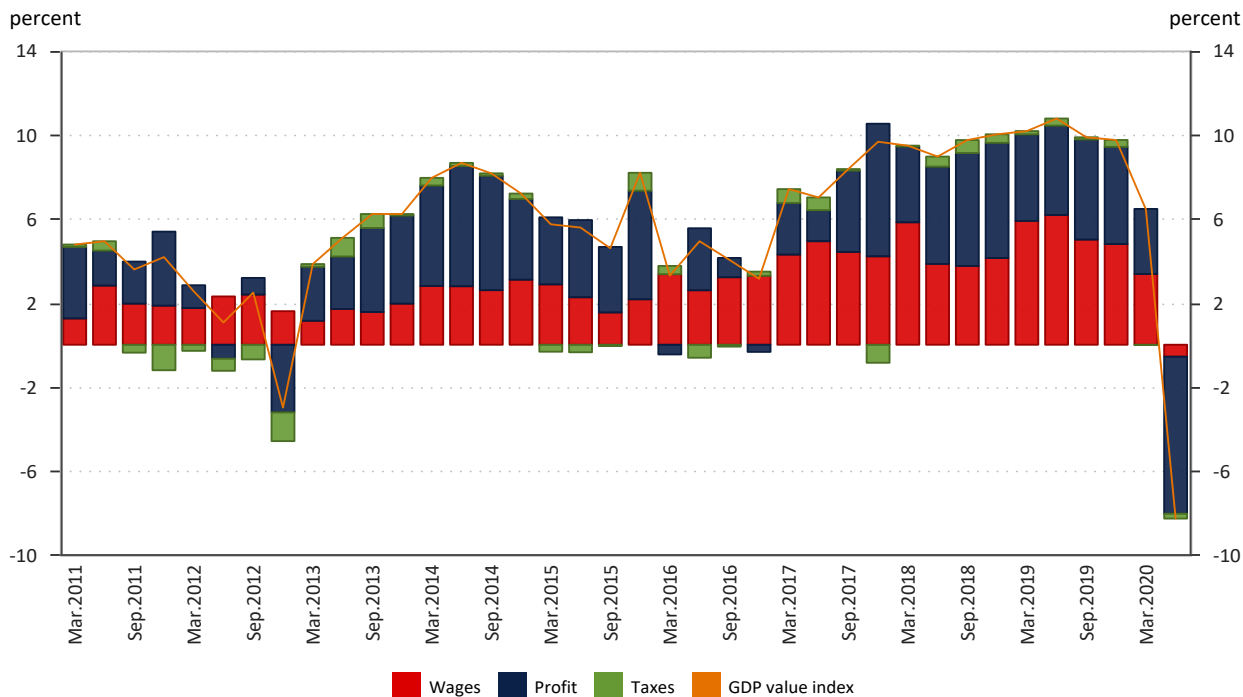
Source: HSCO.

17. Contribution to annual GDP growth in the region



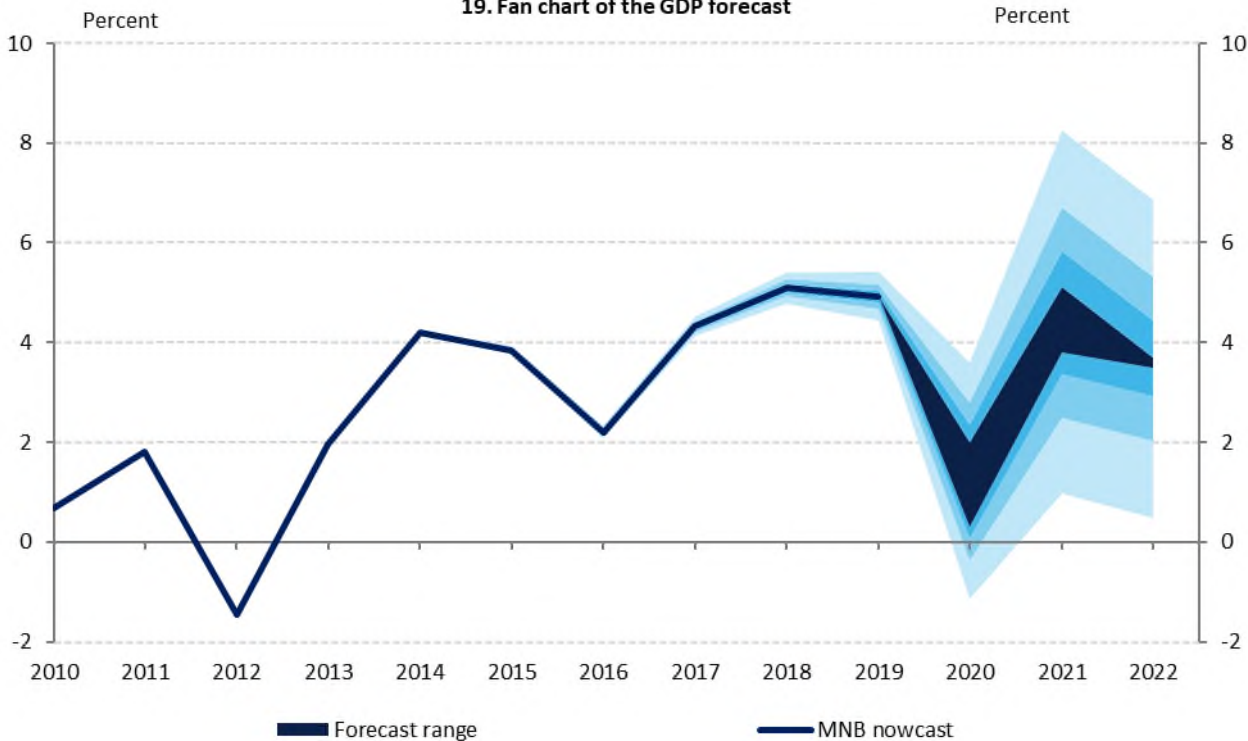
Source: MNB, HSCO. Note: based on seasonally and calendar adjusted and reconciled data

18. Decomposition of GDP growth (income approach)



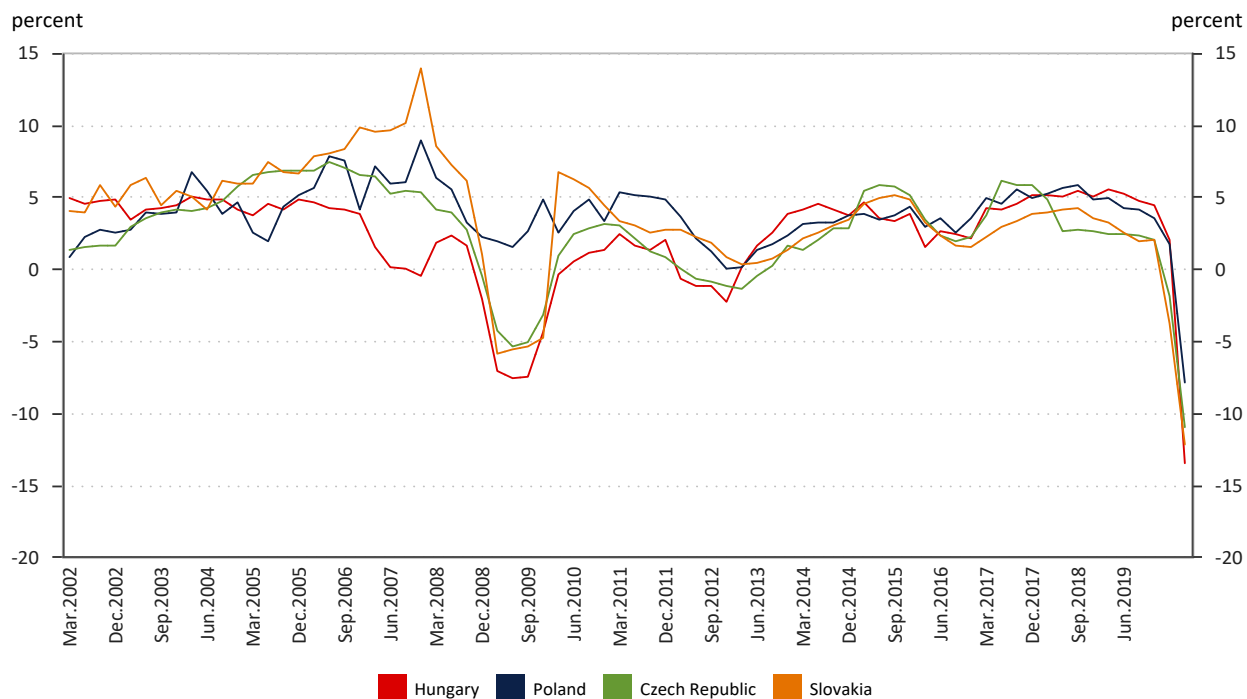
Source: MNB, HSCSO Note: contribution in percentage points

19. Fan chart of the GDP forecast



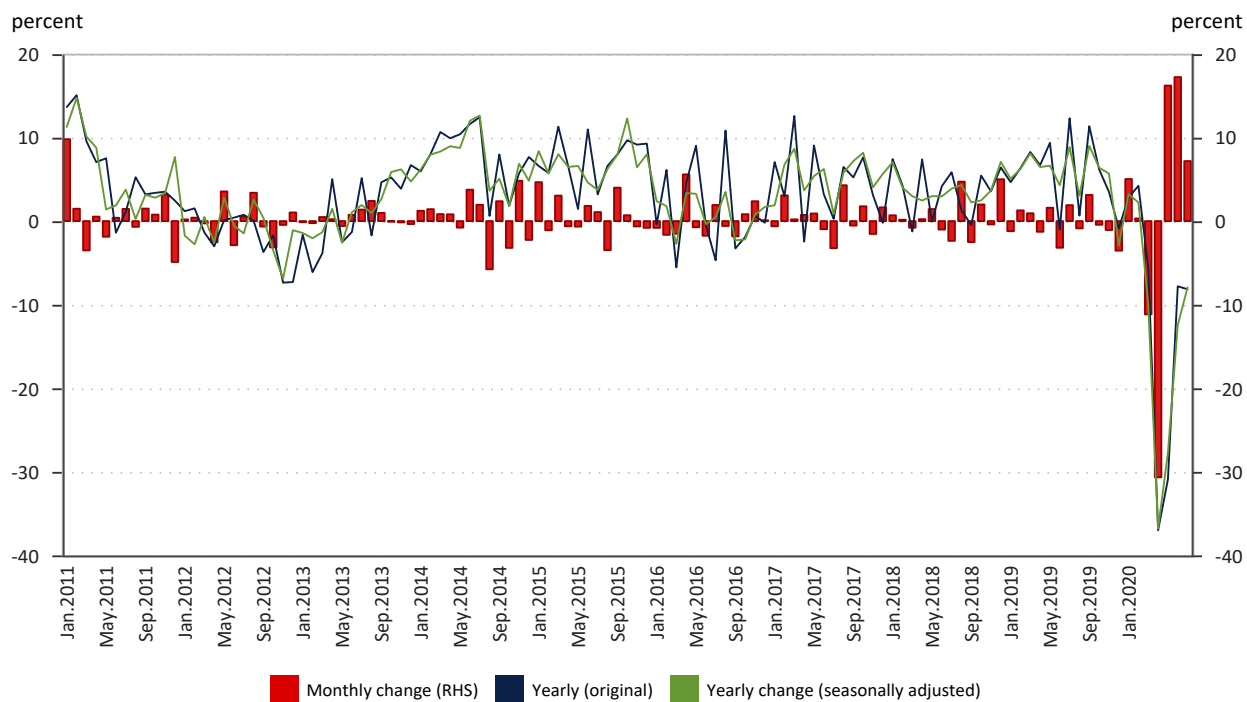
Source: HCSO, MNB

20. GDP growth rate in CEE



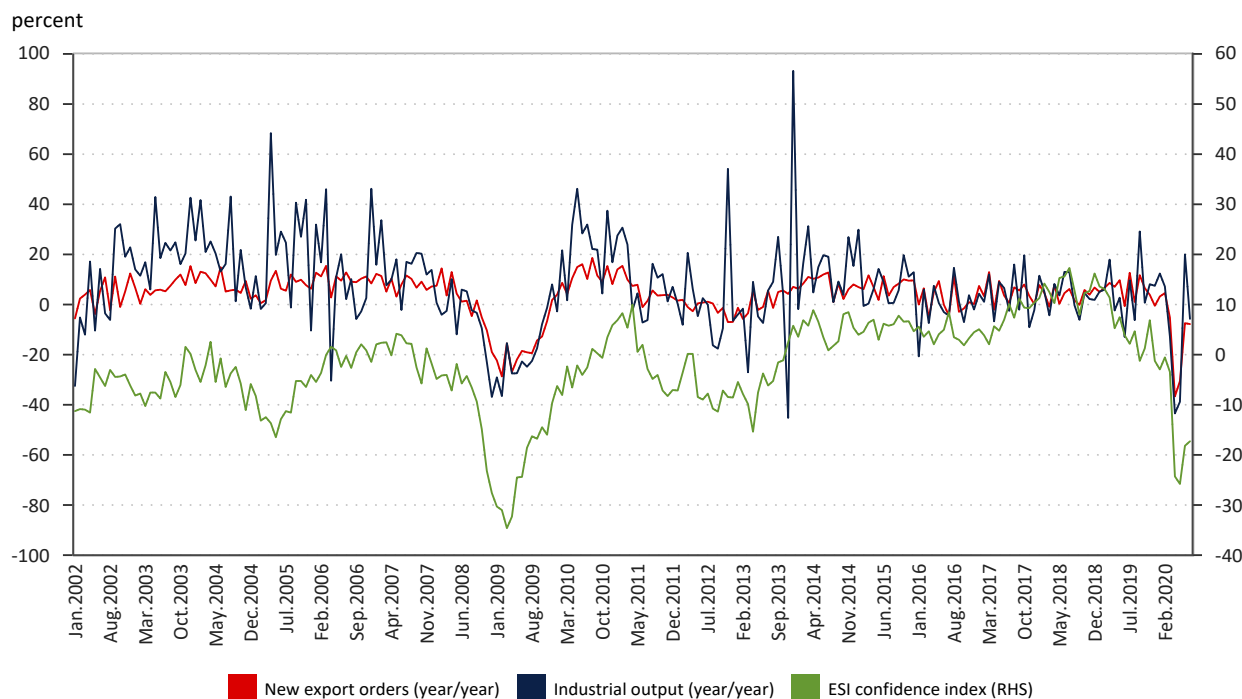
Source: Eurostat
 Note: annual growth rate.

21. Change in industrial production



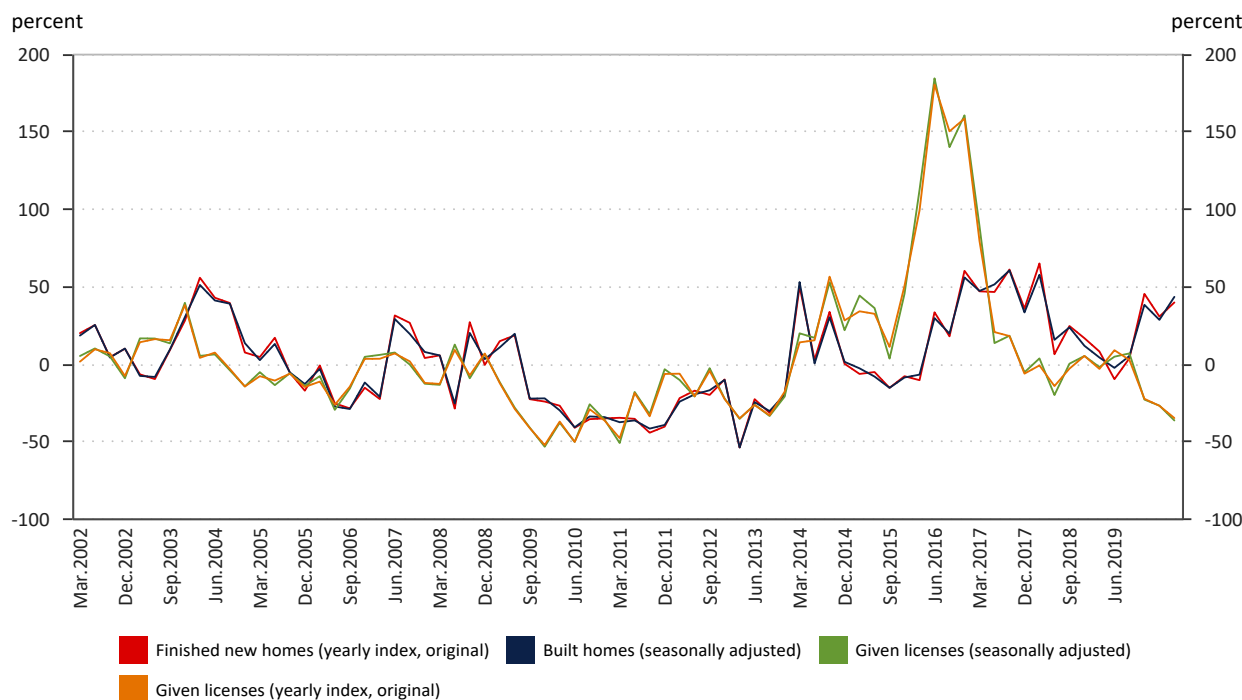
Source: MNB, HCSO.

22. Industrial production and new export orders



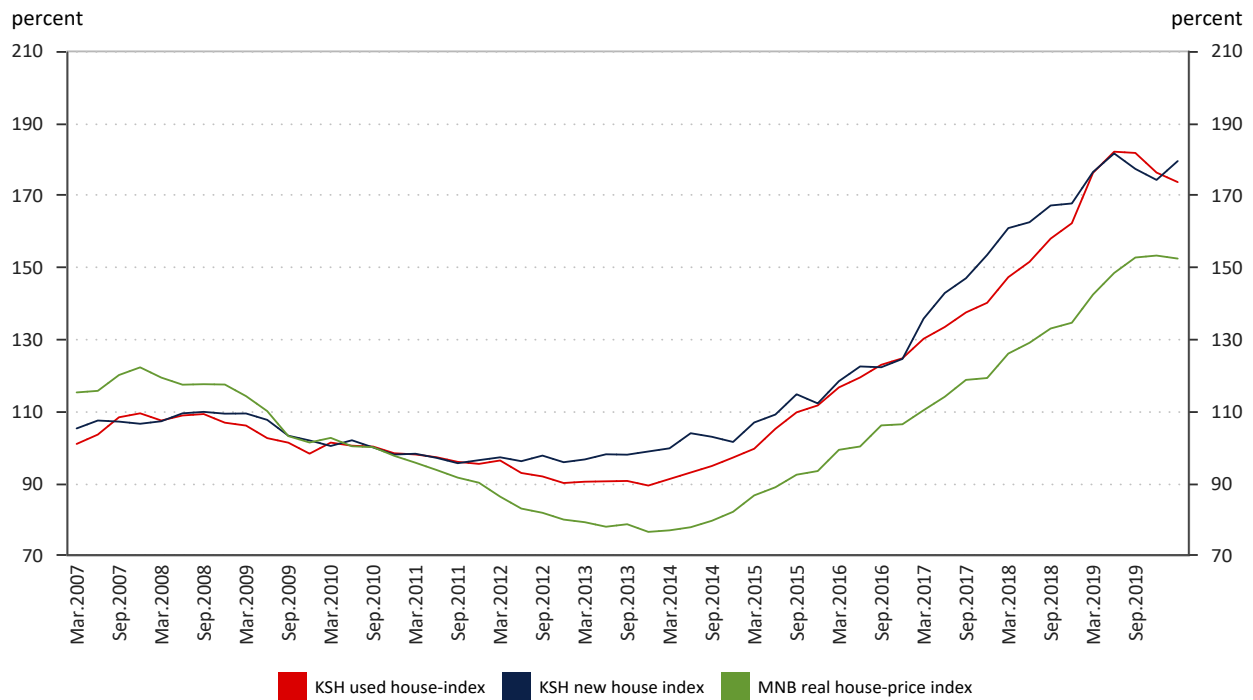
Source: HSCO, European Commission.
 Note: ESI Index is a survey on business confidence by the European Commission. Chart represents the industrial sub-index.

23. Developments on the real estate market



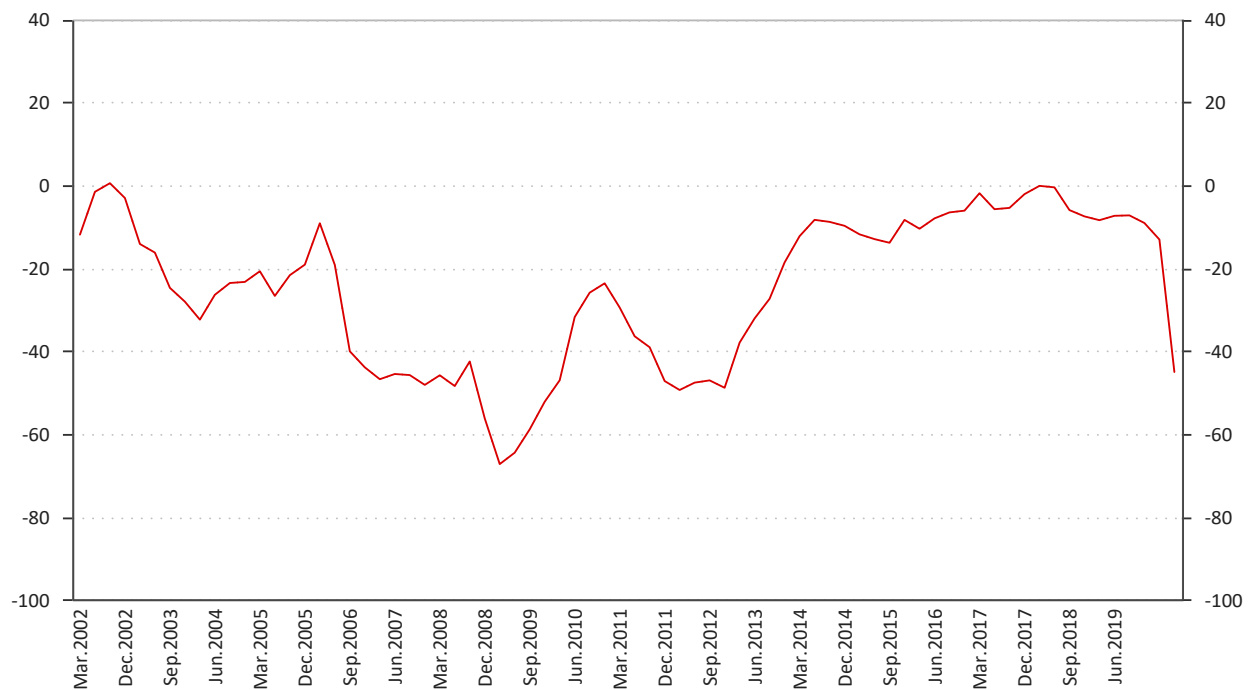
Source: MNB, HCSO.

24. Development of house prices



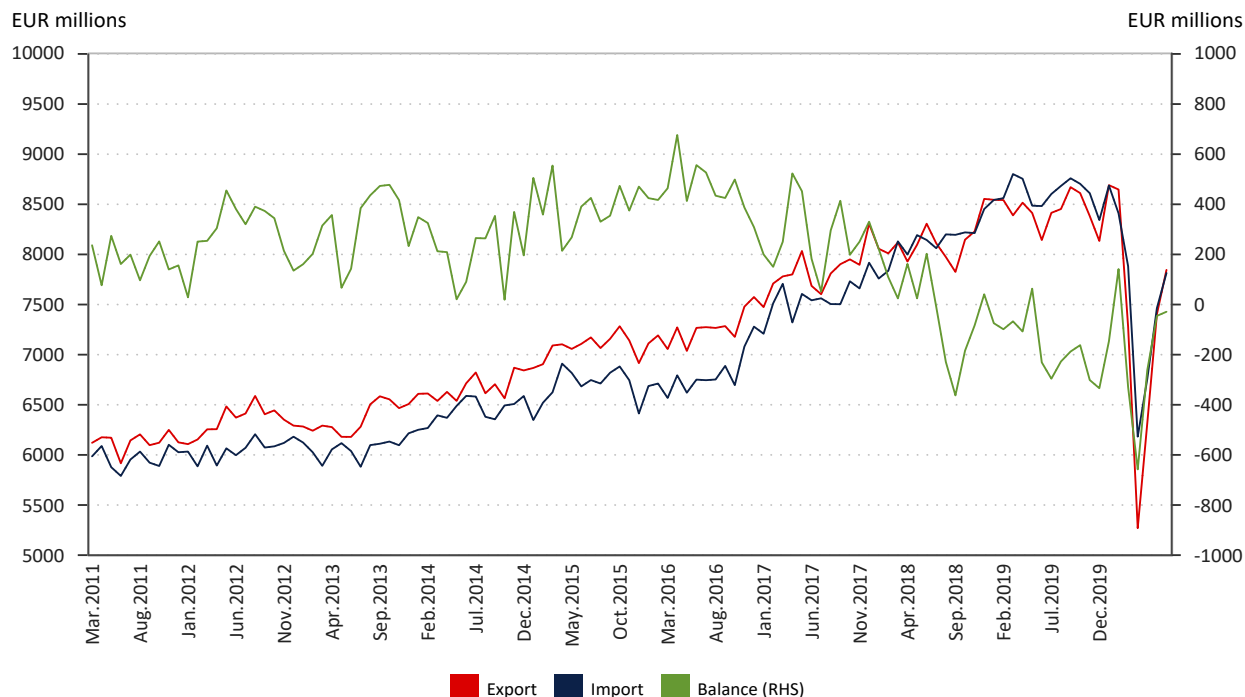
Source: HCSO
 Note: 2010=100, inflation adjusted indices.

25. Household confidence index (reweighted)



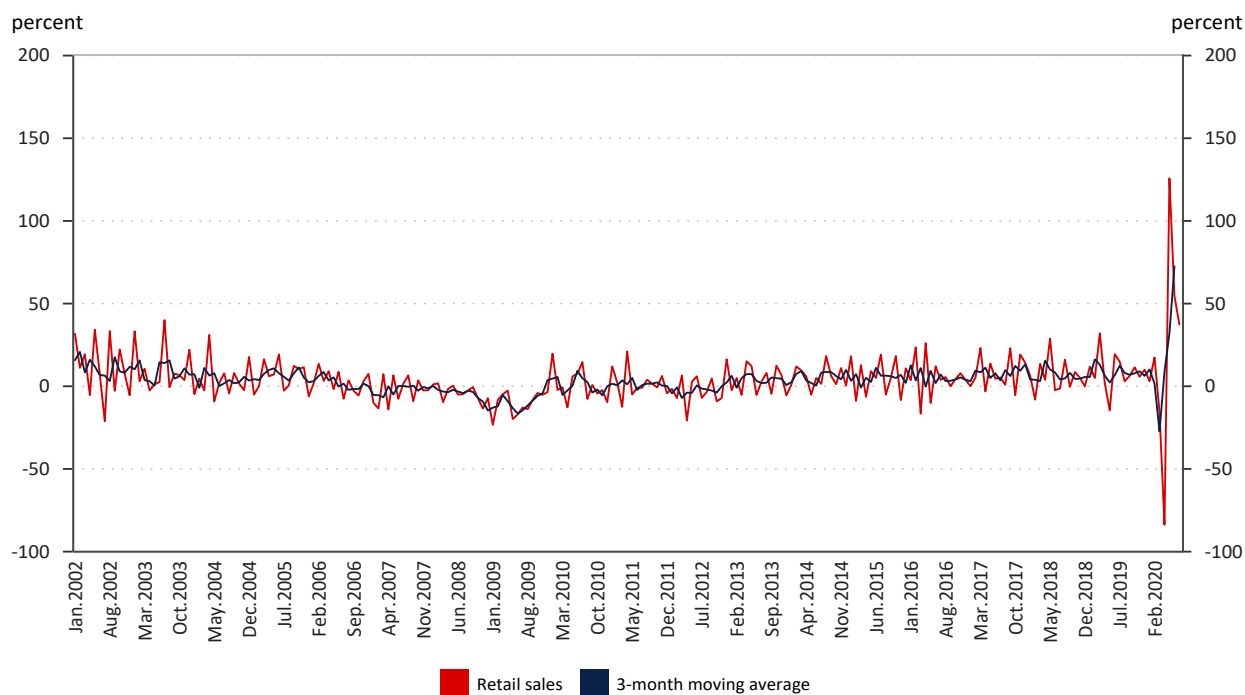
Source: European Commission.
 Note: Household confidence indicator is a composite indicator based on the ESI survey

26. Change in export and import volumes



Source: HCSO, MNB calculation. Comment: Foreign trade was corrected due to slippage and missing items between specific months and the activity of VAT resident companies. The seasonal adjustment of the trade balance was done directly by MNB

27. Total volume of retail trade



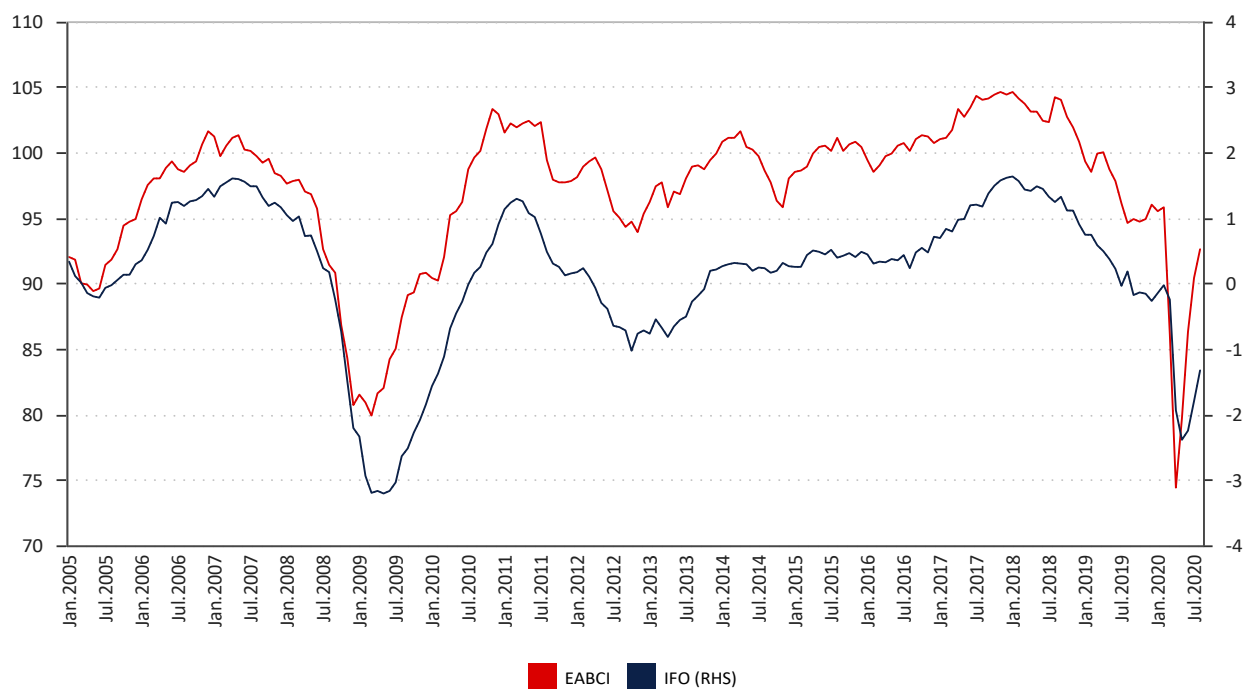
Source: HCSO. Note: seasonally adjusted annualised monthly growth rates. The data of total retail sales contain beyond the narrow retail sales the turnover of motor vehicles and automotive fuel as well.

28. Quarterly growth rates of automobile sales



Source: ACEA.

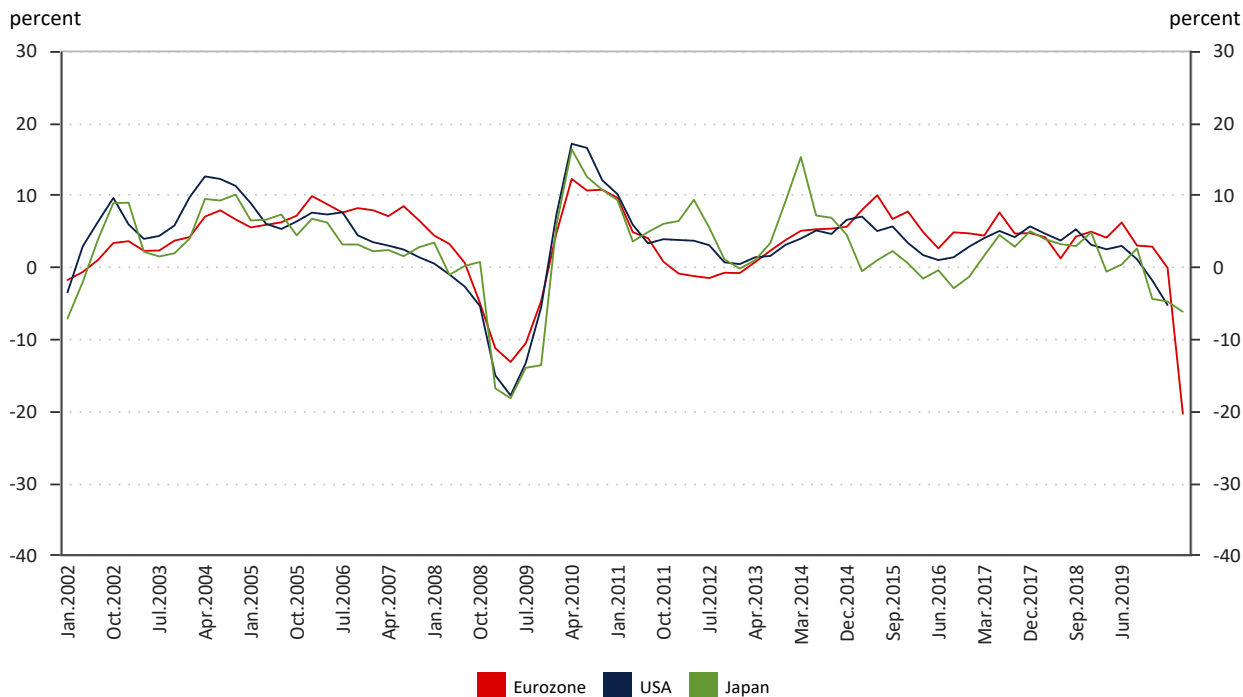
29. Business climate indices in the EMU



Source: IFO; European Committee.

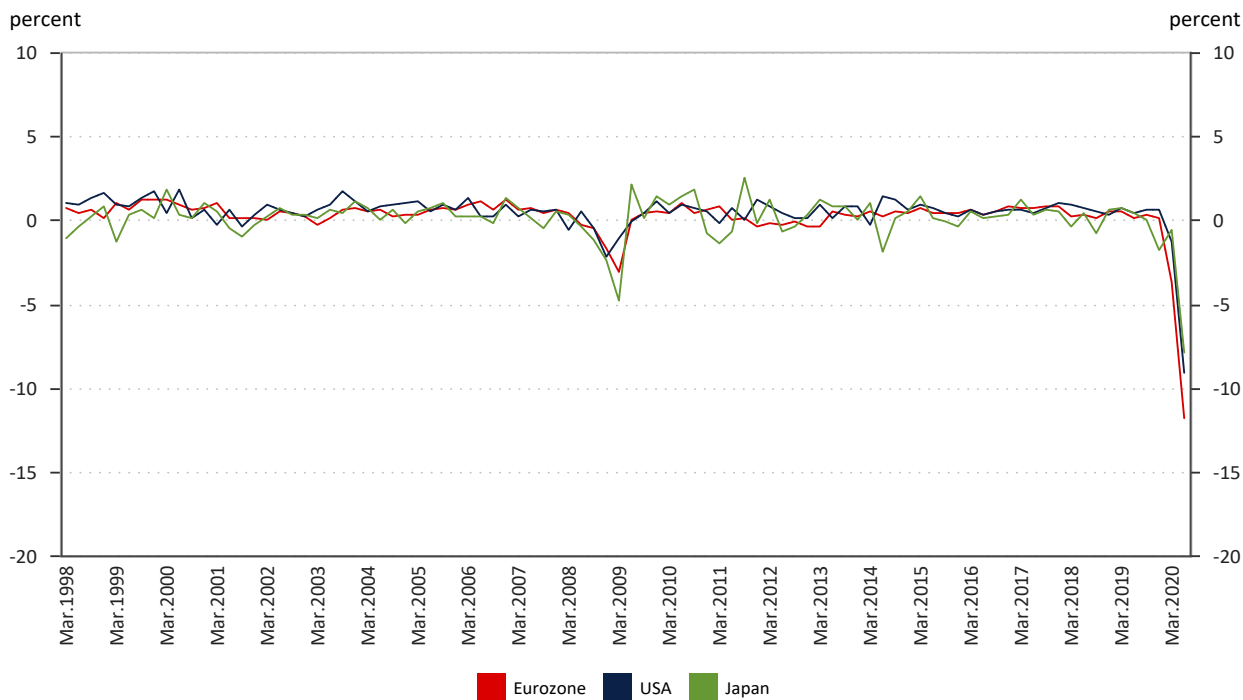
Note: IFO: Business Climate Index of the German Institut für Wirtschaftsforschung (Average of year 2000 = 100); EABCI: Business Climate Index of the European Committee (deviations from the long-run average), seasonally adjusted.

30. The annual growth rate of the volume of imported goods and services



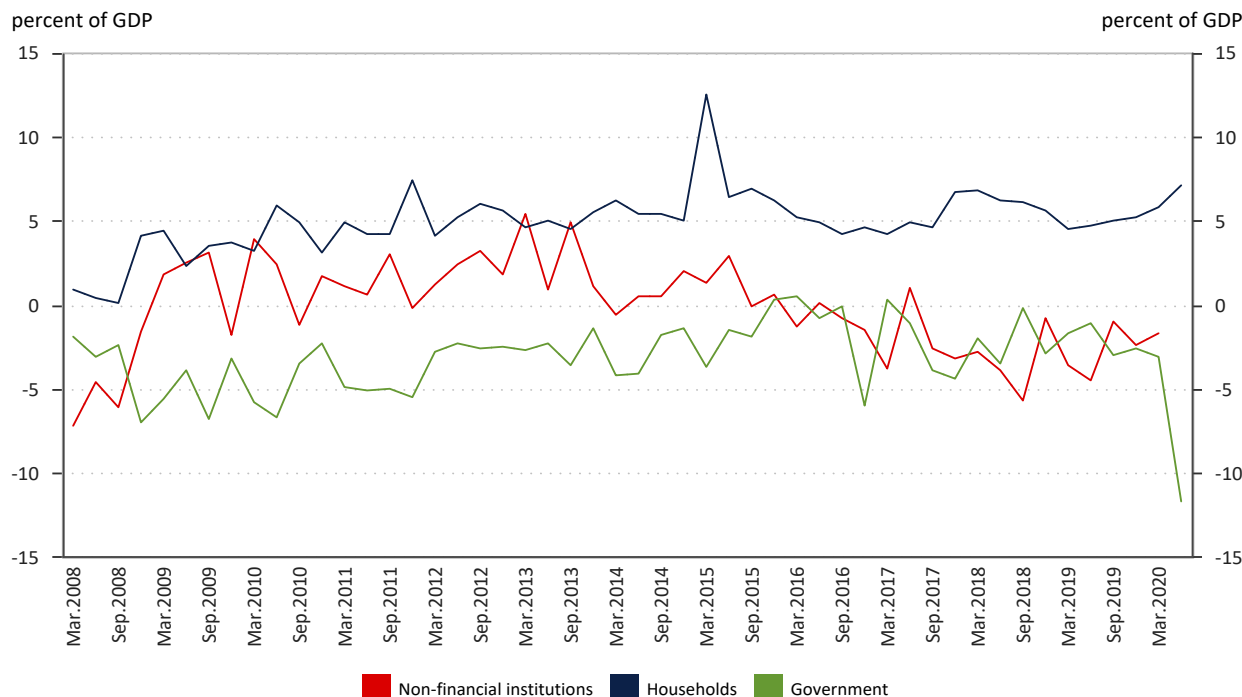
Source: Eurostat.

31. Quarterly GDP growth rate in the EMU, US and Japan



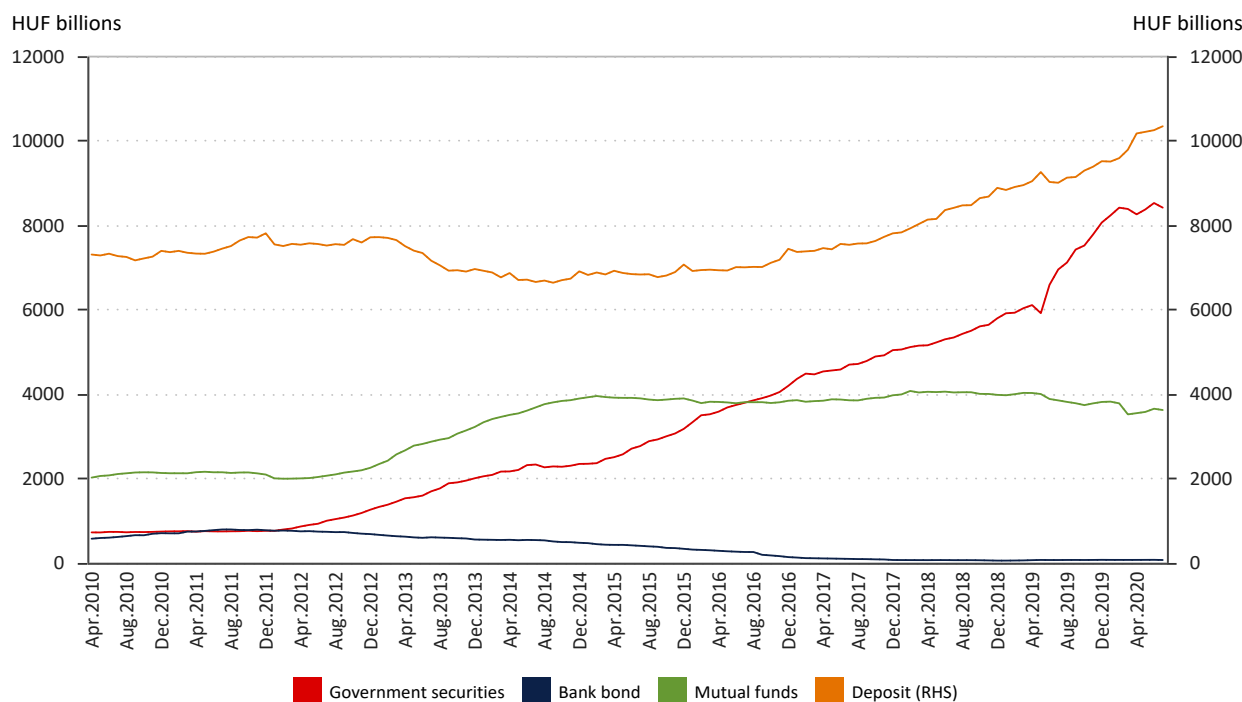
Source: Eurostat

32. Net lending of domestic sectors



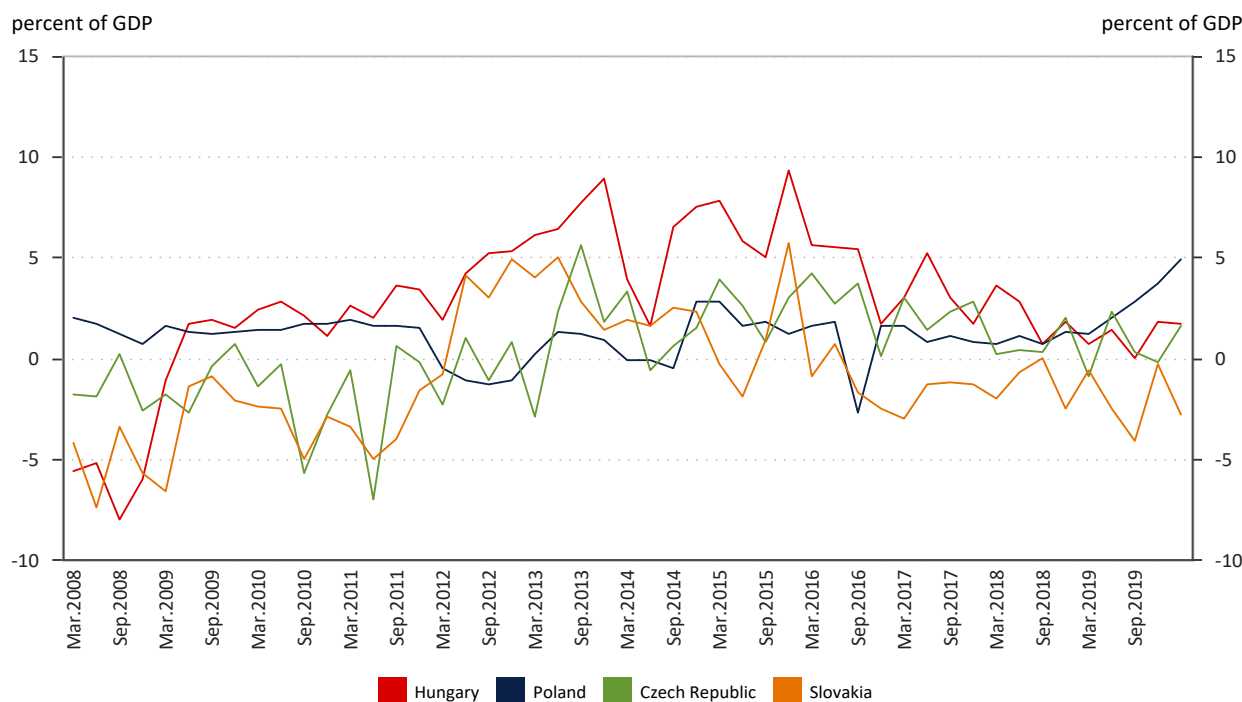
Source: MNB.
Note: Seasonally adjusted by MNB.

33. Main financial assets held by households



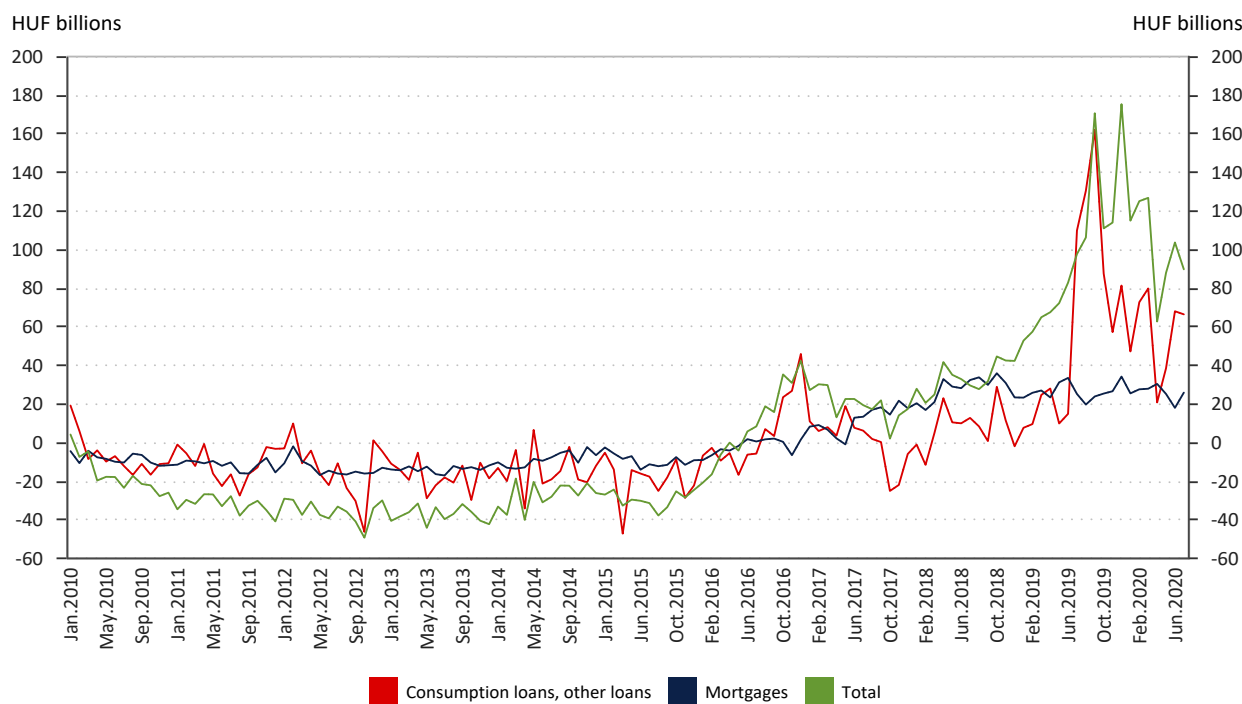
Source: MNB.

34. External financing capacity in the CEE countries



Source: MNB, Eurostat.

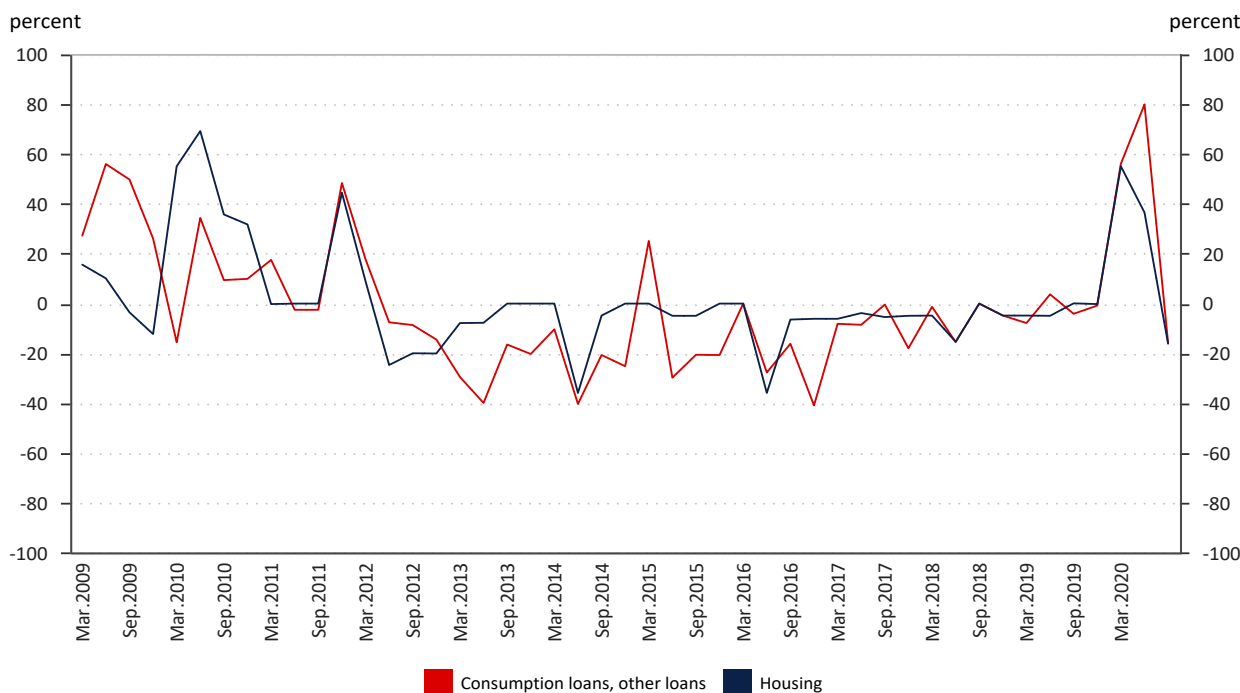
35. Net borrowing of the households



Source: MNB.

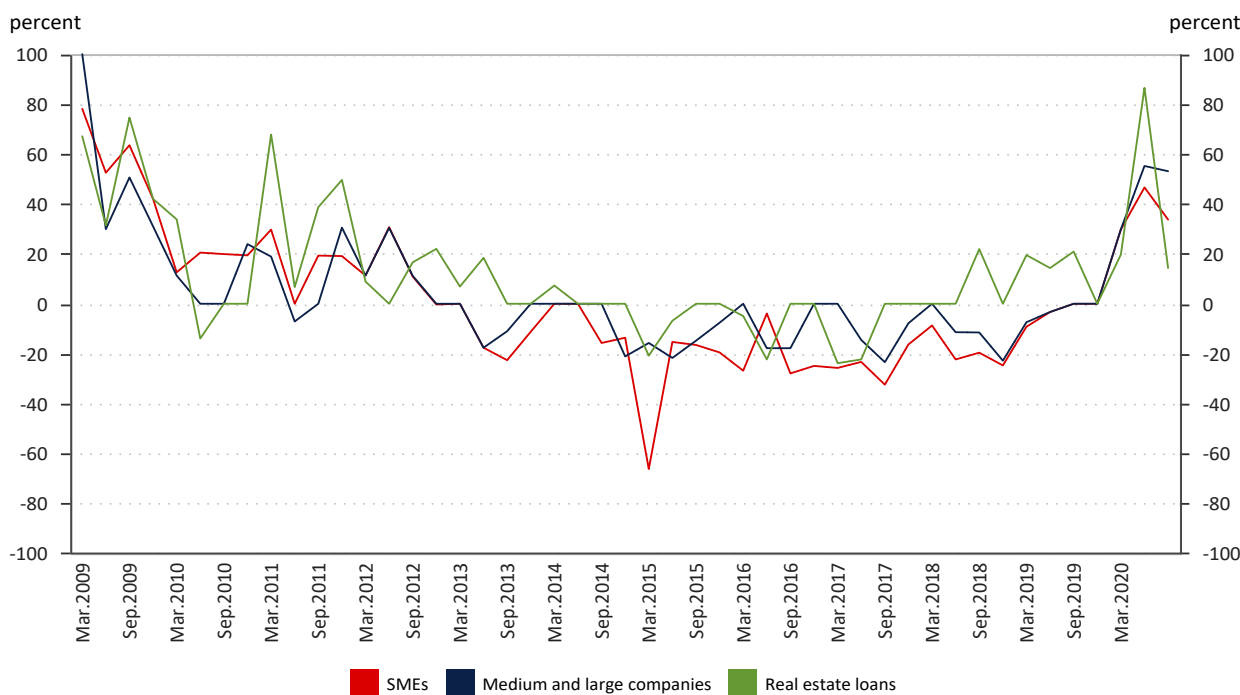
Notes: Figure showing underlying trends, adjusted for the impact of the forint conversion and settlement.

36. Creditworthiness standards and credit conditions in the household sector



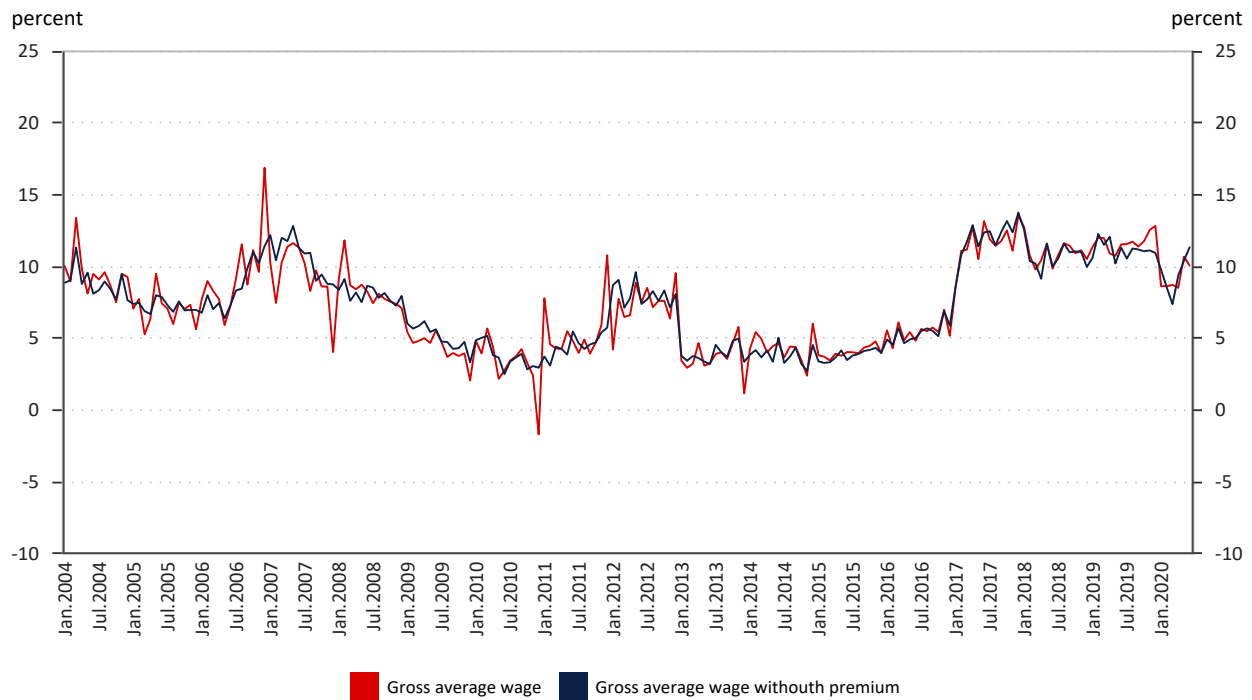
Source: MNB
 Note: credit conditions estimated by lending officers. Negative value indicates easing, positive indicates tightening compared to the last quarter (before 2009 to previous half a year). Last data is a forecast by MNB.

37. Creditworthiness standards and credit conditions in the corporate sector



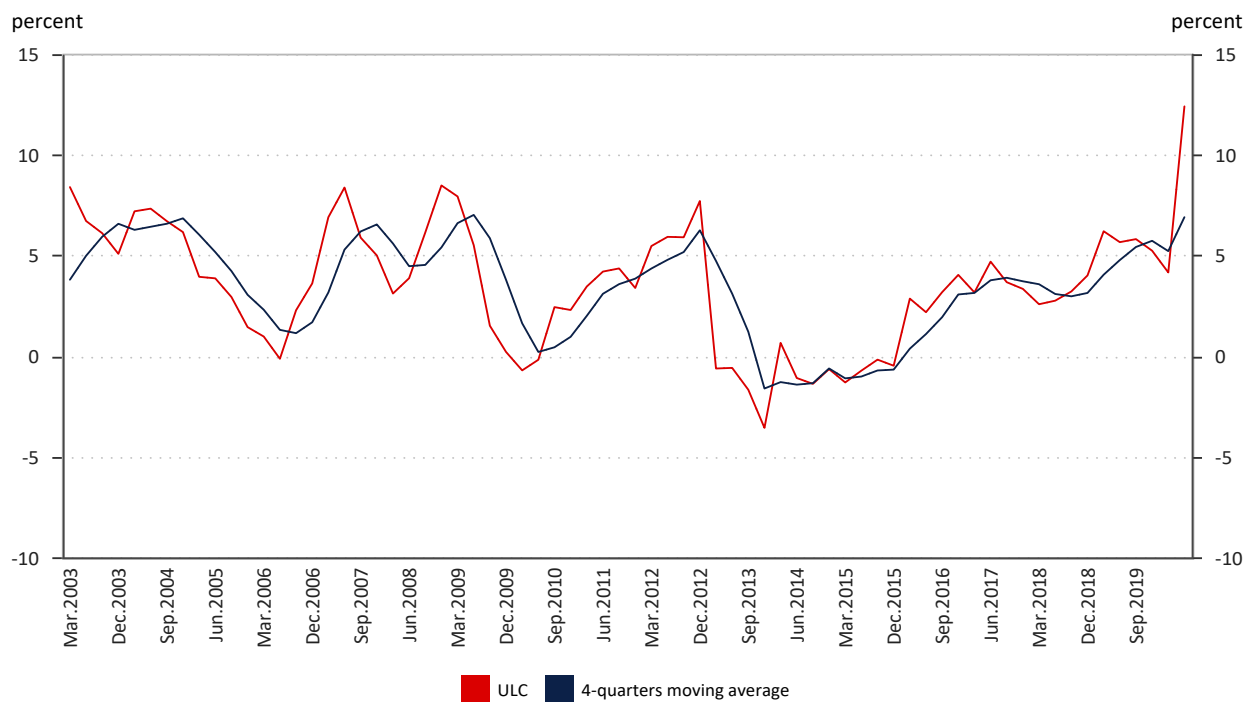
Source: MNB
 Note: credit conditions estimated by lending officers. Negative value indicates easing, positive indicates tightening compared to the last quarter (before 2009 to previous half a year). Last data is a forecast by MNB.

38. Wage growth in private sector



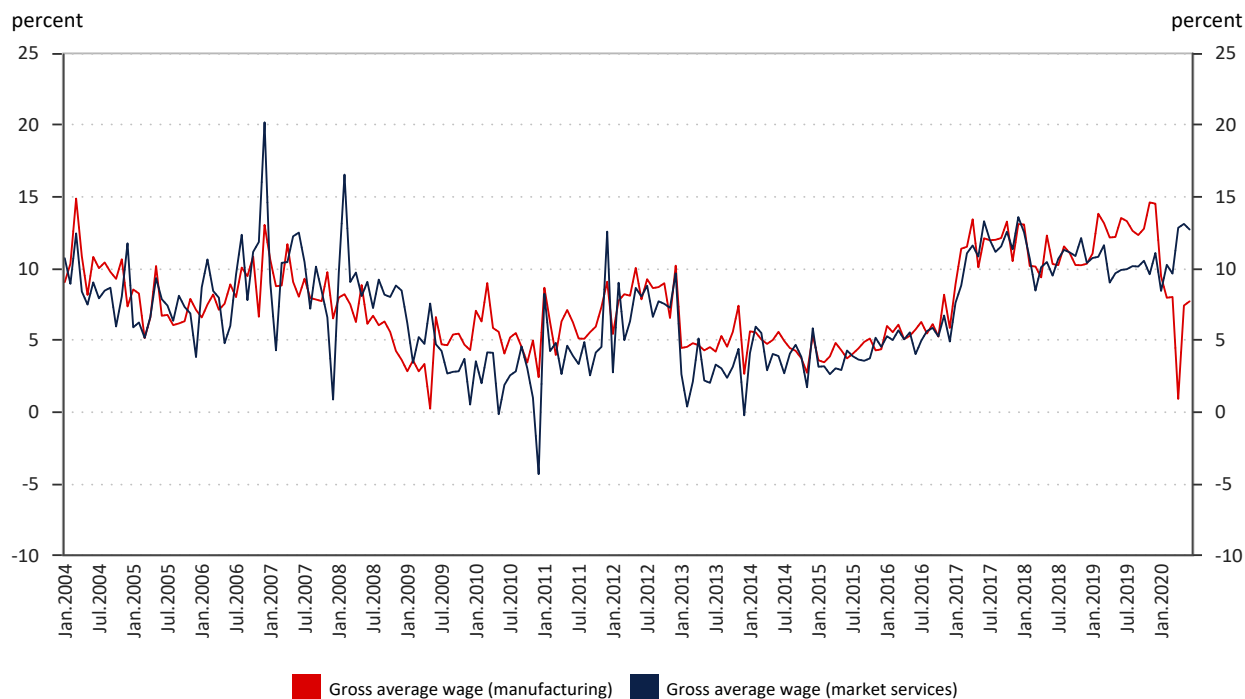
Source: HCSO, seasonally adjusted by MNB
 Note: annual growth rates.

39. Unit labour cost in the private sector



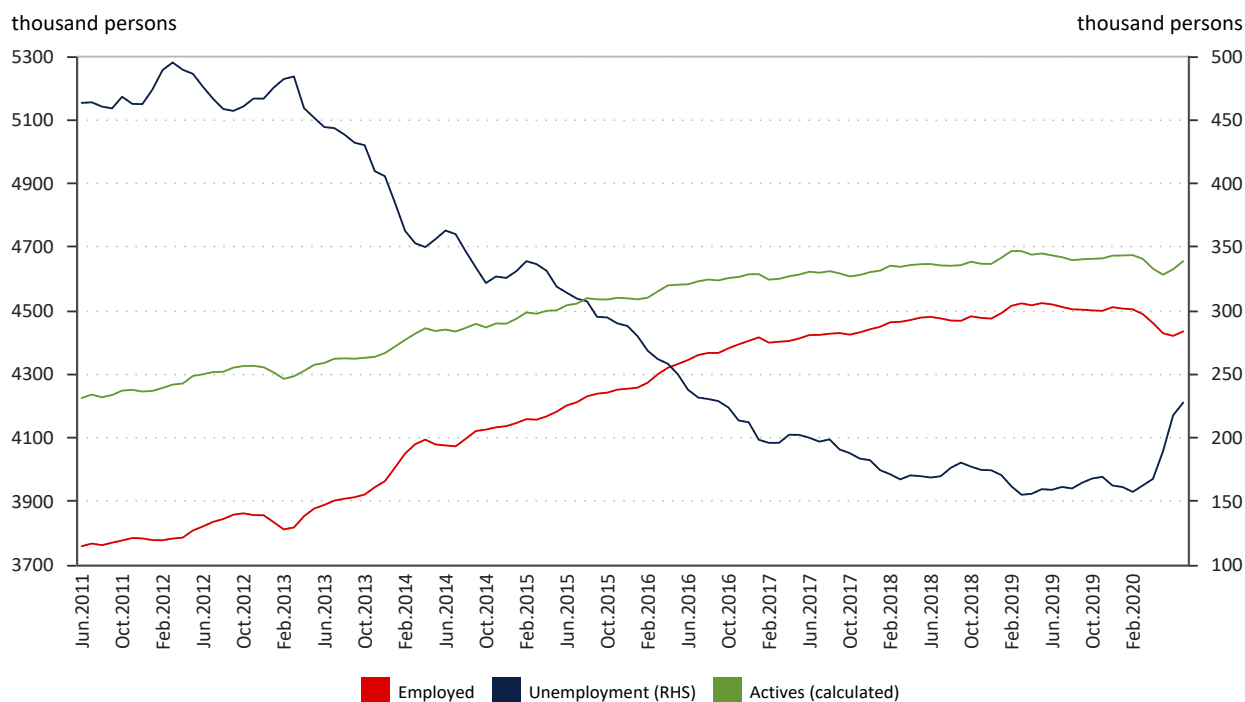
Source: HCSO, seasonally adjusted by MNB
 Note: annual growth rates.

40. Wage growth in the manufacturing and market service sector



Source: MNB, HCSO.

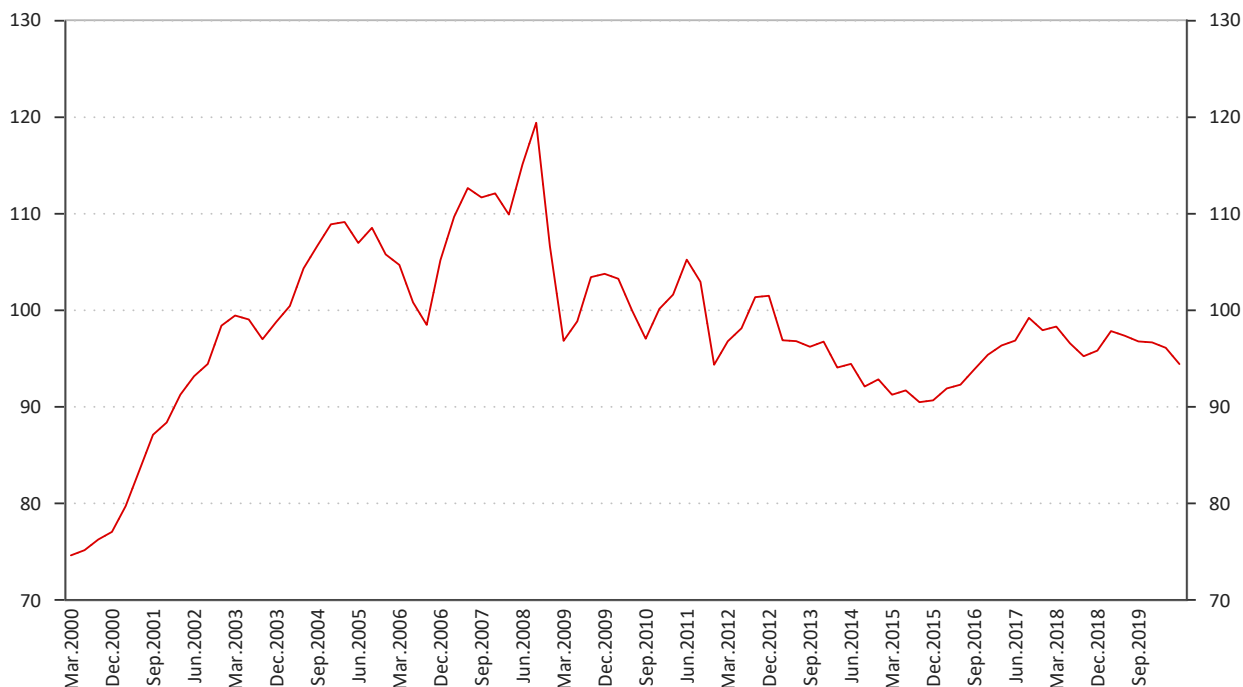
41. Activity and unemployment



Source: HCSO.

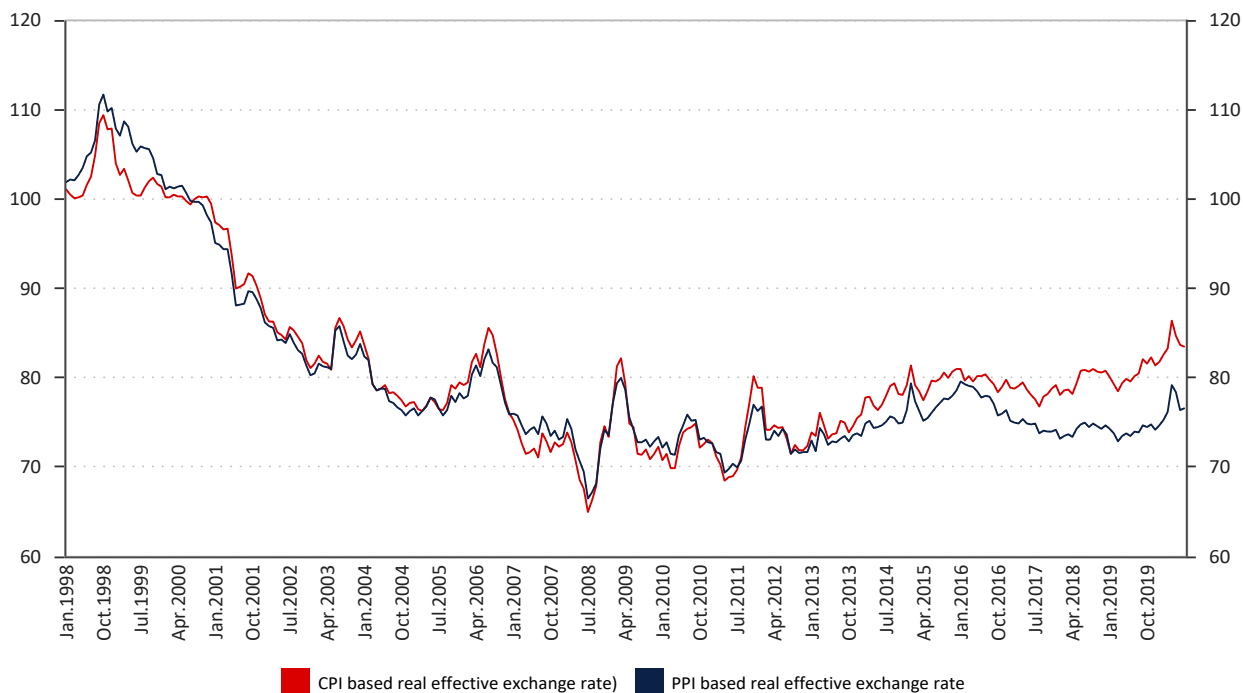
Notes: levels, seasonally adjusted.

42. ULC based real effective exchange rate of the HUF



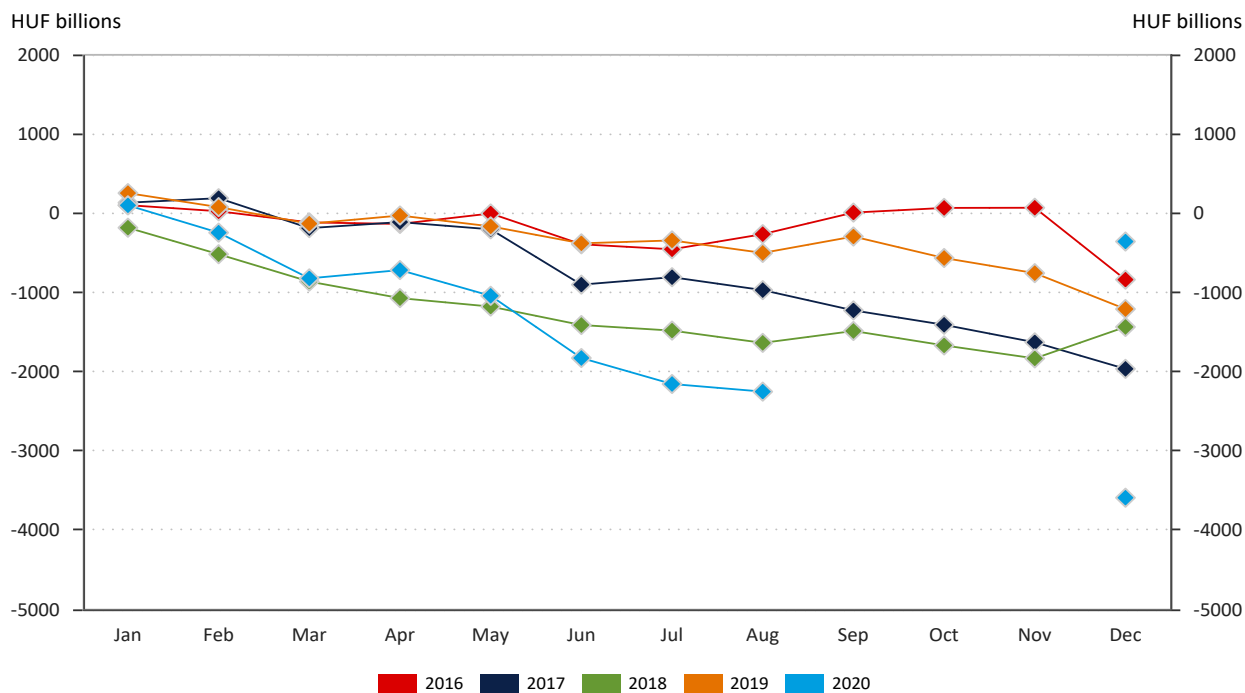
Source: Eurostat.
 Note: average of year 2000 = 100%. Increase means real-effective appreciation of HUF.

43. CPI and PPI based real effective exchange rates of the HUF



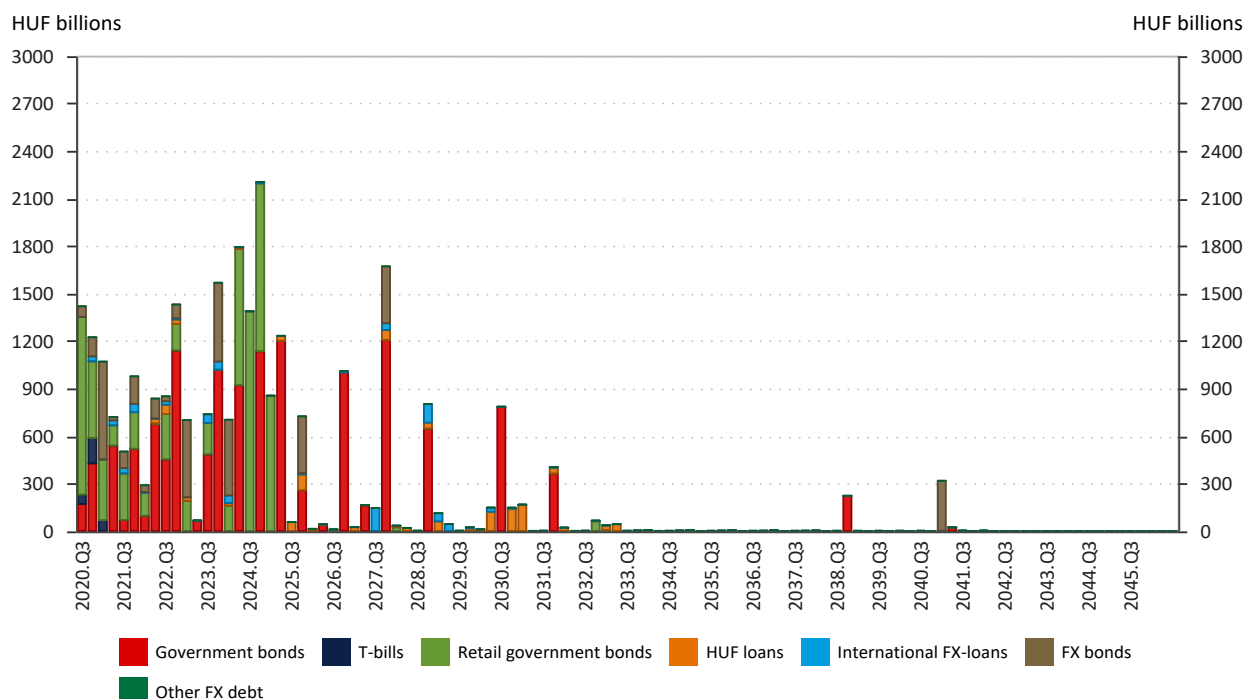
Source: HCSO.
 Note: average of year 2000 = 100%. Increase means real-effective depreciation of HUF.

44. Monthly evolution of budget deficit



Source: Hungarian State Treasury
 Note: Cumulated balance. For December 2020 the appropriation for cash-flow balance in the Budget Act is HUF -367 billion, while the financing plan of AKK at the end of August included a forecast of HUF -3600 billion.

45. Quarterly maturity structure of the government debt



Source: MNB, ÁKK.
 Note: Redemptions in the recent quarter are included.

46. The latest central projection of the MNB compared to other prognoses

	2020	2021	2022
CPI (annual average growth rate, %)			
MNB (June 2020)	3.2 - 3.3	3.2 - 3.3	3
Consensus Economics (August 2020)	2.5 - 3.2 - 3.9	1.4 - 3.0 - 4.0	
European Commission (July 2020)	3.5	2.8	
IMF (April 2020)	3.4	3.3	3.2
OECD (June 2020)	3.5	1.8 - 2.1	
Reuters survey (August 2020)	2.8 - 3.4 - 3.7	1.1 - 3.1 - 4.0	1.7 - 3.0 - 3.8
GDP (annual growth rate, %)			
MNB (June 2020)	0.3 - 2.0	3.8 - 5.1	3.5 - 3.7
Consensus Economics (August 2020)	(-8.0) - (-5.2) - (-3.0)	3.2 - 4.7 - 7.6	
European Commission (July 2020)	-7	6	
IMF (April 2020)	-3.1	4.2	2.6
OECD (June 2020)	(-10.0) - (-8.0)	1.5 - 4.6	
Reuters survey (August 2020)	(-7.4) - (-5.2) - (-3.9)	1.8 - 4.5 - 7.2	2.4 - 3.5 - 4.5
Current account balance (as a percentage of GDP)			
MNB (June 2020)	(-1.9) - (-1.5)	(-1.1) - (-0.9)	(-0.8) - (-0.5)
European Commission (May 2020)	1.3	1.5	
IMF (April 2020)	-0.1	-0.6	-0.3
OECD (June 2020)	(-1.3) - (-1.2)	(-1.3) - (-0.4)	
Budget deficit (ESA-2010 method*, a percentage of GDP, with complete cancellation of free reserves)			
MNB (June 2020)	-3.8	-2.9	(-2.2) - (-2.1)
Consensus Economics (August 2020)	(-6.1) - (-5.0) - (-3.9)	(-4.8) - (-3.4) - (-1.9)	
European Commission (May 2020)	-5.2	-4	
IMF (April 2020)	-3	-1.6	-1.5
OECD (June 2020)	(-9.9) - (-8.8)	(-9.0) - (-7.3)	
Reuters survey (August 2020)	(-6.1) - (-5.3) - (-4.5)	(-4.0) - (-3.4) - (-2.8)	(-2.5) - (-2.3) - (-2.1)
Forecasts on the GDP growth rate of Hungary's trade partners (annual growth rate, %)			
MNB (June 2020)	(-7.0) - (-3.0)	1.0 - 4.5	0.5 - 3.0
ECB (September 2020)	(-10.0) - (-8.0) - (-7.2)	0.5 - 5.0 - 8.9	3.2 - 3.4 - 3.5
Consensus Economics (August 2020)**	-6.4	4.8	
European Commission (July 2020)**	-7.3	5.6	
IMF (June 2020)**	-7.3	5.1	1.8

Explanation:

*The lower value of the forecast band shows the ESA balance if the Country Protection Fund is used, while the higher value shows the ESA balance if the Country Protection Fund is not used.

**Values calculated by the MNB; the projections of the named institutions for the relevant countries are adjusted with the weighting system of the MNB, which is also used for the calculation of the bank's own external demand indices. Certain institutions do not prepare forecasts for all partner countries.

Note:

For the Reuters and Consensus Economics surveys, in addition to the average value of the analysed replies, we also indicate the lowest and the highest values to illustrate the distribution of the data.

Source: Consensus Economics, European Commission, IMF, OECD, Reuters poll

47. Domestic financial developments*Overview*

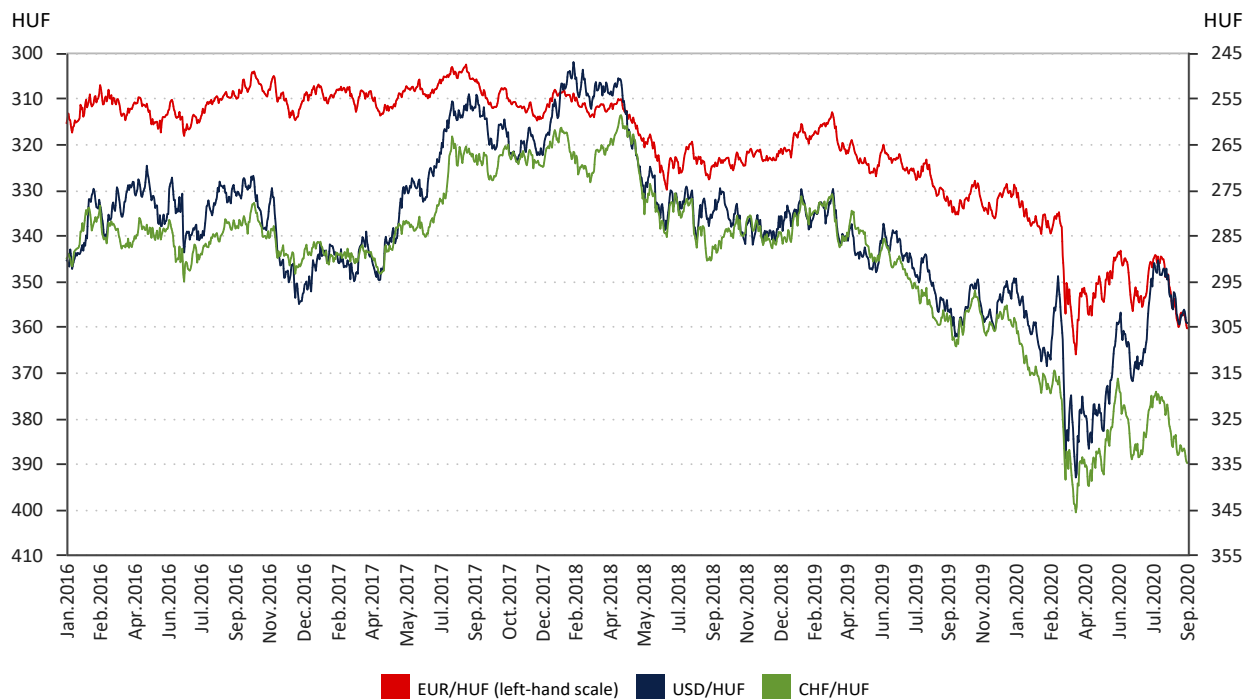
Indicator	One month ago	One week ago	Current
HUF/EUR spot exchange rate	349.2	357.0	360.1
Skewness of expectations on HUF/EUR exchange rate	0.87	1.03	1.01
HUF-positions of foreign investors (HUF billions)	-2562	-2861	-2869
Forward positions of domestic investors (HUF billions)	985	1334	1279
MNB base rate (%)	0.60	0.60	0.60
Expected short-term interbank rate at the end of the year (%)*	0.76	0.78	0.73
3-months interbank rate (%)	0.65	0.67	0.66
3x6 FRA rate (%)	0.75	0.76	0.72
3 month T-bill yield (%)	0.30	0.33	0.33
5 year T-bond yield (%)	1.56	1.74	1.70
Slope of yield curve (10Y-1Y, bp)	188	183	183
O/N FX-swap spread (bp)	7	-16	-5
3-month FX-swap spread (bp)	-4	6	7
5-year FX-swap spread (bp)	9	0	0
5-year CDS spread (bp)	68	59	61
5x5 goverment bond spread (bp)**	221	216	222
Average spread of USD-denominated government bonds (bp)	114	115	114
Foreign holdings of HUF-government securities (HUF billion)	4227	4084	4165

Notes:

* Based on forward yield curve.

** Over German yield.

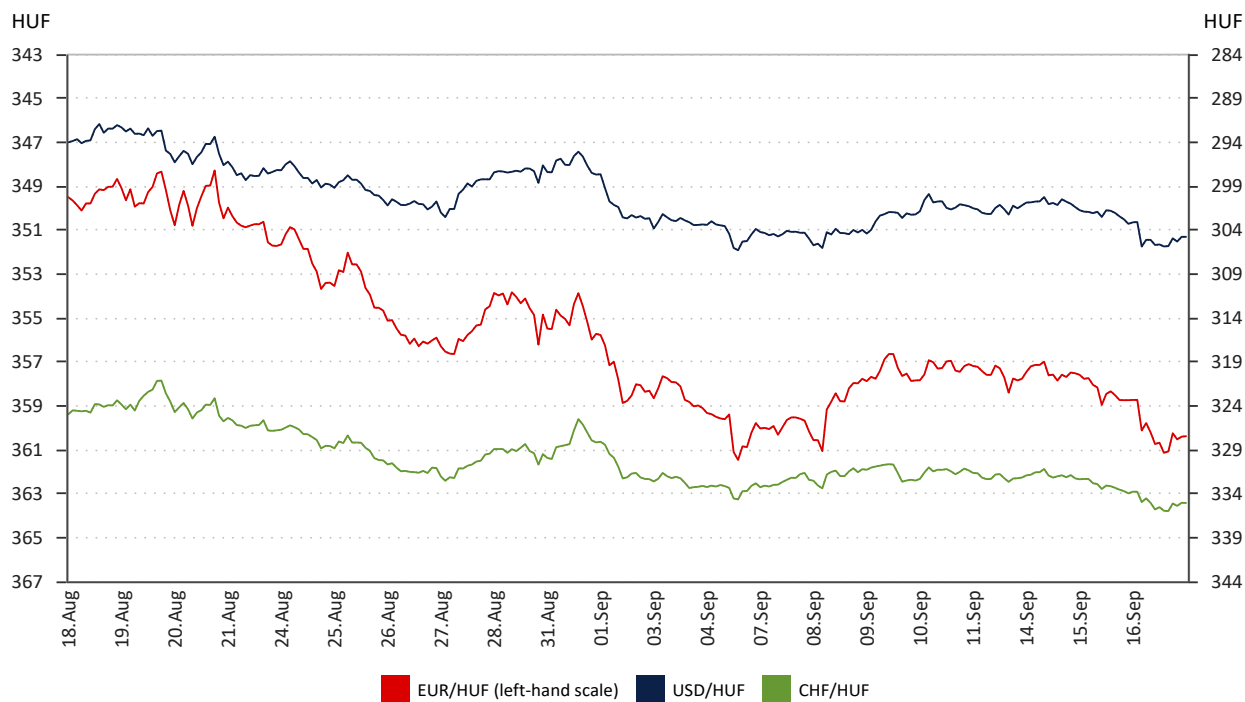
48. Developments in HUF exchange rate



Source: Refinitiv Datastream

Note: reverse scale, daily observations.

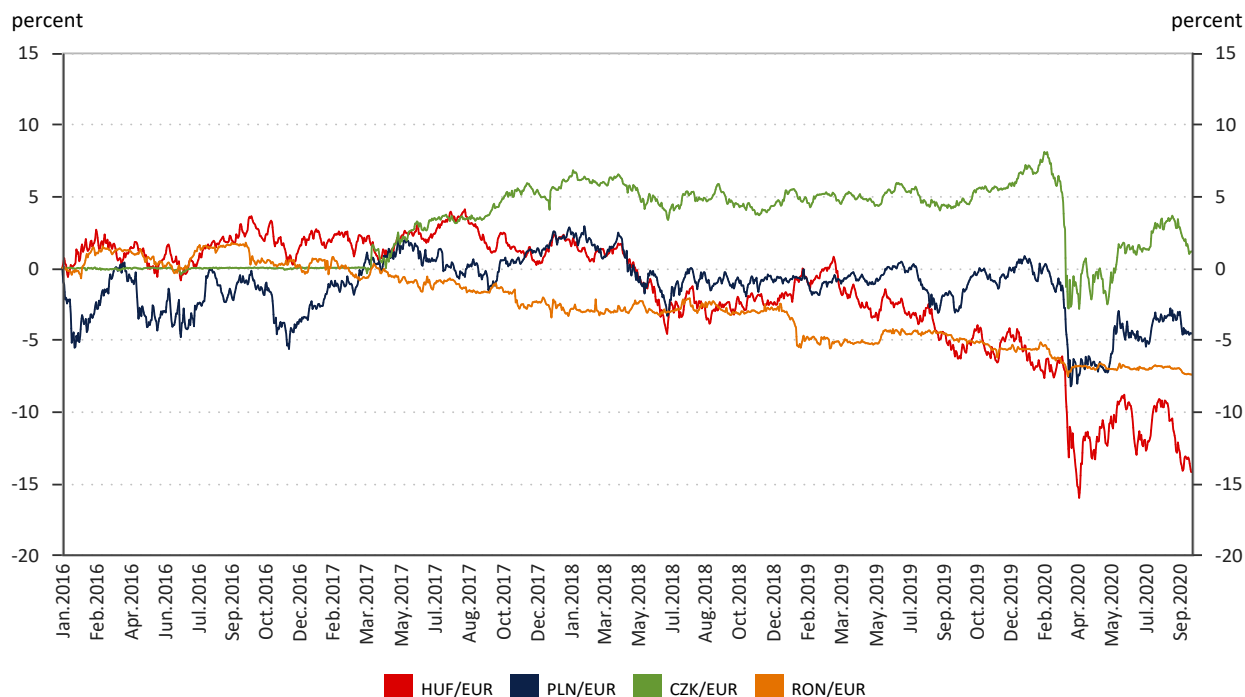
49. Developments in HUF exchange rate (last month)



Source: Refinitiv

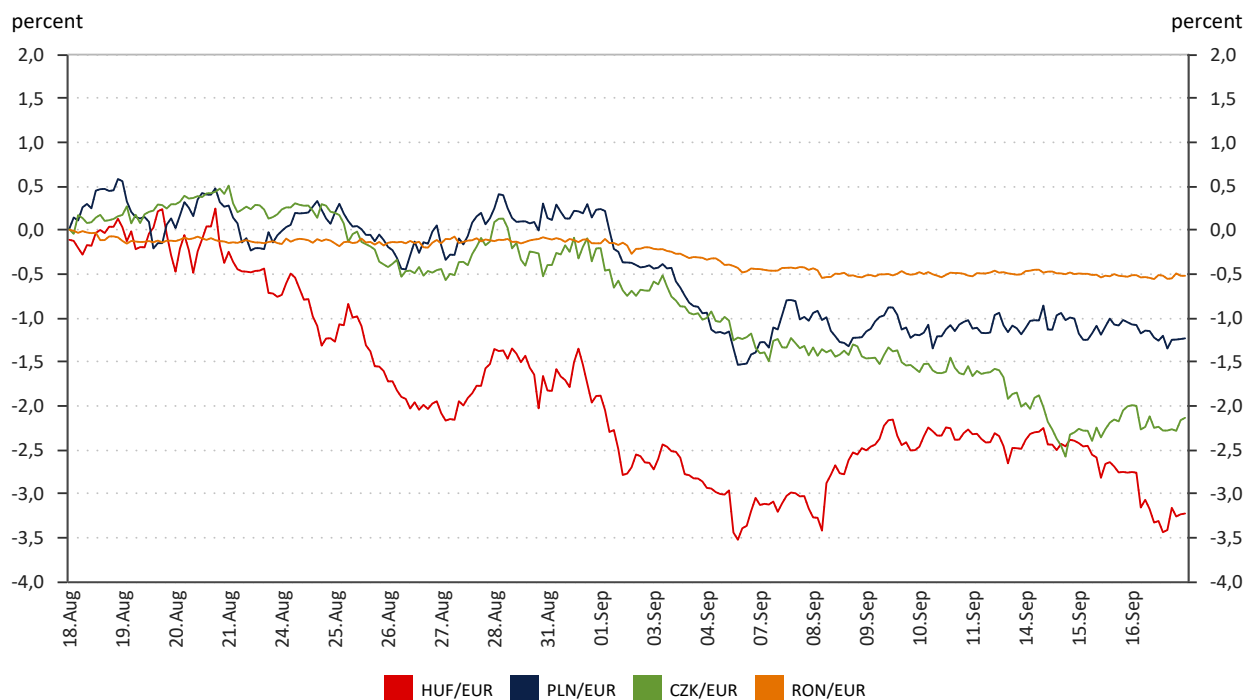
Note: reverse scale.

50. Emerging markets exchange rate



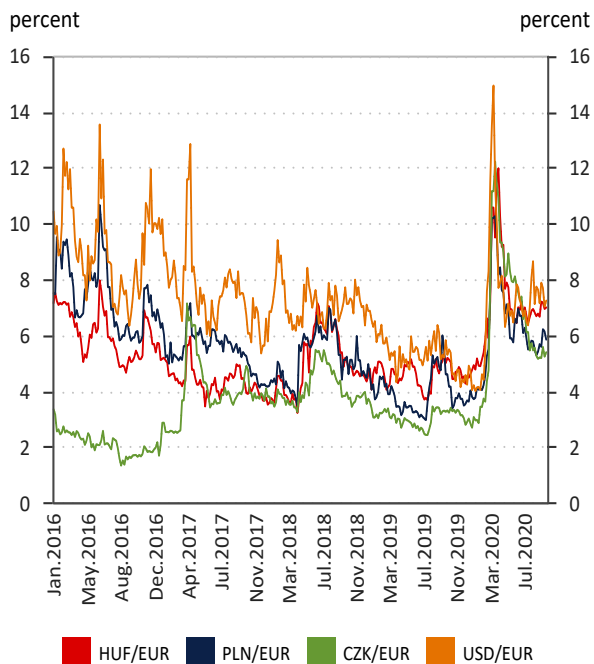
Source: Refinitiv
 Note: cumulative change. Positive values mean appreciation.

51. Emerging markets exchange rate (last month)



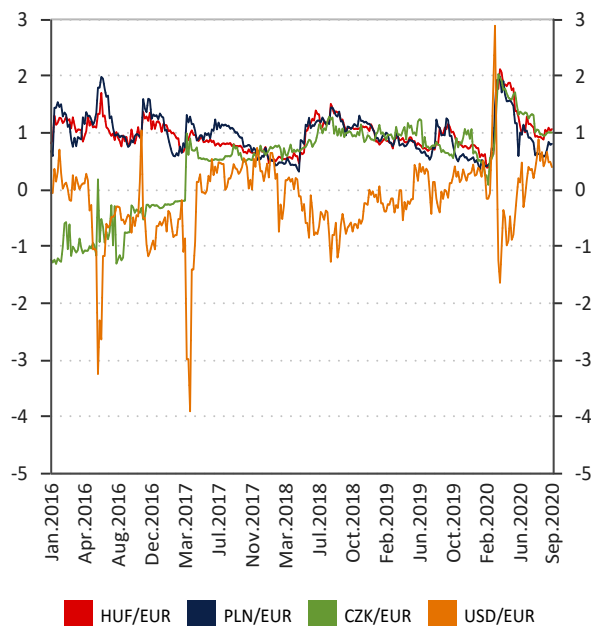
Source: Refinitiv.
 Note: cumulative change, negative value means depreciation of the local currency.

52. Volatility of exchange rate expectations



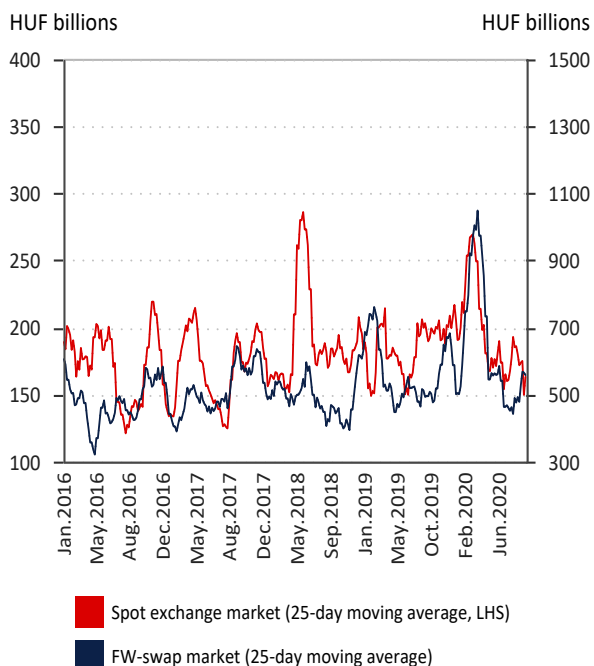
Source: Bloomberg
 Note: implied volatility (based on foreign exchange option quotes) can be interpreted as an indicator of risk perceived by the market.

53. Skewness of exchange rate expectations



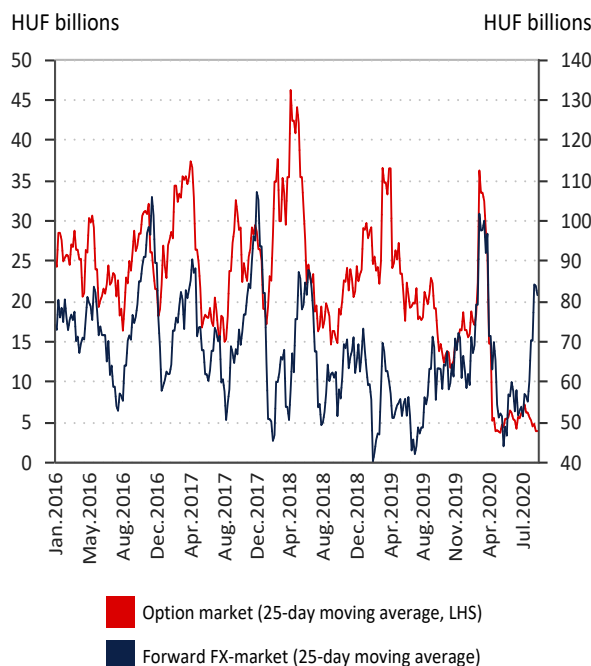
Source: Bloomberg
 Notes: based on option quotes for 1-month 25D risk reversal; skewness=RR/Volatility*10. Risk reversal can be regarded as a nominal indicator for the skewness of the distribution of exchange rate expectations, while skewness eliminates the effect of changes in volatility.

54. Turnover on the spot and the FX-swap market



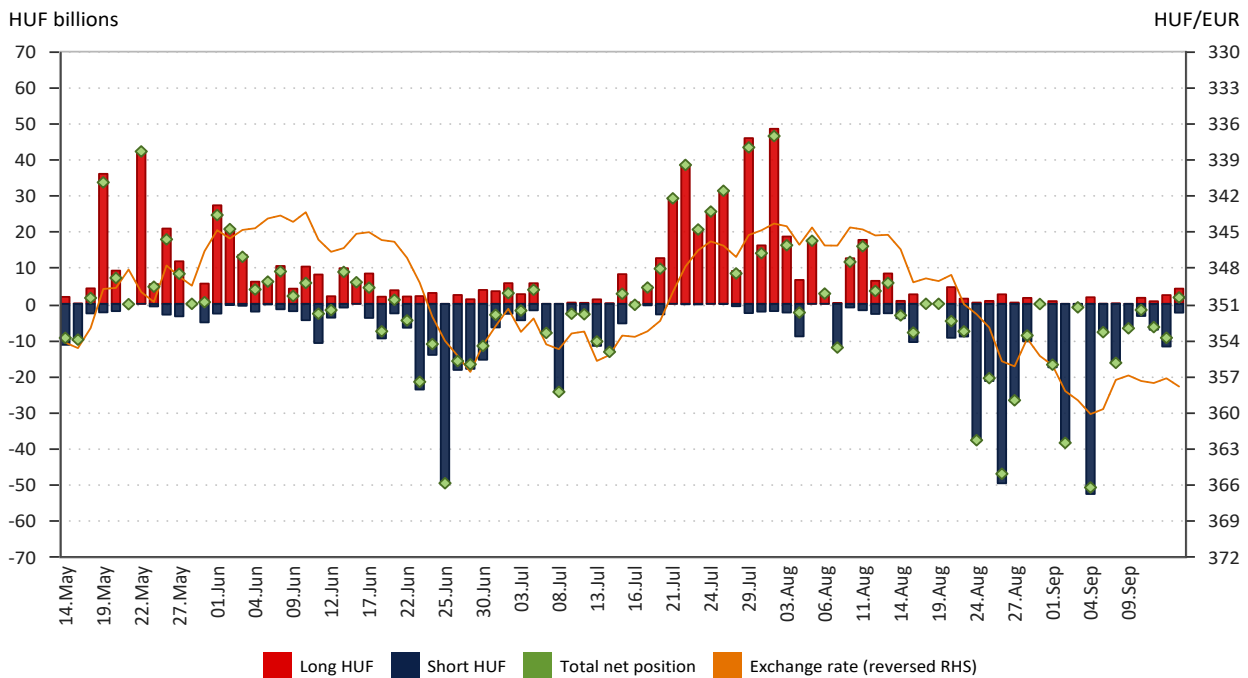
Source: MNB
 Notes: forint against foreign exchange deals by domestic banks; moving averages calculated based on deal date data.

55. Turnover on the forward and option market



Source: MNB
 Note: forint against foreign exchange deals by domestic banks; moving averages calculated based on deal date data.

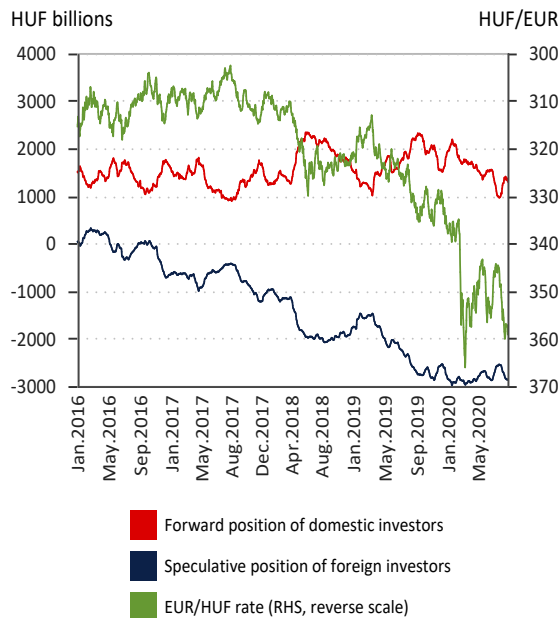
56. Open FX-positions of non-residents in HUF



Source: MNB.

Note: Based on the daily FX reports of the transactions with non-residents of credit institutions. Net HUF positions are calculated based on the change of cumulative FX-swap stocks and spot positions of non-resident market participants. In case of positive value non-resident market participants extended long HUF positions, while in case of negative value short HUF positions were dominant. Positions are presented on spot deal dates.

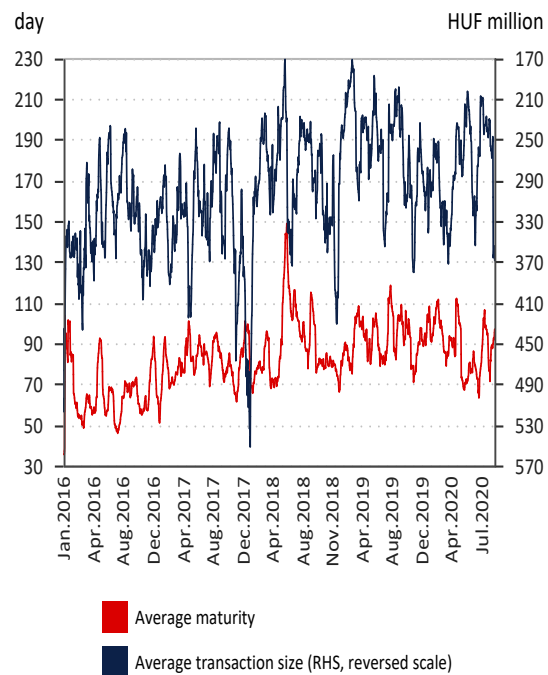
57. Cumulated positions of non-residents in HUF and the EURHUF exchange rate



Source: MNB

Note: Cumulative position, based on the daily FX reports of the transactions with non-residents of credit institutions. Net HUF positions are calculated based on the change of cumulative FX-swap stocks and spot positions of non-resident market participants. Due to the characteristics of the reports the change in the stocks is relevant mainly to evaluate the direction of short-term fluctuations.

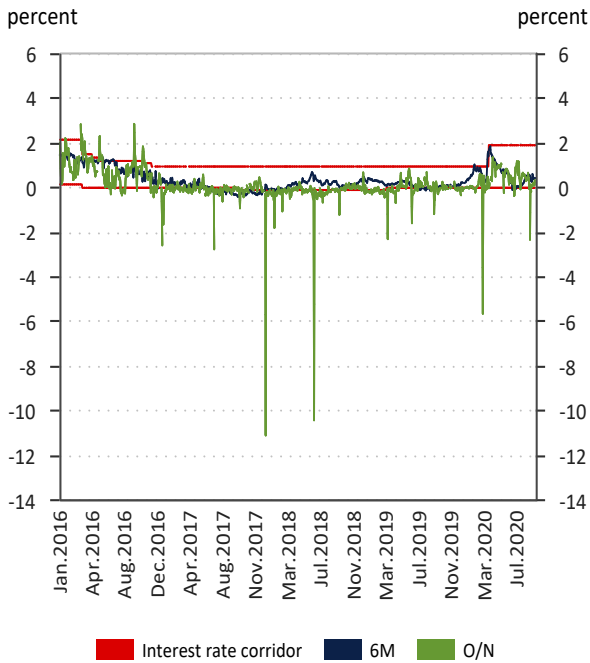
58. Forward agreements of non-financial institutions



Source: MNB

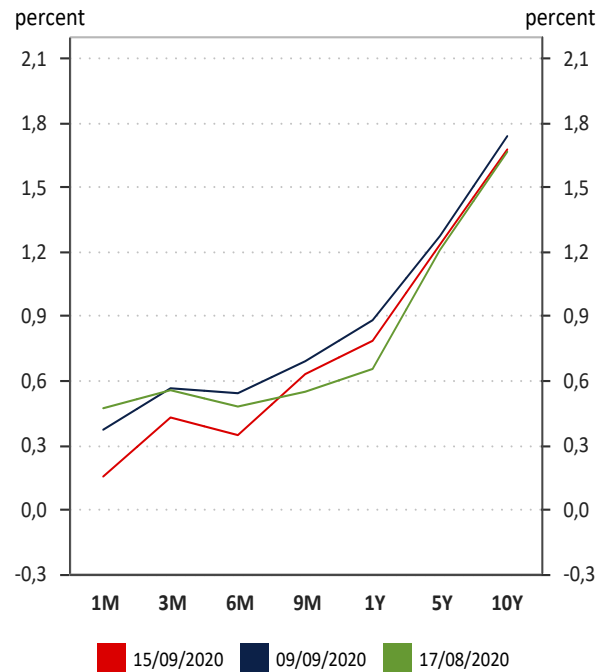
Note: 20-day moving averages.

59. Implied HUF rates on FX-swap market



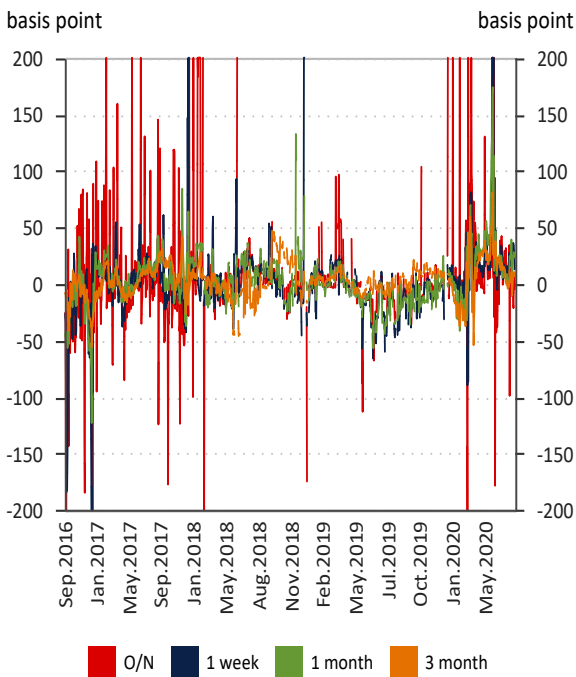
Source: MNB, Refinitiv
 Note: implied HUF yields based on trades in case of O/N maturity and based on USD/HUF FX-swap quotes provided by Thomson Reuters in the cases of 6-month maturity.

60. Implied yield curve on FX-swap markets



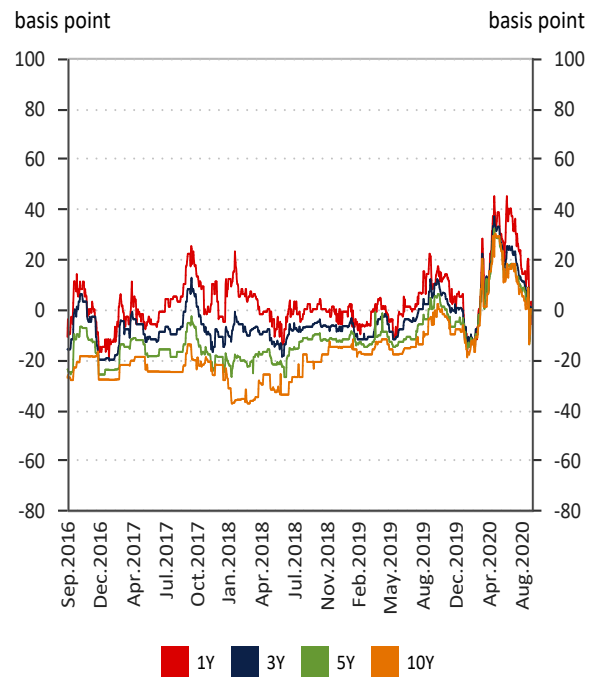
Source: MNB, Refinitiv.
 Notes: Based on USD/HUF swap quotes.

61. Difference between short-term interbank yields and FX-swap market implied yields



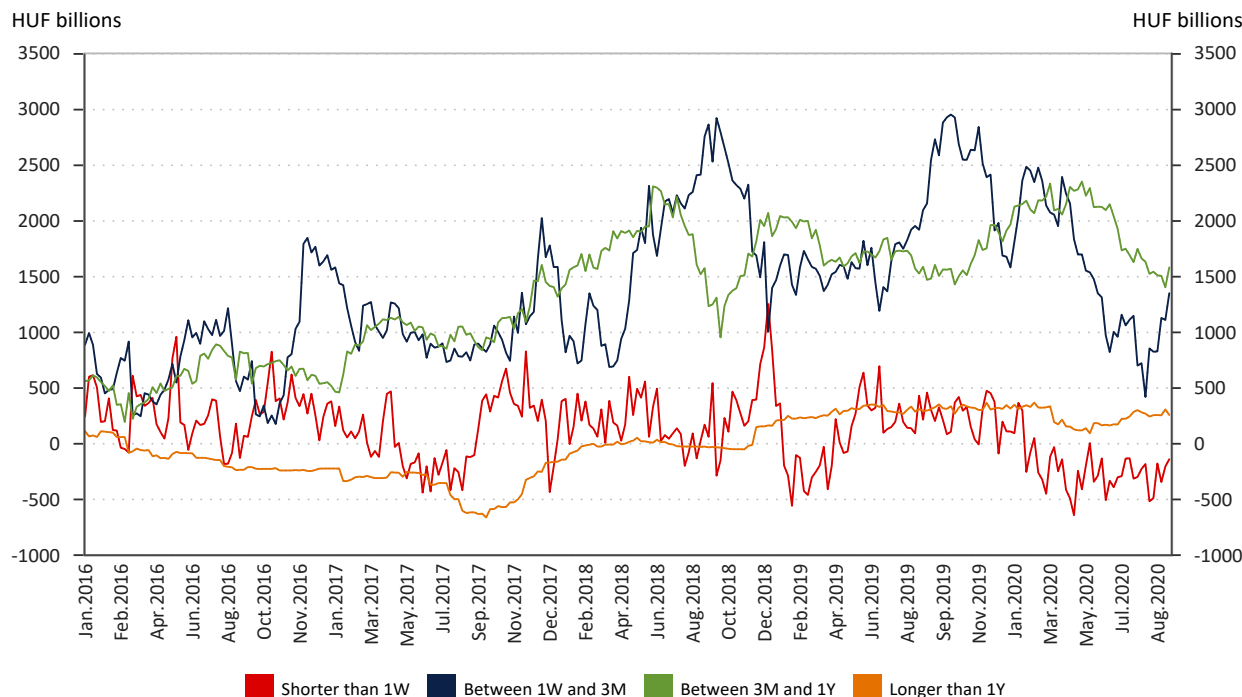
Source: Refinitiv.

62. Development of the EUR/HUF basis swap spread



Source: Bloomberg.

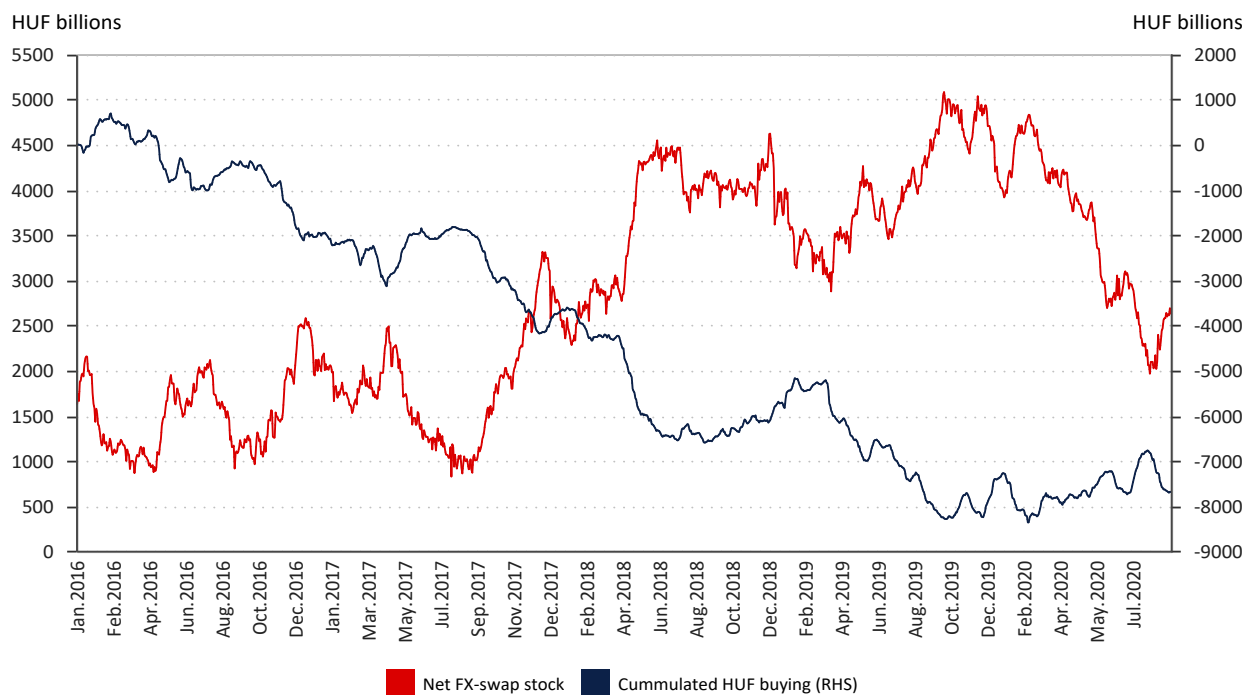
63. Net FX-swap stock of non-residents by maturity



Source: MNB

Note: net FX-swap stock is defined as a difference of HUF-buying and FX-buying transactions.

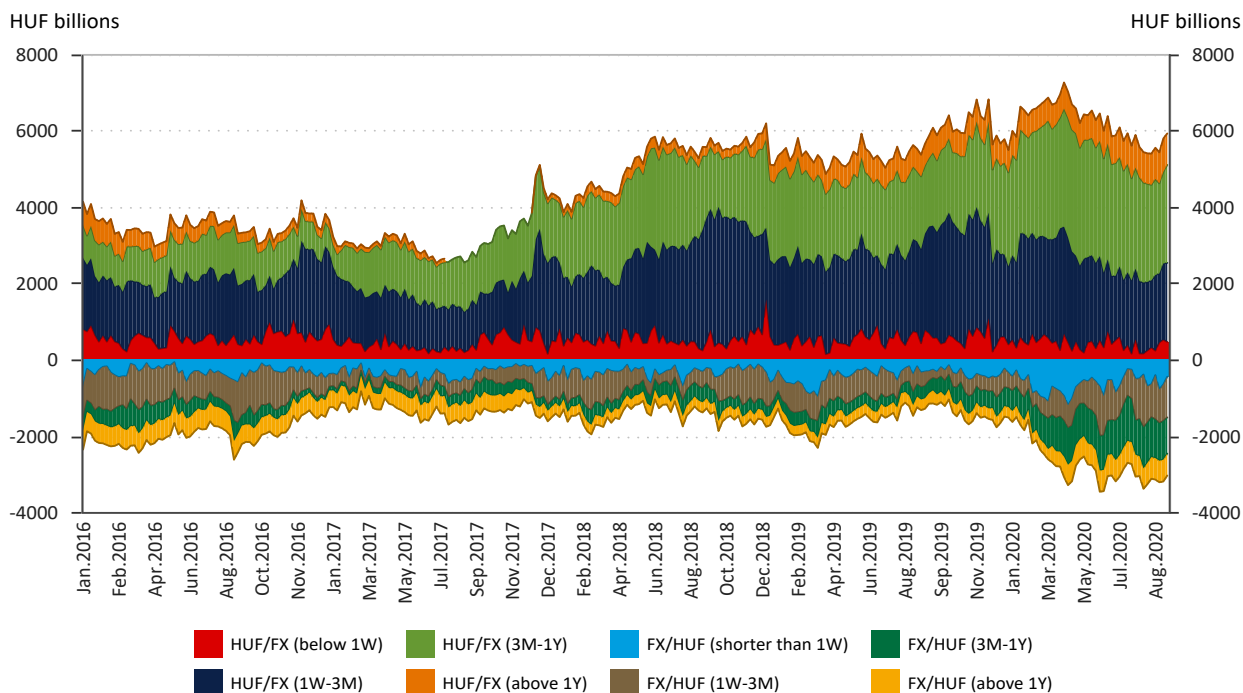
64. Forint FX-swap stock and cumulated HUF purchase of non-residents



Source: MNB

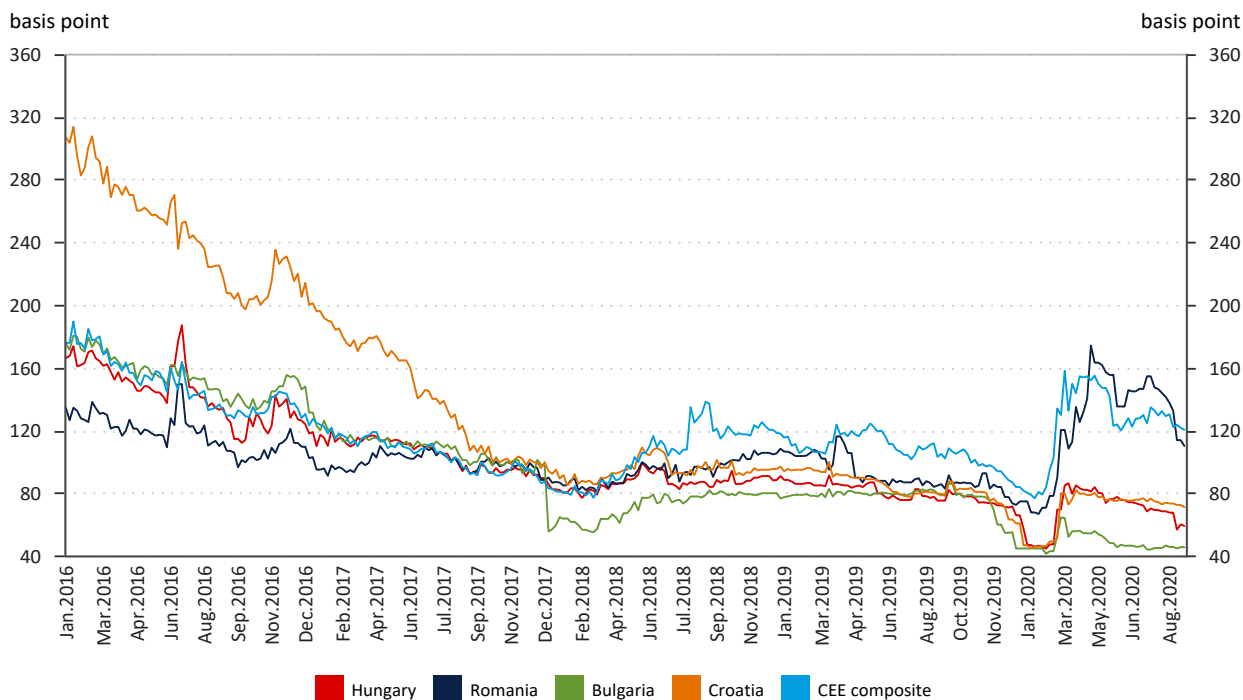
Notes: Based on the daily FX reports of the transactions with non-residents of credit institutions. An increase in the net swap stock stands for swaps with an excess of swap transactions with long forint spot leg, while a decrease stands for swaps with an excess of swap stock with short forint spot leg.

65. Gross FX-swap stocks of foreign investors by maturity



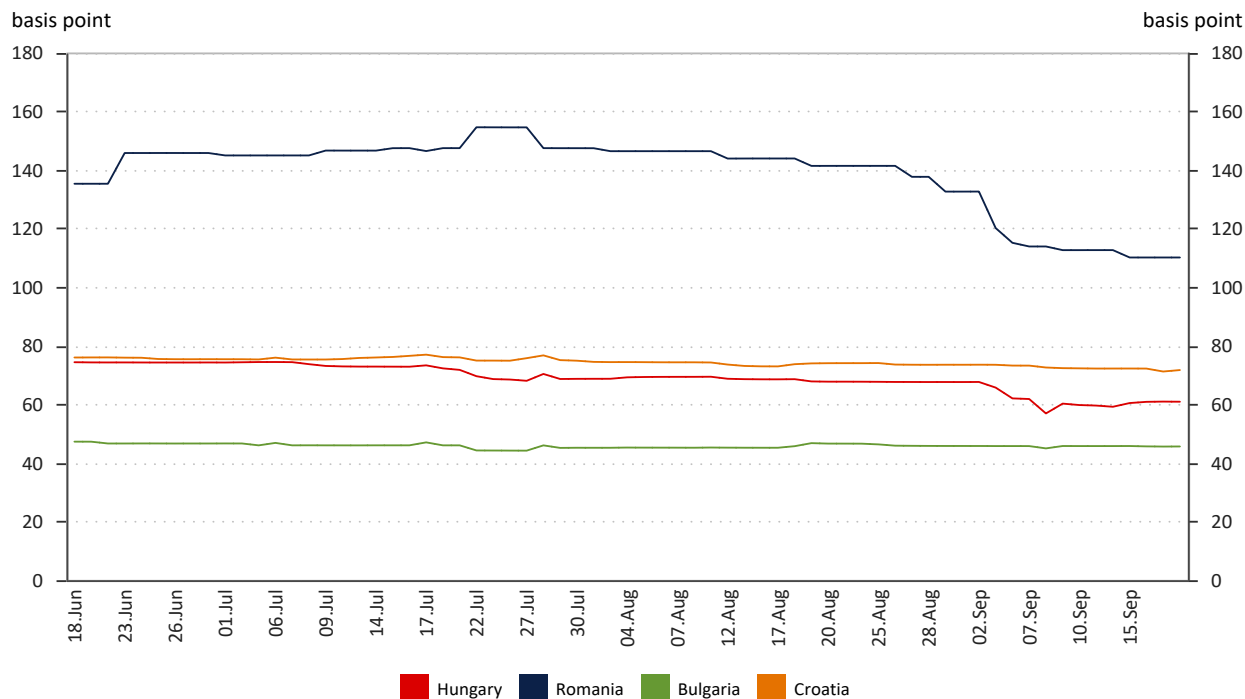
Source: MNB
 Note: Based on the daily FX reports of the transactions with non-residents of credit institutions. Positive values stand for swap stock with long forint spot leg, while negative values stand for swap stock with short forint spot leg.

66. 5 year sovereign CDS spreads in CEE



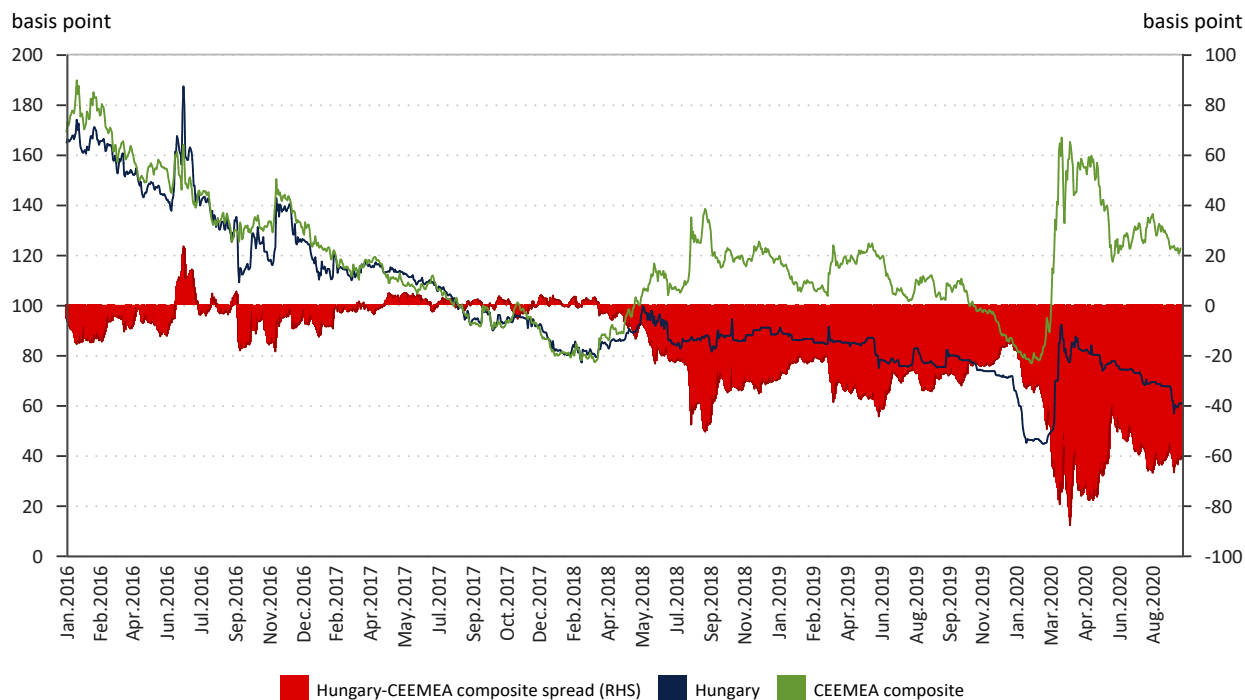
Source: Refinitiv.

67. 5 year sovereign CDS spreads in emerging markets (last month)



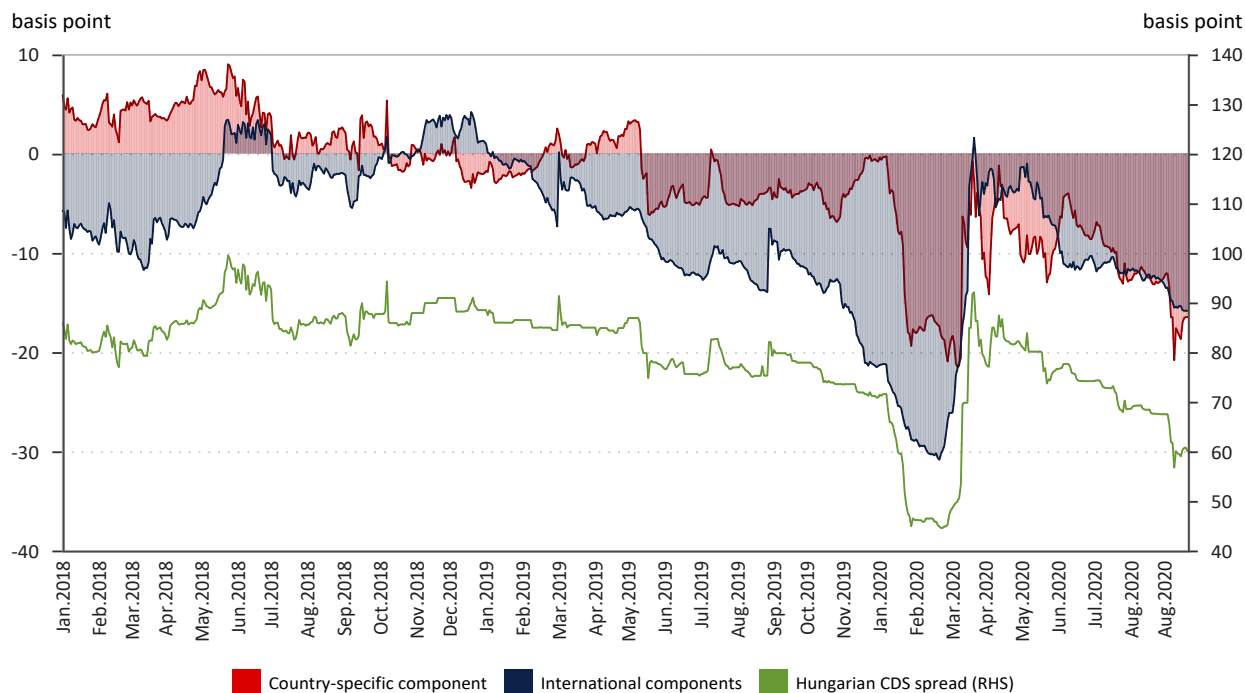
Source: Refinitiv.

68. 5 year sovereign CDS spread in Hungary versus CEEMEA composite index



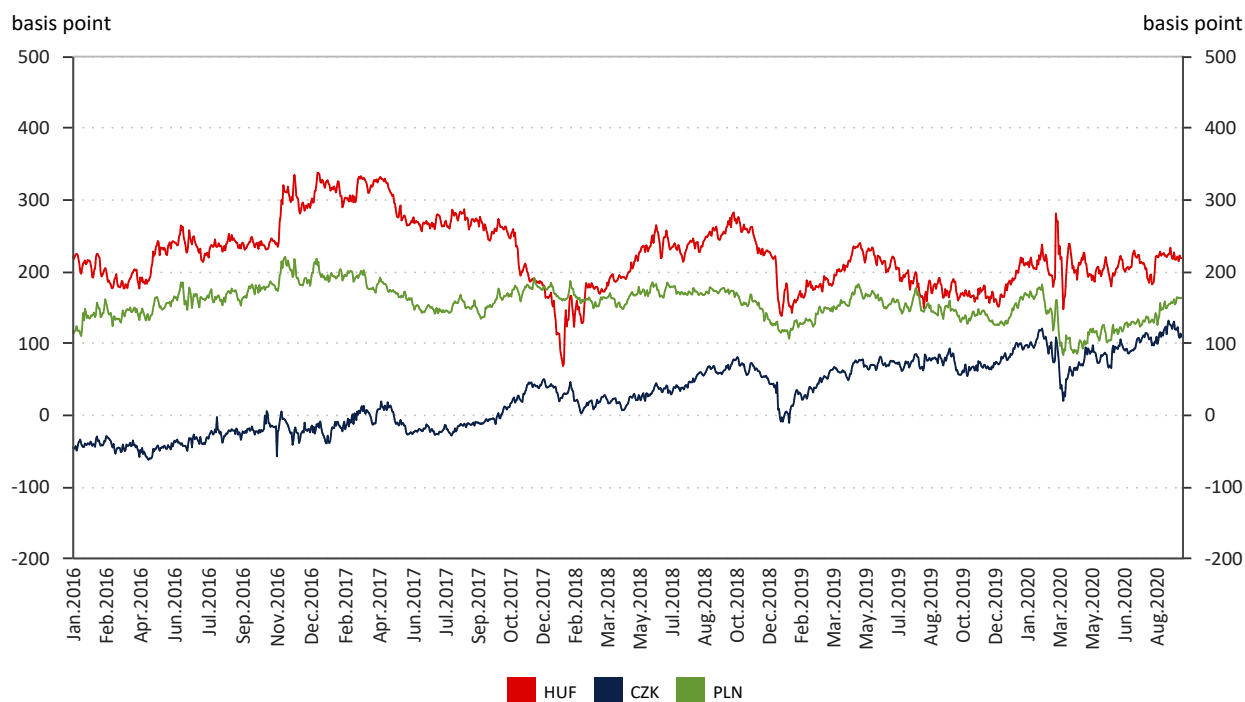
Source: Refinitiv.

69. Components of Hungarian 5 year sovereign CDS



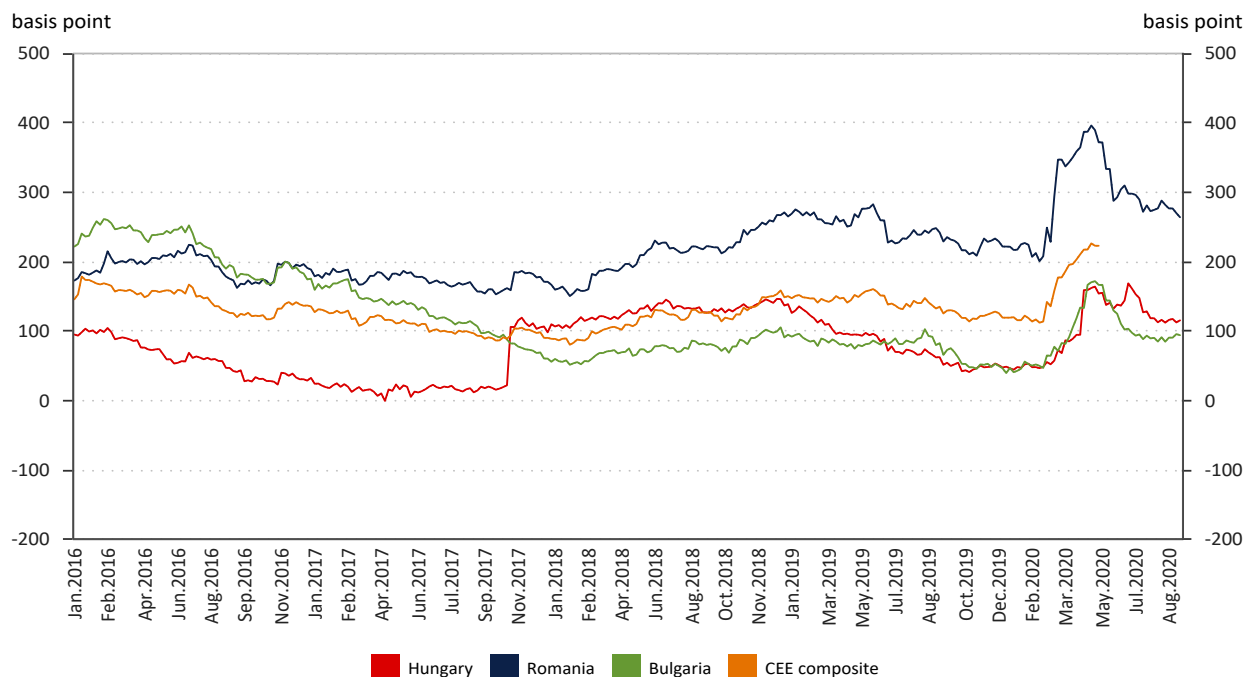
Source: Bloomberg
 Note: based on factor analysis on daily CDS spread changes with volatility calculated on half-year windows. Cumulated series. Increases/decreases of component time series denote contributions to CDS spread increases/decreases.

70. 5 year implied spreads over euro rates in 5 year time



Note: Based on swap rates by Refinitiv

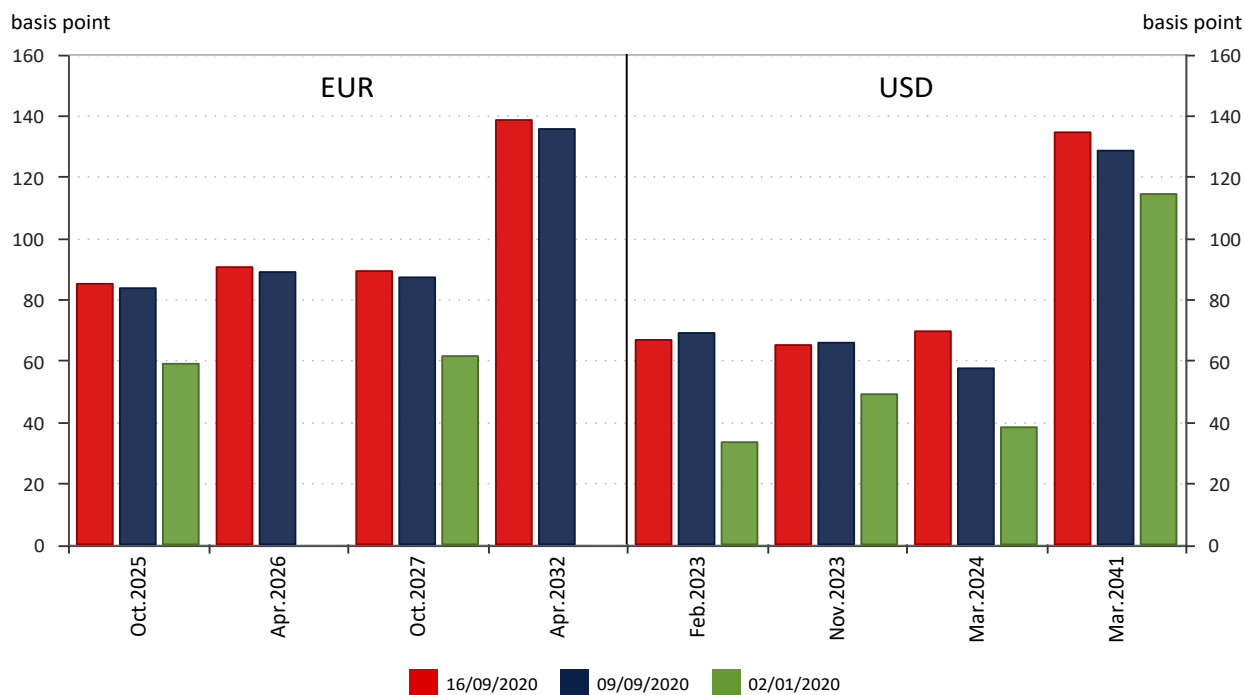
71. Emerging markets FX denominated government bond spreads



Source: Refinitiv Datastream.

Notes: calculated from JP Morgan Euro EMBI data. The series are differences between euro denominated (liquid) foreign currency bond yields and euro zero coupon yields of the corresponding maturities. Different durations may result in significant difference in the level of spreads. MNB has not accessed to the data series CEE composite on the visual since May 2020.

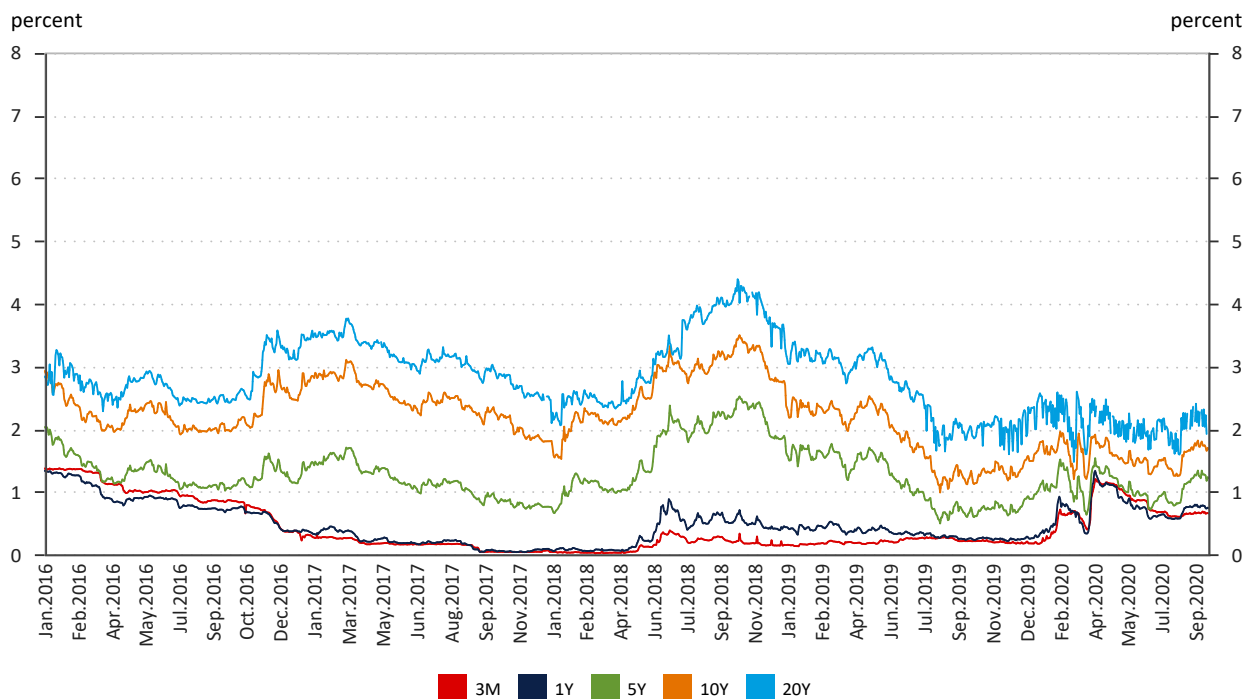
72. Domestic FX-government bond



Source: Bloomberg.

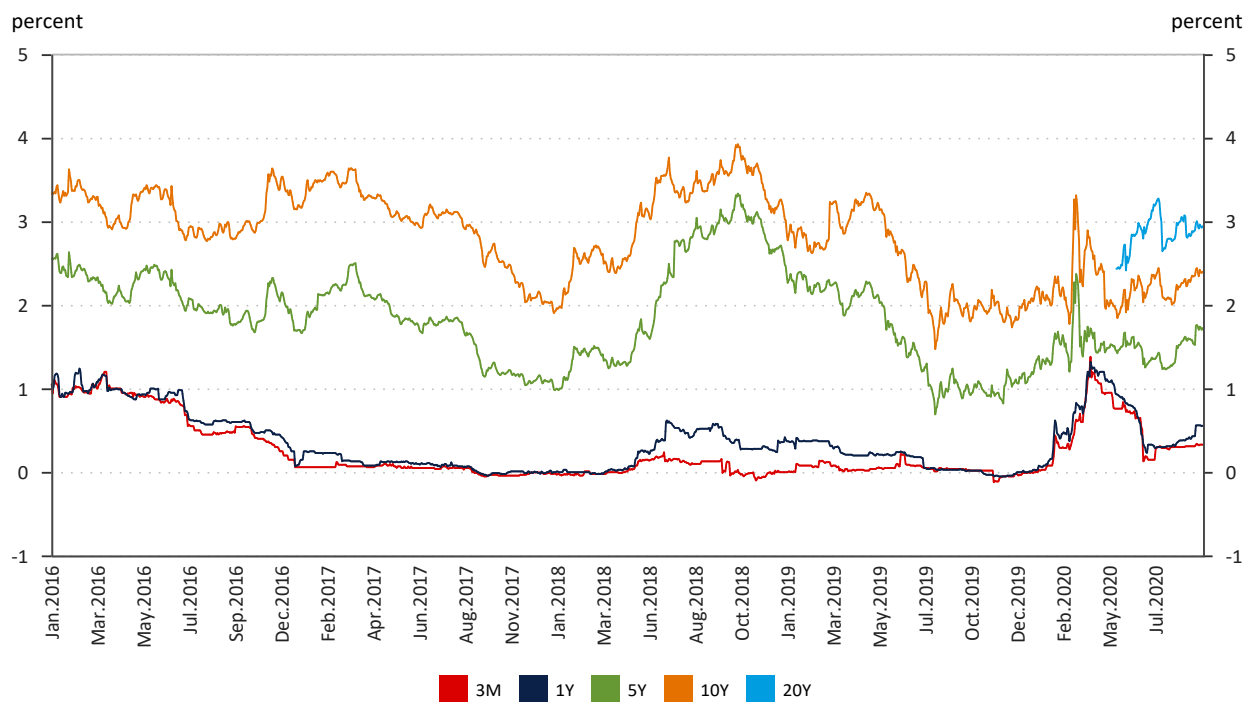
Notes: Spread between EUR and USD denominated FX-bonds and the equivalent US T-bond or euro yields chosen by Bloomberg. We present bonds grouped by currency in order of maturity.

73. Interbank yields



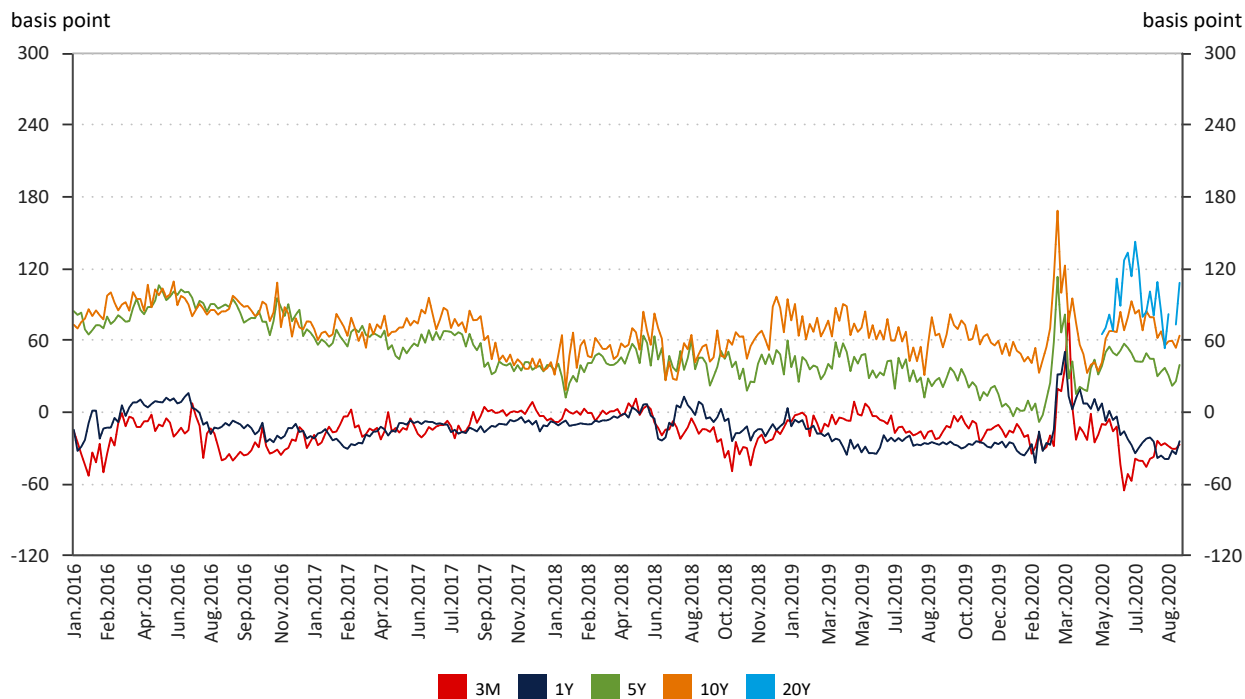
Source: Refinitiv.

74. Yields of benchmark government securities



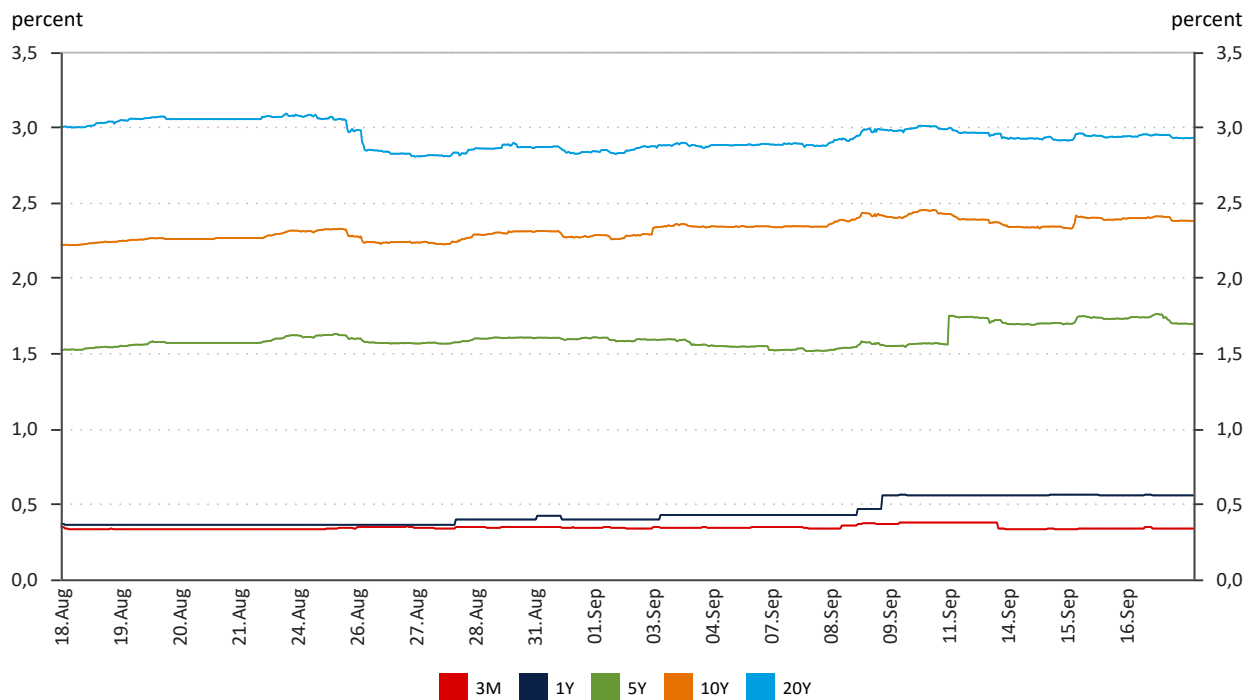
Source: Refinitiv.

75. Government securities - interbank yield spreads



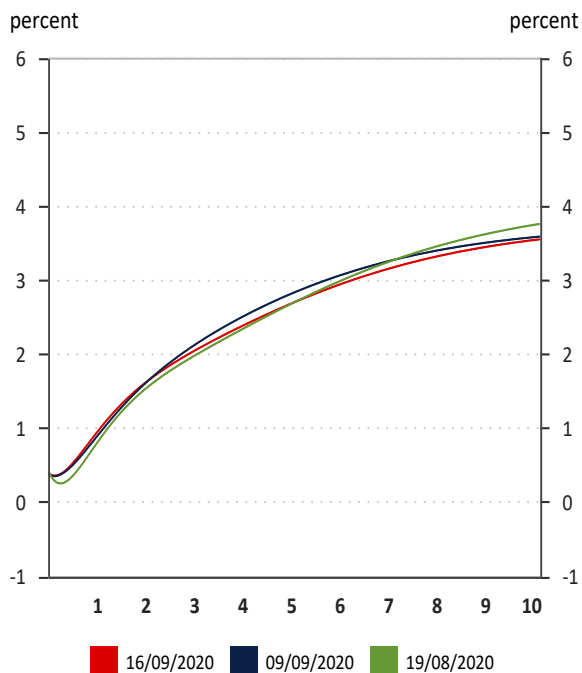
Source: Refinitiv
 Note: Spread between the benchmark government bond yield of the given maturity and the interbank rates.

76. Yields of benchmark government securities (last month)



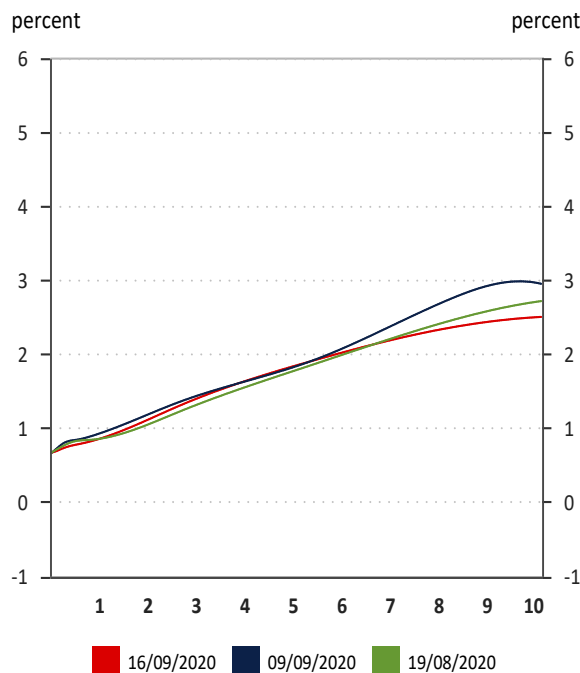
Source: Bloomberg.

77. Implied 3 month forward interest rate yield curve (based on government securities yields)



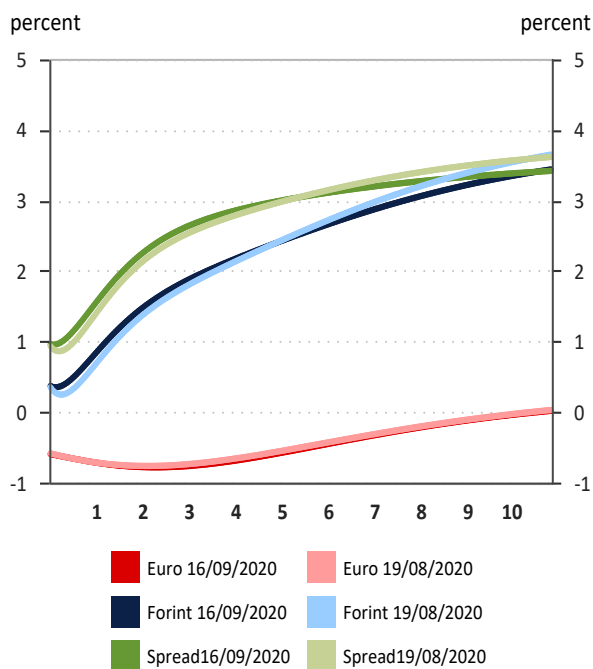
Source: MNB, ÁKK. Note: calculated by Svenson method by MNB. X axis shows maturities, in years.

78. Implied 3 month forward interest rate yield curve (based on interbank yields)



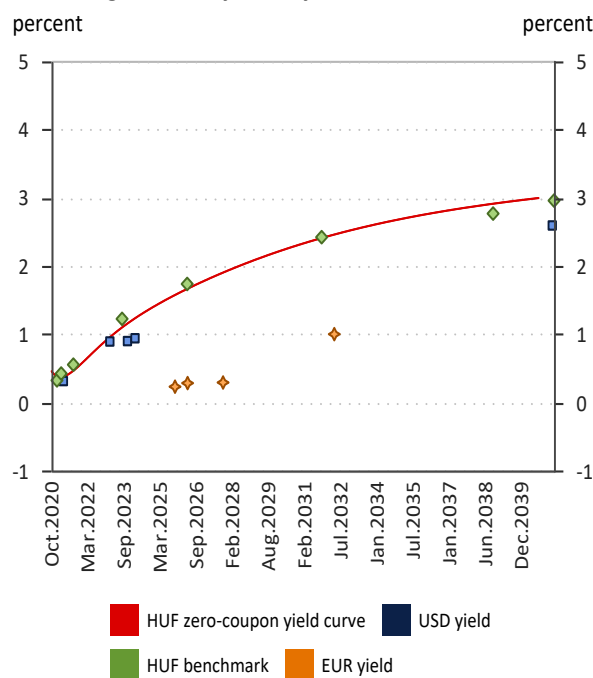
Note: Calculated from FRA-s, and IRS by spline method. X axis shows maturities, in years.

79. Spread between 3-month forward yields in EUR and HUF



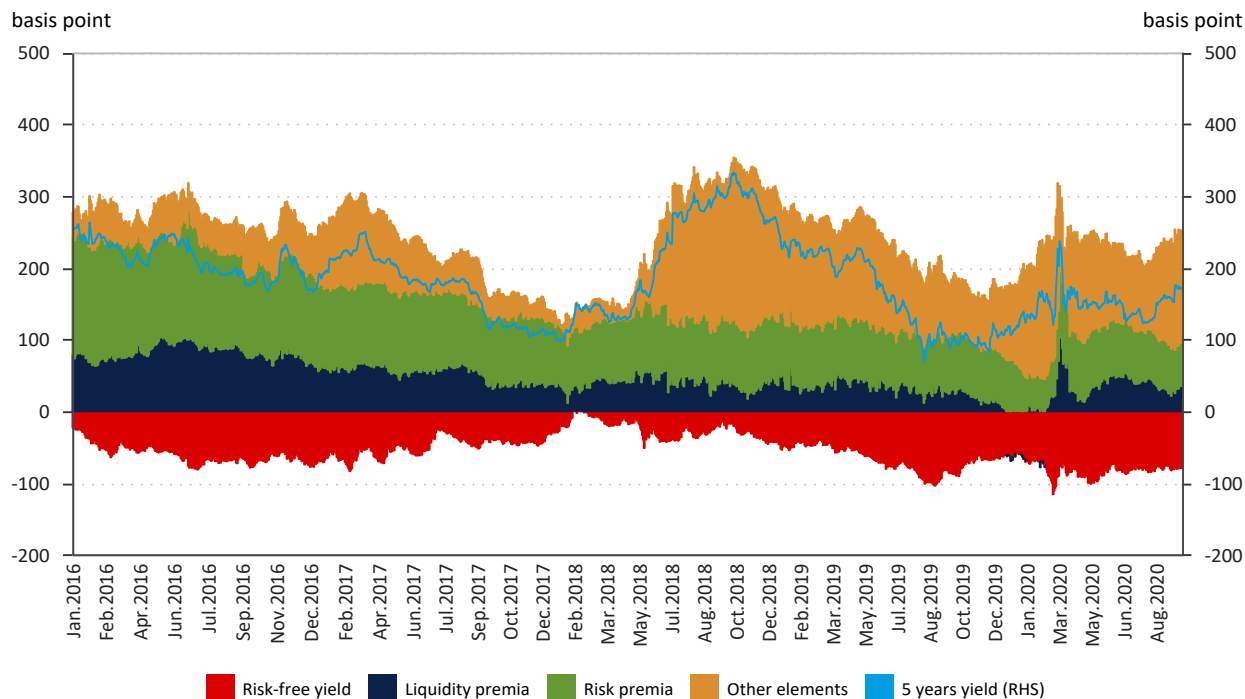
Source: Refinitiv
Note: X axis shows maturities, in years. Estimated by the ECB using the Svensson-technique, based on AAA-rated euro area central government bonds.

80. Hungarian government bond yield curve and foreign currency bond yields



Source: MNB, Bloomberg.

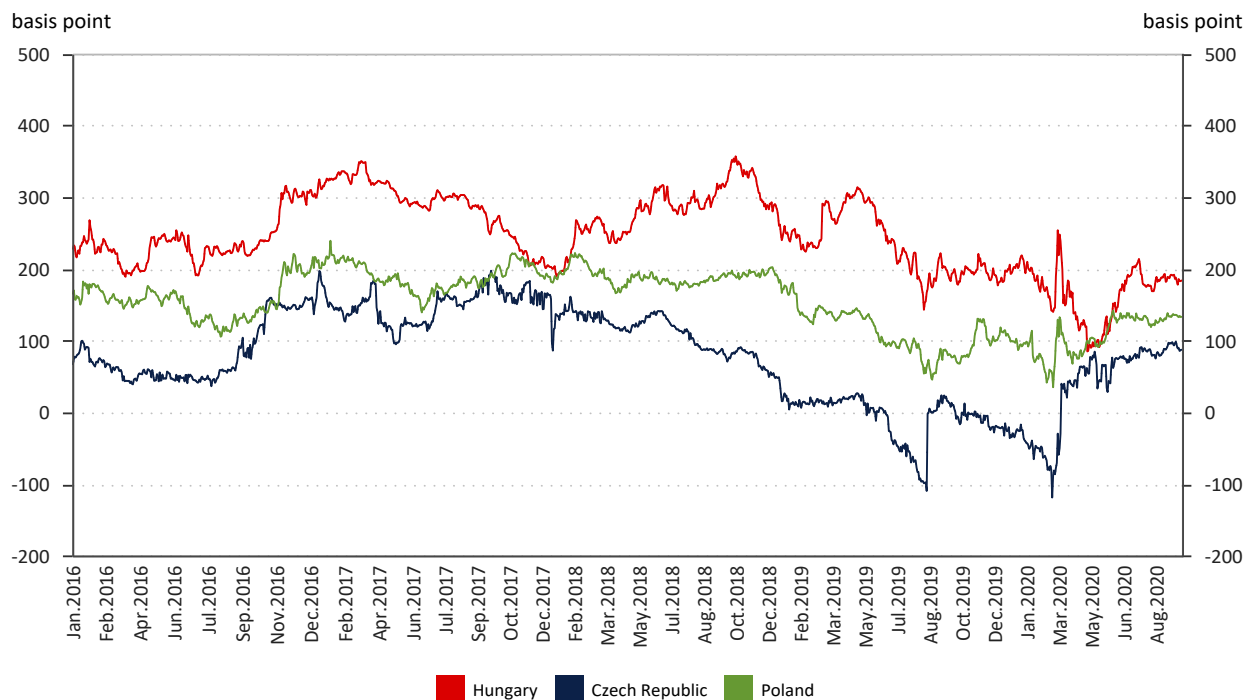
81. Decomposition of 5 year government bond yield



Source: Refinitiv, MNB

Note: Risk-free rate: German 5-year rate; Credit risk premium: 5-year Hungarian CDS spread; Liquidity premium: 5-year interest rate swap spread; others: based on residuals.

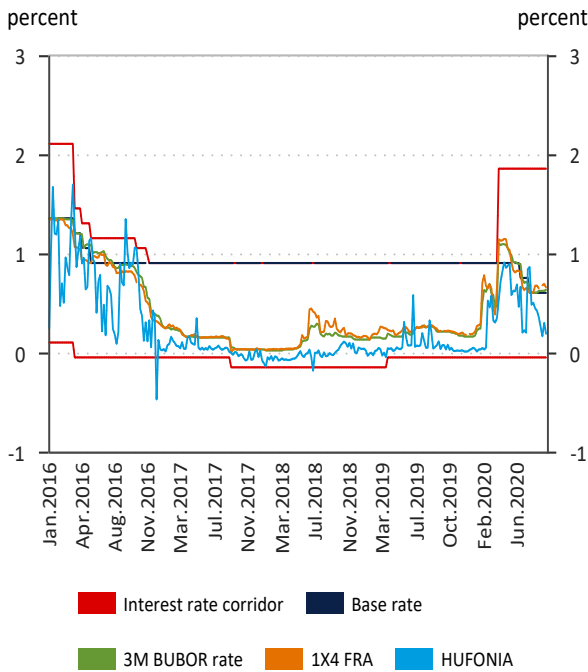
82. Slope of yield curve in CEE



Source: Bloomberg

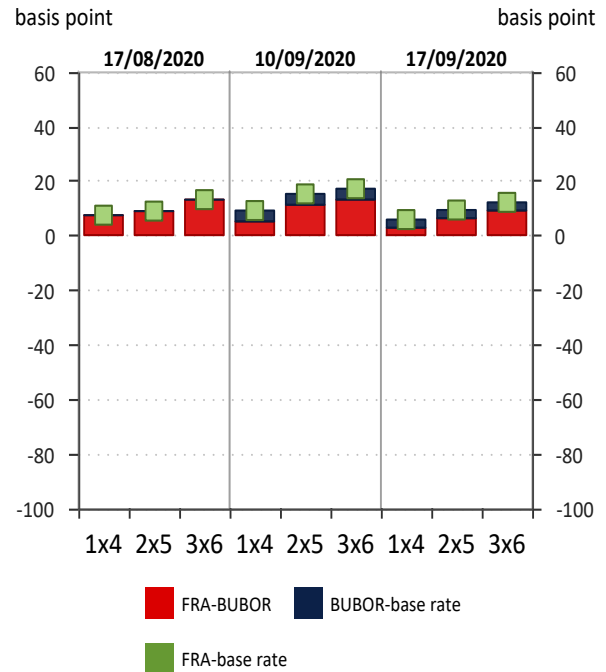
Note: Spread between 10 and 1 year local currency benchmark government bond yield.

83. MNB base rate and money market rates



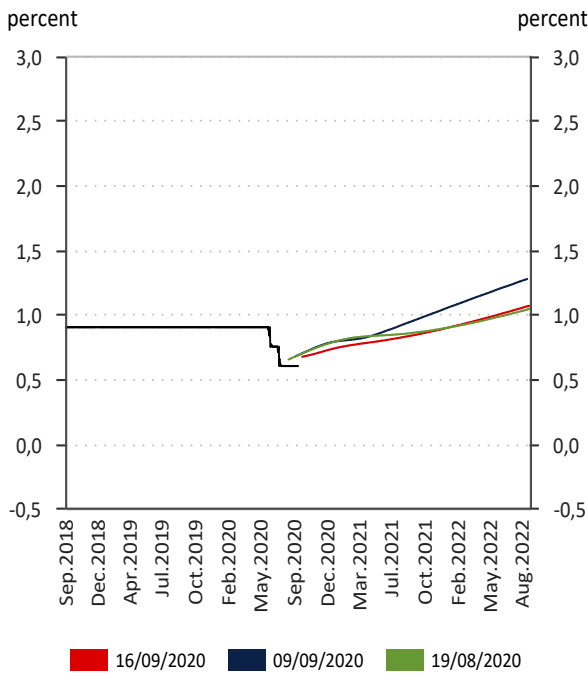
Source: Refinitiv, MNB

84. Difference between the 3 month FRA quotes and the current base rate



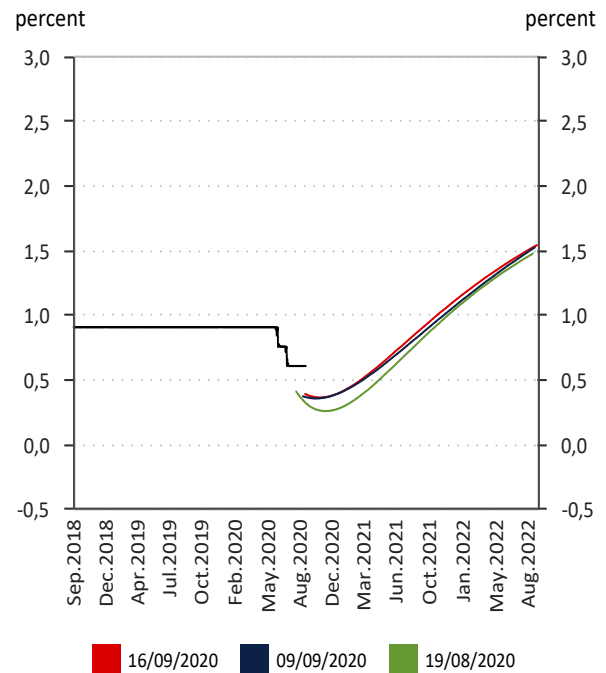
Source: Refinitiv, MNB.

85. Implied 3 month forward interest rate curve (based on interbank yields)



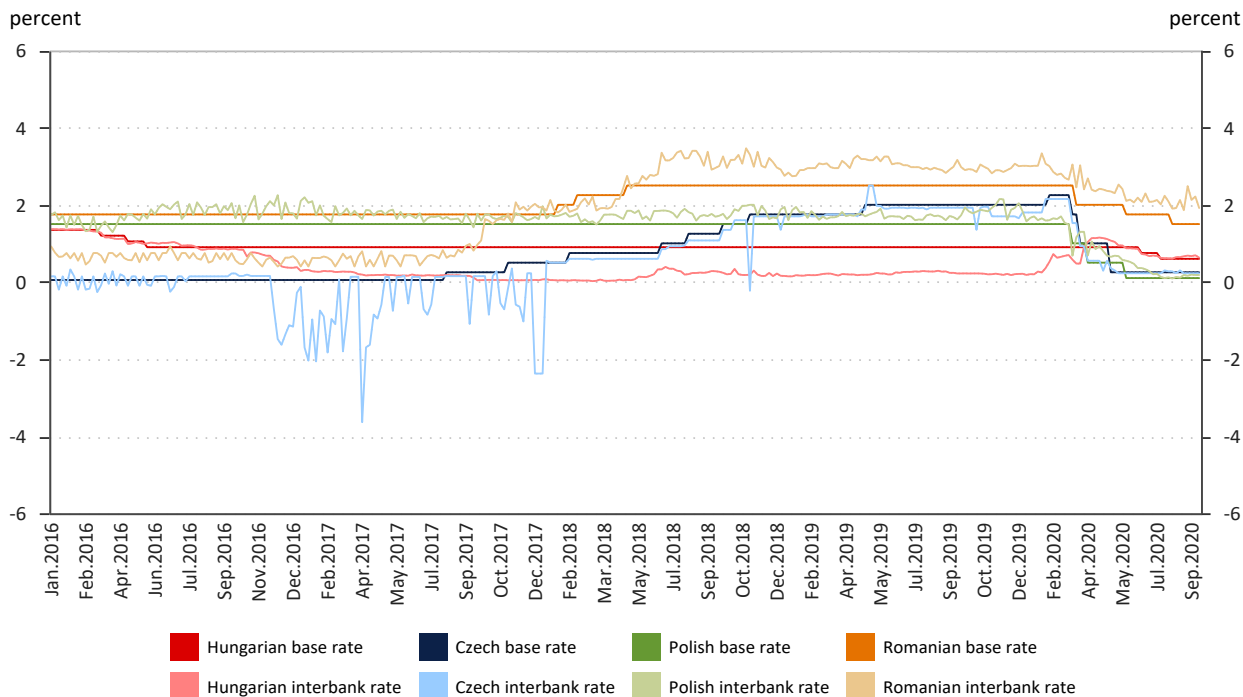
Source: MNB.

86. Implied 3 month forward interest rate curve (based on government bond yields)



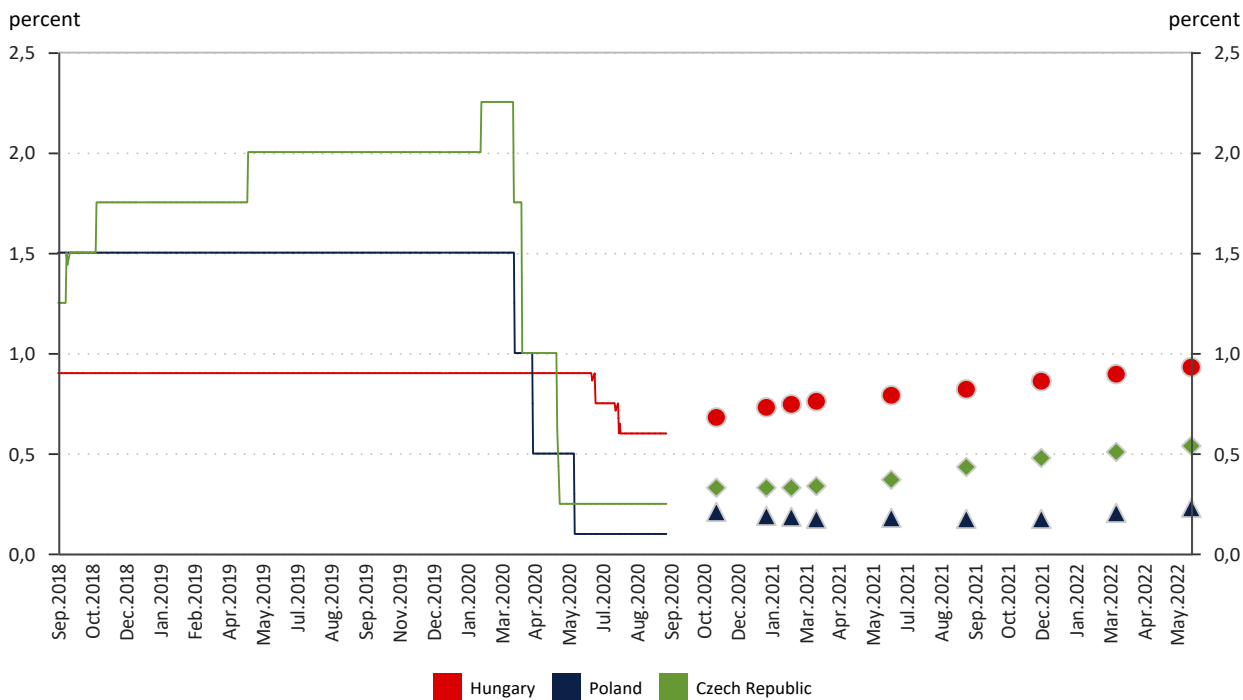
Source: MNB.

87. Base rates and short term interbank rates in the region



Source: Refinitiv.

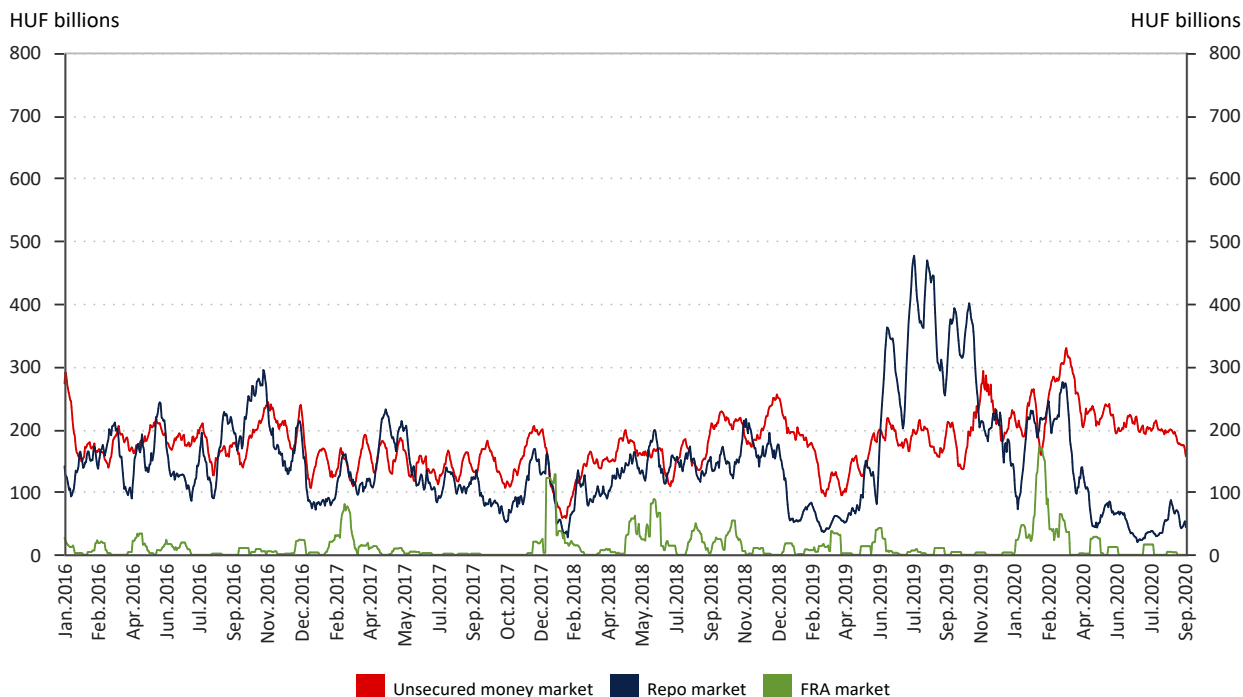
88. CEE base rates and forward rate agreements



Source: Bloomberg

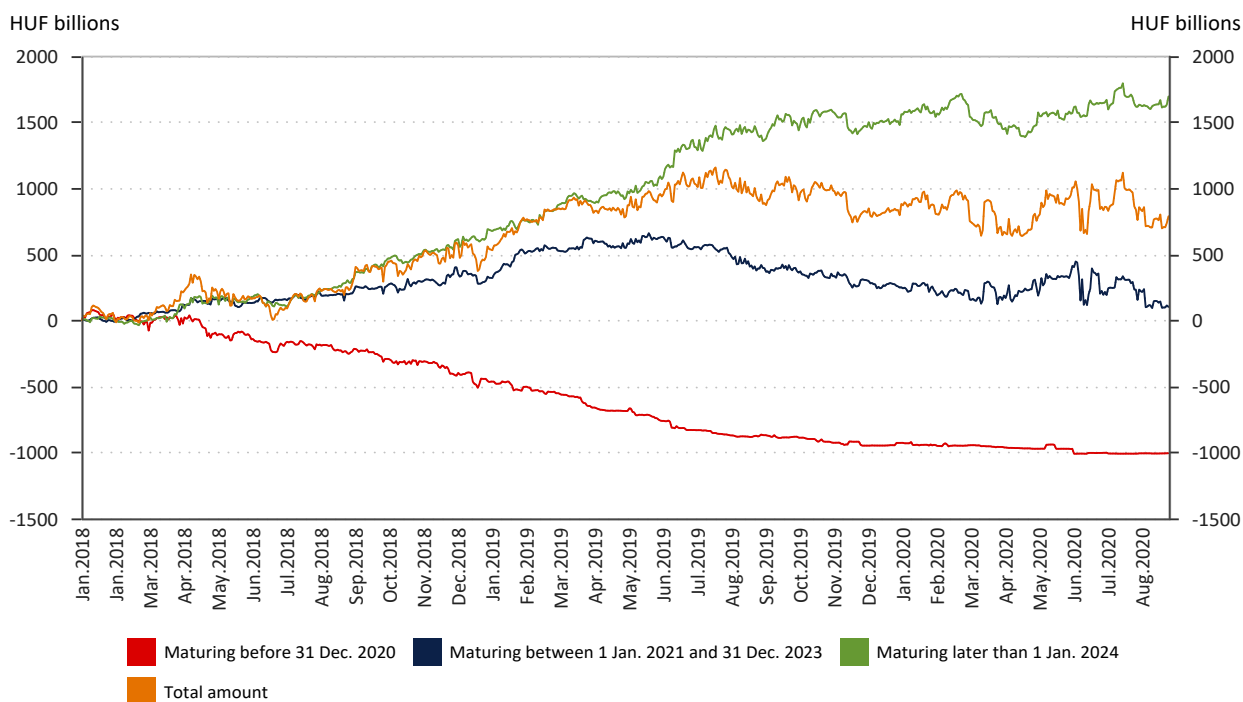
Note: Based on FRA transactions. Last update: (16/09/2020).

89. Turnover on the interbank, HUF repo, and FRA markets (25 day moving average)



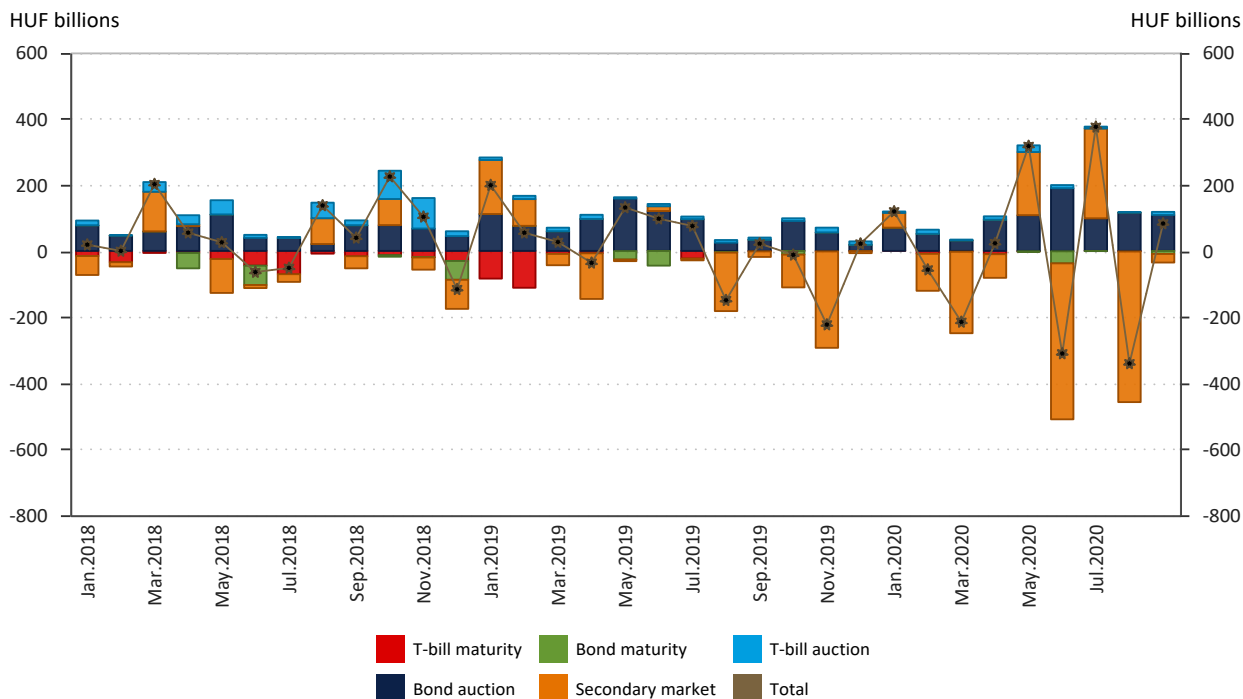
Source: MNB
 Note: turnovers on deal date, based on reporting by domestic banks, 25-day moving averages.

90. Change in government bonds of non-residents by tenor



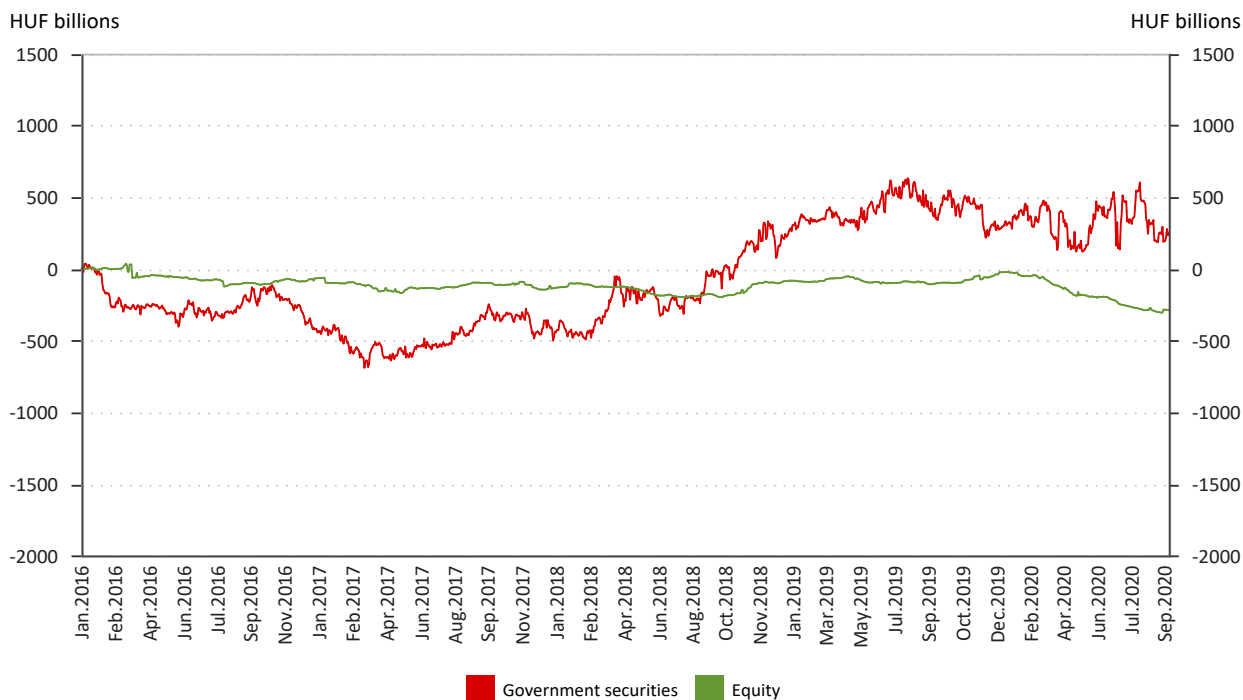
Source: MNB.

91. Decomposition of change in government securities held by non-residents (last months)



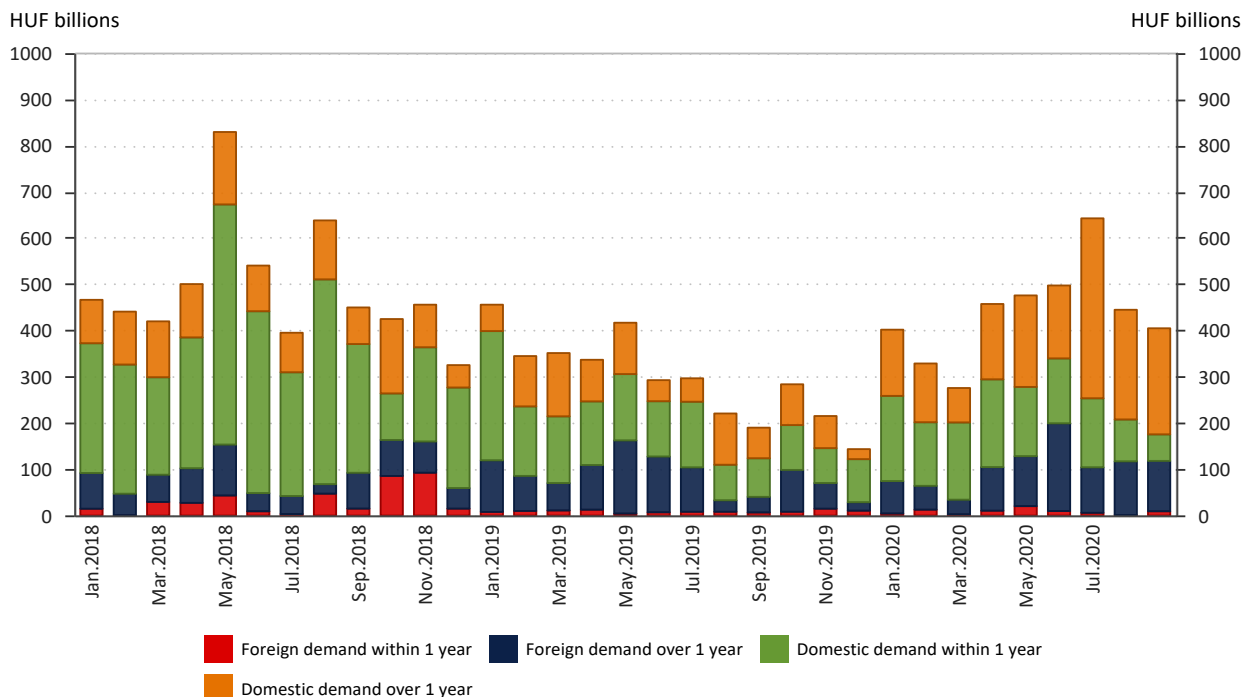
Source: MNB
 Note: Last month is incomplete.

92. Forint financial assets held by non-residents



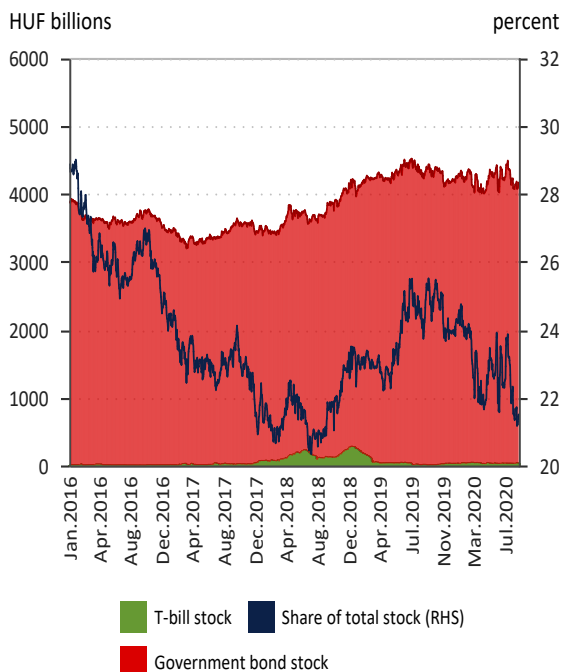
Source: MNB, KELER
 Note: Cumulative change. Equity data are not comprehensive, it contains data for large- and mid-cap stocks quoted on the Budapest Stock Exchange.

93. Primary market government security purchase of domestic and non-resident investors



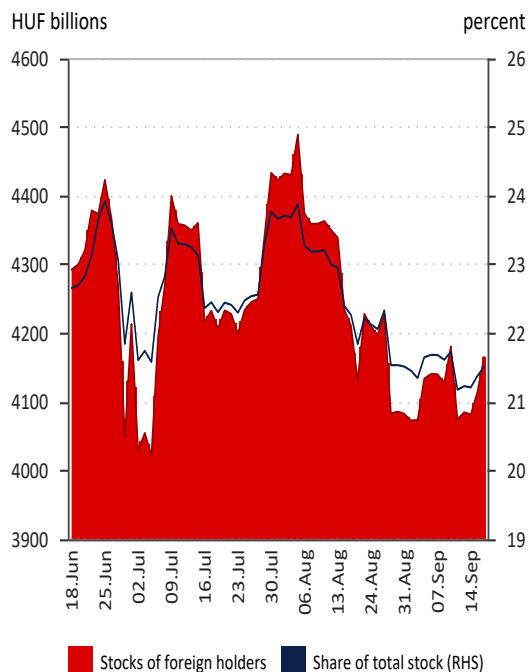
Source: MNB
Note: Last month is incomplete.

94. Government securities held by non-residents and the proportion to the total amount outstanding



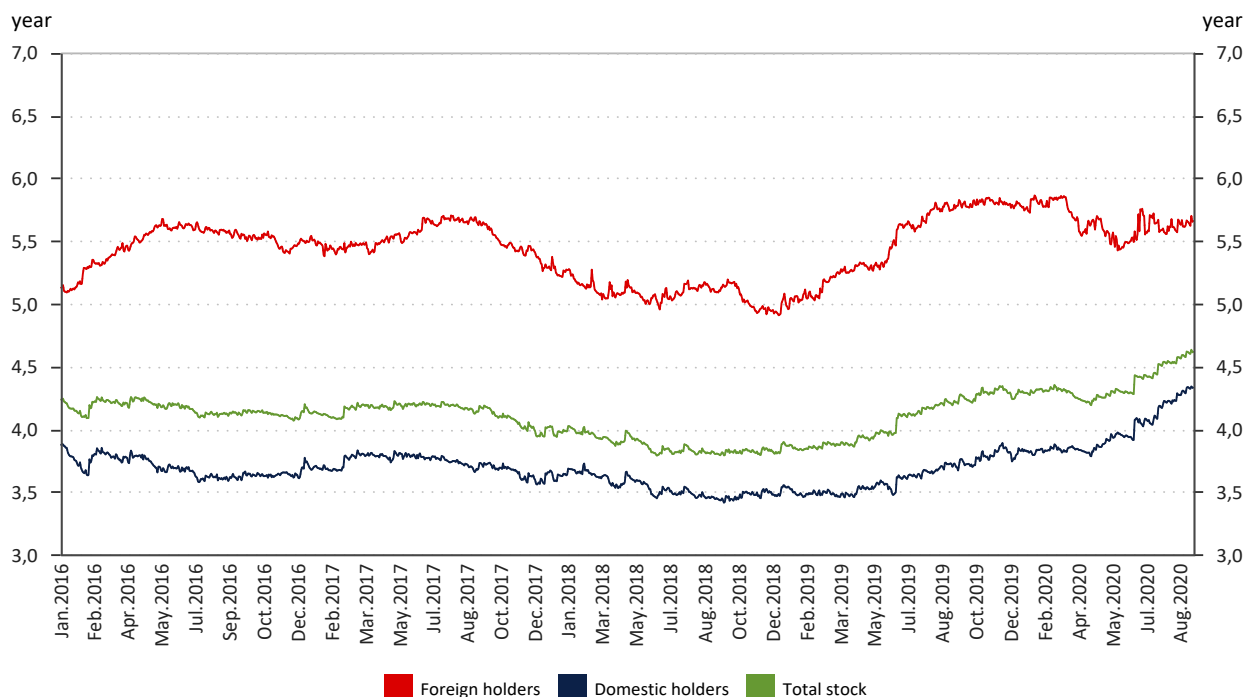
Source: MNB.

95. Government securities held by non-residents and the share of the total amount (last months)



Source: MNB.

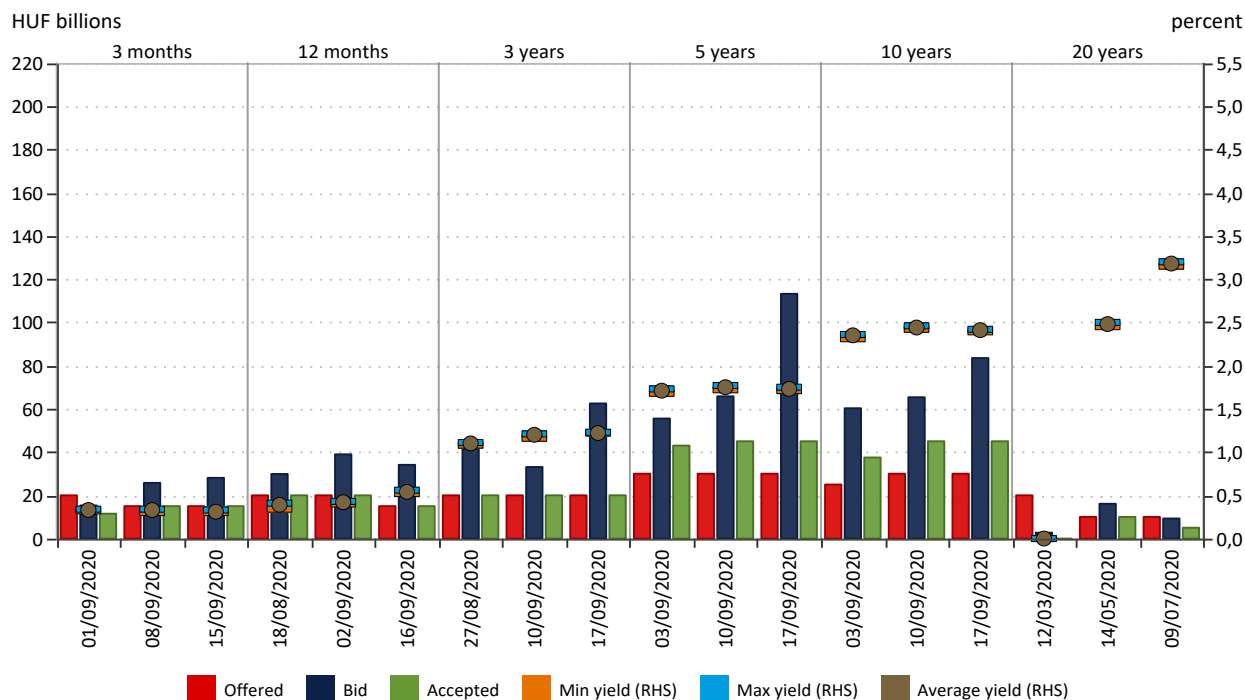
96. The average time to maturity of government security portfolio of residents and non-residents



Source: MNB

Note: Based on HUF government bonds and T-bills.

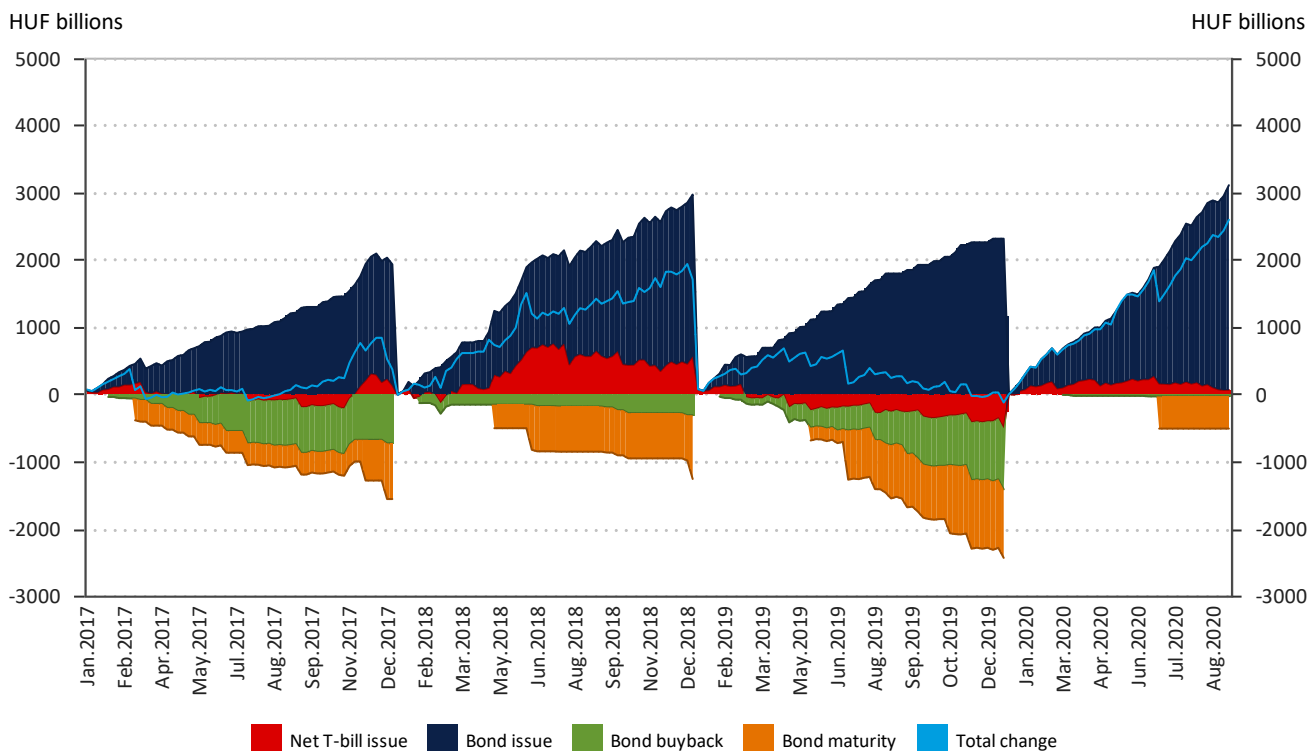
97. The turnover and yield data of the Hungarian primary T-bill and T-bond issues



Source: ÁKK

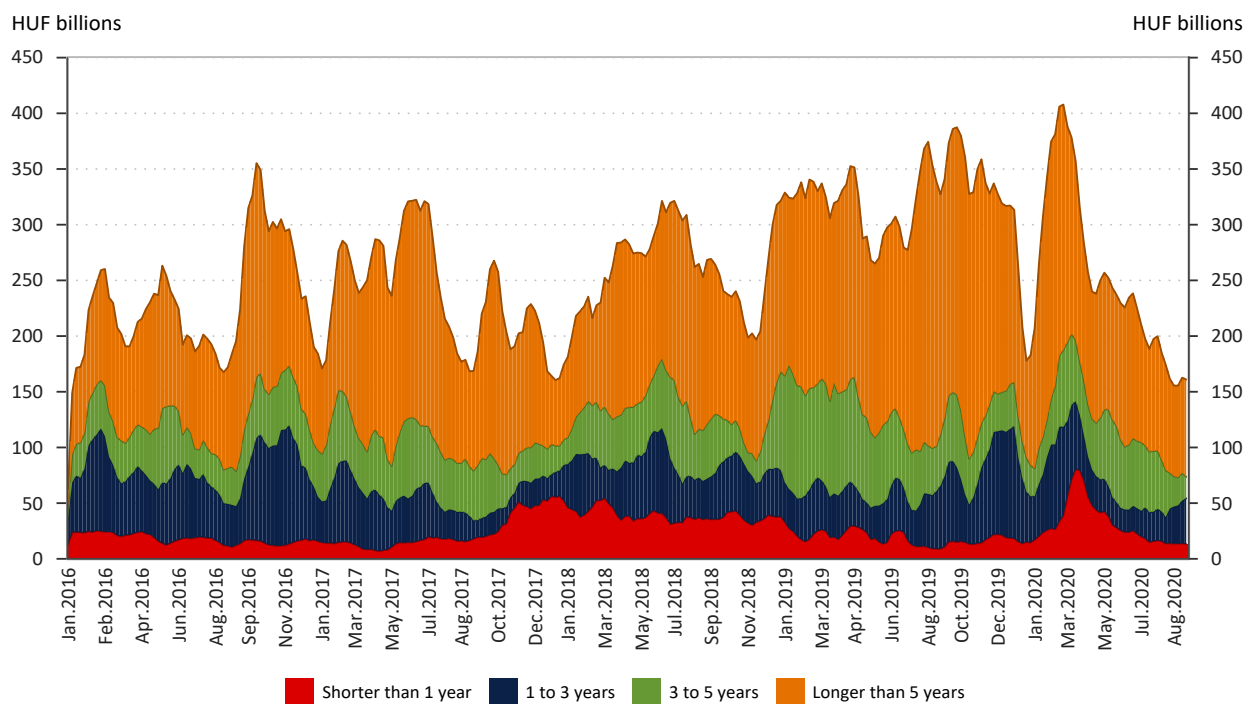
Notes: In case of floating rate bonds the yield data are not plotted. The accepted amount at the bond auctions also include the results of the non-competitive tenders.

98. Government securities issues, buybacks, redemptions



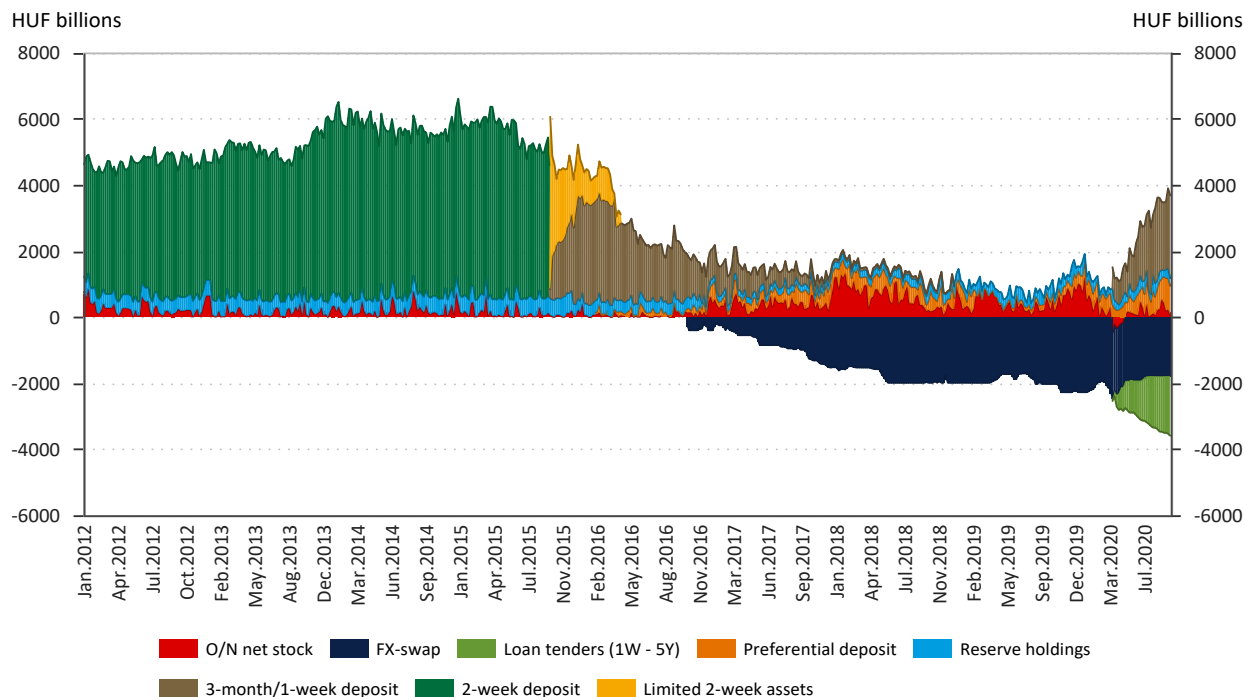
Source: MNB.

99. Turnover on the secondary market of government securities



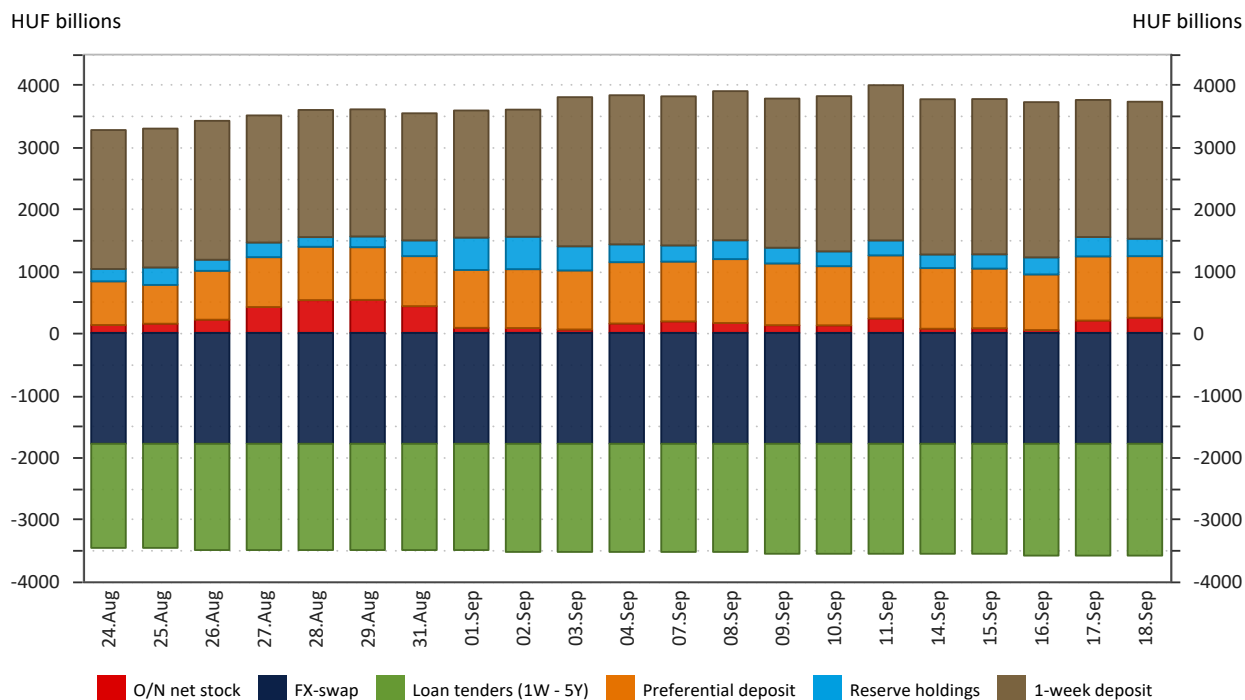
Source: MNB, KELER.

100. Selected assets and liabilities of the MNB



Source: MNB.

101. Use of selected facilities of the MNB beside the main instrument

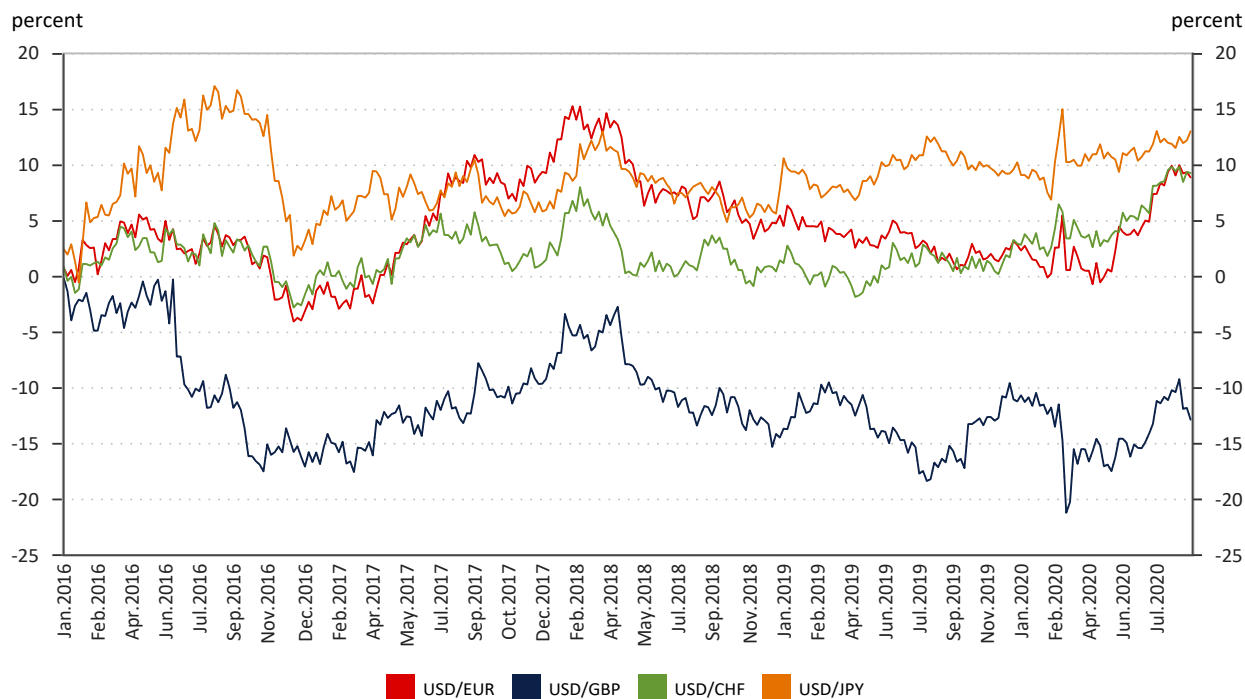


Source: MNB.

102. International developments*Overview*

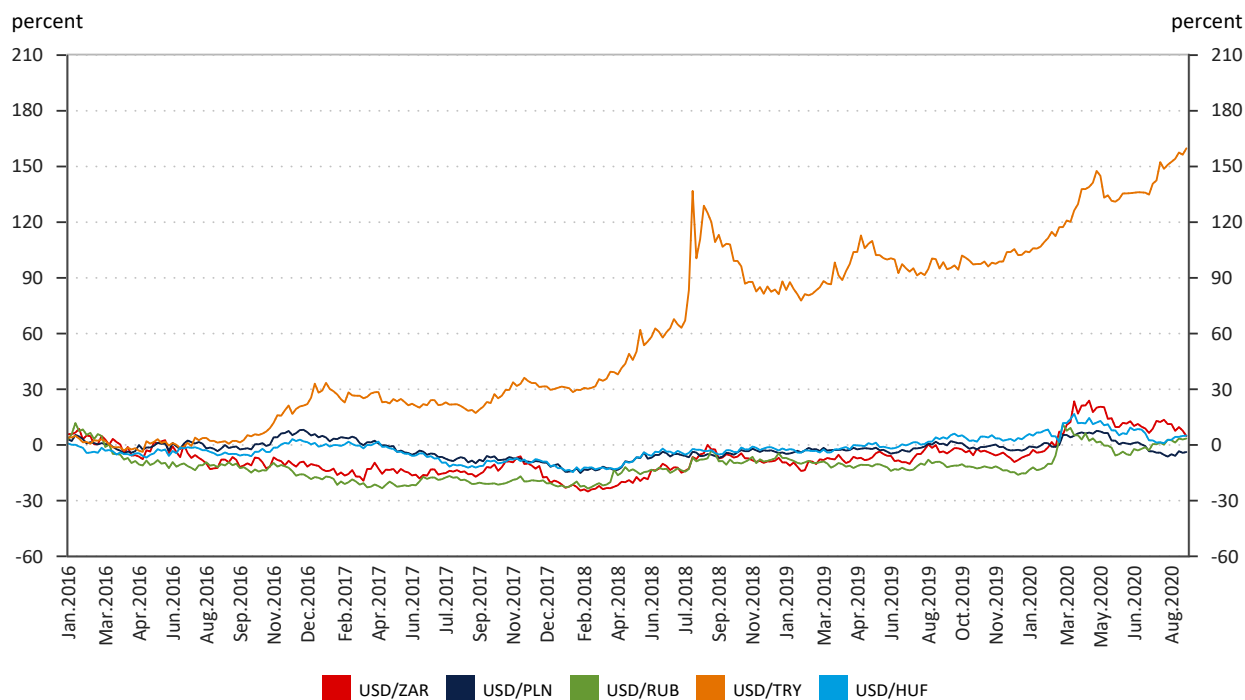
Indicator	1 month ago	1 week ago	Current
Fed base rate (%)	0.25	0.25	0.25
ECB base rate (%)	0.00	0.00	0.00
10-year T-bond yield (%)	0.68	0.67	0.69
10-year euro yield (%)	-0.47	-0.48	-0.49
VIX Index (%)	21.5	28.6	28.0
EMBI Global spread (bp)	381	374	378
SP 500 Index	3375	3341	3385
DAX Index	12977	13203	13208
NIKKEI Index	23051	23235	23476
USD/EUR exchange rate	1.18	1.18	1.18
USD/JPY exchange rate	106.12	106.16	104.74
CHF/EUR exchange rate	1.08	1.08	1.08
Brent oil (USD per barrel)	45.4	39.9	42.3

103. Major currencies versus the dollar



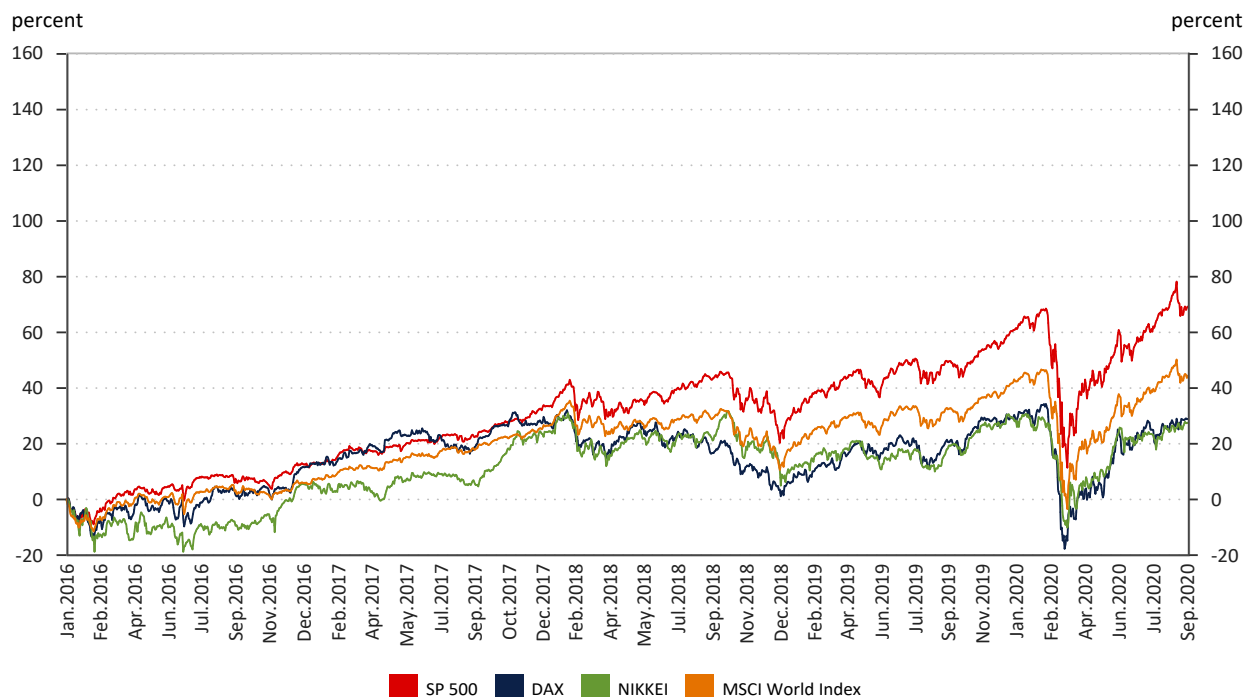
Source: Refinitiv
 Note: cumulative change. Positive values indicate USD depreciation.

104. Emerging currencies versus the dollar



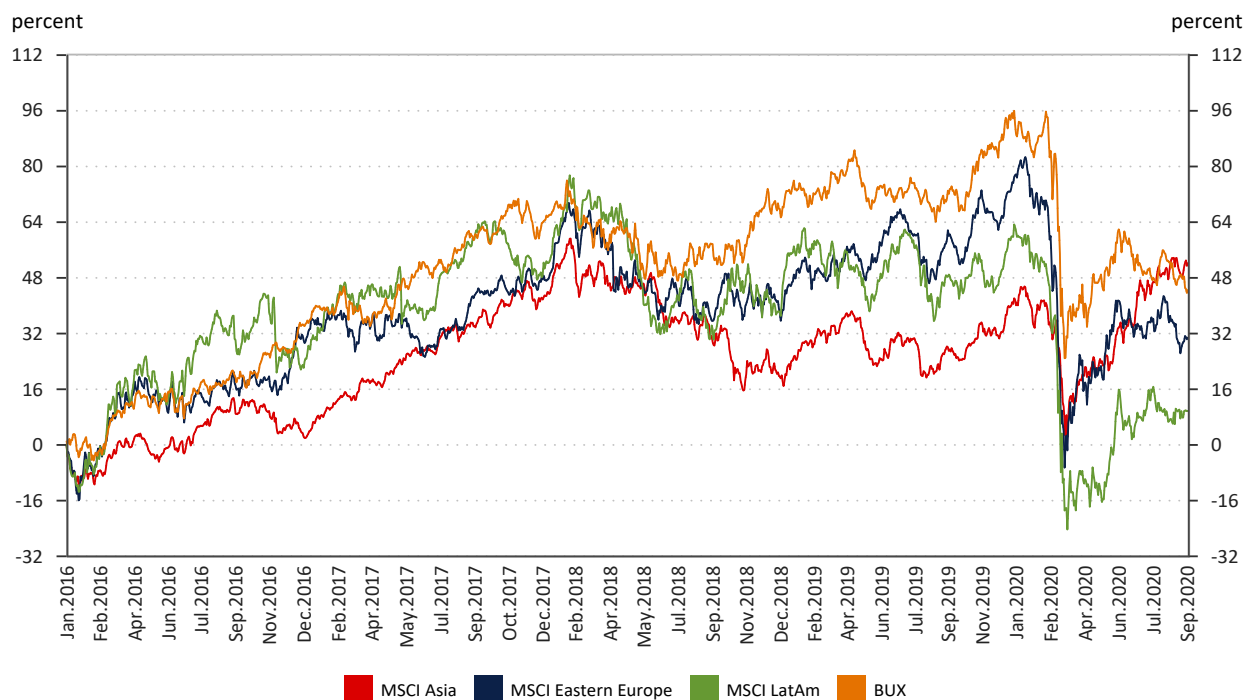
Source: Refinitiv Notes: positive value means depreciation of the emerging currency. Cumulative change.

105. Developed market stock indices



Source: Refinitiv
Notes: cumulative change.

106. Emerging stock exchange markets



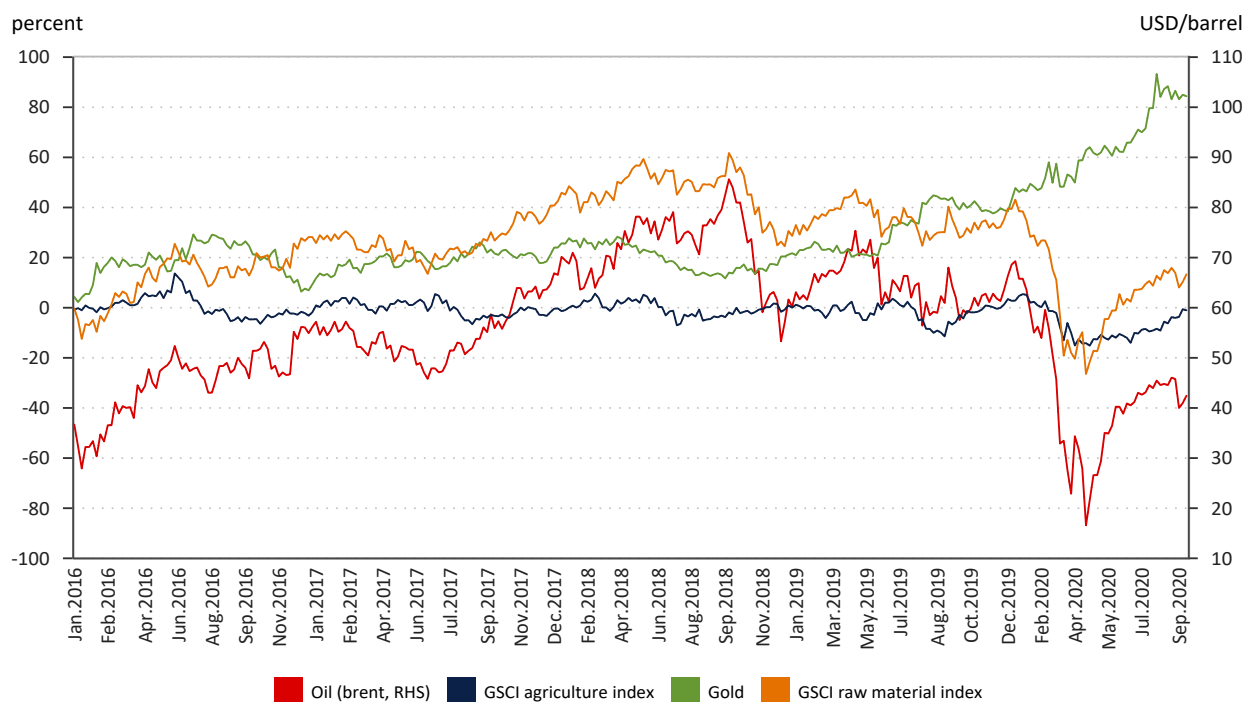
Source: Refinitiv Datastream Note: cumulative change, MSCI stock indices.

107. EUR/USD exchange rate and speculative positions



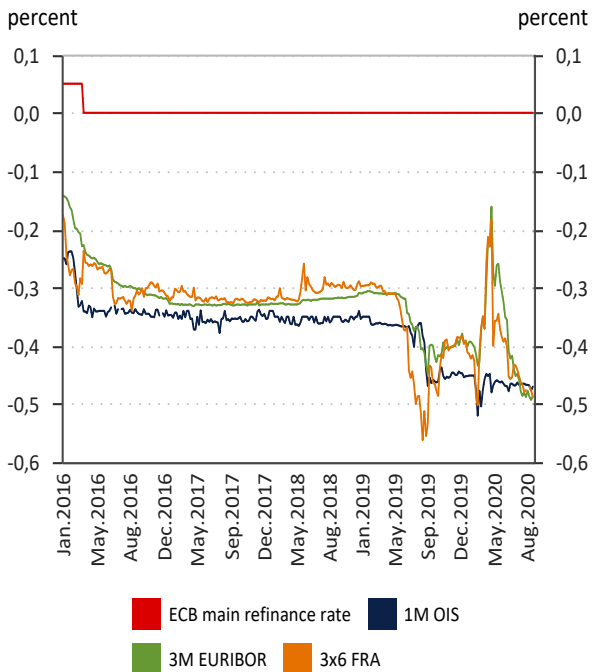
Source: Bloomberg, CFTC.
 Notes: Speculative position is defined as a net of long and short transactions. Positive value means the majority of open positions on euro strengthening. Weekly datab by Commodity Futures Trading Commission.

108. Price of raw materials



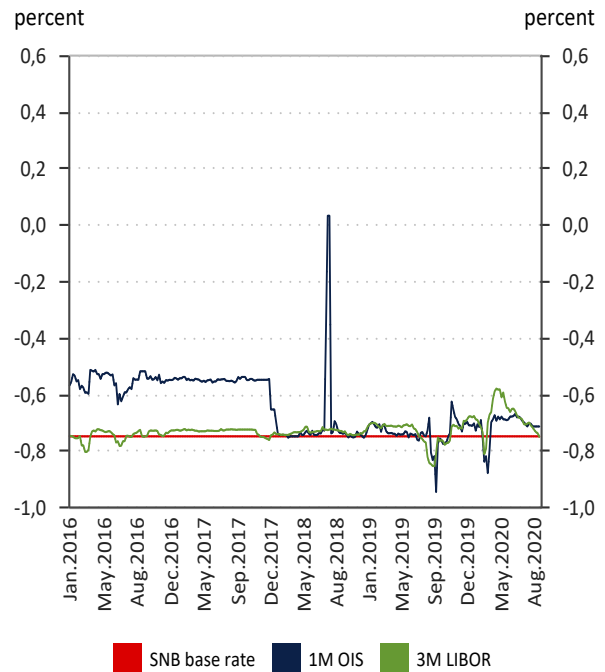
Source: Refinitiv Datastream Note: cumulative change except the Brent oil where the scale is nominal.

109. Short term interbank rates in the eurozone



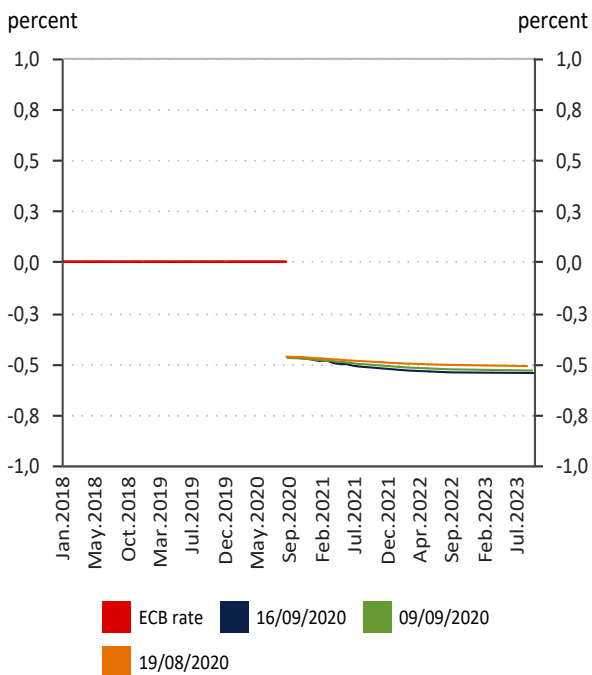
Source: Refinitiv.

110. Short term interbank rates in Switzerland



Source: Refinitiv.

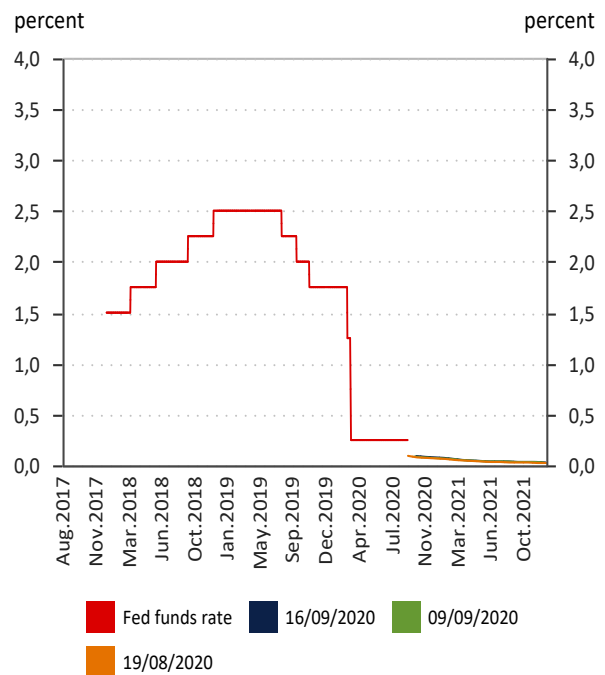
111. Forecasts on ECB policy rate



Source: ECB.

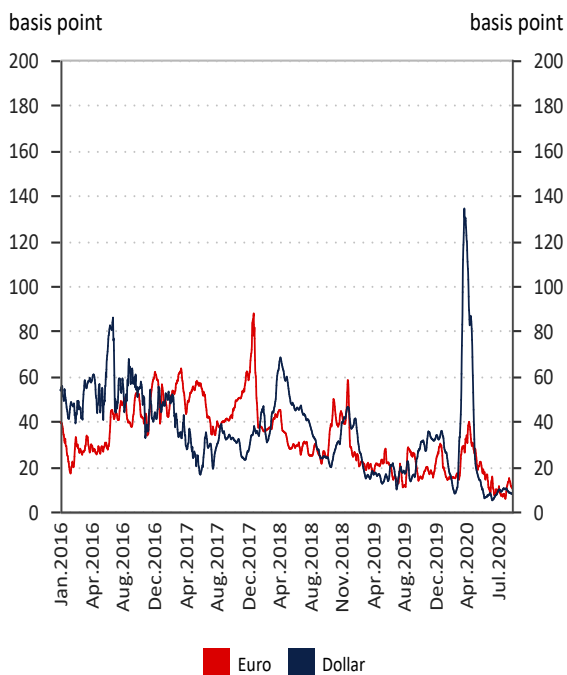
Note: Calculated 3-months forward yield curve based on German government bonds.

112. Forecasts on Fed policy rate



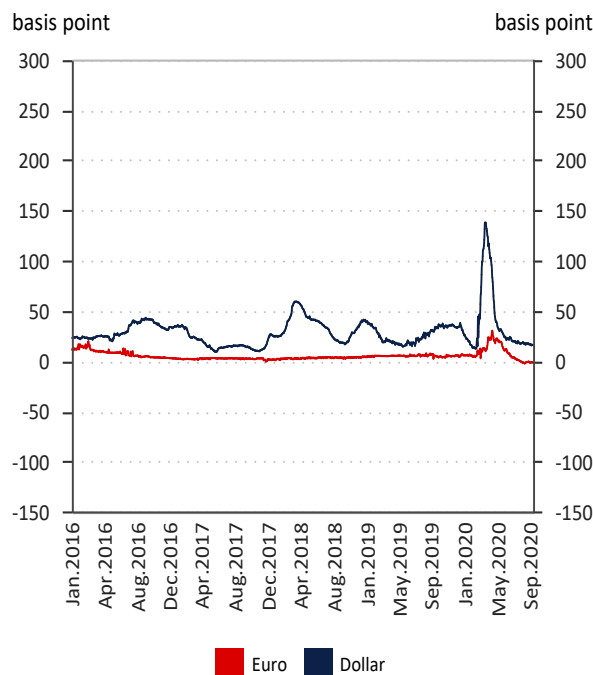
Source: Bloomberg.

113. 3M interbank and government bond yield spread



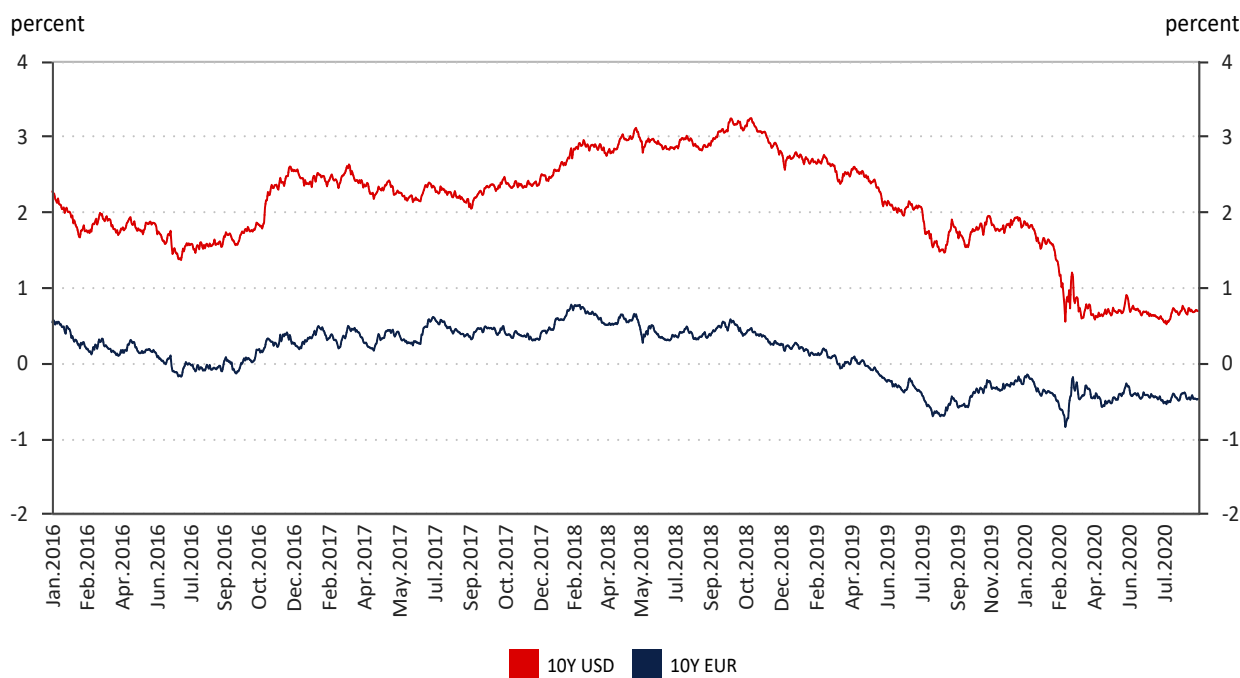
Source: Refinitiv.
Notes: Spread between 3-month interbank rates and 3-month T-bill yield.

114. 3M interbank and OIS yield spread



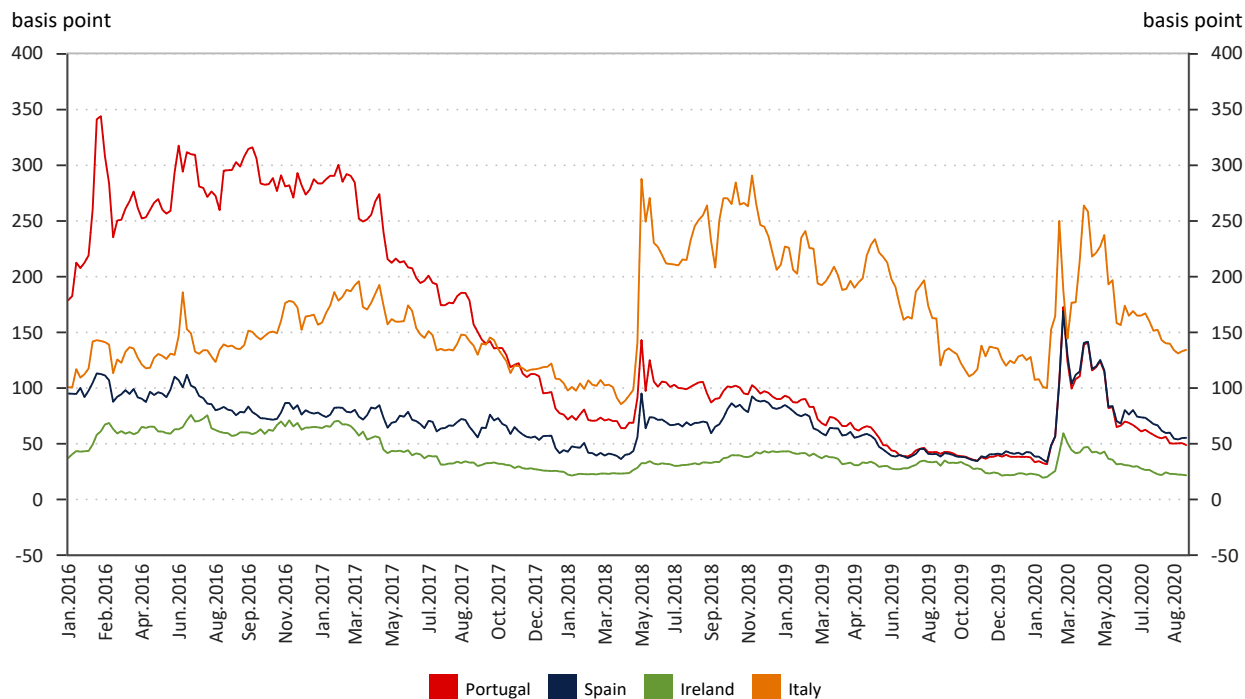
Source: Refinitiv.

115. Long term euro and dollar benchmark yields



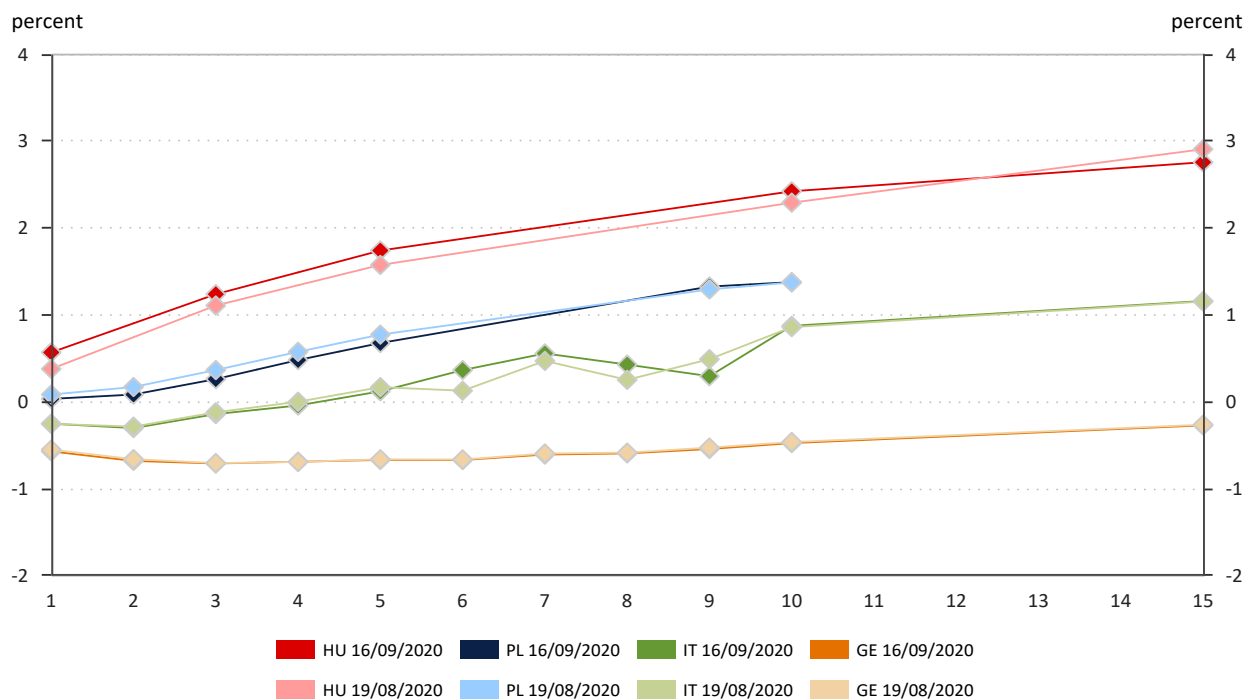
Source: Refinitiv.

116. 5Y sovereign CDS in the eurozone periphery



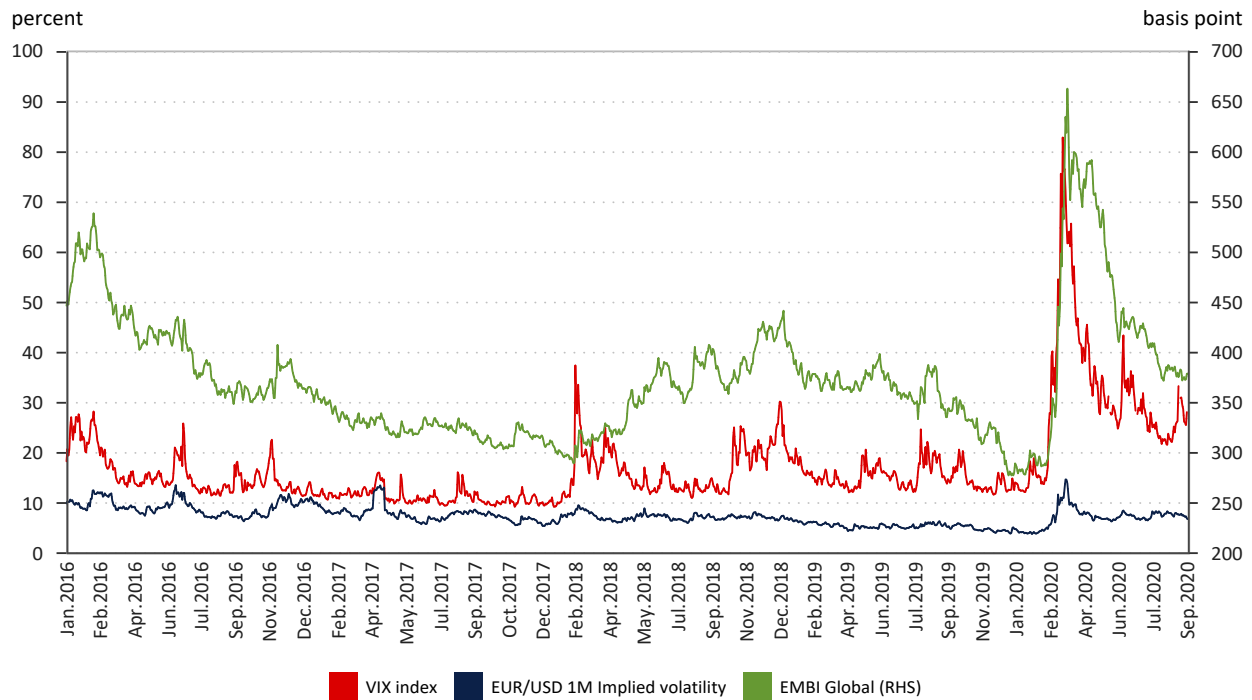
Source: Refinitiv.

117. Benchmark yield curves of Hungary, Poland, Italy and Germany



Source: Bloomberg
Note: X axis is displayed in years.

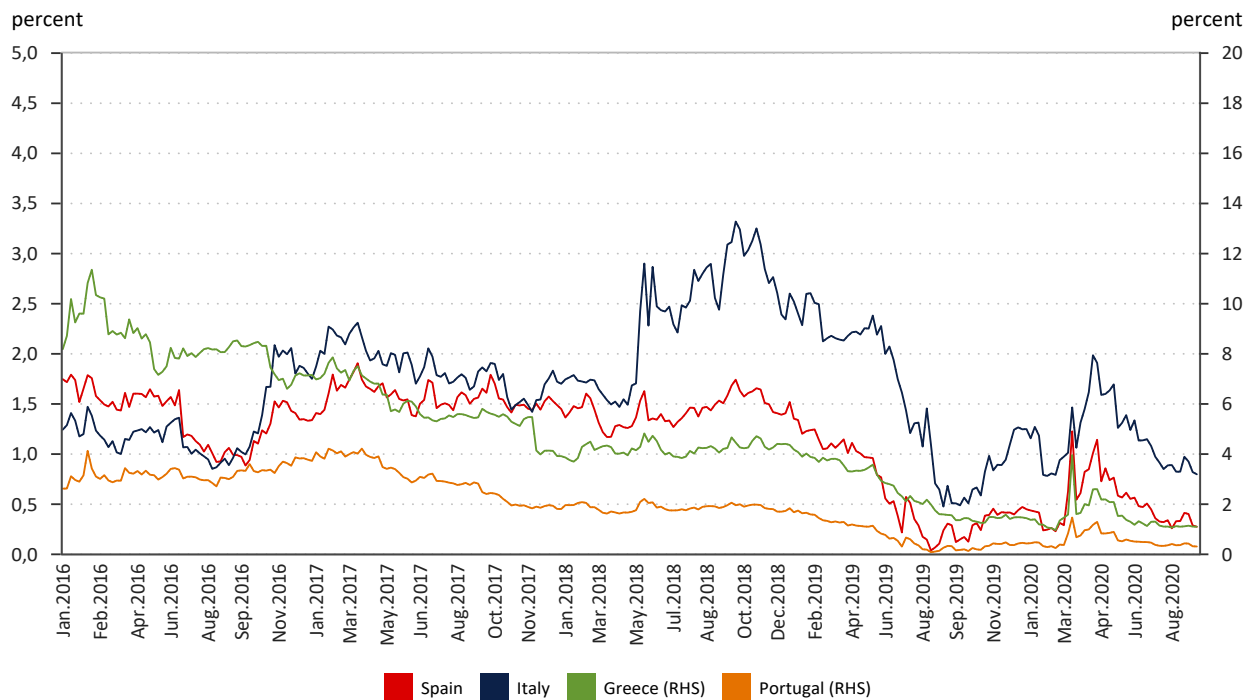
118. Main risk indicators



Source: Refinitiv Datastream

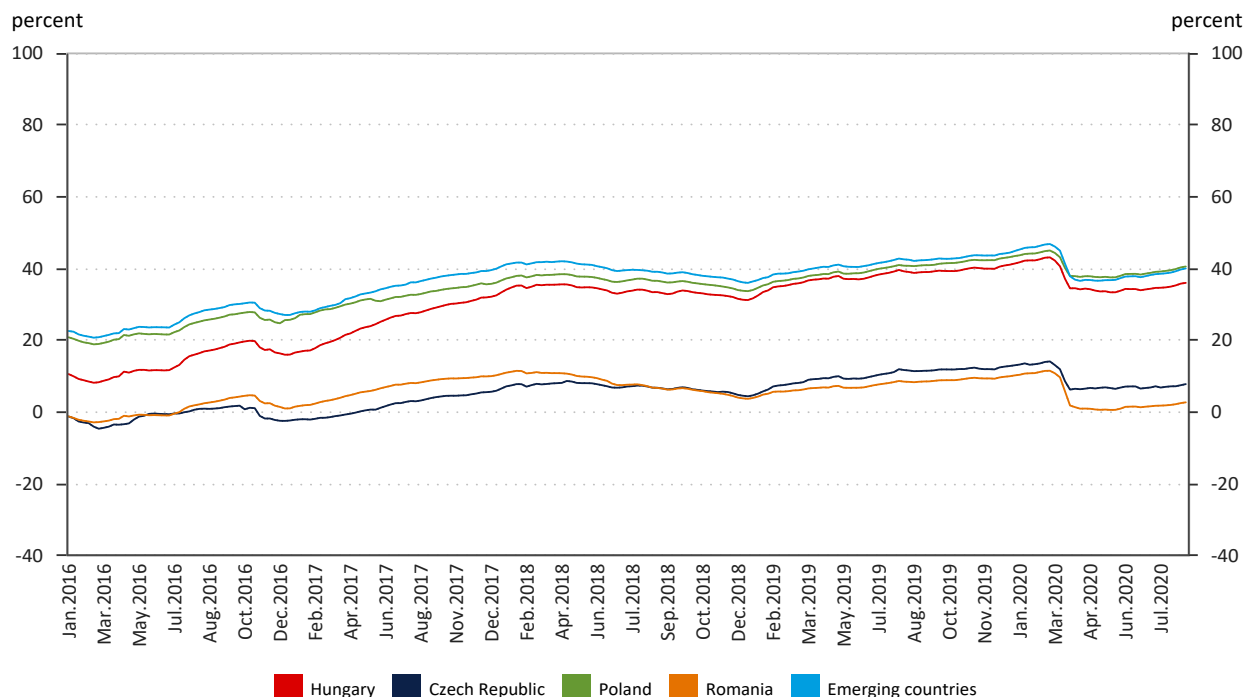
Note: An upward move indicates declining risk appetite or increasing risk aversion. VIX is the implied volatility of SP500 index.

119. Long term government bond yields in the Eurozone periphery



Source: Bloomberg.

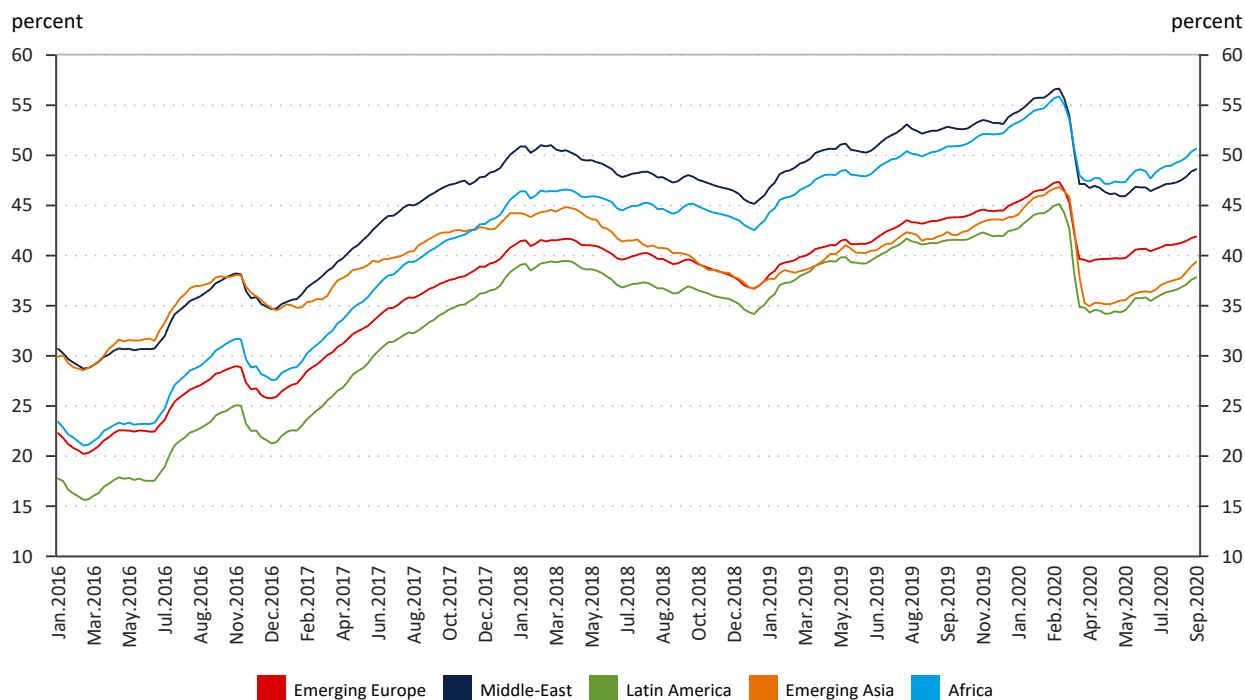
120. Emerging bond-market flows



Source:EPFR

Note: Percentage change of asset under management, 1/1/2011=0

121. Global bond-market flows



Source:EPFR

Note: Percentage change of asset under management, 1/1/2011=1