

Macprudential indicators of the financial sector

June 2018

Macroeconomic risk indicators.....	3
1 Manufacturing Purchasing Managers' Index (PMI) in selected economies	3
2 Services Purchasing Managers' Index (PMI) in selected economies.....	3
3 Consumer confidence indicators in the United States	3
4 Economic sentiment indicators in the euro area.....	3
5 Unemployment rates in selected economies	3
6 Consumer price inflation in selected economies	3
7 Industrial production indices in selected economies	4
8 Retail sales indices in selected economies	4
9 General government balances of EU countries in 2017	4
10 Gross government debt of EU countries in the first quarter of 2018	4
Financial market risk indicators.....	4
11 Price commodity indices	4
12 Exchange rate indices	4
13 Equity indices	5
14 Share price indices of the parent institutions of the five largest domestic banks.....	5
15 Yield curve slopes in selected economies	5
16 Volatility of equity indices	5
17 CDS spread indices	5
18 CDSs of the parent institutions of the largest Slovak banks	5
19 Three-month rates and the OIS spread	6
20 Inflation-linked swap prices	6
21 Credit spreads on 5-year government bonds issued by lower-rated countries	6
22 Credit spreads on 5-year government bonds issued by selected central European countries and Germany.....	6
Corporate credit risk indicators	6
23 Exports and the business environment	6
24 Exports and corporate sales	6
25 Sales in selected sectors compared with their level for the period 06/2007 to 06/2008 ...	7
26 Corporate loans and sales	7
27 Interest rate spreads on new loans to NFCs	7
28 Non-performing loans and default rates	7
29 Loans at risk	7
30 Debt-service burden and its components.....	7
31 Commercial real estate: Development in the office segment.....	8
32 Commercial real estate: sales in the residential segment (new flats)	8
33 Comparison of corporate balance sheets and sales	8
34 Liabilities of non-financial corporations	8

Household credit risk indicators 8

35 Stock of retail loans.....	8
36 Household indebtedness in Slovakia and in selected countries	8
37 Changes in credit standards and credit demand according to the Bank Lending Survey .	9
38 Loan-to-value (LTV) ratio for new loans (%).....	9
39 Net default rates on retail loans (%).....	9
40 NPL ratios for retail loans (%)	9
41 The consumer confidence index and its components.....	9
42 Number of unemployed by income category	9
43 Real wages in selected sectors – index.....	10
44 Housing affordability index.....	10

Market risk and liquidity risk indicators..... 10

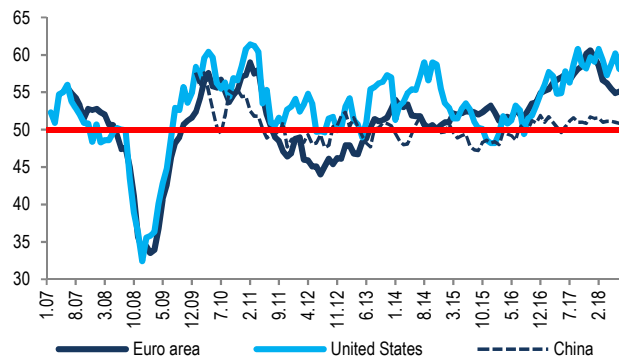
45 Value at Risk for investments in different types of financial instruments	10
46 Loan-to-deposit ratio	10
47 Liquid asset ratio	10

General note:

'Index: 31 December 2017 = 1' means that the given index was normalized so that its value on the specified date (31 December 2017) was equal to 1.

Macroeconomic risk indicators

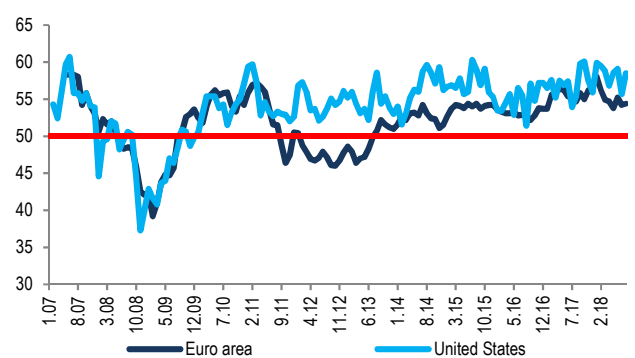
1 Manufacturing Purchasing Managers' Index (PMI) in selected economies



Source: Bloomberg.

Note: PMI (Purchasing Managers' Index) is an indicator of the economic health of the manufacturing or service sector: an index value of more than 50 represents expansion, while a value of below 50 represents contraction.

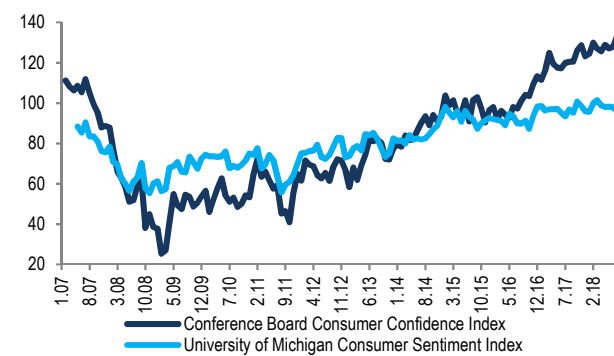
2 Services Purchasing Managers' Index (PMI) in selected economies



Source: Bloomberg.

Note: PMI (Purchasing Managers' Index) is an indicator of the economic health of the manufacturing or service sector: an index value of more than 50 represents expansion, while a value of below 50 represents contraction.

3 Consumer confidence indicators in the United States



Source: Bloomberg.

Note: The chart refers to US consumer confidence indices produced by two different institutions.

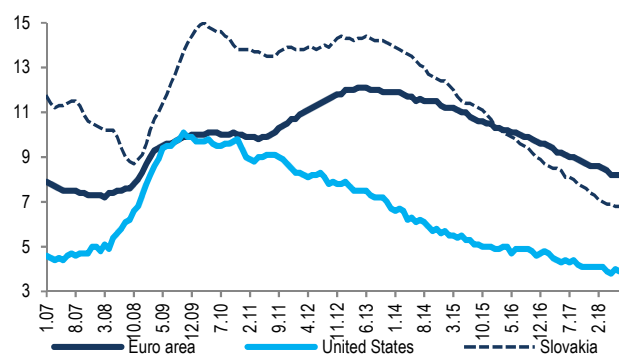
4 Economic sentiment indicators in the euro area



Source: Bloomberg.

Notes: ESI is the Economic Sentiment Indicator compiled by the European Commission. ZEW represents the economic sentiment indicator compiled by a private company ZEW (Zentrum für Europäische Wirtschaftsforschung).

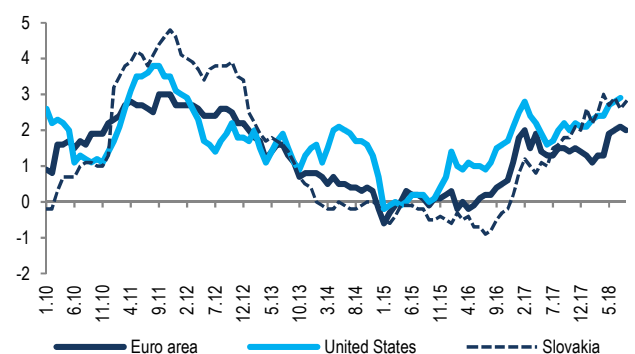
5 Unemployment rates in selected economies (%)



Source: Eurostat, Bureau of Labor Statistics.

Note: Seasonally adjusted.

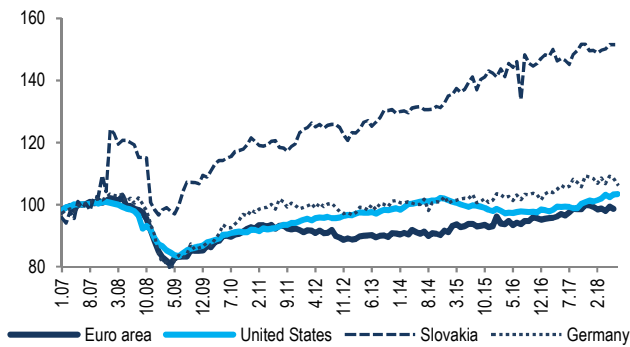
6 Consumer price inflation in selected economies (%)



Source: Eurostat, Bureau of Labor Statistics.

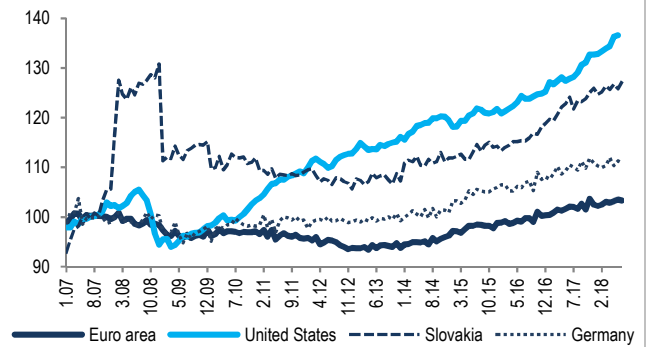
Note: Year-on-year percentage changes in the consumer price indices.

7 Industrial production indices in selected economies



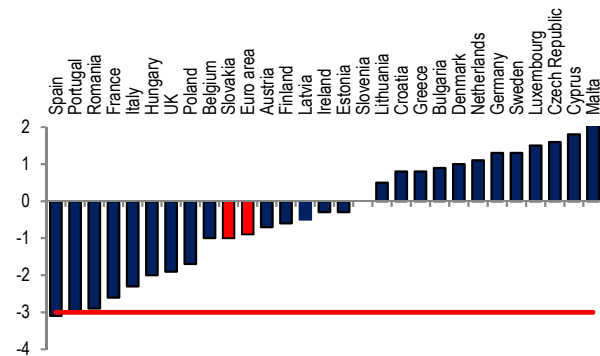
Source: Eurostat, US Federal Reserve.
Notes: Rebalanced (average: 2007 = 100).
Seasonally adjusted.

8 Retail sales indices in selected economies



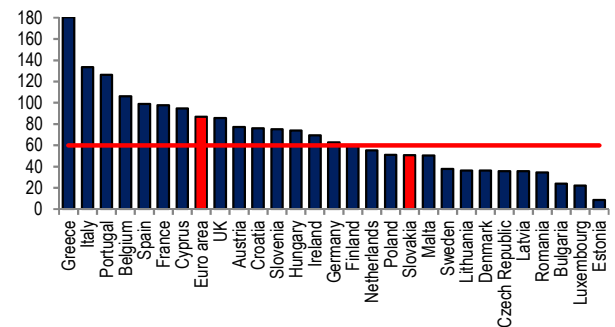
Source: Eurostat, US Department of Commerce.
Notes: Rebalanced (average 2007 = 100).
Seasonally adjusted.

9 General government balances of EU countries in 2017 (%)



Source: Eurostat.
Note: Balance is expressed as a percentage of GDP.

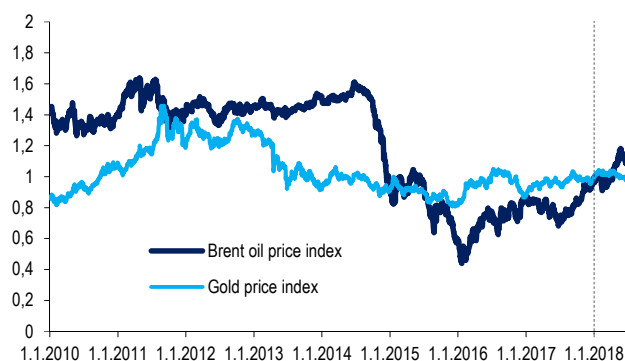
10 Gross government debt of EU countries in the first quarter of 2018 (%)



Source: Eurostat.
Note: Gross government debt is expressed as a percentage of shares of GDP.

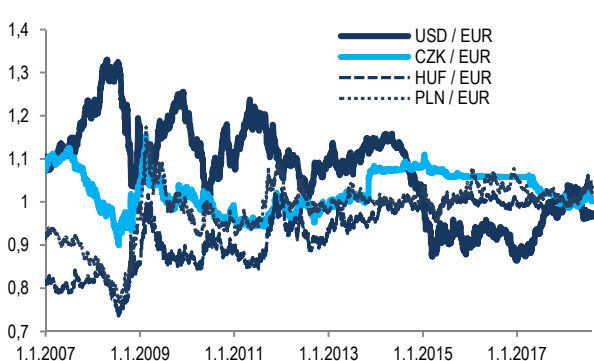
Financial market risk indicators

11 Price commodity indices (31. 12. 2017 = 1)



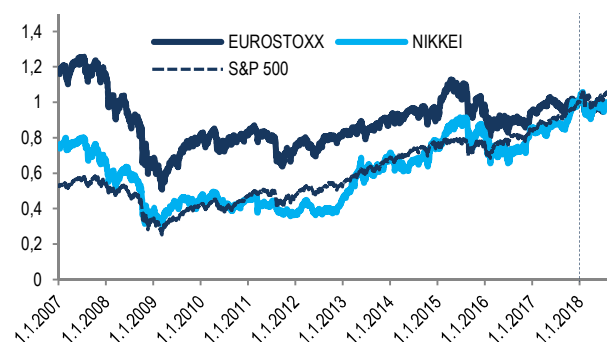
Source: Bloomberg, NBS.

12 Exchange rate indices (31. 12. 2017 = 1)



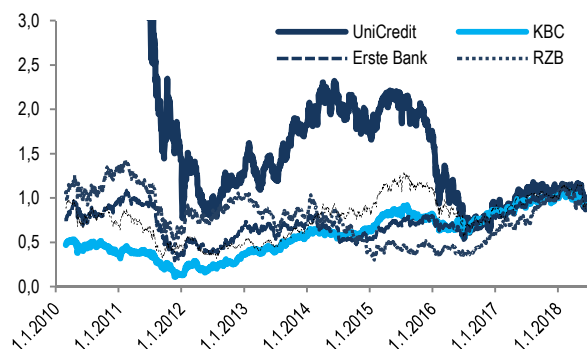
Source: Bloomberg, NBS.

13 Equity indices (31. 12. 2017 = 1)



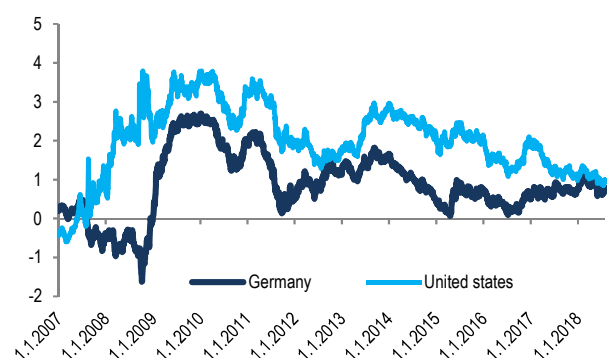
Source: Bloomberg, NBS.

14 Share price indices of the parent institutions of the five largest domestic banks (31. 12. 2017 = 1)



Source: Bloomberg, NBS.

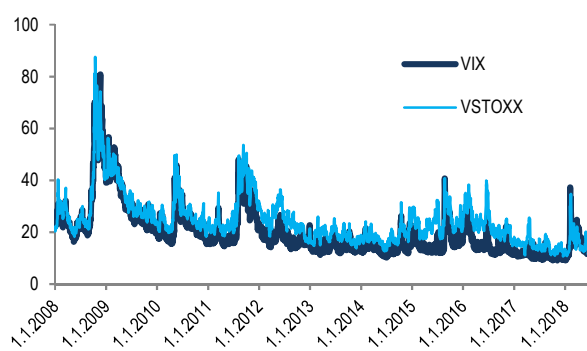
15 Yield curve slopes in selected economies (p. p.)



Source: Bloomberg, NBS.

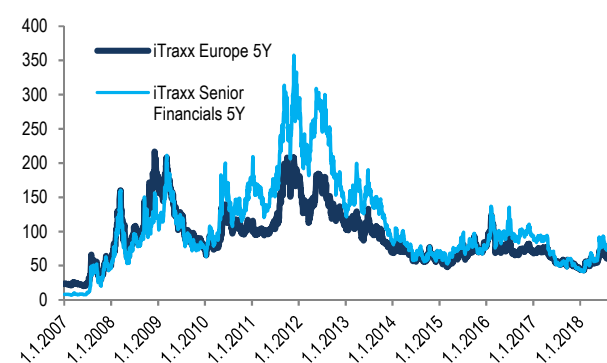
Notes: The yield curve slope is expressed as the difference between the yield to maturity on 10-year and 3-month government bonds.
p. p. – percentage points.

16 Volatility of equity indices



Source: Bloomberg.

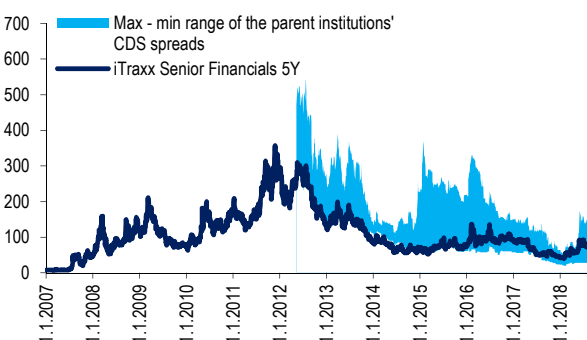
17 CDS spread indices (b. p.)



Source: Bloomberg, NBS.

Note: b. p. – basis points.

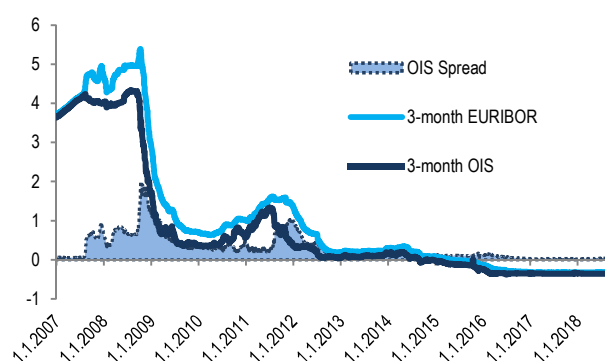
18 CDSs of the parent institutions of the largest Slovak banks (b. p.)



Source: Bloomberg, NBS.

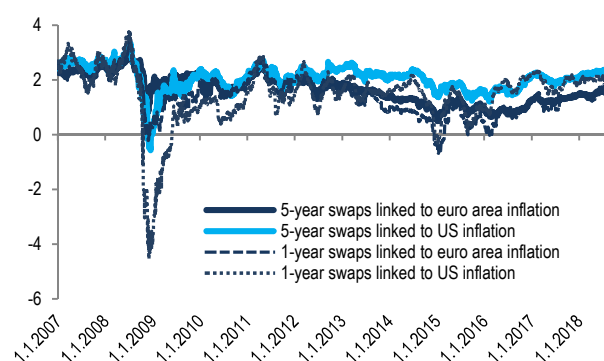
Note: b. p. – basis points.

19 Three-month rates and the OIS spread (% , p. p.)



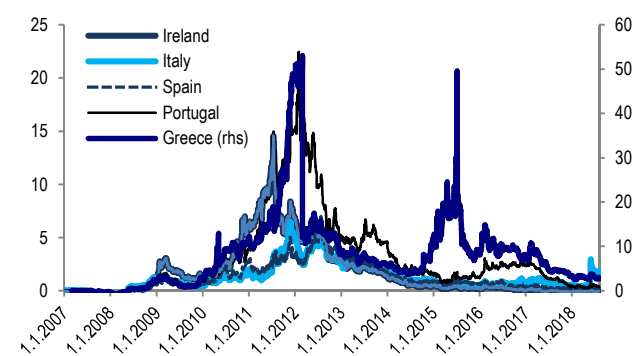
Source: Bloomberg, NBS.
Note: p.p. – percentage points.

20 Inflation-linked swap prices (p. p.)



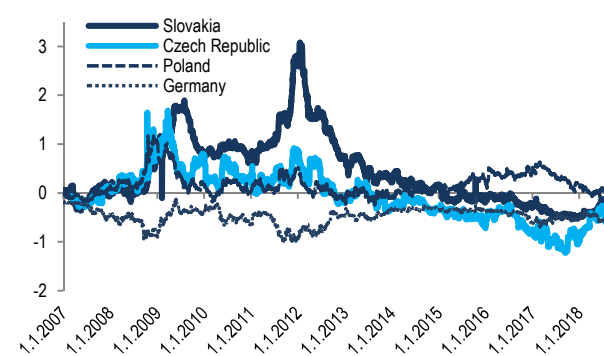
Source: Bloomberg, NBS.
Notes: Inflation-linked swaps are swap transactions in which one counterparty pays a fixed rate (a swap price) and the other pays a rate corresponding to the return on a selected price index. The inflation-linked swap price is calculated on a non-coupon basis.
p.p. – percentage points.

21 Credit spreads on 5-year government bonds issued by lower-rated countries (p. p.)



Source: Bloomberg, NBS.
Notes: The vertical scales shows differences between the yield on 5-year bonds issued by the given countries and 5-year OIS rates, representing a 5-year interest rate on high-rated bonds.
p. p. – percentage points.

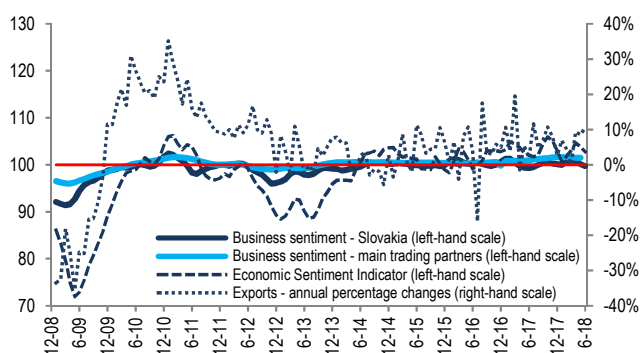
22 Credit spreads on 5-year government bonds issued by selected central European countries and Germany (p. p.)



Source: Bloomberg, NBS.
Notes: The Chart shows the difference between yields on 5-year government bonds denominated in the domestic currencies of the given countries and 5-year swap rates for the respective currencies.
p. p. – percentage points.

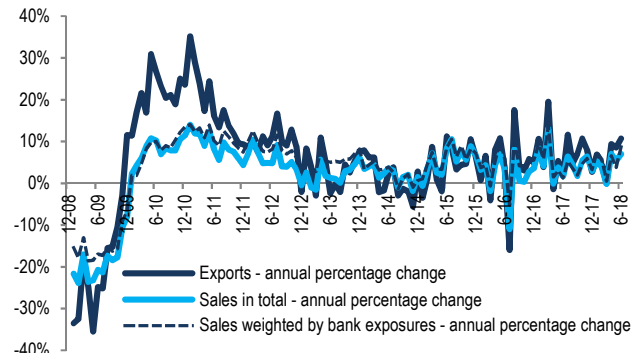
Corporate credit risk indicators

23 Exports and the business environment



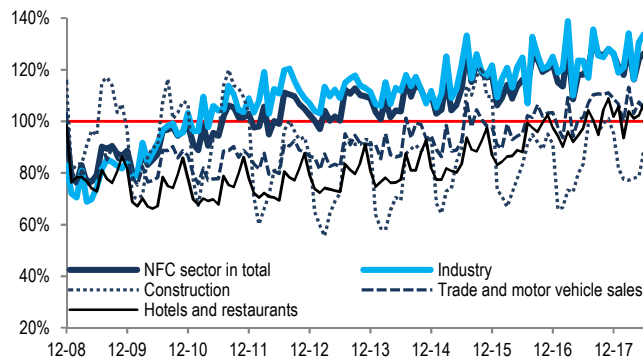
Source: NBS, OECD, Statistical Office of the SR.

24 Exports and corporate sales



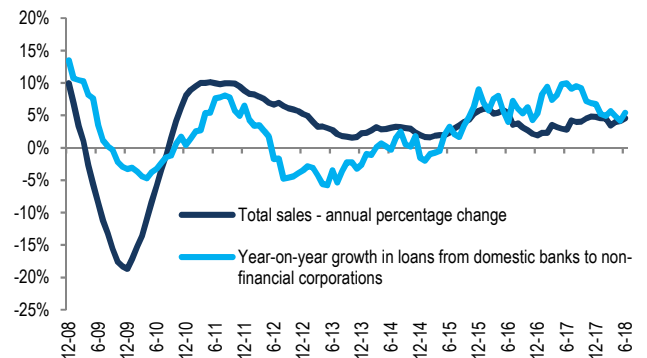
Source: Ministry of Economy of the SR, NBS, OECD, Statistical Office of the SR.

25 Sales in selected sectors compared with their level for the period 06/2007 to 06/2008



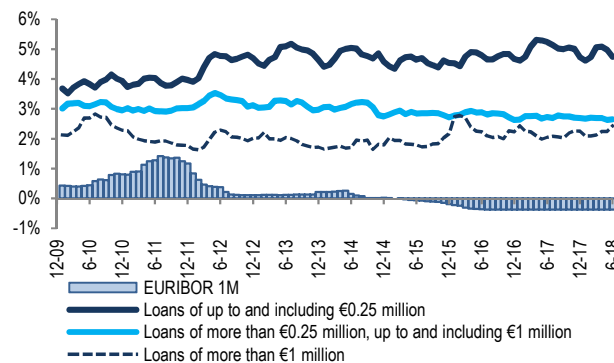
Source: Statistical Office of the SR.

26 Corporate loans and sales



Source: NBS, Statistical Office of the SR.

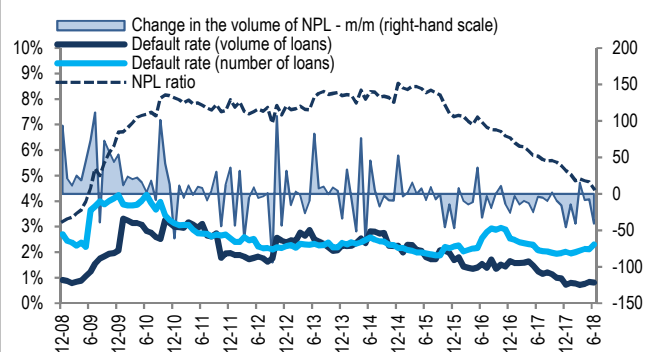
27 Interest rate spreads on new loans to NFCs



Source: NBS, European Banking Federation.

Note: The spread is defined as the difference between the monthly EURIBOR rate and the average rate on new loans in the respective category.

28 Non-performing loans and default rates

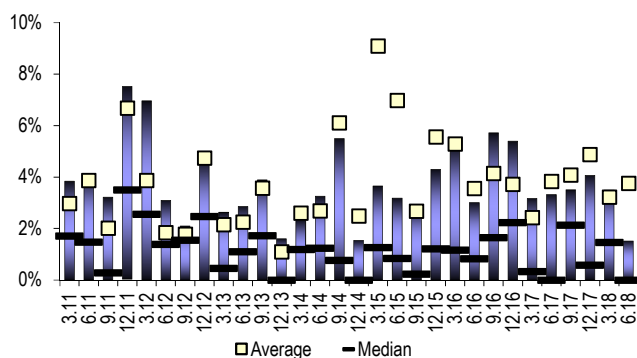


Source: NBS.

Notes: Data on the right-hand scale are in EUR mil.

Default rates refer to ratio of the number/volume of loans re-categorised as defaulted in period under review to the number/volume of non-defaulted loans at the beginning of the period under review.

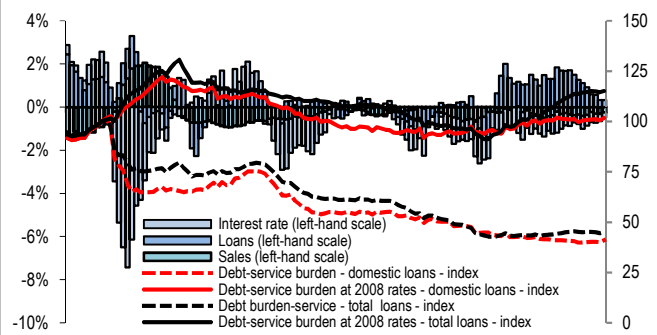
29 Loans at risk



Source: NBS.

Notes: The chart shows the interquartile range. The indicator describes share of loans to those corporates (to total corporate loans), that recorded year-on-year decline in sales of more than 30 % and observed loss in the given quarter.

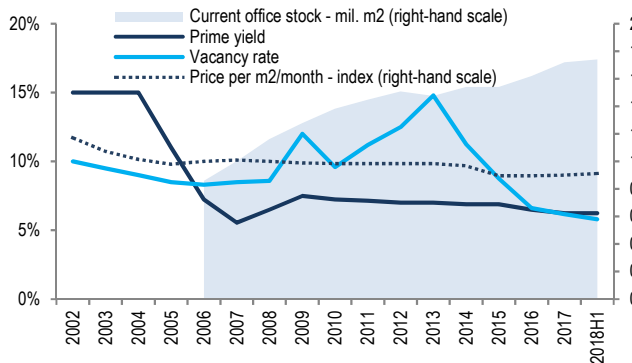
30 Debt-service burden and its components



Source: NBS, SO SR.

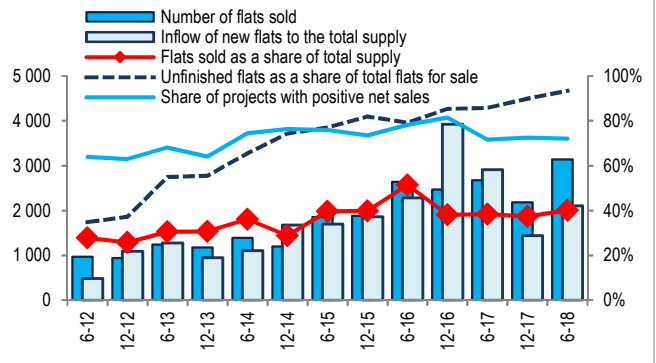
Note: Data on the right-hand scale are in EUR mil.

31 Commercial real estate: Development in the office segment



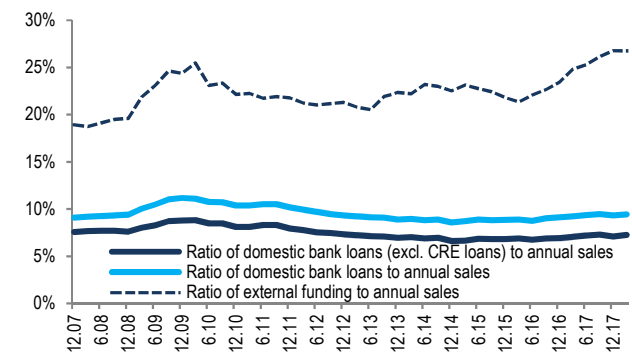
Source: JLL, CBRE, NBS.
Note: The chart shows prices and vacancy rates in Bratislava.

32 Commercial real estate: sales in the residential segment (new flats)



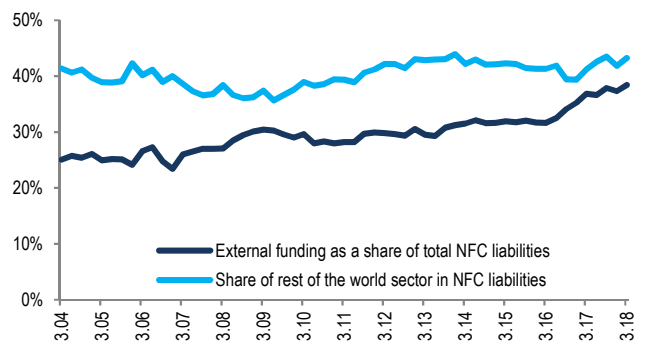
Source: Lexus, NBS.
Note: The chart shows prices and vacancy rates in Bratislava.

33 Comparison of corporate balance sheets and sales



Source: NBS, Statistical Office of the SR.

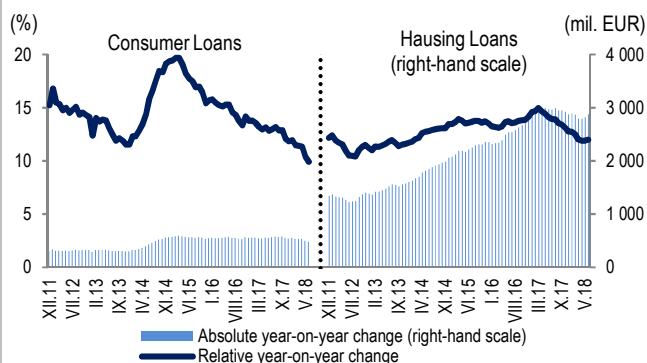
34 Liabilities of non-financial corporations



Source: NBS.
Note: NFC - non-financial corporations.

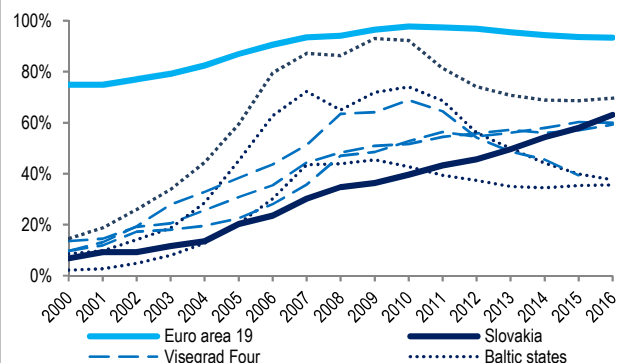
Household credit risk indicators

35 Stock of retail loans (year-on-year changes)



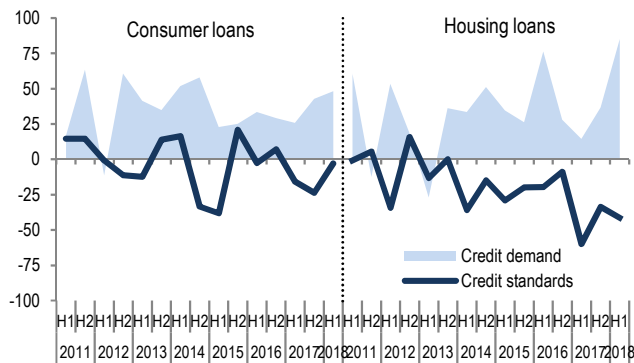
Source: NBS.

36 Household indebtedness in Slovakia and in selected countries



Source: Eurostat.
Note: The indicator is calculated as the ratio of households' total debt to their disposable income.
Euro area 19 – average of 19 Euro area countries.

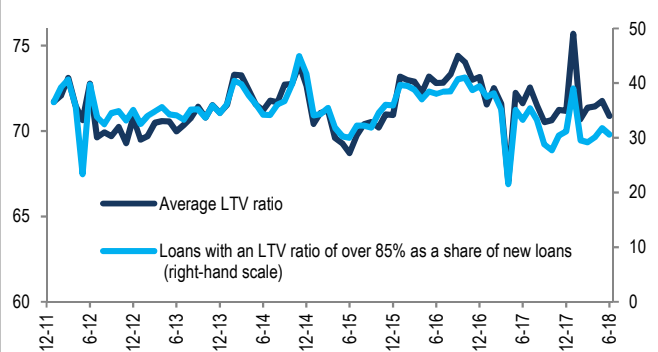
37 Changes in credit standards and credit demand according to the Bank Lending Survey



Sources: Bank Lending Survey, NBS.

Note: The data show net percentage shares, with positive values denoting an increase in demand or an easing of standards.

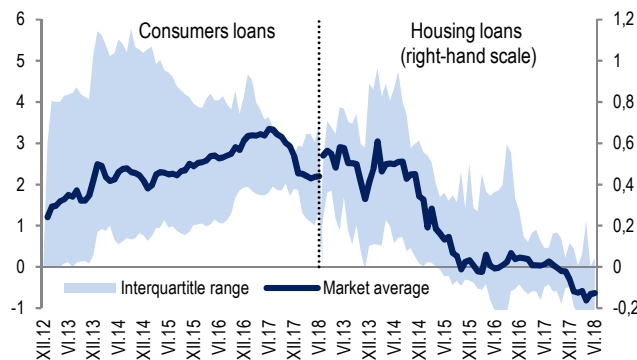
38 Loan-to-value (LTV) ratio for new loans (%)



Source: NBS.

Note: The indicator is defined in the section 'Glossary and abbreviations' of Analysis of Slovak Financial Sector 2017.

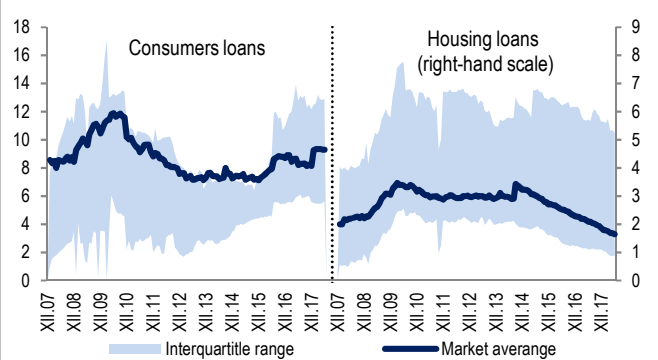
39 Net default rates on retail loans (%)



Source: SO SR.

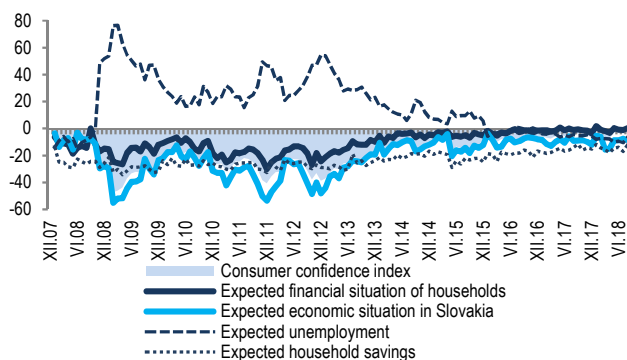
Note: The net default rate denotes the net change in the amount of NPLs over a 12-month period as a share of the outstanding amount of loans at the beginning of the period. The numerator is adjusted for the effect of loan write-offs and sell-offs.

40 NPL ratios for retail loans (%)



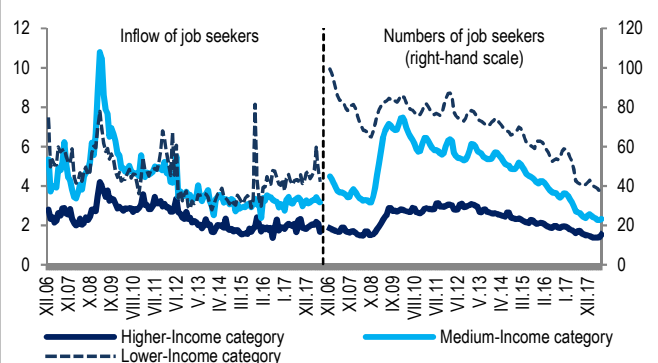
Source: NBS.

41 The consumer confidence index and its components



Source: Statistical Office of the SR.

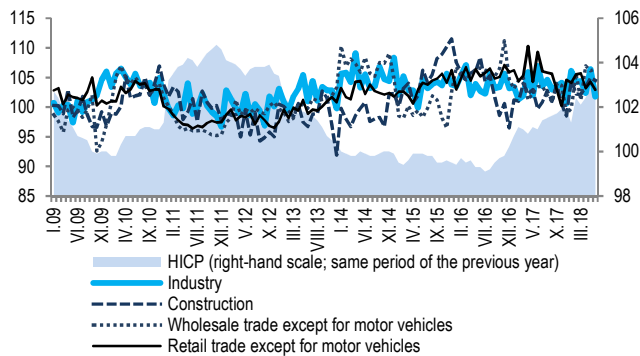
42 Number and inflow of unemployed by income category



Source: Central Office of Labour, Social Affairs and Family of the Slovak Republic.

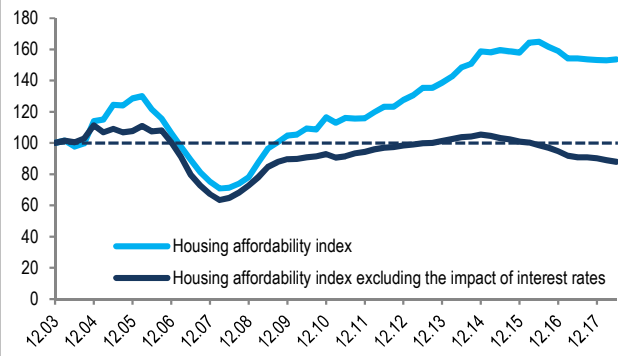
Notes: The left-hand and right-hand scales show numbers of job seekers in thousands. The income categories are defined in the section 'Glossary and abbreviations' of Analysis of Slovak Financial Sector 2017.

43 Real wages in selected sectors – index



Source: SO SR.

44 Housing affordability index

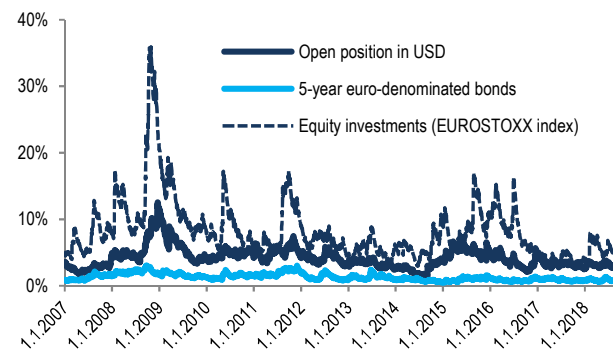


Source: NBS, Statistical Office of the SR.

Notes: Housing affordability index is an index representing the ratio of disposable income to loan instalments. The calculation of disposable income takes into account the average wage and average expenditure of households; the calculation of the instalment amount takes into account the average apartment price, average interest rate, average maturity, and a constant LTV ratio (75%). The calculation methodology for the housing affordability index is set out in the following paper: Rychtárik, Š., Krčmár, M. (2011), "Vývoj na trhu úverov na bývanie a jeho interpretácia" (Developments in the housing loan market and their interpretation), Nehnuteľnosti a bývanie 2010 (Real Estate and Housing), Vol. No 2, Bratislava, 2010.

Market risk and liquidity risk indicators

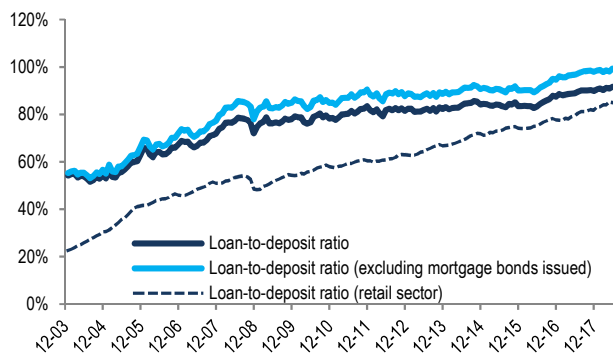
45 Value at Risk for investments in different types of financial instruments



Source: Bloomberg, NBS.

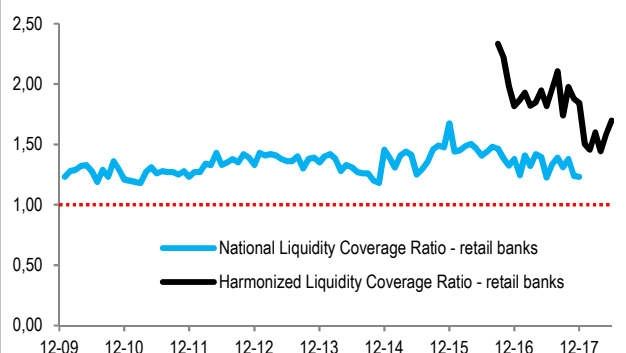
Notes: The data represent the loss (as a percentage of the given investment) that should not be exceeded over a period of 10 days at a confidence level of 99%. This loss was determined on the basis of a risk factor volatility calculation, using exponentially weighted moving averages.

46 Loan-to-deposit ratio



Source: NBS.

47 Liquid asset ratio



Source: NBS.