

# Macroeconomic indicators of the financial sector

June 2014

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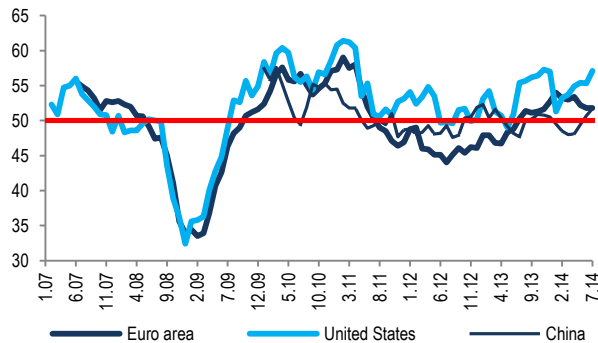
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#### **General notes:**

The formulation 'index: 31 December 2013 = 1' means that the given index was set in such a way that its value as at that date (31 December 2013) was 1.

## Macroeconomic risk indicators

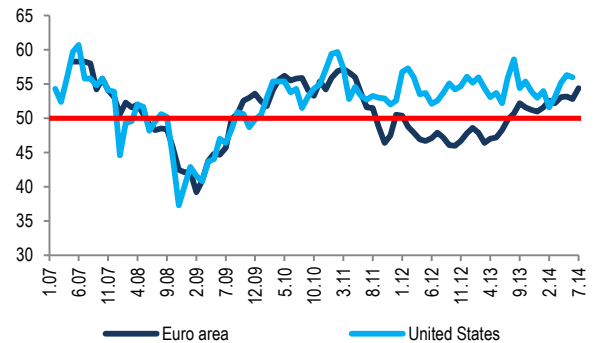
### 1 Manufacturing Purchasing Managers' Index (PMI) in selected economies



Source: Bloomberg.

Notes: 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.

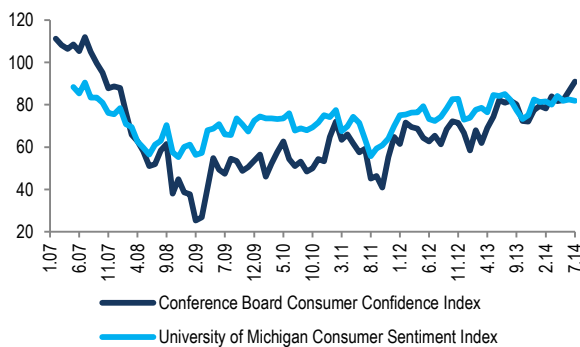
### 2 Services Purchasing Managers' Index (PMI) in selected economies



Source: Bloomberg.

Notes: 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.

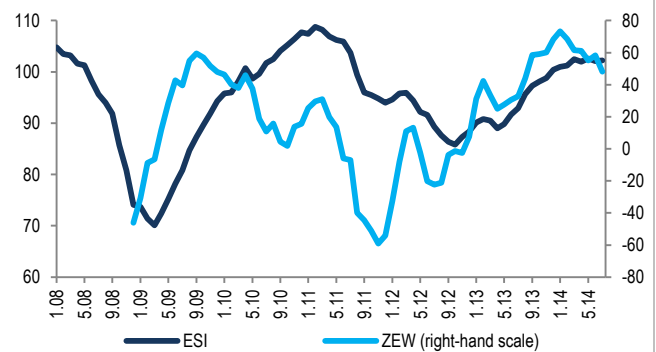
### 3 Consumer confidence indicators in the United States



Source: Bloomberg.

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

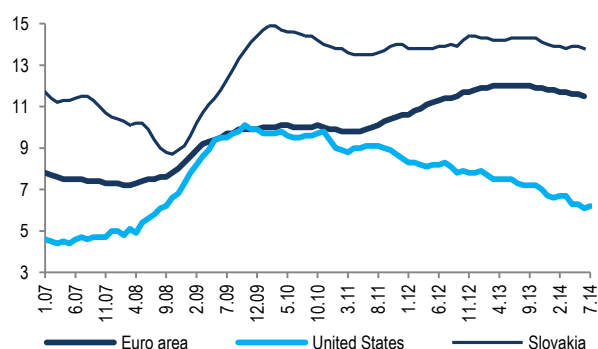
### 4 Economic sentiment indicators in the Euro area



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).

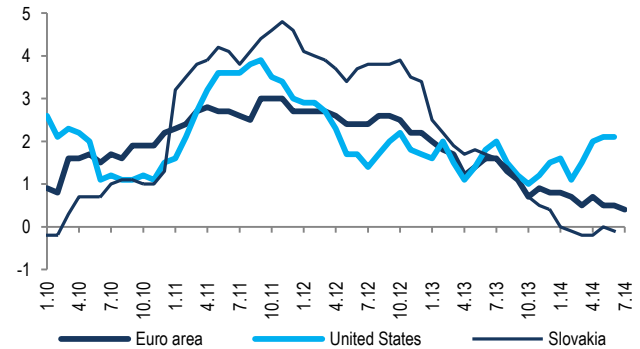
### 5 Unemployment rates in selected economies (%)



Source: Eurostat, Bureau of Labor Statistics.

Notes: Seasonally adjusted.

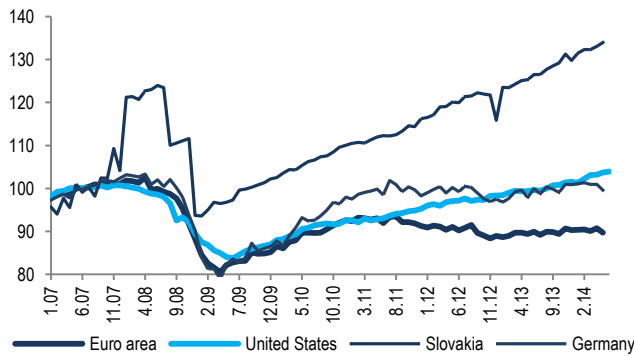
### 6 Consumer price inflation in selected economies (%)



Source: Eurostat, Bureau of Labor Statistics.

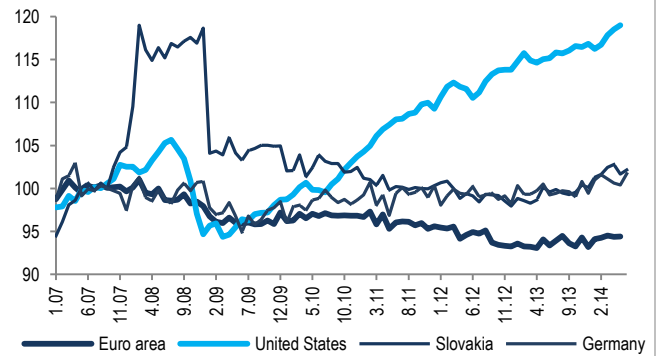
Notes: Year-on-year percentage changes in the consumer price indices.

### 7 Industrial production indices in selected economies



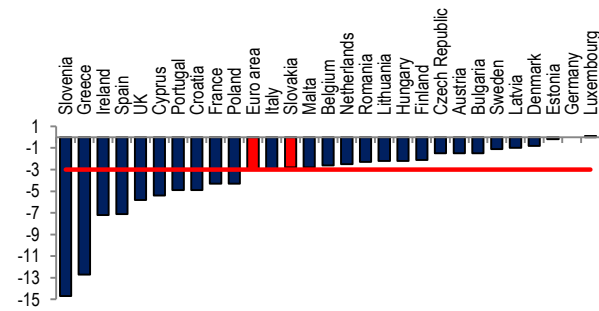
Source: Eurostat, US Federal Reserve.  
Notes: Rebalanced (average: 2007 = 100).  
Seasonally adjusted.

### 8 Retail sales indices in selected economies



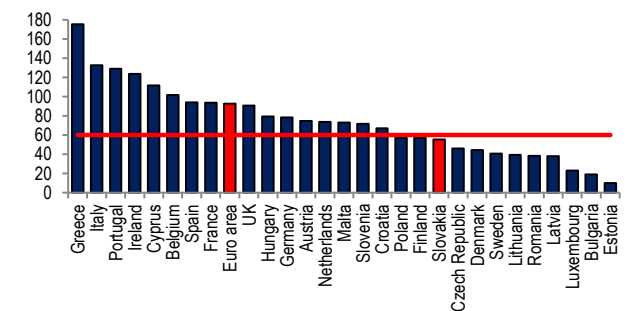
Source: Eurostat, US Department of Commerce.  
Notes: Rebalanced (average 2007 = 100).  
Seasonally adjusted.

### 9 General government balances of EU countries in 2013 (%)



Source: Eurostat.  
Notes: Balance expressed as a percentage of GDP.

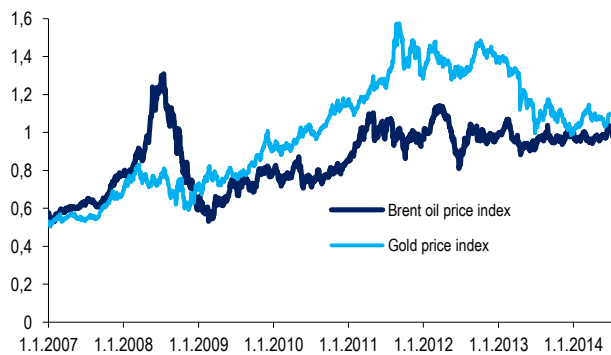
### 10 Gross government debt of EU countries in 4. quarter of 2013 (%)



Source: Eurostat.  
Notes: Percentage shares of GDP.

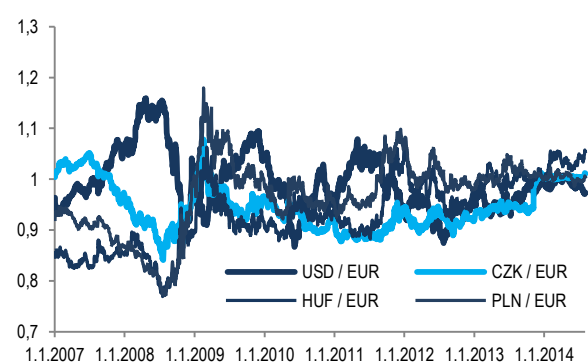
## Financial market risk indicators

### 11 Price commodity indices (31 December 2013 = 1)



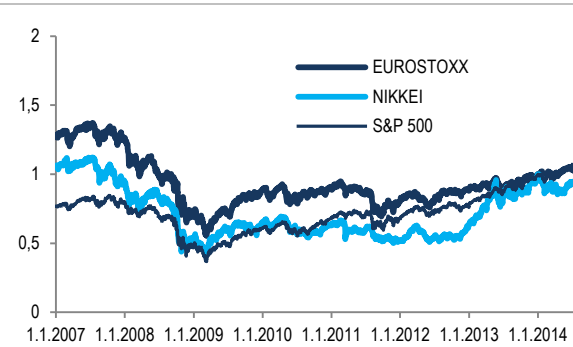
Source: Bloomberg, NBS.

### 12 Exchange rate indices (31 December 2013 = 1)



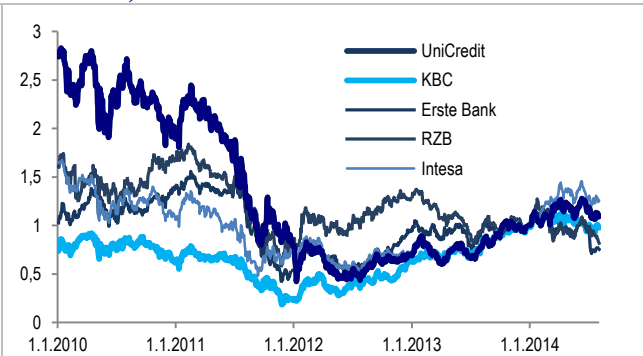
Source: Bloomberg, NBS.

### 13 Equity indices (31 December 2013 = 1)



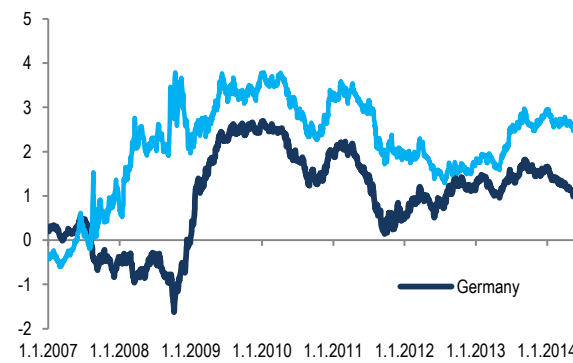
Source: Bloomberg, NBS.

### 14 Share price indices of the parent banks of the 5 largest domestic banks (31 December 2013 = 1)



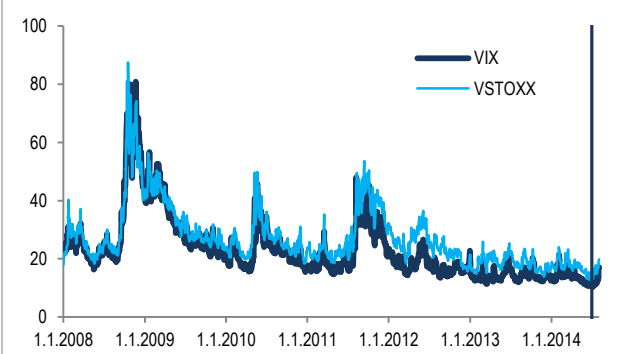
Source: Bloomberg, NBS.

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



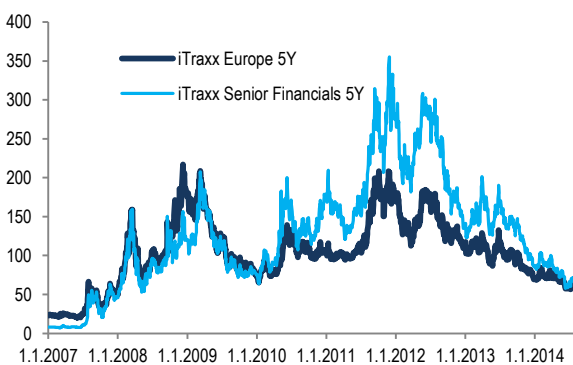
Source: Bloomberg, NBS.  
Notes: The yield curve slope is expressed as the difference between the yield to maturity on 10-year and 3-month government bonds.  
p. p. – percentage points

### 16 Volatility of equity indices



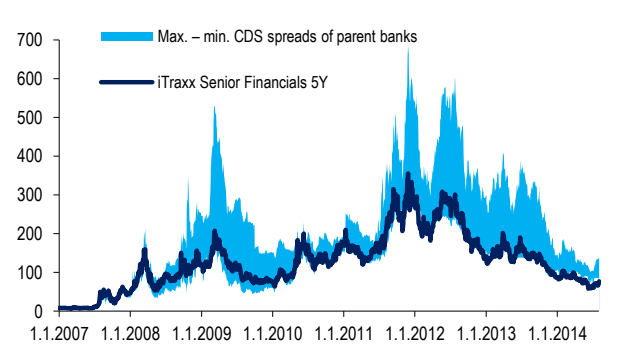
Source: Bloomberg.

### 17 CDS spread indices (b. p.)



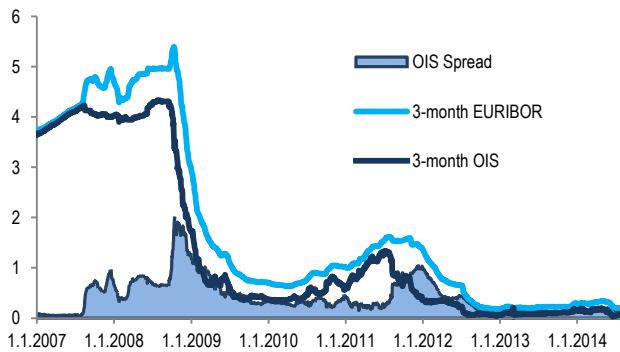
Source: Bloomberg, NBS.  
Notes: b. p. – basis points

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



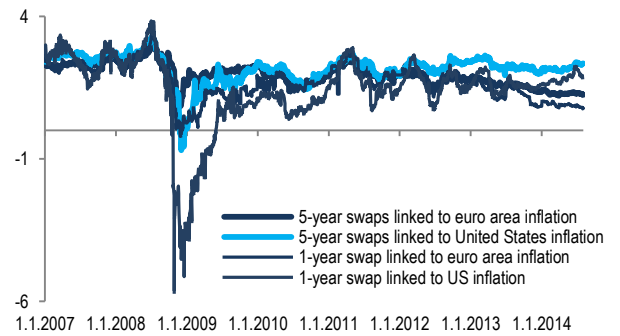
Source: Bloomberg, NBS.  
Notes: b. p. – basis points

### 19 3-month rates and the OIS spread (% p.p.)



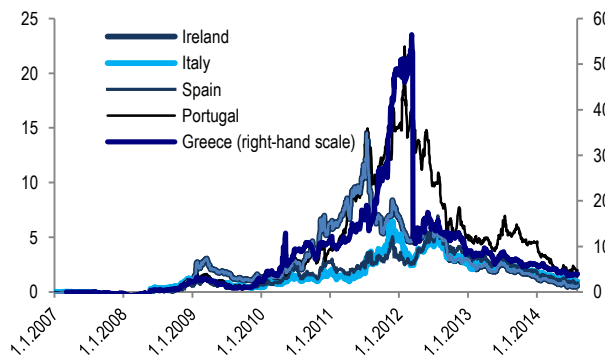
Source: Bloomberg, NBS.  
Notes: p.p. – percentage points

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



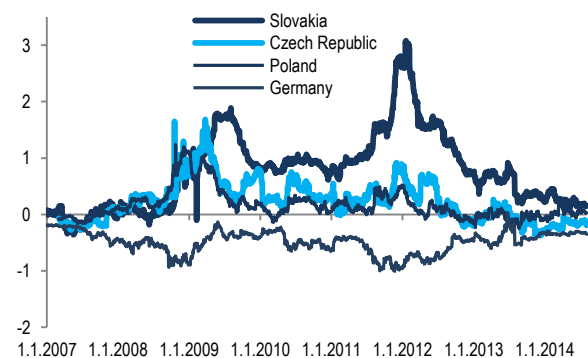
Source: Bloomberg, NBS.  
Notes: Inflation-linked swaps are swap transactions in which one counterparty pays a fixed rate (a swap price) and the other pays a rate corresponding to the return on a selected price index. The inflation-linked swap price is calculated on a non-coupon basis.  
p.p. – percentage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

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



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

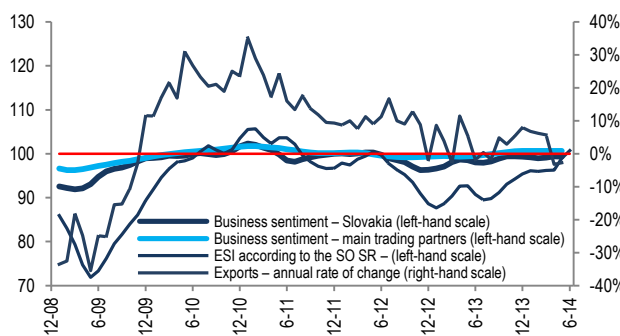
### 22 Credit spreads on 5-year government bonds issued by selected central European countries and Germany (p. p.)



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

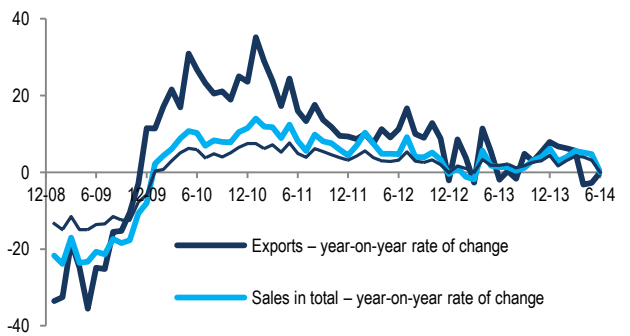
## Corporate credit risk indicators

### 23 Exports and the business environment



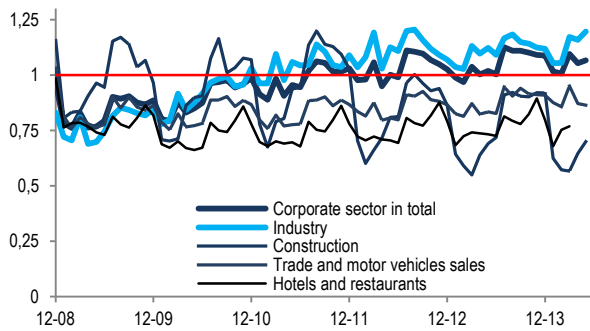
Source: NBS, OECD, Statistics Office of the SR.  
Notes: ESI – Economic Sentiment Indicator.

### 24 Exports and corporate sales (%)



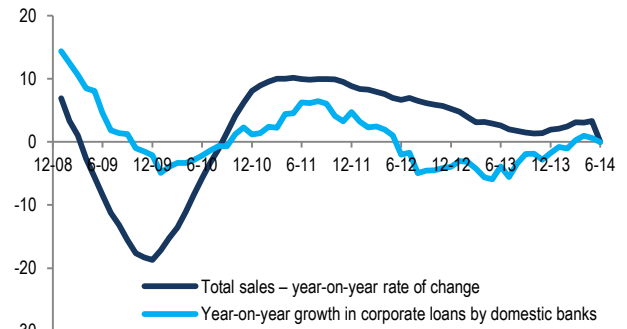
Source: Ministry of Economy of SR, NBS, OECD, Statistical Office of the SR.

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



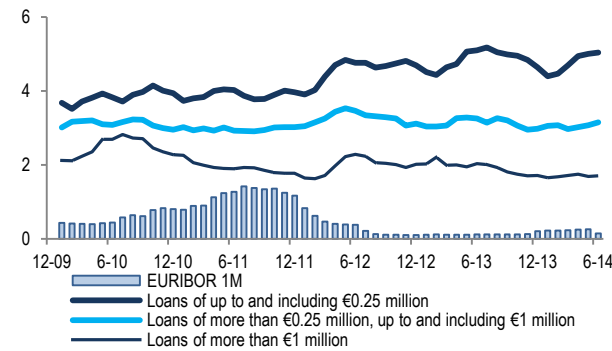
Source: Statistical Office of the SR.

### 26 Corporate loans and sales (%)



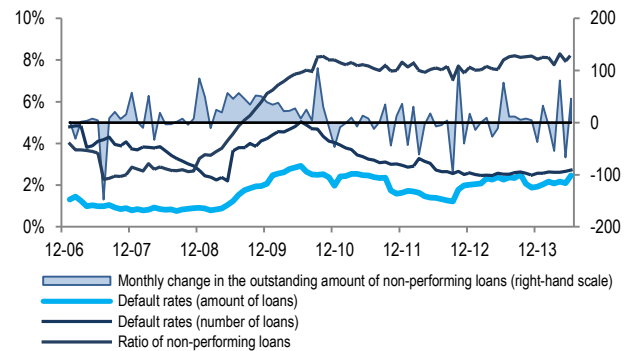
Source: NBS, Statistical Office of the SR.

### 27 Interest rate spreads on new loans to enterprises (%)



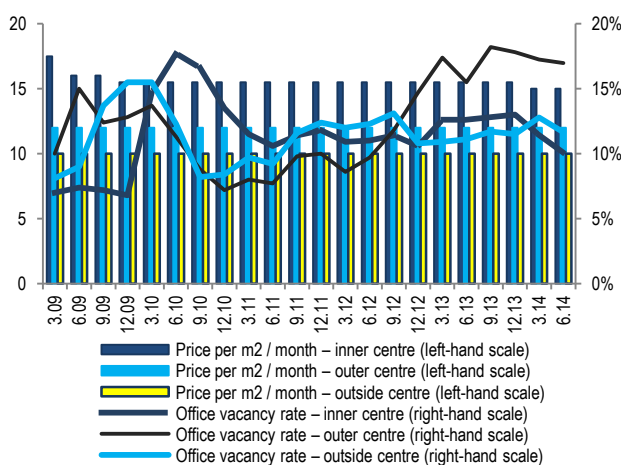
Source: NBS, European Banking Federation.  
Notes: The spread is defined as the difference between the monthly EURIBOR rate and the average rate on new loans in the respective category.

### 28 Non-performing loans and default rates



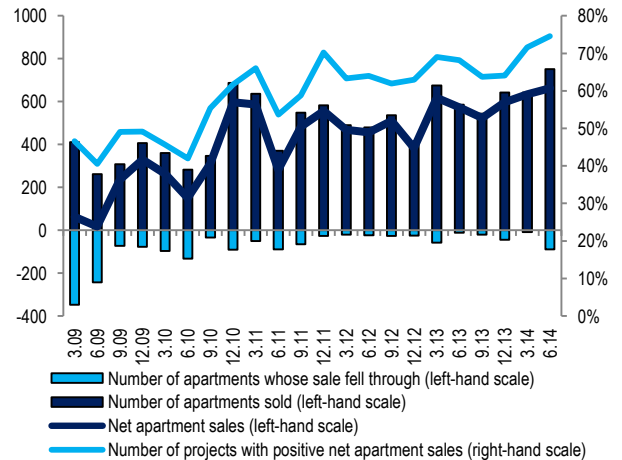
Source: NBS.  
Notes: Data on the right-hand scale are in EUR mil. Default rates refer to the number/volume of loans re-categorised as defaulted to the number/volume of non-defaulted loans at the beginning of the period under review.

### 29 Commercial real estate: prices (EUR/m<sup>2</sup>) and vacancy rates in the office segment



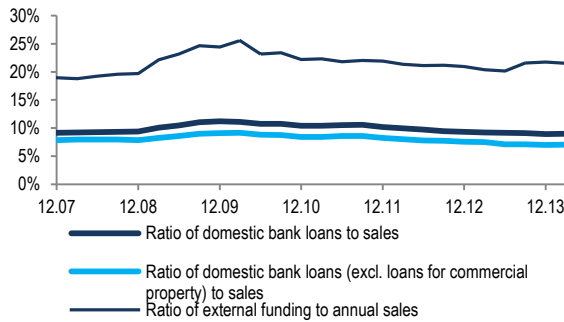
Source: CBRE, NBS.  
Notes: The chart plots prices and vacancy rates in Bratislava.

### 30 Commercial real estate: sales of the new apartments in the residential segment



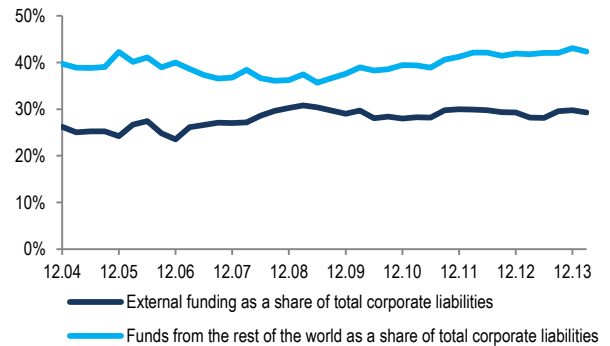
Source: Lexus, NBS.

### 31 Comparison of corporate balance sheets and sales



Source: NBS, Statistical Office of the SR.

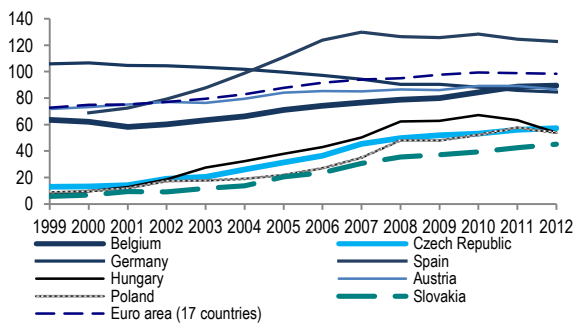
### 32 Liabilities of non-financial corporations



Source: NBS.

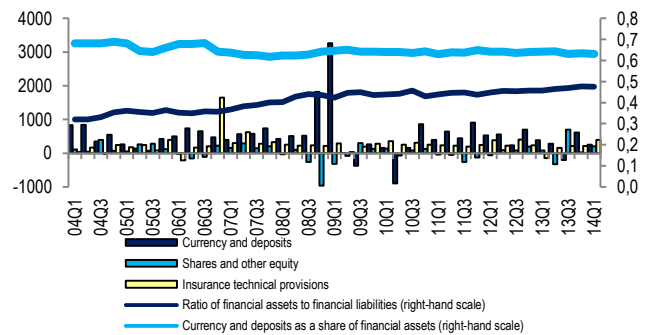
## Household credit risk indicators

### 33 Household indebtedness in Slovakia and in selected countries (%)



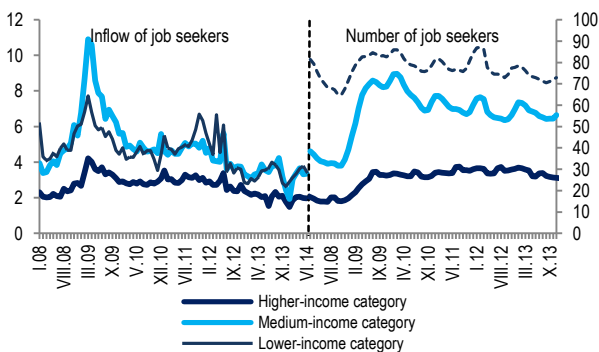
Source: Eurostat.  
Note: The ratio of total debt of households to disposable income.

### 34 Changes in household financial assets



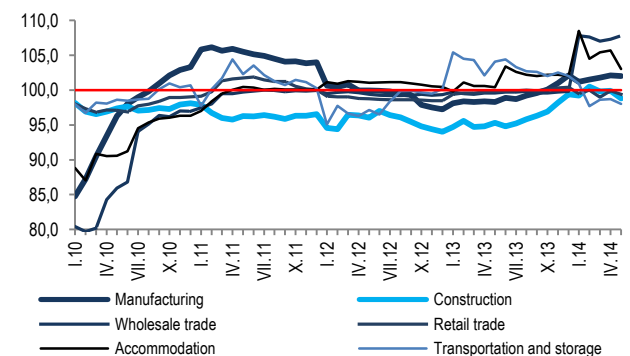
Source: NBS.  
Note: Data on the left-hand scale refer to month-on-month changes in EUR mil.

### 35 Changes in the number of unemployed by income category



Source: Central Office of Labour, Social Affairs and Family.  
Notes: Left-hand and right-hand scales: numbers of job seekers in thousands. Household income categories – a categorisation based on the KZAM employment classification and KZAM income data; it consists of three categories: higher-income category (income of over €800 per month) – legislators, senior officials and managers, scientists, professionals, technicians, health professionals, and teaching professionals; middle-income category (income between €600 and €800 per month) – office workers, craft and skilled workers, processors, and plant and machinery operators; lower-income category (income of up to €600) – service and retail workers, agricultural and forestry workers, auxiliary and unskilled workers.

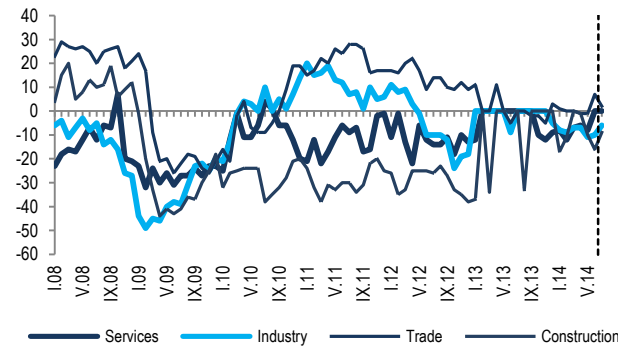
### 36 Index of employment in selected sectors



Source: Statistical Office of the SR.  
Notes: Year-on-year changes.

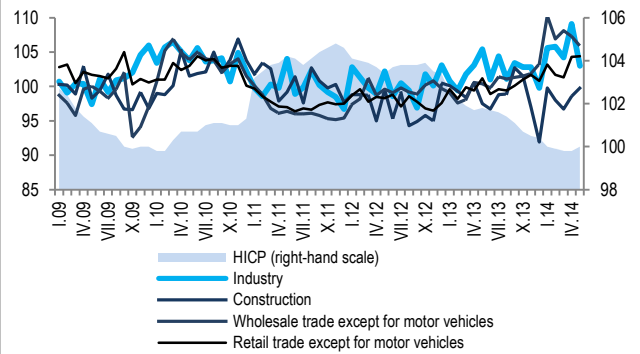


### 37 Expected employment in selected sectors



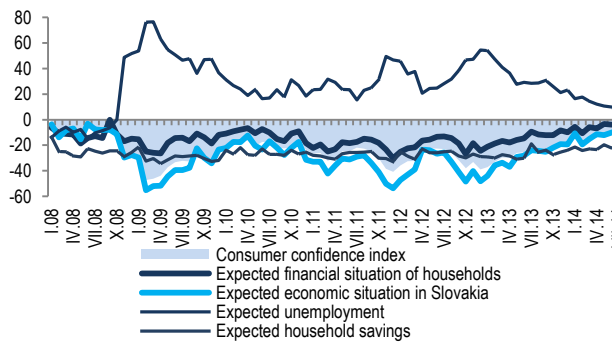
Source: Statistical Office of the SR.  
Notes: Index data.

### 38 Index of real wages in selected sectors



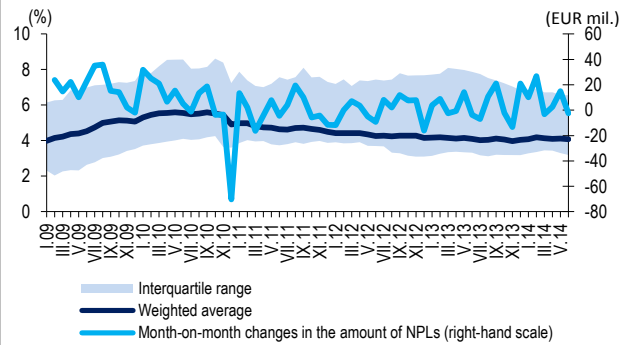
Source: Statistical Office of the SR.  
Notes: HICP - Harmonised Index of Consumer Prices, change on the same period of the previous year.

### 39 The consumer confidence index and its components



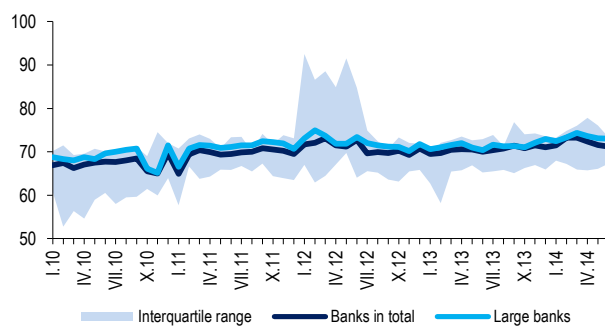
Source: Statistical Office of the SR.

### 40 Non-performing household loans



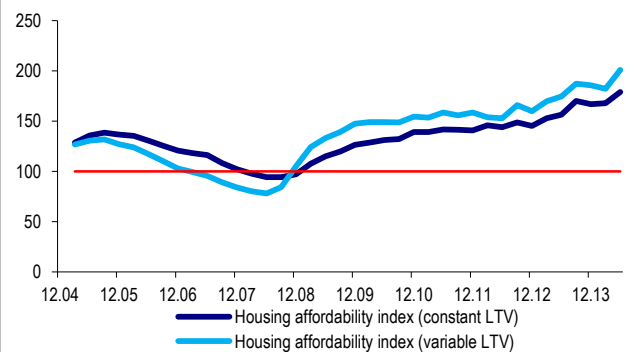
Source: NBS.  
Notes: Left-hand scale: ratio of non-performing household loans to total household loans.

### 41 Loan-to-value (LTV) ratio (%)



Source: NBS.  
Notes: Loan-to-value ratio is the loan value divided by the value of the loan collateral.

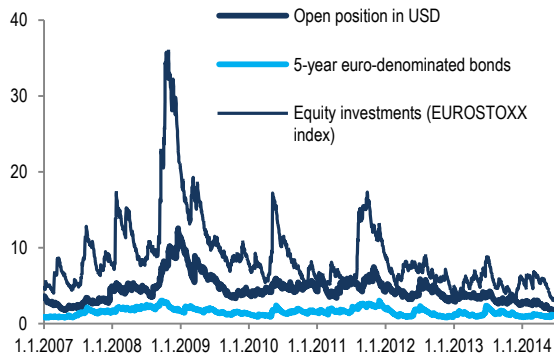
### 42 Housing affordability index



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

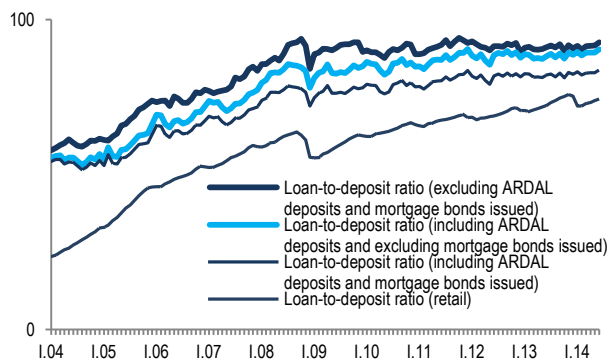
### 43 Value at Risk for investments in different types of financial instruments (%)



Source: Bloomberg, NBS.

Notes: The data represent the loss (as a percentage of the given investment) that would be expected 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.

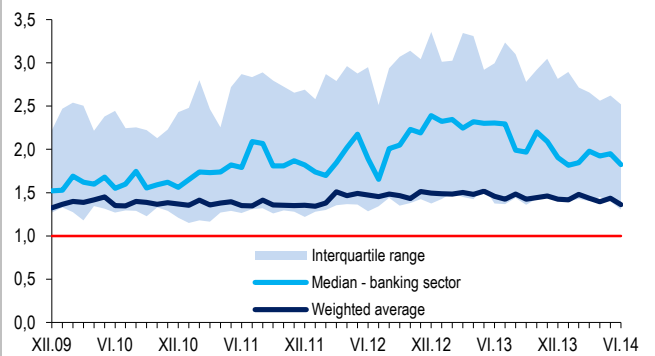
### 44 Loan-to-deposit ratio (%)



Source: NBS.

Notes: ARDAL – Debt and Liquidity Management Agency.

### 45 Liquid asset ratio



Source: NBS