Analytical Data Methodology

Banks and branches of foreign banks

Structure of assets and liabilities of banks and branches of foreign banks

All assets are reported in gross terms, i.e. not net of provisions.
Category "Interbank market operations" covers, in addition to loans and deposits to central banks and other banks, NBS bills purchased, Treasury bills and bills of exchange other than those held by the bank in the portfolio of "securities held to maturity".

Data sources:

Title	source STATUS
Loans to clients	V (NBS) 33 – 12
Interbank market operations	Bil (NBS) 1 – 12
Securities bought	V (NBS) 8 – 12, (NBS) Bil 1 – 12
Deposits and loans received	V (NBS) 5 – 12
Funds received from banks	Bil (NBS) 1 – 12
Securities issued	Bil (NBS) 1 – 12
Risk-weighted assets	BD (HKP) 1 – 12 (section 7)
Equity	BD (HKR) 1 – 04

Notes on the calculation of concentration indices:
CR3 index – the share of three banks with the largest holdings in an item in the total volume of that item in the banking sector; only institutions with a positive item value enter the calculation
CR5 index – the share of five banks with the largest holdings in an item in the total volume of that item in the banking sector; only institutions with a positive item value enter the calculation
Herfindahl index (*HHI*) – defined as the sum of squares of individual banks' shares in the total volume of an item as a percentage; only institutions with a positive item value enter the calculation
One way to interpret the *HHI* value is that the concentration in an item is identical, as if the sector comprised 10 000/*HHI* institutions with identical shares in the item. According to the US Department of Justice definition, a market is deemed highly concentrated if *HHI* exceeds 1 800, and unconcentrated if *HHI* is below 1 000.

Income and expenses of banks and branches of foreign banks

Notes on certain items:
Net trading income includes net income from operations in securities (other than interest income), net income from foreign currency operations and net income from derivative operations.
Other net operation income includes net income from claims assigned, from tangible and intangible asset transfers, shares in profit resulting from equities and equivalent deposits, from transfers of equities and deposits, from other operations, and other net operating income.
The annualized value is a year-end estimate assuming the income statement item concerned develops steadily in time.

The data comes from the Bil (NBS) 2 – 12 statement.

Profitability indicators for banks and branches of foreign banks and their breakdown in the banking sector

Calculation of individual indicators:

- *ROA* = the ratio of cumulative net profit to average net asset value (source: Bil (NBS) 2 – 12, Bil (NBS) 1 – 12)
- *ROE* = the ratio of cumulative net profit to average equity value; branches excluded from calculation (source: Bil (NBS) 2 – 12, BD (HKR) 1 – 04)
- *Operating efficiency* = the ratio of cumulative value of operating expenses to cumulative value of the sum of net interest and non-interest income (source: Bil (NBS) 2 –12)
- *Relative significance of interest income* = the ratio of cumulative value of operating expenses to cumulative value of the sum of net interest and non-interest income (source: Bil (NBS) 2 –12)
- *Net interest spread* = the difference between the share of cumulative value of (interest and non-interest) income, other than interest income on non-performing assets, in outstanding loans to the counterparty concerned and the share of cumulative value of expenses in outstanding deposits with the counterparty concerned (source: V (NBS) 13 – 04)
- *Net interest margin* = the ratio of net interest income less interest income on nonperforming assets to average net assets (source: Bil (NBS) 2 – 12, Bil (NBS) 1 – 12)

The minimum, lower quartile, median, upper quartile and maximum indicate the distribution of values of the indicator concerned in the banking sector. Lower quartile is such a value of the relevant indicator, whereby 25% of all banks (as a number) have an indicator value lower or equal to the lower quartile. Similarly, median is an indicator value, whereby 50% of all banks have an indicator value lower or equal to the median. And finally, upper quartile is an indicator value, whereby 75% of all banks have an indicator value lower or equal to the upper quartile.
Since this distribution takes no account of the size of individual banks, their size is reflected in the percentages stated in brackets. For example, the number below the first quartile value indicates the share of banks (in terms of assets), whose indicator value lies within a closed range between the minimum and the lower quartile. Similarly, the number shown below the median indicates the share of banks whose indicator value lies within a (closed on the right side) interval between the lower quartile and the median.

Risk and capital adequacy indicators for banks and branches of foreign banks and their breakdown in the banking sector

Calculation of individual indicators:

- *Share of non-performing loans in total loans to clients* = the share of gross value of nonstandard, dubious and non-performing loans to clients in total gross outstanding loans (source: V (NBS) 33 – 12)
- *Ratio of provisions to classified loans* = the ratio of provisions to gross value of substandard, doubtful and loss loans (source: BD (ZPZ) 1 – 04)
- *Large (weighted) asset exposure / equity* = the ratio of large weighted assets exposure to equity; pursuant to the Banking Act the ratio must not exceed 800% (Act No 483/2001 Coll., Article 39(2); does not apply to branches of foreign banks (source: BD (HMA) 8 – 12, section C)
- *Large asset exposure within groups* – monitoring the number of month-end overruns of limits set by the Banking Act (Article 39(1)), does not apply to branches of foreign banks (source: BD (HMA) 8 – 12, sections A and B)

- *Ratio of claimable collateral value to total non-performing loans* – the indicator excludes banks which, in accordance with Article 8 of NBS Decree No. 13/2004, have not classified loans due to provisioning on portfolio basis according to international accounting standards (source: BD (ZPZ) 1 – 04)
- *Open foreign currency balance sheet position / equity* = the ratio of the difference between foreign currency assets and liabilities to equity (source: Bil (NBS) 1 – 12)
- *Open foreign currency off-balance sheet position / equity* = the ratio of the difference between foreign currency off-balance sheet assets and liabilities (excluding redistribution and memorandum accounts and assets/liabilities related to items in custody) to equity (source: Bil (NBS) 1 – 12)
- *Total open foreign currency position / equity* = the ratio of the sum of foreign currency balance sheet and off-balance sheet position to equity; if positive, the foreign currency position implies a risk of losses due to appreciation of national currency (source: Bil (NBS) 1 – 12)
- *VaR / equity* = the ratio of an exchange rate loss which, based on a historical simulation (over a period of 1 year), should not be exceeded on any given day with 99% probability, to equity (source: M (NBS) 4 – 12)
- *Total open interest rate position / equity* = the ratio of the difference between assets and liabilities with a fixed interest rate or residual maturity shorter than the relevant period (1 month, 1 year, or 5 years) to equity (source: BD (HUC) 53 – 04, BD (HKR) 1 – 04)
- *Ratio of instantly liquid assets to highly volatile funds*: instantly liquid assets comprise cash and purchased NBS bills and Treasury bills, other than bills held to maturity, and balances in current accounts with central banks and other banks. Highly volatile funds comprise current accounts of central banks and other banks, current accounts and other sight deposits of clients, and all general government deposits (source: Bil (NBS) 1 – 12)
- *Ratio of liquid assets (including collateral in reverse repo contracts) to volatile funds*: on top of instantly liquid assets, liquid assets include securities received in reverse repo contracts, bills held to maturity and all government bonds purchased; however, their value is net of securities pledged and collateral provided in repo contracts. Volatile funds also include time deposits by clients (source: Bil (NBS) 1 – 12, V (NBS) 8 –12)
- *Indicator of fixed and illiquid assets* = the ratio of fixed and illiquid assets to selected liability items; according to NBS Decree No. 3/2004 the indicator must not exceed 1 (does not apply to branches of foreign banks) (source: BD (LIK) 3 – 12)
- *Ratio of loans to deposits and securities issued* (source: Bil (NBS) 1 – 12)
- *Total liquidity position / assets* = the ratio of the difference between assets and liabilities maturing within a relevant period (within 7 days, or 3 months) to total assets. For balance sheet items, securities subject to lien are excluded from the calculation. For off-balance sheet items, the calculation only includes loan commitments given/received and the value of underlying instruments in spot and forward operations (but only if the underlying instrument is a financial asset with actual delivery) (source: BD (LIK) 3 – 12)
- *Capital adequacy* = the ratio of equity to risk-weighted assets (must not fall below 8%) (source: D (HKP) 1 – 12, BD (HKR) 1 – 04)
- *Ratio of Tier I capital to equity* = the ratio of core capital, net of the appropriate portion of items reducing the value of core and supplementary capital, to equity (source: BD (HKR) 1 – 04)
- *Ratio of equity to total assets* (source: BD (HKR) 1 – 04)
- *Ratio of potential loss to equity at 8% capital adequacy* = the ratio of a loss resulting in a decrease of capital adequacy to 8% to equity (source: BD (HKP) 1 – 12, BD (HKR) 1 – 04)

<u>Insurance companies</u>

<u>Notes on the calculation of concentration indices:</u>
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Net profit and profitability indicators for insurance companies
Gross operating expenses in relation to written premiums – acquisition cost of insurance policies + administrative overhead + change in the balance of transferred cost of insurance policies

<u>Calculation of individual indicators:</u>
ROA = ratio of cumulative value of net profit to current net assets value
ROE = ratio of cumulative value of net profit to current equity value; branches excluded from calculation

Indemnification rate in non-life insurance
The indemnification rate is defined as a ratio of insurance claims, reported and unreported, to due premiums:
Indemnification rate = (sum of the cost of insurance claims and a change in insurance reserves) / (written premiums – change in reserves for accrued premiums)

Solvency
Required solvency rate (RSR) for the whole market is the sum of RSRs or guarantee funds (where larger than RSR) of individual insurance companies. The required solvency rate (based on size of operations) and the guarantee fund (its level is set by law and a Slovak Ministry of Finance decree) are determined for each individual insurance company. Each insurance company must hold minimum capital equal to the larger of the two parameters.

Complete list of methods of allocation of technical reserve funds as defined in Article 1(1) of Ministry of Finance of the Slovak Republic Decree No. 197/2002
For better readability of tables, the titles of some methods of allocation of technical reserve funds were abbreviated. Furthermore, categories are listed only if accounting for over 1% of total reserves. Shown below is the full list of methods of allocation of technical reserve funds as defined in Article 1(1) of Ministry of Finance of the Slovak Republic Decree No. 197/2002:

a) Government bonds issued by the Slovak Republic or the National Bank of Slovakia
b) Bonds issued by banks
c) Bills
d) Bonds listed on a stock market
e) Equity listed on a stock market
f) Shares in closed-end mutual funds
g) Shares in open-end mutual funds
h) Time deposits in banks
i) Mortgage bonds
j) Certificate of deposit
k) Real estate in the Slovak Republic
l) Loans to policyholders
m) Loans or credits secured by bank guarantee
n) Bills of exchange secured by bank guarantee
o) Government bonds issued by member states or their central banks and bonds issued by EIB, EBRD or IBRD

Securities dealers

Acronyms:
IS-1 – instruction received from client to acquire, sell or otherwise dispose of investment instruments and forwarded for execution
IS-2 – instruction received from client to acquire or sell investment instruments and executed for the account of a party other than the service provider
IS-3 – instruction received from client to acquire or sell investment instruments and executed for own account

Stock exchange

The data comes from the monthly statistics of the Stock Exchange.