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Basel III challenges

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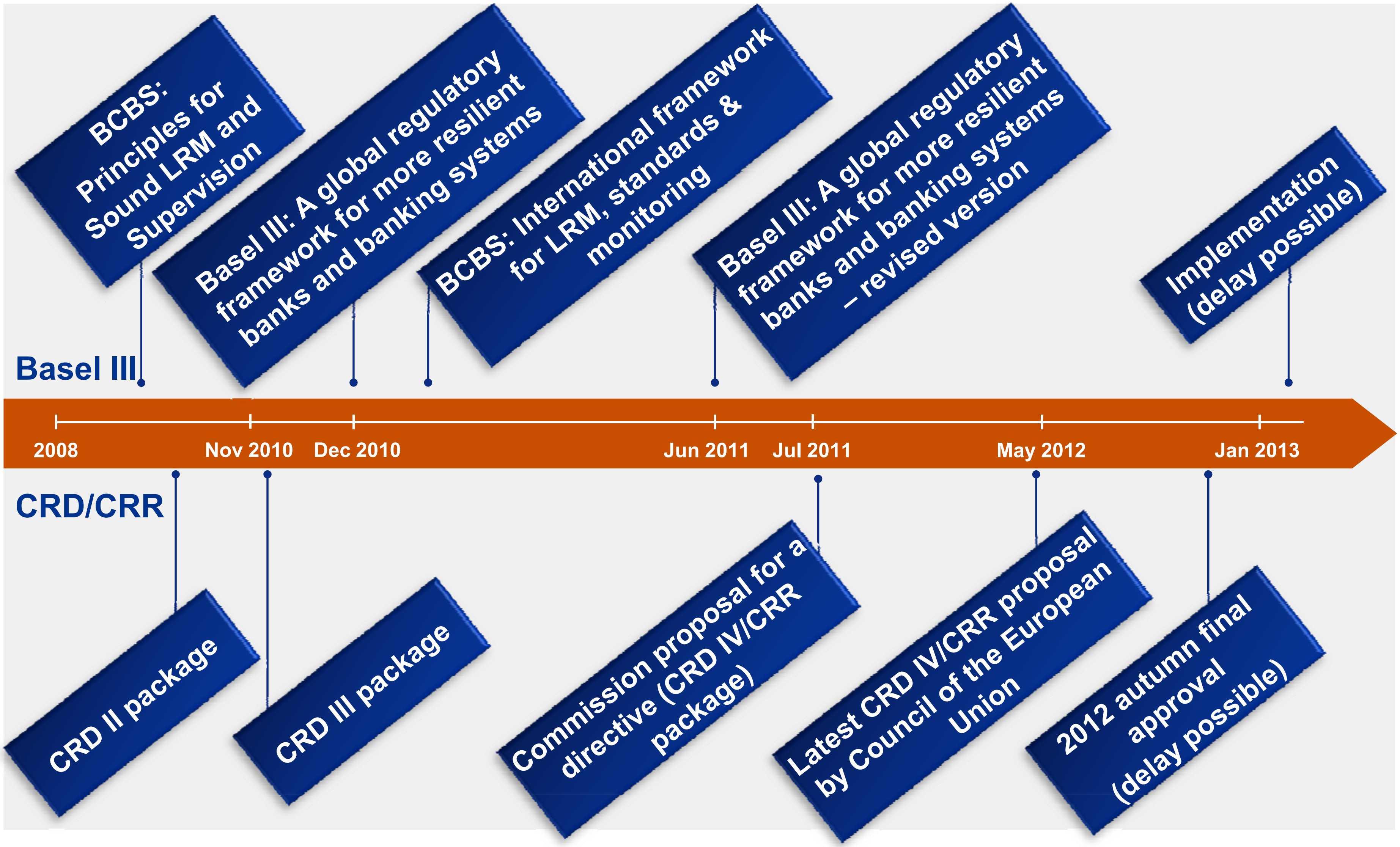
Agenda

- **Introduction**
- **New capital ratios**
- **Liquidity standards**
- **Current market situation & further steps**
- **Appendix**

Basel III timeline - milestones



Key elements of the new Capital Requirements Regulation and Directive

Basel III

Capital reform

- Quality, consistency and transparency of capital base
- Capturing all risks
- Controlling leverage
- Buffers

Liquidity standards

- Short term: liquidity coverage ratio (LCR)
- Long term: Net stable funding ratio (NSFR)

Governance & Supervision

- Maximum harmonisation
- Disclosure & regulatory reporting
- Strengthened corporate & risk governance
- Increase importance of the CRO
- Remuneration

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Capital reform – overview of key changes

New capital ratios
- Common equity
- Tier 1
- Total capital
- Capital conservation buffer

Raising the quality of capital
- Focus on common equity
- Stricter criteria for Tier 1
- Harmonised deductions from capital

$$\text{Capital ratios} = \frac{\text{Available Capital}}{\text{Risk-Weigthed Assets (“RWA”)}}$$

Enhancing risk coverage
- Counterparty credit risk
- Securitisation products
- Other risks

Increasing capital ratios

Core Tier 1 – 2% → CET 1 – 4,5%
Tier 1 – 4% → Tier 1 – 6%
Tier1 + Tier 2 + Tier 3 – 8% → Tier1 + Tier 2 – 8%

Additional capital buffer requirement

Gradual introduction

Capital Buffers

The build-up in good times of buffers can be drawn down in periods of stress.

Capital conservation buffer

- Against losses during periods of financial and economic stress
- **Shall** be 2,5% with a possible regulatory derogation
- Strengthening of shock absorbing ability on institution level

Countercyclical capital buffer

- To build up the protection of the banking sector in periods of excess aggregate credit growth
- The long-term maintenance of the lending capacity of the banking sector
- **Shall** be 0-2,5% or more, set by the competent authority
- Shall be based on the deviation of the credit-to-GDP ratio in a long term trend

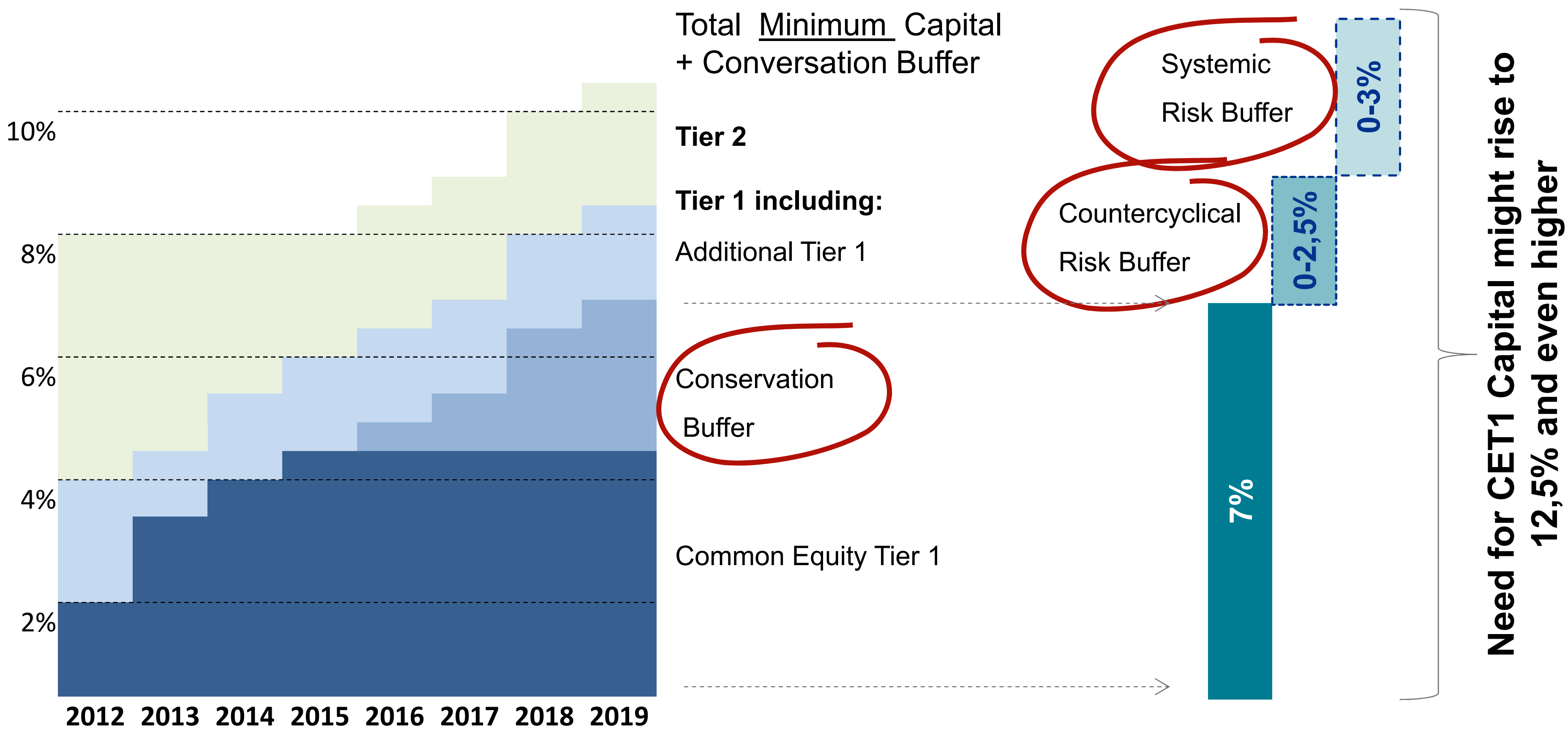
Systemic risk buffer

- To prevent and mitigate long term non cyclical systemic or macro prudential risk not covered by other buffers
- **May** be 0-3% or more, set by the competent authority
- May also apply for exposures in other member states

- The Common Equity Tier 1 capital used to cover Pillar 2 risk shall not be used to meet the buffer requirements.
- If buffer requirements are not met capital conservation measures shall apply.

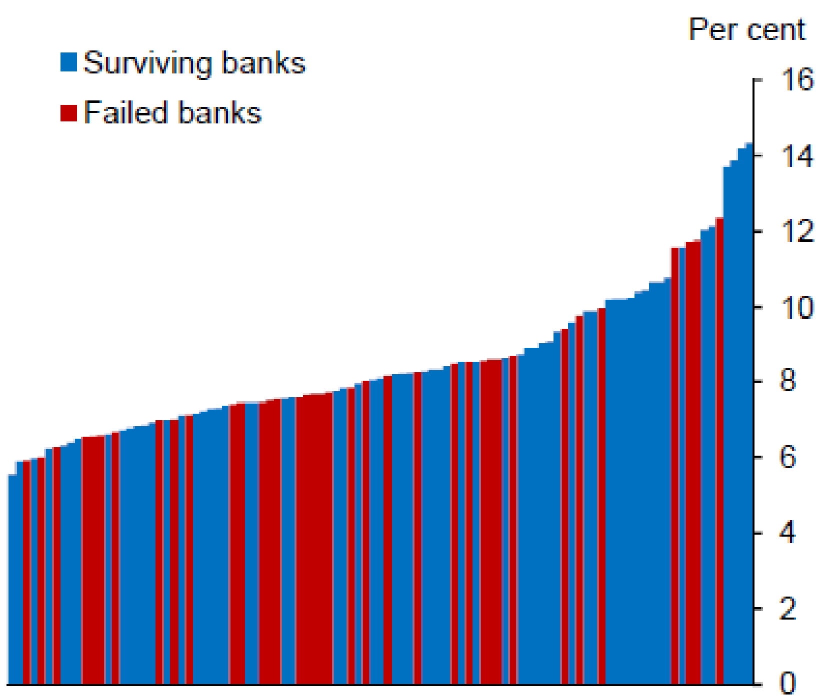
New capital ratios

Capital requirements and capital buffers

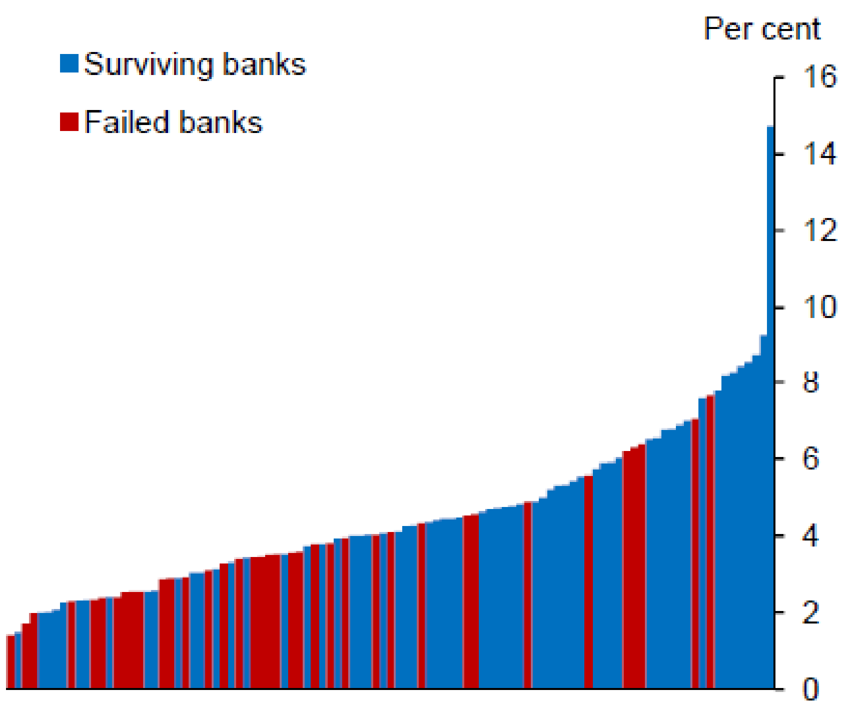


Leverage ratio

Risk-based capital ratios of major global banks, end-2006



Leverage ratios of major global banks, end-2006



Source: BOE, 2012

Leverage ratio

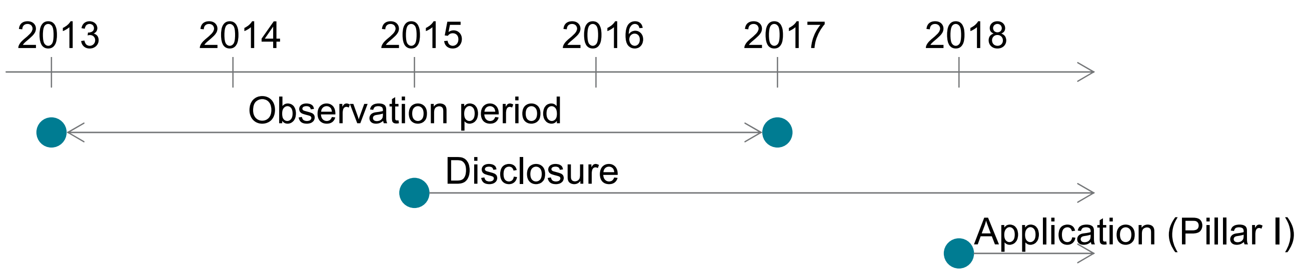
Why is leverage important?

- Contributed to the global financial crisis
- In the lead up to the crisis, many banks reported strong risk-based capital ratios while still being able to build high levels of on- and off-balance sheet leverage

Prudential purposes

- Build-up of excessive leverage in the system
- Non-risk-based → volume based
- Additional safeguard against attempts to the risk-based requirements
- Against model and measurement risk

Implementation



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Liquidity risk management failures

- Rapidly growing mortgage portfolio from wholesale market funding (70%)
- Long term, structural balance sheet problems

- Risky assets and high leverage, lack of sufficient buffers
- Short term liquidity crisis

Quantitative minimum liquidity requirements

Liquidity coverage ratio (LCR)

- **OBJECTIVE:** to promote the short-term resilience of the liquidity risk profile of banks by ensuring that they have sufficient high-quality liquid assets to survive a significant stress scenario lasting 30 calendar days.

Net stable funding ratio (NSFR)

- **OBJECTIVE:** to promote resilience over a longer time horizon by creating additional incentives for banks to fund their activities with more stable sources of funding on an ongoing basis.

Combined idiosyncratic and market wide stress scenario

Short-term resilience to liquidity disruptions

$$\text{Liquidity Coverage Ratio} = \frac{\text{1 Stock of high quality liquid assets}}{\text{2 Net cash outflows over a 30 day period}} \geq 100\%$$

Expectations for high quality liquid assets

Fundamental characteristics:

- ❑Low credit and market risk
- ❑Easy and certain valuation
- ❑Low correlation with risky assets
- ❑Listed on developed exchange

Market related characteristics:

- ❑Active and sizeable market (broad and deep)
- ❑Presence on market
- ❑Low market concentration
- ❑Flight to quality
- ❑Eligible at central banks as collateral

Operational requirements: well diversified , legally and practically readily available during the next 30 days, unencumbered assets, periodically testing market tradability, assets will not be used in other ongoing operations.

Level 1 assets	Level 2 assets
Can be an unlimited share of the pool	No more than 40% of the stock of liquid assets after haircuts have been applied
Held at market value and not subject to a haircut	Should be well diversified in terms of type of assets, type of issuer, counterparties
	A minimum 15% haircut is applied in each type

Short-term resilience to liquidity disruptions

Level 1 →100%	Level 2 →85%
• Cash • Central bank reserves • Marketable securities/claims on sovereigns, central banks (…). – assigned 0 % RW under Basel II standardized – traded in large, deep and active repo or cash markets with low levels of concentrations – proven record as a reliable source of liquidity in the markets even during stressed conditions; and – not an obligation of a financial institution or its affiliated entities • Government debt securities in domestic currency (non 0% RW) , issued by the sovereign or the central bank in the country in which the liquidity risk is being taken or in the bank's home country • For non-0% RW sovereign or central bank debt securities issued in foreign currencies so that it matches the currency needs of the bank in that jurisdiction	• Marketable securities to sovereigns, Central banks (…) that are: – assigned 20% RW under Basel II standardized approach – traded in large, deep and active repo or cash markets with low levels of concentrations – proven record as a reliable source of liquidity in stressed markets (repo and sale) (maximum decline in price or increase in haircut over 30 day period10%) – not an obligation of a financial institutions or its affiliated entities • Corporate bonds and covered bonds: – not issued by a FI or a bank and their affiliated entities – both at least AA- or with no external rating and are internally assessed as AA- equivalent (using approved internal rating systems) - additional criteria will be developed during the observation period – traded in large deep and active repo or cash market with low level of concentration – proven record as a reliable source of liquidity in stressed markets (repo and sale) (maximum decline in price or increase in haircut over 30 day period 10%)

Short-term resilience to liquidity disruptions

2 Net cash outflows over a 30 day period = outflows – Min {inflows, 75% of outflows}

- **No double counting** – if assets are included in the numerator of the ratio (stock of liquid assets), do not count as inflows.
- **Only includes contractual inflows** from outstanding exposures **that are fully performing** and for which the bank has no reason to expect a default within the 30-day time horizon.
- **„Stable” definition:**
  - part of an established relationship making withdrawal highly unlikely;
  - held in a transactional account, including accounts to which salaries are regularly credited;
  - fully covered by public guarantee or deposit insurance scheme.
- **Operational relationship definition:** clearing, custody, cash management services in the context of an established relationship.

Short-term resilience to liquidity disruptions

Cash outflows	Factor	Cash outflows	Factor
❑ Retail deposits		• Non financial corporate and central banks and PSEs liquidity facilities	10%
• Stable	5%	• Other legal entity customer, credit and liquidity facilities	100%
• Less stable	10%	❑ Additional requirements (…)	
• Term deposits with residual maturity >30 days with a withdrawal with a significant penalty or no legal right to withdraw	0%		
❑ Secured funding		**Cash inflows**	
• Backed by level 1 assets	0%		
• Backed by level 2 assets	15%		
• Secured funding transaction with domestic sovereign central banks or PSEs (max RW 20%) that are not backed by L1 or L2 assets	25%	❑ Reverse repos and securities borrowing with the following as collateral:	
		• Level 1 assets	0%
		• Level 2 assets	15%
• All other secured funding transactions	100%	• All other assets	100%
❑ Unsecured wholesale funding		❑ Credit of liquidity facilities	0%
• Stable small business customers	5%	❑ Operational deposits held at other financial	0%
• Less stable small business customer	10%	❑ Other inflows by counterparty	
• Legal entities with <u>operational</u> relationships	25%	• Retail (e.g. repayments for fully performing loans)	50%
• Non-financial corporate, (…)	75%	• Non financial wholesale counterparties	50%
• Other legal entity customers	100%		
❑ Undrawn portion of committed credit and liquidity facilities to:		• Financial institutions from transaction other than the ones above	100%
• Retail and small businesses clients	5%		
• Non financial corporate, sovereigns (..)	10%	• Net derivative receivables	100%

Medium and long-term crisis scenario

Medium and long-term crisis scenario

- Significant deterioration of earning capacity due to the durable existence of credit, market, operational or other types of risk.
- Prospect of possible downgrades by credit rating agencies on bank's bonds or counterparty risk rating.
- Name related reputational crisis.

$$\text{Net Stable Funding Ratio} = \frac{\text{Available amount of stable funding (ASF)}}{\text{Required amount of stable funding (RSF)}} > 100\%$$

- „Stable funding" means as the portion of those types and amounts of **equity** and liability financing expected to be reliable sources of funds over a **one-year time horizon** under conditions of extended stress.
- „Required funding": Mainly assets and off balance exposures that an institution has to cover with additional resources.

Medium and long-term funding of the assets and activities of banks

Sources | Uses

Available Stable Funding	Factor	Required Stable Funding	Factor
• Tier 1 & Tier 2 capital instruments • Preferred shares and capital in excess of Tier 2 allowable amount with effective maturity >1 year •Other liabilities with effective maturity >1 year	100%	• Cash • Securities with remaining maturity <1yr • Non-renewable loans to financials with remaining maturity <1yr •(..)	0%
Stable deposits of retail and small business customers (non-maturity or residual maturity <1yr)	90%	Debt issued or guaranteed by sovereigns, central banks (..) with 0% risk weight under Basel II standardized.	5%
Less stable deposits of retail and small business customers (non-maturity or residual maturity <1yr)	80%	Unencumbered non financial senior corporate bonds (..),maturity≥ 1 year	20%
Wholesale funding provided by non-financial corporate customers, sovereign central banks, multilateral development banks and PSEs. (non maturity or residual maturity <1 yr)	50%	• Unencumbered listed equity securities (..) maturity ≥1 year • Gold • Loans to non-financial corporate clients, sovereigns, central banks, and PSEs with a maturity < 1 year	50%
All other liabilities and equity	0%	Unencumbered residential mortgages (..)	65%
		Other loans to retail clients and small businesses having a maturity <1yr	85%
		All other assets	100%

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Results of the Basel III monitoring exercises - liquidity

Institution	Banking group	Number of banks	LCR	Outflows*	Inflows*	NSFR
BCBS	Group 1	102	91%	21,5%	5,7%	98%
BCBS	Group 2	107	98%	13%	4,40%	95%
EBA	Group 1	44	72%	20%	5,5%	93%
EBA	Group 2	112	91%	11,9%	3,9%	94%

*as a percentage of balance sheet liabilities

47% of the banks in the Basel III monitoring sample already meet or exceed the minimum LCR requirement, and 62% have LCRs that are at or above 75% (BCBS).

€1.8 trillion liquid assets shortfall (€61.4 trillion total assets, BCBS)

The results show that banks in the sample had a shortfall of stable funding33 of €2.5 trillion at the end of December 2011. (BCBS)

Results of the Basel III monitoring exercises - capital

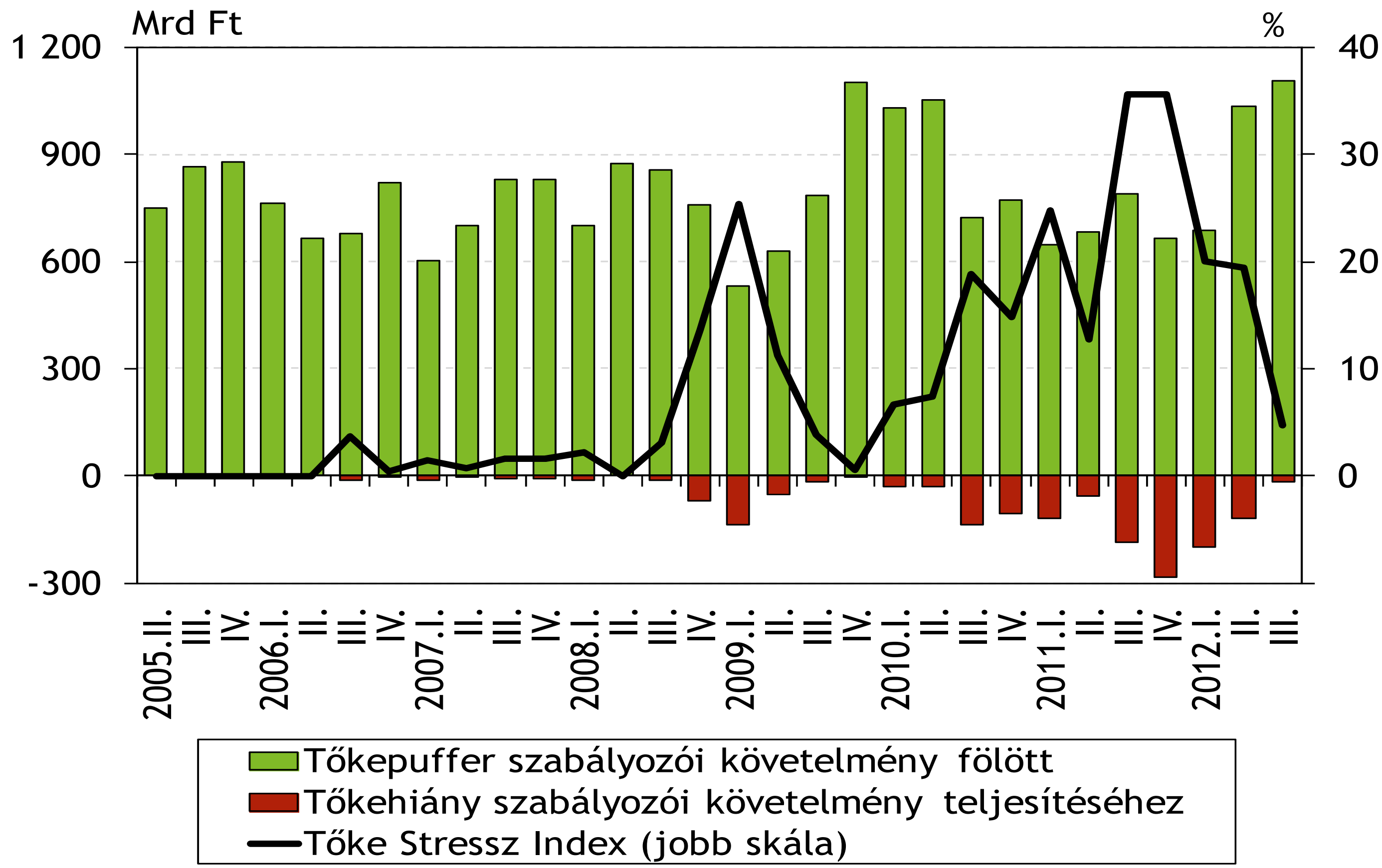
Institution	Banking group	Number of banks	Average CET 1	CET 1 shortfall	Average leverage ratio	Changes in RWA
BCBS	Group 1	102	7,70%	€374,1 billion	3,50%	18,1%*
BCBS	Group 2	107	8,80%	€21,7 billion	4,40%	7,5%*
EBA	Group 1	44	7,70%	€198,6 billion	2,90%	18,40%
EBA	Group 2	112	10,30%	€25,6 billion	3,30%	8,80%

*BCBS includes trading book impacts

The analysis shows that Group 2 banks are generally less leveraged than Group 1 banks, and this difference increases under Basel III when the requirements are fully phased in.

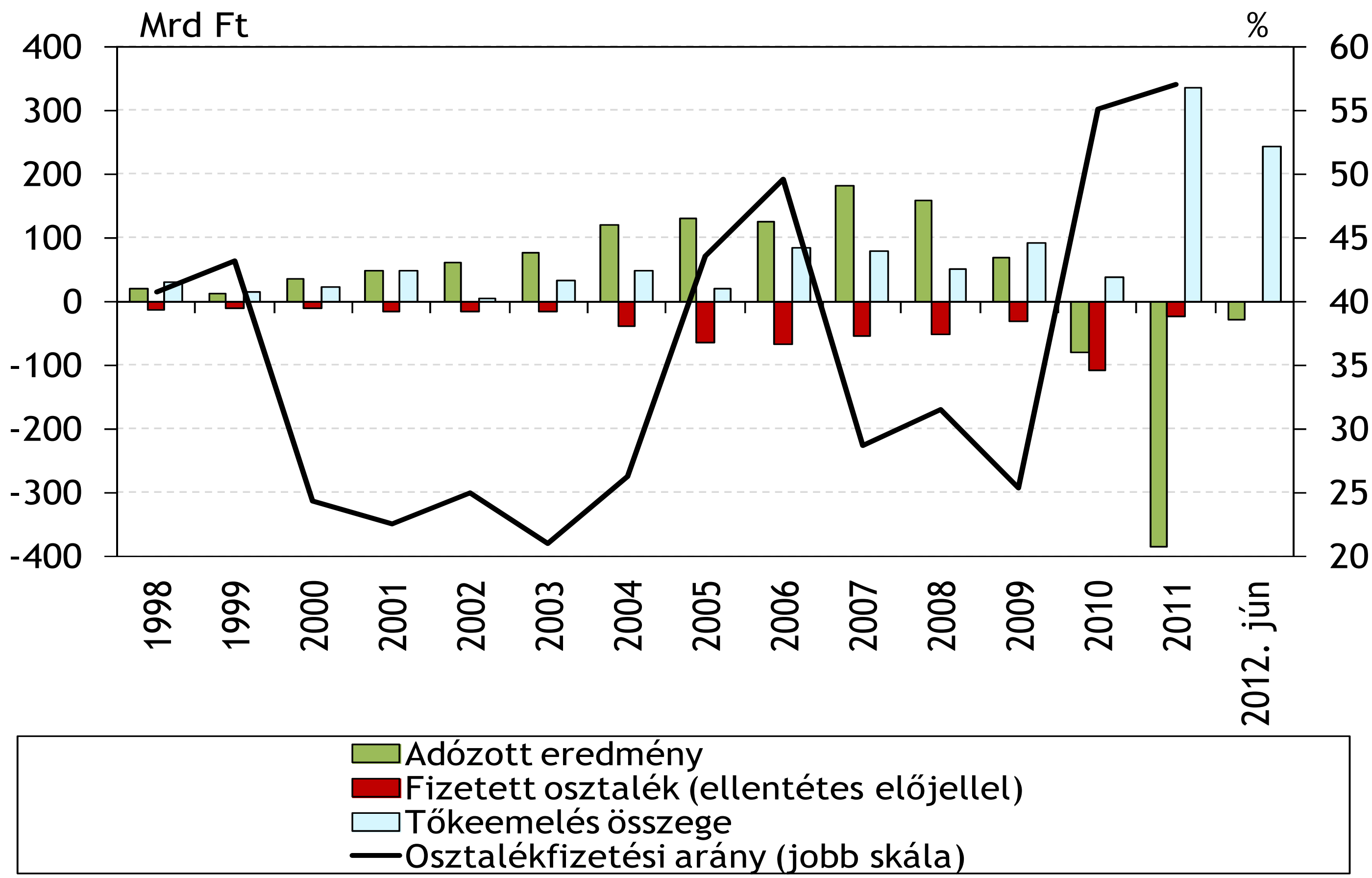
As a point of reference, the sum of profits after tax and prior to distributions across the same sample of Group 1 banks in 2011 was **€356** billion.
The sum of Group 2 banks' profits after tax and prior to distributions in 2011 was **€24 billion**.

Capital stress index



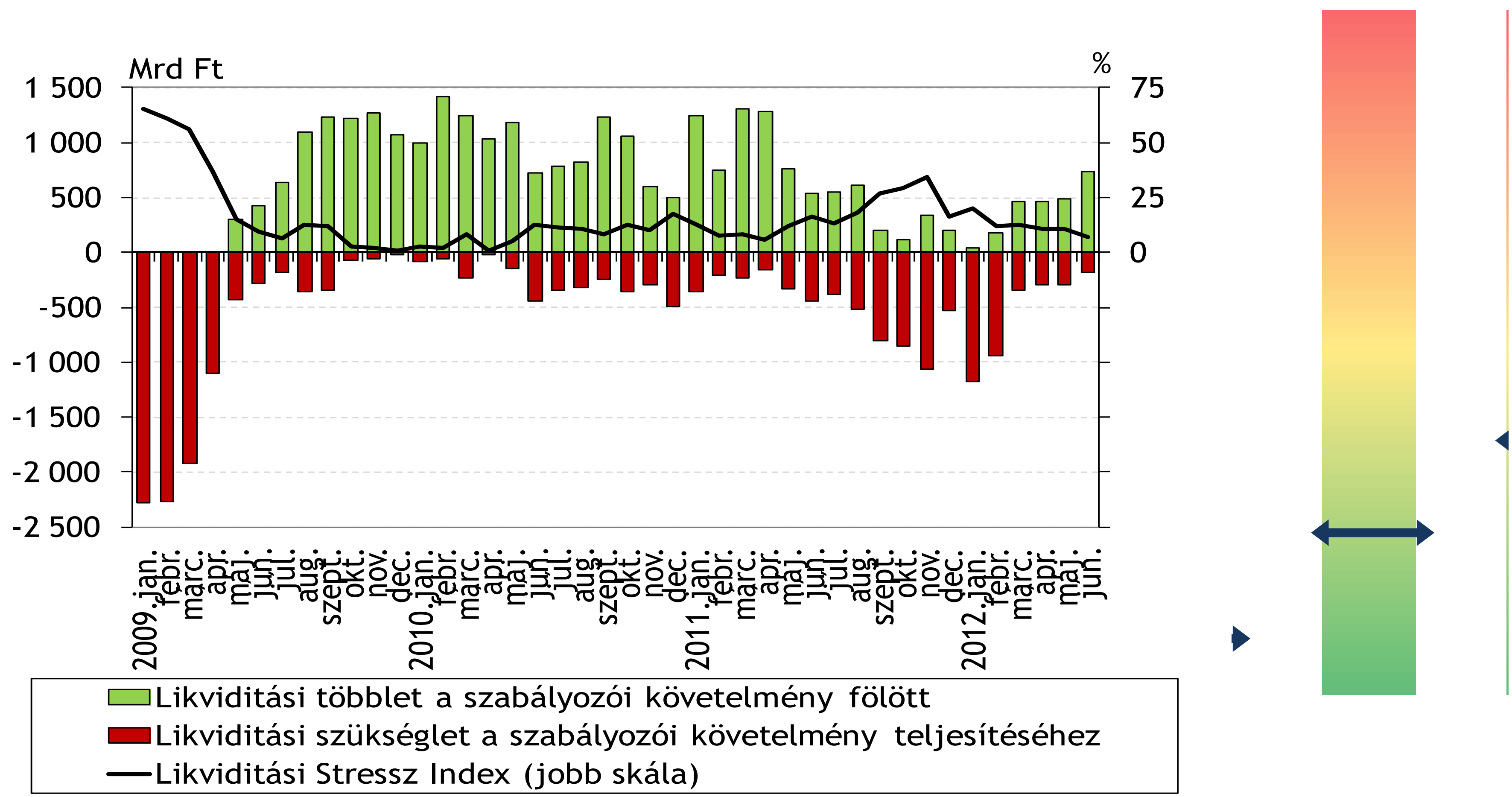
Source: MNB.

Foreign capital injection



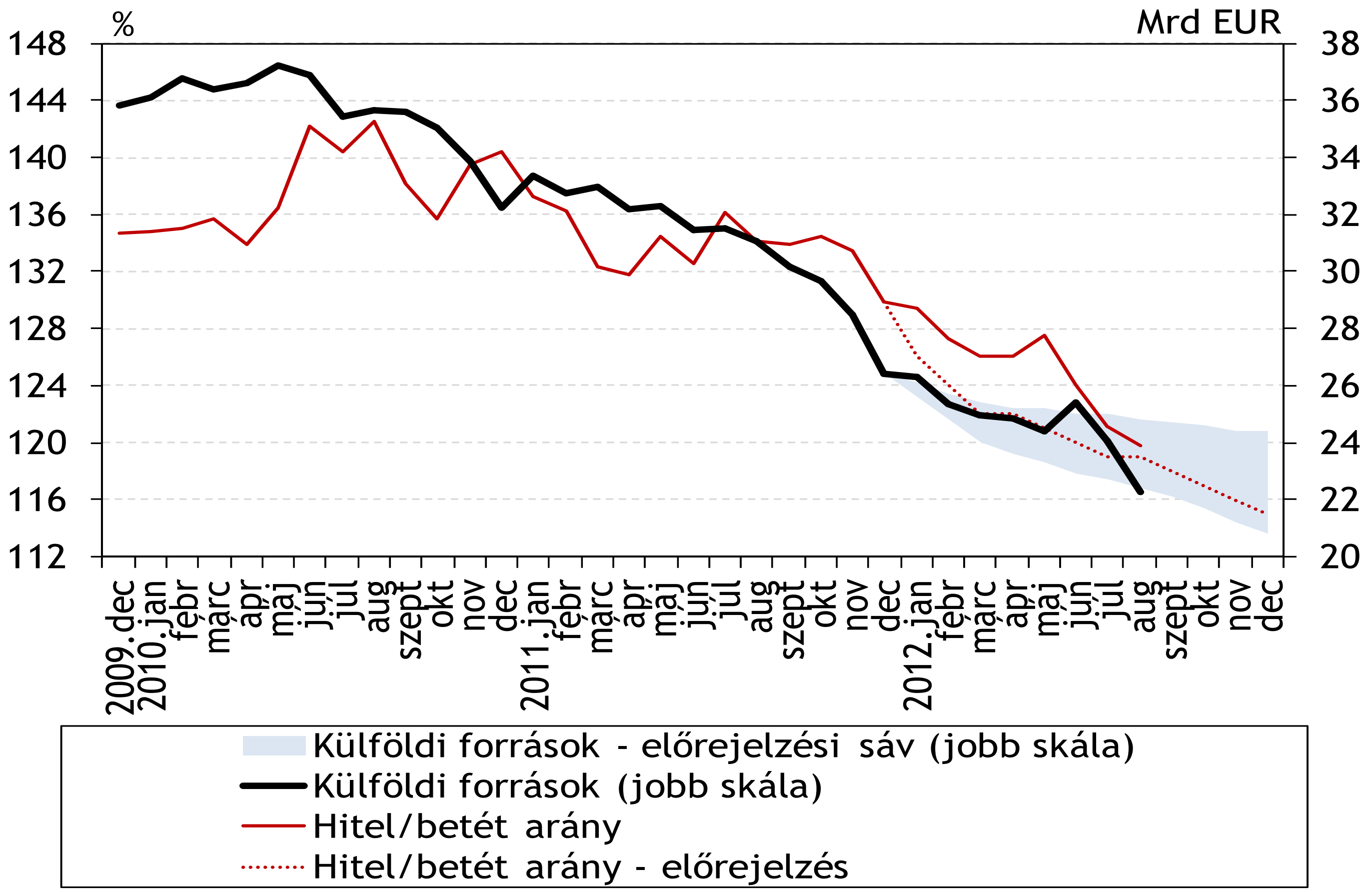
Source: MNB.

Liquidity stress index



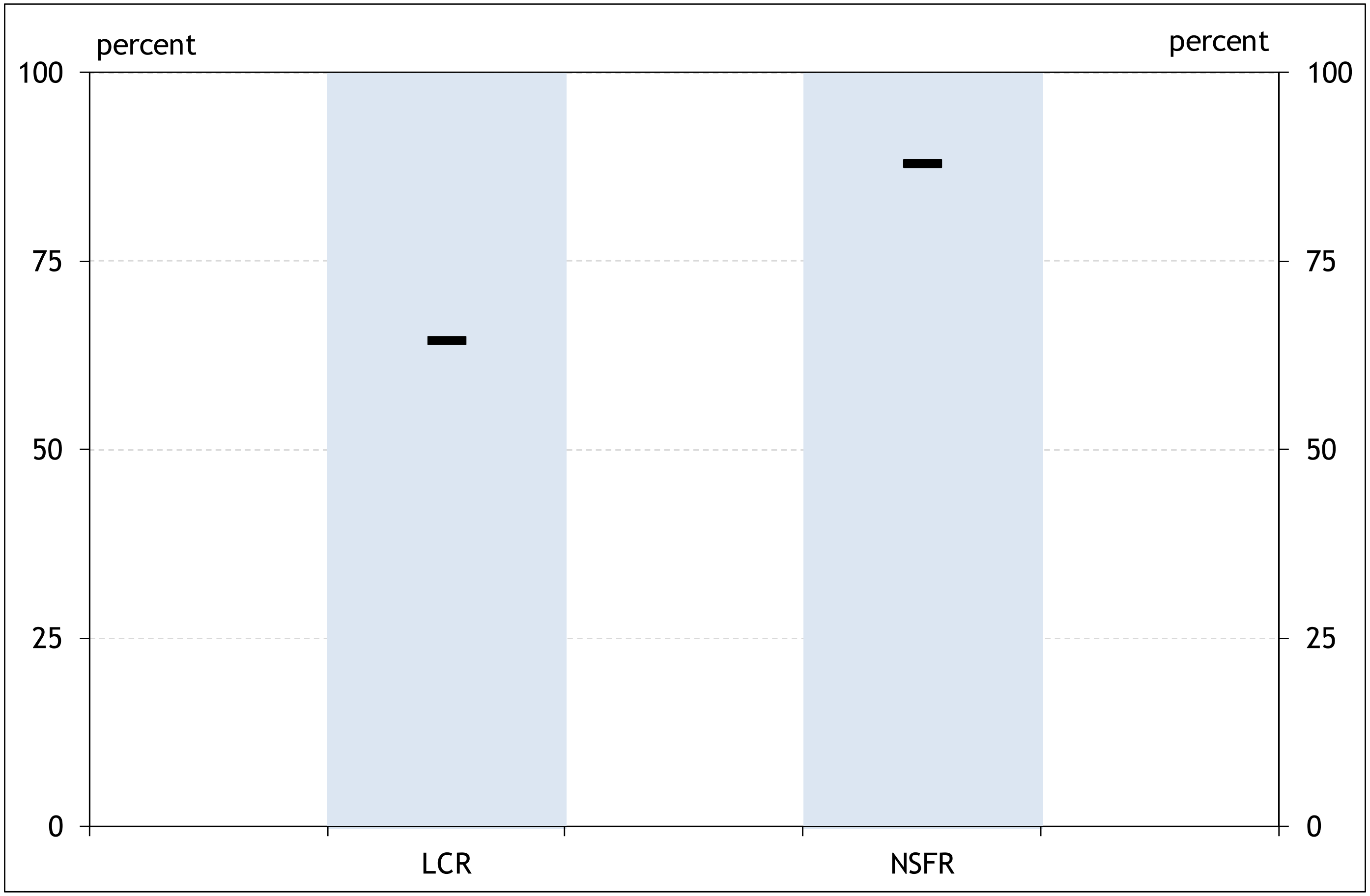
Source: MNB.

Outflow of funds



Source: MNB.

Distance of the banking system's Basel III ratios from the requirements (June 2012)



Preparation

Strategic gap analysis

Impact assesment
- Assumptions
- Projections
- Management actions

Technical preparation
- Data collection
- Processes
- Monitoring
- Reporting

Liquidity risk management
- Measurement
- Contingency funding plan
- Stress test
- Fund transfer pricing
- Liquidity buffers
- Governance

Capital management
- Increased focus
- Growing complexity
- Capital optimization
- Capital planning and allocation
- Ex post and ex ante management

Business model and strategy
- Consumer relations
- Revise focus on business lines and segments
- BS adjustments
- Product pricing
- Raising new capital
- Review funding strategies
- RAROC measurement
- Governance

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