



# QUARTERLY COMMENTARY ON MACROPRUDENTIAL POLICY

JANUARY 2018

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### **Foreword**

Financial system stability is essential for a well-functioning economy. It encompasses many areas, ranging from the security of bank deposits and other similar products to the smooth-functioning of the lending market based on the responsible approach of financial institutions and their customers. The purpose of macroprudential policy is to contribute to financial stability, in particular by strengthening the financial sector's resilience during good times, when risks are typically still at an early stage. This purpose also entails preventing the build-up of systemic risks, so as to make the economy less vulnerable in crisis periods.

Macroprudential policy in Slovakia is implemented primarily by Národná banka Slovenska (NBS), with its formal obligation in this regard laid down in Act No 747/2004 Coll. on financial market supervision. In implementing this policy, NBS may use any of several tools (from mitigating a specific risk to increasing capital requirements across the board), and may apply them in different ways (from issuing risk warnings to laying down statutory obligations). The European Central Bank (ECB) has the power to impose further, stricter macroprudential policy settings.

A key element of macroprudential policy implementation is the regular quarterly assessment of developments in the area of financial stability, and any ensuing decision of the NBS Bank Board to apply a specific instrument. The fulfilment of the core objective, i.e. the maintenance of financial stability, is assessed through the monitoring of five intermediate objectives:<sup>2</sup>

- 1. to mitigate and prevent excessive credit growth and leverage;
- 2. to mitigate and prevent excessive maturity mismatch and market illiquidity;
- 3. to limit direct and indirect exposure concentrations;
- 4. to limit the systemic impact of misaligned incentives with a view to reducing moral hazard;
- 5. to strengthen the resilience of financial infrastructures.

The **first intermediate objective** is to prevent excessive credit growth and leverage, which has been generally identified as a key driver of the financial and economic crisis. This is a particularly important objective in Slovakia, owing to the traditional nature of the financial market in this country. Most of the significant trends, as well as risks, in the domestic banking sector are related to the market in lending to households and enterprises. Looking at loans to the domestic economy as a share of total assets, the ratio in Slovakia is one of the highest of any country, with banks earning the bulk of their income from such lending.

The **second intermediate objective** relates to excessive maturity mismatch in the assets and liabilities of bank balance sheets. In other words, the maturity of banks' assets should not differ significantly from the maturity of their funding liabilities. Although the role of banks is to intermediate the funding of long-term assets (loans) with short-term liabilities (deposits), experience has shown that an excessive maturity mismatch between assets and liabilities makes the financial system more vulnerable and contributes to a build-up of economic and financial imbalances.

<sup>1</sup> Further details about these instruments can be found on the NBS website, at http://www.nbs.sk/en/financial-market-supervision1/macroprudential-policy

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<sup>&</sup>lt;sup>2</sup> The intermediate objectives are set out in line with Recommendation No ESRB/2013/1 of the European Systemic Risk Board of 4 April 2013 on intermediate objectives and instruments of macro-prudential policy.

The **third intermediate objective** is to limit direct and indirect exposure concentrations. Direct concentration risk typically arises from significant exposures to, for example, households, general government, or certain sectors of the economy. Indirect exposures arise from the interconnectedness of financial and non-financial institutions. Elevated concentration is a long-standing structural feature of the domestic financial sector. This is largely attributable to the structure of the Slovak economy, which is heavily dependent on a small number of sectors, as well as to the concentration of bank's claims on and/or sources of funding from certain customers or groups of customers. Another significant feature of the Slovak banking sector is the high share of domestic government bonds in banks' balance sheets.

The **fourth intermediate objective** aims to limit the systemic risk arising from misaligned incentives of financial institutions and their customers. The primary aim here is to reduce the risk of moral hazard related to the presence of systemically important financial institutions. Whereas, in respect of the third intermediate objective, concentration risk is monitored for its potential impact on individual banks or the banking sector, in the case of systemically important institutions concentration is monitored owing to the large impact that potential default of such an institution would have on the financial sector and real economy. Moral hazard may also arise in relation to management remuneration at financial institutions or in the terms of cooperation with financial intermediaries.

The **fifth intermediate objective** is to strengthen the resilience of financial infrastructures. The most important elements of the financial infrastructure in Slovakia are the payment systems (TARGET2, SIPS), the Deposit Protection Fund, and securities settlement systems. Their reliable operation is crucial for the country's financial stability.

The Quarterly Commentary on Macroprudential Policy (QCMP) is structured according to these objectives, pursuant to Recommendation ESRB/2013/1. Its main part is a situation analysis (based on the indicators in the annex), which is a basis for NBS decision-making. This edition of the QCMP is based mostly on data as at 30 September 2017, although the qualitative assessment also takes account of information available until the submission date of the QCMP.

The document is divided into three parts. The first part contains a brief analysis of the most significant developments related to systemic risk which occurred during the quarter under review, broken down into sub-headings that correspond to the above-mentioned intermediate objectives. The second part, focusing on decisions taken in the area of macroprudential policy, includes not only decisions of NBS, but also decisions of the ECB. The third part comprises annexes that include: tables showing indicators used to monitor the intermediate objectives, and reference information for decisions on the countercyclical capital buffer rate.

### 1 Situation analysis by Národná banka Slovenska

### 1.1 Excessive credit growth and leverage

Credit to the private sector<sup>3</sup> continued to increase, year on year, in the third quarter of 2017. At the same time, total domestic bank credit to the non-financial private sector maintained double-digit growth. The growth rate was, however, slightly lower in the third quarter than in the previous quarter; it fell from 12.1% to 11.2%, with both credit to households and credit to non-financial corporations (NFCs) increasing at a moderately slower pace. This slowdown, however, cannot yet be considered a change in the credit market trend, given that the absolute year-on-year increase in credit to the non-financial private sector was at an all-time high in the third quarter. Furthermore, factors supporting credit demand remain present in the economy, including low interest rates, strong competition in the credit market, and favourable macroeconomic trends.

Total credit to households increased in the third quarter of 2017 by 12.3% year on year (after rising by 13.4 % in the second quarter). The current highly positive labour market situation—reflected in a historically low unemployment rate and in both nominal and real wage growth—is, in the current low interest rate environment, significantly stimulating household demand for credit. Households' appetite for borrowing is therefore increasing. The household debt-to-GDP ratio rose above 40% in the third quarter, to 40.3%. For the past two years, household credit growth has been higher in Slovakia than in any other EU country. The result is excessive household debt growth in Slovakia.

Total credit to NFCs increased in the third quarter of 2017 by 9.2% year on year (after rising by 10% in the second quarter). This slowdown was, however, consistent with the volatility typical for NFC credit growth. The stock of both investment loans and operating loans increased in the third quarter. Corporate demand for credit also continues to be supported by historically low interest rates, by favourable macroeconomic trends and their upward impact on firms' sales, and by the continuing optimism of business outlooks. NFC credit growth is strongest in the private sector, where it is broadbased across economic sectors. The traditional sources of credit growth—industry, energy supply, and commercial real estate—have now been joined by services, retail trade, and construction. In the third quarter, the year-on-year increase in total loans to NFCs in Slovakia was the second highest in the EU. NFC debt increased both towards domestic lenders and non-residents, and the NFC debt-to-GDP ratio rose to 55.2%.

The emergence of imbalances related to exceptionally strong credit growth must also be seen in the context of macroeconomic trends that are gradually beginning to exceed their potential.

The continuing expansionary phase of the financial cycle is further evident from increases in indicators that gauge overheating of the credit market. Compared with the previous quarter, increases were observed in all the indicators used as a basis for setting the countercyclical capital buffer (CCyB) rate. The domestic credit-to-GDP<sub>trend</sub> gap<sup>4</sup> rose for an eleventh successive quarter, to 5.5. The benchmark buffer rate based on this indicator—serving as a guide for the setting of the CCyB

<sup>&</sup>lt;sup>3</sup> Loans provided by domestic banks to the household sector (S.14 and S.15) and the NFC sector (S.11) in Slovakia (source: Statement V (NBS) 33-12).

<sup>&</sup>lt;sup>4</sup> The indicator is based on the amount of loans provided by domestic banks to NFCs and households.

rate—was unchanged from the previous quarter, at 1.75%. The standardised credit-to-GDP<sub>trend</sub> gap<sup>5</sup>, which takes into account the private sector's total (i.e. domestic and foreign) debt, also increased in the third quarter. The benchmark buffer rate based on this indicator was 2.5% (up from 2.25% in the previous quarter). The Cyclogram, a composite indicator of the financial cycle, reached its highest ever levels in the third quarter, providing further evidence of the financial cycle's expansionary phase. The benchmark buffer rate based on this indicator was 2.5%, the same as in the previous quarter.

### 1.2 Excessive maturity mismatch and market illiquidity

The overall situation in the area of systemic liquidity risk remained largely unchanged in the third quarter of 2017. As regards banking sector liquidity, two trends remained significant. The first was the combination of long-term credit growth and the falling average maturity of deposits. While the growth rate of long-term credit to NFCs and household credit is at all-time high levels, total current account balances are increasing at the expense of time deposits, which have reached their lowest total since autumn 2008. Therefore, the maturity mismatch between assets and liabilities is at historical lows.

The second trend is the continuing rise in the loan-to-deposit ratio, which is gradually approaching 1. The banking sector is thus gradually becoming less self-sufficient in funding its growing lending activity. On a positive note, however, banks in Slovakia can now take advantage of the newly instituted covered bond issuance framework, in effect from the beginning of 2018.

As regards systemic liquidity, the replacing of the national liquidity coverage ratio with a Europe-wide harmonised liquidity coverage ratio (LCR) is a negative development. In force from 1 January 2018, the new LCR is less conservative and allows the banking sector to reduce significantly its holdings of liquid assets. It therefore has the potential to increase banks' sensitivity to liquidity risk.

### 1.3 Concentration

The concentration of exposures to individual risks did not change significantly in the third quarter of 2017, although the risks themselves maintained their easing trend. This concerned mainly credit risk in the loan books for particular segments of the NFC sector, as well as credit risk premia on government bonds (including bonds issued by lower-rated euro area countries).

 $<sup>^{5}</sup>$  The indicator is compiled from data on the total debt of the non-financial private sector by estimating the missing data on total private sector debt up to 1993 and incorporating a less volatile indicator in the denominator:  $GDP_{trend}$ .

#### 1.4 Moral hazard

Compared with the second quarter, moral hazard indicators remained almost unchanged in the third quarter of 2017. In historical terms, the concentrations of total net assets, total liabilities and total assets in the financial system remain relatively high. Although the share of Slovak government bonds held by banks continues to fall, the concentration of banks' investments in these bonds is rising. The increase in banking sector concentration in the third quarter also had a structural cause, namely the merger of Prima banka and Sberbank; the two banks started operating in Slovakia as a single institution as from August 2017.

### 1.5 Financial infrastructures and other risks

The resources of the Deposit Protection Fund (DPF) did not change in the third quarter of 2017, since the annual contribution to the DPF, set at €3 million, was paid in the first half of the year. As the volume of covered deposits increased in the third quarter, the ratio of the DPF's funds to covered deposits fell slightly, to 0.64%. Owing to the low contribution rate for 2017, set at 0.01% of the total volume of covered deposits, the annual contributions are expected to increase in subsequent years and therefore weigh more heavily on banks' profitability. Moreover, if the extraordinary revenue from insolvency proceedings that is factored into the DPF's estimated target level for 2024 does not materialise, the increase in the banking sector's costs could be higher still.

The cumulative proceeds of the special levy payable by banks in Slovakia rose above €800 million in the third quarter of 2017. Under an amendment to the Special Levy Act<sup>6</sup>, the levy rate remains fixed at 0.2% per year until 2020.

The banking sector's total contribution to the EU's Single Resolution Fund for 2017, payable by the end of June 2017, amounted to €17.5 million.

### 2 Decisions in the area of macroprudential policy

## 2.1 Decisions taken by NBS with respect to developments in the quarter under review

The NBS Bank Board decided that the countercyclical capital buffer (CCyB) rate will be left at 1.25% from 1 February 2019. The CCyB rate is currently set at 0.50% for the period from 1 August 2017 to 31 July 2018 and is due to be raised to 1.25% on 1 August 2018.

In taking its decision on the CCyB rate, the NBS Bank Board gave due consideration to the views of the European Central Bank (ECB) in accordance with Article 5 of the SSM Regulation.<sup>7</sup>

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<sup>&</sup>lt;sup>6</sup> Act No 384/2011 Coll. on a special levy on financial institutions, as amended.

<sup>&</sup>lt;sup>7</sup> Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions ("the SSM Regulation").

### 2.2 Current instrument settings

Under NBS Decision No 20/2016 of 26 July 2016, the CCyB rate was increased from zero to 0.50% with effect from 1 August 2017.<sup>8</sup>

Table 1 CCyB rates for Slovak exposures

Period of application	Rate
1 August 2017 – 31 July 2018	0.50%
1 August 2018 –	1.25%

On 14 November 2017 the NBS Bank Board approved a Decree laying down detailed provisions on the assessment of borrowers' ability to repay consumer loans (NBS Decree No 10/2017). This Decree follows a Decree issued last year concerning the provision of housing loans. The adoption of the new Decree harmonised requirements for the provision of housing loans and consumer loans. At the same time, it completed the transformation of NBS Recommendation No 1/2014 into binding law. As a result, the Recommendation was repealed as from 1 January 2018. The most important change is that loan applicants must now have a financial buffer, after deducting all their debt service expenditure and their minimum subsistence amount from their income. In contrast to conditions for housing loans, however, this requirement does not apply to consumer loan applicants whose total indebtedness, including the loan applied for, will be low in comparison with their annual income.

Under Decision Nos 18/2016 and 19/2016 of Národná banka Slovenska of 24 May 2016, banks in Slovakia identified as 'other systemically important institutions' (O-SIIs) are required from 1 January 2017 to maintain a total additional capital buffer (comprising an O-SII buffer and in some cases also a systemic risk buffer) of between 1% and 2% of risk-weighted assets. From 1 January 2018, under NBS Decision Nos 5/2017 and 6/2017 of 30 May 2017, the total additional capital buffer requirement remains at 2% for the two largest banks and is reduced to either 1% or 1.5% for the other O-SIIs. <sup>10</sup>

Other currently applicable macroprudential policy instruments, covering mainly the area of capital requirements, are listed in **Error! Reference source not found.** 

<sup>&</sup>lt;sup>8</sup> https://www.nbs.sk/\_img/Documents/\_Legislativa/\_FullWordingsOther/EN\_ROZ\_20\_2016.pdf

<sup>&</sup>lt;sup>9</sup>The full text of the Decree, in Slovak, is available on the NBS website at

http://www.nbs.sk/ img/Documents/ Legislativa/ Vestnik/OPAT10-2017.pdf. A summary, in English, is available on the NBS website at

https://www.nbs.sk/ img/Documents/ Dohlad/Makropolitika/opatrenie prehlad2-EN.pdf

<sup>&</sup>lt;sup>10</sup>https://www.nbs.sk/ img/Documents/ Legislativa/ FullWordingsOther/EN ROZ 5 2017.pdf and https://www.nbs.sk/\_img/Documents/\_Legislativa/\_FullWordingsOther/EN\_ROZ 6 2017.pdf

### 2.3 Potential application of macroprudential policy instruments in the medium term

#### **Retail lending**

As NBS noted in its November 2017 Financial Stability Report, debt levels remain under strong upward pressure despite the measures taken to date. The main reasons for this are the extremely low level of interest rates, the easing of credit standards and the strength of economic growth, all of which could lead to economic overheating. NBS is considering the introduction of additional regulations aimed at reducing the potential for excessive household debt growth.

### **Expected developments in the CCyB rate in the next quarter**

Under NBS decisions, the current settings of the CCyB rate—0.50% from 1 August 2017 and 1.25% from 1 August 2018—are lower than the benchmark buffer rates based on the principal indicators (Error! Reference source not found.). Should this divergence persist in the next quarter, the Bank Board will consider raising the CCyB rate.

### 2.4 ECB decisions concerning the Slovak banking sector

As of 30 January 2018 the European Central Bank had not issued any macroprudential policy decision concerning the Slovak banking sector.

Table 2 Current setting of instruments applicable in Slovakia

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Macroprudential instruments	Q1	Q2	Q3	Q4	Q1	Note
	2017	2017	2017	2017	2018	
Macroprudential instruments applicable in Slovakia						
Capital conservation buffer (Article 33b of the Banking Act)	2.5%	2.5%	2.5%	2.5%	2.5%	
Countercyclical capital buffer rate (Article 33g of the Banking Act)	0%	0%	0%	0.5%	0.5%	CCyB increased to 0.5% since 1 August 2017 and will increase to 1.25% since 1 August 2018.
O-SII buffer (Article 33d of the Banking Act) <sup>11</sup>	1%	1% - 2%	1% - 2%	1% - 2%	0.5% - 1%	To be decreased to 0.5% and 1% since 1 January 2018.
Systemic risk buffer (Article 33e of the Banking Act) <sup>12</sup>		1%	1%	1%	1%	
Risk-weight for exposures fully secured by mortgages for residential property (Article 124 of the EU's Regulation on prudential requirements for credit institutions and investment firms –hereinafter "the CRR")	35%	35%	35%	35%	35%	
Risk-weight for exposures fully secured by mortgages on commercial immovable property (Article 124 of the CRR)	50%	50%	50%	50%	50%	Scheduled increase.
Minimum exposure-weighted average LGD for all retail exposures secured by residential property and not benefiting from guarantees from central governments (Article 164 of the CRR)	10%	10%	10%	10%	10%	
Minimum exposure-weighted average LGD for all retail exposures secured by commercial immovable property and not benefiting from guarantees from central governments (Article 164 of the CRR)	15%	15%	15%	15%	15%	
Risk-weight for exposures fully secured by mortgages on commercial immovable property - other EU Member States (Article 124 of the CRR)	50%	50%	50%	50%	50%	
Minimum exposure-weighted average LGD for all retail exposures secured by residential property and not benefiting from guarantees from central governments - other EU Member States (Article 164 of the CRR)	10%	10%	10%	10%	10%	
Minimum exposure-weighted average LGD for all retail exposures secured by commercial immovable property and not benefiting from guarantees from central governments - other EU Member States (Article 164 of the CRR)	15%	15%	15%	15%	15%	

Source: NBS.

<sup>&</sup>lt;sup>11</sup> O-SII buffer is set for Československá obchodná banka, a.s., Poštová banka, a.s., Slovenská sporiteľňa, a.s., Tatra banka, a.s. and Všeobecná úverová banka, a.s. <sup>12</sup> Systemic risk buffer is set for Slovenská sporiteľňa, a.s., Tatra banka, a.s. and Všeobecná úverová banka, a.s.

**Table 3 Current setting of instruments applicable to foreign exposures** 

Macroprudential instrument	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Note
Macroprudential instruments applicable abroad						
Countercyclical capital buffer rate for <b>Czech Republic</b> (Article 33j of the Banking Act)	0.5%	0.5%	0.5%	0.5%	0.5%	To be increased to 1.0% from 1 July 2018.
Countercyclical capital buffer rate for <b>Sweden</b> (Article 33j of the Banking Act)	1.5%	2%	2%	2%	2%	
Countercyclical capital buffer rate for <b>United Kingdom</b> (Article 33j of the Banking Act)	0%	0%	0%	0%	0%	To be increased to 0.5% from 27 June 2018.
Countercyclical capital buffer rate for <b>Lithuania</b> (Article 33j of the Banking Act)	0%	0%	0%	0%	0%	To be increased to 0.5% from 31 December 2018.
Countercyclical capital buffer rate for other EU Member States (Article 33j of the Banking Act)	0%	0%	0%	0%	0%	
Countercyclical capital buffer rate for <b>Norway</b> (Article 33j of the Banking Act)	1.5%	1.5%	1.5%	2%	2%	
Countercyclical capital buffer rate for <b>Iceland</b> (Article 33j of the Banking Act)	0%	1%	1%	1.25%	1.25%	
Countercyclical capital buffer rate for <b>Hong Kong</b> (Article 33i and Article 33j of the Banking Act)	1.25%	1.25%	1.25%	1.25%	1.875%	To be increased to 2.5% from 1 January 2019.
Countercyclical capital buffer rate for countries other than EU Member States (Article 33i and Article 33j of the Banking Act)	0%	0%	0%	0%	0%	
Systemic risk buffer for <b>Estonia</b> (Article 33f of the Banking Act)	1%	1%	1%	1%	1%	
Systemic risk buffer for other EU Member States (Article 33f of the Banking Act)	0%	0%	0%	0%	0%	
Risk-weight for exposures fully secured by mortgages on residential property - other EU Member States (Article 124 of the CRR)	35%	35%	35%	35%	35%	<b>Ireland, Croatia, Malta, Slovenia:</b> conditions to be tightened for application of the 35% risk weight
Risk-weight for exposures fully secured by mortgages on commercial immovable property – <b>Sweden</b> and <b>Romania</b> (Article 124 of the CRR)	100%	100%	100%	100%	100%	Romania: conditions to be tightened for application of the 50% risk weight
Risk-weight for exposures fully secured by mortgages on commercial immovable property - other EU Member States (Article 124 of the CRR)	50%	50%	50%	50%	50%	<b>United Kingdom:</b> conditions to be tightened for application of the 50% risk weight
Minimum exposure-weighted average LGD for all retail exposures secured by residential property and not benefiting from guarantees from central governments - other EU Member States (Article 164 of the CRR)	10%	10%	10%	10%	10%	
Minimum exposure-weighted average LGD for all retail exposures secured by residential property and not benefiting from guarantees from central governments – <b>Norway</b> (Article 164 of the CRR)	20%	20%	20%	20%	20%	
Minimum exposure-weighted average LGD for all retail exposures secured by commercial immovable property and not benefiting from guarantees from central governments - other EU Member States (Article 164 of the CRR)	15%	15%	15%	15%	15%	

Souce: ESRB.

### **Annexes**

### A) Selected indicators broken down by main risk categories

							Ex	ces	sive	cre	dit	gro	owti	h a	nd I	eve	eraç	je									Exc	nato	ch a		ma		t						Co	onc	ent	ratio	on						Moral hazard										Moral hazard											ncial ructi			fina	ncia ncia	ıl	
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9.17 6.17 3.17	2,53% 2,05%	12% 14%	14%	12% 15%	94% 92%	40% 39%	54% 53%	5,25 4,83	9% 12 1% 11	2% 1 1% 1	13% 14%	10% 7%	59% 58%	6 38 6 37	% 2	1% 1%	3%	63%			95 96	1,1% 0,9%	0,5% 0,4% 0,4%	7	.6	41% 40%	-41%	-489 -489	6 -43	1% 1 3% 1	17% 17%	10%	5%	5	92%	12%		4%	19		% 3 % 3	4% 3%	0%	3% 3% 4%	1%	6% 1		74%	1 292	76% 76%	1 451	20%	2 10	1 80%	1 63	7 689 3 699	6 1 41 6 1 43 6 1 38	8 84% 8 85%	15	598 510	0,7%	1,0%	5 -12 5 -7 5 -26	776 330	17% 17%	19% 18%	1,48 1,44 1,50	97% 96%								
12.16 9.16 6.16	1,26% -0,52% -1,54%	9% 8%	12% 12%		88% 86%	37%	51% 50%	3,8		0% 1 % 1	13%	5%	55%	6 35	5% 2 1% 2	0%	3% 2% 1%		73% 74% 73%		101 102 -	0,1%	0,2% 0,1% -0,1% 0,0%	6	6 -	41% 42% 41%	-43%	-479 -46%	6 -44	4% 1	14%	14% 14% 12% 9%		i 1	05% 06% 02%		5% 6%		19	% 19	% 3 % 3	3% !%	0% 0% 0%	7%	1%	6% 1 6% 1 5% 1	1% 1% 1%	73% 73% 73%	1 269	75% 75%	1 427	22% 22%	1 863	7 79% 3 79%	1 591	0 589	963	9 85% 86%	1 56 1 56 1 56	309 31	0,7%	1,0%	5 -19 5 -202 5 -10	918 29	17% 16%	18% 17%	1,49 1,47 1,60	93% 90%								
3.16 12.15 9.15 6.15	-3,73% -2,86% -2,83% -2,72%	5% 4%	11% 12%		84%	35%	49%	2,8		1% 1 9% 1	12%	9% 3% 3%	52%	6 33 6 33 6 34	2% 2 2% 2	0% 0%	1% 1% 1% 0%	57% 56% 55% 54%	73% 71% 70% 69%		105 - 106 -	0,6%	0,0% 0,0% -0,2% -0.2%	5	.4	39% 40% 39%	-40%	-469 -469		0% 1 9% 1	16% 15%	14%	4% 4% 5% 4%	1	19% 02% 14% 12%	15% 15%		4% 4% 3% 3%	19		% 2 % 2	9% 8%	0% 0% 0%	9% 15% 17%	1% 2%	5% 1 5% 1 5% 1	1% 1% 1%	73% 72% 72%	1 248 1 250 1 237	75% 69%	1 416	24% 24%	1 739	79% 2 79%		3 619	6 1 008	8 87% 5 89%	1 57	72 841	0,7%	0,9%	6 986 6 -1 6	8	17%	18%	1,69 1,64 1,53	90% 91%								
3.15 12.14 9.14	-1,72% -1,92% -0,82%	7% 6%	12% 12%		83% 82%	33%	50%	1,1	3% 7 5% 6	7% 1 6% 1	13% 12%	-1% -2%	50%	6 31	1% 1	9% 9%	0% 0%	53%	71% 73%		108 -	0,1% 0,2%	-0,5% -0,8% -0,6%	4	,5	38% 37% 37%	-37%	-469 -469	6 -43 6 -41		14% 16%	18%	5%	1		17% 17% 18%	5% 6% 5%		19	% 19	% 3 % 2	0% 9%	1% 1% 1%		1% 1%	5% 1 5% 1 5% 1	1% 1% 1%	71% 71% 71%	1 221	70% 70%	1 283 1 279	25% 25%	1 755	9 79%	1 57	1 539	6 86 6 87	7 86%	15	550 587	0,6%	0,8%		973 149	16% 16%	17% 17%	1,58 1,6	90% 91%								
6.14 3.14 12.13	-0,05% -2,14% -1,81%	10% 8%	9%	10% 7%	80% 79%	30%	49%	0,31	3% 6	6% 1 4%	10%	0%	47%	6 28	% 2 % 2	0%	-1% -1%	47%	73% 71%		107 106 105	0,9% 0,1% 0,4%	-0,7% -0,7% -0,8%	3	4 4	38% 36% 36%	-38%	-459	6 -41 6 -40 6 -40	0% 1	11%	14% 14%	3%	1	24% 05% 99%	18% 18% 18%		3%	29	% 19	% 3 % 3	3% 1% 1%	1% 1% 1%	15% 14% 15%	2% 2% 2%	5% 1	1% 1% 1%	70%	1 205 1 214	70% 70%	1 276	26% 27%	1 764	8 80%	1 55	9 55%	6 103	7 84%	15	534 508 805	0,6% 0,6% 0,5%	0,8%	6 -36 6 38 6 -42	399	16%	17%	1,36 1,44 1,42	89%								
9.13 6.13 3.13	-2,94% -5,92% -5,82%	3% 4%	9% 9% 9%	0%	74%	29%	45%	0,3	5% 4 1% 3	4% 4% 3%	9% 9%	-3% -4%	47%	6 27	% 2 % 2	0%	-1% -2%	45% 44%	70% 70%		103 -	1,3%	-0,8% -0,8% -0,8%	3	.1 4	36% 34% 31%	-36% -33%	-419 -409	6 -40 6 -38 6 -38	8% 1 6% 1	15% 16%	9% 11% 14%	3% 2% 4%	1	06%	21%	5% 5% 5%	3% 2%	29	% 19 % 19	% 3 % 3	5% 4%	1% 1%	14% 13% 14%	2% 2%	6% 1 6% 1	1% 1% 1%	71% 71%	1 213 1 220	73% 73%	1 360	27% 28%	1 689	9 82% 4 83%	1 61	0 49%	6 85	0 84% 7 86% 3 87%	16	327 354	0,5%	0,4%	6 25 6 39	527 923	15% 15%	16%	1,42 1,46 1,5	88% 87%								
12.12 9.12 6.12	-4,36% -4,87% -5,36%	5% 5%	8% 8%	3% 3%	74%	27%	47%	1,0	9% 3 2% 3	2% 3%	9% 8%	-3% -5% -2%	46%	6 25	5% 2 5% 2 5% 2	1%	-1% -2%		70% 71%		100 -	0,5%	-0,7% -0,6% -0,5%	3	.6		-33% -32%	-399	6 -34	3% 2 4% 2 2% 2	22%	15% 14%	3% 4%	1	00% 95%	21% 21%	6% 6% 6%	2% 2%	49		% 3 % 3	4% 6%	1% 1%	12% 12% 11%	2% 2%	6% 1 5% 1	1% 1% 1%	72% 72%	1 254 1 250	73% 73%	1 386 1 383	32% 31%	1 848	8 83% 7 83%	1 64 1 64 1 65	3 55% 9 56%	6 88 6 90	0 86% 2 86% 5 84%	16	588 544	0,5% 0,5% 0,5%	0,2%	37	r18 r79	13%	16%	1,51 1,47 1,47	90%								
3.12 12.11 9.11 6.11	-5,21% -4,19% -3,82% -4,45%	8% 6%	10%	7% 3%	74%		47%	2,5	3% 9	9% 1 9% 1	10%	4% 7% 8%	46% 47%			2% 3%	-1% -1%	41% 41% 41% 40%	70% 70%		97 - 96 -	0,3%	-0,3% -0,1% 0,2% 0.1%	4	,5	29% 33% 32%	-35% -37%	-409 -409	6 -35	2% 2 5% 2 7% 1	28% 17%	12% 14%	2% 0%	1	17% 39%	20%	4%	4%	39	% 19 % 29	% 3	8%	13% 14%	10% 10% 7% 7%	2% 2%	6% 1 6% 1	1% 1% 1%	72%	1 254 1 220	73% 75%	1 389 1 458	34% 37%	1 777	7 84% 6 84%	167	2 579 1 599	6 91 6 88	4 81% 2 79%	15 15 14	537 409	0,4%	0,0%	5 5 5 6 -2 6 5 1 5 6 -2 3	128	12% 13%	13% 13%	1,51 1,36 1,36	90% 88%								
3.11 12.10 9.10	-3,71% -4,60% -2,58%	5% 3%		2% -1%	73%	26%	47%	2,4	r% 7	7% 1 6% 1	12%	3% 0% -1%	45%	6 23	3% 2	2% 2%	-1% -1%	39%	68% 66%		93 - 95 -	0,5% 1,1%	-0,1% -0,3% -0,2%	4	.6	34% 36% 36%	-38% -39%	-399	6 -35	5% 1	17%	19% 14%	2%	1	10%	21% 21%		6% 5%	49	% 29 % 29	% 3	9% 7%		10% 8% 4%	2%	6% 1	1% 1%	71% 72%	1 220 1 237	75% 75%	1 458 1 478	38% 40%	1 789	9 84% 9 84%	1 668	5 629 2 629		7 78%	14	448 375	0,3%	0,0%	6 15 6 11	529 140	12%	13%	1,36	86% 85%								
6.10 3.10 12.09	-2,49% -0,78% 0,24%	-1% 3%	10%	-6% 0%	73% 73%	24%	49%		5% 2 2% 3	3% 1	10% 11%	-4% -3%	45% 45%	6 22	2% 2	3%	-1% -1% -1%	35%	67% 67% 65%		91 - 91 -	1,0%	-0,4% -0,4% -0,5%	3	.0	36% 36% 32%	-39% -37% -34%	-379 -409 -399	6 -33 6 -34 6 -31		26% 26% 27%	30%	3%	1	01% 11% 10%	22%	4% 3% 4%	4% 4%	5% 5%	% 39	% 4 % 4	0% : 0% :		4% 4% 5%	2% 2% 2%	6% 1 6% 1	1% 1% 1%		1 265 1 273	76% 77%	1 517 1 536	47% 47%	1 809	5 85% 9 85%	1 69	6 63% 3 62%	6 1 03 6 1 16 6 1 13	8 77% 5 74%	13	331	0,2%			572 54	11%	12%	1,35 1,39	86%								
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9.08 6.08 3.08	-0,02% 0,36% 0,14% -1,04%	19% 19%	27% 28%	16% 16%	66% 64%	20%	46%	6,7	r% 23	3% 2 4% 2	28% 28%	20% 21%	40% 39%	6 18	3% 2 7% 2	2% 2%	0%	31% 30%	84% 90%		70 67	0,0% 0,0%	0,1% 0,4% 0,5% 0.5%	7	.8	30%	-23% -30% -30%	-289 -289	6 -24		7% 5%	22% 22%		1	68%	14% 15%	2% 1% 1%	12%	109	% 69 % 59	% 6 % 11 % 10 % 11	2% 8%			2% 2% 2% 2%	4% 1	1% 1% 1%	68% 67%	1 090 1 083	74% 74%	1 512 1 571	34% 33%	1 913	3 82% 6 82%	1 619	9 62%	6 91 6 96 6 1 09 6 98	0 69% 5 66%	10	097 060					11% 12%	12% 13% 13% 13%		78% 85% 84% 83%								
12.07 9.07 6.07	-0,28% 0,11% 0.31%	27% 19%	29% 29%	26% 16%	62% 61%	18%	44%	6,5	0% 24 1% 25	4% 2 5% 2	28% 27%	22% 24%	37% 36%	6 16	5% 2 5% 2	1% 0%	0%	28% 27%	91%		69 - 75	0,2%	0,6%	7	,6 ,7	33% 28%	-32%	-299 -299	6 -24	4% 4%		14% 7%	-12% -12% -11% -11%		79%	18% 18%	1% 1% 1%	10%	109	% 69 % 69	% 10 % 10 % 10	6% 7%			2% 2% 2% 2%	4% (	1% 0% 1%	68% 68%	1 085 1 075	75% 75%	1 573 1 582	40% 40%	2 300	6 82% 4 82%	1 58	689	6 107 6 100 6 109	6 65% 5 66%	10	056 124					12% 13%	13% 13% 14%		77% 74% 71%								
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6.06 3.06 12.05	3,77% 3,55% -0,39%	31% 29% 13%	37% 40% 43%	30% 26% 5%	60% 57% 50%	15% 14% 13%	45% 43% 37%	4, 11 3, 16 2, 85	3% 26 3% 21 9% 28	6% 3 7% 4 8% 4	38% 40% 41%	20% 19% 21%	32% 31% 30%	6 12		9% 8% 8%	1% 0% 1%	22% 21% 20%	82% 80%		110 113 110 -	1,5% 1,4% 0,5%	0,4% 0,3% 0,3%	5	.1 -3	23% 28%						5% 4%				16%		7%	69	% 79	% 13 % 11	1%			1% 1%	2% 1	1% 1%	67% 66% 68%	1 110 1 037 1 071	76% 76% 75%	1 614 1 622 1 593	47% 45% 52%	2 195 2 056 2 37	5 81% 0 81% 7 81%	1 600	709 6 629 6 669	6 1 20 6 95 6 1 06	4 69% 4 67% 0 67%	11	125 194					14% 15%	18% 18% 19%		68% 66% 66%								
9.05 6.05 3.05	-0, 12% 0, 35% -0, 30%	17% 19%	41% 39%	12% 15%	50% 48%	12%	38%	0,3	3% 11	6% 4 1% 3	41% 39%	4% -1%	28% 27%	6 10	1% 1 1% 1	7%	1% 0%	16%	74%		111 108 -	0,0%	0,2% 0,1% -0,1%	3	.9 .0																							67% 67%	1 121 1 104	75% 75%	1 644 1 658	51% 50%	2 052	2 81% 6 81%	1 62	1 619 5 639	6 1 02 6 1 00 6 1 04	8 68% 8 66%	11	176					17%	21% 22% 21%		63% 58% 56%								
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12.03	0,00% 0,00% he darke		olour, th	he grea	46%	8%	38%	0, 19	9% 12	2% 3	37%	4%	26%	6 7	r% 1	8%	0%	13%			100	0,0%	0,1%	3	.7	trend.	Credi	-to-GI	DP ga	ıp: dev	iation	of cre	edit-to-0	GDP r	ato fro	m its	long-to	erm tre	and. C	5: the	o overa	ill shar	re of th	e five in	nstitutio	ins that h	nave ti													er. HH	II: Her	findahl	I-Hirsch	hman ir	ndex.	U%		56% 55%								

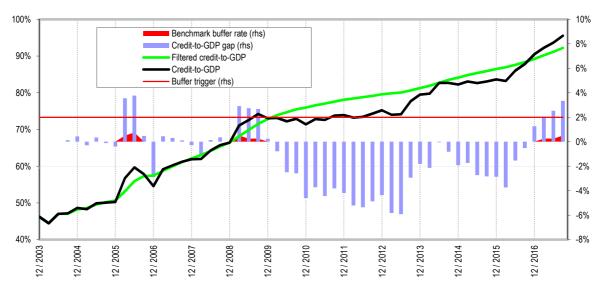
<sup>1)</sup> The date on LTV ratios for reviews for the princip 2004-2008 are blasted on an export extendior, 2) Cyclogram from senters are instruction. 2) Cyclogram from senters are instruction of the princip bearing and the princi

Due to revised national accounts data and therefore revised GDP data (released by SO SR, november 2017), historical data of the respective indicators in the table based on GDP data were changed in comparison with previous Quarterly Commentary on Macroprudential Policy - October 2017.

### B) Countercyclical capital buffer

Deviation of the credit-to-GDP ratio from its long-term trend<sup>13</sup>

**Chart 1 Credit-to-GDP gap** 



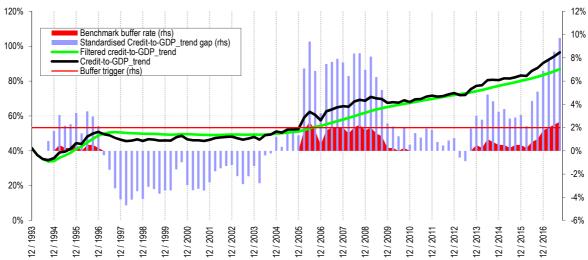
Source: NBS, SO SR.

Credit-to-GDP gap is estimated on outstanding amount of debt of NFCs and households.

Countercyclical capital buffer trigger values and gap values are shown on the right-hand scale.

Since the October 2017 QCMP, the credit-to-GDP gap values have been adjusted due to the SO SR's November 2017 revision of the national accounts and related revision of GDP figures.

Chart 2 Credit-to-GDP<sub>trend</sub> gap



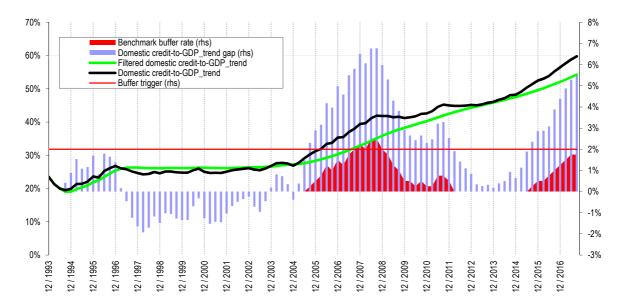
Source: NBS, SO SR.

Credit-to-GDP $_{trend}$  gap is estimated on outstanding amount of debt of NFCs and households. Data within time frame 1993 – 2002 for foreign debt of NFCs are estimated according to development of domestic debt of NFCs. Countercyclical capital buffer trigger values and gap values are shown on the right-hand scale.

Since the October 2017 QCMP, the credit-to-GDP<sub>trend</sub> gap values have been adjusted due to the SO SR's November 2017 revision of the national accounts and related revision of GDP figures.

 $<sup>^{13}</sup>$  The buffer guide calibration made in accordance with with ESRB Recommendation No ESRB/2014/1 of 18 June 2014, Annex, Part II.

Chart 3 Domestic credit-to-GDP<sub>trend</sub> gap<sup>14</sup>



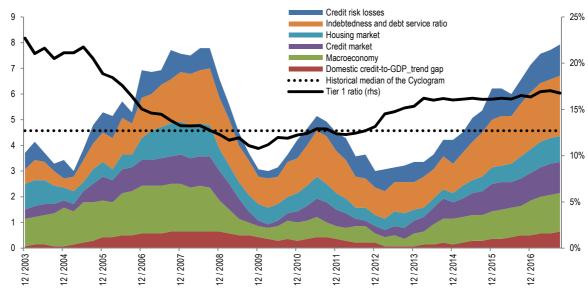
Source: NBS, SO SR.

Domestic credit-to-GDP gap is estimated on credit provided by domestic banking sector to NFCs and households.

Countercyclical capital buffer trigger values and gap values are shown on the right-hand scale.

Since the October 2017 QCMP, the domestic credit-to-GDP<sub>trend</sub> gap values have been adjusted due to the SO SR's November 2017 revision of the national accounts and related revision of GDP figures.





Source: NBS, SO SR and CMN.

Since the October 2017 QCMP, the Cyclogram values have been adjusted due to the SO SR's November 2017 revision of the national accounts and related revision of GDP figures.

<sup>14</sup> Ratio pursuant to Article 33g(2)(a) of the Banking Act; calculation made in accordance with ESRB Recommendation No ESRB/2014/1 of 18 June 2014 on guidance for setting countercyclical buffer rates, part B2.

part B2.

15 Pursuant to Article 33g(1c) of the Banking Act; calculation made in accordance with ESRB Recommendation No ESRB/2014/1 of 18 June 2014 on guidance for setting countercyclical buffer rates, parts C and D.

Table 4 Buffer guide for the countercyclical capital buffer as at 30 September 2017

Indicator	Buffer guide	Debt/GDP ratio	Deviation of the credit- to-GDP ratio from its long-term trend
Credit-to-GDP gap (Chart 1)	0.50%	95.6%	3.35%
Credit-to-GDP <sub>trend</sub> gap (Chart 2)	2.50%	95.6%	9.71%
Domestic credit-to-GDP <sub>trend</sub> gap (Chart 3)	1.75%	59.2%	5.50%
Cyclogram (Chart 4)	2.50%		

Source: NBS.

Note: Due to the shortage of time series, the Credit-to-GDP gap indicator does not actually perform as a reliable buffer guide indicator.