LIETUVOS BANKAS
EUROSISTEMA

# COUNTERCYCLICAL CAPITAL BUFFER

BACKGROUND MATERIAL FOR DECISION

2017

June

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# Abbreviations

| | |
|---|---|
| CCB | countercyclical capital buffer |
| ECB | European Central Bank |
| EEA | European Economic Area |
| ESRB | European Systemic Risk Board |
| GDP | gross domestic product |
| MFI | monetary financial institutions (banks and credit unions) |
| RE | real estate |

The publication has been prepared by the Economics and Financial Stability Service of the Bank of Lithuania.
It is available in PDF format on the Bank of Lithuania website www.lb.lt.

Unless otherwise indicated, data up to 31 March 2017 was used.

Periods indicated in chart subtitles also include end-of-period (year, quarter, etc.) data.

## Decision basis for setting the countercyclical capital buffer rate

**On 30 June 2017, the Board of the Bank of Lithuania took a decision to set the CCB rate at 0 per cent. The decision was based on leading and additional indicators for setting the CCB, as well as the analysis of the lending and RE markets.**

**Early warning indicators of the need to raise the CCB rate do not show any imbalances so far. Nevertheless, the loan portfolio continued to grow fast, housing prices were on the rise, while the role of credit in the housing market increased gradually. Despite the fact that the growth of the Lithuanian economy accelerated at the end of 2016 and the nominal GDP rose by more than 7 per cent in the first quarter of 2017, if the trends of robust growth in the lending and housing market persist, the build-up of cyclical risk would also increase the need for a counter-cyclical capital buffer.**

**Both the corporate and household sectors contributed to strong credit growth (of more than 8% per year) to a similar extent in the first quarter of 2017. In their financing plans, banks indicate that annual growth of loans to enterprises and households in both 2017 and 2018 is likely to remain slightly less robust, at 6 per cent. Private non-financial sector indebtedness to banks and credit unions continued to be relatively insubstantial – the ratio of household and corporate loan portfolio to annual GDP was 43.1 per cent at the end of the first quarter of 2017. With lending increasing, the role of credit in the housing market strengthened gradually. In the last quarter of 2016, the annual growth in housing prices accelerated to more than 9 per cent. Housing market activity remained high in early 2017, however, it should be noted that in April the number of housing deals dropped by more than 10 per cent.**

**Different early warning and other indicators suggest a low probability of a systemic crisis of banks and no credit and RE market imbalances so far. While Lithuania's current account deficit widened somewhat in the fourth quarter of 2016, it was just –0.89 per cent. Moreover, at the beginning of the first quarter of 2017, the MFI loan-to-deposit ratio was 106.5 per cent, remaining below the long-term average (119.0%) and decreasing gradually for the third consecutive quarter.**

*** Resolution No 03-91 of the Board of the Bank of Lithuania of 28 June 2017 on the application of the countercyclical capital buffer.**
**** The calculation of this rate is based on deviations of the credit-to-GDP ratio from its long-term trend, taking into account, *inter alia,* the domestic credit growth and the ESRB recommendations currently in effect. For more information, see the Bank of Lithuania Occasional Paper No 5, 'Application of the Countercyclical Capital Buffer in Lithuania'.**

## LENDING AND REAL ESTATE MARKET DYNAMICS

**The portfolio of loans to enterprises and households[1] continued to expand in the first quarter of 2017; the country's economic expansion accelerated at the same time.** The portfolio of credit institution loans to enterprises and households was larger by 8.2 per cent in March 2017 than a year ago. Accelerated expansion of the domestic economy towards the end of 2016, an increase in inflation, and the pace of credit growth similar to that in the previous quarter contributed to a slight widening of the gap between the credit-to-GDP ratio and its long-term trend in the last quarter of 2016, after it narrowing in the first three quarters of 2016: the gap was –4.9 per cent and –14.9 per cent respectively subject to the assessment method.[2]

**Non-financial undertaking and household borrowing grew at similar rates.** At the end of the first quarter of 2017, the portfolio of loans to non-financial undertakings was by 8.0 per cent and to households – by 8.5 per cent larger year on year. The most significant contribution to growth in the portfolio of loans to households stemmed from mortgage loans. Year on year the portfolio of housing loans grew by 7.6 per cent. As at March 2017, approximately 26 per cent more of housing loans had been granted year on year. Annual growth rate of loans for consumption remained strong (11.6%).

**Good financial situation of the private sector, growing household income, and the application of the Responsible Lending Regulations limit the risk of over-indebtedness; however, if the current robust credit growth persists, it may precondition an increase in cyclical systemic risk in one year.** Over 2016, the income and operating profits of non-financial undertakings were on the rise, while the burden of their obligations and liquidity level were stable.[3] The results of the survey of enterprises conducted by the Bank of Lithuania early this year indicate[4] that

[1] MFI balance-sheet statistics data adjusted for the removal of MFIs facing bankruptcy from statistics and other technical factors is used. For more information, see Annex 2 'MFI loan portfolio adjustment for technical factors' of the December 2014 Lithuanian Economic Review (https://www.lb.lt/en/publications/lithuanian-economic-review-december-2014).
[2] According to the ESRB recommendation (ESRB/2014/1), the Bank of Lithuania calculates the gap using two methods: the standardised Basel method, defined in the first part of the Annex to this recommendation, and by applying the credit-to-GDP forecast which is a more suitable method for the data on Lithuania. The latter differs from the standardised Basel method in that the long-term trend is calculated by extending the ratio forward using a 4-quarter weighted average. For more information, see N. Valinskytė and G. Rupeika, 'Leading Indicators for the Countercyclical Capital Buffer in Lithuania', Occasional Paper Series, Bank of Lithuania (http://www.lb.lt/lt/leidiniai/no-4-leading-indicators-for-the-countercyclical-capital-buffer-in-lithuania)
[3] The income and operating profit of non-financial undertakings earned in 2016 were by 2.6 per cent and 1.2 per cent higher year on year. The equity capital-to-assets ratio was 57.1 per cent, while the liquidity-reflecting ratio between short-term assets and short-term liabilities was 155.9 per cent. Both indicators remained almost unchanged over the year.
[4] See https://www.lb.lt/en/publications/review-of-the-survey-of-enterprises-2017-1

an increasingly larger share of enterprises intend to apply to credit institutions for a loan. Bankruptcy proceedings initiated continued to grow in number (over 2016 – by 25.9%) and the total ratio between enterprises against which bankruptcy proceedings have been initiated and total enterprises registered in Lithuania (3.8%) approached the record level recorded in 2009 (4.0%). These bankruptcy number developments were mainly related to administrative changes in the bankruptcy process. Strong wage growth improved the household situation.[5] While the credit-to-GDP gap continues to be negative and the private sector's financial situation – robust, a prolonged high growth rate of housing prices and of the credit market would precondition the build-up of cyclical imbalances. In that case, the need for increasing the counter-cyclical capital buffer would arise accordingly.

**Housing market activity in Lithuania gradually increased; however, the latest (April) data indicate a rather significant annual decline in the housing market activity.** Transactions concluded in the Lithuanian RE market over the first quarter of 2017 increased by 6.6 per cent in number year on year. The number of housing deals grew the most over the year (8.4%); however, within other market segments, more RE objects were also assigned: land plot transactions grew by 6.3 per cent, commercial property transactions – by 3.0 per cent. According to the latest data from Statistics Lithuania, annual increase in house prices in Lithuania was 9.5 per cent in the fourth quarter of 2016. In geographical terms, house price developments were basically even: housing in Vilnius and in other parts of the country rose in price by 10.7 per cent 8.4 per cent respectively. Nevertheless, according to April data, housing deals concluded in Lithuania declined by 12 per cent year on year. Housing price changes announced by market participants indicate that the rate of price growth has recently decelerated somewhat. As consumer prices started rising more rapidly, real house prices in Vilnius, Kaunas and Klaipėda, according to *UAB Ober-Haus* data, dropped in April for the third consecutive month. The significance of borrowed funds within the housing market increased over the first quarter of 2017. New housing loans accounted for 69.1 per cent of the value of total housing deals.[6] This indicator rose by 1.9 p.p. over the quarter and by 4.8 per cent over the year.

**The demand for new flats within the primary housing market remained unchanged over the quarter, but the number of completed single family homes grew significantly.** According to the data of market[7] participants, at the end of the first quarter of 2017, 4.6 thousand flats were offered for acquisition in Lithuania's primary flat market – the same amount as in the previous quarter, but 3.5 per cent more than a year ago. 1.3 thousand new flats were sold in the primary market during the reference period; consequently, with the demand not declining, RE developers would sell available flats sooner than within a year. Moreover, the number of completed single family homes went up recently: the building of 3.3 thousand of them was completed in Lithuania over the last quarter of 2016. New supply of single family homes increased by 64.5 per cent year on year – to the highest figure since 2000 overall.

**Within the commercial RE market, rental prices remained basically unchanged in the first quarter, while the office buildings' vacancy rate rose amid increasing supply of new office space in the first quarter of 2017.** Having opened two new business centres, the office area in Vilnius to let increased by 2.1 per cent over the quarter. The office vacancy rate in Vilnius currently stands around 7 per cent. If the demand for new offices in Vilnius does not increase significantly, office prices may go down within one to two years, as a substantial increase in supply is projected during the same period.

## ASSESSMENT OF THIRD COUNTRY MATERIALITY FOR LITHUANIA'S BANKING SECTOR

**The aim is that all EU financial institutions, in calculating their CCB[8], apply the same country-specific CCB rates.** This is necessary in order to ensure the efficiency of the application of macroprudential regulation and equal market conditions, as many EU financial institutions also operate outside their home country. Hence Capital Requirements Directive IV sets forth the mandatory recognition of CCB rates up to 2.5 per cent in the EU, Member States are obliged to recognise the CCB rates in excess of 2.5 per cent applied in other EU countries[9], whereas the CCB rates for exposures in third countries are applied in a coordinated manner.[10] The ESRB monitors and assesses the setting of CCB rates in third countries material for the entire EU banking sector and obligates Member States to monitor the development of cyclical risk for the financial sector and the setting of the CCB in other third countries material for their banks.

**The significance of third countries (due to the CCB) for the Lithuanian banking sector is assessed annually by mid-year, applying ESRB methodology (for more information, see Annex 3.).** This methodology is based on the monitoring of three metrics reflecting the banking sector's credit exposures to the private non-financial sector. Monitored indicators – risk-weighted exposure amount, exposure (unweighted) amount, and defaulted exposure amount. A

[5] Net wages and salaries rose by 8.9 per cent, while unemployment fell from 8.8 per cent to 7.6 per cent over 2016.
[6] Sources: State Enterprise Centre of Registers and Bank of Lithuania calculations.
[7] *UAB Eika.*
[8] Calculation of the CCB for an institution is provided for in section four of the Rules for the Formation of Capital Buffers, approved by Resolution No 03-51 of the Board of the Bank of Lithuania of 9 April 2015 (https://www.lb.lt/uploads/documents/files/musu-veikla/Finansinis-stabilumas/Kapitalo%20rezervo%20sudarymo%20taisyklės.pdf).
[9] Recommendation of the ESRB (ESRB/2014/1) of 18 June 2014 on guidance for setting countercyclical buffer rates (http://www.esrb.europa.eu/pub/pdf/recommendations/2014/140630_ESRB_Recommendation.en.pdf).
[10] Recommendation of the ESRB (ESRB/2015/1) of 11 December 2015 on recognising and setting countercyclical buffer rates for exposures to third countries (http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX: 32016Y0312(01)).

country is identified as material in terms of the CCB, if, according to any of these metrics, exposures in a country amount to at least 1 per cent of all exposures within a specific category (including exposure in Lithuania). In order to reduce the impact of one-off data fluctuations, not only the values of the last two quarters but also average longer-term (8 -quarter) values are taken into account.

**In 2017, one third country – the Russian Federation – was identified as material to the Lithuanian banking sector in the context of the application of the CCB.** Lending from Lithuanian banks beyond the country is limited[11]. Nonetheless, the share of defaulted exposures in two third countries – the Russian Federation and Panama – is slightly above a 1 per cent limit set in the methodology (compared to such exposures in all countries, including Lithuania)[12]. At the end of 2016, defaulted exposures in Russia stood at EUR 8.3 million and were basically concentrated in one bank. Several other banks operating in Lithuania also held property in Russia, although the amounts are relatively small (up to EUR 1.4 million with single institutions) and the liabilities under almost all these exposures were met. Given the quantitative criteria specified in the methodology as well as the fact that exposures in Russia are characteristic of several banks operating in Lithuania, the Russian Federation is considered a material country for the Lithuanian banking sector because of the CCB. Since, according to the ESRB, Russia is a material third country for the EU banking sector as a whole, the development of cyclical risk and the setting of a CCB rate in this country is monitored by the EU in a centralised manner, i.e. additional monitoring by the Bank of Lithuania is unnecessary.

**Having taken into account additional information, Panama has not been added to the list of material third countries, although officially this country exceeds the criteria set in the methodology.** Firstly, a number of international organisations (such as the International Monetary Fund, Organisation for Economic Cooperation and Development) name Panama as an offshore financial centre; it is therefore likely that the exposures in Panama are only related to enterprises registered in that country rather than those engaged in activities. In that case, monitoring of cyclical risk in Panama would make no sense. Moreover, lending in Panama is not a systemic phenomenon – it is relatively small exposures of one bank (accounting for 0.12% of an institution's not risk-weighted exposure amount) related to the solution of issues of non-performing loans to one enterprise. Other banks do not have exposures in Panama.

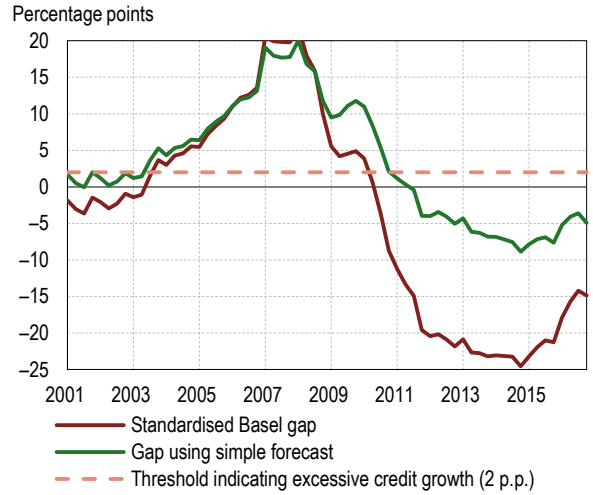
[11] According to the end-2016 data, when lending to foreign residents, the share of exposures (both original and risk weighted) was below 2.6 per cent, of which in third countries – not above 0.7 per cent.

[12] The Russian Federation: in the third quarter of 2016 – 1.4, in the fourth quarter of 2016 – 1.6, the average for eight months – 1.2 per cent; Panama: in the third quarter of 2016 – 1.4, in the fourth quarter of 2016 – 1.5, average – 1.1 per cent. The increase in these relative indicators in the third and fourth quarters of 2016 was determined by the fact that the total amount of defaulted exposures was tilted to the downside (mainly – due to the decline in such poor quality exposures in Lithuania).

# Annex 1. Housing market and credit trends

***Chart 1. Gap between the credit-to-GDP ratio and its long-term trend***

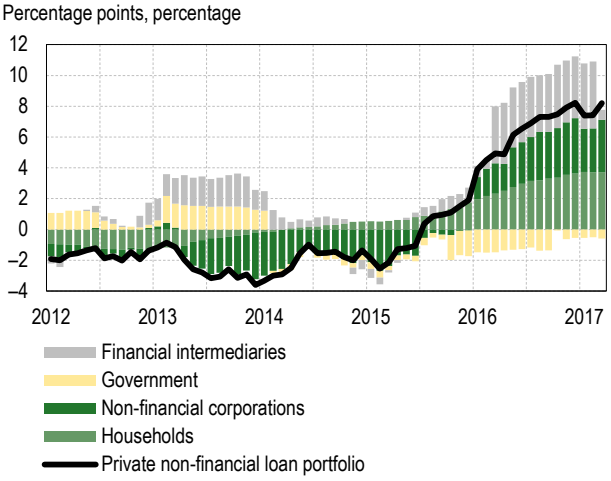
*(Q1 2001–Q4 2016)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*

***Chart 2. Contributions to MFI loans to the private non-financial sector***

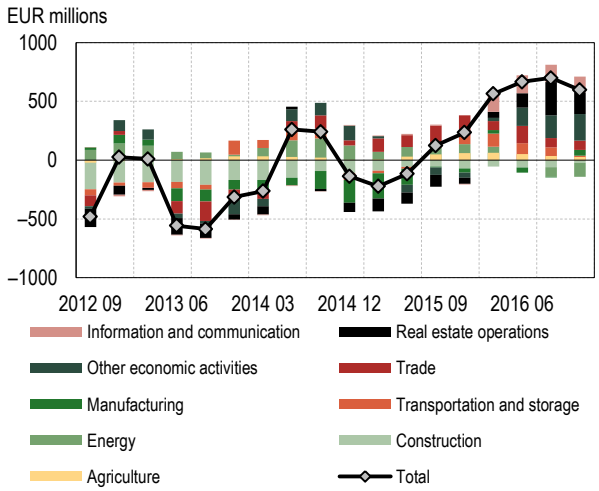
*(January 2012–March 2017)*




*Source: Bank of Lithuania calculations.*

***Chart 3. Annual developments of MFI loans to non-financial undertakings***

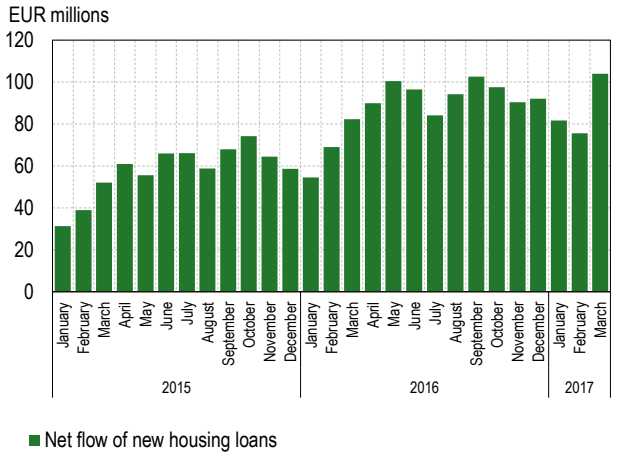
*(Q3 2012–Q4 2016)*




*Source: Bank of Lithuania calculations..*
*Note: Names of some economic activities are abbreviated.*

***Chart 4. Flow of new housing loans***

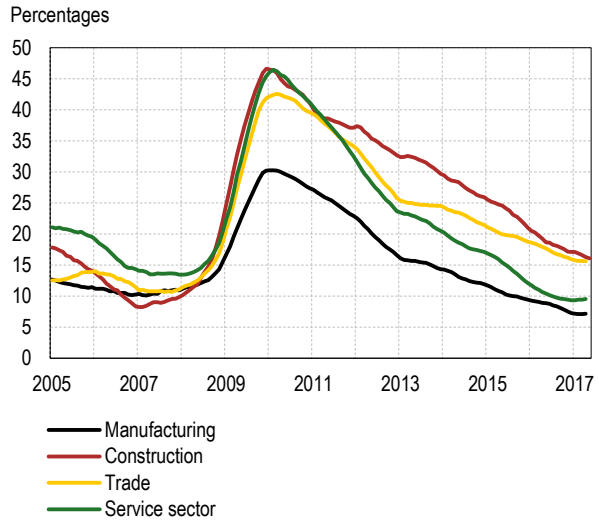
*(January 2016–March 2017)*




*Sources: ECB and Bank of Lithuania calculations.*

***Chart 5. Share of companies whose activities are curbed by financial difficulties***

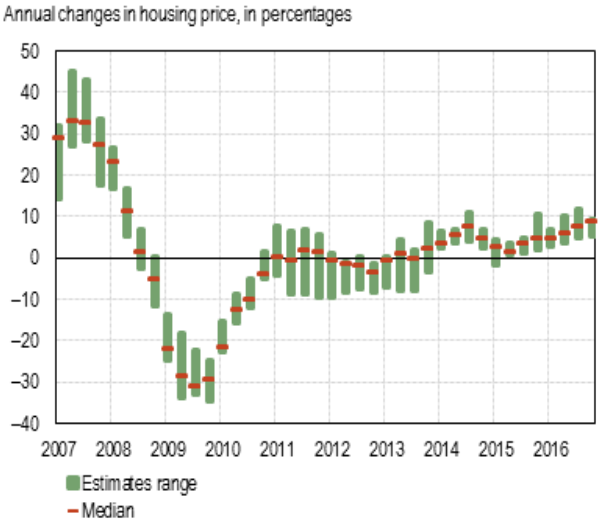
*(January 2005–April 2017)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*

***Chart 6. Annual growth in house prices according to different sources***

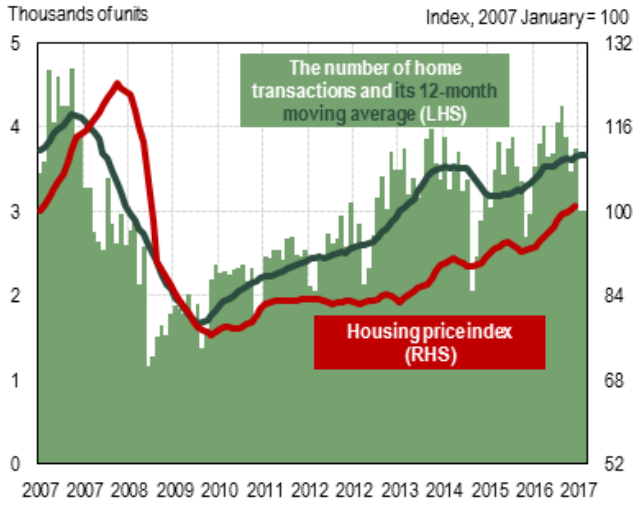
*(Q1 2007–Q4 2016)*




*Source: State Enterprise Centre of Registry, Statistics Lithuania, UAB „Ober-Haus", Aruodas.lt and Bank of Lithuania calculations.*

***Chart 7. Real estate market activity and price indices***

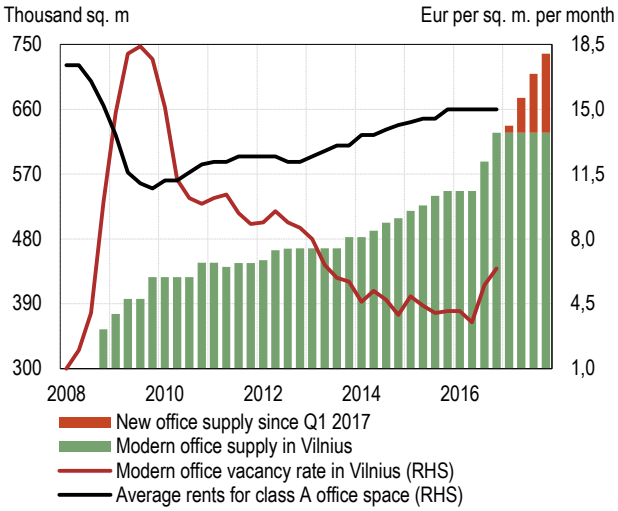
*(January 2007–April 2017)*




*Sources: State Enterprise Centre of Registers, Statistics Lithuania and Bank of Lithuania calculations.*

***Chart 8. Supply of modern offices, rental prices, and vacancies in Vilnius***

*(Q1 2008–Q1 2017)*

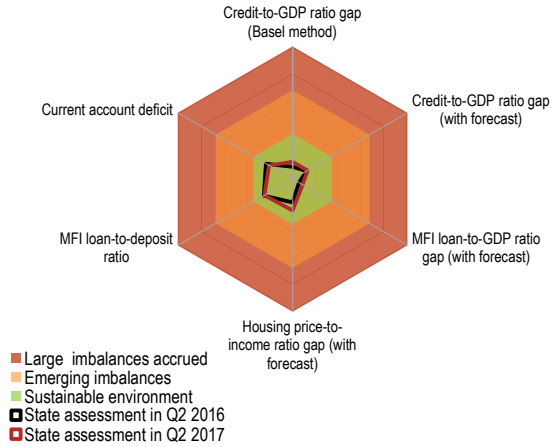



*Sources: UAB „Ober-Haus", „biuraivilniuje.lt", „realgame.lt" and Bank of Lithuania calculations.*

## Annex 2. CCB reference rates and indicators warning of the need to raise the CCB rate

***Chart A. Evaluation of credit market imbalances based on leading and additional indicators***

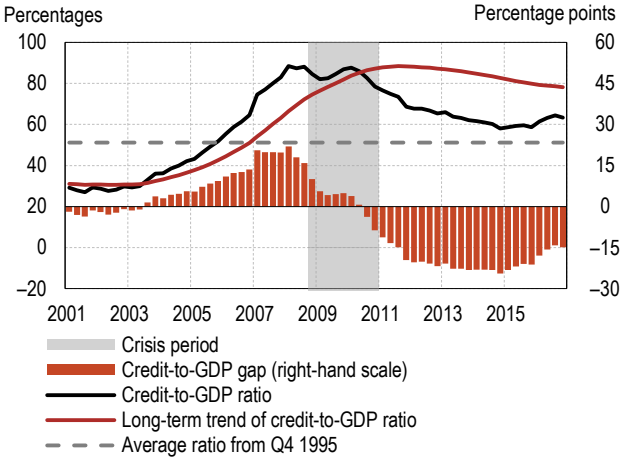
*(evaluation carried out in Q2 2017)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*
*Note: axes are scaled according to the range of a particular indicator: from its minimal value up to the maximal value.*

***Chart B. Leading indicator I: Credit to the private non-financial sector-to-GDP ratio gap (calculated using the standardised Basel method)***

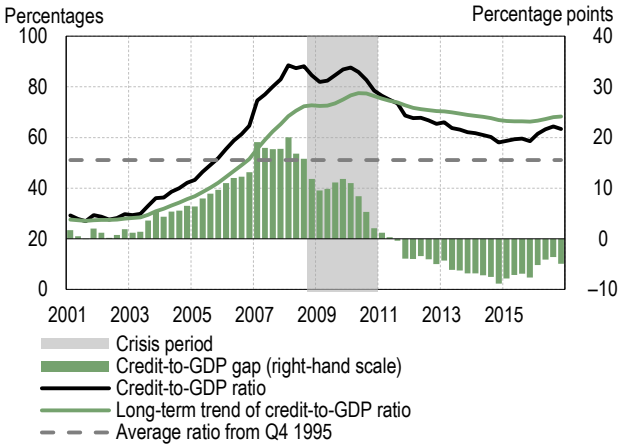
*(Q1 2001–Q4 2016)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*
*Note: long-term trend is computed using a one-sided HP filter with a smoothing parameter of 400,000.*

***Chart C. Leading indicator II: Credit to the private non-financial sector-to-GDP gap (calculating using the forecast-augmented method)***

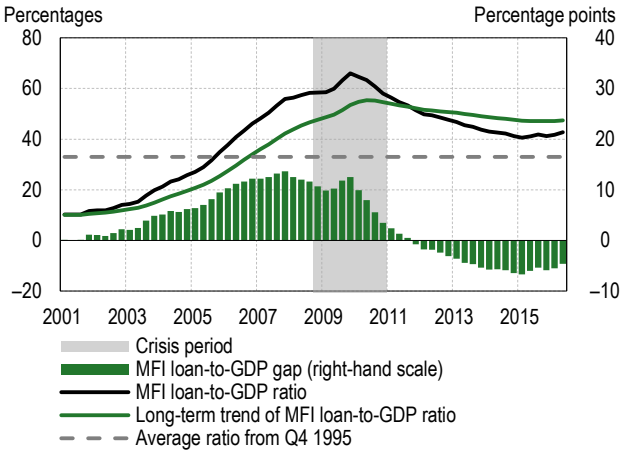
*(Q1 2001–Q4 2016)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*
*Note: the long-term trend is computed by applying a one-sided HP filter with the smoothing parameter of 400,000; before applying the filter, the ratio is modelled for the next five-year window using a four-quarter weighted average.*

***Chart D. Additional indicator I: MFI lending to the private non-financial sector-to-GDP ratio gap (calculated using the forecast-augmented method)***

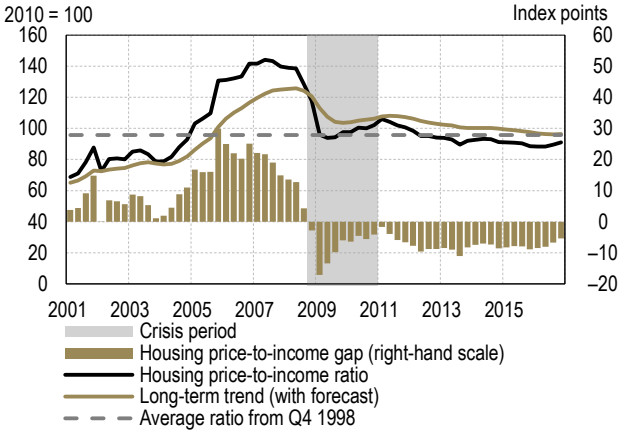
*(Q1 2001–Q1 2017)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*
*Note: the long-term trend is estimated by applying a one-sided HP filter with the smoothing parameter 400,000; before applying the filter, the ratio is modelled for the next five-year window using a four-quarter weighted average.*

***Chart E. Additional indicator II: Housing prices-to-household income ratio gap (calculated using the forecast-augmented method)***

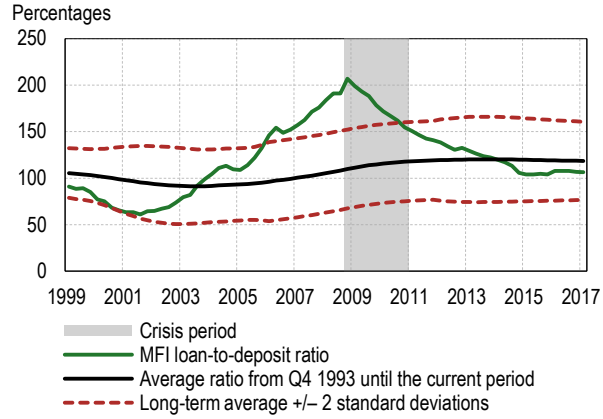
*(Q1 2001–Q4 2016)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*
*Notes: 1) income – household wages and salaries; 2) the long-term trend is estimated by applying a one-sided HP filter with the smoothing parameter 400,000; before applying the filter, the ratio is modelled for the next five-year window using a four-quarter weighted average.*

***Chart F. Additional indicator III: Ratio of MFI lending to the private sector and private sector deposits (after eliminating seasonal effects)***

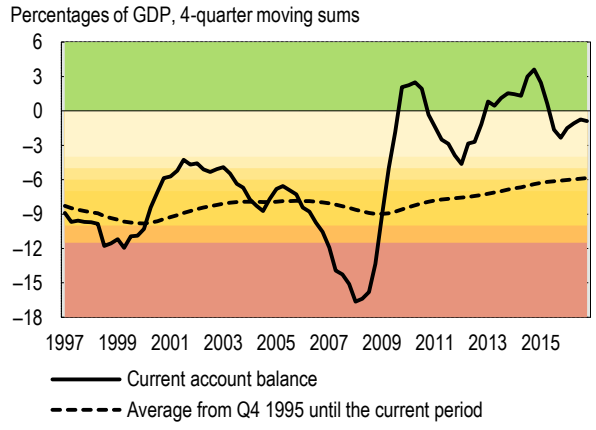
*(Q1 1999–Q1 2017)*




*Source: Bank of Lithuania calculations.*
*Note: the ratio develops in a balanced way if it does not deviate from its long-term average by more than two standard deviations. Standard deviation is computed on the basis of data covering the period of moderate changes in the ratio, excluding Q2 2016–Q4 2011 data.*

***Chart G. Additional indicator IV: Current account balance (4-quarter moving sums)-to-GDP ratio***

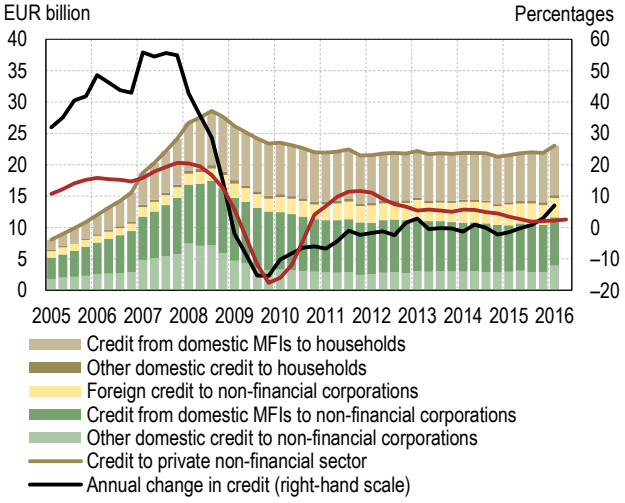
*(Q1 1997–Q4 2016)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*
*Note: colours indicate different levels of risk which have been set based on Reinhart S. M. and V. R. Reinhart (2008): "Capital flow bonanzas: An encompassing of the past and present", NBER working paper, 14321.*

***Chart H. Credit and nominal GDP moving dynamics***

*(Q1 2005–Q4 2016; nominal GDP dynamics – until Q1 2017)*




*Sources: Statistics Lithuania and Bank of Lithuania calculations.*

## Annex 3. Methodology for the assessment of third country materiality for the Lithuanian banking sector

Assessment of third country materiality for the Lithuanian banking sector, monitoring of material third countries identified, communication of results, notification of the ESRB and other related institutions is carried out according to the internal rules of the Bank of Lithuania, prepared on the basis of Recommendation of the ESRB (ESRB/2015/1) of 11 December 2015 on recognising and setting countercyclical buffer rates for exposures to third countries.[13] The Bank of Lithuania, annually by the end of the second quarter, identifies third countries material of the Lithuanian banking sector by applying methodology set by Decision of the ESRB (ESRB/2015/3) of 11 December 2015 on the assessment of materiality of third countries for the Union's banking system in relation to the recognition and setting of countercyclical buffer rates[14]:

1. Material third countries must be identified based on data from reports, collected for supervisory purposes, on three types of exposure: risk-weighted exposure amount, original (unweighted) exposure; and defaulted exposure.

2. Third country must be identified as material for the Lithuanian banking sector and put on the list of material third parties, when the following two conditions are satisfied:

2.1. the average exposure in the third country, calculated as the arithmetic mean of exposures to the third country in the eight months preceding the reference date was at least 1 per cent for at least one of the metrics listed in paragraph 1;

2.2. the exposures in the third country in each of the two quarters preceding the reference date were at least 1 per cent for at least one of the metrics listed in paragraph 1.

3. A country shall be deleted from the list of material countries where the following two conditions are satisfied:

3.1. for all types of exposure provided in paragraph 1, the average exposure in that country, calculated as the arithmetic mean of exposures in twelve quarters preceding the reference date, was below 1 per cent of total exposures of a respective type;

3.2. for all types of exposure provided in paragraph 1, the exposure in a third country in each of the two quarters preceding the reference date was below 1 per cent of total exposures of a respective type.

Where there is reasonable proof that the indicators set out in sub-paragraphs 2.1, 2.2, 3.1 and 3.2 do not adequately reflect a third country's materiality for the Lithuanian banking sector and that the final debtor's jurisdiction does not coincide with an exposure's jurisdiction, when identifying materiality of the third country, expert assessment may be applied.

[13] See 10 footnote 10.
[14] OJ 2016 C 97, p. 11. Internet access: http://eur-lex.europa.eu/legal-content/LT/TXT/?uri=CELEX:32016Y0312(03).