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Quarterly assessment of the financial cycle in Lithuania

**March
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Periods indicated in charts include data for the respective year, quarter, etc.
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Introduction

The quarterly assessment of the financial cycle in Lithuania (formerly – the Credit and Real Estate Market Review) is a quarterly publication issued by the Bank of Lithuania that assesses the state of the financial cycle in Lithuania and the level of cyclical systemic risk: the sustainability of trends in the credit and real estate markets, imbalances in the financial sector and the risk of their build-up or widening. The information provided in this review forms the basis for a regular assessment of the level of the rates of the financial stability instruments used, such as the counter-cyclical capital buffer and the sectoral systemic risk buffer for the housing loan portfolio.¹

Explanation of the key terms used in this publication:

Financial cycle. *The financial cycle refers to the development cycle of the financial system, comprising four phases: expansion (growth), deceleration, recession and recovery, defined by the overall evolution of the various indicators of the financial system (in particular, those reflecting trends in the credit and real estate markets), which are related, for example, to the perception of the value of financial assets and real estate, the perceived level of risk, the tightening or relaxation of lending standards and the resulting impact on the supply of credit, and the interplay between these phenomena. The literature generally considers that the financial cycle tends to last longer than the business cycle and can significantly amplify economic booms and deepen recessions. The application of the CCyB aims at increasing the resilience of the financial system and, to some extent, reducing its pro-cyclicality and, within the meaning of financial cycle, at reducing the size of fluctuations in the financial cycle, especially in the recession phase.*

Systemic risk. *Systemic risk is the risk of a disruption to the financial system or a part of the financial system, which could have significant negative consequences for the financial system and the economy. Two types of systemic risk are generally distinguished: cyclical and structural risks. Cyclical risk is related to the evolution of the financial cycle: it rises and falls as the financial cycle unfolds and is usually associated with changes in the supply of credit and in the risk assessment of financial system participants. Structural (systemic) risk arises from the structural features of the financial system, such as the interconnectedness of financial system participants, concentration and the specific nature of business models.*

Abbreviations

CCyB – counter-cyclical capital buffer

CRE – commercial real estate

EA – euro area

GDP – gross domestic product

HCPI – harmonised consumer price index

HH – household

HP – Hodrick-Prescott filter

MFI – monetary financial institutions (banks, credit unions)

NFC – non-financial corporation

RE – real estate

¹ <https://www.lb.lt/en/financial-stability-instruments-1>

Key messages

The financial cycle in Lithuania continued to slow in Q4 2023 and aligned with a soft-landing scenario. The annual growth of the private non-financial sector debt remained positive but moderate, while the quality of bank loans remains good. Due to slower borrowing relative to the change in nominal GDP, both bank and broad credit-based financial cycle indices continued to decrease. Indeed, the pace of borrowing by businesses and households changed only slightly during the quarter: nominal growth of broad credit amounted to 8.5%, while consumer credit growth reached 5.7%. Meanwhile, real portfolio loan growth rates became positive due to decreasing annual inflation. The results of the Banking Survey conducted by the Bank of Lithuania indicate that the demand for new loans should essentially remain unchanged, but there is still an expectation of further decline in the housing loan segment. Corporate and household indebtedness remains low, the current account balance is positive, and the loan-to-deposit ratio of banks is moderate (79%).

The portfolio of corporate loans has stabilised at a low growth level. Only the value of newly issued loans is increasing, while their number has significantly decreased. In December 2023, the annual growth rate of the MFI corporate loan portfolio in Lithuania was still slowing down (4.3%). However, it was the sixth highest in the entire euro area (the overall euro area annual change amounted to -0.1%). The decreasing trend is also indicated by the diminishing ratio of the corporate loan portfolio to GDP. The number of newly issued loans in Q4 2023 was one-sixth lower than a year ago, but due to individual larger loans, the flow of new credit increased by more than one-fourth. When evaluating the long-term trend, new corporate lending essentially corresponds to overall economic growth – the ratio of loan flow to annual GDP is 1, and the 10-year average is 1.3%. The Banking Survey indicates that the continued decrease in lending is mainly due to reduced demand from companies themselves as interest rates rise.

Activity in the commercial real estate market is stabilising, but the likelihood of prolonged market stagnation remains significant. After a year-long downturn, the number and volume of CRE transactions have stopped declining, and transaction prices have so far avoided correction. However, the prices of properties in certain segments may be significantly overvalued (e.g. Class A offices in Vilnius are potentially overvalued by about 20%). Price imbalances increase the risk of disorderly correction, which in the event of an economic shock could deepen and prolong the downturn of the financial cycle because nearly a third of bank loans are secured by CRE. Banks' expectations regarding further price developments have become somewhat more optimistic (no bank expects a correction in commercial real estate prices exceeding 10%). However, they were still slightly poorer compared to expectations for the housing market. The reduced risk premium (the difference between CRE and sovereign bond yields remains 2 percentage points below the historical average) continues to dampen investment activity: investment transactions worth €108 million were concluded in the second half of 2023 – more than three times less than in the corresponding period a year ago, and the annual volume of investments has returned to the level of 2017. Moreover, significant refinancing risk persists as borrowing costs reach or even surpass the rental yields of commercial premises. However, despite the tension in the CRE market, the weighted vacancy rate remains low – it stood at 4.6% in Q4 2023 (long-term average – 3.6%).

The annual growth rate of household loans continued to slow down, with fewer new housing loans being issued compared to the previous year. The nominal annual growth of the housing loan portfolio in Q4 2023 remained moderate and decreased to 6.1%, although it was the third fastest in the entire euro area, where the average growth rate was 0.3%. New housing lending continues to decline: in Q4, the flow of new housing loans was 22% lower, and the number of loans was more than a quarter lower than a year ago. The Banking Survey indicated that the declining demand for housing loans, in addition to high levels of interest rates,

is also influenced by the poorer prospects of the housing market and the expectations of residents. Meanwhile, the demand for consumer loans remained essentially unchanged during the quarter. In December 2023, the annual growth of MFI consumer loan portfolios for Lithuanian residents (19.5%) continued to be one of the fastest in the euro area (where the average growth rate was 2.1%), and the flow of new consumer loans in Q4 2023 for Lithuanian residents was almost one-fifth higher than a year ago. Despite this, there are no household credit imbalances, with the gap in the ratio of HH loans to GDP remaining negative and broadly unchanged from the long-term trend.

Despite the continued modest activity in the housing market, the pace of housing price growth continues to slow down. However, there are still limited-scale imbalances in housing prices in the market. In Q4 2023, the number of sold houses was the lowest quarterly result since 2012. Due to the decreased demand amid rising interest rates, housing prices continue to increase at a slower pace. Based on various indicators,² their annual growth rate in January 2024 ranged from 2.1% to 4.1%. However, the housing market cycle in Lithuania is slightly higher than the euro area average, where a 2.2% annual price decline was recorded in Q3 2023. Limited-scale imbalances in housing price levels are still apparent: based on the median of six different estimates, prices are overvalued by about 4.3%. Prices continue to be overvalued due to accelerated real housing price growth and recently faster growth in housing sales compared to rental prices. Banks' expectations regarding residential RE prices remain essentially unchanged: most banks expect a relatively small decrease in prices, up to 10%, over the next year.

At present, there is a 1% CCB rate in place, which, as the financial cycle slows down and economic activity decreases, ensures that credit institutions maintain a capital reserve that could be released in case of an economic shock or the appearance of cyclical risks. The slowdown in the financial cycle is primarily driven by reduced demand, while the quality of loan credit remains historically good. Therefore, there are no signs that banks' lending capabilities are overly restricted. The relaxation of the CCB requirements could be considered in situations where challenges to the economy, financial market shocks, or deteriorating loan quality significantly impact the financial sector and could lead to a decrease in overall credit supply to the economy. Currently, banks and central credit union groups have accumulated capital reserves exceeding 1%. The CCB requirement, and the projected high profitability of the banking sector, due to rising interest rates, should sustain and further increase this reserve.

² The Bank of Lithuania's repeat sales housing price index and *Ober-Haus* housing price index.

Financial cycle assessment

The financial cycle continued to slow down, with little change observed in the growth rates of both broad and MFI lending during the quarter. Only limited-scale imbalances in housing prices are being observed.

Chart 1. Cyclical risk assessment matrix

Change in financial cycle indicators

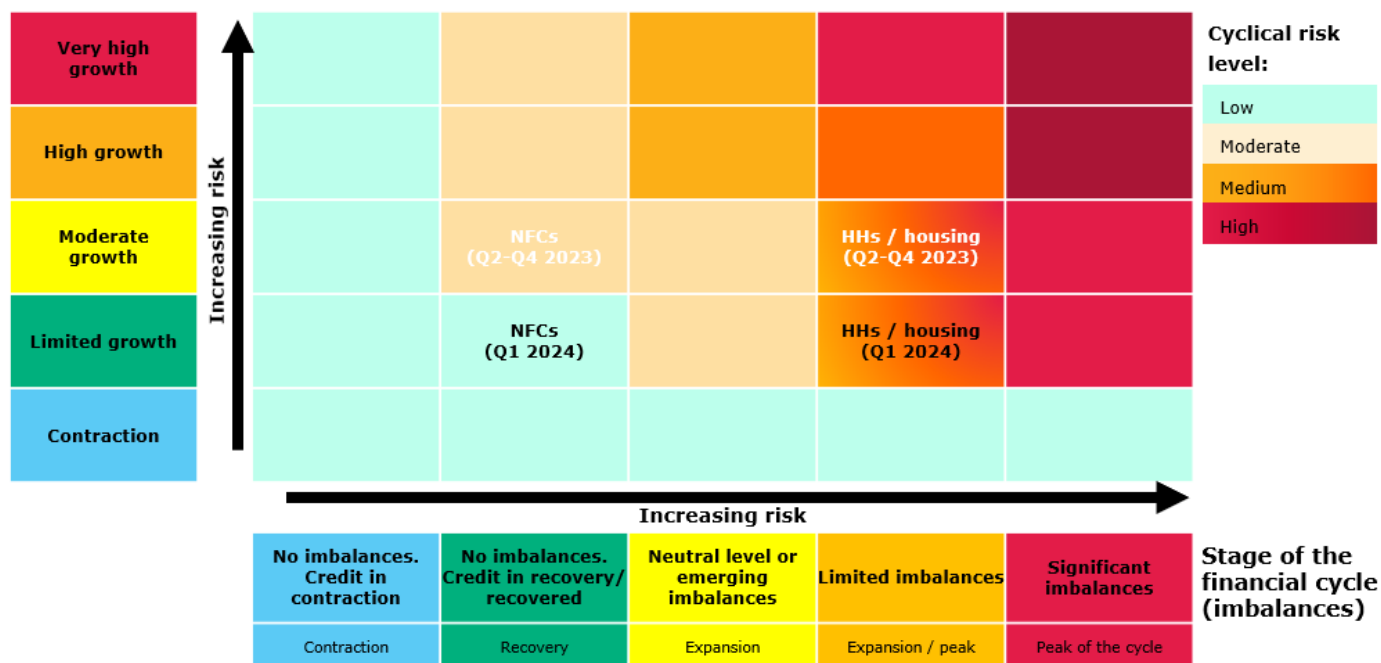


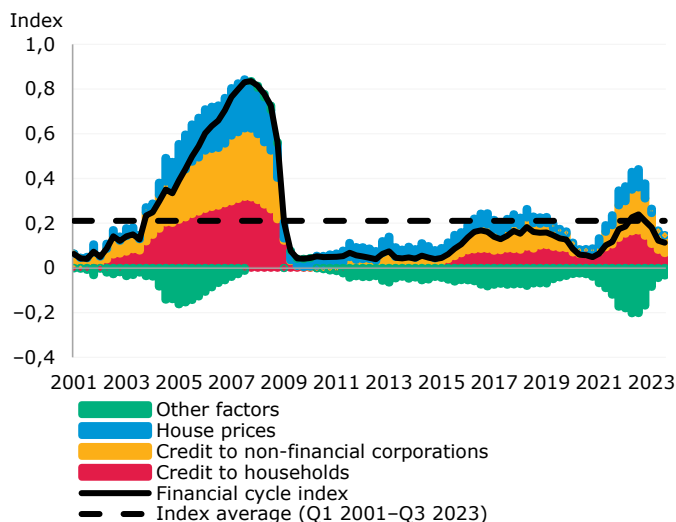
Chart 2. Map of corporate and resident credit growth, credit imbalances, and composite financial cycle indicators. (Q1 2019–Q4 2023, with the most recent data represented by the black dashed line on the right)

	2019				2020				2021				2022				2023			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Non-financial private sector																				
Growth indicators																				
Composite indicators																				
Domestic systemic risk indicator (d-SRI)	0,14	0,16	0,20	0,24	0,30	0,40	0,42	0,40	0,33	0,29	0,19	0,06	0,01	0,07	0,12	0,16	0,07	0,00	0,00	-0,07
Financial cycle index (new MFI loans)	0,08	0,05	0,04	0,03	0,03	0,03	0,03	0,05	0,07	0,09	0,11	0,14	0,14	0,13	0,13	0,10	0,07	0,06	0,06	0,05
Financial cycle index (broad credit)	0,16	0,15	0,13	0,13	0,09	0,06	0,06	0,05	0,06	0,10	0,12	0,17	0,19	0,23	0,24	0,21	0,18	0,12	0,11	0,11
Band-pass filtered financial cycle indicator	-0,04	-0,04	-0,04	-0,04	-0,04	-0,05	-0,05	-0,05	-0,06	-0,06	-0,06	-0,06	-0,06	-0,06	-0,06	-0,06	-0,06	-0,06	-0,05	-0,05
Difference between private sector debt and GDP annual growth (8-year moving average)	3,13	2,20	1,13	0,72	-2,35	-7,26	-6,72	-6,95	-3,26	1,47	2,77	8,06	8,33	13,72	15,26	10,13	8,03	0,98	0,09	0,09
Nominal and real growth																				
1-year nominal growth of broad credit	9,4	8,4	7,2	6,7	3,5	-1,6	-1,2	-1,5	2,0	6,8	8,2	13,8	14,4	20,2	22,2	17,5	15,8	9,1	8,5	8,5
1-year nominal MFI credit growth	5,3	2,5	3,9	3,2	3,2	-0,5	-1,2	-2,1	-1,4	3,1	5,8	10,7	13,3	14,0	16,0	14,2	10,1	8,1	5,5	5,7
1-year real growth of broad credit	7,2	5,7	4,8	4,6	1,0	-2,2	-2,0	-1,8	1,3	3,5	2,9	4,0	0,4	1,4	0,6	-3,0	-1,0	-1,4	2,5	2,5
1-year real MFI credit growth	3,1	0,0	1,6	1,2	0,7	-1,2	-2,1	-2,4	-2,1	0,0	0,6	1,2	-0,5	-3,8	-4,5	-5,8	-5,9	-2,4	-0,4	3,2
1-year difference of the broad credit-to-GDP ratio	1,0	0,4	-0,6	-0,5	-2,1	-3,7	-2,9	-2,2	0,0	0,0	-0,7	0,3	-1,3	1,5	1,5	-1,0	-0,4	-2,7	-0,5	-0,5
1-year difference of the MFI credit-to-GDP ratio	-1,0	-2,1	-1,7	-1,7	-1,4	-1,9	-1,8	-1,6	-1,3	-1,4	-1,3	-0,9	-1,1	-1,1	-1,1	-1,6	-2,1	-1,9	-1,3	-0,5
Other indicators																				
Relative credit flow indicator	0,04	0,05	0,04	0,04	0,03	0,01	0,01	0,01	0,01	0,00	0,00	0,01	0,01	0,02	0,01	0,00	0,00	0,00	0,00	0,01
1-year difference of broad credit-to-GDP ratio	12,8	9,9	7,0	4,8	0,2	-6,0	-12,0	-17,0	-13,9	-8,8	-0,3	6,0	12,8	19,6	20,8	21,4	14,3	6,3	1,3	-4,2
1-year difference of MFI credit-to-GDP ratio	1,5	-1,6	-2,7	-4,3	-5,5	-6,3	-8,6	-10,5	-12,4	-11,8	-9,6	-5,2	-0,4	2,8	5,5	6,2	4,7	2,4	-1,3	-4,2
Ratio of pure new loans (4 quarters sum) to GDP (4 quarters sum)	9,2	8,6	8,2	7,8	7,1	6,4	6,2	6,9	7,5	8,5	8,8	9,3	9,2	9,3	9,0	8,3	8,4	8,2	8,2	8,2
Ratio of new loans with rollovers (4 quarters sum) to GDP (4 quarters sum)	13,9	12,9	12,3	11,6	11,2	11,6	11,3	12,3	12,4	12,6	13,2	13,7	13,8	13,5	13,1	12,6	12,8	13,2	13,1	13,9
Non-financial private sector credit impulse (loan portfolio, first version)	-1,4	-4,5	2,2	-1,1	0,0	-6,0	-1,1	-1,3	1,0	6,7	3,5	6,5	3,0	0,6	2,2	-2,3	-4,9	-2,4	-3,2	0,2
Non-financial private sector credit impulse (loan portfolio, second version)	-0,9	-6,4	-1,6	-2,9	-2,0	-3,1	-5,2	-5,3	-4,6	3,7	7,0	12,8	14,7	10,9	10,2	3,5	-3,3	-5,9	-10,6	-8,5
Non-financial private sector credit impulse (flow of new loans)	1,2	-4,2	-2,5	-2,5	-1,5	1,4	-1,0	4,1	0,5	0,6	2,5	1,5	0,7	-1,4	-1,3	-2,3	0,9	1,3	-0,2	3,2
1-year difference of the non-financial private sector debt service to income ratio	0,6	-0,6	0,8	0,6	-1,0	-2,1	-1,9	-1,8	-0,8	-0,4	-0,3	0,6	0,2	1,6	1,5	0,6	0,4	-1,1	-0,5	-0,5
Imbalance indicators																				
Gap between the broad credit-to-GDP ratio and its long-term trend (Basel method)	-9,7	-8,6	-9,0	-10,1	-10,8	-11,0	-10,4	-10,7	-9,3	-9,6	-9,6	-9,0	-9,1	-6,7	-6,9	-8,6	-8,2	-7,9	-5,9	-5,9
Gap between the broad credit-to-GDP ratio and its long-term trend (LT method)	-3,4	-2,5	-3,1	-4,2	-4,8	-4,9	-4,3	-4,7	-3,6	-4,1	-4,3	-3,9	-4,2	-2,3	-2,9	-4,6	-4,2	-3,9	-2,3	-2,3
Gap between the MFI credit-to-GDP ratio and its long-term trend (LT method)	-5,3	-5,1	-5,1	-5,6	-5,5	-5,6	-5,4	-5,7	-5,4	-5,6	-5,4	-5,3	-5,2	-5,4	-5,1	-5,5	-5,7	-5,6	-4,8	-4,6
Gap between the broad credit-to-GDP ratio and its long-term trend (State Space method)	-1,2	-0,9	-2,2	-4,3	-6,0	-7,3	-7,7	-9,1	-8,7	-10,0	-11,1	-11,4	-12,6	-11,2	-12,3	-15,2	-15,8	-16,6	-15,6	-15,6
Other indicators																				
Capital adequacy ratio	19,7	19,6	19,0	23,7	23,1	23,1	22,5	24,0	24,5	23,1	22,6	23,5	22,7	21,3	19,9	20,4	20,4	19,9	20,0	20,0
Leverage ratio of banks	7,6	7,6	7,4	8,3	8,2	7,8	7,3	7,4	7,4	6,9	6,8	8,6	6,5	6,0	5,9	5,9	6,2	6,1	6,4	6,4
Loan-to-deposit ratio	96,0	95,7	94,1	92,7	88,1	80,5	76,4	71,2	68,5	68,3	69,7	74,0	77,9	79,8	81,3	80,0	79,1	79,1	78,4	79,1
Current account balance-to-GDP ratio	1,3	1,7	2,4	3,5	4,8	6,2	7,3	7,3	6,6	4,7	3,0	1,1	-1,3	-2,8	-4,3	-5,0	-3,6	-2,0	-0,3	0,4

Note: Indicator values are rounded; some indicators are evaluated based on their percentile values, so in some cases cells of these indicators with the same value may be coloured differently.

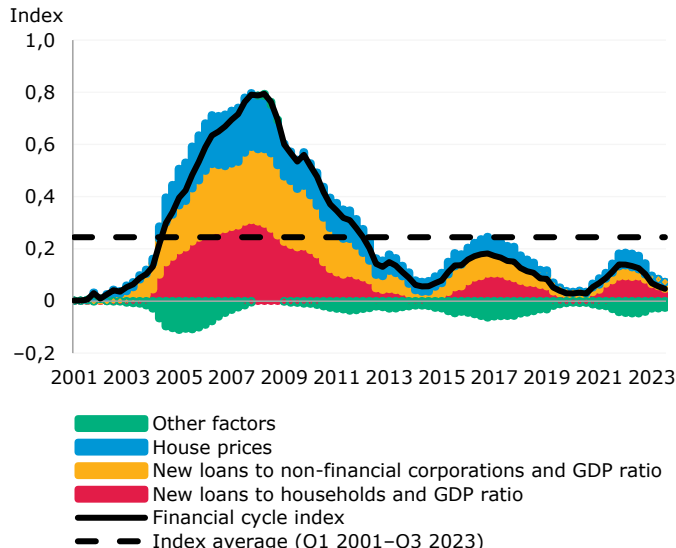
Financial cycle indices continued to decline in Q3 primarily due to the ongoing slowdown in housing lending.

Chart 3. Lithuania's financial cycle index and its drivers (distributors credit, Q1 2001–Q3 2023)



Sources: State Data Agency and the Bank of Lithuania.
Note: The assessment uses a broader definition of credit to NFCs and HHs, regardless of the credit provider.

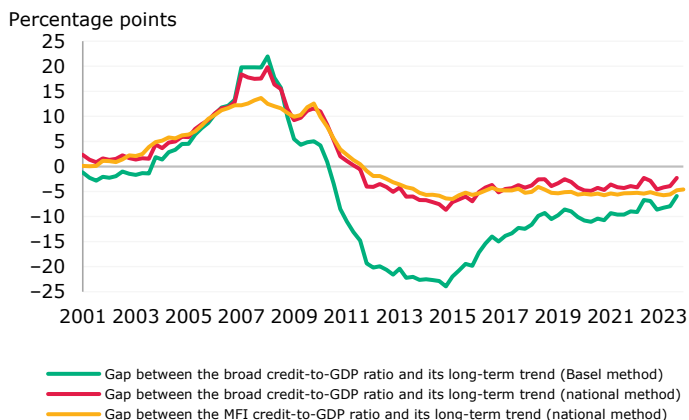
Chart 4. Lithuania's financial cycle index and its drivers (MFI loans, Q1 2001–Q3 2023)



Sources: State Data Agency and the Bank of Lithuania.

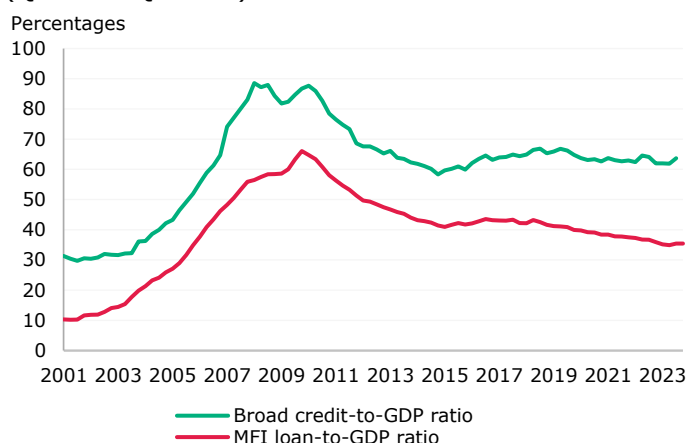
Discrepancies between the ratio of total credit (NFC and HH) to GDP increased slightly mainly due to the recent slowdown in GDP growth, but no credit imbalances were observed.

Chart 5. The discrepancy of credit, loans from MFIs (NFC and HH)-to-GDP ratios (Q1 2001–Q4 2023)



Sources: State Data Agency and the Bank of Lithuania.
Note: Long-term trend is computed using a one-sided HP filter with a smoothing parameter of 400,000; for the national method, before applying the filter, the ratio is modelled for the next 5-year window using a 4-quarter weighted average.

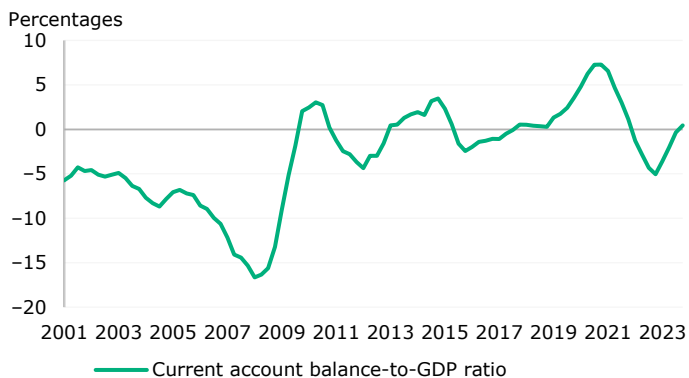
Chart 6. Ratios of credit, MFI loans (NFC and HH)-to-GDP (Q1 2001–Q4 2023)



Sources: State Data Agency and the Bank of Lithuania.

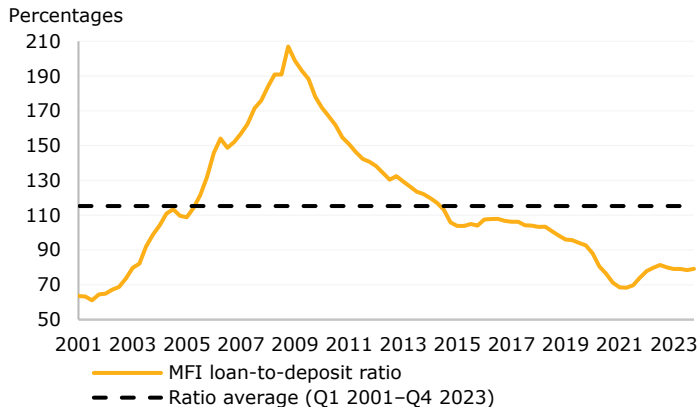
The current account balance has become positive, while the loan-to-deposit ratio remains low.

Chart 7. Current account balance-to-GDP ratio (Q1 2001–Q4 2023)



Sources: State Data Agency and the Bank of Lithuania.
Note: Preliminary data for the latest quarter.

Chart 8. MFI loans (NFC and HH)-to-deposits ratio (Q1 2001–Q4 2023)



Sources: State data agency and Bank of Lithuania.

Non-financial corporations' sector

The pace of broad corporate borrowing growth remained almost unchanged during the quarter, while MFI lending slightly increased, albeit still corresponding to a phase of modest growth.

Chart 9. Map of indicators of growth and imbalances in the corporate sector.

(Q1 2019–Q4 2023, with the most recent data represented by the black dashed line on the right)

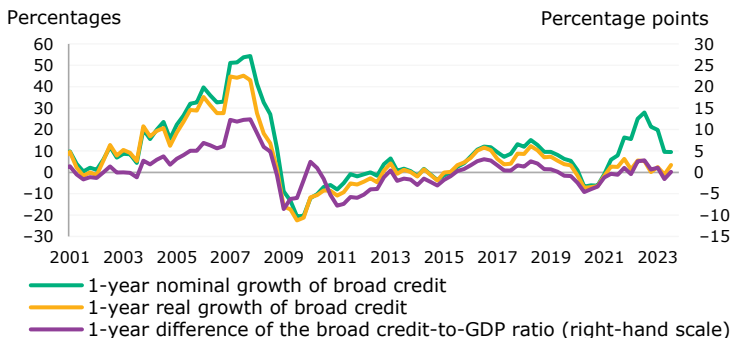
	2019				2020				2021				2022				2023			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Non-financial corporations sector																				
Growth indicators																				
Credit to NFCs nominal and real growth																				
1-year nominal growth of broad credit	9,5	8,1	6,2	5,3	0,9	-6,7	-6,1	-6,3	-1,0	5,9	7,9	16,2	15,5	25,0	27,9	21,3	19,8	9,6	9,5	
1-year nominal growth of broad and trade credit	9,6	5,1	4,0	2,5	1,6	-4,5	-1,7	-0,4	5,5	13,1	13,6	21,9	16,7	19,9	21,1	23,1	22,9	18,5	17,0	
1-year nominal MFI credit growth	1,9	-3,5	-0,8	-1,2	-2,0	-9,0	-10,1	-12,5	-11,3	-3,8	1,2	10,6	16,2	17,5	21,3	18,3	10,0	7,0	3,1	4,3
1-year real growth of broad credit	7,3	5,4	3,8	3,3	-1,5	-7,3	-6,9	-6,5	-1,7	2,7	2,5	6,3	1,4	5,5	5,3	0,1	2,4	-1,0	3,4	
1-year real growth of broad and trade credit	7,4	2,5	1,6	0,9	-0,8	-5,1	-2,6	-0,7	4,7	9,7	8,0	11,8	2,4	1,1	-0,4	1,6	5,1	7,0	10,8	
1-year real MFI credit growth	-0,2	-5,9	-3,0	-3,2	-4,4	-9,6	-10,9	-12,7	-11,9	-6,7	-3,8	1,1	2,0	-0,9	-0,2	-2,3	-5,8	-3,1	-2,6	1,8
1-year difference of the broad credit-to-GDP ratio	0,7	0,1	-0,8	-0,9	-2,5	-4,6	-4,0	-3,4	-1,2	-0,4	-0,6	1,0	-0,4	2,6	2,8	0,6	1,1	-1,6	0,8	
1-year difference of the broad and trade credit-to-GDP ratio	1,2	-1,9	-3,0	-3,5	-3,7	-6,2	-3,5	-1,6	2,3	4,0	2,6	5,2	-0,1	1,6	1,0	2,3	3,9	3,0	5,1	
1-year difference of the MFI credit-to-GDP ratio	-1,1	-2,3	-1,7	-1,6	-1,6	-2,5	-2,5	-2,6	-2,3	-1,7	-1,3	-0,4	-0,1	0,0	0,2	-0,1	-0,9	-0,9	-0,9	-0,4
CRE credit and number of transactions growth																				
1-year nominal growth of CRE credit	-0,2	1,7	-0,5	-6,5	-2,7	-6,0	-7,2	-0,4	-0,8	0,7	7,0	8,0	10,7	9,8	9,2	12,2	5,3	6,3	6,0	4,8
1-year growth of the number of CRE transactions (2-year moving average)	-3,5	-2,6	-0,4	1,2	0,1	-5,2	-4,0	-1,0	3,8	15,3	19,9	21,9	22,3	20,7	16,3	5,7	4,8	-3,5	-9,9	-8,9
Other indicators																				
1-year difference of broad NFC credit-to-GDP ratio	10,4	7,3	4,2	2,0	-2,3	-8,7	-14,4	-19,1	-19,8	-15,0	-9,6	-1,1	4,6	11,1	17,7	19,1	20,6	14,4	7,6	
Ratio of pure new loans (4 quarters sum) to GDP (4 quarters sum)	5,2	4,8	4,5	4,1	3,3	2,9	2,6	3,1	3,6	4,1	4,4	4,8	4,7	4,8	4,4	3,9	4,1	4,0	4,3	4,5
Ratio of new loans (including rollovers) to GDP	9,3	8,5	7,9	7,4	6,9	7,4	7,1	8,0	7,9	7,7	8,2	8,6	8,7	8,4	7,9	7,5	7,9	8,3	8,5	9,3
NFC credit impulse (MFI loan portfolio)	-1,3	-4,4	-2,2	-0,2	-0,6	-5,4	-0,9	-1,4	0,0	5,6	2,9	5,4	2,7	0,6	1,8	-1,4	-4,1	-1,5	-2,4	0,6
NFC credit impulse (flow of new MFI loans)	-1,7	-3,2	-2,1	-2,2	-1,8	-1,9	-1,1	-3,4	0,0	-1,2	2,1	1,3	0,6	-1,1	-1,8	-1,8	1,3	1,6	0,6	3,4
1-year difference of NFC debt to income ratio	0,8	0,3	-1,4	-2,2	-3,2	-6,6	-4,7	-5,9	-3,9	-1,9	-1,5	-0,1	0,3	3,7	4,9	4,4	3,4	-0,1	-0,1	
1-year difference of ratio of NFC liabilities to assets	-9,4	-7,7	-4,3	-5,2	0,0	-8,4	-10,2	-11,2	-12,3	-5,7	-2,0	2,7	2,9	14,9	17,9	11,6	12,6	2,5	1,7	
1-year difference of the NFC debt service to income (profit) ratio	1,5	-0,3	-2,1	-2,1	-0,7	-2,9	-2,9	-2,9	-1,4	-0,5	0,1	1,5	0,9	3,3	5,3	2,2	1,1	-0,8	-1,2	
Imbalance indicators																				
Credit to NFCs																				
Gap between the broad credit to NFC-to-GDP ratio and its long-term trend (Basel method)	-3,4	-2,6	-3,2	-4,6	-5,3	-6,5	-6,2	-6,8	-5,3	-5,6	-5,6	-4,7	-4,7	-2,1	-2,0	-3,4	-3,0	-3,0	-1,3	
Gap between the broad credit to NFC-to-GDP ratio and its long-term trend (LT method)	-1,2	-0,6	-1,2	-2,5	-2,9	-3,6	-3,2	-3,7	-2,4	-2,8	-2,9	-2,3	-2,4	-0,4	-0,7	-2,1	-1,8	-1,8	-0,3	
Gap between the MFI credit to NFC-to-GDP ratio and its long-term trend (LT method)	-3,4	-3,3	-3,3	-3,8	-3,7	-4,3	-4,2	-4,6	-4,2	-4,3	-3,9	-3,7	-3,4	-3,5	-3,0	-3,2	-3,5	-3,5	-2,9	-2,8
NFC short-term liabilities to short-term assets ratio	37,9	39,3	37,9	35,1	38,0	30,9	27,7	23,9	25,7	25,2	25,7	26,6	28,6	40,1	43,7	38,2	41,2	42,6	45,4	
CRE credit																				
Deviation between current and historical CRE yield and government bond spread	142,7	142,7	142,7	142,7	190,4	190,4	190,4	190,4	165,8	165,8	165,8	165,8	90,4	-32,3	-119,4	-246,0	-240,4	-199,5	-192,9	-165,2
CRE price misalignment indicator (Vilnius office prime)	24,8	24,8	24,8	24,8	10,7	10,7	10,7	10,7	4,2	4,2	4,2	4,2	16,9	17,2	11,2	11,1	14,2	13,7	22,0	
Volume share of CRE purchase transactions made with loans (3-year moving average)	34,5	32,4	32,6	31,8	31,7	32,6	37,7	37,1	38,4	36,7	38,6	39,7	39,8	43,1	45,3	45,6	45,9	45,3	40,1	39,9

Note: Indicator values are rounded; some indicators are evaluated based on their percentile values, so in some cases cells of these indicators with the same value may be coloured differently.

The nominal annual growth rate of MFI lending to companies slightly increased for the first time in the past year, and the real growth in lending is mostly driven by the effect of the decreasing inflation base.

Chart 10. Corporate credit developments

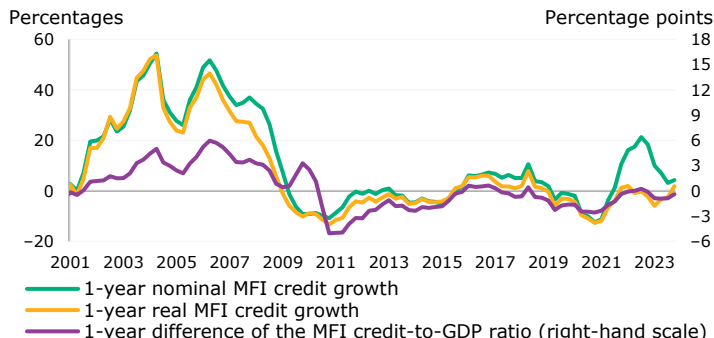
(Q1 2001–Q3 2023)



Sources: State Data Agency, Bank of Lithuania, and Bank of Lithuania calculations.

Chart 11. Developments in corporate borrowing from MFIs

(Q1 2001–Q4 2023)

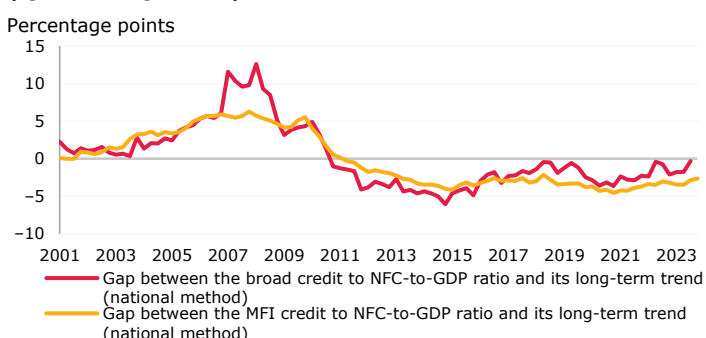


Sources: State Data Agency, Bank of Lithuania, and Bank of Lithuania calculations.

The gap between broad corporate credit and GDP approached the threshold for the formation of imbalances; however, the decreasing ratio of MFI loans to GDP indicates that companies are borrowing at a slower pace than the economy is growing.

Chart 12. Corporate credit imbalances

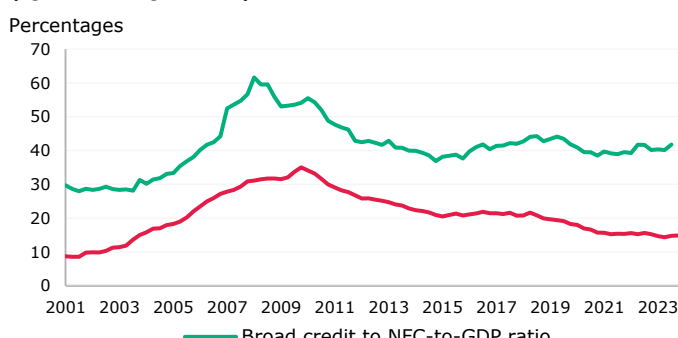
(Q1 2001–Q4 2023)



Sources: State Data Agency and the Bank of Lithuania.
Notes: The long-term trend is computed by applying a one-sided HP filter with a smoothing parameter of 400,000; before applying the filter, the ratio is modelled for the next 5-year window using a 4-quarter weighted average.

Chart 13. Corporate credit, MFI loans to GDP ratios

(Q1 2001–Q4 2023)



Sources: State Data Agency and the Bank of Lithuania.

Households/housing sector

Crediting for house purchase is returning to a moderate growth pace, while limited-scale imbalances persist mainly in the housing price segment.

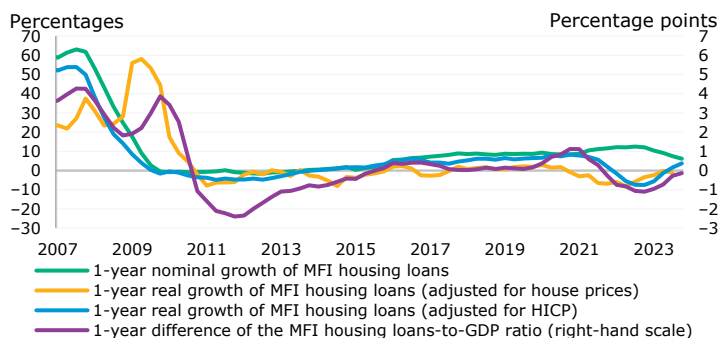
Chart 14. Map of indicators of growth and imbalances in the household and housing sector. (Q1 2019–Q4 2023, with the most recent data represented by the black dashed line on the right)

	2019				2020				2021				2022				2023			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Households / housing sector																				
Growth indicators																				
Housing credit nominal and real growth																				
1-year nominal growth of MFI housing loans	8,7	8,5	8,7	8,6	9,3	8,6	8,4	8,5	8,6	10,5	11,2	11,6	12,1	12,0	12,4	12,1	10,4	9,2	7,5	6,1
1-year real growth of MFI housing loans (adjusted for housing prices)	0,8	1,8	2,1	2,0	2,9	1,5	1,8	-0,8	-3,0	-2,5	-6,5	-6,9	-5,9	-8,2	-5,7	-3,4	-2,4	-0,2	-1,1	-1,1
1-year real growth of MFI housing loans (adjusted for HICP)	6,5	5,8	6,2	6,5	6,7	7,9	7,4	8,2	7,8	7,1	5,7	2,0	-1,6	-5,5	-7,4	-7,5	-5,6	-1,4	1,5	3,7
1-year difference of the MFI housing loans-to-GDP ratio	0,1	0,1	0,1	0,2	0,4	0,7	0,8	1,1	1,1	0,6	0,3	-0,3	-0,7	-0,8	-1,1	-1,1	-1,0	-0,7	-0,3	-0,1
Other indicators																				
Gap between the housing loan flow and its fundamentals (2-markets disequilibrium model)	-15,1	-16,6	-15,0	-17,0	-18,5	-16,2	-13,2	-6,1	2,7	7,9	15,1	18,2	21,9	24,2	18,6	12,9	6,6	1,8	1,1	2,2
1-year difference of the broad HH credit-to-GDP ratio	2,4	2,6	2,9	2,8	2,5	2,7	2,4	2,1	1,8	1,1	0,7	0,8	1,4	1,7	1,9	1,7	0,8	-0,1	-1,3	-1,3
Ratio of new housing loans including rollovers (4 quarters sum) to GDP (4 quarters sum)	3,2	3,1	3,1	3,0	3,1	3,0	3,0	3,2	3,3	3,7	3,8	3,9	3,9	3,8	3,8	3,6	3,5	3,3	3,1	3,0
Housing credit impulse (loan portfolio)	-0,3	-0,1	0,0	-0,1	0,5	0,1	0,0	0,3	0,1	0,7	0,4	0,1	0,2	-0,2	0,1	-0,3	-1,0	-0,7	-1,0	-0,9
Housing credit impulse (new loans)	-0,1	-0,3	-0,1	-0,2	0,3	-0,4	0,0	0,7	0,6	1,6	0,4	0,2	-0,1	-0,5	0,1	-0,6	-0,6	-0,5	-0,8	-0,5
Housing prices nominal and real growth																				
1-year nominal growth of house prices	7,9	6,6	6,4	6,5	6,2	7,0	6,4	9,4	12,0	13,3	18,9	19,8	19,2	22,1	19,3	16,0	13,1	9,4	8,7	8,7
1-year real growth of house prices (adjusted for HICP)	5,7	3,9	4,0	4,4	3,7	6,3	5,5	9,1	11,1	9,8	13,0	9,5	4,6	3,0	-1,8	-4,2	-3,3	-1,2	2,7	2,7
1-year difference of the house price-to-rent ratio	-0,5	1,1	-3,4	-3,1	-1,9	-1,9	3,1	2,0	3,1	5,5	4,7	7,6	3,4	-5,8	-4,1	-3,8	-1,7	3,5	1,8	-2,3
1-year difference of the house price-to-income ratio	-1,6	-3,1	-3,0	-3,4	-3,2	-0,8	0,1	3,0	5,5	3,5	5,2	4,8	2,3	4,8	3,5	1,1	-4,5	-10,9	-15,0	-15,0
Imbalance indicators																				
Housing credit																				
Gap between the broad credit to HH-to-GDP ratio and its long-term trend (Basel method)	-6,3	-6,0	-5,7	-5,4	-5,5	-4,6	-4,2	-3,9	-4,0	-4,0	-4,0	-4,3	-4,4	-4,6	-4,8	-5,3	-5,2	-4,6	-4,6	-4,6
Gap between the broad credit to HH-to-GDP ratio and its long-term trend (LT method)	-2,1	-2,0	-1,9	-1,7	-1,9	-1,3	-1,1	-1,0	-1,2	-1,2	-1,4	-1,6	-1,8	-1,9	-2,1	-2,5	-2,4	-2,1	-1,9	-2,0
Gap between the MFI credit to HH-to-GDP ratio and its long-term trend (LT method)	-2,0	-1,8	-1,8	-1,9	-1,8	-1,3	-1,3	-1,2	-1,2	-1,4	-1,5	-1,6	-1,9	-1,9	-2,1	-2,3	-2,3	-2,1	-1,9	-2,0
Gap between the MFI housing loans to HH-to-GDP ratio and its long-term trend (LT method)	-0,6	-0,6	-0,5	-0,5	-0,4	0,0	0,0	0,2	0,2	0,0	-0,1	-0,2	-0,4	-0,6	-0,8	-0,9	-0,9	-0,8	-0,7	-0,8
House prices																				
Average of house price overvaluation indicators	-4,9	-5,3	-4,7	-4,6	-4,6	-2,0	-1,5	-0,2	1,9	3,6	6,7	9,2	9,1	11,1	10,4	8,5	8,1	7,6	8,0	8,0
Median of house price overvaluation indicators	-1,6	-1,3	-0,9	-0,9	-1,3	1,6	3,3	4,3	5,7	7,0	9,0	8,8	6,5	6,2	4,1	2,2	2,4	2,6	4,3	4,3
Gap between the nominal HPI and its long-term trend (HP filter)	3,1	3,3	3,9	4,1	4,7	5,8	6,2	8,6	11,3	13,3	17,6	20,3	22,7	27,1	27,7	27,2	26,7	25,6	25,4	25,4
Gap between the real HPI and its long-term trend (HP filter)	-1,7	-2,5	-0,9	-0,9	-0,2	1,5	2,6	5,3	7,5	7,6	10,5	9,7	7,6	6,4	4,2	1,9	1,8	2,0	3,7	3,7
Gap between the house price-to-income ratio and its long-term trend	-14,3	-14,8	-14,8	-15,3	-16,6	-15,9	-17,3	-16,7	-14,8	-14,2	-10,2	-8,6	-8,8	-5,7	-3,3	-5,3	-6,4	-6,8	-6,7	-6,7
Gap between the house price-to-rent ratio and its long-term trend	-14,5	-15,6	-15,3	-14,2	-12,9	-11,0	-10,2	-7,9	-3,8	-0,7	4,0	7,8	5,3	6,0	3,9	2,5	2,8	3,1	4,8	4,8
Gap between house prices and their long-term trend (1-market disequilibrium model)	-1,5	-1,2	-0,9	-0,3	-2,3	1,7	5,5	3,4	4,3	9,0	9,9	18,2	22,1	27,1	28,5	23,5	22,0	20,3	19,1	19,1
House price panel model	-0,5	-0,9	-0,1	-0,9	-0,1	5,9	4,1	6,1	7,0	6,4	8,2	7,9	5,3	5,5	2,1	1,1	1,1	2,0	1,2	1,9

Note: Indicator values are rounded; some indicators are evaluated based on their percentile values, so in some cases cells of these indicators with the same value may be coloured differently.

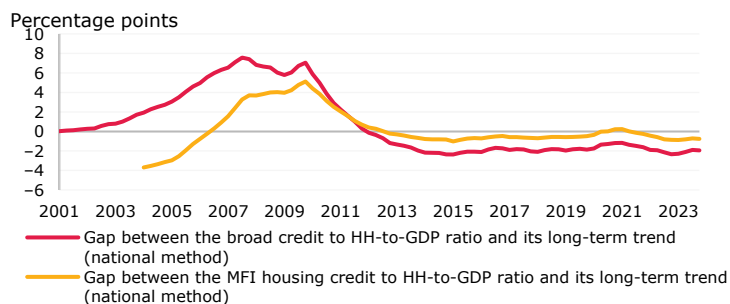
The real growth rate of crediting for house purchase increased; however, the annual growth rate of housing prices remained higher than the growth in crediting for house purchase, so no excessive borrowing was observed.

Chart 15. Housing credit developments (Q1 2007–Q4 2023)



Sources: State Data Agency, the Bank of Lithuania, and Bank of Lithuania calculations.

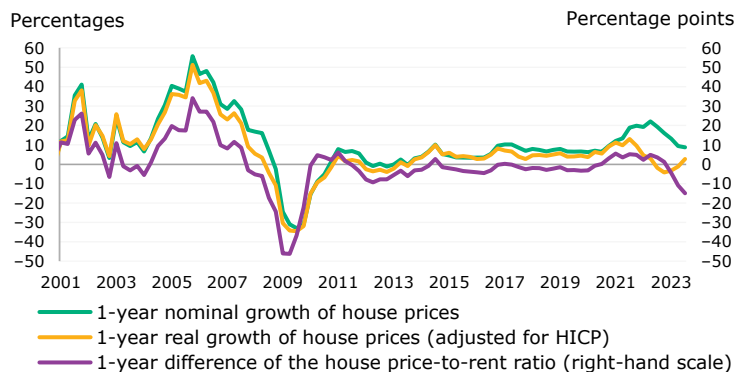
Chart 16. Household credit imbalances (Q1 2001–Q4 2023)



Sources: State Data Agency and the Bank of Lithuania. Note: The long-term trend is computed by applying a one-sided HP filter with a smoothing parameter of 400,000; before applying the filter, the ratio is modelled for the next 5-year window using a 4-quarter weighted average.

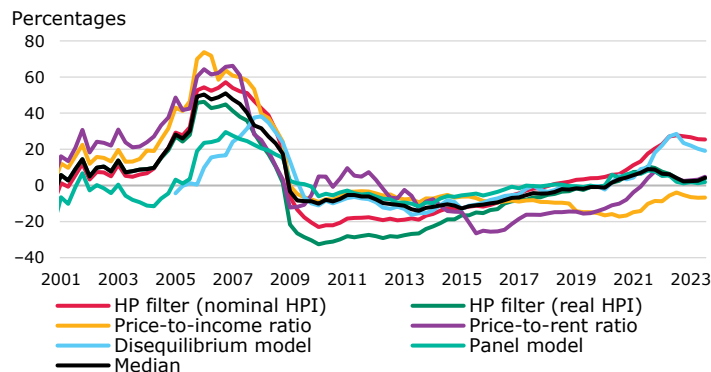
Decreased inflation resulted in the real growth of housing prices turning positive again, while the overvaluation of prices increased slightly during the quarter.

Chart 17. Housing price developments (Q1 2001–Q3 2023)



Sources: State Data Agency and Bank of Lithuania calculations.

Chart 18. Gap between actual house prices and their fundamental values (Q1 2001–Q3 2023)



Sources: Bank of Lithuania calculations.