1 SUMMARY

The Czech financial sector has developed highly favourably since spring 2018. According to the CNB's aggregate assessment, it has maintained a high level of resilience to possible adverse shocks. As regards potential sources of risks to financial stability in the future, the Report overall finds a partial increase in risks associated with the financial and business cycle and an unchanged level of structural risks.

At its meeting on 23 May 2019, the CNB Bank Board decided to increase the countercyclical capital buffer rate to 2.0% with effect from 1 July 2020. The decision on the CCyB rate reflects a rise in risks associated with economic developments in the upward phase of the financial cycle and a slight increase in signals of vulnerability of the domestic banking sector to a potential adverse change in conditions. Assuming reasonable dividend policies, banks have sufficient space for a prospective increase in the CCyB and growth in their credit portfolios on the aggregate level.

With regard to estimates of house price overvaluation, the CNB regards the current LTV limits as upper bounds. However, it currently does not deem it necessary to tighten them. After the recommended DTI and DSTI limits entered into force in October 2018, the shares of loans in excess of the recommended levels of the two ratios started to head towards the 5% exemption. However, the adjustment process has not yet been completed and banks were non-compliant with the recommended limits overall in 2018 Q4. The CNB expects banks to comply with the limits in the first half of this year. Despite a small reduction of the room for interest rates on mortgage loans to rise sharply, the CNB Bank Board decided to leave the recommended cap on the DSTI ratio at 45%. At the same time, the CNB expects lenders to continue to be highly prudent in providing loans with DSTI ratios of between 40% and 45% given the conclusions of its analyses and stress tests demonstrating that loans with DSTI ratios of over 40% can be regarded as highly risky.

ASSESSMENT OF RISKS TO FINANCIAL STABILITY ASSOCIATED WITH THE REAL ECONOMY AND FINANCIAL MARKETS

Monetary and financial conditions in other countries remain very easy

Monetary policy rates remain low or negative in many European countries even in a situation of economic recovery and inflation only just below target levels. Monetary policy normalisation is slowing or being postponed outside Europe as well. The easy monetary and financial conditions are supporting a shift into the growth phase of the financial cycle, characterised by faster growth in loans and property prices. In response, macroprudential authorities in several EU countries have applied macroprudential instruments targeted at risks relating to lending for property purchase and to non-financial corporations. The CNB has made substantial progress with monetary policy normalisation, having increased its key monetary policy rate eight times since August 2017 to 2.0% in effect since May 2019. The CNB's monetary and macroprudential polices are thus working in a single direction and their countercyclical character is contributing to the stability of the domestic economy and the financial system.

Risk premia remain low and investors are demanding higher-yield assets with riskier profiles

Uncertainty regarding future economic developments is also visible on financial markets, where the volatility of the still relatively high asset prices has risen. However, risk premia remain very low, indicating a possibility of persisting overvaluation of financial assets. A sudden increase in financial market uncertainty and a related disorderly jump in risk premia could therefore lead to a relatively significant correction of share and bond prices and to losses on the part of their holders (banks, insurance companies and pension funds), as suggested by the swing on the financial markets seen in late 2018. Yields on domestic assets have rebounded from the record lows they reached in 2017 but remain below average by historical comparison. This is encouraging domestic institutional investors to allocate part of their portfolios to more profitable risky assets (shares, corporate bonds and commercial property). Negative real yields on deposit products are also motivating households to continue investing in higher-yield financial products – especially investment fund units – and to buy property on credit.

The debt of the Czech private non-financial sector is low and gradually rising

The debt of the domestic private non-financial sector relative to GDP rose by 1 pp year on year. At the end of 2018, it stood at 89% of GDP, which represents an increase of 13 pp over the last ten years. However, the debt-to-GNI ratio is higher at almost 96%, although this ratio has not been rising in recent years. The favourable trend in incomes is boosting optimism regarding future developments and raising demand for loans. The gradual growth in private sector debt in the Czech Republic could become a source of vulnerability in the medium or long term, even though the level of indebtedness it is still low by international comparison. In the event of an economic slowdown or recession, the higher debt level could negatively affect the depth and duration of the recession. The materialisation of external risks, associated mainly with the repricing of global risk premia, the high debt levels in euro area countries and potential structural changes in the global division of labour, can still be considered the most likely trigger of this scenario in the Czech Republic at the moment.

Developments in the non-financial corporations sector are being driven by a tight labour market and uncertainty regarding the global economy

The labour market showed persisting signs of overheating. A marked increase in compensation of employees was reflected in a decline in the gross operating surplus of the corporate sector and a further decrease in its profitability. The proportion of loss-making firms also increased considerably, especially in property development, manufacturing, and energy generation and distribution. A potential increase in protectionism in international trade, a cyclical cooling of the global economy, a marked slowdown of the Chinese economy and the unresolved issue of Brexit are the main risks that may adversely affect external demand and, in turn, the financial soundness of the sector. Another potential source of weaker financial soundness is persisting strong growth in wage costs, which would exert downward pressure on the corporate sector's profitability or reduce its competitiveness on the international scale.

Household debt remains relatively low, but some indebted households are relatively vulnerable

The debt-to-income ratio of households was flat at 61% in 2018. It is still relatively low in the European context and does not currently represent an immediate source of systemic risk. In the household stress test, this sector remained resilient to risks even in the *Adverse Scenario*. In particular, low-income households, whose debt service-to-income ratio has long exceeded 45%, were exposed to increased financial stress. According to the stress test results, this segment of households remains the most vulnerable group. In addition to a marked increase in unemployment and a drop in income, stronger growth in client interest rates remains a risk to the stability of the sector as a whole. For a significant proportion of households, it would mean a substantial worsening of their financial situation, starting at a debt service-to-net income ratio of 40%. However, this risk is partially mitigated by the current level of monetary policy interest rates and client interest rates in the Czech Republic.

Credit risk in the private non-financial sector continued to decline

Credit risk in the non-financial corporations sector, as measured by the 12-month default rate, has probably reached its cyclical trough. A decrease in credit risk measured in this way was also seen in the household sector, due to income growth and still relatively low debt servicing costs. Neither sector is likely to see any significant decrease in credit risk in the next few years. The non-performing loan ratio, measuring the materialisation of risks taken on in the past, followed the same pattern as credit risk, being flat in the case of non-financial corporations and decreasing slightly in the household sector. This decrease was due not only to positive economic developments, but also to strong credit growth, which contributed to an increase in the denominator of the indicator.

The banking sector maintained resilience to potential adverse developments with the aid of a voluntary capital surplus

The domestic financial sector showed favourable trends in 2018 and expanded in all segments. The banking sector strengthened its capitalisation and profitability and has high liquidity. Banks' high profitability and capitalisation is to a large extent conditional on very low asset impairment losses. Any contraction in the cycle could lead to a sharp rise in credit losses, a significant drop in profitability and growth in risk weights of credit portfolios, followed by a negative impact on banks' capitalisation. Capital buffers are an important element enhancing banks' resilience to such developments. The stress tests of

the banking sector confirmed its capital and liquidity resilience to the *Adverse Scenario*. The sector's aggregate capital ratio remained almost constantly above 19% over the three-year test horizon in the *Baseline Scenario*. However, the capital surplus held voluntarily by banks contributed significantly to keeping the overall capital ratio above the 8% regulatory threshold over the test horizon in the *Adverse Scenario*. Its potential use to cover the minimum requirement for own funds and eligible liabilities (MREL) may have a significant effect on the assessment of the resilience of systemically important banks in the future. The test methodology does not include the potential sectoral tax under discussion by the government at the time the tests were processed. Its introduction would partially limit the ability of some institutions to top up their capital using retained earnings.

The insurance sector could contribute a decline in domestic financial asset prices in the event of adverse developments

Insurance companies maintained their capitalisation and profitability in a situation where financial market developments adversely affected their assets and liabilities. The domestic insurance sector's resilience to adverse shocks at the three-year horizon was also confirmed by a new macro stress test. Insurance companies should thus not be a source of systemic risk. However, sell-offs of domestic financial assets by insurance companies could cause their prices to fall in the event of adverse economic developments.

Pension management companies and investment funds are vulnerable to market developments

The segments of pension management companies and investment funds were hit by changes in the prices of some of their assets at the end of 2018. However, this did not lead to an exodus of planholders and investors or to systemically important losses. The greater sensitivity of the segments of pension and investment funds to financial market developments and changes in asset prices requires high-quality management of market and liquidity risks to maintain long-term confidence among participants, investors and clients. Financial market developments in 2018 led to a decline in the excesses of assets over liabilities of pension management funds' transformed funds. This means that even slightly unfavourable market developments in the form of an increase in government bond yields and risk premia may force pension management companies to cover investment losses in transformed funds in the future. However, the stress tests of pension management companies at the one-year horizon show that the intensity of this risk diminished year on year due to an increase in market yields.

The risks associated with public finances remain low

Czech government debt declined again year on year and is small by European comparison as a percentage of GDP. Financial risk decreased also due to an increase in the average residual maturity of government debt. The CNB continues to regard credit institutions' exposures to the Czech government as systemically important. Given the favourable results of the Czech public finance stress test, however, the CNB will not require credit institutions to meet an additional capital requirement to cover the risk of concentration of these exposures over a three-year horizon.

MACROPRUDENTIAL POLICY

The CNB responds to risks in the banking sector associated with the financial and business cycle by setting the countercyclical capital buffer

The countercyclical capital buffer (CCyB) is designed to increase the resilience of the banking sector to risks associated with the effect of the financial cycle. One of the manifestations of an expansionary phase of the cycle in the real economy is higher cyclical risk-taking, accompanied by strong credit growth, growth in debt and a very low default rate. In the event of a downturn in the financial cycle, accumulated risks may materialise and credit losses may increase, affecting banks' capital. Another feature of an upward phase of the financial cycle is growth in the banking sector's vulnerability due to cyclically low provisioning and/or decreasing risk weights. An economic downswing results in them returning to higher levels, which is adversely reflected in banks' capital ratios. An appropriately set CCyB rate should help reduce the negative impacts of these manifestations of the financial cycle on the banking sector, maintain the supply of bank credit and prevent transmission of an additional shock to the real economy. The CNB set the CCyB rate at 0.5% at the end of 2015 and has

increased it five times since then. At the time of publication of this FSR, the CCyB rate applied to exposures in the Czech Republic is 1.25%. Over the last year, the CNB Bank Board decided to increase it to 1.5% with effect from July 2019 and 1.75% with effect from January 2020.

Consistent with the assessment of cyclical risks and the degree of vulnerability of the banking sector at the Bank Board meeting in May is an increase in the countercyclical capital buffer rate to 2.0%.

The final decision on the CCyB rate is always a result of a comprehensive assessment of indicators of the financial cycle and the vulnerability of the banking sector and other factors affecting the sector's resilience. Following this assessment, the CNB Bank Board decided at its meeting on 23 May 2019 to increase the CCyB rate to 2.0% with effect from 1 July 2020. Most banks are compliant with the overall capital requirement, consisting of the minimum regulatory level in Pillar 1, the requirements based on the supervisory review of risks in Pillar 2 and capital buffers, by a sufficient margin. Assuming reasonable dividend policies, banks have sufficient space for a prospective increase in the CCyB and growth in their credit portfolios on the aggregate level. Given that the domestic economy is probably close to the peak of the financial cycle, the likelihood of a further increase in the countercyclical capital buffer rate has significantly decreased.

The domestic economy has moved slightly further into the growth phase of the financial cycle

The starting point for the Bank Board's decision on the CCyB rate is an assessment of the position of the domestic economy in the financial cycle. According to the aggregate Financial Cycle Indicator, the domestic economy entered the fourth year of the expansionary phase at the end of last year. This situation usually sees higher cyclical risk-taking, which may result in higher credit losses if economic conditions deteriorate. The prudential estimate of these losses is around CZK 26 billion in the current phase of the financial cycle. The fact that a relatively large volume of loans with worsened risk characteristics was provided in the second half of 2018 was also taken into account. This mainly concerns mortgage loans with high DTI and DSTI ratios and loans to finance commercial property purchases and construction, and also loans to the non-financial corporations sector, which saw a fall in profitability and a rise in the number of loss-making firms. The vulnerability of the banking sector also usually increases in the upward phase of the financial cycle. It is manifested in a low default rate and near-zero asset impairment losses. This is reflected in a decline in risk weights of the main IRB credit portfolios. The current absolute capital requirement for IRB portfolios would be CZK 24 billion higher based on the risk weights observed at the start of the expansionary phase. The sum of these effects represents an absolute volume of capital of CZK 50 billion. This would imply a CCyB rate of 2.0% relative to the value of risk-weighted assets as of the end of 2018 (CZK 2,514 billion). Provisioning is an additional indicator of vulnerability. The ratio of provisions to total loans continued to follow a downward trend for most of 2018.

Materialisation of cyclical risks and growing tensions in financial markets will be the key signal to lower the CCyB rate

The CNB stands ready to lower or completely zero the CCyB rate in the event of a sudden turnaround in the financial cycle. However, a gradual decrease in lending activity or more prudential lending will not constitute a reason for lowering the CCyB rate, as the cyclical risk assumed at times of above-average credit growth and relaxed credit standards stays in banks' balance sheets. Clear signals of increased risk materialisation, reflected in rising risk weights, growing costs of risk and increased provisioning leading to a decline in profitability and the capital ratio, will be grounds for reducing the CCyB rate. A weakening credit supply and its causes will be another important factor when deciding to release the buffer. Indicators of stress in financial markets may be a leading or parallel signal of this. The process of lowering the CCyB rate will be timed carefully. A very early reduction would increase the banking sector's capital surplus, which might not be used prudently to cover future losses and the draining of which might further increase the sector's vulnerability. Conversely, releasing the buffer too late could result in a credit crunch and would render it impossible to smooth the downward phase of the financial cycle.

Credit financing of housing is a source of systemic risks

Previous *Financial Stability Reports* identified a spiral between credit financing of residential property and rapidly rising residential property prices as a significant source of systemic risks in the Czech economy. Genuinely new housing loans

increased gradually in 2018 H1 and then picked up significantly, fostering a renewed rise in property price inflation in 2018 H2. This was reflected in worsening housing affordability. The spiral between credit financing of property purchases and optimistic expectations of a future rise in the value of property thus started to intensify slightly again after having slowed in the previous quarters. Buoyant wage growth and favourable financial conditions for purchasing property are continuing to boost the attractiveness of investing in housing. The sustained property price growth may be increasing the incentive for some households to buy property on credit and encouraging them to take on excessive debt in relation to income. A risk scenario going forward is therefore a situation where a large proportion of households start to consider the current income growth to be permanent and succumb to the illusion that it will be easy to service increasing debt levels. Another risk is a situation where households start to believe that house prices will continue to rise indefinitely. According to the CNB's analyses, apartment price overvaluation grew slightly further in 2018 H2 and currently stands at around 15%. The currently observed property prices may not be sustainable in the long run.

The CNB is responding to the risks associated with credit financing of housing by applying macroprudential policy instruments

Since 2015, the CNB has been applying instruments to mitigate risks associated with the provision of retail loans secured by residential property as formulated in its *Recommendation on the management of risks associated with the provision of retail loans secured by residential property* (the "Recommendation"). The CNB currently recommends that lenders should not provide such loans with LTVs of over 90% and should limit the provision of loans with LTVs of 80%–90% to 15% of new loans in the quarter. Since October 2018, the CNB has also advised lenders not to exceed a debt-to-net income (DTI) ratio of nine annual incomes and a debt service-to net income (DSTI) ratio of 45%. The Recommendation also sets maximum loan maturities, selected parameters for stress testing applicants and qualitative criteria for prudent provision of loans. The CNB assesses the risks associated with mortgage lending and banks' compliance with the Recommendation twice a year.

The setting of DTI and DSTI caps led to a fluctuation in the provision of mortgage loans

The high volumes of new mortgage loans provided in 2018 H2 to some extent reflected efforts to obtain loans in the months just before the recommended DTI and DSTI caps were introduced. As expected, new loans dropped at the end of 2018 and in the first few months of 2019. This was probably a result not only of the macroprudential measures adopted and the frontloading effect, but of growth in client interest rates and a drop in housing affordability. The true impact of the DTI and DSTI caps on the amount of mortgage loans provided cannot be assessed at the moment. An assessment conducted on the basis of data on loans provided in 2018 H2 shows that some loans provided last year had highly risky characteristics. The scale of loans with such characteristics started to fall after the introduction of the DTI and DSTI caps. The CNB expects the above factors, combined with the effect of last year's base, to foster a drop in new mortgage loans in 2019 as a whole.

Banks are mostly compliant with the recommended LTV limits and the CNB considers the current limits to be sufficient

Banks are broadly compliant with the Recommendation in force as regards LTV limits. The share of loans with LTVs of 80%–90%, which can account for a maximum of 15% of new loans, decreased slightly further, reaching 9% in December 2018. Banks provided some loans with an individual LTV limit of over 90%, the level above which loans should not be provided under the Recommendation. However, the total share of these loans remained low, falling below 2% of new loans in 2018 Q4. Although most credit institutions are compliant with the recommended LTV limits, some tendencies may indicate that in good times lenders tend to value collateral on the basis of current market prices, regardless of the fact that those prices may be overvalued in an upward phase of the cycle. With regard to its estimate that house prices are overvalued by around 15%, the CNB regards the current LTV limits as upper bounds. The CNB does not deem it necessary to tighten the limits immediately. However, continued growth in house price overvaluation could necessitate a reassessment of the sufficiency of the current limits.

The DTI and DSTI distributions of new loans indicate increased risk-taking

In 2018 Q3 – immediately before the recommended DTI and DSTI caps took effect – credit institutions were lending to a significant extent to clients who had high additional debt service. Following the introduction of the recommended limits in October 2018, this trend was reversed and the shares of loans in excess of the limits started to decline towards the 5%

exemption. However, the adjustment process has not yet been completed and institutions were non-compliant with the recommended limits overall in 2018 Q4. The share of loans with DSTIs of over 45% exceeded 24% of loans provided in 2018 Q3 and fell to less than 12% in 2018 Q4. Loans with DTIs exceeding the recommended limit of 9 accounted for almost 12% of loans provided in 2018 Q3, with the share declining to around 6% in 2018 Q4. A reduction in the supply of loans to clients with higher additional debt can be regarded as the main channel for adjustment to the recommended limits for both ratios. This is indicated by the distributions of loans according to risky LTI and LSTI levels. These were well below the shares of loans in excess of the limits until the upper DTI and DSTI limits took effect. However, the two types of indicators converged in 2018 Q4 (with LTI and LSTI falling much less than DTI and DSTI). Another possibility is a higher number of loan applicants who together have a higher income.

The CNB is leaving the upper DTI and DSTI limits unchanged

The DSTI ratio is more restrictive for mortgage applicants and providers. Capping this ratio is crucial in a situation where interest rates on mortgage loans fall to exceptionally low levels. This occurred in the domestic economy particularly in 2016 and 2017, when average rates on new mortgages stood at around 2% or even lower. These rates started to rise in 2018, approaching 3% at the end of the year. In 2019 Q1, by contrast, they declined slightly. As a result, the potential room for them to rise sharply has been partly reduced and the risk of a surge in debt service has decreased. However, the extent of this reduction is still small. This, together with insufficient compliance with the current DSTI limit of 45%, makes an increase in the cap on this ratio impossible. At the same time, the CNB expects lenders to be highly prudent in providing loans with DSTI ratios of between 40% and 50% given the conclusions of its analysis and stress tests showing that loans with a DSTI of more than 40% can be regarded highly as risky.

The CNB has made several technical changes to the Recommendation

On the basis of discussions with mortgage providers, the CNB has redefined the reference volume of loans used as the base for calculating the volume of new loans subject to exemptions from the LTV, DTI and DSTI limits. The reference volume is now one-half of the sum of all retail loans secured by residential property provided in the two previous quarters or one-half of the sum of other consumer credit not secured by residential property provided in the two previous quarters. The CNB has also clarified the provision on the refinancing of consumer credit not secured by residential property for clients who already have a retail loan secured by residential property and are simultaneously increasing the outstanding principal of the unsecured loan by more than 10% as part of the refinancing process. In such cases, lenders should always assess whether clients' total debt satisfies the recommended DTI and DSTI limits.

The CNB is seeking the statutory power to set upper limits on the LTV, DTI and DSTI ratios for mortgage loans

The CNB and the Czech Ministry of Finance have submitted into the legislative process an amendment to the Act on the CNB that would empower the CNB to set upper LTV, DTI and DSTI limits in a legally binding manner through provisions of a general nature. All three ratios are regulated by the current Recommendation. A switch to setting these indicators in a legally binding manner will therefore have no major impact on current bank providers of these loans or on consumers. However, the limits must be legally binding in order to ensure a level playing field on the market and to prevent unfair competition between lenders in the future if new (especially non-bank and foreign) players enter this market segment, as enforcement of the rules set out in the Recommendation would not be as effective for them as it is for domestic banks.

The CNB will publish additional detailed analyses of risks to financial stability and information about the macroprudential policy setting in December 2019 in its regular document *Risks to financial stability and their indicators – December 2019*, which will be an underlying document for the autumn Bank Board meeting on financial stability issues.