III. THE FINANCIAL SECTOR

The domestic financial sector recorded growth in most segments in 2019, but the coronavirus crisis is likely to affect the rate of growth in 2020. The banking sector entered the acute phase of the coronavirus crisis with a robust capital position, strong profitability and high liquidity. The non-banking sector maintained its resilience to systemic liquidity stress.

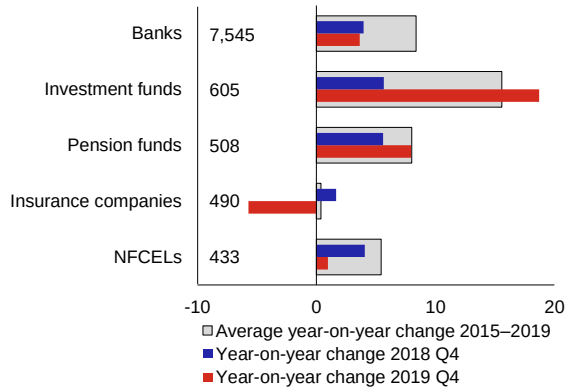
The economic consequences of the coronavirus crisis will increase the pressure on the financial indicators of domestic financial institutions. The response of the banking sector in the key area of credit losses has so far been muted due to the application of flexibility in the accounting and regulatory frameworks and to economic stabilisation measures. Looking ahead, however, credit losses can be expected to grow. This will increase the pressure on the banking sector's profitability. Uncertainty regarding future developments therefore requires careful consideration of the possible macroprudential policy response in the area of capitalisation. The shocks on financial markets have not affected the stability of domestic insurance companies and pension and investment funds. Risks relating to the heightened volatility of market variables persist in the pension funds segment. Stress test results demonstrate that the current capitalisation, liquidity and profitability of the most important segments of the financial sector ensure considerable resilience to shocks.

III.1 DEVELOPMENTS IN THE FINANCIAL SECTOR

The total assets of all segments except insurance companies increased, but slower growth can be expected in investment funds next year

All segments of the financial sector except insurance companies posted year-on-year growth in total assets at the end of 2019 (see Chart III.1). The total assets of the financial sector grew by 4.0% year on year to CZK 9.6 billion (169.7% of GDP). The banking sector,[38] which accounts for almost 80% of the financial sector's assets (see Chart III.1), recorded the largest growth in absolute terms (CZK 267 billion, or 3.7%). Investment funds recorded the highest rate of growth of total assets (CZK 97 billion, or 18.7%). However, some correction can be expected in this constantly growing segment in 2020 owing to the impacts of the coronavirus crisis on financial markets. Insurance companies recorded a year-on-year decline in total assets (of CZK 30 billion, or 5.7%).

Chart III.1
Rates of growth of segments of the financial sector
(%)



Source: CNB
Note: NFCELs = non-bank financial corporations engaged in lending. Figures in parentheses in CZK billions as of the end of 2019. The banking sector also includes credit unions.

38 The assets of the banking sector also include assets of credit unions due to the low total assets of the latter relative to the former.

III.2 BANKING INSTITUTIONS

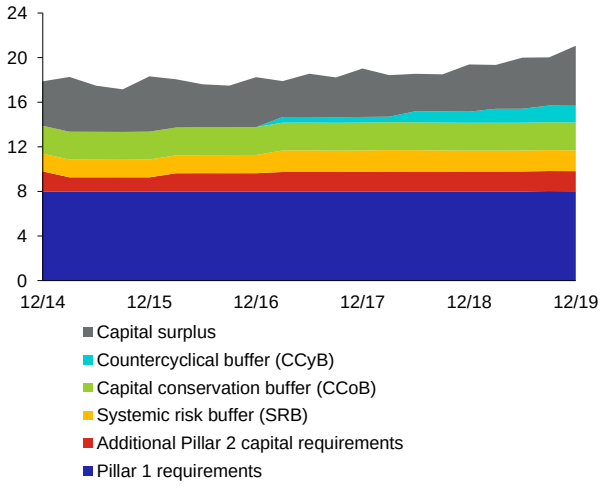
III.2.1 Capital

The domestic banking sector entered the coronavirus crisis and the recessionary phase of the financial cycle well-capitalised

At the CNB's decision, banks created a countercyclical capital buffer (CCyB) and prudently maintained a stable voluntary capital surplus in the expansionary phase of the financial cycle. The total regulatory eligible capital in the domestic banking sector rose by CZK 46 billion in 2019, reaching CZK 528 billion.[39] The overall capital ratio increased by 1.7 pp to 21.1% (see Chart III.2) and the Tier 1 capital ratio by 1.7 pp to 20.6%.[40] The capital ratio was affected mainly by accumulation of capital from profit (+1.8 pp of the capital ratio) and a decline in aggregate risk weights (+0.7 pp), which outweighed growth in client loans and other assets (-0.8 pp).

Chart III.2
Structure of capital requirements in the domestic banking sector

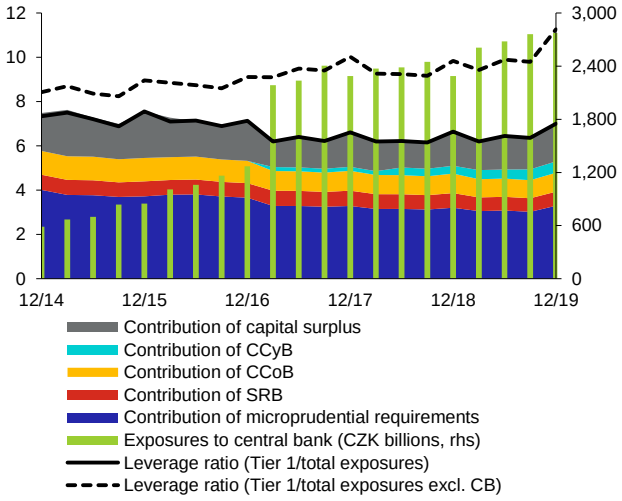
(pp)



Source: CNB

Chart III.3
Structure of the leverage ratio by capital source (the denominator including exposures to the CNB)

(%; right-hand scale: CZK billions)



Source: CNB

Note: Due to unavailability of data in a longer time series, the denominator of the leverage ratio up to 2016 Q3 contains total assets instead of total exposures. The contribution of the capital surplus consists of total capital (not just Tier 1 capital).

The reduction of the countercyclical capital buffer rate to 1% increased institutions' capital surplus

As part of the economic stabilisation measures introduced to mitigate the economic impacts of the coronavirus crisis, the CNB responded by reducing the CCyB rate from 1.75% to 1% with effect from 1 April 2020. The CNB lowered the CCyB rate further to 0.5% with effect from 1 July 2020. This led to an increase in the capital surplus of almost CZK 20 billion. This helped reduce the capital intensity of new loans, which in turn supported the banking sector's capacity to absorb losses and lend to the real economy (see section V.III).

The economic consequences of the coronavirus crisis will put pressure on the capital position of domestic institutions

The coronavirus crisis triggered an unprecedented fall in economic activity, one with strong economic impacts. It is currently impossible to determine the scale of those impacts reliably. They will depend on: (i) the reaction of entities in the real economy to the shock impulse of the coronavirus crisis in the longer term (see section II); (ii) the scale and effect of previously adopted economic stabilisation measures (see section III); and (iii) the future course of the coronavirus

39 The Czech Export Bank and the Czech-Moravian Guarantee and Development Bank are excluded from the analysis of the capital of the banking sector as a whole in the entire section III.2. This is because these banks are wholly owned by the Czech state (providing implicit state guarantees for their liabilities) and have different business models and volatile credit portfolios.

40 Most banks meet the overall capital requirement, consisting of the minimum level of regulatory capital in Pillar 1 (8%), a requirement based on the supervisory review and evaluation process in Pillar 2 (an average of 1.8% for the sector) and capital buffers (an average of 5.9% for the sector), by a sufficient margin. The capital surplus amounted to CZK 135 billion at the end of 2019, of which that of systemically important banks to CZK 83 billion (4.7 pp) and that of other banks to CZK 52 billion (7.2 pp).

pandemic and the subsequent response of the real economy and governments on both the domestic and global scale (see section IV). A lengthening of the period of restricted economic activity can be expected to increase the pressure on institutions' capital position. In such case, an escalation of the subsequent adverse consequences can be expected, associated with possible longer-term structural changes in the behaviour of households and non-financial corporations.

The capitalisation of domestic institutions is largely dependent on capital surpluses…

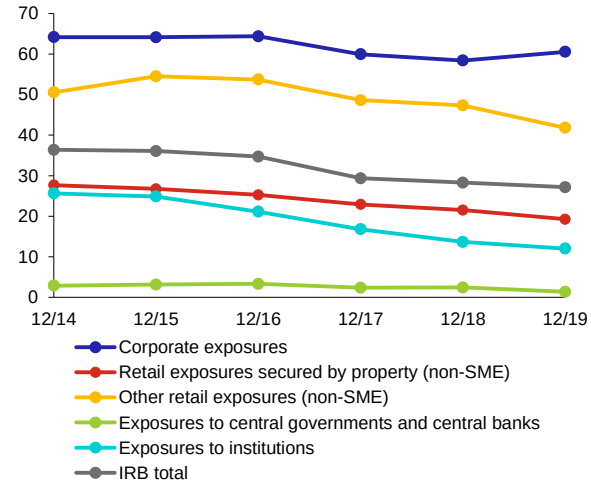
In the *Baseline Scenario* of the CNB's macro stress tests, the capital ratio of the banking sector as a whole does not fall below the Pillar 1 and Pillar 2 capital requirements. Most banks make full use of the capital conservation buffer, and some systemically important institutions also draw on the systemic risk buffer. The results of the macro stress tests also confirmed the key role of the capital surplus in maintaining the banking sector's stability in the event of strong shocks. Without a capital surplus, a total of 17 banks, and the sector as a whole, would fall below the total capital requirement in the *Adverse Scenario* of the CNB's macro stress tests (see section IV.1).

…and requires a prudential approach to profit distribution…

The uncertainty regarding future economic developments and their effect on the performance of institutions and credit losses[41] led the CNB to issue a recommendation calling on institutions to temporarily restrict dividend payments and other actions that might jeopardise their resilience until the acute and longer-running consequences of the coronavirus crisis recede.[42] Similar recommendations were issued in numerous other EU countries. The coordination of these activities at the EU level resulted in the ESRB issuing a Recommendation on restriction of distributions,[43] which foresees the prudential regime lasting at least until the end of 2020.

Chart III.4
Average risk weights of the main categories of exposures under the IRB approach

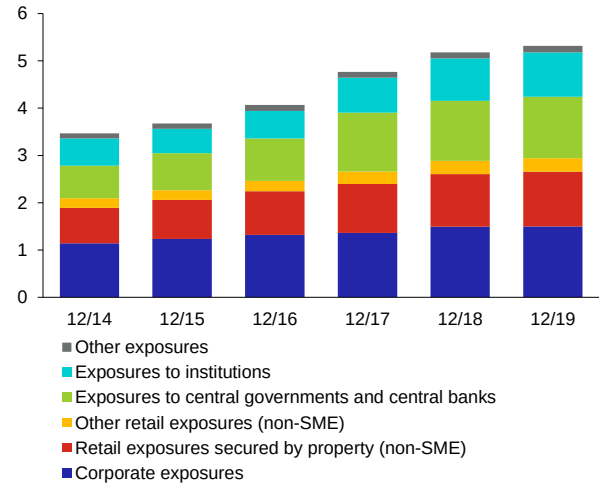
(%)



Source: CNB

Chart III.5
Size of the main categories of exposures under the IRB approach

(CZK trillions)



Source: CNB

…due in part to a possible change in trend in risk weights…

The change in the phase of the financial cycle and the rise in credit risk materialisation are reflected in a rise in risk weights for exposures of institutions that use internal models to set those weights (the IRB approach).[44] Implicit aggregate risk weights tended to fall in previous years (by 1.1 pp year on year to 27.2% in 2019; see Chart III.4). The evolution of retail exposures was consistent with the strongly expansionary phase and subsequent peak of the financial cycle, which was accompanied by stable growth in household income and favourable property price trends.[45] In the case of risk weights for corporate exposures, growing pressure on profitability started to emerge in 2019 in an environment of

41 The materialisation of credit losses usually peaks one or two years after the start of an economic downturn – see BIS (2020): *Buffering Covid-19 Losses – The Role of Prudential Policy.*

42 In addition to banks, the communication was targeted at insurance companies and pension funds – see https://www.cnb.cz/en/monetary-policy/bank-board-decisions/CNB-Board-decisions-1585237680000/?tab=statement.

43 See https://www.esrb.europa.eu/home/html/index.en.html.

44 The analysis of risk weights uses data on implicit risk weights. These are calculated as the weighted value of the exposure divided by the original value of the exposure under the European COREP reporting framework. Exposures whose risk weights are set using the IRB approach amount to CZK 5.3 trillion (see Chart III.5), which corresponds to 70.1% of the exposures of the domestic banking sector.

45 In 2019, the risk weights for loans backed by residential property fell by 2.3 pp year on year to 19.3% and those for other retail exposures (especially consumer credit and other unsecured products) decreased by 5.5 pp year on year to 41.8%.

increased wage costs and weakening external demand (see section II.1).[46] The current situation may further intensify the upward tendency in risk weights for corporate exposures (see section IV.1).

…which may also have a downward effect on the capital ratio

Other things being equal, growth in risk weights increases the capital requirements in absolute terms and reduces the capital ratio. The potential increase in risk weights will be due most of all to the longer-term structural consequences of the coronavirus crisis for the economy on both the domestic and global scale, and may not be strong at first. It may be partly and/or temporarily mitigated by fiscal, monetary policy and prudential stabilisation measures, such as state guarantees in the case of broad application of COVID guarantee programmes,[47] which reduce the credit risks of the relevant exposures (see Table III.1). Conversely, the effect of increasing risk weights on the capital position may be magnified if combined with major credit losses (see section III.2.2 credit risk).

Table III.1
Transmission of fiscal stabilisation measures to institutions' performance while in effect

Description						Impact on credit institutions*								
		Recipients				Credit risk (section III.2.2)			Profitability (section III.2.3)		Capitalisation (section III.2.3)			
Type	Aim	NFCs	Self-employed	Households	Debt instrum.	Credit stage classification	PD	LGD	Reve-nues	Costs (ECL)	Profita-bility	RW	Other **	Liquidity
Direct financial assistance	Strengthen liquidity situation of firms and households	x	x	x	No	↓	↓			↓	↑	↓		
Credit guarantees		x	x		Yes			↓		↓	↑	↓	↑ (BOX 3)	
Loan moratorium		x	x	x	Yes	↓	↓		↓	↓	↗	↓		↓

Source: CNB

Note: The arrows denote the difference compared with the situation of no measures being applied. * The direction of the arrow indicates the transmission to the relevant parameters and the colour of the arrow (green/red) the total expected impact (favourable/unfavourable) on institutions' performance. ** Other measures to strengthen regulatory capital in order to absorb losses (adjustments of capital deductions, dividend restrictions, etc.). PD = probability of default, LGD = loss given default, RW = risk weights, ECL = expected credit loss.

The leverage ratio continues to act as a prudential backstop…

The leverage ratio rose by 0.4 pp year on year to 7.0% at the end of 2019 (see Chart III.3).[48] If capital surpluses decline, it could fall to 4%, close to the 3% level that will represent the minimum leverage ratio requirement after the transposition of CRR II/CRD V.[49] This might imply undesirable capital constraints for smooth lending during an economic downturn. In the Czech Republic, however, the leverage ratio is significantly affected by institutions' exposures to the central bank. In the CRR II/CRD V preparation process, the CNB therefore proposed that exposures to the central bank be excluded in an appropriate way from the base to be used for calculating the leverage ratio, and it still considers this necessary as regards achieving financial and price stability.

…the current situation confirms that the CNB's proposals to exclude exposures to the central bank from the leverage ratio calculation are justified

CRR II/CRD V gives authorities the discretion to adjust the denominator of the leverage ratio for exposures to the central bank for up to one year under exceptional macroeconomic circumstances. Nevertheless, the application and meaning of the discretion are limited due to its being fully offset by an increase in the leverage ratio requirement. The ill-considered nature of this construction is indicated in the Commission's "banking package",[50] which contains a proposal to relax the offsetting mechanism for the adjustment of the leverage ratio requirement (see Box 4). When the denominator was adjusted for exposures to the central bank, the leverage ratio grew by 0.6 pp year on year to 10.4%, signalling a strong capital position of the domestic banking sector in a non-risk-weighted capital regime.

46 The risk weights for corporate exposures increased in 2019 (by 2.1 pp year on year to 60.6%).

47 See, for example, the guarantees under the Czech-Moravian Guarantee and Development Bank's programmes: https:/www.cmzrb.cz/podnikatele/zaruky/zaruka-covid-iii/ (in Czech only).

48 The slight growth in the leverage ratio was due to stronger year-on-year growth in capital (9.7%) than in the banking sector's balance and off-balance sheet (4.1%).

49 Under CRR II, compliance with the leverage ratio is mandatory from 28 June 2021. It is currently only monitored.

50 See https://ec.europa.eu/commission/presscorner/detail/en/ip_20_740.

III.2.2 Credit risk

Credit portfolio quality metrics reached their best-ever levels at the end of 2019…

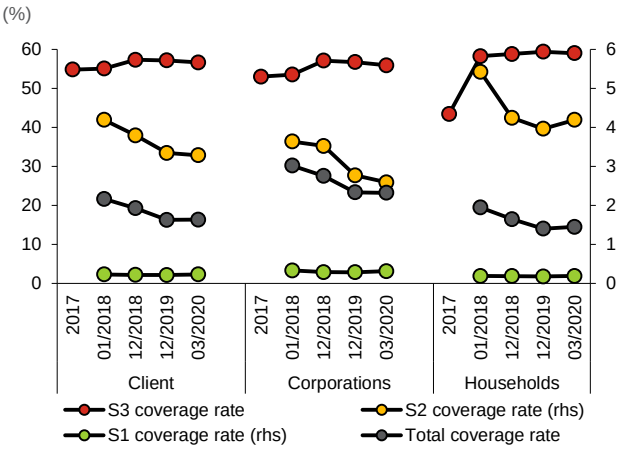
Institutions started 2020 at a historically low credit risk materialisation level. The ratio of non-performing loans (NPLs) to total loans, which is essentially identical to the share of impaired exposures (Stage 3),[51] fell to 2.1% at the end of 2019, its lowest level since 2007 (see Chart III.6).[52] By contrast, the ratio of loans showing no increase in credit risk (Stage 1) to total loans rose by 0.5 pp year on year to 91.8%. The NPL coverage ratio for households and non-financial corporations remained at a sufficient prudential level of 57.5% at the end of 2019. Total coverage by provisions nonetheless recorded a significant year-on-year decrease across portfolios. During 2019, the total coverage ratio gradually declined by 0.4 pp to 2.3% for non-financial corporations and by 0.3 pp to 1.4% for households. This was due mainly to the release of provisions, which dropped by 11.7% year on year to CZK 58 billion for client loans (see Table III.1 CB).[53]

Chart III.6
Loan structure by portfolio

Source: CNB

Note: The loan breakdown for 2017 corresponds to the classification into standard, watch and loss loans under the former IAS 39 standard. Under the new IFRS 9 accounting standard (in effect since 1 January 2018), non-performing loans (NPLs) correspond to loans classified in Stage 3 – impaired loans.

Chart III.7
Loan coverage by portfolio



Source: CNB

…but the consequences of the coronavirus crisis are highly likely to lead to significant credit risk materialisation…

The domestic banking sector showed the first changes in credit portfolio structure in March 2020, soon after the outbreak of the coronavirus crisis, in both loans to non-financial corporations and loans to households. Institutions took into account the change in economic conditions by reclassifying credit exposures into the category of significantly increased credit risk (Stage 2), whose share in client loans thus increased by 1.3 pp to 7.5% at the end of March (up 21.6%) (see Chart III.6; the yellow fill in the column). Non-financial corporations recorded an increase in the ratio of Stage 2 loans of 2.5 pp to 10.3% (up 32.5%), while households saw a rise of 0.7 pp to 6.5% (up 12.4%). At the portfolio level, a simultaneous increase in expected credit losses caused the decline in the cyclically conditional coverage ratios seen in previous periods to halt and stabilise at the end-2019 levels (see Chart III.7). Nevertheless, the growth in expected credit losses was uneven at the credit stage level. This was reflected in mixed trends in coverage ratios. Together with the rise in Stage 2 loans, the coverage ratio for households increased by 0.2 pp to 4.2%, whereas non-financial corporations saw a continuation of the downward trend observed in previous periods (a fall of 0.2 pp to 2.6%).

51 For the assessment of credit risk, the IFRS 9 accounting standard requires correct and timely recognition of both materialised credit risks (a backward-looking view), when loan impairment has already taken place (non-performing loans, Stage 3 – impaired) and future expected credit risks (a forward-looking view) for loans that do not currently show any evident signs of impairment (performing loans, Stage 1 – no increase and Stage 2 – increase). Institutions cover recognised materialised and future expected credit risks with provisions.

52 This fall was due to a combination of an increase in the volume of total loans (from 23%) and a decline in the volume of NPLs (from 77%).

53 Provisions for performing loans in the household and non-financial corporations sectors amounted to around CZK 14 billion at the end of 2019, accounting for 25% of the total volume. The value of provisions for NPLs in Stage 3 was roughly CZK 44 billion.

…which the current level of expected credit losses may not reflect sufficiently…

The change in economic conditions and the reclassification of exposures into higher credit risk categories were reflected in an increase in expected credit losses (see Table III.1 CB), but the expected credit losses in the sectors of households and non-financial corporations remain close to all-time lows in absolute terms.[54] Current expectations regarding future developments in the domestic and global economy (estimates of the contraction in GDP significantly exceed the adverse scenarios usually considered in central banks' stress tests; see section II)[55] suggest that the reactions of institutions' modelling systems in the credit risk area to the change in economic conditions have so far been gradual[56] and may reflect the application of flexibility in the regulatory and accounting frameworks (see Box 3), the effect of economic stabilisation measures, and a more favourable assessment of possible future economic developments.

BOX 3 Flexibility in the regulatory and accounting frameworks and measures to mitigate the impacts of the coronavirus crisis

Besides a proposed CRR-COVID amendment (see Box 4), the banking package with which the European Commission responded to the current coronavirus crisis contained an interpretative communication on the application of the accounting and prudential frameworks to facilitate EU bank lending (the "Communication"). The argumentational starting point for applying flexibility during the coronavirus crisis was the concern that strict application of the current accounting and regulatory frameworks might foster a sudden and sizeable increase in credit losses with negative impacts on institutions' performance and in turn on the credit supply. The CNB has long been pointing to these properties of IFRS 9 and takes them into account in its macroprudential policy regarding capital buffers.[57] Numerous institutions have advocated making use of the existing flexibility of the accounting and regulatory frameworks[58] to enhance institutions' role in resolving the impacts of the coronavirus crisis. The Communication summarises these recommendations and brings them under one roof. As regards the assessment of credit risk, the Communication covers (i) approaches to assessing the credit quality of exposures and (ii) approaches to determining expected losses.

(i) Assessing the nature of credit exposures in terms of credit quality

According to the Communication, exposures affected by stabilisation measures do not have to be automatically classified as foreborne or non-performing for regulatory purposes. The same applies to public and private moratoria if they are targeted at a wide range of classes of products or clients rather than individual obligors.[59] One case where an exposure is classified as non-performing is the determination of a defaulted exposure. By using a moratorium, the time limit of 90 days past due, which is one of the criteria for determining a defaulted exposure, may be suspended temporarily (for the duration of the moratorium). However, institutions are still obliged to assess on an ongoing basis the credit quality of exposures (the unlikely-to-pay criterion) to which the moratorium and other stabilisation measures apply, and to identify default where necessary.[60] The use of public guarantees does not give rise to separate grounds for identifying default.

Under IFRS 9, non-performing exposures are recorded as impaired loans (Stage 3). As regards the credit quality of exposures, however, it is also relevant to assess the criterion of a significant increase in credit risk (SICR) and take it into account appropriately in the classification of credit exposures (Stage 2). The use of public or private moratoria or other stabilisation measures alone should not be considered an automatic condition for the SICR criterion to be applied. Moreover, as with the determination of default, when assessing a significant increase in credit risk, the time limit of 30 days past due, which is one of the SICR criteria, is suspended for the duration of the loan moratorium.

54 Expected credit losses rose by CZK 2.7 billion in absolute terms in 2020 Q1. The expected credit losses on client loans were thus CZK 9 billion (13%) lower at the end of March 2020 than when IFRS 9 was introduced at the start of 2018. Client loans rose by CZK 500 billion (13%) in the same period.

55 According to the CNB's current forecast, the real GDP growth estimate for 2020 is -8%, while the cumulative decline in real GDP in the FSR 2018/2019 adverse scenario was 7%. See also, for example, Bank of England (2020), *Financial Stability Report*, at https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-report/2020/may-2020.pdf.

56 For details see Box 3.2 in FSR 2018/2019, which discusses the impact of banks' expectations on timely and sufficient provisioning under IFRS 9.

57 See, for example, section 4 *Stress tests* in FSR 2017/2018 at https://www.cnb.cz/export/sites/cnb/en/financial-stability/.galleries/fs_reports/fsr_2018-2019/fsr_2018-2019_chapter_4.pdf.

58 See, for example, ECB communication of 12 March 2020 at https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200312~43351ac3ac.en.html.

59 According to a statement made by the EBA, public and private moratoria should be treated equivalently if they have a similar purpose and features. For details see the EBA *Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis* at https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2020/Guidelines%20on%20legislative%20and%20non-legislative%20moratoria%20on%20loan%20repayments%20applied%20in%20the%20light%20of%20the%20COVID-19%20crisis/882537/EBA-GL-2020-02%20Guidelines%20on%20payment%20moratoria.pdf.

60 According to the EBA, individual credit assessments should be conducted carefully, i.e. without automatic classification. The initial assessment should focus on exposures that are most likely to have an important impact. In the period immediately after the moratorium, credit institutions should pay special attention to exposures for which payments are delayed under a revised schedule and identify potential "unlikely-to-pay" default.

(ii) Approaches to determining expected credit losses
The Communication also provides an interpretation of the procedure for calculating expected credit losses under IFRS 9. Institutions should consider the complex nature of the situation, the likely expected longer-term future developments, and the availability and reliability of source information. Institutions should carefully assess to what extent the high degree of uncertainty and sudden changes in the economic outlook affect the obligation in question during its expected duration. When classifying exposures under the accounting framework, which affects the way expected credit losses are calculated, institutions should distinguish between obligors whose rating should not be affected significantly by the current situation in the long term and those whose previous creditworthiness is not likely to be restored. When calculating expected credit losses, institutions should also take into account the effect of government guarantees, which do not affect the obligor's probability of default but do reduce institutions' realised credit losses in the event of default.

…due in part to the application of flexibility in the regulatory and accounting frameworks…
Given the extraordinary situation, European authorities and numerous EU Member States advocated making use of the existing flexibility of the regulatory and accounting frameworks to enhance the banking sector's role in resolving the economic impacts of the coronavirus crisis (see Box 3). In some cases, the existing legislative rules needed to be changed to enable flexibility (see Box 4). The application of flexibility responds to the extraordinary situation caused by the coronavirus crisis, but cannot be seen as a permanent relaxation of the prudential requirements by supervisors. The aim is to spread over time the potential one-off shock to institutions' performance caused by consistent application of the IFRS 9 accounting and prudential principles and the capital regulatory framework. In terms of macroprudential policy, however, such application of flexibility requires a prudential approach to the macroeconomic management of capital buffers, as systemic losses may temporarily turn latent. Full and reliable calculation of those losses will be possible only after further economic developments become clearer, the regime of applying flexibility of the regulatory framework has been abandoned, and the long-term effectiveness of the stabilisation measures has been assessed.

BOX 4 The proposed CRR-COVID amendment

The Commission responded to the coronavirus crisis by proposing a banking package containing a draft amendment of CRR (CRR-COVID).[61] This initiative is intended to enhance institutions' ability to lend to firms and households while maintaining their resilience and thus enabling them to overcome the crisis and subsequently recover more quickly. The proposed revisions of CRR take into account the need to make some temporary and targeted changes to the legislative framework, changes which should further enhance institutions' key role in mitigating the negative impacts of the crisis. The banking package focuses on strengthening institutions' capital position by changing the dates of effect and parameters of selected regulatory rules.

(i) Strengthening capital by changing the date of application of regulatory rules
The first set of proposals postpones or conversely advances the date of application of selected regulatory measures. The amendments include an extension of the transition period for incorporating changes arising from IFRS 9 into regulatory capital and softening the capital requirements. Under the temporary IFRS 9-related measures, this will allow institutions to set off part of their expected credit losses due to COVID-19 against CET1 capital. The amendment postpones the date of implementation of the final phase of the Basel III reform by one year. Among other things, this affects the leverage ratio buffer requirement for global systemically important institutions. The date of application of the leverage ratio buffer is now 1 January 2023. Other measures include advanced application of the SME supporting factor and the infrastructure supporting factor, and earlier application of the exemption of software assets from capital deductions.

(ii) Strengthening capital by changing the parameters of regulatory rules
The second set of proposals extends the application of the existing regulatory rules to a wider group of entities and instruments and modifies the mechanisms for their application. For example, it changes the treatment of guarantees for the minimum loss coverage for non-performing loans (the prudential backstop) and extends the preferential treatment of non-performing exposures to a broader set of public guarantee providers.[62]

61 The banking package also included an interpretative communication on the EU's accounting and regulatory frameworks related to the coronavirus crisis (the "Communication"; see Box 3).

62 As regards the domestic financial sector, it is important in this context that the legislative amendment also covers the guarantee schemes managed in the Czech Republic by the Czech-Moravian Guarantee and Development Bank and counter-guaranteed by the state.

Another of the proposed legislative amendments concerns the discretion applied to the calculation of the leverage ratio. CRR II allowed institutions to temporarily exclude their central bank reserves from the leverage ratio denominator for up to one year provided that such exclusion was fully offset by an increase in the leverage ratio requirement. Under the proposal, the adjusted leverage ratio would be calculated only at the moment the institution exercises the discretion. The adjusted leverage ratio would remain unchanged throughout the period during which the discretion is exercised (even if exposures to the central bank increased). However, the unchanged application date of 28 June 2021 raises questions, as it may be insufficient in the current situation and thus represents a delay.

The CNB generally supports the Commission's initiative. In line with its long-term approach, the CNB simultaneously observes the need for a prudential approach to the creation and reporting of regulatory capital. In this sense, the need for a balanced approach is growing in importance, particularly as regards the proposed amendments in the area of the transition period for incorporating changes arising from IFRS 9 into regulatory capital, which disrupt the continuity of public policy and may potentially undermine its credibility. As regards financial stability and the mitigation of the negative impacts of the coronavirus crisis, it is conversely desirable to expand the range of eligible providers of public guarantees and their operation in the domestic banking sector.

…and the economic stabilisation measures adopted to reduce credit risk

The measures taken by the government and the CNB to mitigate the economic impacts of the coronavirus crisis reduce the risk of rapid materialisation of credit risks in institutions' balance sheets (see Table III.1). The fiscal measures aim to enhance the liquidity situation of non-financial corporations and households, and include direct support,[63] deferral of loan repayments (a loan moratorium) and state guarantees for bank loans. Direct support and loan moratoria favourably affect the default rates of non-financial corporations and households and thus enhance institutions' position by reducing expected credit losses and spreading them over time. State guarantees reduce institutions' potentially realised credit losses in the event of default. In the monetary policy area, interest rates have been lowered, fostering a potential decrease in the debt service of firms and households.[64]

The take-up of the loan moratorium…

A voluntary and statutory loan moratorium enabled institutions' customers to postpone their loan instalments in the event of a temporary loss of income due to the coronavirus crisis (see section V).[65] More than 320,000 applicants (firms and households), with loans totalling CZK 420 billion,[66] had exercised the statutory option to postpone their instalments as of the end of May 2020. Applications in the non-financial corporations sector amounted to CZK 190 billion, or 14.5% of non-financial corporations' portfolio. Most of the applications in the household sector involved mortgage loans, totalling CZK 175 billion (around 12% of the portfolio). Applications amounting to almost CZK 55 billion concerned consumer credit (23% of the portfolio).

…indicates potential growth in expected credit losses…

Foreign experience with moratoria shows that deferring instalments prevents default to only a limited extent.[67] A comparison of institutions' prudential approach to unimpaired loans (Stage 1 and Stage 2) with the potential losses on the loans under moratorium calls for a prudential assessment of institutions' existing expected credit losses. The observed trend in repayment deferral applications (see Chart III.8 and Chart III.9) indicates that the expected credit losses may be markedly higher, so the risk of latent credit losses must be assessed as being quite high. The fact that the amount of loans under moratorium may increase further over time should also be taken into account in this context.

…which macroprudential policy must take into account

On the one hand, the latency of credit risks and the lag in their pass-through to institutions' performance create favourable conditions for dealing with the economic impacts of the coronavirus crisis and enhance institutions' role in resolving them. On the other hand, they require a balanced macroprudential policy response in the area of the banking sector's resilience, especially as regards capitalisation.

63 Fiscal measures in the form of direct support include grants and/or compensation (e.g. the Antivirus employee protection programme and a compensation bonus for the self-employed) and tax and insurance relief (e.g. a tax liberation package).

64 However, the decrease depends on the response of the risk and liquidity components of the interest rate on new loans.

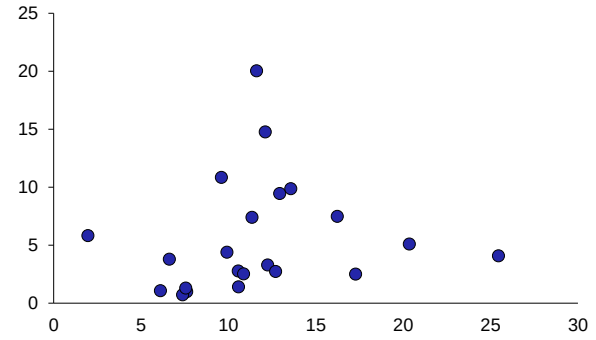
65 See Act 177/2020 Coll. on some measures in the area of loan repayment in connection with the COVID-19 pandemic. The moratorium is binding on all institutions and non-bank lenders. Instalments on consumer credit and corporate loans, including mortgages agreed and drawn before 26 March 2020, can be postponed for a grace period lasting until 31 October 2020 or, in the case of the shortened grace period, 31 July 2020.

66 This figure represents the collateral for loans with postponed instalments.

67 See, for example, Bartiloro, L., Carpinelli, L., Finaldi Russo, P., Pastorelli, S. (2012): *Access to Credit in Times of Crisis: Measures to Support Firms and Households.* Bank of Italy Occasional Paper No. 111, and Bank of Italy (2012), *Financial Stability Report* at https://www.bancaditalia.it/pubblicazioni/rapporto-stabilita/2012-3/index.html?com.dotmarketing.htmlpage.language=1.

Chart III.8
Potential losses from the loan moratorium and expected credit losses

(x-axis: shares of applications in institution's portfolio in %; y-axis: ratio of potential ECL exposures under moratorium to ECL on unimpaired loans)

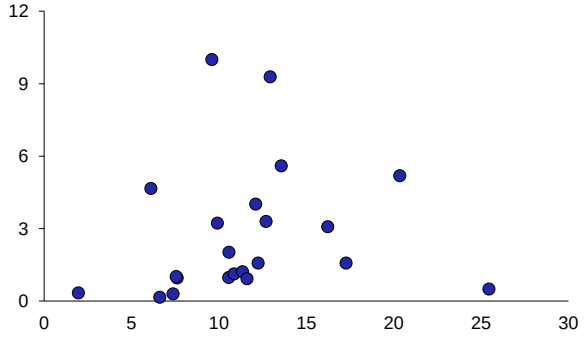


Source: CNB

Note: ECL – expected credit losses. Anonymised data from banks' quantitative reporting related to the COVID-19 pandemic as of 29 May 2020. The ECL from the moratorium are calculated assuming an upper limit on problem loans of 30% in line with Bartiloro et al. (2012) and Bank of Italy (2012). The expected loss given default (LGD) corresponds to the levels in the macro stress tests. An LGD of 10% was considered in the case of loans for house purchase. ECL on unimpaired loans as of 31 March 2020 – Stage 1 and Stage 2.

Chart III.9
Potential losses from the loan moratorium and migrations to stages with higher credit risk

(x-axis: shares of applications in institution's portfolio in %; y-axis: ratio of exposures under moratorium with potential credit risk deterioration to migrations from Stage 1 and Stage 2)



Source: CNB

Note: Exposures with potential credit risk deterioration are calculated using anonymised data from banks' quantitative reporting related to the COVID-19 pandemic as of 29 May 2020. The assumed upper limit is 30% in line with Bartiloro et al. (2012) and Bank of Italy (2012). Migrations comprise downward reclassifications from Stage 1 and Stage 2 as of 31 March 2020.

III.2.3 Profitability and liquidity

The profitability of the banking sector reached a historical high in 2019 but started to decline in 2020 Q1…

The banking sector's profit was up 11.6% year on year at the end of 2019, reaching a historical high of CZK 91 billion. The CNB repeatedly pointed to sources of profitability that are cyclical or otherwise situationally conditional – especially very low impairment losses and interest income on exposures to the central bank (see Chart III.10). The first impacts of the coronavirus crisis started to be felt in 2020 Q1. Profit fell by 20.7% year on year to CZK 14.5 billion. The main factors behind the drop were incipient growth in impairment losses and a continuing upward trend in administrative expenses.[68]

…the coronavirus crisis will lead to a further drop in profitability

Profitability will decline further in 2020, mainly because of growth in impairment losses and the impact of the monetary policy rate cut on interest profit. Impairment losses started to rise in 2020 Q1 (see Chart III.11). Going forward, they may be temporarily affected by the loan moratoria, the state guarantees for loans,[69] regulatory flexibility in assessing credit risk, and banks' internal approaches to provisioning (see section III.2.2). The reduction of the monetary policy rate from 2.25% in March 2020 to 0.25% in May 2020 will also exert downward pressure on profit. That pressure will be felt first of all in a drop in interest income on banks' excess liquidity held at the CNB (see Chart III.12) and may subsequently lead to a fall in interest rates on new loans.

Maintenance of current interest income on client loans is uncertain

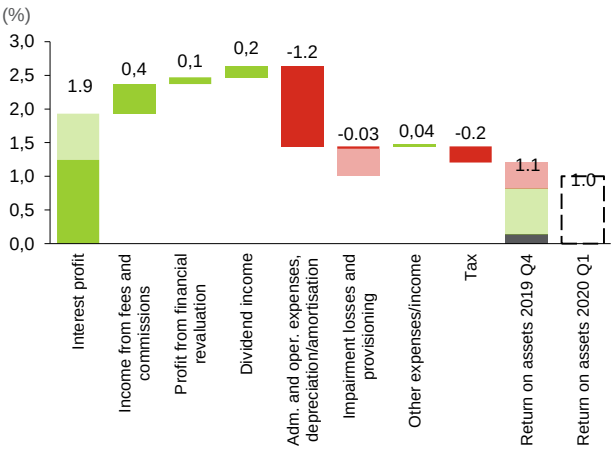
Total interest margins[70] kept following a downward trend (of -0.34 pp year on year to 3.31 pp) at the end of 2019. The only exception was margins on corporate loans (up 0.09 pp to 3.66 pp). In 2020 Q1, however, the trend changed (see Chart III.13). While margins on housing loans have gone up slightly since the end of 2019 (by 0.07 pp to 2.26 pp), those on corporate loans have already responded to the drop in monetary policy rates (down 0.61 pp to 3.04 pp). A further decline in margins may be hindered by growth in the risk premium. Interest income on client loans will be affected by credit activity in addition to loan margins. The negative impacts of the coronavirus crisis on the financial situation of households and non-financial corporations (see section II) and increased risk aversion of credit institutions may lead to a drop in both demand for and supply of credit from the banking sector. However, the loan moratorium and state loan guarantees, which reduce the risk of an acute credit contraction, should have a temporarily favourable effect. Moreover, the CNB has supported banks' capital capacity for lending (see section V) by partially releasing the CCyB.

68 Impairment losses increased by CZK 2.2 billion and administrative expenses by CZK 1.6 billion year on year as of 2020 Q1.

69 The impact of these measures on profitability will depend on their take-up and duration.

70 Margins are calculated as loan rates for the given sector minus the average deposit rate.

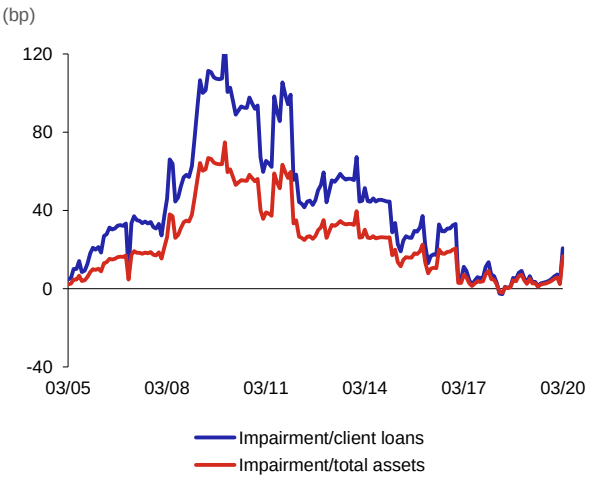
Chart III.10
Decomposition of return on assets



Source: CNB

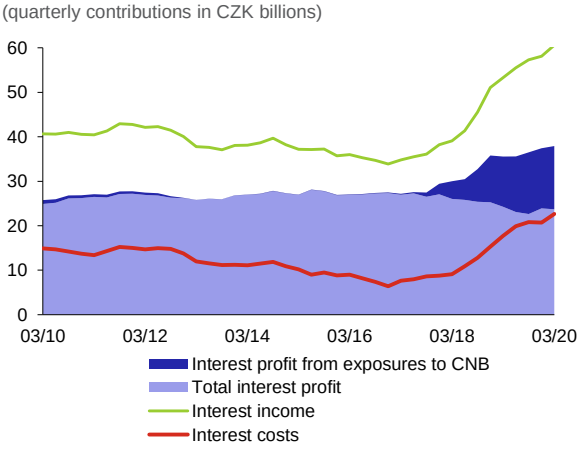
Note: The given value is the ratio of the given type of income/expense to the level of assets. The light red fill is the level of impairment as of 2009 Q4 (the highest impairment level in the period under review) and its potential impact on return on assets in 2019 Q4. The light green fill is the share of interest profit from exposures to the central bank.

Chart III.11
Asset impairment losses



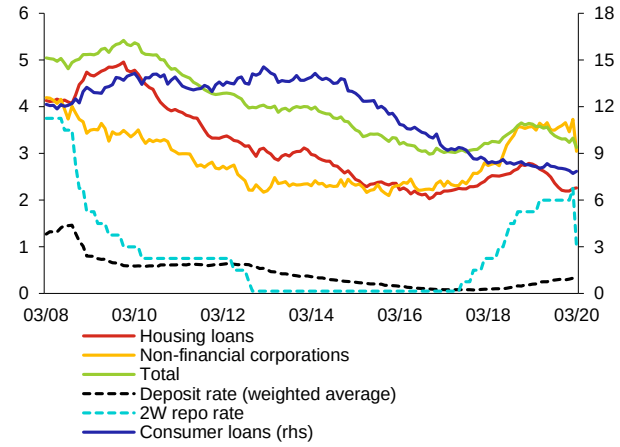
Source: CNB

Chart III.12
Decomposition of interest profit



Source: CNB

Chart III.13
Interest margins on new loans



Source: CNB

Note: Margins are calculated as loan rates for the given sector minus the average deposit rate. The non-financial corporations item excludes revolving loans and credit cards.

Interest profit may adversely affect the limited manoeuvring space for deposit rates

In response to the decrease in financial market rates, interest rates on household deposits with agreed maturity (9.9% of total household deposits) also declined, doing so by 0.4 pp month on month to 1.4% as of 2020 Q1. Rates on demand deposits have not responded yet; the average deposit rate for Q1 was 0.29%. Banks' manoeuvring space for a further cut in deposit rates is thus much smaller than during the previous contraction of the business and financial cycle (see Chart III.13).[71] It may also be limited by the potential risk of migration of deposits outside the banking sector. However, this risk is not significant in the short term given the banking sector's good liquidity position.

The liquidity ratios confirmed the domestic banking sector's high resilience to liquidity risk

The banking sector's resilience to a short-term liquidity shock is assessed using the liquidity coverage ratio (LCR). Sufficient available stable funding is monitored using the net stable funding ratio (NSFR). The aggregate LCR for the banking sector as a whole was 172% as of 2020 Q1 and all credit institutions were compliant with the regulatory limit of 100% (see Chart III.14). The impact of the loan moratorium on the LCR should be limited due to the low, 6% share of

71 Other things being equal, a drop in deposit rates from their current level to 0% implies an increase in interest profit of CZK 15 billion.

inflows of repayments of claims on non-financial corporations and retail clients in total inflows under the LCR. The euro LCRs of most banks are below the 100% level (see Chart III.1 CB). As of 2020 Q1, the euro-denominated liquidity buffer for the banking system as a whole was 26% and the dollar-denominated one was 75%. The euro LCR is affected mainly by encumbered outflows within ownership groups and – together with potential access to euro liquidity through foreign parents – thus constitutes a lower systemic risk. No regulatory limit on the LCR in foreign currencies is set for institutions. The NSFR for the domestic banking sector was also at a sufficient aggregate level of 135% (see Chart III.14).[72]

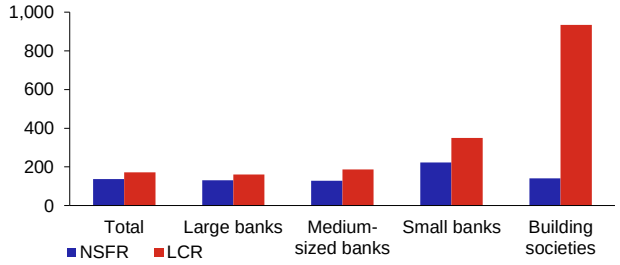
The high LCR and the NSFR levels were due in part to the composition of credit institutions' assets

Banks' balance sheets contain a large share of highly liquid securities, to which no haircuts are applied in the case of the LCR and which require no or very low coverage by stable funds in the case of the NSFR. The high ratios were also due to a strong base of retail deposits, which are considered stable funds subject to low expected outflows in crises (see section III.2 CB). For this reason in particular, building societies had the highest aggregate LCR. Unlike other bank groups, they traditionally have a high share of stable funds with a contractual maturity of over three months, which has a favourable effect on their LCR and NSFR (see Chart III.14). On the other hand, their assets requiring coverage by stable funds in the NSFR account for more than 60% of total assets, with loans to natural persons and non-financial corporations dominating (see Chart III.3 CB).

Chart III.14

Comparison of selected indicators of bank balance-sheet liquidity

(%; as of 31 March 2020)



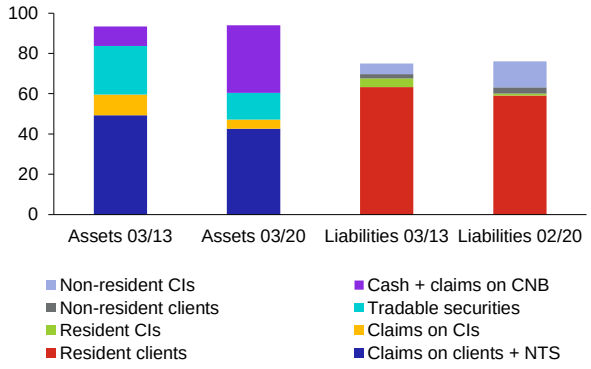
Source: CNB

Note: The LCR is the ratio of the liquidity buffer to the net liquidity outflow of banks over a 30-day stress horizon as defined by European Commission Regulation 2015/61. The NSFR is the ratio of available stable funding to required stable funding as defined by Basel III. The results take liquidity subgroups into account and exclude state-owned institutions.

Chart III.15

Selected balance-sheet items of the domestic banking sector

(% of balance sheet)



Source: CNB

Note: CIs = credit institutions. NTS = nontradable securities.

Despite a higher share of short-term liabilities to non-resident credit institutions, a strong liquidity position persists in banks

The high resilience of domestic banks to liquidity shocks is due mainly to a high share of liquid assets and a large excess of client deposits over client loans (see Chart III.15). An elevated share of liabilities to non-resident credit institutions persists in balance sheets. Loans from non-resident credit institutions rose from 5.2% of total assets (March 2013) to almost 13% (March 2020). However, their share took on a downward trend during 2019 and stood at 17% of total assets as of 31 December 2019. The banking sector's claims on the CNB grew from 10% to almost 34% of its balance-sheet total in the period under review (see Chart III.15).

According to banks' plans, coverage of loans by primary funds will remain high in the future

In their end-2019 funding plans, domestic institutions expected loans to the private sector to increase on average by 5.6% year on year, from CZK 3.4 trillion to around CZK 4 trillion at the three-year horizon (see Chart III.4 CB). They planned to increase private sector deposits and issuance of debt securities with maturities of at least three years from CZK 4.4 trillion to CZK 5.3 trillion. The planned funds of banks would sufficiently exceed their planned loans and would even cover credit growth over the entire three-year horizon in the *Baseline Scenario* (see section II.1, Table IV.1 and Chart III.4 CB). The three-year outlook for the coverage of loans by primary funds, i.e. the ratio of client deposits to loans, also remains high. Institutions are planning to stay at similar levels in the medium term. This ratio would drop below 100% assuming slightly higher-than-planned growth in client loans (10%) and unchanged client deposits (see Chart III.5 CB). These developments would force banks to cover growth in loans using other, potentially less stable, funds. Institutions can be expected to incorporate the economic impacts of the coronavirus crisis into their plans by lowering the expected growth in loans to the private sector. Other things being equal, this should strengthen the banking sector's liquidity position.

72 A minimum standard specifying the calculation of the NSFR in the EU will be introduced by an amendment to the CRR (CRR II) expected to take effect during 2021.

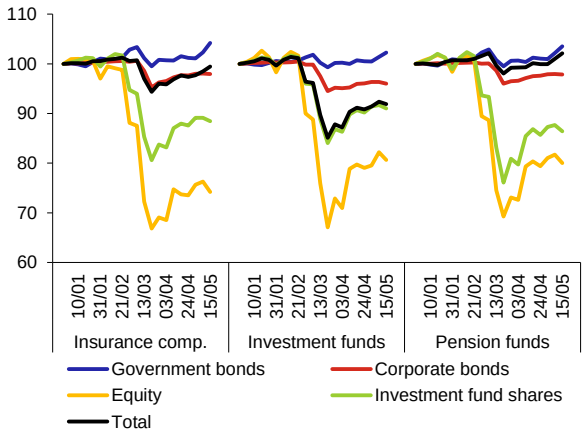
III.3 NON-BANK FINANCIAL INSTITUTIONS

The coronavirus crisis led to a drop in asset value, particularly in the case of investment funds

Investment and pension funds recorded growth in their balance sheets in 2019 (see Chart III.1). This reflected both domestic investors' continuing interest in investing through institutional investors, and returns on financial assets during 2019. In the case of insurance companies, by contrast, the gradual downward trend in assets continued in 2019. Due to the coronavirus crisis, the financial markets experienced a turnaround in 2020 Q1 (see section II.1). Of the assets held, shares were the most affected and government bonds the least affected by the crisis (see Chart III.16). Given the structure of assets (see Chart III.17) and their riskiness (see Chart III.18), the revaluation was the most pronounced in the investment portfolios of domestic investment funds.

Chart III.16
Relative values of portfolios

(relative index; 31 December 2019 = 100)

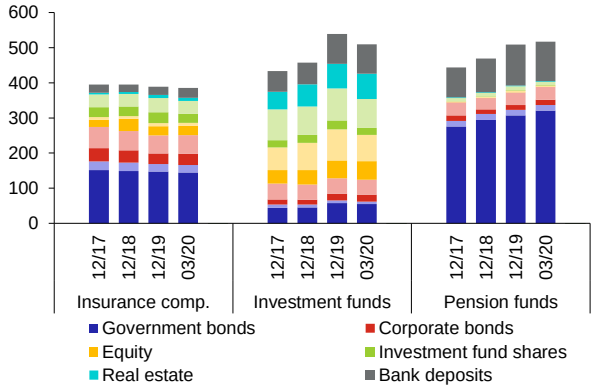


Source: CNB, Refinitiv

Note: The chart shows the weighted price indices calculated from the assets held by the given segments as of 31 Dec 2019, where the weights were the volumes of assets in the given categories. Only traded assets with available price quotations were included (in all segments this involved most assets, with the exception of shares held by insurance companies).

Chart III.17
Components of domestic institutional investors' assets

(CZK billions)



Source: CNB

Note: The light-coloured areas of columns show the values for foreign assets and the dark-coloured areas show domestic assets, with the exception of real estate and deposits, where domestic and foreign assets are not differentiated.

The revaluation of assets did not lead to systemic liquidity stress for domestic non-bank institutions

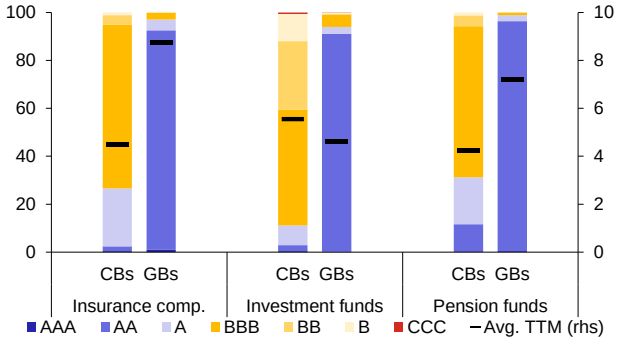
The financial market shock culminated globally in a liquidity stress on institutional investors' balance sheets and required central banks to respond by supplying liquidity to financial markets (see section II.1). For domestic insurance companies, pension funds and investment funds, two possible sources of liquidity stress are relevant: growth in terminations of investment products, and liquidity needs arising from the use of derivatives. In the first case, the possible liquidity stress is associated with the risk of a sudden increase in the termination of investment products by investors in response to the loss in the value of their shares.[73] Nevertheless, growth in terminations was not systemically significant in the first few months of 2020 (see Chart III.19).[74] Some domestic institutions did record liquidity needs arising from the use of derivative contracts during the first few months of 2020. These needs related mainly to certain derivatives through which domestic institutions were hedging against appreciation of the koruna. A weakening of the koruna in March 2020 led to losses on these transactions and related requirements from counterparties to replenish margins, which could have led to liquidity shortages in some institutions. According to the CNB's estimates, the additional liquidity requirements arising from derivative transactions mainly concerned certain investment funds. Their total liquidity shortage was estimated at almost CZK 5 billion.[75]

73 In the event of significant terminations, funds and insurance companies may not have a sufficient liquidity buffer to make payments. They would therefore be forced to sell off less liquid assets. This in turn would cause prices of financial assets to fall and multiply the initial shock and could result in a spiral of falling prices and sell-offs of assets, potentially with systemic impacts.

74 In the case of insurance companies, the liquidity stress associated with growth in terminations is limited by the existence of a statutory three-month period for insurance companies to pay the residual value of the product. The three-month period also applies to transformed pension funds. In the case of other segments, the period is shorter – one to two months for participation pension funds and two weeks to one month for investment funds (with the exception of real estate funds, where the period may be up to one year).

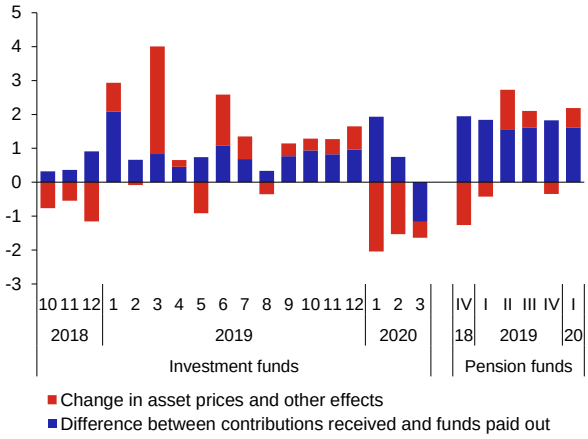
75 The CNB's estimate was based on the fact that the vast majority of the foreign currency positions of domestic insurance companies and pension and investment funds were hedged against exchange rate risk, and especially against appreciation of the koruna. Based on the size of foreign currency portfolios and the extent of the depreciation in March 2020, the size of the loss and subsequently the extent of the liquidity top-up need were estimated. The latter was compared with the liquid funds on the balance sheets of individual institutions. The CNB's estimate was based on data on selected derivative transactions of investment funds from the EMIR database.

Chart III.18
Decomposition of bonds held by institutional investors by rating as of 31 December 2019
(%; right-hand scale: maturity in years)



Source: CNB, Refinitiv
Note: CBs = corporate bonds, GBs = government bond, TTM = time to maturity Time to maturity is calculated for all bonds held (including unrated bonds). The share of corporate bonds with an available rating in total corporate bonds held was 44% for insurance companies, 42% for investment funds and 66% for pension funds. The share of government bonds with an available rating exceeded 85% in all segments.

Chart III.19
Decomposition of the change in the value of investment and pension funds' assets
(% of assets as of end of previous period)



Source: CNB
Note: Monthly data for investment funds and quarterly data for pension funds.

Risks relating to increased volatility of market variables and the long-term impacts of the coronavirus crisis persist

The drop in prices on the financial market was most pronounced in March 2020, and the situation gradually began to stabilise in April. The risk of insufficient liquidity of domestic institutional investors was reduced by the extension of the CNB's instruments to include the option of conducting repo operations with non-bank institutions (see Box 1). The CNB's recommendation to suspend the pay-out of profits for 2019, directed at insurance companies and pension companies, also temporarily contributed to maintaining sufficient liquidity and solvency positions of these segments. Nevertheless, the risk of increased volatility returning to the markets persists, as does the uncertainty about the future course of the pandemic and related measures to counter its spread. The gradual uncovering of the economic consequences of the coronavirus crisis may also have a negative effect on stock prices and trigger a wave of downgrades with an impact on bond prices (see section II.1.1). Given the riskiness of bond portfolios, this would have the greatest impact on the domestic investment funds segment (see Chart III.18). A sustained decline in prices of financial assets and a simultaneous decrease in the liquidity buffers of households and non-financial corporations could lead to a gradual outflow of funds from the domestic non-bank segments of the financial market and cause structural changes in the domestic financial system.

Developments in the investment fund segment had the biggest effect on equity funds…

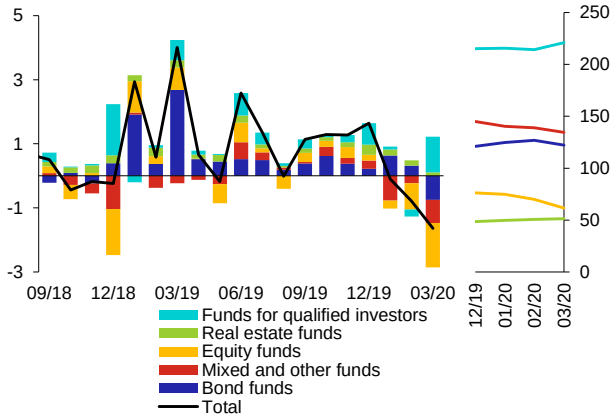
The growth in funds in the investment fund sector in 2019 (a year-on-year increase of 18.6% to CZK 606 billion) reflected both inflows of new funds and returns on investments (see Chart III.19). Bond funds recorded the fastest growth, due to inflows of new funds. Equity funds were favourably affected by the movement of prices on stock markets (see Chart III.20 and Chart III.21). The trend reversed after the outbreak of the coronavirus crisis in 2020 Q1 (a decrease in the segment's total assets of CZK 15 billion, or 2.5%, occurred between 31 December 2019 and 31 March 2020). Equity funds saw the biggest decline (of CZK 14.7 billion, or 19.3%, quarter on quarter), due to a drop in valuation.

…the increased net outflow from some investment funds in March 2020 did not attain systemic significance

Redemptions of bond fund units totalled CZK 8.4 billion during March 2020,[76] more than double the monthly average for 2019 (CZK 3.2 billion). The inflow of new funds to bond funds was CZK 3.9 billion in March, so the net outflow was CZK 4.5 billion (3.6% of assets as of 29 February 2020). Other categories of investment funds were less affected by outflows (see Chart III.21). Outflows of funds generally pose a risk to collective investment funds. In Q1, however, the outflow of funds in the order of a few per cent of assets did not represent a risk to financial stability, as collective investment funds held sufficient liquid funds (see Chart III.6 CB). A prolonged crisis associated with a gradual outflow of a higher volume of capital from funds could nevertheless force investment funds to gradually sell even less liquid assets. For some asset classes (such as real estate), this could lead to a more significant change in their prices. The potential risks arising from current developments and the contribution of investment funds to systemic risk are now assessed by the CNB by means of a macro-stress test of investment funds (see section IV.2.3).

76 For the purposes of the outflow analysis, the fund breakdown was performed according to the list used for the purposes of monetary and financial statistics.

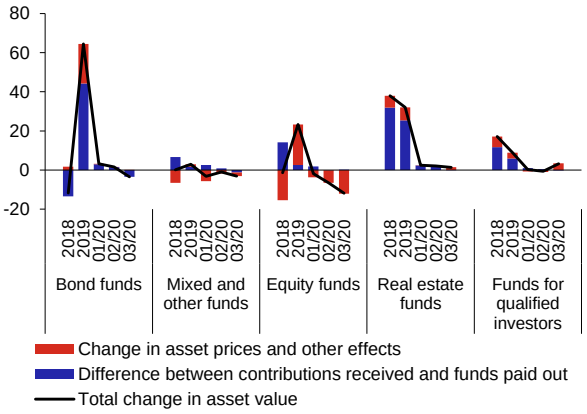
Chart III.20
Growth rates in the investment fund sector
(%; right-hand panel: CZK billions)



Source: CNB

Note: The right-hand panel shows the value of the assets managed by the given fund categories since the end of 2019.

Chart III.21
Decomposition of the change in the value of investment funds' assets by investment area
(% of assets as of end of previous period)



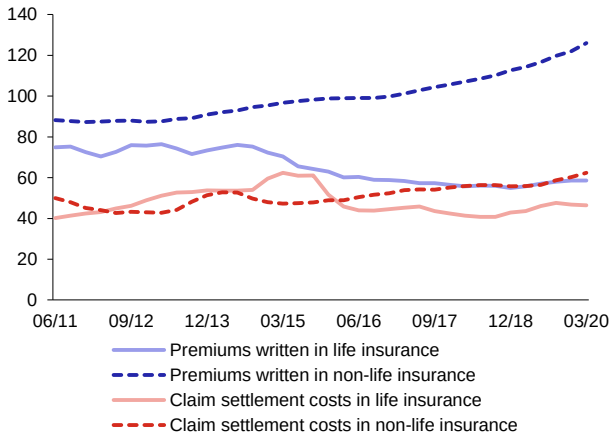
Source: CNB

Note: In this chart, the fund breakdown was performed according to the list used for the purposes of monetary and financial statistics.

Domestic insurance companies entered the coronavirus crisis in good shape…

The total assets of domestic insurance companies[77] continued to decline in 2019 (by 4.1%, or CZK 19 billion, year on year to CZK 457 billion). The main sources of this decline were a decrease in the rate of use of synthetic hedging[78] and a drop in the value of shares in controlled entities due to mergers of insurance companies. The decline in premiums written in life insurance halted in 2019 (a year-on-year increase of 6.7% to CZK 59 billion), while premiums written in non-life insurance continued to grow at a steady pace (by 8.2% to CZK 122 billion; see Chart III.22). The capital adequacy of domestic insurance companies remained sufficient in 2019, and the aggregate solvency ratio remained safely above the regulatory threshold (see Chart III.23). The sector's profitability increased in 2019 due to the one-off effects of mergers, and the results of the technical accounts for life and non-life insurance remain relatively stable (see Chart III.7 CB).

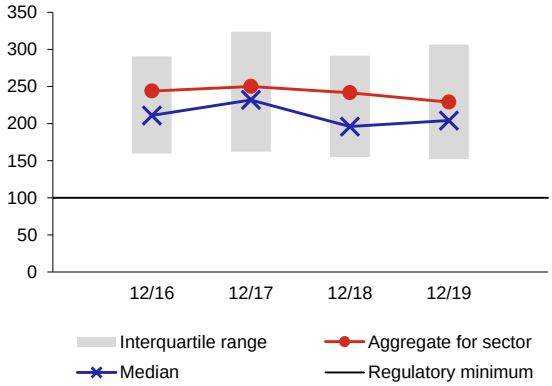
Chart III.22
Developments in the insurance sector
(CZK billions)



Source: CNB

Note: The Export Guarantee and Insurance Corporation is excluded from the calculation. The chart shows the moving sum of the values for four quarters in gross terms, i.e. unadjusted for reinsurers' share.

Chart III.23
Ratio of insurance companies' eligible own funds to the solvency capital requirement
(%)



Source: CNB

Note: Branches of foreign insurance companies and the Export Guarantee and Insurance Corporation are excluded from the calculation.

77 The description of developments in the domestic insurance sector excludes the Export Guarantee and Insurance Corporation. The stated values correspond to the balance sheet under the Solvency II framework.

78 In the case of synthetic hedging against appreciation of the koruna, institutions borrow in foreign currency, convert the loan into koruna and deposit it as a secured loan with a domestic bank. This operation thus leads to growth of assets and liabilities.

…the onset of the crisis did not pose a threat to the stability of the domestic insurance sector overall…

The coronavirus crisis did not significantly affect the key insurance variables or profitability in 2020 Q1. In life insurance, written premiums were flat and cost of claims fulfilment decreased; in non-life insurance, premiums written rose faster than claims paid. The increased volatility on the financial markets in March 2020 did not threaten the aggregate financial stability of the domestic insurance sector. Domestic insurance companies hold a significant share of their investment portfolios in domestic government bonds (see Chart III.17), whose prices were affected only temporarily and to a limited degree by the increase in risk aversion on financial markets (see Chart III.16 and section II.1.2).

…but the long-term effects of the crisis could affect domestic insurance companies

A prolonged economic decline could affect insurance companies in both the life and non-life areas. Given the global easing of monetary policies (see section II.1.1), a return to an environment of sustained low yields poses a risk to the attractiveness of life insurance products with an investment component, as it may be difficult for insurers to achieve returns on financial markets offering a positive real rate of return. Interest in these products may therefore start to fall again (see Chart III.22). Moreover, a low-yield environment may motivate insurance companies to search for yield, which would further increase the sensitivity of investment portfolios to a renewed rise in financial market volatility. The loss of income of firms and households may also mean a decline in demand for purely risk insurance products. The profitability of the insurance sector may thus decline in the coming years due to increased competition in some insurance sectors.

The assets administered by pension management companies (PMCs) continued to rise in 2020 Q1…

The total assets administered by PMCs' funds grew by CZK 37.4 billion (8%) to CZK 507.7 billion in 2019. Dynamic growth (of CZK 11 billion, or 2.2%) continued into 2020 Q1, so the outbreak of the coronavirus crisis did not affect the aggregate growth of the segment. The growth of assets in 2019 and in 2020 Q1 was due mainly to higher contributions received than sums paid out (see Chart III.19). This reflected both a slight increase in the number of participants, and conservative behaviour by participants – after the increase in uncertainty associated with the outbreak of the coronavirus pandemic, no significant increase in the number of surrenders was recorded at the end of 2020 Q1. However, in the event of a prolonged economic downturn, households facing a fall in income could be forced to reduce their contributions or to withdraw part of their savings for old age, which could halt or slow down the growth of pension funds.

…the coronavirus crisis affected pension funds' investment portfolios

The drop in prices on global financial markets (see section II.1.1) mainly affected non-conservative participation funds. The value of the assets they administer rose in Q1, but the growth was lower than in other types of pension funds (growth of CZK 0.6 billion, or 1.6%). The fall in asset prices had a smaller impact on the balance sheets of transformed and mandatory conservative funds. These funds have long held most of their portfolios in Czech government bonds, the prices of which were exposed to lower volatility (see Chart III.16). The largest fall in Czech government bond prices due to growth in risk aversion, which occurred in March 2020, was subsequently largely offset by monetary policy rate cuts, so the portfolio levels at the end of March 2020 did not reflect the previous volatility (see section II.1.2).[79]

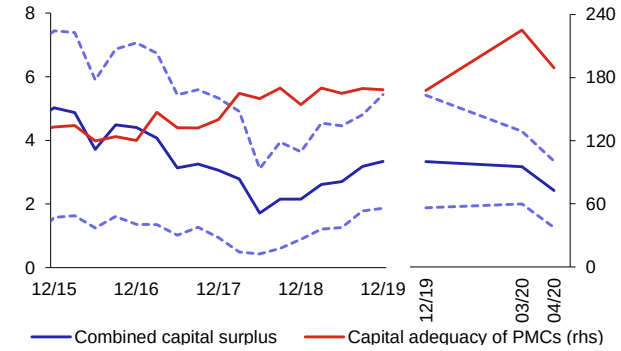
Low capitalisation exposes transformed funds to vulnerability in the event of continued volatility of Czech government bond prices

The aggregate combined capital surplus[80] increased to a level near 3% in 2019 and, owing to the above developments, remained there in 2020 Q1 (see Chart III.24). The stable capital surplus in 2020 Q1 reflected the favourable effect of growth in PMCs' capital ratios and at the same time an aggregate decrease in the surplus of transformed funds' (TFs) assets over their liabilities (see Chart III.25). The financial markets stabilised during April 2020, but the aggregate decline in the surplus of assets over liabilities continued due to the crediting of the previous year's profit shares to participants in most TFs. There is thus still a risk that in the event of a return to increased volatility in the Czech government bond market, the liabilities of TFs will outweigh their assets and PMCs will be forced to top up their funds. For the same reason, due to the relatively low capital surpluses of PMCs relative to the size of TFs, there is also a risk of PMCs failing to meet the capital requirements. From the size of the combined capital surplus at the end of April 2020, it can be concluded that the owners of three PMCs would be forced to top up capital due to non-fulfilment of the regulatory requirements in the event of impairment of the TFs' assets of less than 2%.

79 The favourable effect of the reduction in monetary policy rates was especially apparent in bonds with a fixed-coupon yield due to a reduction in the discount rates used to value the bonds. Bond prices with a variable-coupon yield are generally relatively immune to rate movements, as the effect of the change in the discount factor is offset by a change in the value of the coupon due to a change in monetary policy and reference rates. Therefore, the decline in Czech government bond prices due to increased risk aversion in March was not followed by a renewed rise in prices of variable-coupon bonds in connection with monetary policy developments, and their holders thus incurred losses.

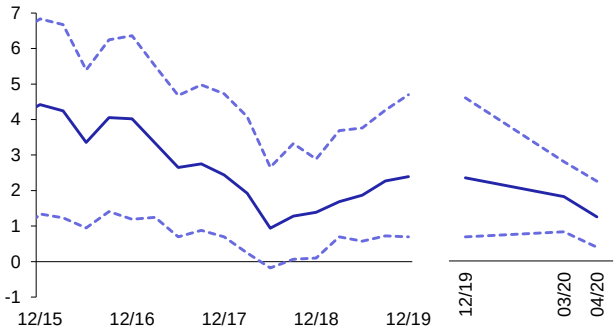
80 The combined capital surplus is used as a measure of vulnerability. It is the sum of the capital surplus of PMCs and the difference between the assets and liabilities of transformed funds.

Chart III.24
Combined capital surplus and capital adequacy
(%)



Source: CNB
Note: Dashed lines denote the minimum and maximum values of the combined capital surplus across TFs.

Chart III.25
Surplus of assets over liabilities of transformed funds
(% of total assets of TFs)

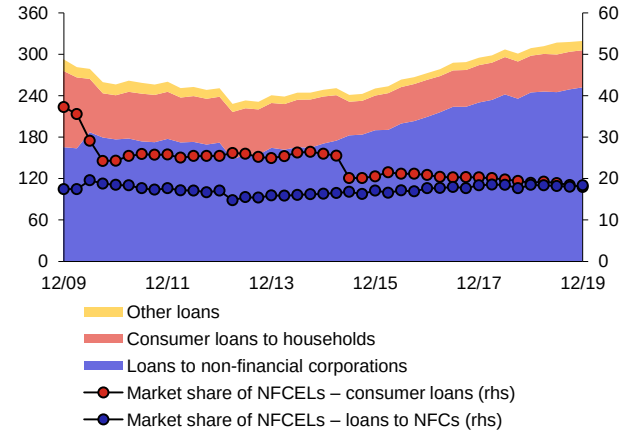


Source: CNB
Note: Dashed lines denote the minimum and maximum values across TFs.

The trends in the market shares and loan riskiness of non-bank lenders are mixed

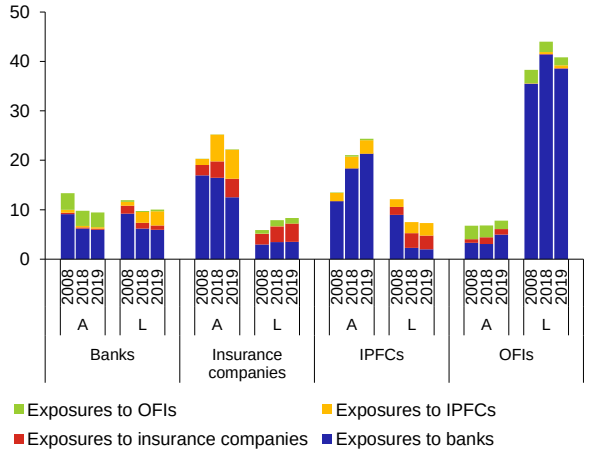
The total volume of loans provided by non-bank financial corporations engaged in lending (NFCELs) continued to grow (by CZK 10.5 billion year on year to CZK 319.3 billion). However, the pace of growth slowed slightly further compared with previous years (see Chart III.26). While the average year-on-year growth had been 8.1% in 2016 and 2017, it fell to 5.7% in 2018 and further to 4.2% in 2019. As in previous years, the year-on-year growth in loans provided by NFCELs was due largely to loans to non-financial corporations (3.0% year-on-year growth) and to a lesser extent also to loans for consumption (0.9%). The trends in the market shares and loan riskiness of NFCELs are mixed across segments. The market share of NFCELs in loans to non-financial corporations was flat in 2019, while the downward trend of recent years in loans to households (typically loans for consumption) continued. Loan riskiness for NFCEL loans to households, as expressed by the three-month default rate, increased by 23 bp year on year to 2.24%, whereas the default rate for NFCEL loans to non-financial corporations returned almost to the 2017 level after having gone up in 2018 (see Chart III.8 CB). In general, the longer-term conclusion regarding the riskiness of NFCEL loans compared with bank loans holds: NFCEL loans to households exhibit a higher degree of credit risk, whereas for loans to non-financial corporations broadly similar figures are observed in both segments of the financial sector, as secured leasing loans make up roughly three-quarters of NFCEL loans to non-financial corporations. In the coming months, NFCEL loan riskiness may be negatively affected by the coronavirus crisis, despite the fact that NFCELs are also subject to the Loan Moratorium Act.

Chart III.26
Loans provided by non-bank financial corporations engaged in lending
(stock of loans in CZK billions; right-hand scale in %)



Source: CNB
Note: The market share of NFCELs relates to total loans provided to residents by banks and NFCELs combined. The market share of independent NFCELs relates solely to loans to residents provided by all NFCELs.

Chart III.27
Share of exposures to domestic financial counterparties
(% of financial assets and liabilities of segments)



Source: CNB
Note: A = assets, L = liabilities. IPFCs = investment and pension funds and companies. The segment of other financial intermediaries (OFIs) primarily comprises NFCELs and non-bank security dealers. Year-end values.

III.4 INTERCONNECTEDNESS OF THE FINANCIAL SYSTEM

Direct balance-sheet interconnectedness had only a limited effect on the spread of the adverse conditions following the onset of the coronavirus crisis…

Banks remained the most significant link of domestic direct balance-sheet interconnectedness in 2019 (see Chart III.27). The importance of bank deposits in the balance sheets of pension and investment funds and other financial intermediaries rose slightly year on year. This supported their liquidity position, making them more resilient on aggregate to the liquidity stress associated with the outbreak of the coronavirus crisis (see section III.2). Domestic insurance companies could face some transmission of the financial market stress via their holdings of shares in investment funds (see Chart III.16). However, the investment funds through which insurance companies invest in financial markets are often created specifically for this purpose. Insurance companies therefore have only limited exposure to the risk of transmission of any stress arising from growth in terminations of investment products by households or other domestic financial market participants. One long-term impact of the coronavirus crisis and the related economic downturn may be a decline in banks' earnings on shares in the profits of other entities in domestic financial groups.

…indirect interconnection through joint exposures was reflected in the government bond market

The growth in risk aversion in markets was reflected in a sharp rise in the bid-ask spread on Czech government bonds (see section II.1.2). This partly contributed to a temporary decline in Czech government bond prices during March 2020, which was also caused by an outflow of foreign investors from the domestic market. Liquidity shortages in domestic financial institutions in an environment of increased risk aversion could lead to fire sales of government bonds, with a knock-on effect on their prices and related transmission of the stress to other government bond holders. However, this risk did not materialise in the first few months of 2020 due to the sufficient liquidity position of domestic government bond holders (see sections III.2 and III.3), which was further supported by the CNB's new liquidity support measures (see section II.1.2).

Banks remain in a net creditor position in their ownership groups…

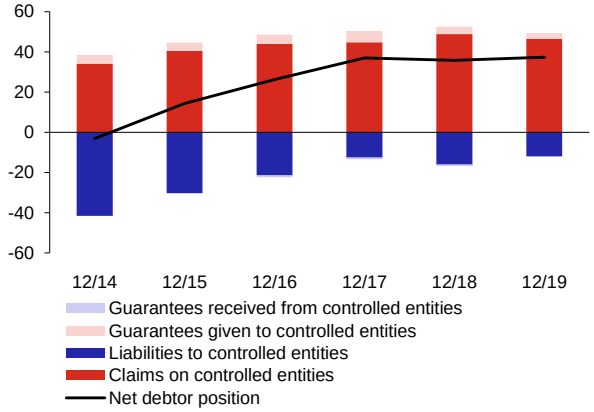
The overall creditor position of the five largest domestic banks in their groups was unchanged in 2020 Q1 (see Chart III.28). The net claim on controlled entities rose by CZK 23.6 billion year on year to CZK 146.8 billion, but domestic banks' net creditor position fell by 0.1 pp to 36.3% of the total regulatory capital of domestic banks. On banks' asset side, claims on own NFCELs rose (by CZK 4.2 billion year on year). NFCELs remain the largest debtor within bank groups (82.5% of all claims). Nevertheless, the high concentration of claims on NFCELs has long been stable and, given the nature of the controlled companies' transactions (leasing and factoring), does not give rise to increased risk. Liquidity from building societies also decreased year on year (by CZK 9.7 billion). As in previous years, however, this item represents the largest part of banks' liabilities within their groups (69.6%).

…but the upward trend in the net debtor position of banks vis-à-vis non-residents is gradually reversing

The net debtor position of the five largest domestic banks vis-à-vis foreign parent financial institutions decreased by 30.4 pp year on year to 215.8% of these banks' regulatory capital (see Chart III.29). The upward trend in the net debt position of recent years is thus slowly reversing.

Chart III.28
Interconnectedness in domestic bank groups

(% of regulatory capital of domestic parent banks)

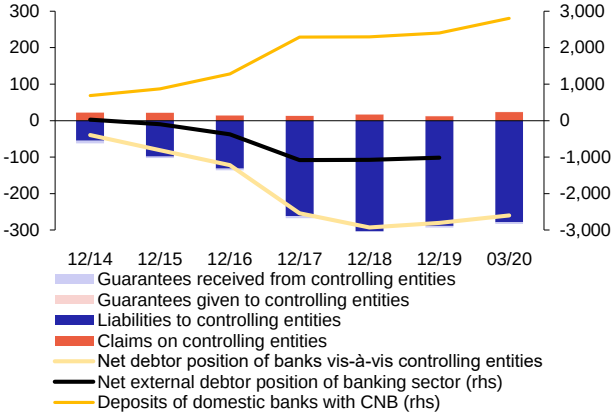


Source: Obligatory information to be disclosed pursuant to Decree No. 123/2007 and Decree No. 163/2014

Note: The chart depicts the aggregate credit interconnectedness of the largest domestic banks, i.e. Česká spořitelna, ČSOB (except Hypoteční banka), Komerční banka and Raiffeisenbank. UniCredit Bank is included only in the periods when it controlled entities.

Chart III.29
Interconnectedness vis-à-vis non-residents

(% of regulatory capital of domestic banks; right-hand scale: CZK billions)



Source: Obligatory information to be disclosed pursuant to Decree No. 123/2007 and Decree No. 163/2014, banks' annual reports, CNB

Note: The chart depicts the aggregate credit interconnectedness of the five largest domestic banks vis-à-vis their parent companies. The net debt position of the banking sector represents the overall net position of all banks vis-à-vis all non-residents excluding shares and other equity.