

# Supervisory stress tests of selected banks

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## 2021



Czech National Bank — Supervisory stress tests of selected banks — 2021

## SUMMARY

*The aggregate results of the supervisory stress tests of domestic banks subject to CNB supervision (accounting for around 90% of the assets of the Czech banking sector) confirmed that those banks are sufficiently resilient to potential hypothetical adverse economic developments. The capitalisation of the part of the banking sector tested would remain well above the regulatory minimum of 8% even in an Adverse Scenario assuming a decline in economic activity in the Czech Republic and abroad. The sector's resilience is based mainly on its initial capitalisation with a total capital ratio, which amounted to 22.6% at the end of 2020. As usual, credit risk was the most significant of the risks under review.*

## I. INTRODUCTION

The CNB has been conducting [supervisory stress tests](#) in partnership with selected domestic banks and banking groups since 2009. The tests are used to assess the risks<sup>1</sup> they face in the event of hypothetical adverse economic developments as represented by the *Adverse Scenario* defined by the CNB. The results are used by the CNB's Financial Market Supervision Department in the process of supervising and assessing the capitalisation of individual banks.<sup>2</sup> Since 2018, the supervisory stress test methodology has been based on the European Banking Authority's rules for EU-wide stress testing adapted to the specificities of the Czech banking system.

## II. MACROECONOMIC SCENARIOS

The *Baseline Scenario* is based on the CNB's macroeconomic forecast presented in Monetary Policy Report – Winter/2021. It assumes continued economic growth over the entire test period at around 3% year on year in individual years (see [Chart 1](#)).<sup>3</sup> Developments in the labour market are also consistent with a gradual fading of the pandemic. The unemployment rate peaks at 3.8% in 2021 Q3 and then falls gradually. Wage growth will be volatile until mid-2022 due to one-off factors and then shows an upward trend, rising to 5% at the scenario horizon. In line with the expected economic recovery and growth in inflation pressures in the second half of 2021, the scenario assumes a gradual increase in monetary policy interest rates and appreciation of the koruna against the euro.

The *Adverse Scenario* assumes repeated declines in foreign and domestic economic activity, due mainly to further waves of the pandemic, a slow pace of vaccination, and variants resistant to existing vaccines. Household consumption and investment activity would decline further in the second half of 2021 and the first half of 2022 against a backdrop of negative sentiment and renewed lockdowns of the domestic economy, including industrial sectors. A serious epidemic situation abroad would lead to a drop in external demand and a deterioration in the economic and financial situation, especially in industrial sectors. GDP would fall by 3.3% on average in the first year of the scenario and remain flat for the next two years while being volatile in individual quarters (see [Chart 1](#)). The weaker effect of fiscal measures and firms' economic exhaustion would be reflected in a sharp rise in unemployment (to 8%) and muted wage growth, which would temporarily turn negative even in nominal terms in 2022. The PRIBOR would fall to zero in the first two years due to still strongly supportive monetary policy. However, yields on Czech government bonds, especially those with long residual maturities, would rise, mainly because of a rise in the credit risk premium, while the CZK/EUR exchange rate would deteriorate.

## III. RESULTS

Despite high profitability, the volume of total regulatory capital declines (-8.2%) in the *Baseline Scenario* due to the volume of dividends paid. Combined with a slight increase in risk-weighted assets (+2.7%), the total capital ratio thus decreases to 20.2%.

In the *Adverse Scenario*, the sharp decrease in profit (130.2% on average), due mainly to an increase in credit risk, has an adverse effect on the volume of total regulatory capital (-14.5%) amid a simultaneous increase in the volume of risk-weighted assets (+7.0%). This is subsequently reflected in a decline in the total capital ratio to 18.0%, which is, however,

<sup>1</sup> Supervisory stress testing covers credit, market and operational risk, interest income and expenses, and capital.

<sup>2</sup> Article 100 of Directive 2013/36/EU of the European Parliament and of the Council (CRD).

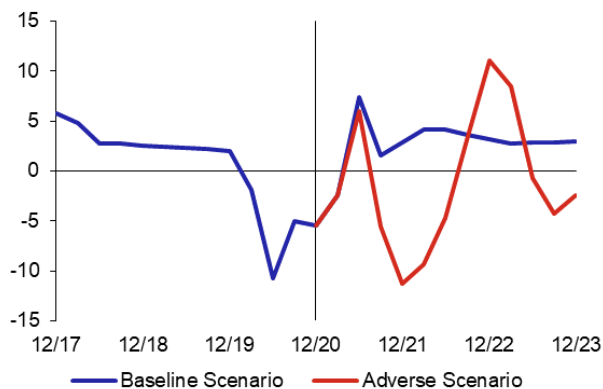
<sup>3</sup> The *Baseline Scenario* and the *Adverse Scenario* were created solely for stress testing purposes. Neither the *Baseline Scenario* beyond the horizon of the forecast published in Monetary Policy Report – Winter/2021 nor the *Adverse Scenario* is an official forecast of the CNB. For details see [FSR 2020/2021](#).

well above the regulatory threshold of 8%. The results of the supervisory stress tests thus confirm that the part of the banking sector tested is highly resilient to adverse economic developments.

**Chart 1**

**Alternative scenarios: real GDP growth**

(year on year in %)



Source: CNB

**Table 1**

**Impact of the *Baseline* and *Adverse* Scenarios**

	Actual value	<i>Baseline Scenario</i>	<i>Adverse Scenario</i>
	31 Dec 2020	31 Dec 2023	31 Dec 2023
Net after-tax profit (CZK billions)	41.7	43.3	5.2
CET1 capital (CZK billions)	518.6	478.3	442.5
Regulatory capital (CZK billions)	561.7	515.9	480.1
Risk-weighted assets (CZK billions)	2,485.9	2,553.2	2,661.0
CET1 capital ratio (%)	20.9	18.7	16.6
Total capital ratio (%)	22.6	20.2	18.0
Leverage ratio (%)	7.4	6.8	6.4

Source: CNB

#### IV. FREQUENCY OF SUPERVISORY STRESS TESTS

The supervisory stress tests of banks are carried out every two years. The CNB is thus planning to conduct the next supervisory stress tests in 2023. However, it may return to annual stress testing if the financial or macroeconomic situation changes significantly or other material facts arise.

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