CZECH BANKING SECTOR STRESS TESTS
NOVEMBER 2013

Financial Stability Department

2013

CNB CZECH
NATIONAL BANK

SUMMARY

The results of stress tests of the Czech banking sector performed using data available as of the end of 2013 Q3 still show that the banking sector is sufficiently resilient to potential adverse shocks. The capitalisation of the sector as a whole would remain above the regulatory minimum of 8% even in a stress scenario assuming a continuing and intensifying decline in economic activity in the Czech Republic and abroad over the next three years. The sector's resilience is based mainly on its sufficient capital adequacy ratio, which exceeded 17% at the end of September 2013.

1. INTRODUCTION

The Czech National Bank regularly conducts stress tests to assess the impacts of highly adverse future economic scenarios on the domestic banking sector. This document presents the results of the November stress tests, which were conducted on the data as of 30 September 2013 and focus on the coming three years. In the assessment of the sector's resilience, the impact of future economic developments – represented by one baseline scenario and one stress scenario – on selected indicators of the banking sector's soundness was tested.

2. MACROECONOMIC SCENARIOS

The ***Baseline Scenario*** is based on the scenario of the CNB's macroeconomic forecast using the exchange rate of the koruna as an instrument for easing monetary policy, published in Inflation Report IV/2013.[1] This scenario assumes a continuing moderate decline in the domestic economy during 2013, replaced by a gradual recovery in 2014. Owing partly to the weaker exchange rate, headline inflation will return to the CNB's 2% target already in 2014 H2. The exchange rate will remain close to CZK 27/EUR. Consistent with this scenario are stable short-term interest rates, which will not start rising until early 2015.

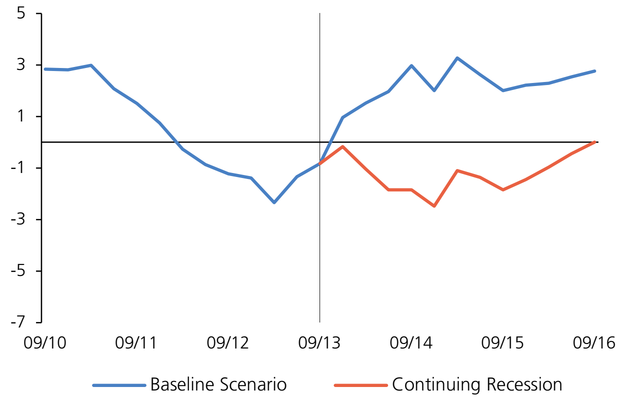
The ***Continuing Recession*** stress scenario assumes a further decrease in economic activity over the entire three-year test horizon, due mainly to low external demand and a decline in domestic consumption and investment. Rising uncertainty associated with the future outlook and the continuing recession will cause an increase in the private sector's unfavourable expectations, further postponement of corporate investment and generation of precautionary savings by households. This combination will result in a contraction in economic activity in the Czech Republic, leading to a sizeable increase in unemployment and a fall in wages. As a result of the long-running adverse situation, some households and corporations will exhaust their financial reserves and their ability to repay debts will deteriorate significantly. Their worsened solvency will affect the banking sector, causing it substantial credit losses. The adverse developments will not reverse until late 2016, when real GDP will cease to decline. The stress scenario is meanwhile based on the extremely unlikely scenario that monetary policy would not be able to respond proactively to the deflation pressures; this leads to a fall in inflation into negative territory over the scenario horizon. The 3M PRIBOR stays at its minimum level.

Charts 1–4 illustrate the evolution of the key macroeconomic variables of the baseline and stress scenarios.

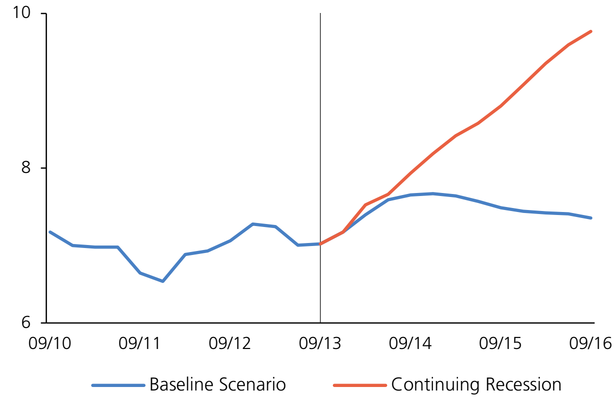
1 In the first two years, the path in the *Baseline Scenario* is based on the CNB's official prediction. Beyond this horizon, it is extrapolated towards the expected long-term equilibrium values.

CHARTS 1–4

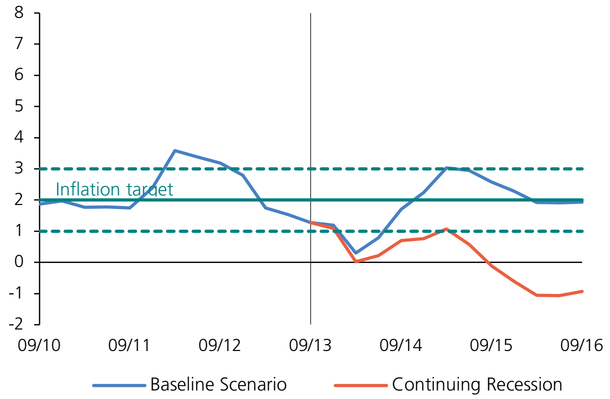
ALTERNATIVE SCENARIOS: REAL GDP GROWTH
(%)



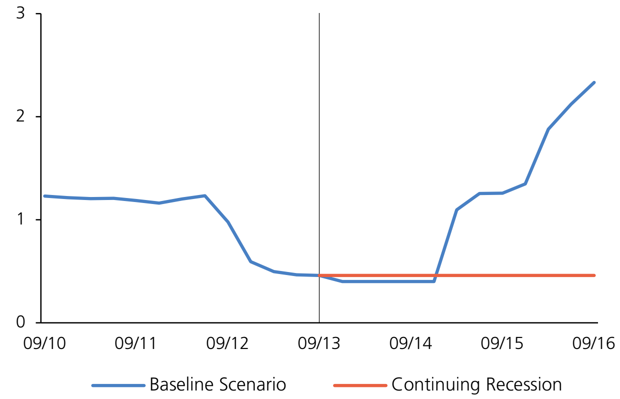
ALTERNATIVE SCENARIOS: UNEMPLOYMENT
(%)



ALTERNATIVE SCENARIOS: INFLATION
(%)



ALTERNATIVE SCENARIOS: 3M PRIBOR
(%)



Source: CNB

3. THE IMPACT OF THE MACROECONOMIC SCENARIOS ON THE BANKING SECTOR

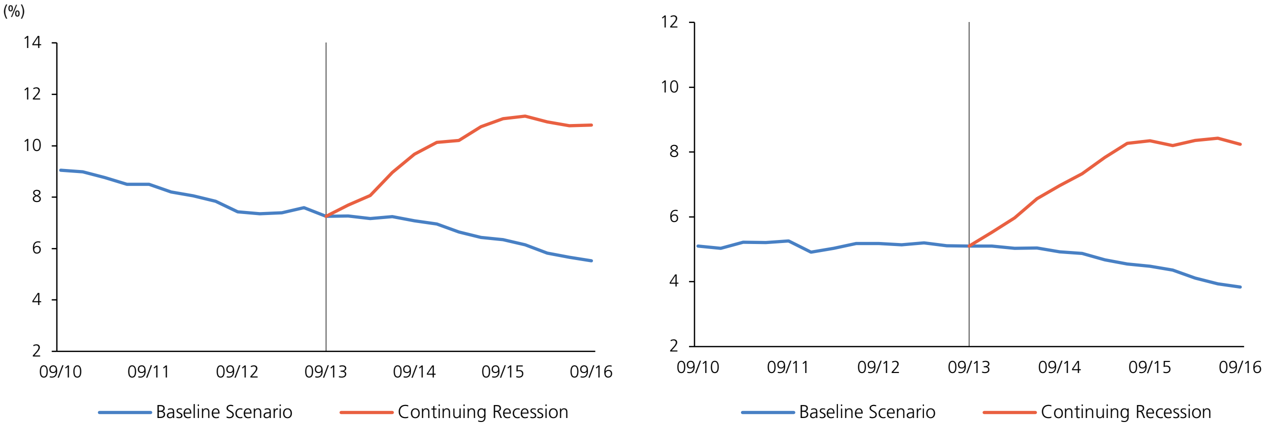
Credit risk is the most significant risk in the Czech banking sector. It can be quantified using the ratio of non-performing loans (NPLs) to total loans. In the *Baseline Scenario*, this ratio remains stable over the next twelve months and starts to decrease only as the economic recovery becomes more robust at the end of next year, doing so for both non-financial corporations and households (see Charts 5 and 6).

In the *Continuing Recession* scenario, the combination of a drop in economic activity, an increase in unemployment and a decline in real wages would be reflected in a noticeable rise in credit risk and growth in the default rate for both non-financial corporations and households. NPLs in this scenario would be considerably higher than in the *Baseline Scenario*, not only in terms of the NPL ratio, but also in absolute terms, against which banks would have to create an appropriate level of provisions with a further negative effect on their profitability. Loan impairment losses would more than triple in 2014 compared to 2012, exceeding 2% of the total loan portfolio (roughly CZK 45 billion).

CHARTS 5–6

NPL RATIO FOR BANK LOANS IN THE NON-FINANCIAL CORPORATIONS SECTOR
(%)

NPL RATIO FOR BANK LOANS IN THE HOUSEHOLD SECTOR
(%)



Source: CNB

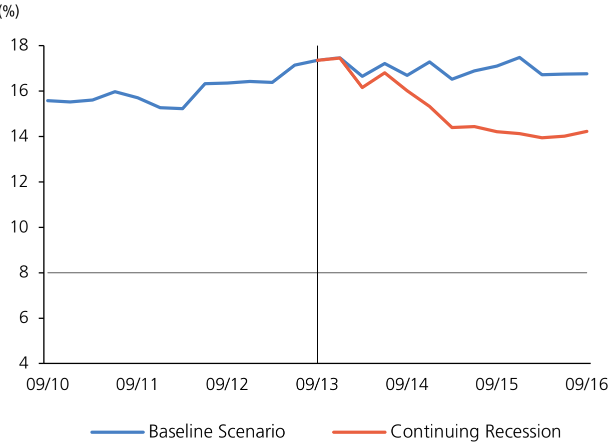
The sector's profitability is an important assumption of the stress tests, as profits for the current period are the first buffer for covering potential banking sector losses. The *Baseline Scenario* assumes a slight year-on-year fall in banks' operating profits of about 5% owing to stronger competition on the deposit market, the overall environment of low interest rates reducing interest income and still limited credit activity. In the stress scenario, operating profits plummet, recording a cumulative fall of over 30% compared to 2012 at the scenario horizon.

Although it is weakened by lower profits and in the stress scenario hit by high credit losses, the banking sector as a whole remains stable in both scenarios and its aggregate capital adequacy ratio always stays above the regulatory minimum of 8% by a sufficient margin (see Chart 7). This is achieved despite the conservative settings of many of the stress test assumptions.

Despite the high resilience of the sector as a whole, several banks (representing around 1% of the sector's assets) would get into a situation of insufficient capital adequacy in the *Baseline Scenario*. In this case, this is a result of the banks' business model, which is unsustainable in the long run according to the stress test methodology, implying a need to adjust the model or top up capital in the future.

CHART 7

CAPITAL ADEQUACY RATIOS IN EACH SCENARIO
(%)



Source: CNB

By comparison with the stress test results in the 2012/2013 Financial Stability Report, the banking sector shows greater resilience in the *Baseline Scenario*. This is due to its higher initial capitalisation (17.3% at the end of September 2013) and also to more favourable developments in the real economy over the scenario horizon connected with the easing of the monetary policy conditions by means of the exchange rate.

In the *Continuing Recession* stress scenario, the sector as a whole records a loss which substantially reduces its regulatory capital, and its aggregate capital adequacy ratio falls below 14%. A total of ten banks, representing approximately 11% of the sector's assets, would get into a situation of insufficient capital adequacy in this scenario.

To make up their capital adequacy to the regulatory minimum of 8%, banks having their registered offices in the Czech Republic (i.e. excluding foreign bank branches) would together have to increase their regulatory capital by around CZK 10 billion (roughly 0.3% of GDP) as at the end of the test period. Relative to the size of the banking sector, this figure is not significant enough to jeopardise its stability.

CZECH NATIONAL BANK
Na Příkopě 28
115 03 Praha 1
CZECH REPUBLIC

Contact:
FINANCIAL STABILITY DEPARTMENT
financial.stability@cnb.cz

This document was published on 10 December 2013 and has been placed on the CNB website:
http://www.cnb.cz/en/financial_stability/stress_testing/index.html