

CZECH BANKING SECTOR STRESS TESTS
AUGUST

Financial Stability Department

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SUMMARY

The results of stress tests of the Czech banking sector using data available as of the end of 2011 Q2 show that the banking sector is sufficiently resilient to adverse developments. The capitalisation of the entire sector would remain above the regulatory minimum of 8% even in a very improbable stress scenario. This scenario assumed a drop in domestic and external economic activity at the two-year horizon as a result of a recession in the Czech Republic's main trading partner countries caused by an escalation of the fiscal crisis in the indebted euro area countries.

1. INTRODUCTION

The Czech National Bank regularly conducts stress tests to assess the impacts of highly adverse and implausible future economic scenarios on the domestic banking sector. This document presents the results of the August stress tests, which were conducted on the data as of 30 June 2011 and focus on the coming two 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** corresponds to the CNB's official August macroeconomic forecast published in Inflation Report III/2011. This scenario assumes a slight slowdown in economic activity this year and in early 2012, due to fiscal consolidation in the Czech Republic but also in euro area countries. Inflation temporarily increases above 3% in 2012 due to a planned increase in VAT. However, monetary-policy relevant inflation (i.e. inflation adjusted for the effects of tax changes) remains close to the inflation target of 2% at the two-year horizon. The exchange rate is modestly appreciating and short-term interest rates are stable in the following period and gradually rising as from the end of 2011.

The **Recession** stress scenario assumes a drop in economic activity as a result of a renewed recession in the Czech Republic's main trading partner countries, an escalation of the euro area fiscal crisis and increased financial market volatility. The unfavourable developments lead to a depreciation of the koruna and a rise in government bond yields. The drop in economic activity is also reflected in a marked decline in property prices of more than 30%. In this scenario, impairment of the Czech banking sector's exposures vis-à-vis five indebted EU countries¹ and their revaluation in banks' balance sheets from CZK 28 billion to zero is assumed. This scenario can thus be considered highly stressed.

¹ Ireland, Italy, Portugal, Greece and Spain.

Charts 1–4 below illustrate the evolution of the key macroeconomic variables of the stress scenario compared to the baseline scenario.

Chart 1
Alternative scenarios: real GDP growth
(in %)

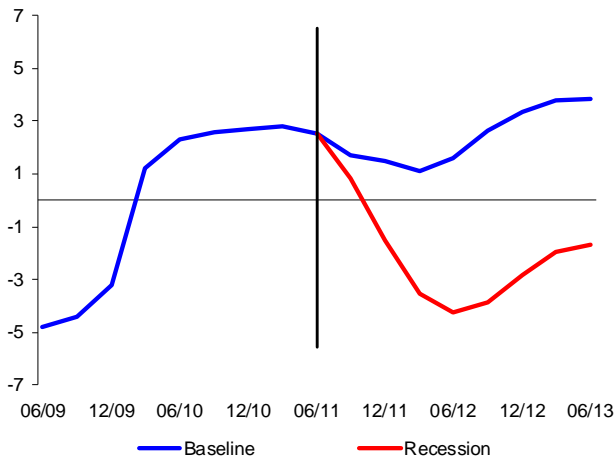


Chart 2
Alternative scenarios: 3M PRIBOR
(in %)

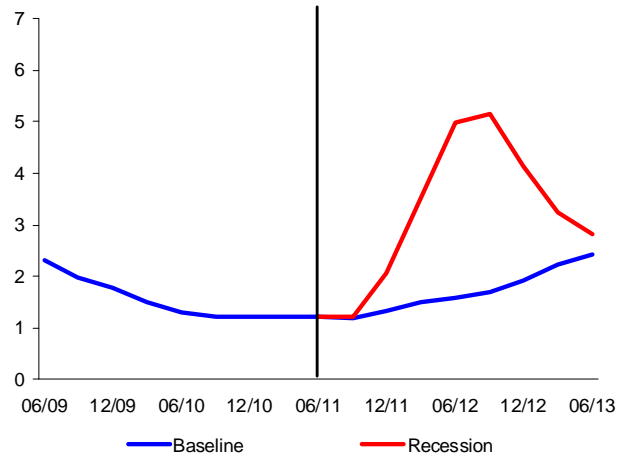


Chart 3
Alternative scenarios: inflation
(in %)

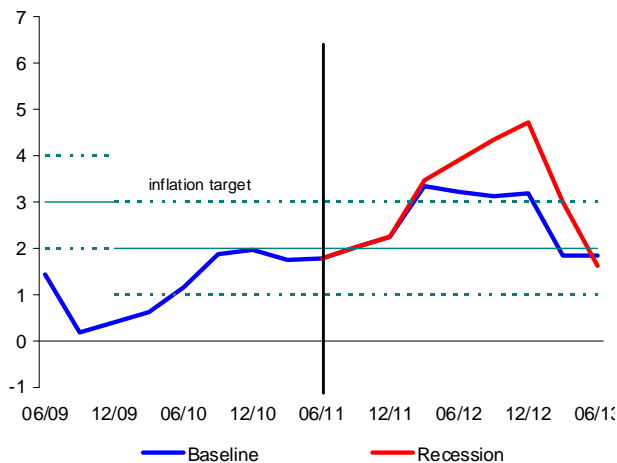
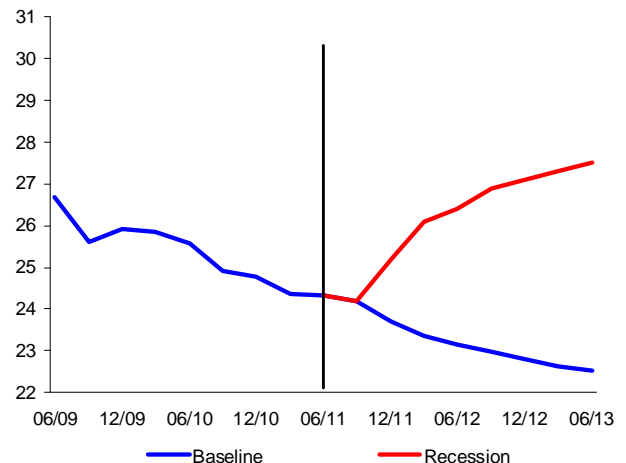


Chart 4
Alternative scenarios: exchange rate
(CZK/EUR)



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

The ratio of non-performing loans (NPLs) to total loans in the non-financial corporations sector is stable in the *Baseline Scenario*, ranging between 8.3% and 8.7% at the two-year horizon. The NPL ratio in the household sector increases slightly in the *Baseline Scenario* next year, reaching levels close to 5.8%.

The *Recession* stress scenario would be reflected in a larger increase in credit risk and the NPL ratio in this scenario is much higher than in the *Baseline Scenario* (see Charts 5 and 6). Loan impairment losses would increase in the period ahead from about 1.2% in 2011 to almost 3% in 2012 relative to the overall loan portfolio, representing a strong increase compared to 2010 (1.1%). In parallel, the banking sector would be hit by relatively sizeable market losses in this scenario due to falling prices of government bond holdings and the revaluation of all claims vis-à-vis the five indebted EU countries to zero. Although this additional assumption of 100% impairment of exposures vis-à-vis these countries is highly stressed, only one bank would get slightly below the regulatory capital threshold owing exclusively to the revaluation assumption. However, the size of this bank and the amount of capital needed to reach the threshold is negligible relative to the entire sector.

Chart 5
Non-performing loans: non-financial corporations
(in %)

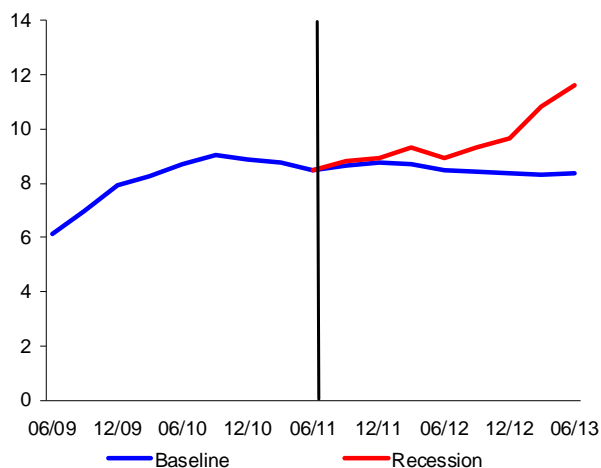
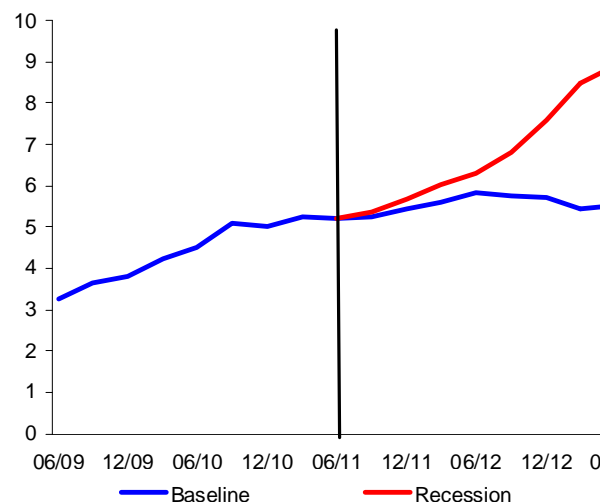
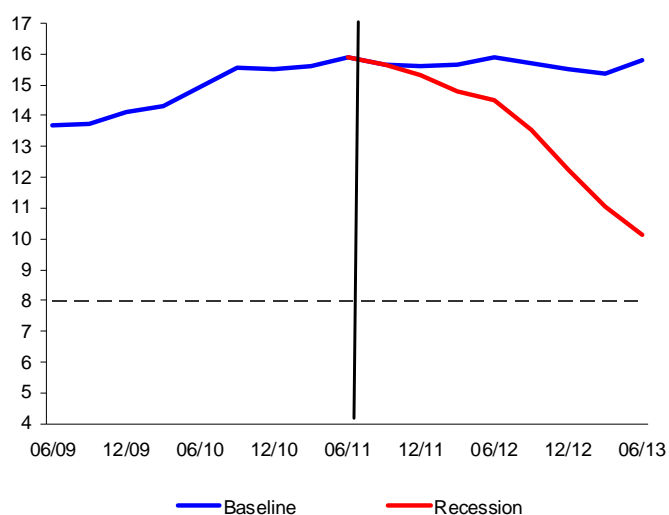


Chart 6
Non-performing loans: households
(in %)



While the *Baseline Scenario* assumes that operating profit in the period ahead will remain at a similar level as in 2010, a considerable drop of nearly 40% occurs in the *Recession* stress scenario. In the stress scenario, therefore, many banks get into a loss-making situation, which reduces their regulatory capital.

Chart 7
Capital adequacy ratio
 (in %)



Despite the relatively high credit and market losses and weaker operating profit, the banking sector as a whole remains stable in the baseline scenario and in the stress scenario and its aggregate capital adequacy ratio stays above the regulatory minimum of 8% and does not even fall below 10% (see Chart 7). This is achieved despite the conservative settings of many of the assumptions of the individual scenarios, which assume very unfavourable developments. The banking sector's stability continues to be based on its high capital adequacy ratio, which stood at 15.9% at the end of June 2011. However, a few banks would get into a situation of insufficient capital adequacy in the adverse scenario. To make up their capital adequacy to the regulatory minimum of 8%, all banks having their registered

offices in the Czech Republic (i.e. excluding foreign bank branches) would have to increase their regulatory capital by CZK 13.4 billion (i.e. less than 0.4% 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.

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http://www.cnb.cz/en/financial_stability/stress_testing/index.html