CZECH BANKING SECTOR STRESS TESTS FEBRUARY

2011

Financial Stability Department

CZECH NATIONAL BANK

CZECH BANKING SECTOR STRESS TESTS (FEBRUARY 2011)

SUMMARY

The results of stress tests of the Czech banking sector performed using data available as of 2010 Q4 still show that the banking sector is sufficiently resilient to potential adverse shocks. The capitalisation of the entire sector would remain above the regulatory minimum of 8% even in a very adverse stress scenario assuming a sudden drop in domestic and external economic activity in 2011 H2 as a result of an external shock caused by a renewed increase in the sovereign risk of the indebted euro area countries. However, the capital adequacy ratio of the banking sector would get dangerously close to the 8% threshold in an adverse scenario where banks, expecting favourable developments in 2011 H1, reduce their capital buffers significantly by raising dividend payments without simultaneously increasing their capital in any other way.

1. INTRODUCTION

The Czech National Bank regularly conducts stress tests to assess the impacts of highly adverse and implausible future economic scenarios on the resilience of the domestic banking sector. This document presents the results of the February stress tests, which were conducted on the data as of the end of 2010[1] and focus on the coming two years. In the assessment of 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. The stress scenario is presented in two variants (see below).

2. MACROECONOMIC SCENARIOS

The baseline scenario corresponds to the CNB's official February macroeconomic forecast published in Inflation Report I/2011. This scenario assumes a slight slowdown in economic activity this year due to fiscal consolidation in the Czech Republic and also in euro area countries, resulting in a fall in external demand. Inflation at the two-year horizon remains close to the 2% inflation target, 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 *Unexpected Recession* stress scenario assumes a drop in economic activity as a result of an external shock in 2011 H2, which is connected with a renewed increase in the sovereign risk of the indebted euro area countries. The sudden and unexpected drop occurs in a period of optimistic expectations, which lead to an easing of credit standards and a renewal of projects halted because of the financial crisis. Growing uncertainty results in exchange rate depreciation and an increase in long-term government bond yields. Inflationary pressures trigger a monetary policy reaction and a subsequent rise in short-term interest rates. Significant impairment of claims on five indebted EU countries[2] and revaluation of those claims to zero in bank balance sheets is also assumed. This scenario can be considered highly stressed.

[1] Data as of 31 December 2010 were not available for some variables at the time the tests were prepared, so data as of the end of November 2010 were used instead.
[2] Greece, Ireland, Italy, Portugal and Spain.

The *Unexpected Recession* scenario has a variant which additionally assumes a change in banks' behaviour regarding their targeted capital adequacy levels. In the standard case it is assumed that banks will try to maintain their initial level of capital adequacy, which is currently quite high, when deciding on profit distribution. The adverse scenario *Unexpected Recession with Extraordinary Dividends* reflects the risk that banks, expecting favourable future developments, will decide to downsize their existing capital buffers to the level prevailing in the pre-crisis period (2004–2007) and will pay out extraordinary dividends in 2011 H1.

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 %)

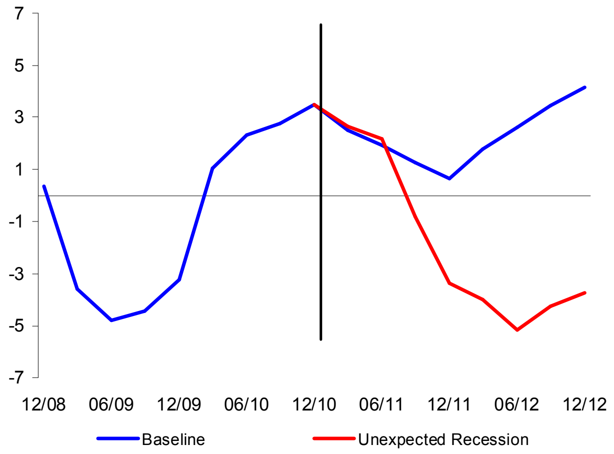


Chart 2
Alternative scenarios: 3M PRIBOR
(in %)

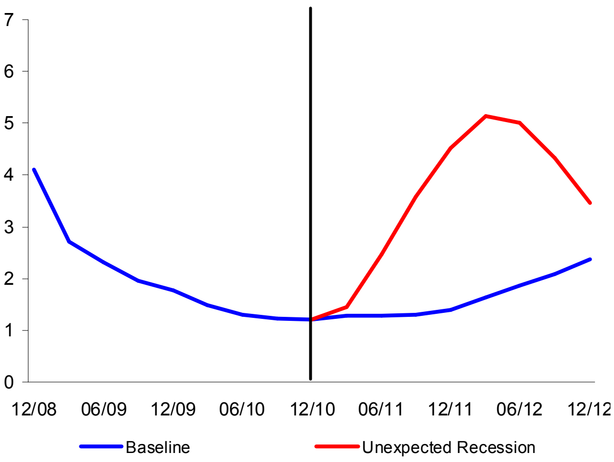


Chart 3
Alternative scenarios: inflation
(in %)

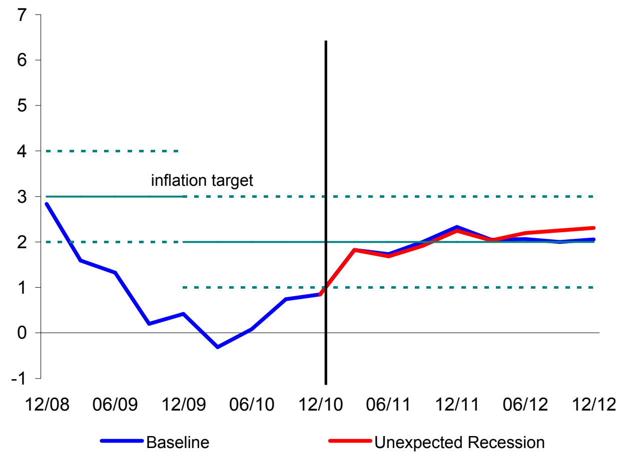
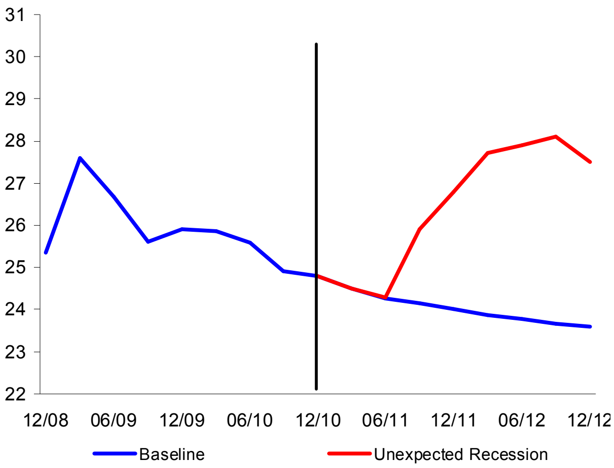


Chart 4
Alternative scenarios: exchange rate
(CZK/EUR)



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 rises moderately in the *Baseline Scenario*, peaking at roughly 10% at the end of 2011. The NPL ratio in the household sector also increases in the *Baseline Scenario*, to just below 6% at the end of this year.

The *Unexpected 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 reach about 3% in 2011 and almost 4% in 2012 relative to the overall loan portfolio, implying a strong increase compared to 2010 (1.1%). In parallel, the banking sector would be hit by relatively sizeable market losses due to falling prices of government bond holdings and the revaluation of all claims vis-à-vis the five indebted EU countries to zero. The assumed renewed growth in loans in the first three quarters of 2011, stemming from overly optimistic expectations regarding future economic developments, would be replaced by a decline in loan portfolios as a result of low demand for loans and limited supply due to tightening credit standards.

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

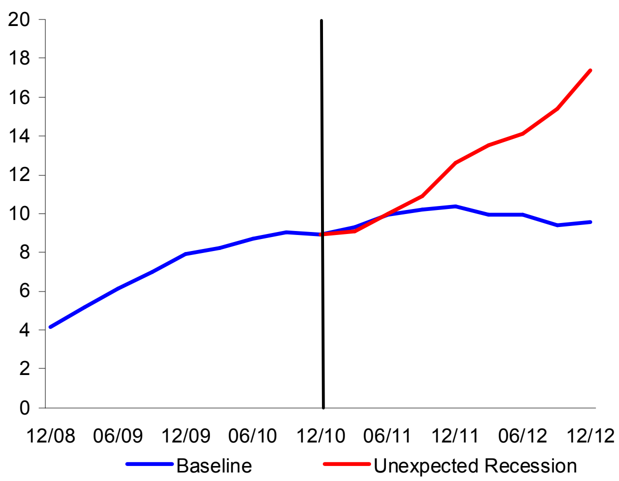
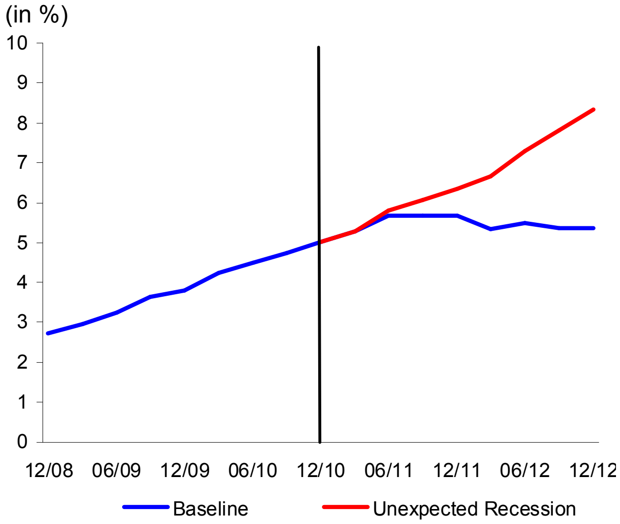
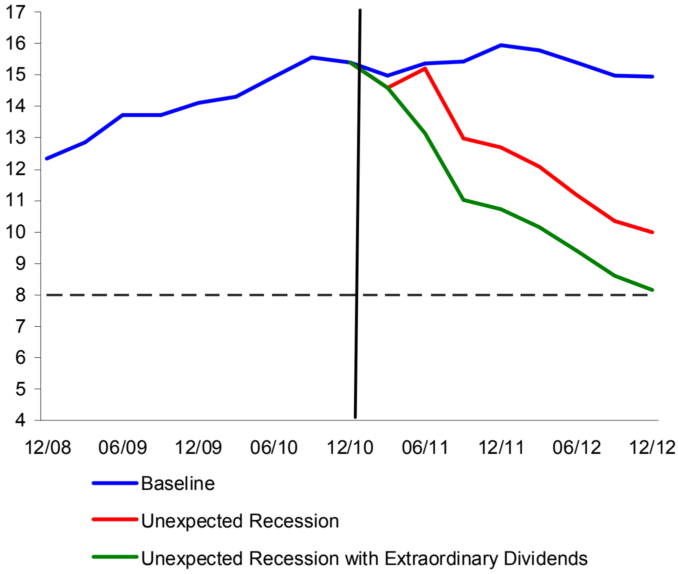


Chart 6
Non-performing loans: households
(in %)



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 25% occurs in the *Unexpected Recession* stress scenario. In the stress scenario, therefore, many banks get into a loss-making situation, which significantly reduces 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 *Unexpected Recession* stress scenario and its aggregate capital adequacy ratio stays above the regulatory minimum of 8% (see Chart 7). This is achieved despite the conservative settings of many of the assumptions of the individual scenarios, which assume very unfavourable developments. One of the reasons for the banking sector's stability remains its high capital adequacy ratio, which stood at 15.4% at the end of November 2010. 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 16 billion (i.e. less than 0.5% of GDP) as at the end of the test period. Relative to the size of the sector, this figure is not significant enough to jeopardise the stability of the banking sector.

However, in the variant of the adverse scenario *Unexpected Recession with Extraordinary Dividends*, the capital adequacy ratio of the banking sector would get dangerously close to the 8% threshold. The main reason would be a weakening of banks' capitalisation by extraordinary dividend payments, meaning that banks would enter a highly adverse period in 2011 H2 with a smaller capital buffer. In this extreme case, more banks would get into a situation of insufficient capital adequacy and the capital injections would total CZK 28 billion (10% of the current regulatory capital level and almost 0.8% of GDP).

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