23 July 2010

EU STRESS-TEST EXERCISE

– KEY MESSAGES ON METHODOLOGICAL ISSUES –

The adverse macroeconomic scenario and the changes operated in the key micro parameters represent a substantial stress for the European banks for the following three reasons:

1. The adverse macroeconomic scenario incorporates prevailing tail risks, especially related to the sovereign debt situation; in particular, it implies that real GDP growth in the EU would be substantially lower than in currently available forecasts – on average by some 3 percentage points cumulated over 2010 and 2011 implying a recession both in 2010 and 2011. This scenario has a very low probability of occurring. Coinciding with a recession, the adverse scenario implies significant increases in interest rates, which are unlikely and are assumed only for the purpose of building a stressful scenario.

2. The severity of the adverse scenario regarding the key micro parameters arises from the combination of the increase in the haircuts for government debt in the trading book and especially in the PDs – the likelihood that a loan will not be repaid and that it will fall into default – and LGDs – the amount of losses in case of a default of a borrower:

   i. The haircuts on government debt in the trading book increase according to the introduction of sovereign risk, which is modelled as an increase in government bond spreads in line with market developments since the beginning of May 2010. For instance, the weighted average euro area five-year bond yields increase to 4.60% under the adverse scenario in 2011, compared to 2.69% at the end of 2009. Similarly, the interest rate shocks results in yields of 3.5% and of 13.9% for a five-year German and Greek government bond, respectively, at the end of 2011.

      The reference haircuts were computed from changes in the prices of 5-year sovereign bonds. The maturity of the sovereign portfolio, equal to five years at the start of the exercise, will fall to four year by the end of 2010 and to three year by the end of 2011. As sovereign default events are not envisaged, bond values converge to their par values as the time to maturity approaches zero, with all other relevant parameters being equal. Seen against this background, the haircuts are particularly significant. For instance, although the haircut of a five-year bond between December 2009 and the end of May was 12.4% for Greece, 3.1% for Portugal and 2.3% for Ireland, the test assumes haircuts of 23.1%, 14% and 12.8% for 2011. It should be highlighted that the haircuts are applied without considering any sort of hedging that the banks may have. For some non-euro area countries, the higher haircuts are driven primarily by the expected increase in long-term interest rates, with the impact of the sovereign risk shock playing a lesser role.

The haircuts are applied to the trading book portfolios only, as no default assumption was considered, which would be required to apply haircuts to the held to maturity sovereign debt in the banking book. It should be stressed, nevertheless, that the disclosure of total exposures to sovereign debt by individual banks allows for a full assessment of their respective capital positions.

	5-year yields end-2009	5-year yields end of May 2010	Valuation changes between December 2009 and end of May 2010	5-year yields under the adverse scenario (2011)	2011 haircut, adverse scenario
Austria	2.69	1.98	2.8%	4.04	-5.6%
Belgium	2.79	2.34	1.8%	4.47	-6.9%
Finland	2.62	1.76	4.4%	4.16	-6.1%
France	2.48	1.72	3.3%	3.92	-6.0%
Germany	2.42	1.56	3.6%	3.49	-4.7%
Greece	4.96	8.23	-12.4%	13.87	-23.1%
Ireland	2.91	3.10	-2.3%	5.62	-12.8%
Italy	2.80	2.98	-1.1%	4.80	-7.4%
Netherlands	2.46	1.69	3.2%	3.82	-5.2%
Portugal	3.08	3.76	-3.1%	7.40	-14.1%
Spain	2.96	3.34	-1.6%	5.78	-12.0%
UK	2.81	2.28	1.9%	5.07	-10.2%
Denmark	2.80	1.53	6.4%	3.93	-5.2%
Sweden	2.41	2.05	1.9%	3.97	-6.7%
Czech Rep.	3.29	2.81	1.6%	4.32	-11.4%
Poland	5.96	5.27	3.9%	8.23	-12.3%

ii. The increases in PDs and LGDs are substantial and affect all portfolios in the banking book. For instance, comparing the end-2009 values with those under the adverse scenario in 2011, PDs of corporate assets double or even triple in some countries, while for the euro area as a whole they increase by over 61%.

Changes in PDs in 2011 under the adverse scenario, compared to end-2009

	Institutions	Corporate	Retail real estate	Consumer credit
Austria	10.8	47.4	21.9	24.9
Belgium	68.6	112.4	32.0	55.4
Cyprus	14.8	69.4	14.5	34.8
Finland	10.8	46.8	29.2	18.4
France	11.3	31.4	13.0	21.4
Germany	22.6	57.5	36.2	32.1
Greece	45.0	364.8	26.5	74.2
Ireland	-0.5	21.7	3.6	4.9
Italy	10.0	41.6	11.2	21.4
Luxembourg	11.0	71.6	21.8	34.6
Malta	11.9	54.9	18.5	36.0
Netherlands	66.1	88.5	39.0	46.9
Portugal	31.0	147.0	30.3	102.3
Slovenia	0.7	23.9	24.9	4.2
Slovakia	-1.8	7.7	8.0	0.8
Spain	29.4	113.1	17.1	56.3
Euro area	**8.5**	**61.3**	**20.8**	**25.8**
Bulgaria	14.3	12.9	8.5	15.2
Czech Republic	87.4	61.2	41.6	66.7
Denmark	1.9	26.7	5.6	14.7
Estonia	-5.4	5.8	4.5	8.6
Hungary	36.2	35.3	21.5	40.8
Latvia	-1.0	13.1	9.7	15.9
Lithuania	9.5	6.9	12.6	10.8
Poland	58.9	56.0	39.7	62.3
Romania	16.9	19.8	14.9	23.4
Sweden	2.6	32.4	14.5	12.3
UK	0.9	22.6	6.2	13.9
Rest of the EU	**1.6**	**25.0**	**5.5**	**13.7**

3. The impact of the stress-test is measured against individual banks' capital buffers. In this respect, the EU banks (contrary to the US banks at the time of the SCAP) have already benefited from previous official public support programmes that have increased capital buffers in several national banking systems. From October 2008 to the end of May 2010, EU governments injected 236 billion euro in the capital of EU banks. In addition, there has been a substantial increase in the capital ratios by EU banks since last year as a result of retained earnings, balance sheet repair, de-leveraging, and new issuances. Accordingly, should any individual bank require additional capital as a result of the exercise, this reflects the severity of the stress assumptions under the adverse scenario.