2011 EU-Wide Stress Test

Objectives, outcome and recommendations

16 July 2011

EBA

European Banking Authority

European System of Financial Supervision

Why the stress test?

What the stress test exercise is about:

- Assess resiliency of large sample of EU banks (90 institutions in 21 countries) against an adverse but plausible macroeconomic scenario towards a 5% CT1 threshold – relatively strong benchmark
- Offer unprecedented transparency on EU bank disclosure – including on sovereign risk -- aiming to help market confidence and increase degree of comparability (3,200 data points vs. 149 last year)
- Provide a relevant additional tool to help national supervisors assess the prudential risk of their banks in a pan-EU perspective and to take appropriate remedial measures on a more timely basis

What the stress test results are not about:

- Capture fully all financial and business risks in EU banking today
- Assume absolute worst-case scenarios aiming to cover extreme tail risk – including on sovereign risk
- Force-rank EU banks or banking systems in terms of capital positions or other financial or non-financial metrics

Outcome of the stress test: without 2011 capital raising

End 2010: EUR1trn CT1 and 8.9% weighted-average CT1R:

Adverse outcome w/o Jan-April 2011 capital raising:

- **20 banks** below 5% CT1
- EUR25bn capital deficit below 5%
- **14 banks** in the 5%-6% CT1R range
- CT1R from 8.9% to 7.4%

Adverse scenario

	2010	2012	< 2%	< 3%	< 4%	< 5%	< 6%	< 7%	< 8%	< 9%	< 10%	> 10%
AT	8.2%	7.6%	0	0	0	1	0	0	1	1	0	0
BE	11.4%	10.2%	0	0	0	0	0	0	0	0	0	2
CY	7.7%	4.8%	0	0	1	0	0	1	0	0	0	0
DE	9.4%	6.8%	0	0	1	0	2	2	3	1	0	3
DK	9.8%	10.8%	0	0	0	0	0	0	0	0	1	3
ES	7.4%	6.5%	4	0	3	2	7	2	0	3	2	2
FI	12.2%	11.6%	0	0	0	0	0	0	0	0	0	1
FR	8.4%	7.5%	0	0	0	0	0	2	1	1	0	0
GB	10.1%	7.6%	0	0	0	0	0	1	2	1	0	0
GR	10.2%	5.7%	1	0	0	1	2	0	2	0	0	0
HU	12.3%	13.6%	0	0	0	0	0	0	0	0	0	1
IE	6.2%	-0.1%	2	0	1	0	0	0	0	0	0	0
IT	7.4%	6.5%	0	0	0	1	1	2	1	0	0	0
LU	12.0%	13.3%	0	0	0	0	0	0	0	0	0	1
MT	10.5%	10.4%	0	0	0	0	0	0	0	0	0	1
NL	10.6%	9.4%	0	0	0	0	0	1	0	1	1	1
NO	8.3%	9.0%	0	0	0	0	0	0	0	1	0	0
PL	11.8%	12.2%	0	0	0	0	0	0	0	0	0	1
PT	7.1%	5.2%	0	0	1	0	1	2	0	0	0	0
SE	9.0%	9.5%	0	0	0	0	0	0	0	1	2	1
SI	5.7%	4.2%	0	0	1	0	1	0	0	0	0	0
Total	8.9%	7.4%	7	0	8	5	14	13	10	10	6	17

Outcome of the stress test: with 2011 capital raising

- *Adverse outcome with Jan-April 2011 capital raising*:
  - **8 banks** below 5% CT1
  - EUR2.5bn capital deficit below 5%
  - **16 banks** fall in the 5%-6% CT1R range
  - CT1R from 8.9% to 7.7%

Adverse scenario

	2010	2012	< 2%	< 3%	< 4%	< 5%	< 6%	< 7%	< 8%	< 9%	< 10%	> 10%
AT	8.2%	7.6%	0	0	0	1	0	0	1	1	0	0
BE	11.4%	10.2%	0	0	0	0	0	0	0	0	0	2
CY	7.7%	5.7%	0	0	0	0	1	1	0	0	0	0
DE	9.4%	6.8%	0	0	0	0	2	4	2	1	1	2
DK	9.8%	11.9%	0	0	0	0	0	0	0	0	1	3
ES	7.4%	7.3%	0	0	3	2	7	5	1	3	2	2
FI	12.2%	11.6%	0	0	0	0	0	0	0	0	0	1
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GR	10.2%	6.1%	1	0	0	1	2	0	2	0	0	0
HU	12.3%	13.6%	0	0	0	0	0	0	0	0	0	1
IE	6.2%	9.8%	0	0	0	0	0	0	1	0	0	2
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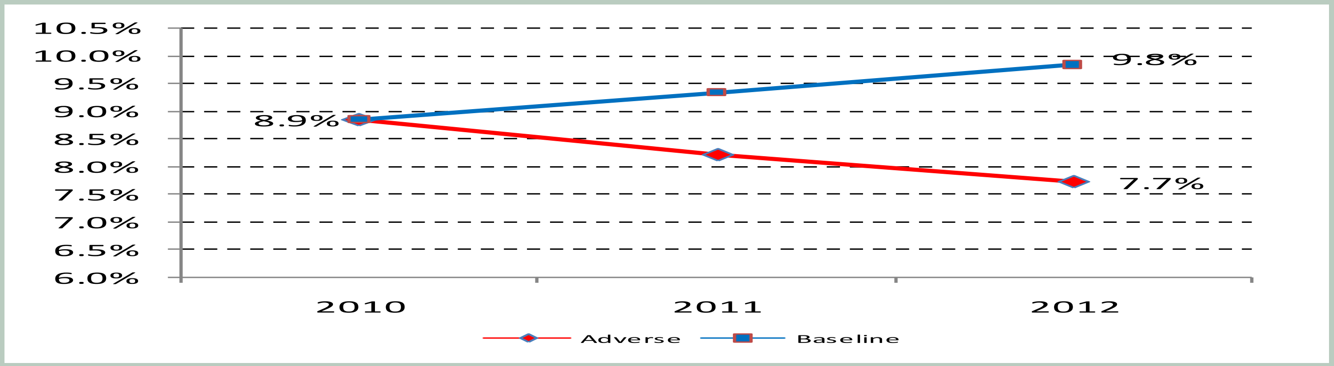
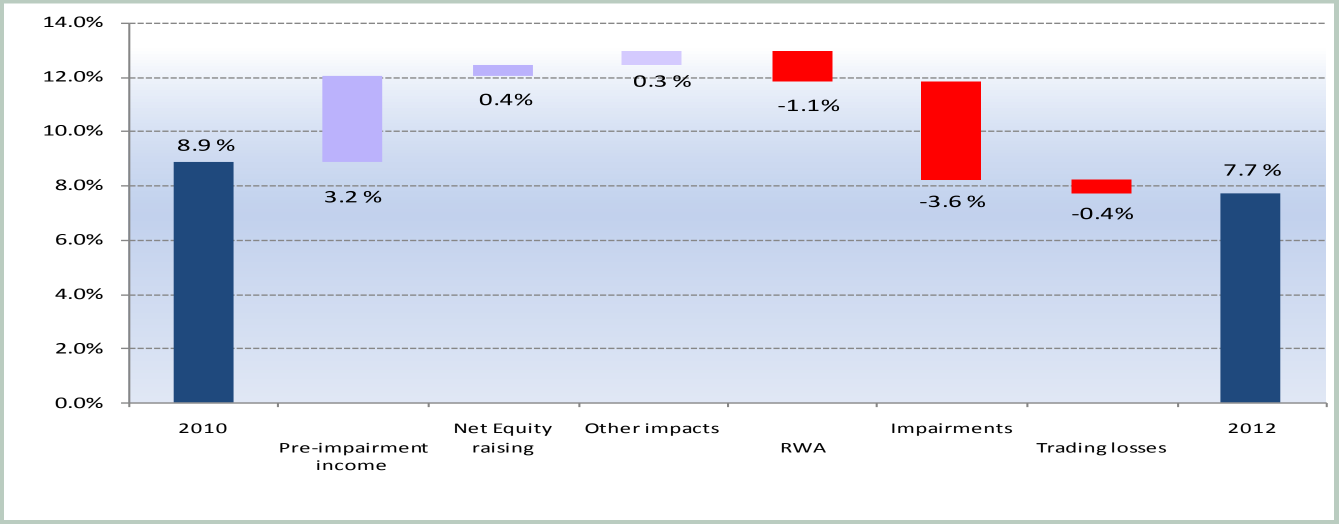
SE	9.0%	9.5%	0	0	0	0	0	0	0	1	2	1
SI	5.7%	6.0%	0	0	0	0	1	0	0	1	0	0
Total	8.9%	7.7%	1	0	3	4	16	18	11	12	7	18

Evolution and drivers of CT1

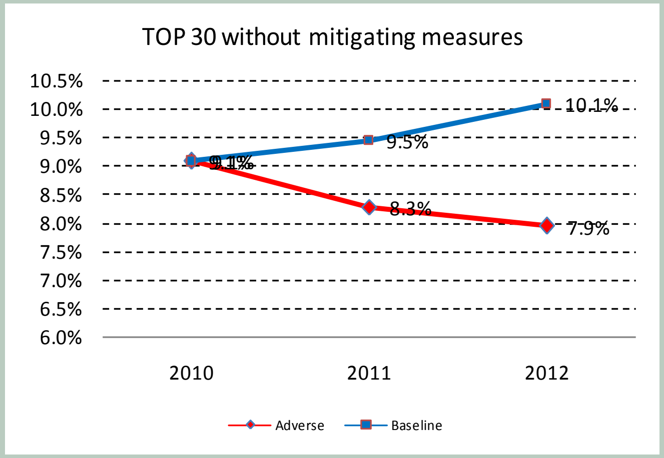
Evolution of CT1R (baseline vs. adverse scenarios)

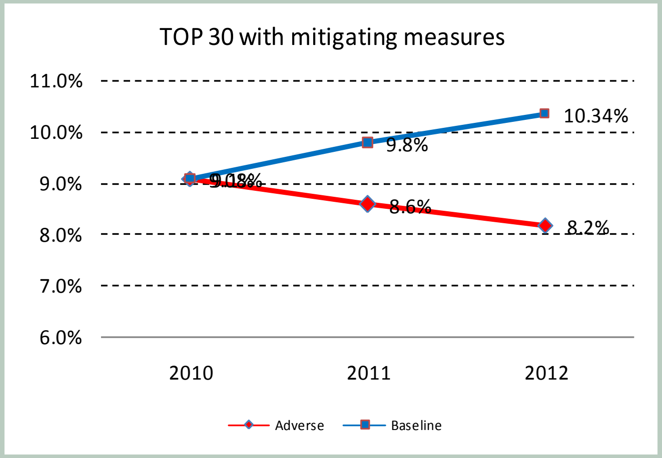


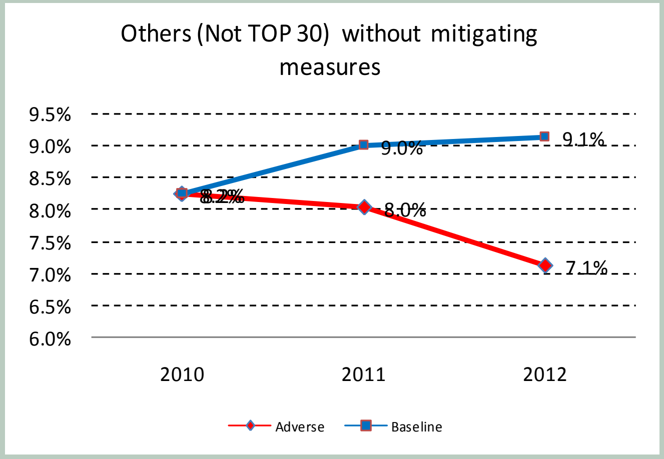
Drivers of CT1 evolution

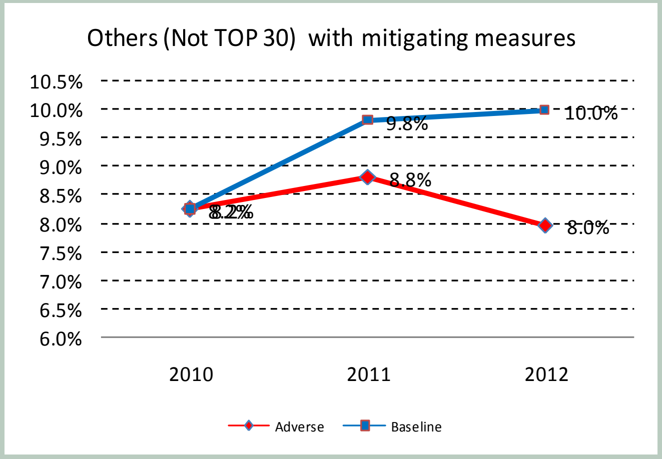


CT1R trends for top-30 vs. bottom-60 banks









Recommendations for follow-up action

- **Banks with CT1R below 5% under adverse scenario**:
  - National supervisors to request the respective banks to present plan by 15 October 2011 to restore CT1 to at least 5%
  - Agreed-upon remedial measures will have to be implemented by end-2011 (with flexibility allowed only if justified by market conditions or required procedures)
- **Banks with CT1R above but close to 5% under adverse scenario and with sizeable exposures to stressed sovereigns:**
  - National supervisors to request remedial action plan by 15 October 2011
  - Agreed-upon remedial measures to be fully implemented by 15 April 2012
  - National supervisors of the respective banks to provide detailed overviews of remedial measures to the EBA by 31 October 2011
  - Upon review of the measures the EBA will issue reports in February and June 2012 on the implementation of these recommendations

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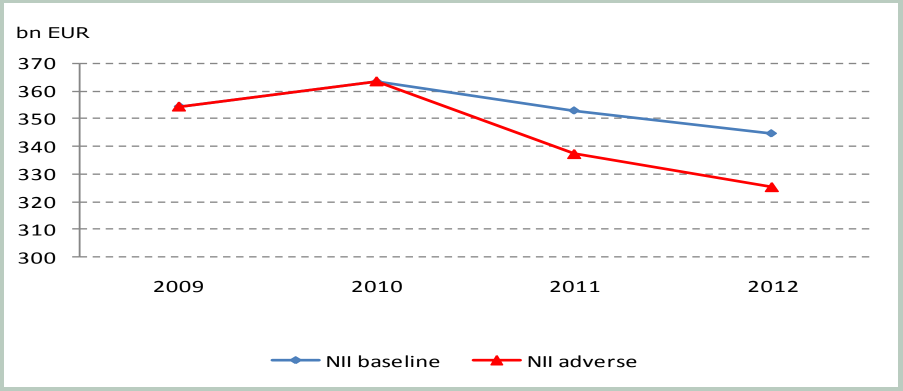
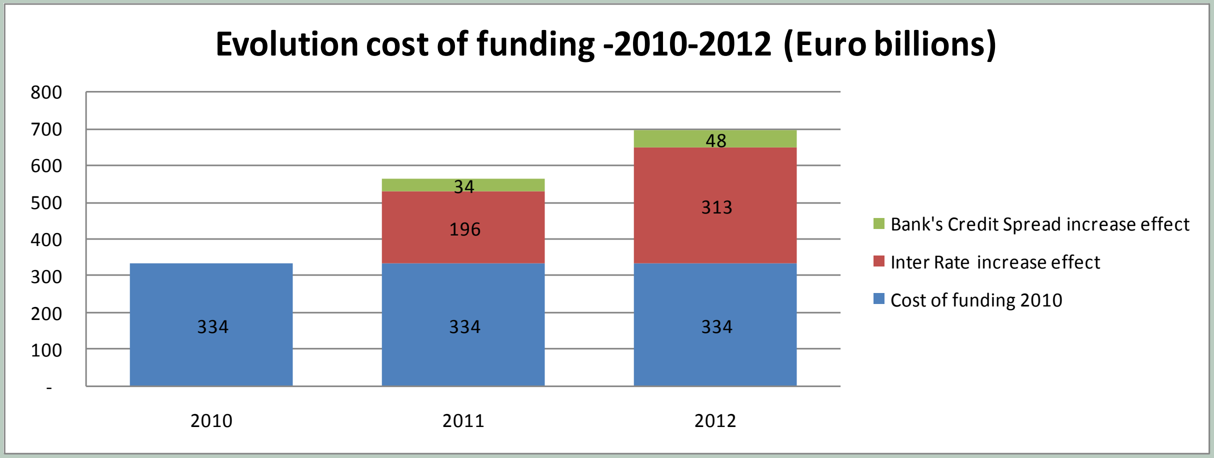
- Significant challenges remain for all EU banks in view of the adverse sovereign situation
- National authorities in countries currently in IMF-EU programmes are strengthening the capital levels of home-country banks and in many cases are setting capital standards above that of the EU-wide stress test.
- At the same time they take steps to extend funding maturities, increase liquidity buffers, and develop contingency plans

Net interest income and funding costs

- Adverse scenario assumes rising rates pushing funding costs upwards more than asset yields: net interest income falls below 2009 level

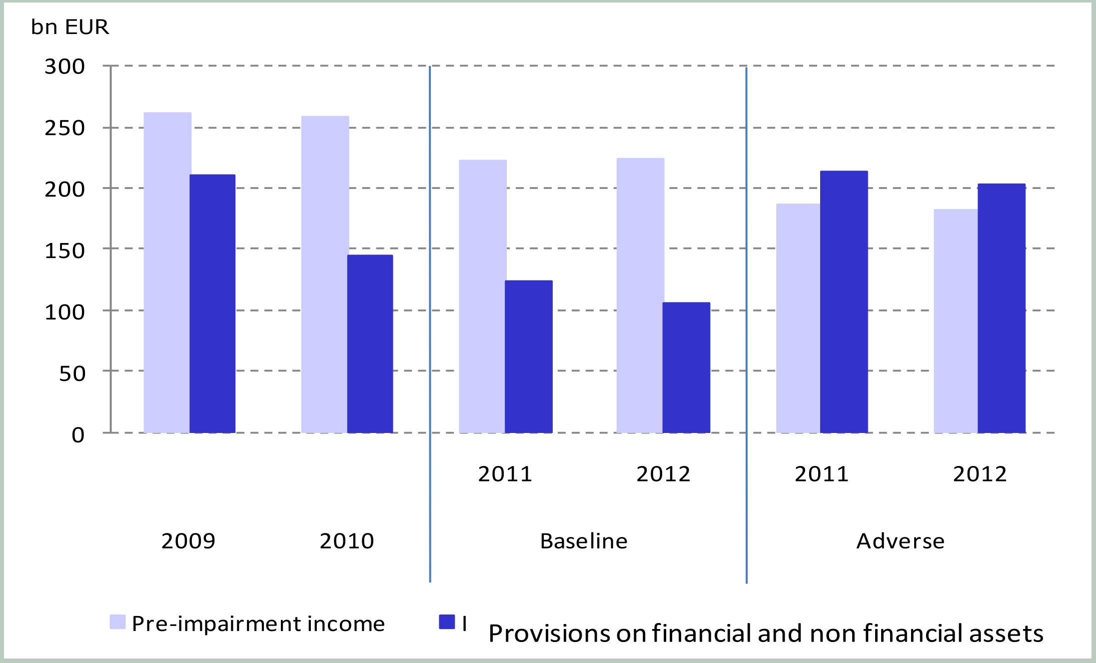


- Drivers of funding cost increase



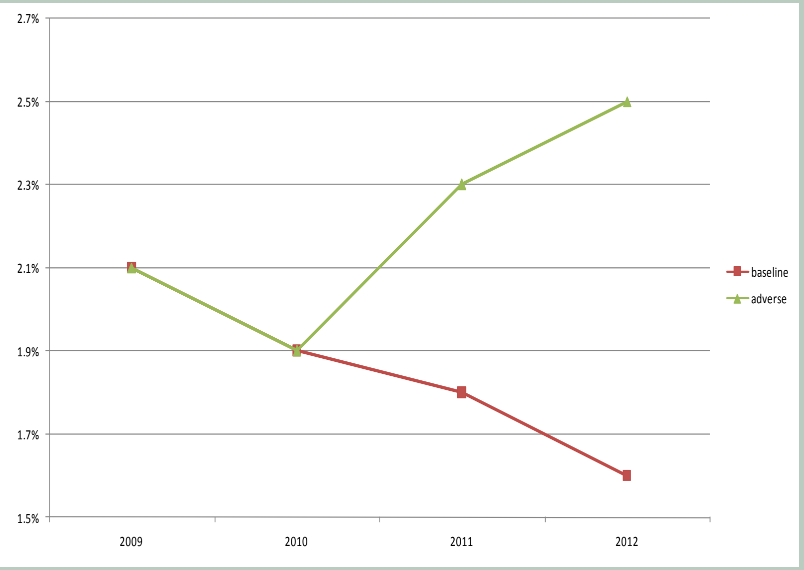
Pre-provision income and impairment provisions

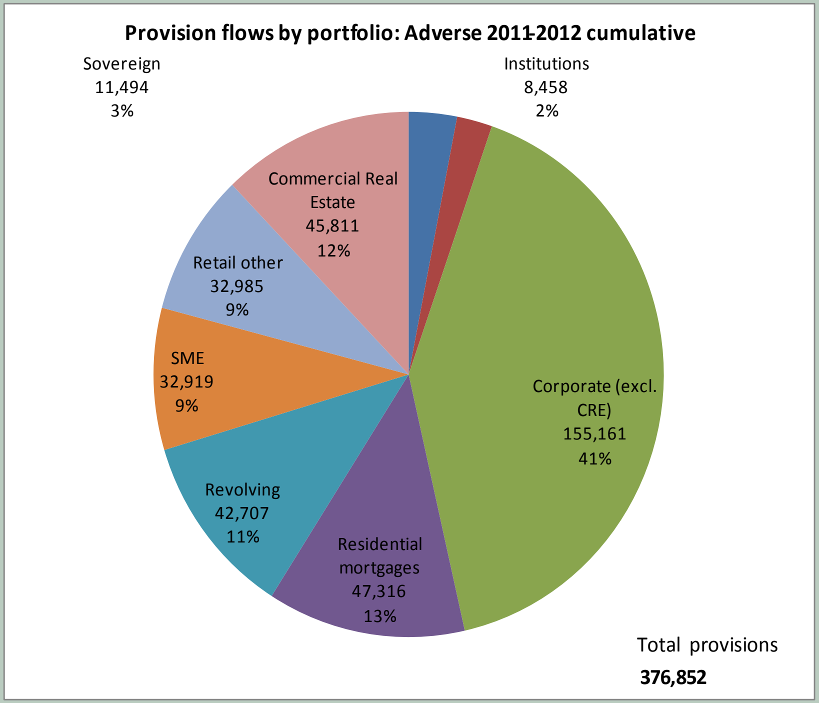
- Impairment provisions amount to ca. EUR400bn for 2011-12 (adverse) –level comparable to 2009 (worst year of the crisis)
- In adverse scenario pre-provision income falls behind new impairment provisions flow



Default and loss rates

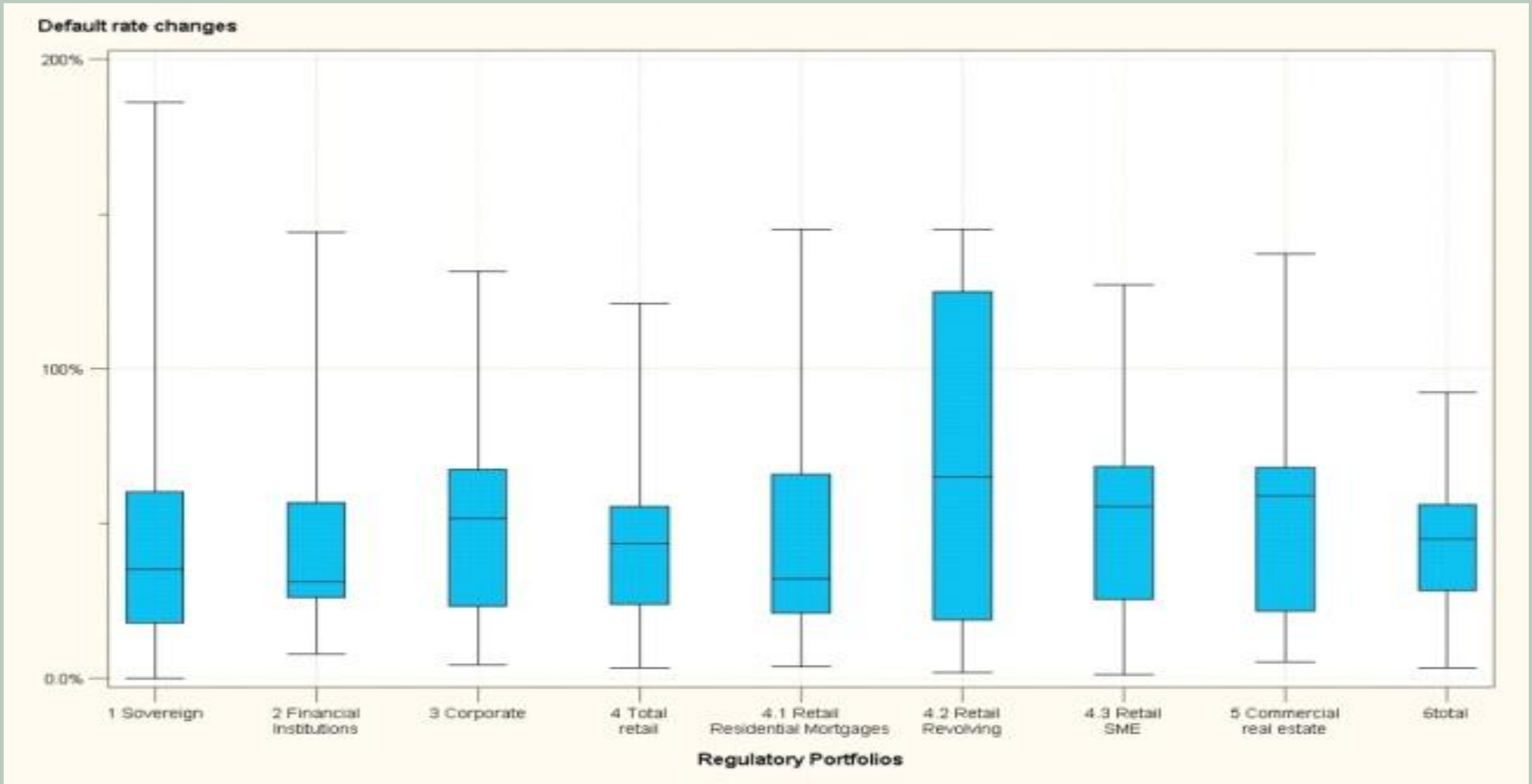
- Default rates sensitive to macroeconomic scenarios (baseline vs. adverse)
- Provisions for sovereigns and financial institutions determined to a large extent by the EBA's additional guidance





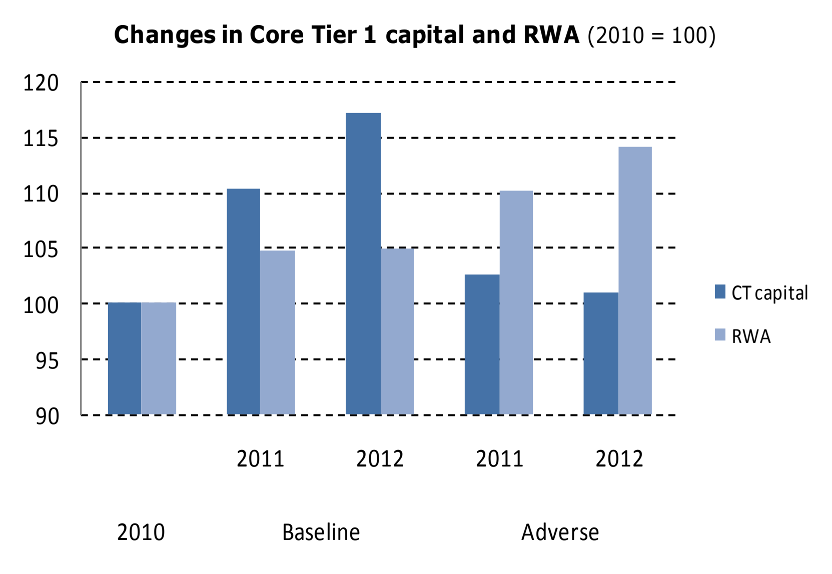
Default rates by portfolio

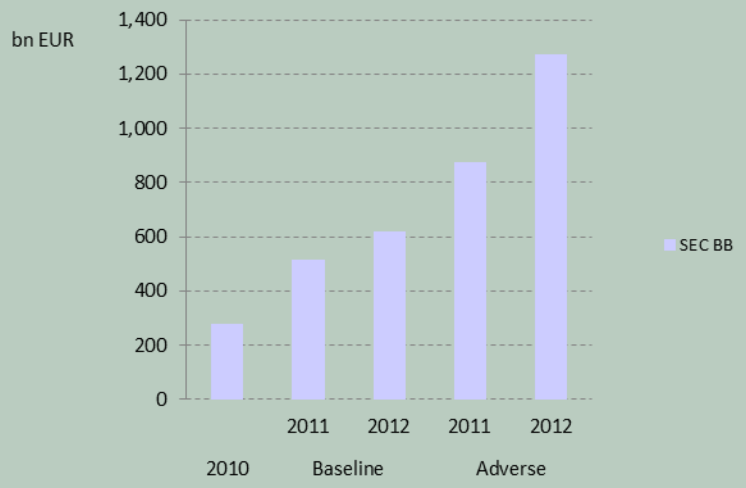
- Dispersion of default rates is particularly evident for the Retail SME, CRE and Corporate portfolios
- In general wide dispersion of default rates across banks



Risk-weighted assets and PD/LGD dispersion patterns

- Adverse scenario: RWA grow 14% -- due solely to higher IRB risk weights particularly for defaulted assets and securitization in banking book





- EBA's analysis shows significant dispersion in PD and LGD parameters (both starting and stressed levels)
- Further regulatory analysis should reveal more details on commonalities and differences in IRB method implementation across EU banks

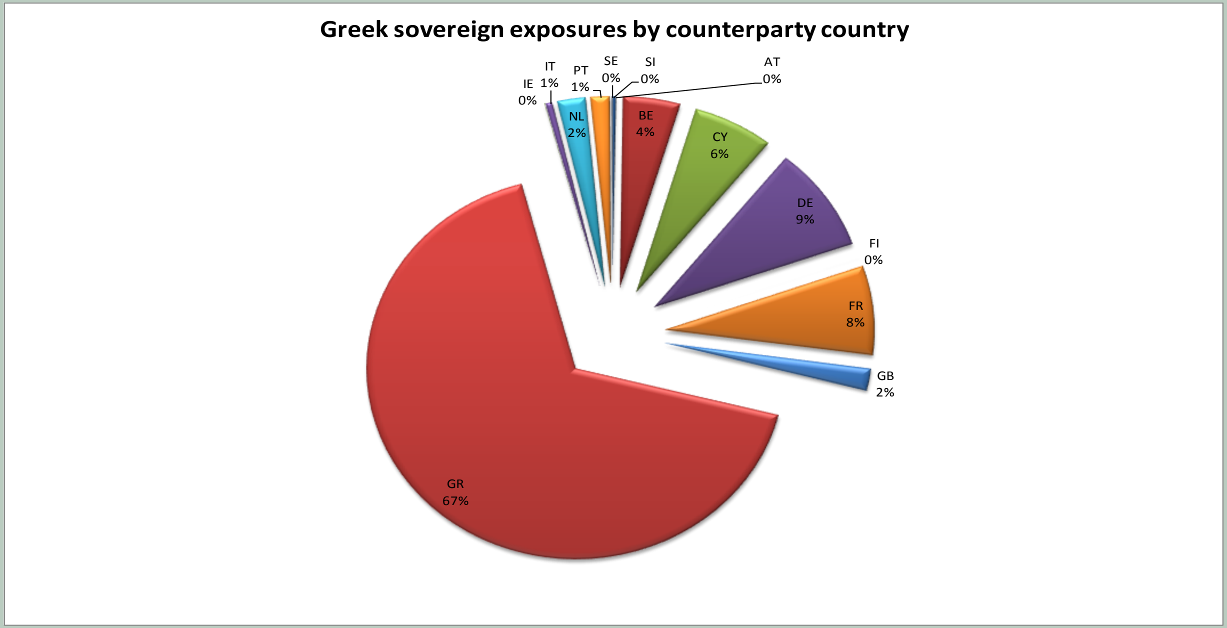
Sovereign exposures: impairment recognition

In June 2011 the EBA issued additional guidance on sovereign and financial institutions exposure risk:

- **Trading book**: market risk haircuts
  - Reflect both widening sovereign spreads and interest rate movements in the adverse scenario

- **Banking book**: sovereign exposures treated as another credit risk
  - PDs linked to external ratings: lowest non-default rating (CCC-equivalent) benchmarked to a 36.15% PD (based on rating agencies' corporate rating migration matrices)
  - LGD of 40% considered as appropriate by the EBA for sovereigns
  - 36.15% PD and 40% LGD lead to a 15% expected loss (EL)

Sovereign exposures



- Aggregate EAD Greek sovereign debt was EUR98bn (end 2010):
  - Sixty-seven percent held by home-country banks
- In the case of the sovereign debt of Ireland and Portugal it is also home-country banks that are majority holders (61% Ireland and 63% Portugal)
- The three countries' banks should have capital shortfalls covered with backstop mechanisms such as IMF-EU support packages
- Aside from impact of direct exposures there are second-order effects: negative market sentiment on stressed sovereigns impacts exposed banks' (i) market funding costs and availability, (ii) share price and capital generation capacity, and (ii) business and counterparty profile

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