SP Global : Why Another Capital Ratio?

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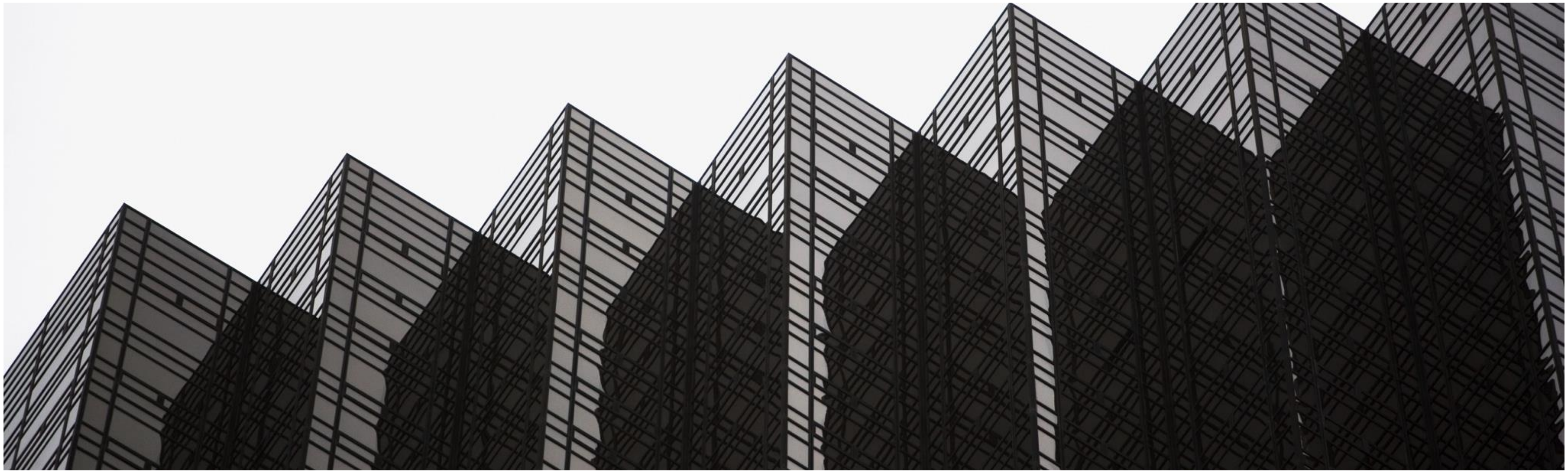

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Agenda

- Why Another Capital Ratio?
- Risk-Adjusted Capital Framework (RACF) Overview
- Bank Ratings Framework– Where Does RACF Fit In?
- Outlook For European Banks
- Appendix 1: BICRA and S&P RWs curves
- Appendix 2: Regulatory RWs vs S&P RWs – Illustrative Example

Why Another Capital Ratio?

Why Yet Another Capital Ratio?

- **We first introduced our Risk-Adjusted Capital Framework (RACF) in April 2009 to address comparability issues with the regulatory ratios. We believe these issues will persist under Basel III and "Basel IV".**

- **Regulatory Tier 1, Core Tier 1, CET 1 ratio.**
  - **Key regulatory metrics, risk sensitive**
  - **Very complex under Basel II, Basel II.5 and Basel III**
  - **Comparability is blurred, within and across banking systems**
    - **National discretions (affect both the numerator and the denominator)**
    - **Methodological differences**
    - **Difference in banks' internal models/estimates**
      - While we think that internal model approaches are relevant and better capture the underlying risks in some instances we have concerns about the absence of global standardized validation framework among the national supervisors.
    - **Timing differences in the regulatory framework implementation**
  - **Transition to Basel III will last up to 2023**

Why Yet Another Capital Ratio?

- **S&P also has different views on some risks and calibrations.** Appendix
  - S&P Credit Risk RWs are calibrated to a 'A' stress scenario
    - In such scenario, the GDP could decline by as much as 6 % over 3 years, unemployment could reach up to 15% and the home price could decline by 30%. The stock market could drop up to 60 % (for a developed economy)
  - S&P Market RWAs are calculated over 1 year horizon with a 99.9% confidence level

- **As we rate banks all over the globe it is critical for us to have to use capital ratios that are comparable. We also calculate RAC ratios for entities falling out of scope of the Basel Framework**

- **Therefore, while we monitor regulatory ratios, our capital assessment for banks is centred on RACF.**

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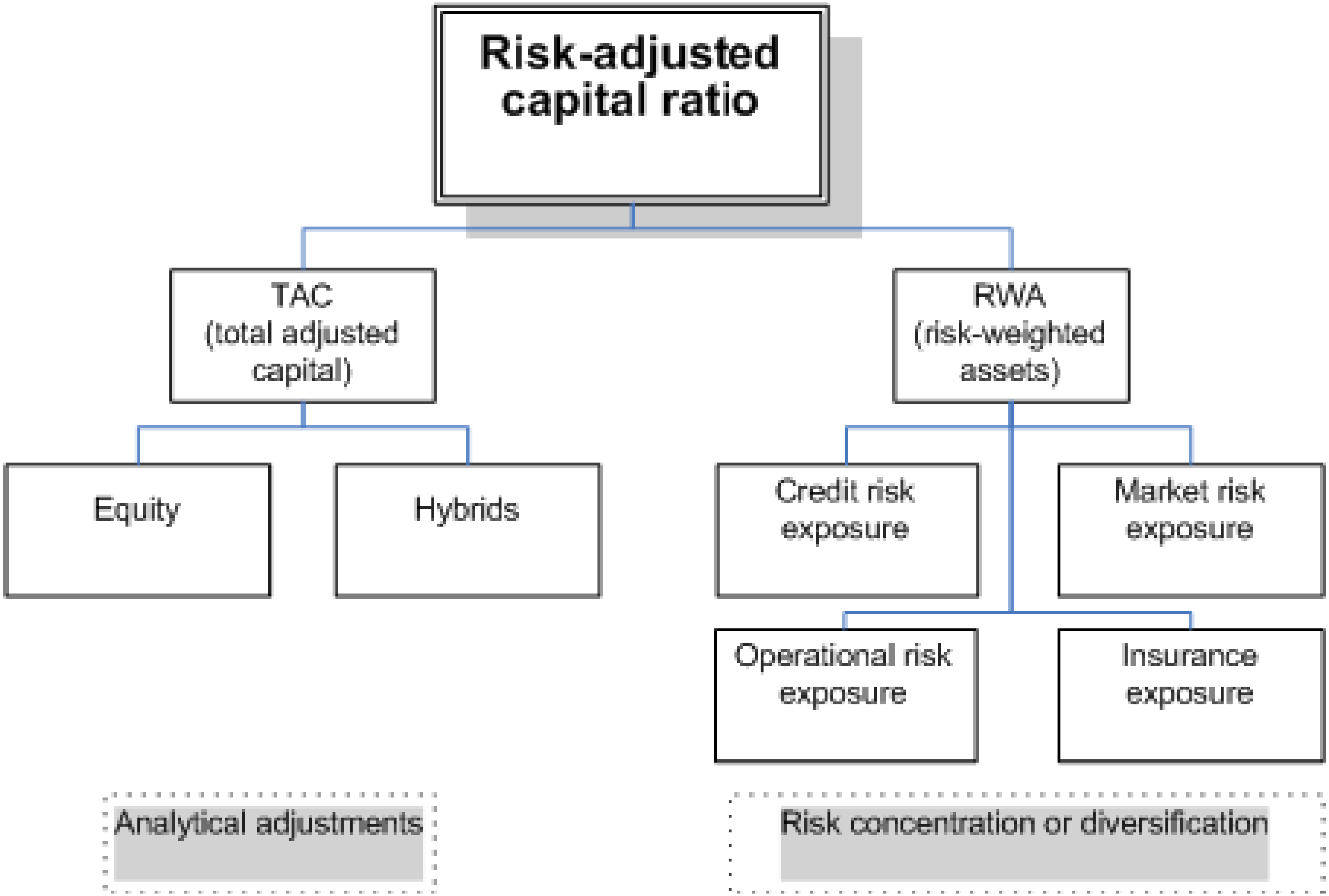
Risk-Adjusted Capital Framework (RACF) Overview

Building Blocks For S&P's Risk-Adjusted Capital



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S&P Risk Weights Risk-Weighted Assets

- **RWs for each credit exposure class reflect Standard & Poor's own qualitative risk assessment of what could be unexpected losses under a 'substantial' stress scenario**
  - **Losses are calibrated to a 'A' stress scenario**
    - **In such scenario, the GDP could decline by as much as 6 % over 3 years, unemployment could reach up to 15% and the home price could decline by 30%. The stock market could drop up to 60 % (for a developed economy)**

- **We derived from these stress losses a risk weight equivalent that we apply to banks' exposure at default**
  - **Ex: Retail mortgages in a low risk country could generate in our opinion 150 bps of unexpected losses**
  - **150bp / 8% = 150bp × 12.5 = 19% is our benchmark risk weight for retail mortgage portfolios in very low risk countries**

- **Risk Weighted Assets for Market risk are calculated over 1 year horizon with a 99.9% confidence level**

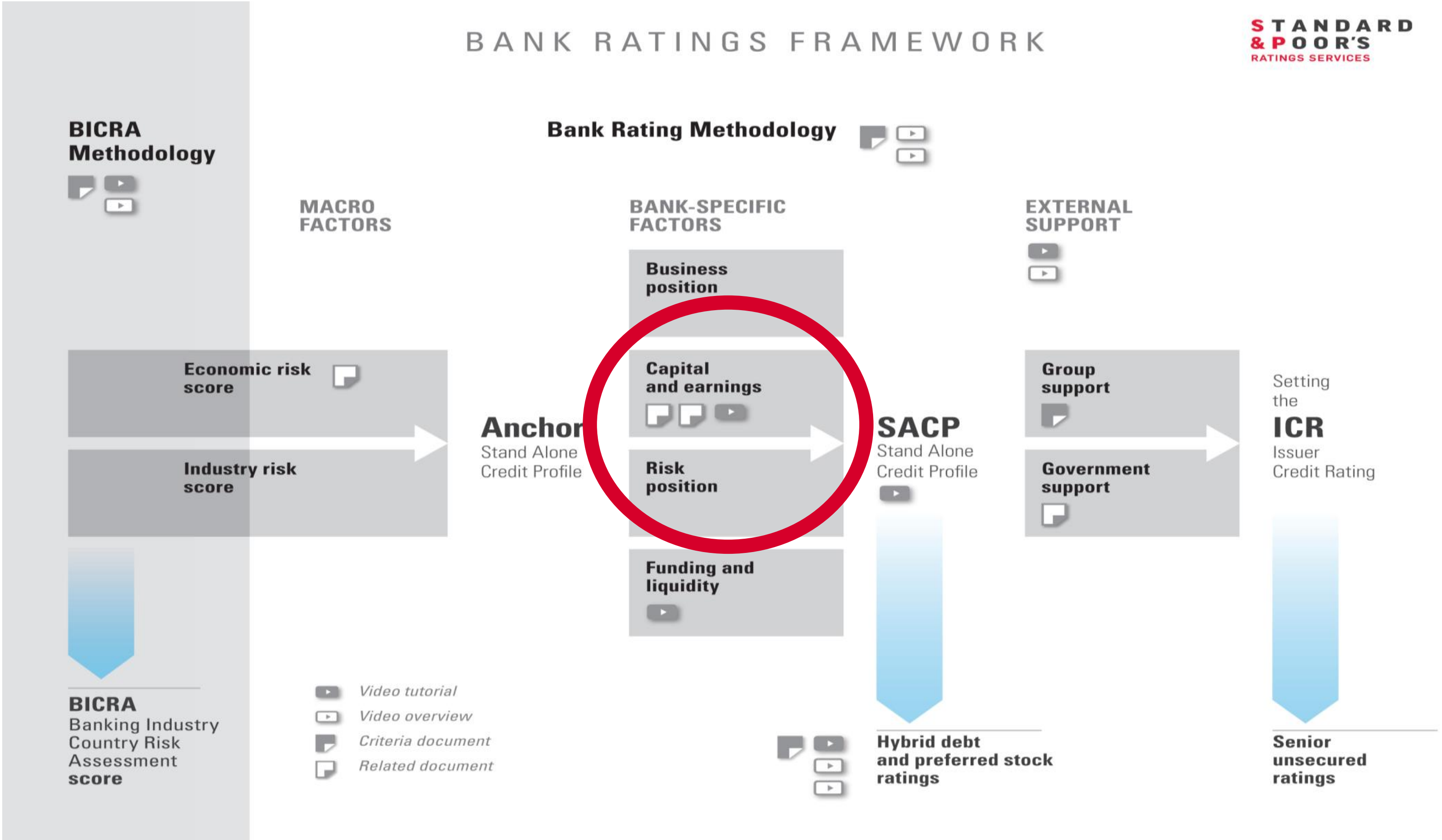
- **A RAC ratio of 8% indicates that a bank has just enough capital to absorb this 'substantial' (i.e. 'A' level) stress scenario**

Risk Weights Differentiation: S&P's Approach

- The risk charges for corporate and retail exposure classes are differentiated based on the economic risk score.
- The risk charges for financial institutions are differentiated based on BICRA groups. BICRA is our methodology for assessing the risks relevant to national banking systems.
- The risk charges for sovereign exposures are differentiated based on Standard & Poor's sovereign ratings
- The risk charges for securitization exposures are differentiated based on assessments from rating agencies
- Risk charges are applied to Exposure At Default (EAD)
  - Adjustments to EAD for Credit Cards (10% of undrawn amounts taken as Credit Exposure) and Equity in the banking book
  - Where EAD is not available (e.g. in the U.S and some emerging countries.), S&P uses Basel Credit Conversion Factors assumptions

Appendix

Bank Ratings Framework– Where Does RACF Fit In?



- **The projected RAC ratio is the key driver of "Capital and earnings"**
- **'Risk position' serves to refine the view of a bank's actual and specific risks, beyond the conclusion arising from the standard assumptions in the capital and earnings analysis (i.e. RAC ratio)**
- **A comparative assessment, in relation to peers operating in banking systems with similar economic risk. We also look whether material risks are not adequately captured by RACF**

From The Actual RAC Ratio To The SACP Impact

Actual RAC ratio
(based on actual data input)

Forecast RAC ratio
(based on bank's ability to grow or rebuild capital through internally generated retained earnings + external capital raising)

Table 9
Capital Assessment

Qualifier	Projected RAC ratio before concentration or diversification adjustments (%)
Very strong	More than 15%
Strong	More than 10% and up to 15%
Adequate	More than 7% and up to 10%
Moderate	More than 5% and up to 7%
Weak	3% up to 5%
Very weak	Less than 3%

Capital and Earning Score
(all else being equal)

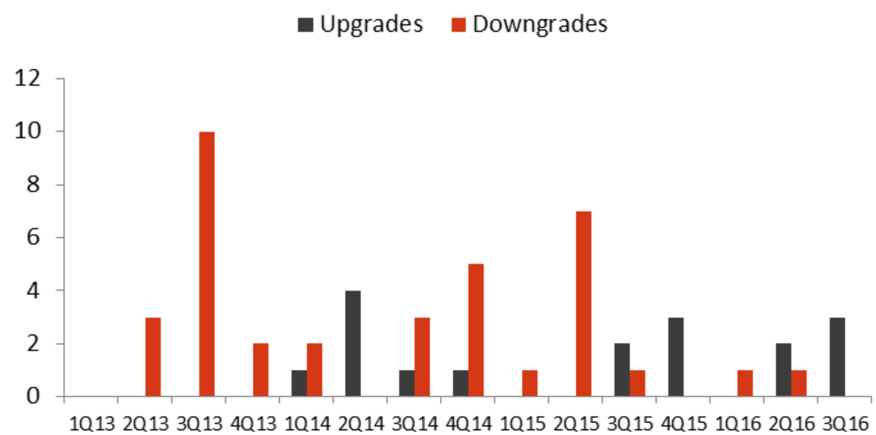
Table 3
Using Bank-Specific Analysis To Determine The SACP

Capital and earnings* *Anchor*	*'bbb-' or better*	*'bb+' to 'bb-'*	*Below 'bb-'*
Very strong	+2 notches	+2 notches	+2 notches
Strong	+1 notch	+1 notch	+2 notches
Adequate	0 notches	0 notches	+1 notch
Moderate	-1 notch	0 notches	0 notches
Weak	-2 to -3 notches	-1 notch	0 notches
Very weak	-5 notches	-2 notches	-1 to -2 notches

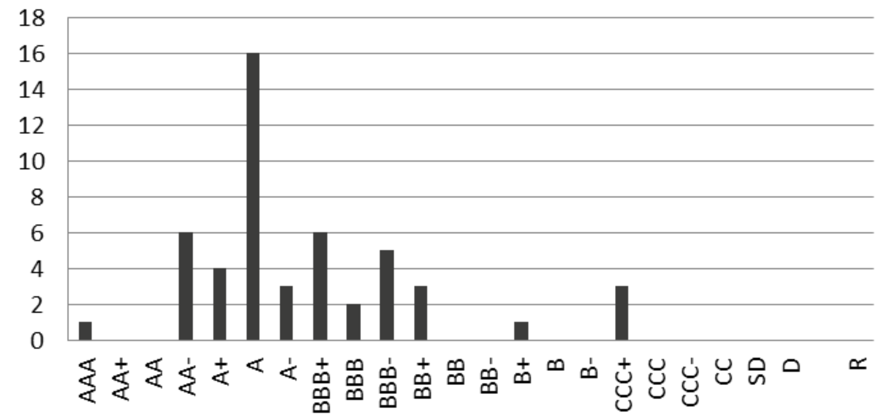
Outlook For European Banks

Top 50 Rated European Banks - Rating Trends

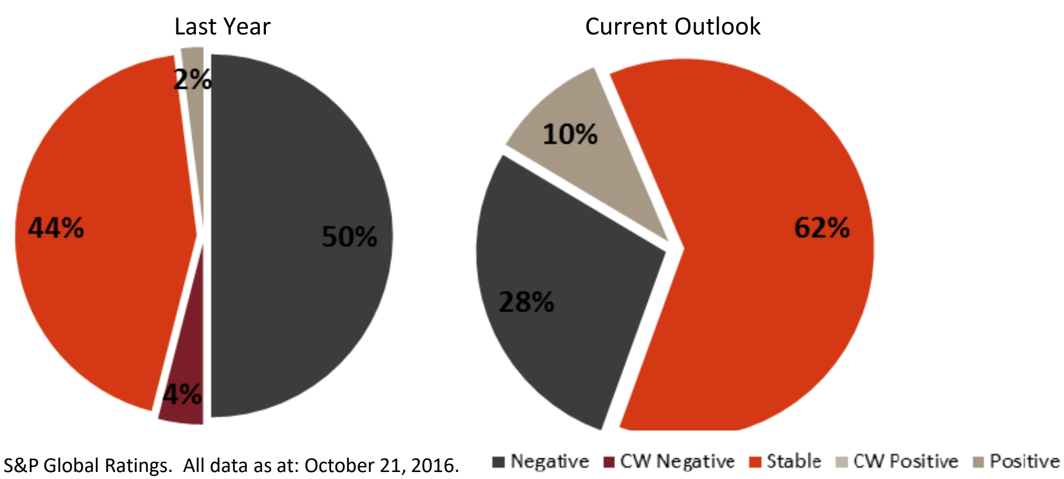
Historic Downgrades & Upgrades



Rating Distribution (ICR)



OL/CW Distribution



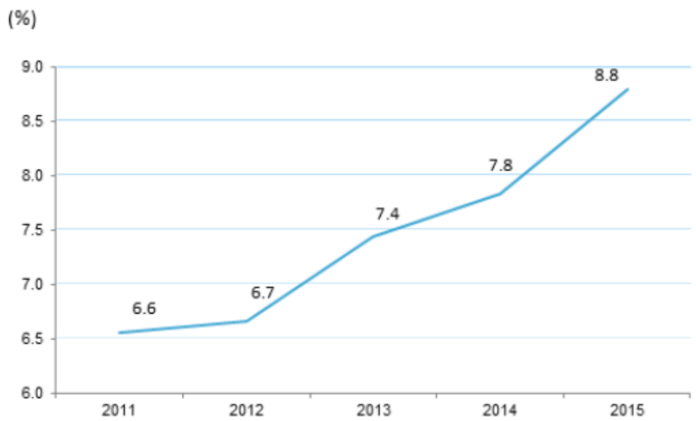
Source: S&P Global Ratings. All data as at: October 21, 2016.

Takeaways:

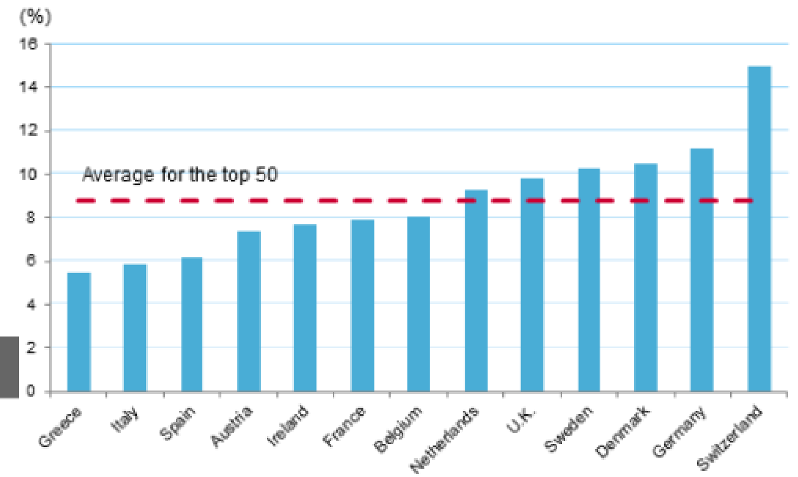
1. Concentration at "A"
2. Since mid-2015, 8 upgrades vs. 2 downgrades
3. Shift from Neg to Stable outlooks, linked to removal of government support
4. But Europe is far from being an homogenous zone.

More Resilient Balance Sheets Support These Trends

Average RAC Ratio For The Top 50 Rated Western European Banks, 2011-2015

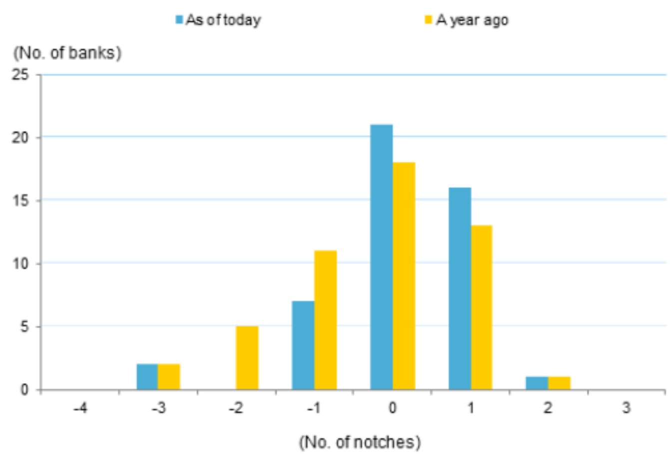


Average RAC Ratio For The Top 50 Rated Western European Banks, 2015, By Country



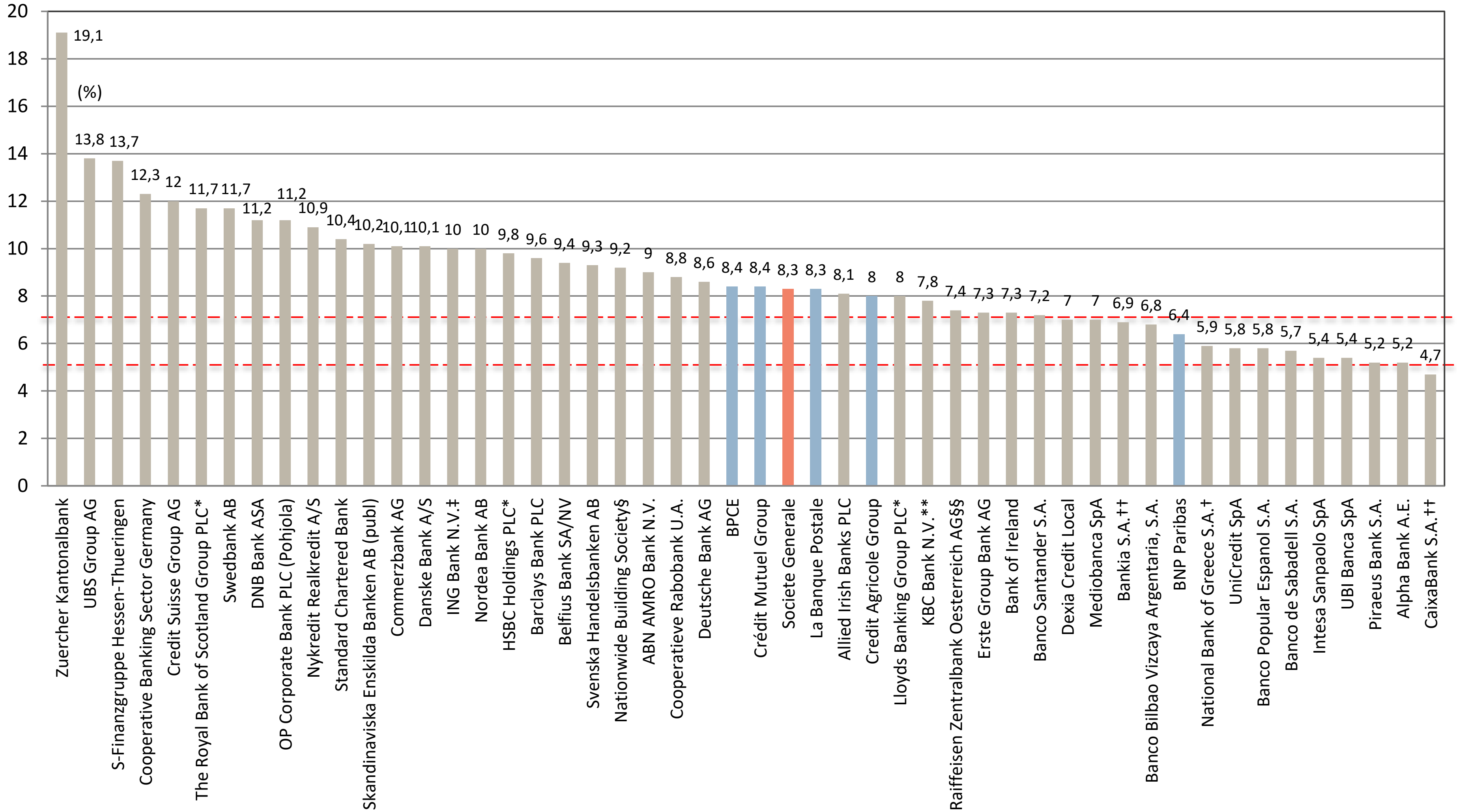
RAC--Risk-adjusted capital. Source: S&P Global Ratings.

Combined Notching Impact Of Capital & Earnings And Risk Position For The Top 50 Rated Western European Banks



Source: S&P Global Ratings.

RAC Ratio / European Top 50 (Most Recent Historic Figures)



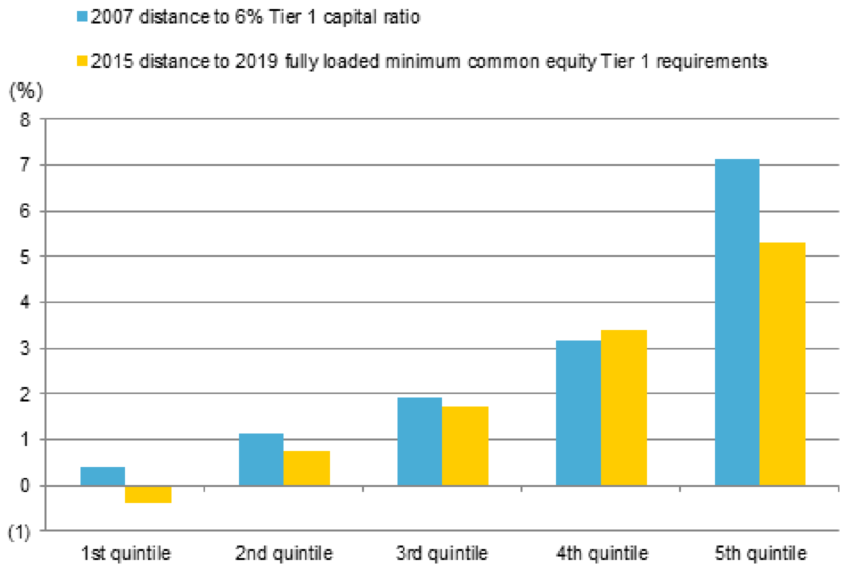
Note: The ranking is based on Tier 1 capital as published in The Banker in June 2016. All RAC ratios are calculated at the group level. *Holding company; the rating reflects that of the main operating company. § Nationwide Building Society (April 2015). †National Bank of Greece: Best estimate, ‡ING: The RAC ratio calculated at the operating bank level does not take into account part of the cash buffer managed at the holding company level (ING Groep) that we include in our forecast. **We calculate the RAC at the Group level. §§ Referring to consolidated sector data ††RAC ratios are calculated at parent company level with group's consolidated financial statements.

Most Banks Don't Need More Capital, But The Flexibility To Use It In Times Of Stress

- Banks' limited capacity to use their enhanced capital bases without breaching much stricter minimum regulatory requirements undermines the benefits of having a stronger capital base.

- As a result, we believe that banks' pro cyclical behaviors and exposure to confidence shocks might not have improved as significantly as could have been expected.

Distance To Minimum Regulatory Ratio, 2007 Versus 2015, Average By Quintile



Based on public information as of Nov. 30, 2016, and constant countercyclical buffer. See table for the banks included in this chart. Source: S&P Global Ratings.

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Thank you

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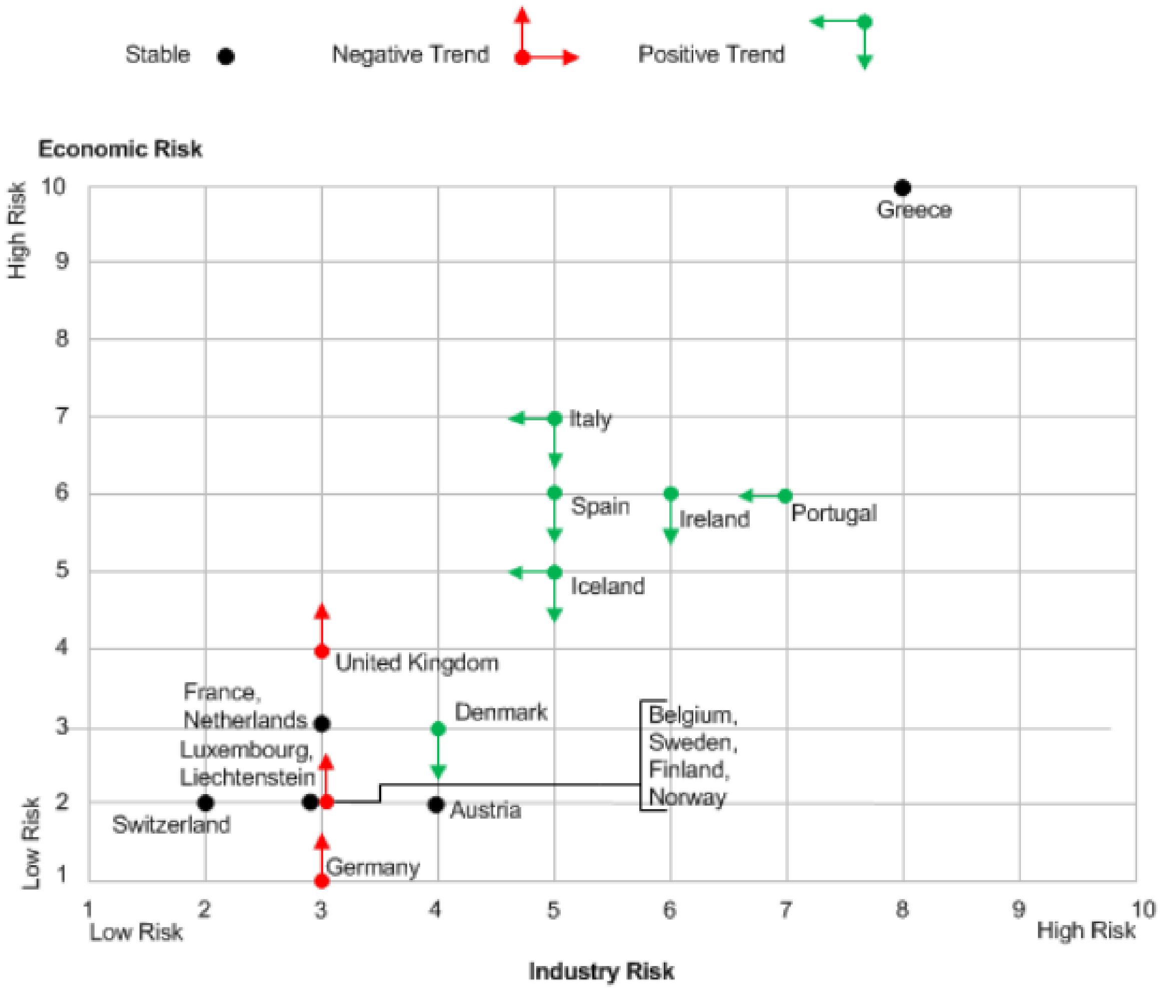
Appendix 1: BICRA and S&P RWs curves

BICRA Is Our Methodology For Assessing The Risks Relevant To National Banking Systems



Source: S&P Global Ratings. Data as of Nov. 4th, 2016

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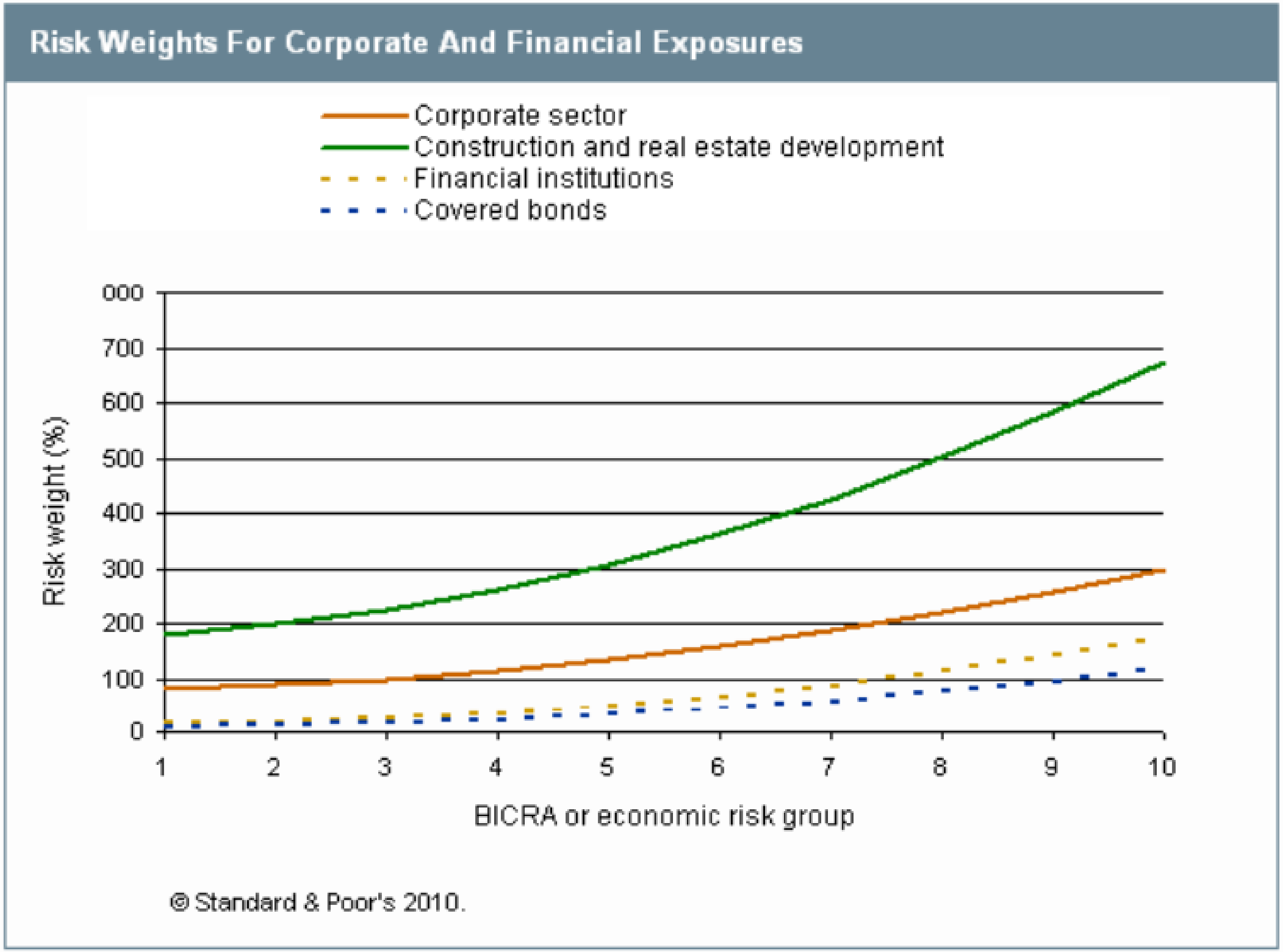
S&P Risk Weights For Corporate And FI Exposures



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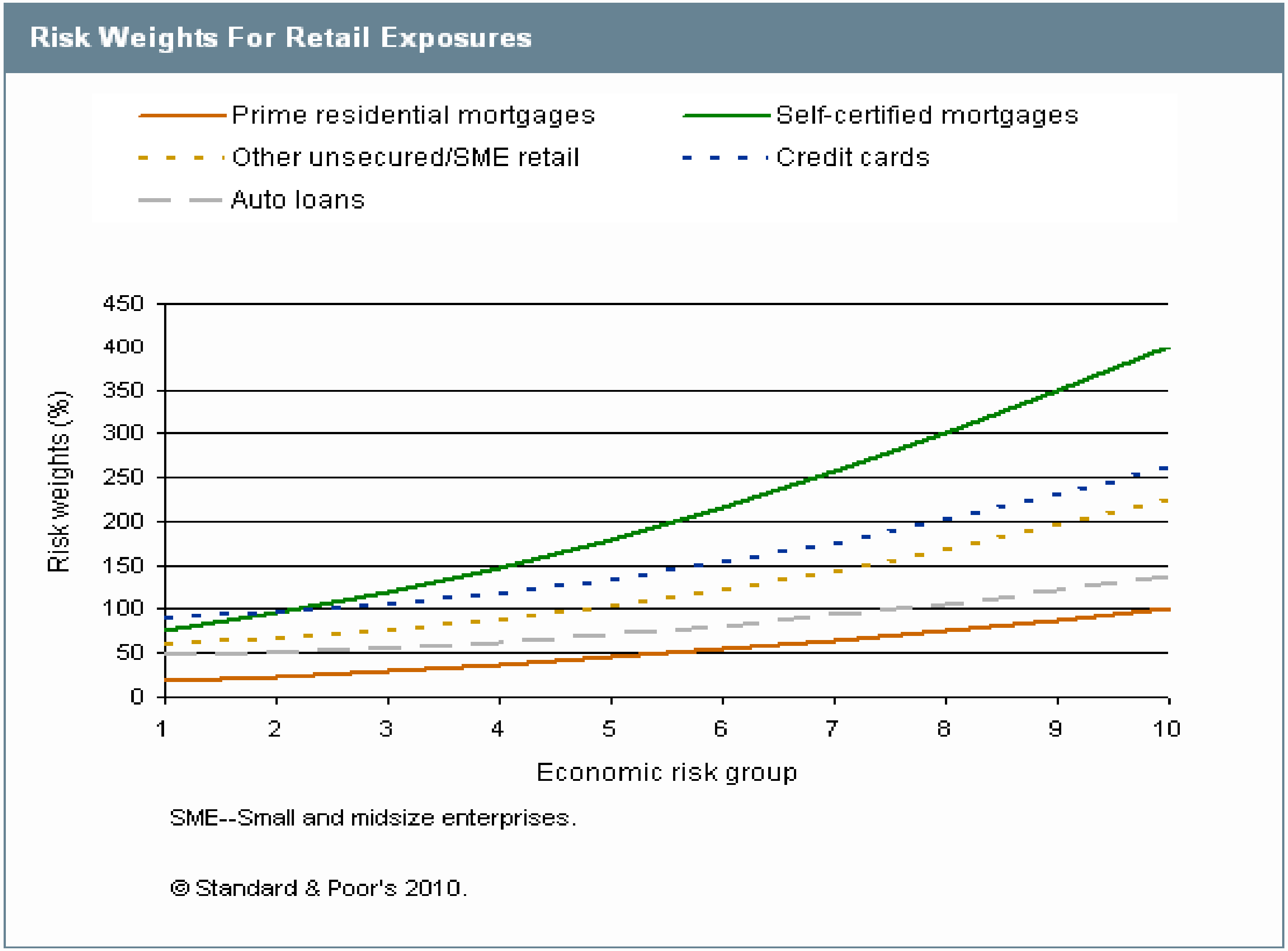
S&P Risk Weights For Retail Exposures



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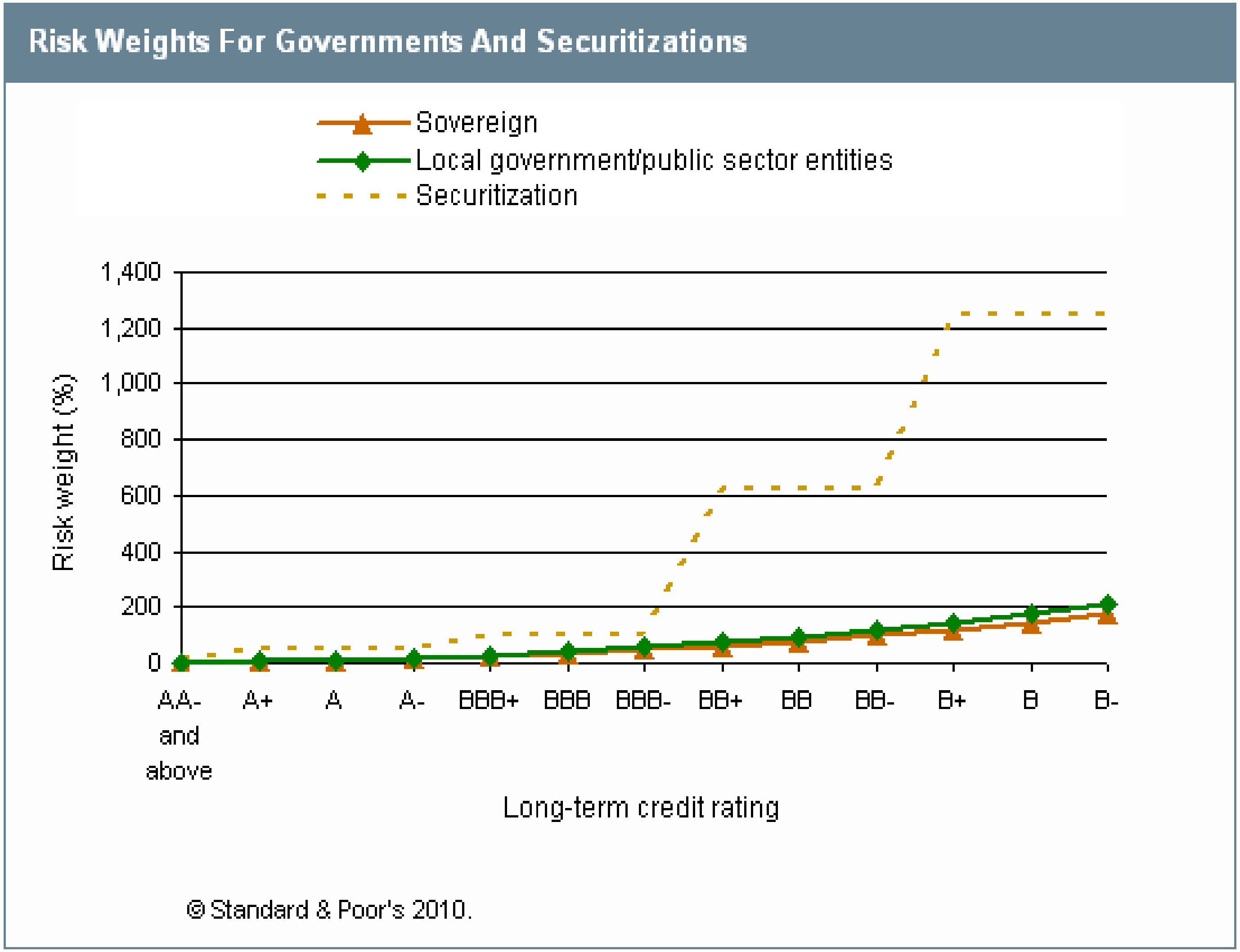
S&P Risk Weights For Sovereign And Securitizations



Presentation

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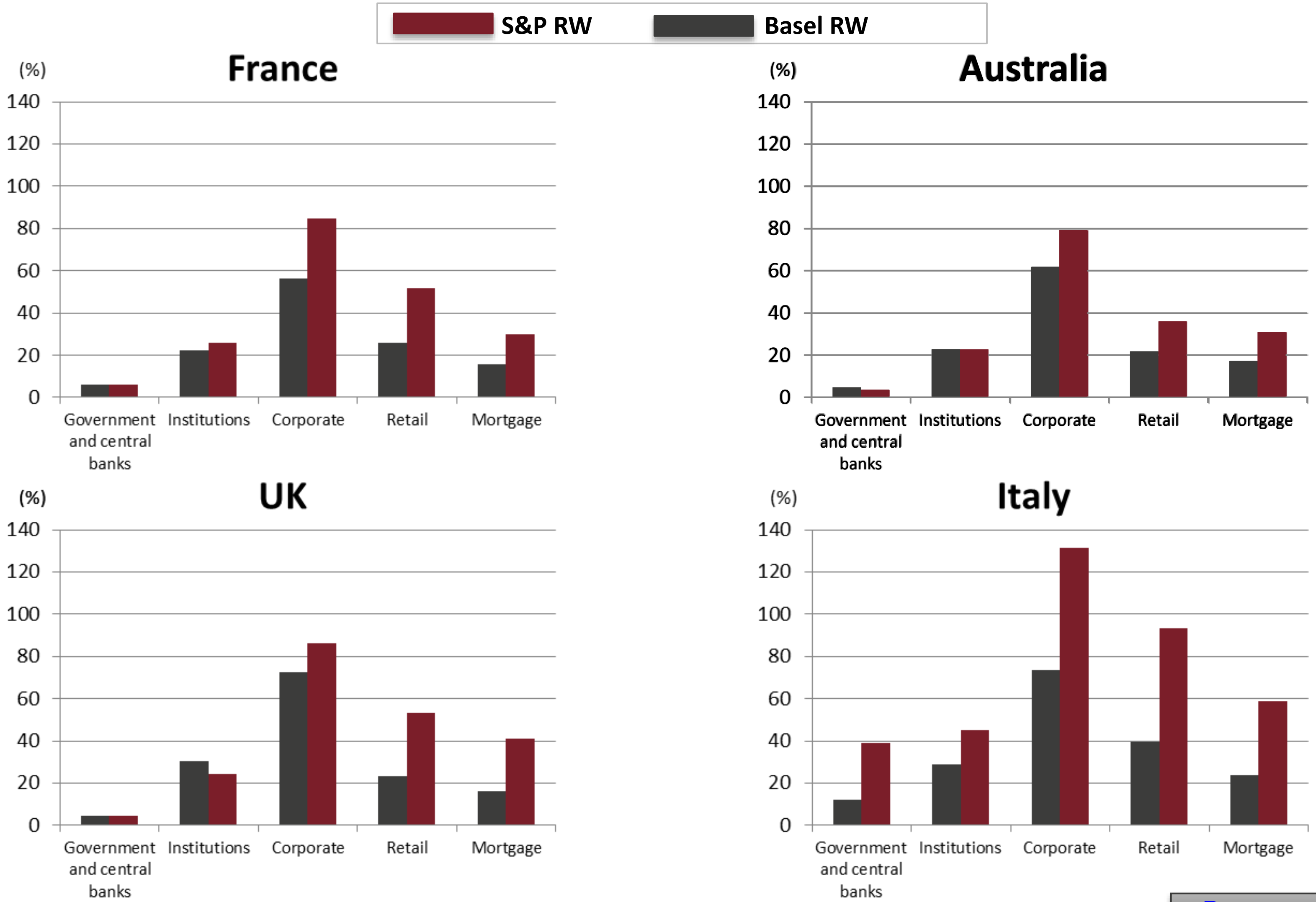
Appendix 2: Regulatory RWs vs S&P RWs – Illustrative Example

Regulatory RWs vs S&P RWs – Illustrative Example



Presentation