CICA ROUNDTABLES 2015

How to improve prudential norms in order to increase financing of infrastructure ?

Or : Can we limit the impact of prudential norms to ease the financing of infrastructures ?

Expectations of the Banking Sector

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Agenda

1. Basel III and its ratios
2. Monitoring Reports from the Basel Committee
3. Other regulations and rules
4. General impact of the ratios
5. Impact of the ratios on Infrastructure Finance
6. New possible evolutions
7. Actors on financial markets
8. What next ? Possible actions ?

1. Basel III and its ratios

Capital Ratio:

Compare

- Equity (and quasi-equity)
- with RWAs (Risk Weighted Assets)

Target : 10,5% in 2019 (vs 8,0% in 2013 – similar system already in force for years)

  - With stricter criteria on pure equity (4,5% common equity vs 2% and 6% Tier 1 vs 4%)
  - With less flexibility on calculation of RWAs for counterparty credit risks and trading book exposures

Aim : better capitalized banks can better cope with credit losses and other losses without any need for public support

Consequences :

- need to reduce RWAs (deleveraging)
- need to remunerate more equity, with a probable lower Return on Equity (RoE at 10% vs 15%)

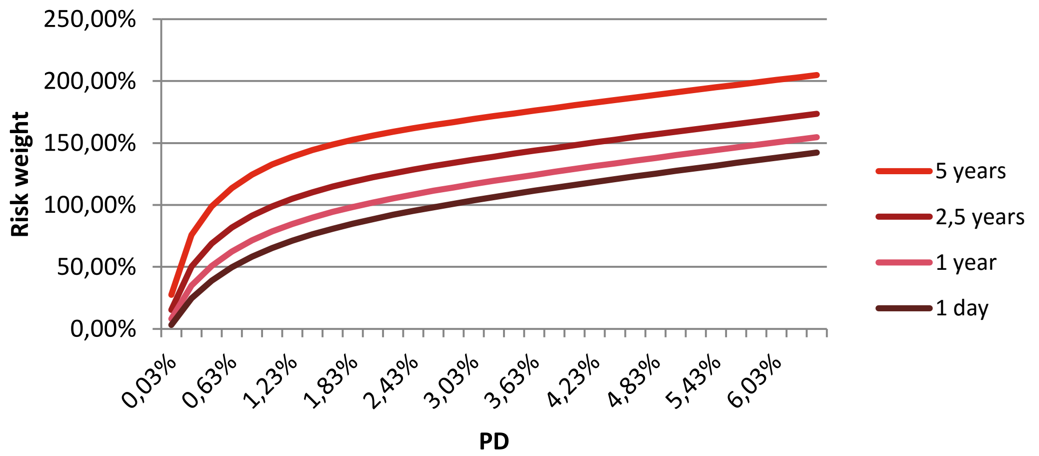
1. Basel III and its ratios

<u>Capital Ratio</u>

The main drivers to transform Gross Assets in RWAs are :

- Ratings and linked Probabilities of Default (PD)
- Durations
- Credit Conversion Factors coming often from Basel I)
  - 0% for exposures covered by ECAs based in OECD high income countries
  - 20% for LCs and 50% for technical guarantees
  - 50% for undrawn amounts on signed facilities

Risk weights under different maturities (Source PWC)



1. Basel III and its ratios

LCR – Liquidity Cover Ratio – (Short-term liquidity ratio)

Compare

- HQLA (High Quality Liquid Assets) (cash or available cash within 30 days)
- with liquidity needs (potential cash-outflows over the next 30 days)

Target : > 100% in 2019 (vs 60% in 2015 – first year of publication)

Aim : ensure that global banks have sufficient unencumbered, high-quality liquid assets to offset the net cash outflows they could encounter under an acute short-term stress scenario. The specified scenario is built upon circumstances experienced during the global financial crisis that began in 2007 and entails both institution-specific and systemic shocks.

Most banks' failures are coming from ST liquidity crisis

Consequences :

- Need for banks to increase HQLA (T-bonds,…)
- Need to reduce committed lines

1. Basel III and its ratios

NSFR – Net Stable Funding Ratio – (Long Term Liquidity)

Compare

- stable sources of funding (> 1 year)
- with long-term assets, as well as the potential for contingent liquidity needs arising from off-balance sheet commitments (> 1 year)

Possible Target : > 100% in ? 2019 ? – Not yet finalized

Aim : to limit over-reliance on short-term wholesale funding during times of buoyant market liquidity

Consequences

- Need for banks to raise for LT funds (more expensive than ST ones)
- Analysts also want to check further mismatches (over 5y, 10 y,..)
- Need for reduced volumes committed over LT and with shorter durations

1. Basel III and its ratios

Leverage Ratio – (Principles under finalization)

Compare

- Tier 1 Equity (≠ total equity)
- with total assets (On-balance sheet + NPV Derivatives + off balance sheet commitments + unconditionally cancellable commitments + …)

Possible Target : to be determined - 3% to 4% (UK) or 6% (USA) in ? 2019 ?

Aim : to prevent banks to boost their financial leverage by increasing their exposures to low risk-weighted assets as unexpectedly large losses may materialize in low-RWA portfolios

Consequences :

- Need for banks to reduce the size of their balance-sheet (deleveraging)
- An incentive for banks to increase their share of riskier exposures, which offer better Returns on Assets (RoA)
- Transfer of some of low-margin activities (public sector lending) to non-banks and shadow banking

2. Monitoring Report of Basel 3 (Basel Committee)

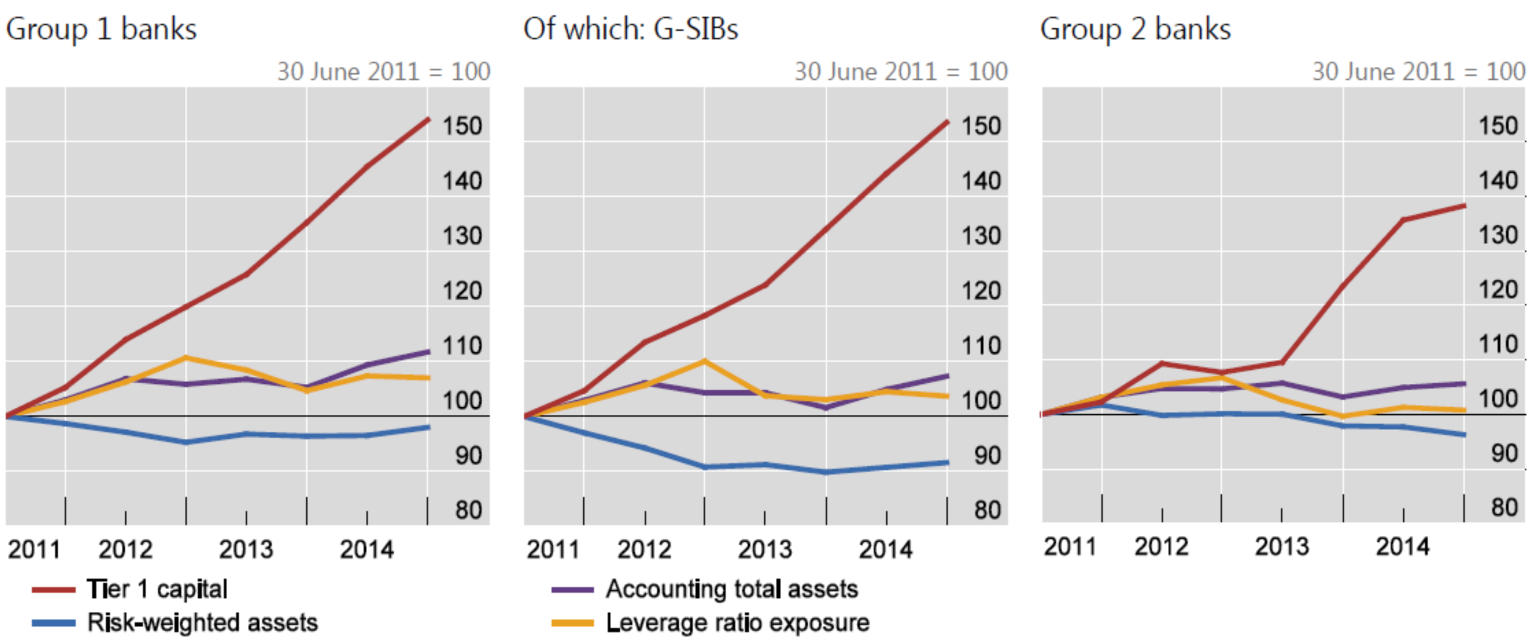
Ratios will be met…

	June 2011	December 2013	December 2014
Nb Banks	103 Group I - 109 Group II	102 Group I - 125 Group II	100 Group I - 121 Group II
	Group I - Large international active banks		Group II other banks
Capital	34 banks with Tier 1 < 7% (6-12) Ratio Decline : 7,1% vs 10,2% Total Shortfall : € 980 Bn Net Profit/year : € 260 Bn	12 banks with Tier 1 < 7% Ratio Decline : 10,5% vs 11,7% Total Shortfall : € 185 Bn Net Profit/year : € 312 Bn	0 banks with Tier 1 < 7% Ratio Decline : 11,7% vs 12,8% Total Shortfall : € 60,1 Bn Net Profit/year : € 438 Bn
LCR	Average : 90% // 55% below 100%	Average : 116% 24% below 100% // 8% below 60%	Average : 125% 15% below 100% // 2% below 60%
NSFR	Average : 94% // 54% below 100%	Average : 111% 24% below 100% // 12% below 90%	Average : 112% 20% below 100% // 8% below 90%
Leverage	Average : 3,4% Group 1 Average : 4,2% Group 2 Not met by 30%	Average : 4,3% Group 1 Average : 5,2% Group 2 Not met by 11%	Average : 5,0 % Group 1 Average : 5,3% Group 2 Not met by 8%
Equity Shortfall			Combined Shortfall : € 64,3 Bn

2. Monitoring Report of Basel 3 (Basel Committee)

But more equity does not mean more loans….

Consistent sample of banks, exchange rates as of 31 December 2014 Graph 14

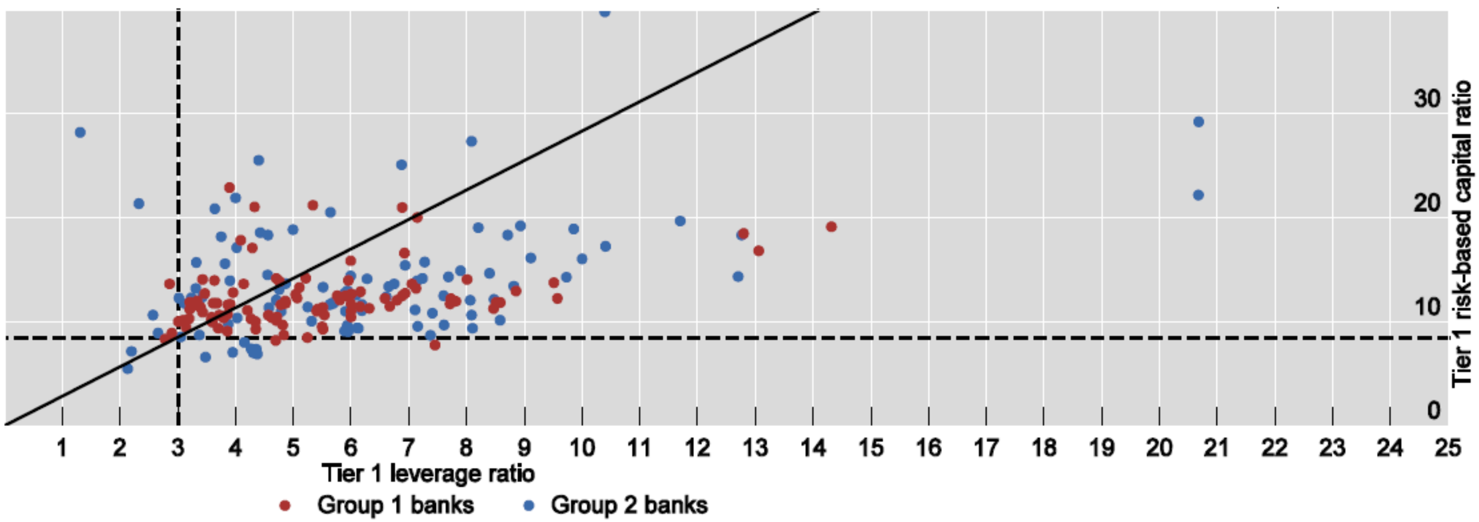


[1] Tier 1 capital, risk-weighted assets and leverage ratio exposure assume full implementation of Basel III. Note that the data points for H1 2013 use an approximation for the final definition of the Basel III leverage ratio exposure where gross instead of adjusted gross securities financing transaction values are used.

2. Monitoring Report of Basel 3 (Basel Committee)

Fully phased-in Basel III Tier 1 risk-based capital and leverage ratios

Consistent sample of banks, in per cent[1] Graph 15



[1] Banks with a risk-based Tier 1 capital ratio of more than 40% have been excluded from the graph.

Source: Basel Committee on Banking Supervision.

In Dec 2014, 10 banks (vs 25 in Dec 13 and 17 in June 14) did not meet the 3% threshold created by the Leverage Ratio

59 banks (vs 58 in Dec 13 and 62 in June 14) are more constrained by the Leverage Ratio than the Equity Ratio (above the diagonal)

A 4% Leverage Ratio would be an issue for at least 40 additional banks

3. Other regulations and rules

Other financial regulations

Segregation : split of Investment Banking Activities

The two parts (Investment Banking and other activities) have to comply with all ratios individually.

TLAC (Total Loss Absorbing Capacity) -FSB

More equity needs (16 to 20 % RWAs ?) for 30 G-SIBs (Global Systematically Important Banks)

A Leverage ratio at 6% ?

Resolution (Prevention of crisis and bail-out)

Equity : up to 20% of RWAs ? (EBF)

Non financial regulations

KYC, ALM-FT, Sanctions,…

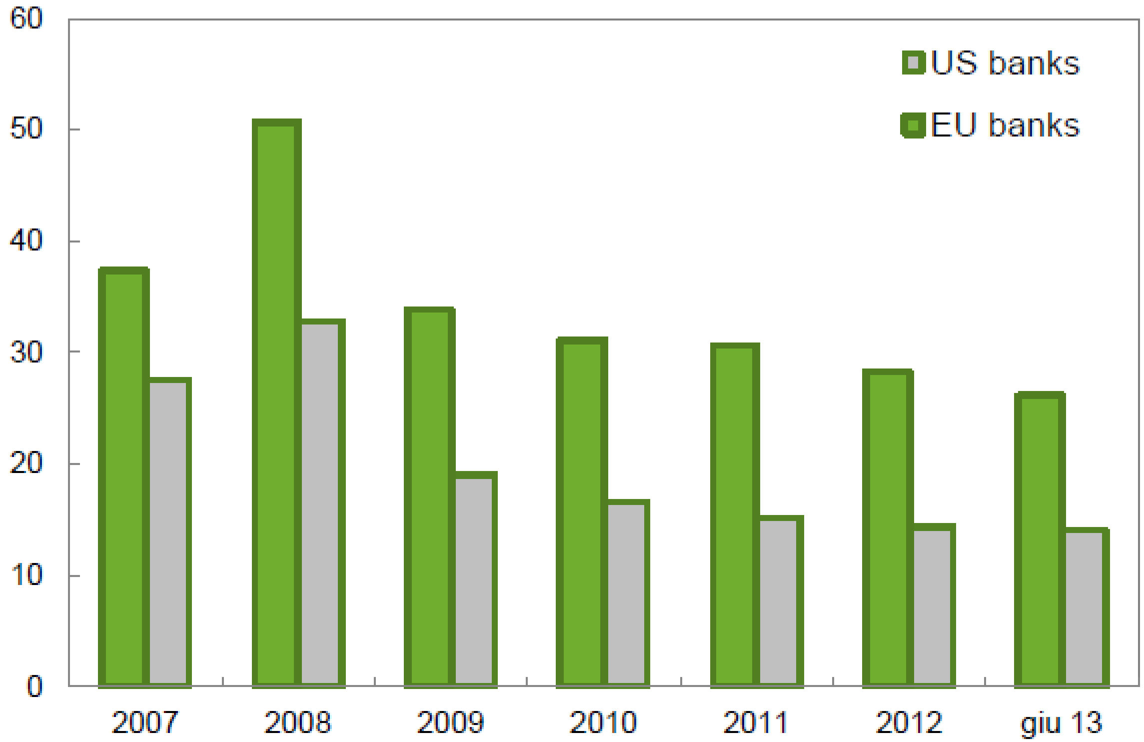
Other rules

Matching of LT assets (5, 10, 15 years) with LT resources (more difficult to raise and more expensive)

4. General impact of these ratios (2007-2013)

If EU banks were to decrease their Leverage in the same proportion as US banks did since 2007 and reached a 21.4 Leverage instead of 26.1 (US banks are at 14.1), the results would be

- either in a 17.3% contraction in assets
- or a 20.9% increase in Equity
- or a mix of both moves



Study published Pierluigi Bologna
October 2014

4. General impact of these ratios (2007-2013)

Increased equity : + 50 %

+ 60% in Europe / + 80% in the US

Reduced level of assets : -12%

-19% in Europe / stable in the US

Larger reduction of RWA (means more low-risk assets and possible growing pression from Leverage)

Further deleveraging for banks?

8 Tn $ in the US & 22 Tn $ in Europe (FSB)

Increased costs of LT loans

Lower return on Equity : 10% vs 15% pre-crisis

5. Impact of the ratios on Infrastructure Finance

Limited impacts of the Liquidity Ratios (LCR & NSFR) if mitigants are maintained

Large impact of the Equity Ratio

- More RWA for Project Finance activities
- An increased Equity Ratio means more Equity for the same volume of loans (or less loans with the same equity)

+ other Equity Requirements

Probable impact of the Leverage Ratio

- Clear limitations for banks with Leverage constraints and G-SIBs
- For banks which would try to limit the Equity Ratio by using Export
- Credits (≈ 0% RWA on the ECA covered portion), possible impact of the Leverage Ratio

Impact on volumes and pricing of Long Term Loans

5. Impact of the ratios on Infrastructure Finance

Some Achievements

General

- Green Paper of the EU Commission for the financing of LT Investment (and recognition of a possible role for Export Credits)
- Export Finance with ECAs is better recognized as net contributor to States' Budgets
- Banks created the ICC Trade Register (to consolidate data on low risks of EF) and the PECDC Register (to consolidate risk data for Project Finance)

CRD IV (Europe) – June 2013

- LCR – Outflows : 10% of the undrawn portion
- Agreed revision process with EBA regarding unintended consequences (with consultation of end-users) (Articles 509 – 510 and 511 CRR)

Basel III – January & November 2014

- LCR – Outflows : 10% of the undrawn portion
- NSFR – CCF of 65% for off-balance sheet exposures

6. New consultations of the Basel Committee

BCBS 306 - Capital Floors : the design of a framework based on standardized approach

In 2006, the Basel Committee imposed a floor on RWAs calculated by banks using an IRB approach.

Since 2009, the floor represents 80% of RWAs recalculated according to Basel II methodology in a standardized approach.

This floor might be maintained based on RWA calculated according the new Standardized Approach.

Reasons to maintain the floor (for the BCBS)

- Inconsistent RWA among banks for similar deals
- Low level of model-based RWAs
- Horizontal inequity in risk-weighted capital requirements & Harmonization of RWAs between Standardized and IRB approaches

Issues created for IRB banks

- Do they integrate the standardized approach in their models ?
- Where is the value of the development of costly models ?

6. New consultations of the Basel Committee

BCBS d307 : Revision to the Standardized Approach

(2.2.2) Specialised lending

- Empirical evidence shows that specialised lending generally exhibits higher risk and losses than other types of corporate lending. Since the corporate category is extremely heterogeneous, the Committee considers that additional granularity is necessary to more accurately reflect risk. For this reason, the Committee proposes to introduce a specialised lending category in the corporate exposure class, similar to the one applied in IRB.
- The Committee believes that, for banks applying the standardised approach for the calculation of their credit risk capital requirements, specialised lending constitutes only a small part of their business activity.

21. A corporate exposure will be treated as a specialised lending exposure if such lending possesses all the following characteristics, either in legal form or economic substance:

   The exposure is typically to an entity (often a special purpose entity (SPE)) that was created specifically to finance and/or operate physical assets;

   The borrowing entity has few or no other material assets or activities, and therefore little or no independent capacity to repay the obligation, apart from the income that it receives from the asset(s) being financed;

   The terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generates; and

   As a result of the preceding factors, the primary source of repayment of the obligation is the income generated by the asset(s), rather than the independent capacity of a broader commercial enterprise.

Project finance (PF) is a method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the exposure.

6. New consultations of the Basel Committee

BCBS 307 : Revision to the Standardized Approach

RWA for Corporates - Prevailing rules (BCBS 189)

	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated
Credit assesment	20%	50%	100%	150%	100%

Proposal (BCBS 307)

	Revenue ≤ €5m	€5m < Revenue ≤ €50m	€50m < Revenue ≤ €1bn	Revenue > €1bn
Leverage: 1x–3x	100%	90%	80%	60%
Leverage: 3x–5x	110%	100%	90%	70%
Leverage > 5x	130%	120%	110%	90%
Negative equity(*)	300%			

Impact on PF

28. Corporate exposures classified as project finance, object finance, commodities finance, and income-producing real estate exposures will be risk-weighted at the higher of (i) the risk weight applicable to the counterparty, and (ii) 120%.

6. New consultations of the Basel Committee

BCBS d 342 - TLAC Holdings - consultative document

The Committee welcomes comments on the TLAC holdings consultative document. Comments on the proposals should be uploaded here by **Friday 12 February 2016**

The TLAC regime also necessitates changes to Basel III to specify how G-SIBs must take account of the TLAC requirement when calculating their regulatory capital buffers. In particular, any Common Equity Tier 1 that is being used to meet the TLAC requirement cannot be used to meet the regulatory capital buffers. The proposed changes to Basel III to give effect to this requirement are set out in the consultative document.

BCBS d343 : Capital treatment for "simple, transparent and comparable" securitisations - consultative document

The Committee welcomes comments on this consultative document. Comments should be uploaded here by **Friday 5 February 2016**

The July 2015 STC criteria are designed to mitigate securitisation risks, including uncertainty related to asset risk, structural risk, governance and operational risk. Transactions that comply with these criteria should therefore have lower structural and model risk.

6. Consultations of the EBA

The CRR (articles 509, 510 and 511 regarding respectively LCR, NSFR and Leverage) invites the EBA to submit reports to the EU Commission and the EU Parliament on the unexpected consequences of the CRR on trade financing, including lending under official export credit insurance schemes.

EBA published 2 assessments report on the LCR in 2013 and 2014.

- No real consultation of stakeholders
- The 2013 Report mentions that “banks in the sample did not … cut back trade finance exposure to improve their LCR/become compliant” (p 32)
- The 2014 Report states that “in no way, Trade Finance seems to be affected by the introduction of the LCR” (p 83)
- No mention of EF

In June 2015, the EBA invited the EBF, the ICC and the BAFT to attend a meeting on the consequences of the NSFR for EF and TF. A public hearing is now expected this fall.

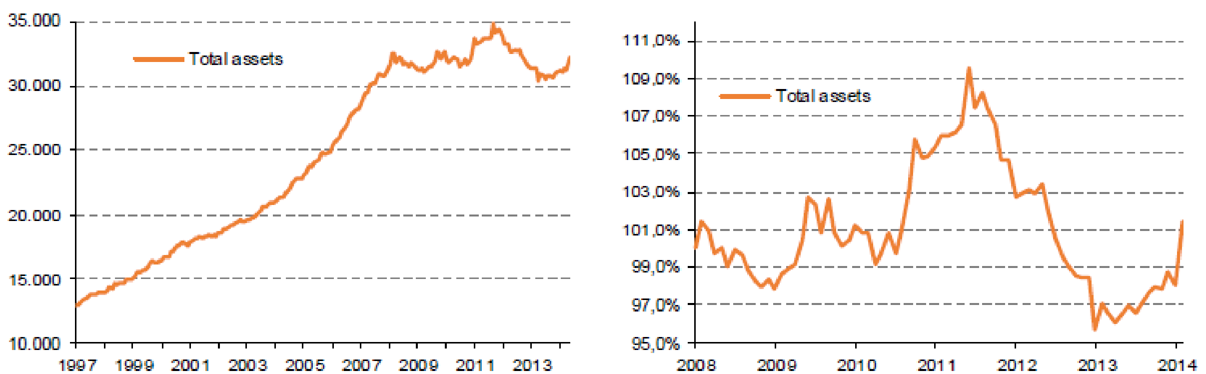
In July 2015, EBA confirmed it will prepare the reports on NSFR and the Leverage Ratio

6. EU Consultation – Impact of CRD IV

On 15-7-15, the EU (DG FISMA) launched a consultation on the CRD IV and the CRR and their consequences on the financing of the economy.
Stakeholders were invited to submit their comments before 7 October 2015.

Chart 3.1: Total banking assets, euro area MFIs, excluding the Eurosystem

Total assets, billion EUR — December 2008 = 100



Source: ECB and own calculations

Source
EU Consultation documents

Mostly oriented towards
- Equity Ratio and LCR (compulsory in the EU)
- 3 articles of the CRR (501, 505 and 516 regarding the financing of long-term investments and SMEs)

Mention of a binding NSFR and a Leverage Ratio to be analyzed in 2016.
http://europa.eu/rapid/press-release_IP-15-5347_en.htm

6. EU Consultation – Impact of CRD IV

CRR - ART 505 **Review of long-term financing**

> By 31 December 2014, the Commission shall report to the European Parliament and to the Council, together with any appropriate proposals, about the appropriateness of the requirements of this Regulation in light of the need to ensure adequate levels of funding for all forms of long-term financing for the economy, including critical infrastructure projects in the Union in the field of transport, energy and communications.

Questions in the consultation included:

- To what extent have CRR and CRDIV affected the level of capital held by banks?
- Are all the new requirements under all circumstances proportionate to the risks they were meant to address?
- What impact are the rules having on lending to smaller businesses, and to infrastructure projects?
- Could some of the rules be simplified or differentiated by risk or size, without compromising of their objectives of financial soundness and stability of banks?
- Is the regulation a cause of the fall in corporate lending ?

In June 2015, the EU Commission also invited the EBA the prepare reports on NSFR (before the end of 2015) and the Leverage Ratio (before October 2016)

7. Actors on financial markets

Assets of Financial Institutions
20 jurisdictions and Euro Area (20+EA-group) Source FSB Tn USD

	Central Banks	Banks	Banks' assets to OFIs	Banks' liabilities to OFIs	Insurance Companies	Pension Funds	Public Financial Institutions	Other Financial Intermediaries (OFIs)	Financial Auxiliaries	Total
2002	4,8	53,8	1,4	1,6	14,5	12,0	11,3	30,0	0,2	126,6
2003	5,6	67,0	1,9	2,0	17,5	13,8	12,2	36,9	0,3	153,2
2004	6,5	78,5	2,4	2,5	19,8	15,4	12,3	42,9	0,3	175,6
2005	7,1	79,5	2,4	2,8	20,0	16,4	11,8	46,3	0,2	181,4
2006	8,0	92,7	3,5	3,8	22,6	18,3	11,7	56,1	0,3	209,6
2007	10,4	113,8	5,5	5,6	25,1	19,7	12,6	66,7	0,3	248,6
2008	14,6	123,3	8,3	8,0	21,2	19,0	13,8	60,6	0,2	252,8
2009	15,0	124,0	7,5	7,8	23,3	21,7	13,8	64,1	0,9	262,8
2010	16,7	130,3	7,3	8,2	24,8	24,2	14,0	68,3	0,9	279,0
2011	20,4	140,2	8,1	8,4	25,4	24,8	13,9	68,2	1,0	293,9
2012	22,4	145,2	8,0	8,1	27,1	26,8	13,5	73,0	1,0	309,0
2013	23,0	144,4	7,2	7,6	27,9	28,4	13,0	78,2	1,0	315,9
2014	23,3	142,2	6,4	7,0	28,0	29,2	12,8	79,8	0,9	316,1

7. Actors on financial markets

Assets of Financial Institutions

	Central Banks	Banks	Banks' assets to OFIs	Banks' liabilities to OFIs	Insurance Companies	Pension Funds	Public Financial Institutions	Other Financial Intermediaries (OFIs)	Financial Auxiliaries	Total
2002	3,8%	42,5%	1,1%	1,3%	**11,4%**	**9,5%**	**9,0%**	23,7%	0,2%	100%
2003	3,7%	43,7%	1,2%	1,3%	11,4%	9,0%	7,9%	24,1%	0,2%	100%
2004	3,7%	44,7%	1,3%	1,4%	11,3%	8,7%	7,0%	24,4%	0,1%	100%
2005	3,9%	43,8%	1,3%	1,5%	11,0%	9,1%	6,5%	25,5%	0,1%	100%
2006	3,8%	44,2%	1,7%	1,8%	10,8%	8,7%	5,6%	26,8%	0,1%	100%
2007	4,2%	45,8%	2,2%	2,3%	10,1%	7,9%	5,1%	**26,8%**	0,1%	100%
2008	5,8%	**48,8%**	3,3%	3,2%	8,4%	7,5%	5,4%	24,0%	0,1%	100%
2009	5,7%	47,2%	2,8%	3,0%	8,9%	8,3%	5,3%	24,4%	0,3%	100%
2010	6,0%	46,7%	2,6%	2,9%	8,9%	8,7%	5,0%	24,5%	0,3%	100%
2011	6,9%	47,7%	2,8%	2,9%	8,6%	8,4%	4,7%	23,2%	0,3%	100%
2012	7,2%	47,0%	2,6%	2,6%	8,8%	8,7%	4,4%	23,6%	0,3%	100%
2013	7,3%	45,7%	2,3%	2,4%	8,8%	9,0%	4,1%	24,7%	0,3%	100%
2014	**7,4%**	45,0%	2,0%	2,2%	8,9%	9,2%	4,0%	25,3%	0,3%	100%
Growth										
2008-02	206%	129%	487%	403%	47%	59%	22%	102%	7%	100%
2014-08	60%	15%	-23%	-13%	32%	53%	-7%	32%	247%	25%

7. Actors on financial markets

Banks are very important but in the USA

But since 2008, their role is decreasing

OFIs are very important in the € zone

FSB Tn USD	Central Banks	Banks	Insurance Companies	Pension Funds	Public Financial Institutions	OFIs & Others	Total	%
Euro Area	4,7	36,5	8,2	2,6	0,0	29,0	81,0	26%
UK	0,6	16,8	2,9	2,8	0,0	9,6	32,7	10%
USA	4,6	21,2	7,8	17,7	8,0	25,7	85,1	27%
Japan	2,6	15,2	3,8	1,2	2,7	3,6	29,2	9%
China	5,5	28,2	1,7	0,1	0,0	3,0	38,4	12%
Others	5,2	24,3	3,7	4,8	2,1	9,7	49,8	16%
Total	23,3	142,2	28,0	29,2	12,8	80,7	316,1	100%
Euro Area	6%	45%	10%	3%	0%	36%	100%	
UK	2%	51%	9%	8%	0%	29%	100%	
USA	5%	**25%**	9%	21%	9%	30%	100%	
Japan	9%	52%	13%	4%	9%	12%	100%	
China	14%	73%	4%	0%	0%	8%	100%	
Others	11%	49%	7%	10%	4%	19%	100%	

8. What next ? A new landscape

<u>The role of banks</u>

Efficient in structuring

Efficient in funding deals during construction period

Constraints on balance-sheet especially for LT deals

<u>The role of Capital Markets</u>

Large volumes of funding available (under several formats : bonds, loans,…)

Efficient to fund on long-term

Efficient on pricing

But over-reaction during a crisis

<u>The role of public institutions</u>

Contra-cyclical.

Support of public policies (SMEs) – cf UK, France, Italy,…

Lower expectations on RoE

8. What next ? Possible actions

New regulations will be implemented… but amendments are possible

Basel 3 is a constraint for banks but other financial constraints are coming such as Resolution, TLAC ,…(Equity up to 20% of RWAs as EBF says ?)

And the impact of the non-financial ones which have a cost and create uncertainties might be stronger (KYC, AML, Sanctions,…)

Make the case of the Financing of Infrastructure Finance more vocal (to be performed by banks but also corporates, ECAs and MDBs)

Follow-up of public consultations : Basel Committee, EBA, EU Commission,…

Prepare our selves for a new business model with an involvement of banks together with public entities and capital markets.

- Introduction of capital markets and OFIs as B-lenders, insured parties,…
- Development of public tools

Thank you for your attention !

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