



BASEL COMMITTEE ON BANKING SUPERVISION

BANK FOR INTERNATIONAL SETTLEMENTS

Basel III Minimum Capital Requirements

FSI Seminar on Financial Stability

Basel, Switzerland

25 October 2011

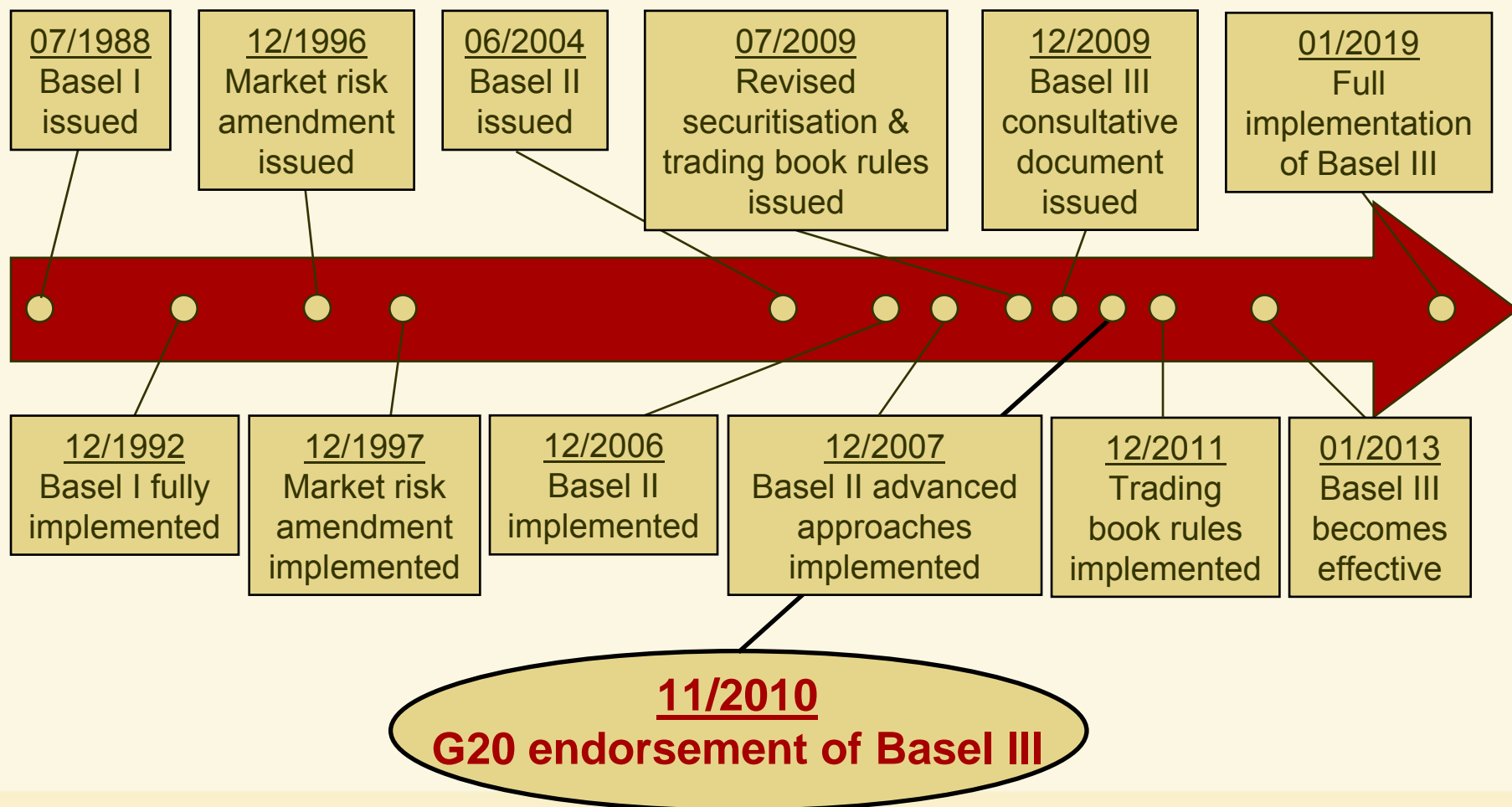
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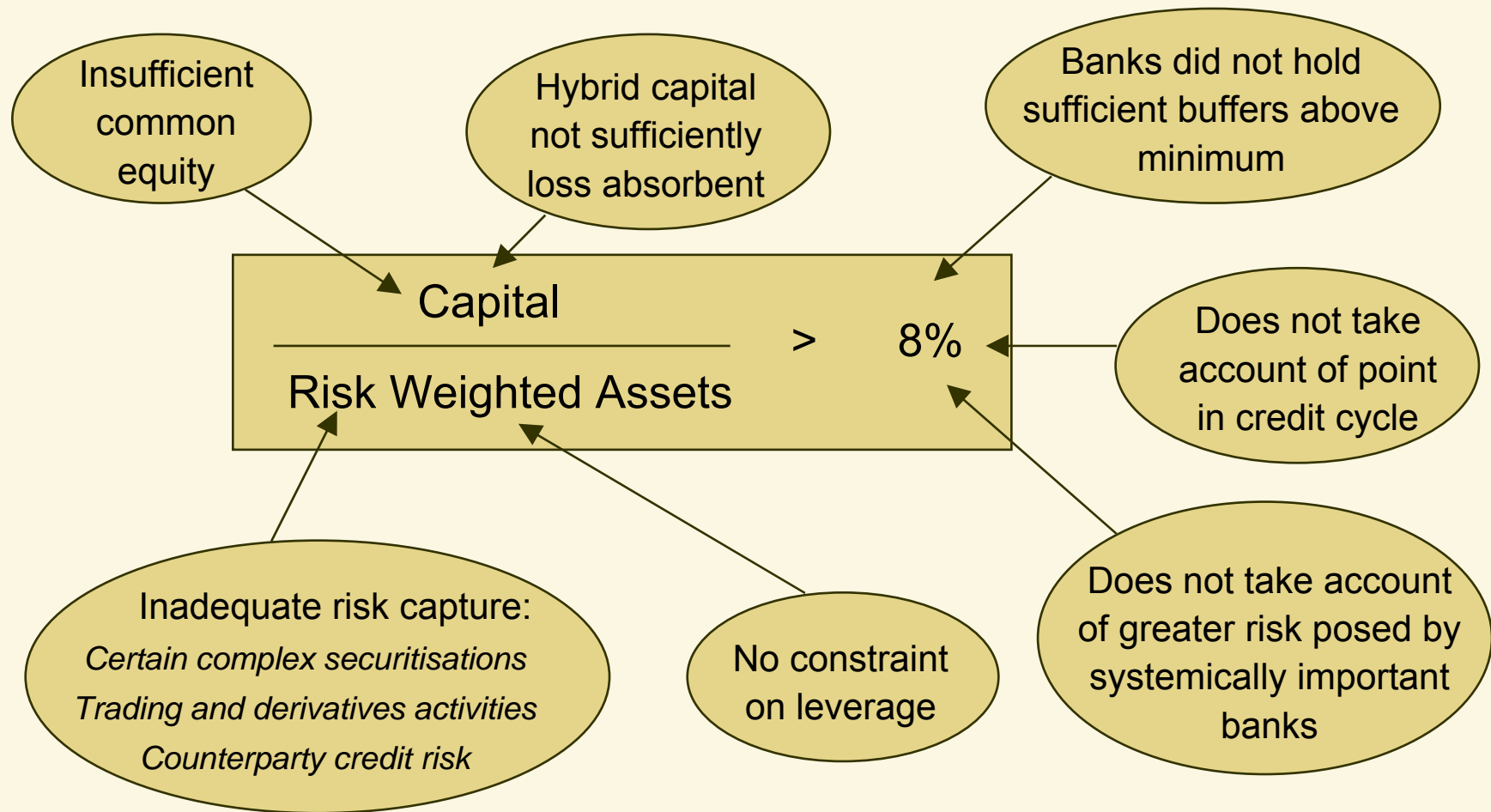


Timeline of international bank capital regulation





Lessons from financial crisis (bank capital)





Key Elements of Basel III minimum capital framework

- Quality and level of capital
- Capital buffers
 - Capital conservation buffer
 - Countercyclical buffer regime
- Risk coverage enhancements
 - Securitisation
 - Trading book
 - Counterparty credit risk
- Leverage ratio
- Additional loss absorbency requirement for systemically important banks



Quality and level of capital

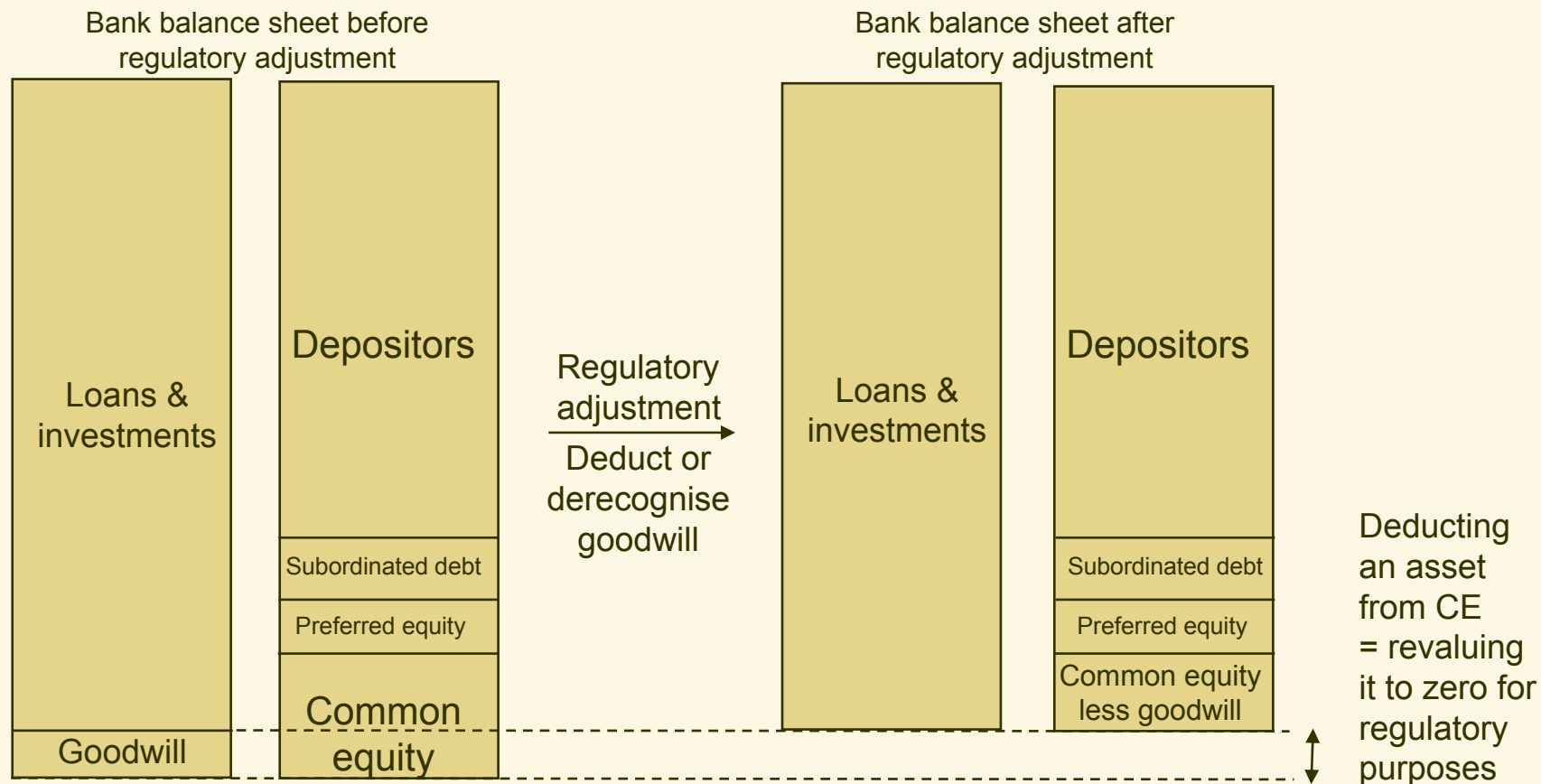


Quality and level of capital

- Big banks entered crisis with insufficient level & quality of capital
- Minimum requirements permitted too little common equity:
 - Total Capital > 8% RWAs
 - Tier 1 (ie Common + pref equity) > Tier 2 (subordinated debt)
 - Common equity “predominant” form of Tier 1
- Deductions applied to Tier 1 or Total Capital
- Basel III Objective:
 - Raise quality, consistency and transparency of capital
- Focus on Common Equity Tier 1
 - Common shares and retained earnings
 - Net of regulatory adjustments (ie deductions from common equity)



How does a regulatory adjustment work?





Regulatory adjustments

- Goodwill and other intangibles
- *Deferred tax assets **
- *Mortgage servicing rights **
- Certain elements of cash flow hedge reserve
- Shortfall of provisions to expected losses (IRB banks)
- Gain on sale related to securitisation transactions
- Gains and losses due to the changes in own credit risk on fair valued financial liabilities
- Defined benefit pension fund assets
- Investments in own shares
- Reciprocal cross holdings
- *Investments in the capital of other financial entities **

* Deductions subject to a threshold



Double counting of capital

Supervisor of Bank A
relies on the equity of
Bank A to protect the
depositors of Bank A

Bank A balance sheet

| | |
|------------------|---|
| Deposits \$90 | Investment in common equity of Bank B \$10 |
| Equity \$20 | Banking assets \$100 |

**Bank A owns all the
equity of Bank B**

Bank B balance sheet

| | |
|------------------|----------------------------|
| Deposits \$90 | Banking assets \$100 |
| Equity \$10 | |

Supervisor of Bank B
relies on the equity of
Bank B to protect the
depositors of Bank B

- How much equity is protecting the \$180 of deposits?



Definition and Structure of Capital in Basel III

| Balance sheet component | Main (required) features | Going-concern loss absorption | Gone-concern loss absorption |
|---------------------------------|---|---|--|
| Common Equity Tier 1 (CET1) | <ul style="list-style-type: none">• Common shares• Reserves (eg retained earnings)• Less regulatory adjustments | <ul style="list-style-type: none">• Retained earnings reduced as losses incurred | <ul style="list-style-type: none">• Subordination in liquidation |
| Additional Tier 1 capital (AT1) | <ul style="list-style-type: none">• Perpetual instruments• Fully discretionary coupons / dividends | <ul style="list-style-type: none">• Discretionary coupons/ dividends• If accounted for as a liability, required to have going concern write down/ conversion | <ul style="list-style-type: none">• Subordination in liquidation.• Point of non-viability write-down/conversion |
| Tier 2 subordinated debt (T2) | <ul style="list-style-type: none">• Subordinated debt• Maturity > 5 years• Coupons can be mandatory | <ul style="list-style-type: none">• None | <ul style="list-style-type: none">• Subordination in liquidation• Point of non-viability write-down/conversion |



Capital calibration

- Minimum requirement
 - 4.5% Common Equity Tier 1 to RWAs
 - 6.0% Tier 1 (=CET1 + AT1) to RWAs
 - 8.0% Total capital (=CET1 + AT1 + T2) to RWAs
- Capital conservation buffer
 - 2.5% Common Equity Tier 1 to RWAs
- Factoring in definition of capital and risk coverage, increase in common equity standard of about 7 times for global banks
- Countercyclical buffer (when there is excess credit growth)
 - 0 to 2.5% common equity to RWAs
- Work continues on additional loss absorbency for globally systemic banks



Calibration of the Capital Framework

Capital requirements and buffers

| | Common Equity Tier 1 | Tier 1 Capital | Total Capital |
|-------------------------------------|---------------------------------|-----------------------|----------------------|
| Minimum | 4.5% | 6.0% | 8.0% |
| Conservation buffer | 2.5% | | |
| Minimum plus conservation buffer | 7.0% | 8.5% | 10.5% |
| Countercyclical buffer range | 0 – 2.5% | | |



Capital buffers



Capital conservation buffer

- Lessons from the crisis:
 - Banks held insufficient buffers above the minimum
 - Banks were distributing earnings even during stress periods
- Objective:
 - Establish buffer above the minimum that banks hold outside periods of stress
 - Ensure bank earnings used to rebuild buffer when drawn down
- Buffer range above the minimum is established (0-2.5% CET1)
- If banks' capital levels fall within this buffer range, constraints on the distribution of dividends, on bonuses and share buybacks (but not on the way the bank conducts its business)



Capital Conservation Buffer

| Individual bank minimum capital conservation standards | |
|--|--|
| Common Equity Tier 1 Ratio | Minimum Capital Conservation Ratios (expressed as a percentage of earnings) |
| 4.5% - 5.125% | 100% |
| >5.125% - 5.75% | 80% |
| >5.75% - 6.375% | 60% |
| >6.375% - 7.0% | 40% |
| > 7.0% | 0% |



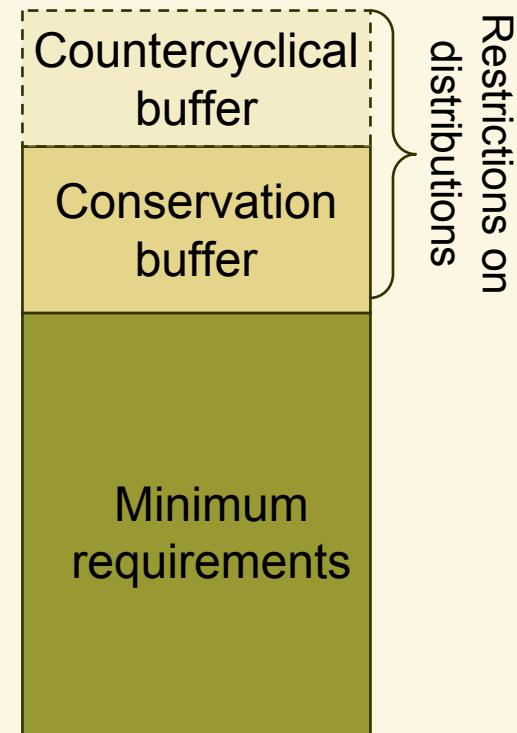
Countercyclical buffer

- Lesson from the crisis: Capital requirements should be able to respond to increased risk from credit boom
- Countercyclical buffer introduced to increase the capital buffer at banks during periods of excess credit growth
- Primary objective : Protect banking sector from periods of excess aggregate credit growth often associated with system-wide risk
- Each jurisdiction responsible for calculating countercyclical capital buffer applicable to all credit exposures in its jurisdiction
 - Common guide (credit-to-GDP guide) and use of judgement
- Buffer subject to an upper bound for reciprocity (2.5%)
- A bank would have one year to get its capital above the top of the range before restrictions come into effect



The functioning of the capital buffers

- The capital conservation buffer establishes a buffer range above the minimum common equity capital requirements. When a bank's CET1 ratio falls into this range it becomes subject to restrictions on distributions
- The countercyclical capital buffer works by extending size of capital conservation buffer during periods of excess credit growth





Risk coverage



Better risk coverage

- Re-securisations
- Trading book
 - Stressed VAR
 - Incremental credit risk charge
- Counterparty credit risk
 - Stressed inputs to measure exposure
 - Credit valuation adjustment
 - Capital incentives for banks to use central counterparties



Leverage ratio



Leverage ratio: what is it?

- Risk based ratio

$$\frac{\text{Capital}}{\text{Risk Weighted Assets}}$$

- Leverage ratio

$$\frac{\text{Capital}}{\text{Assets}}$$



Leverage ratio: evidence

Mean leverage and risk-based capital ratios for stressed and non-stressed banks

(Data is calculated as at end 2006, all capital ratios in per cent)

Excludes countries with leverage ratio requirements

| | Working Group Sample | | | | Broader Sample | | | |
|--------------------------|----------------------|-------|-------|---------|----------------|-------|-------|----------|
| | Stressed | | Other | | Stressed | | Other | |
| <i>Risk-based Ratios</i> | | | | | | | | |
| Total capital /RWA | 10 | 11.77 | 49 | 12.09 | 15 | 11.57 | 54 | 11.78 |
| Tier 1 capital / RWA | 10 | 7.59 | 48 | 8.25 | 15 | 8.31 | 54 | 8.37 |
| TCE / RWA | 8 | 5.66 | 45 | 6.86 | 14 | 6.16 | 58 | 7.69 ** |
| <i>Leverage Ratios</i> | | | | | | | | |
| Total Capital / Assets | 6 | 4.32 | 41 | 7.62 ** | 14 | 4.37 | 51 | 6.28 *** |
| Tier 1 Capital / Assets | 6 | 2.79 | 41 | 5.27 ** | 15 | 3.02 | 54 | 3.65 * |
| Common Equity / Assets | 6 | 2.69 | 41 | 5.08 ** | 17 | 2.64 | 63 | 4.48 *** |
| TCE / Tangible Assets | 6 | 1.93 | 41 | 4.34 ** | 17 | 2.22 | 63 | 3.62 *** |

The symbols ***, **, * indicate that the difference is statistically significant at the 1%, 5% and 10% levels respectively. The Working Group Sample comprises up to 88 banks supplied by national supervisors from 14 countries. The Broader Sample is drawn from the Bankscope database and includes up to 117 banks from 19 countries. Each panel includes the number of banks in the sample and the relevant capital ratio.

Source: BCBS (October 2010), Calibrating regulatory minimum capital requirements and capital buffers: a top-down approach.



Leverage ratio: objectives

- Constrain build-up of leverage in banking sector, helping avoid destabilising deleveraging process which can damage financial system and economy
- Serve as a backstop (floor) to risk-based regime with a simple non-risk based measure
 - Protect against model risk and measurement error



Leverage ratio: definition, calibration, phase-in

- Numerator: Measure of capital is Tier 1
- Denominator: Exposure is based on accounting balance sheet
 - Repos and SFT (accounting measure of exposures + Basel II netting)
 - Derivatives (accounting measure of exposure, + add-on for potential exposure using the Current Exposure Method, and Basel II netting rules apply)
 - Include OBS items with a 100% Credit Conversion Factor (CCF), except unconditionally cancellable commitments (UCC) which have a 10% CCF.
- Calibration: Minimum of 3%
- Phase-in: Migration to Pillar 1 requirement in 2018



Systemically important banks



Addressing the Too-Big-Too-Fail (TBTF) problem

- Global systemically important banks (GSIBs)
 - BCBS and FSB developed a methodology to measure global systemically important banks (not a static list)
 - GSIBs must have additional loss absorbing capacity
 - Proposal to meet additional requirement through common equity (not contingent capital)
- Better resolvability
 - Strengthen resolution schemes (potential role for bail-in)
 - Improve cross border coordination



Basel III implementation

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | As of 1 January 2019 |
|---|---------------------------------|---------------------------------|---|------|----------------------------------|--------|--------|----------------------------------|----------------------------|
| Leverage Ratio | Supervisory monitoring | | Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015 | | | | | Migration to Pillar 1 | |
| Minimum Common Equity Capital Ratio | | | 3.5% | 4.0% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% |
| Capital Conservation Buffer | | | | | | 0.625% | 1.25% | 1.875% | 2.50% |
| Minimum common equity plus capital conservation buffer | | | 3.5% | 4.0% | 4.5% | 5.125% | 5.75% | 6.375% | 7.0% |
| Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials) | | | | 20% | 40% | 60% | 80% | 100% | 100% |
| Minimum Tier 1 Capital | | | 4.5% | 5.5% | 6.0% | 6.0% | 6.0% | 6.0% | 6.0% |
| Minimum Total Capital | | | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% |
| Minimum Total Capital plus conservation buffer | | | 8.0% | 8.0% | 8.0% | 8.625% | 9.125% | 9.875% | 10.5% |
| Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital | | | Phased out over 10 year horizon beginning 2013 | | | | | | |
| Liquidity coverage ratio | Observation period begins | | | | Introduce minimum standard | | | | |
| Net stable funding ratio | | Observation period begins | | | | | | Introduce minimum standard | |