

Overview of the Basel Committee's Efforts to Strengthen the Global Capital Framework

FSI/SEACEN Regional Seminar on Basel III
and Capital Management by Banks

Kuala Lumpur, Malaysia
21 February 2011
Jun Iwasaki
Bank of Japan

Contents

1. Background
2. Major developments
3. Overview of the Reform Package
4. Strengthening the Global Capital Framework
5. Leverage ratio
6. Procyclicality
7. Basel III ratios
8. Transitional arrangements
9. Analysis behind calibration
10. Remaining major capital issues

1. Background

- Bank's insufficient recognition of risks involved in re-securitization and trading activities.
- A build-up of excessive leverage
- Inadequate and low-quality capital
- Insufficient liquidity buffers
- Procyclical deleveraging process
- Interconnectedness of SIFIs

2. Major developments

- Sept. 2008: Lehman shock
- Nov. 2008: G20 Summit in Washington, D.C.
- Apr. 2009: G20 Summit in London
- Sept. 2009: G20 Summit in Pittsburgh
 - “We commit to developing by end-2010 internationally agreed rules to improve both the quantity and quality of bank capital and to discourage excessive leverage. These rules will be phased in as financial conditions improve and economic recovery is assured, with the aim of implementation by end-2012.”
- Dec. 2009: Publication of Basel III consultative documents
- June 2010: G20 Summit in Toronto
- July & Sept 2010: GHOS meetings
 - Agreed on the basic framework of Basel III
- Nov. 2010: G20 Summit in Seoul
 - Endorsed the basic framework of Basel III
- Dec. 2010: Publication of Basel III rules texts

3. Overview of the Basel III

Setting three minimum standards

Common Equity, Tier 1, and Total Capital

Raising the quality of capital

- (1) Stricter criteria for inclusion in Tier1 & Tier2
- (2) Internationally harmonized deductions from capital

$$\text{Capital Ratio} = \frac{\text{Capital}}{\text{Risk-weighted assets}}$$

Introducing (minimum) liquidity standards

- (1) Liquidity Coverage Ratio (strengthening short-term resilience to potential liquidity disruptions)
- (2) Net Stable Funding Ratio (promoting resilience over longer-term horizon by more stable sources of funding)

Enhancing risk coverage

- (1) Securitisation products
- (2) Market risk
- (3) Counterparty credit risk

Supplementary to capital ratio

Mitigating procyclicality

- Building buffers in good times which can be drawn down in bad times
- Restricting capital distribution when buffer target is not met

Containing build up of excessive leverage

$$\text{Leverage Ratio} = \frac{\text{Capital}}{\text{Exposure}}$$

Setting additional measures for Systemically Important Banks (SIBs)

Developing prudential tools to address externalities posed by SIBs (incl. capital surcharge, liquidity surcharge and other supervisory tools)

4. Strengthening the Global Capital Framework

(1) The numerator

- Raise the quality, consistency and transparency of capital
- Loss absorption does matter: focus on common equity in this context
- Clarification of roles of the different tiers:
 - Tier 1 \Rightarrow going concern capital
 - Tier 2 \Rightarrow gone concern capital
- Simplifying the category (no upper or lower Tier 2, no Tier3)
- Treatment of deduction strengthened and internationally harmonized (more items to be deducted from common equity, improving the consistency and comparability of retained earnings)

(2) The denominator

- Strengthen risk coverage with regard to the securitization products, market risk in general and counterparty credit risk arising from derivatives, repo and securities financing activities.
- Implementation of higher capital charge for securitization and market risk by end 2011.

(3) Effects of the revision

▼ Average of capital ratios (%)

	CET1		Tier1		Tier1+Tier2	
	Gross	Net	Current	New	Current	New
Group1	11.1	5.7	10.5	6.3	14.0	8.4
Group2	10.7	7.8	9.8	8.1	12.8	10.3

“Gross CET1” is the ratio of gross CET1 (without deductions) relative to current risk-weighted assets. “Net” columns show net CET1 (with deductions) relative to new risk-weighted assets.

▼ CET1 deductions and minority interest as a percentage of new CET1 capital gross of deductions(%P)

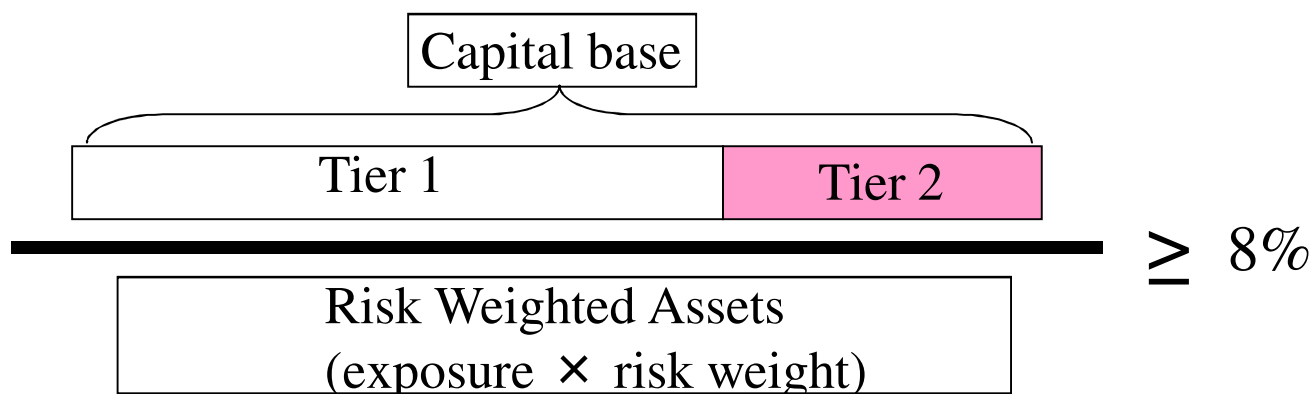
	Total (%)							minority interest
		Good-will	Intan-gebles	Finan-cials	DTA	MSR	Excess above 15%	
Group1	-41.3	-19.0	-4.6	-4.3	-7.0	-0.4	-2.4	-2.0
Group2	-24.7	-9.4	-2.3	-5.5	-2.8	0.0	-1.0	-2.1

▼ Change in risk weighted assetes (%P)

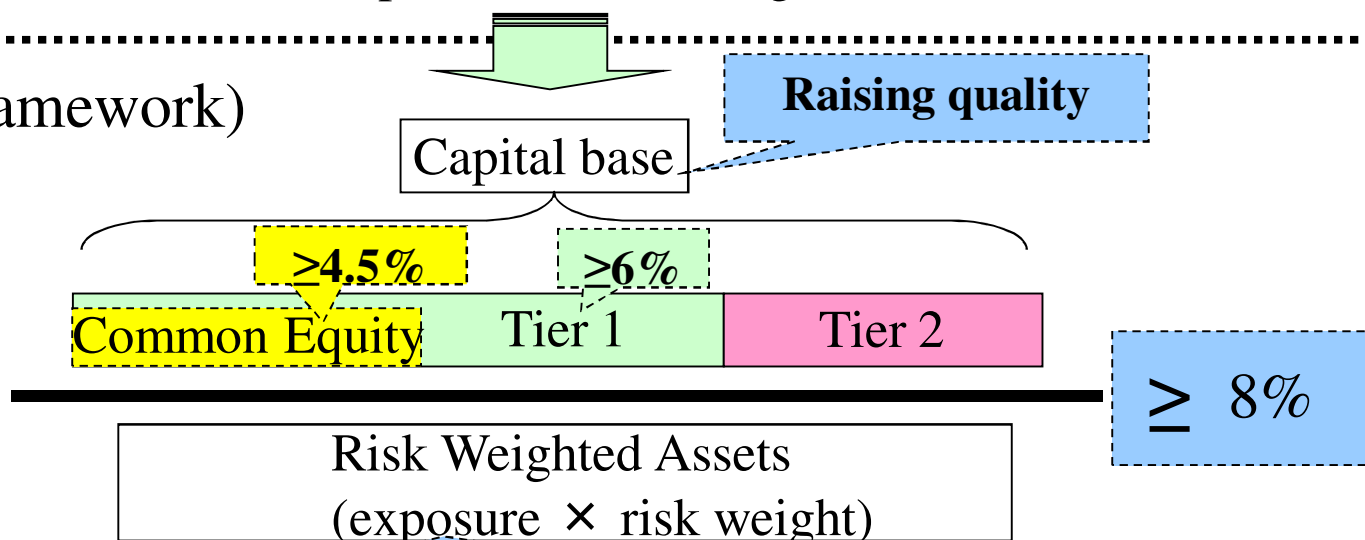
	Overall (%)				
		definition of capital	Counterparty Credit Risk	Securitization Banking Book	Trading Book related
Group1	23.0	6.0	7.6	1.7	7.6
Group2	4.0	3.2	0.3	0.1	0.5

(4) Setting three minimum standards

(Current Framework)

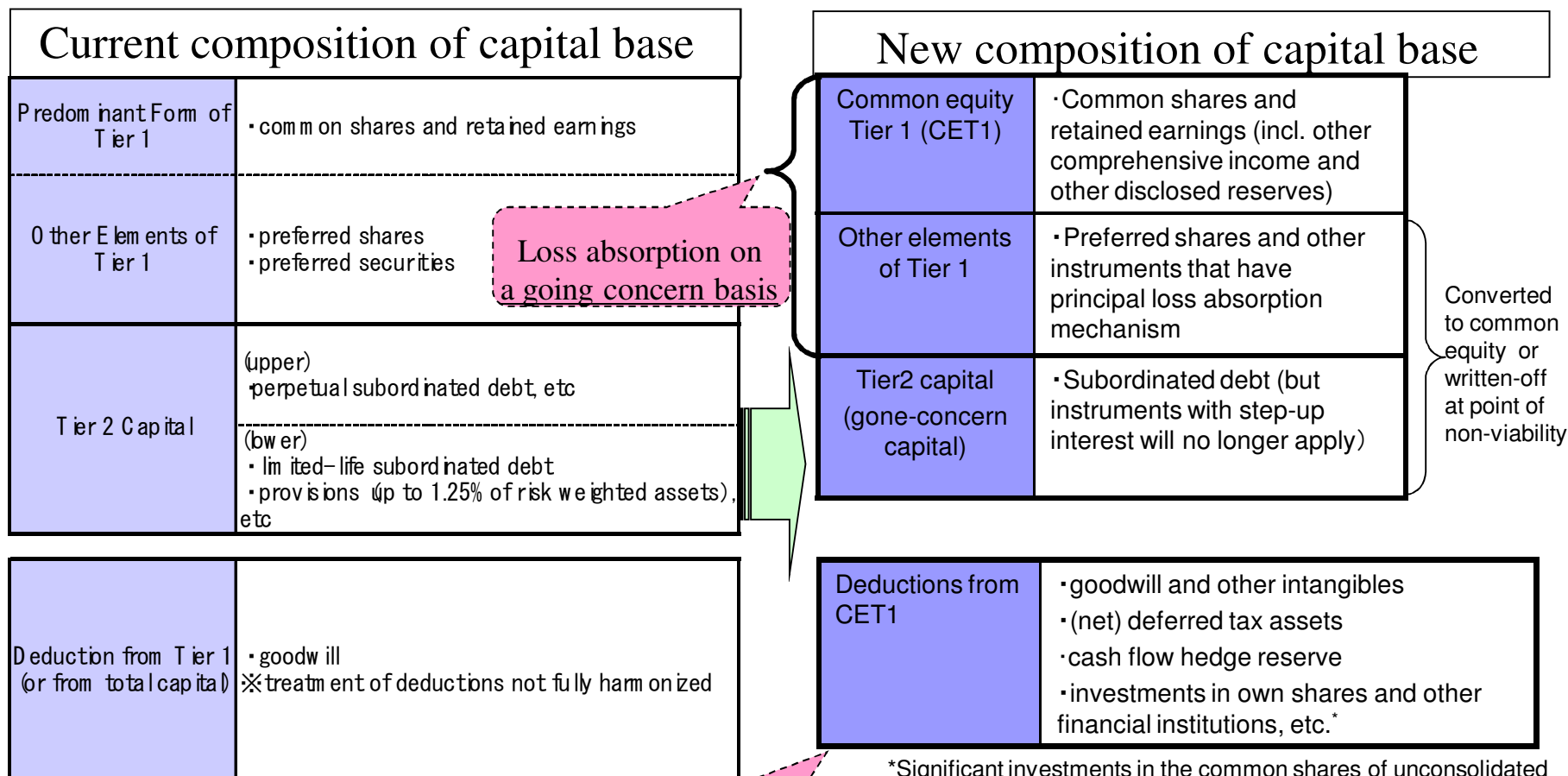


(New Framework)



Strengthening capital requirements for securitization products, market risk and counterparty credit risk.

(5) Improving the quality, consistency and transparency of the capital base



Loss absorption on a going concern basis

Converted to common equity or written-off at point of non-viability

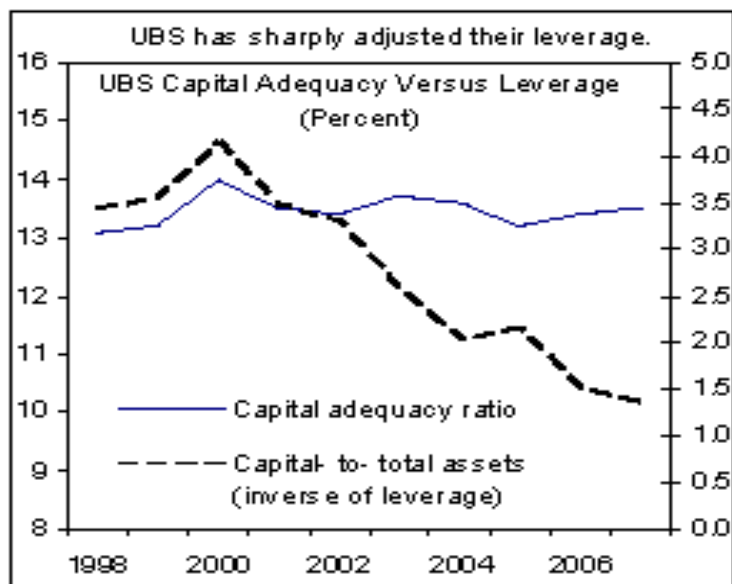
Internationally harmonized treatments

*Significant investments in the common shares of unconsolidated financial institutions, MSRs and DTAs that arise from temporary differences receive limited recognition of 10% of CET1 each, with its sum capped by 15% of CET1.

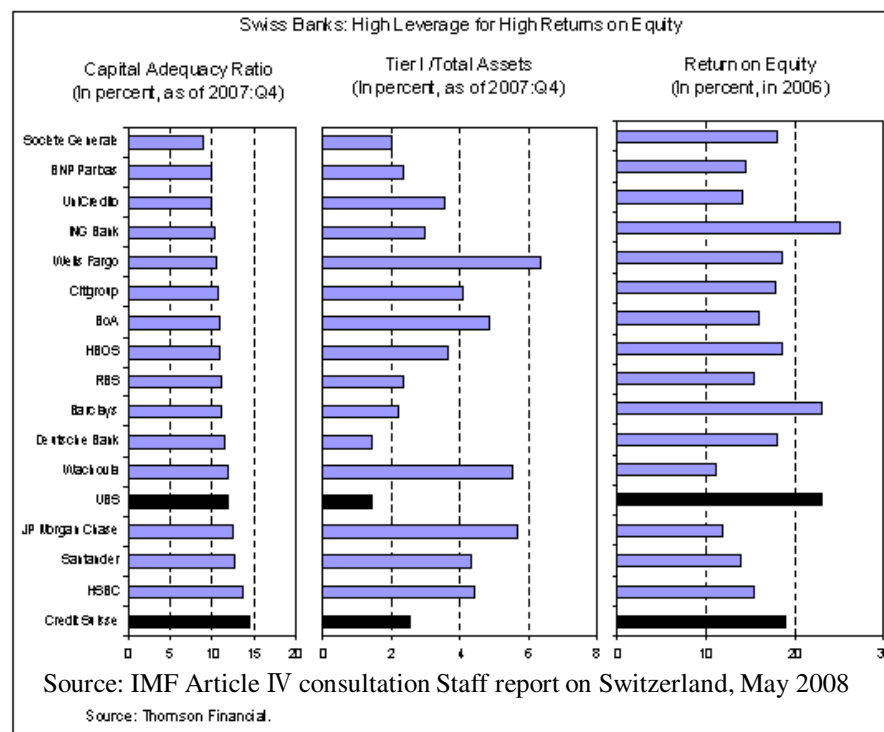
5. Leverage Ratio

(1) Objectives

- a) contain the build-up of leverage in the banking sector, helping avoid destabilising deleveraging processes which can damage the broader financial system and the economy; and
- b) reinforce the risk-based requirements with a simple, non-risk-based “backstop” measure



Source: IMF Article IV consultation Staff report on Switzerland, May 2008



Outline of the ratio

$$\text{Leverage Ratio} = \frac{\text{Capital (Tier 1)}}{\text{Exposure (on- \& off-balance sheet assets)}}$$

(2) Issues discussed for the Leverage Ratio

Issue	Dec.'09 proposal	Dec.'10 rule text
Capital related		
Definition of capital	Tier1 capital and the predominant form of Tier1 capital	Tier 1. But BCBS “also will collect data during the transition period to track the impact of using total regulatory capital and Common Equity Tier1”
Exposure related		
High quality liquid assets	Include high quality liquid assets	(no change)
Repurchase agreements and securities finance	Apply accounting measure of exposure but disallow netting	Apply accounting measure of exposure and the regulatory netting rules based on the Basel II framework
Derivatives	Two options 1) With or without potential future exposure 2) With no netting or with regulatory netting	With future potential exposure under current exposure method and the regulatory netting rules based on the Basel II framework
Other off-balance sheet items	Include OBS items with 100% credit conversion factor (CCF)	Apply uniform 100% CCF. But for commitments that are unconditionally cancellable at any time by the bank without prior notice, apply a CCF of 10%

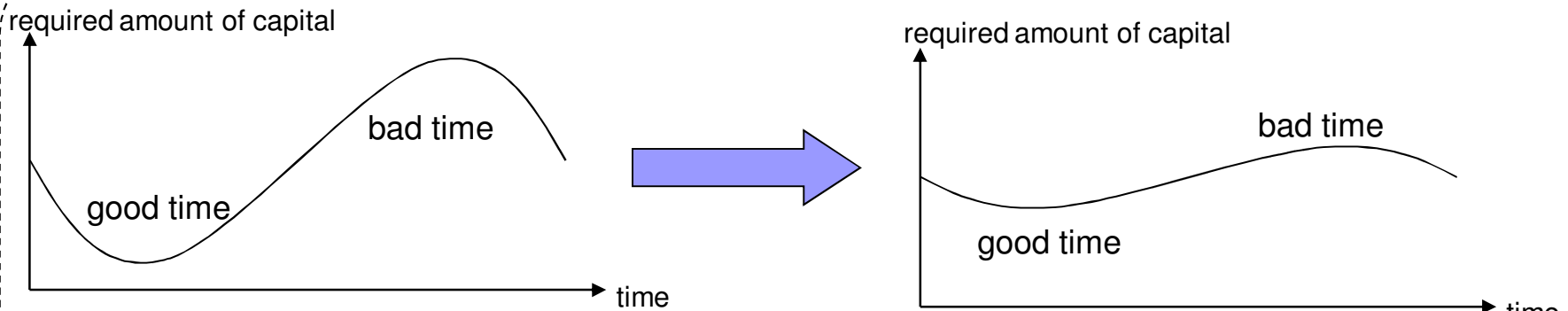
6. Procyclicality

(1) Outline of the Issue

- The current regulatory and accounting frameworks tended to amplify the procyclical manner of market participants
- Proposed measures to address procyclicality:
 1. Dampen any excess cyclicality of the minimum capital requirement;
 2. Promote more forward looking provisions;
 3. Conserve capital to build buffers at individual banks and the banking sector that can be used in stress; and
 4. Achieve the broader macroprudential goal of protecting the banking sector from periods of excess credit growth

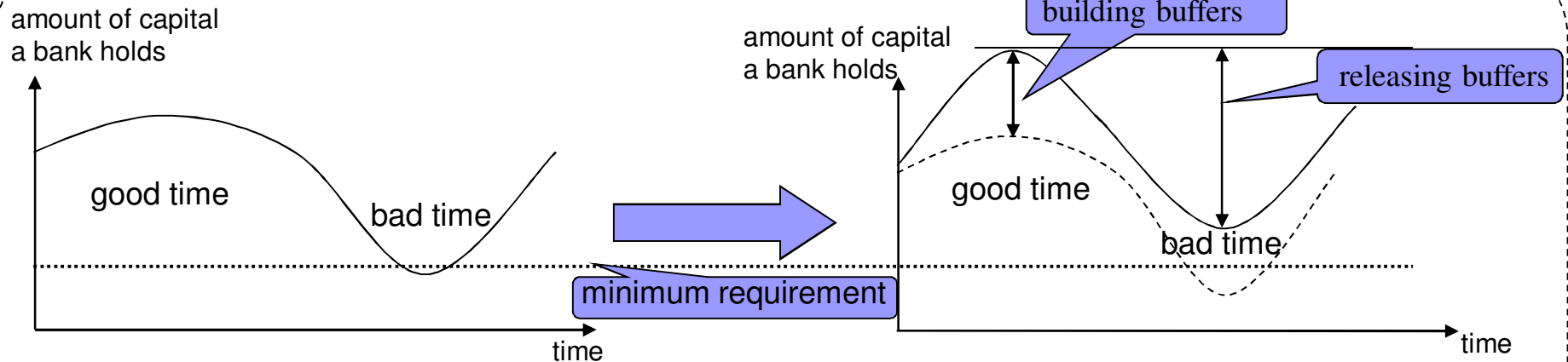
(2) Rough images of 4 measures being discussed

Dampen cyclicalcy of the minimum requirement (corresponds to 1.)



Constraining excess cyclicalcy of the minimum requirement of capital, amount of which tends to decrease in good times and increase in bad times.

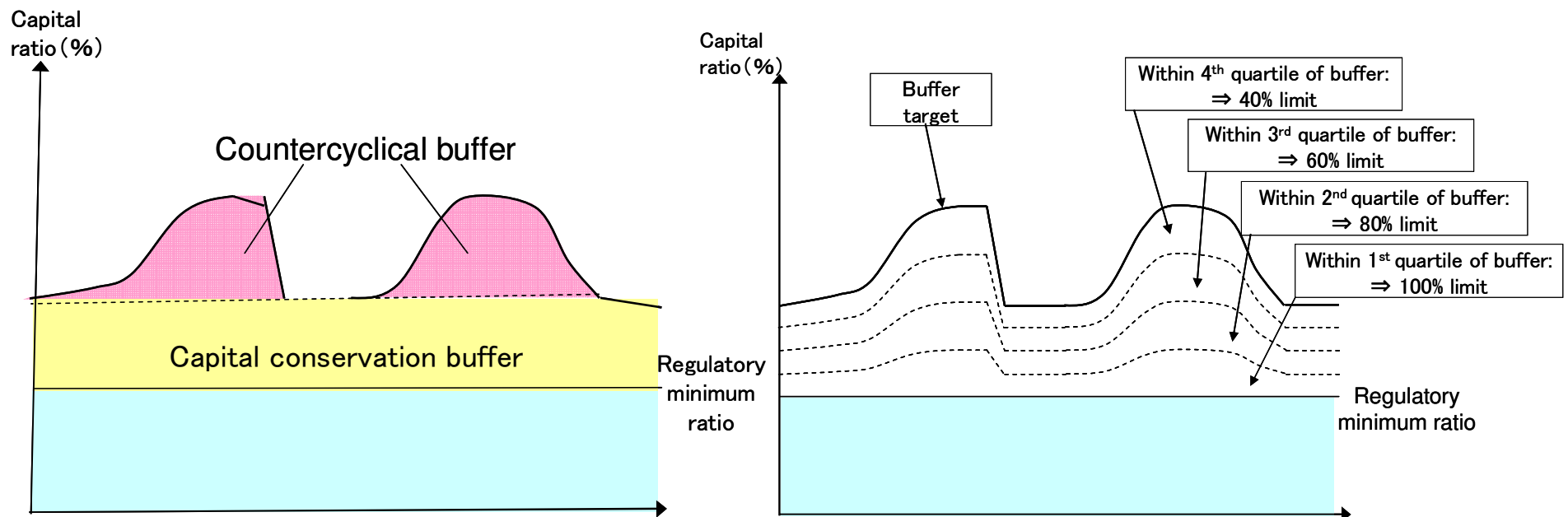
Building buffers (corresponds to 2. to 4)



Building buffers in good times which can be drawn down in bad times.

(3) Countercyclical buffer

- If the relevant national authority judges a period of excess credit growth to be leading to the build up of system-wide risk, they will consider, together with any other macroprudential tools at their disposal, putting in place a countercyclical buffer requirement.
- Banks will be subject to restrictions on distribution, if they do not meet capital requirement (the sum of minimum + buffers).



7. Basel III capital ratios

Calibration of the Capital Framework

Capital requirements and buffers (all numbers in percent)

	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 ^x	0 – 2.5		

8. Transitional arrangements

Phase-in arrangements

(shading indicates transition periods - all dates are as of 1 January)

	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, MSR's 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%	9.25%	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						

9. Analysis behind calibration

(1) Historical experience

High-level summary table: Range of calibration results					
	Minimum	Max.	Arithmetic Mean	Median	Countries #
<i>Calibration of the minimum</i>					
<i>RORWA (large bank results)</i>					
99 th percentile ^a	+0.89%	-8.66%	-3%	-4%	7
99 th percentile, excluding gains ^a	-0.18%	-8.66%	-4%	-5%	6
Maximum ^a	+0.89%	-41.5%	-10%	-5%	6
Maximum, excluding outliers and gains ^a	-2.71%	-6.83%	-5%	-5%	5
<i>Calibration of the regulatory buffers</i>					
<i>Historical losses^d</i>					
Peak losses / RWA	0.00%	-29.2%	-3%	-1.0%	7 ^b
Peak losses / RWA – systemic crises	-0.09%	-29.2%	-7%	-3.7%	4 ^b
<i>Losses during the recent crisis^d</i>					
Pre-tax net income / RWA	-0.60%	-25.7%	-5%	-3%	14
<i>Stress tests^d</i>					
Tier 1 capital / RWA	-1.2%	-4.0%	-3%	-3%	6 ^e
<i>Calibration of the leverage ratio</i>					
<i>Critical values^a</i>			Range		
Tier 1 Capital / Assets			3.0% - 5.0%		19
Common Equity / Assets			3.0% - 4.0%		19
Tangible Common Equity / Tangible Assets			2.5% - 4.0%		19
Common Equity minus Tier 1 Deductions / Assets			2.5% - 4.5%		19
<p>a. The 99th percentile or maximum is first determined within each country. The data presented in each row summarises the data across countries. Because of insufficient data, percentiles higher than the 99th percentile cannot be identified in some countries' samples. While 99th percentile values are reported in this table, higher percentiles may be more reasonable measures for calibration purposes.</p> <p>b. This refers to the number of crisis episodes. The averages and ranges reported are based on individual bank figures.</p> <p>c. Individual bank stress test results in a number of countries are significantly more severe than -4.0%.</p> <p>d. Results for banks experiencing losses during the stress period. For the historical loss results, these are peak losses; for the recent crisis these are cumulative losses; for the stress tests, these are average losses for banks subject to the stress test and do not include losses already incurred prior to the stress test period.</p> <p>e. Levels of the ratio at which at least 50% of banks that became severely stressed during the financial crisis and 50% of banks that did not become severely stressed.</p>					

(2) LEI analysis

Analysis of the long-term economic impact (LEI) of the Basel Committee's proposed capital and liquidity reforms assesses the economic benefits and costs of stronger capital and liquidity regulation in terms of their impact on output.

Expected long-run annual benefits and costs of tighter regulatory standards¹
(Benefits and costs are measured by the percentage impact on the level of output per year)

Capital ratio ²	Expected costs ³	Expected benefits (moderate permanent)	Net benefits (moderate permanent)	Net benefits (no permanent)	Net benefits (large permanent)
Liquidity requirement met					
7%	0.08	0.76	0.68	0.15	1.83
8%	0.17	1.40	1.23	0.25	3.33
9%	0.26	1.82	1.56	0.29	4.30
10%	0.35	2.10	1.75	0.28	4.91
11%	0.44	2.29	1.85	0.25	5.30
12%	0.53	2.42	1.89	0.20	5.55
13%	0.62	2.52	1.90	0.14	5.70
14%	0.71	2.60	1.89	0.07	5.80
15%	0.80	2.65	1.85	0.00	5.85

1 The starting point of the net-benefit analysis corresponds to the pre-reform steady state, approximated by historical averages for total capital ratios (7%) and the average probability of banking crises. ² The capital ratio is defined as TCE over RWA. ³ To meet the liquidity requirement, the annual expected output cost is estimated to be 0.08%. Each 1 percentage point increase in the capital ratio starting at 7% thereafter results in a 0.09% fall in the level of output below the baseline. ⁴ Expected benefits equal the estimated reduction in the annual probability of crisis times the (discounted) cost of a crisis using the median estimate of the cost of crises equal to 63% of pre-crisis output (moderate permanent effect). ⁵ Net benefits are the difference between expected benefits and costs; expected benefits are calculated assuming a crisis has a moderate permanent effect (cost of a crisis equals 63%), no permanent effect (cost of a crisis equals 19%) and large permanent effect (cost of a crisis equals 158%).

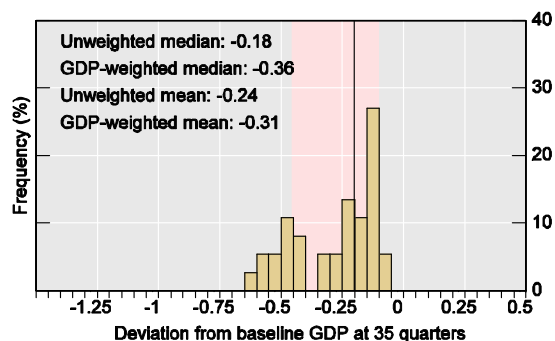
(3) MAG analysis

- The Macroeconomic Assessment Group (MAG) was established in February 2010 by FSB and BCBS to coordinate an assessment of the macroeconomic implications of the Basel Committee’s proposed reforms.

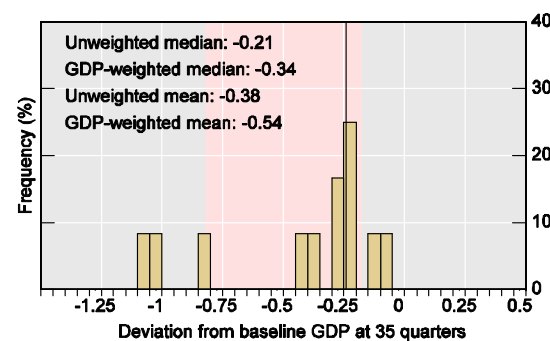
<Headline message>

Interim report	A 1 percentage point increase in the target ratio of TCE for four year implementation period would lead to a maximum decline in the level of GDP of about 0.19% from the baseline path
Final report	The estimated maximum GDP impact per percentage point of higher capital for eight year implementation period was 0.17%

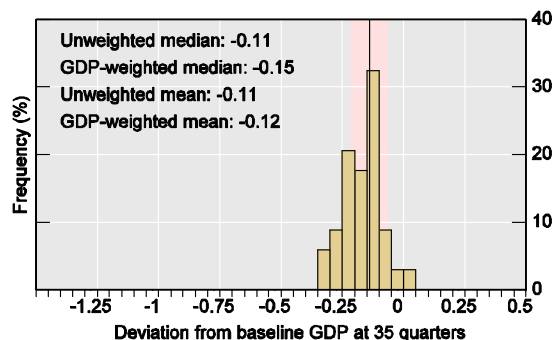
Spread-based models, exogenous monetary policy (37 models)



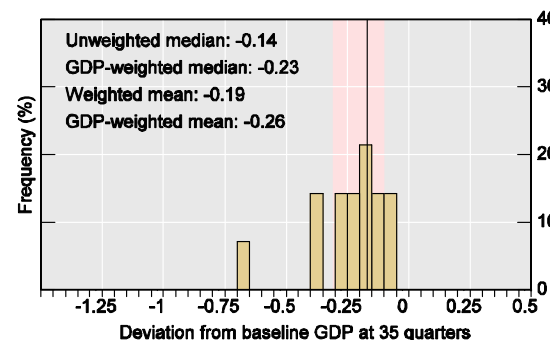
Standards-based models, exogenous monetary policy (12 models)



Spread-based models, endogenous monetary policy (34 models)



Standards-based models, endogenous monetary policy (14 models)



¹ Distributions are computed across models that meet the specified criteria. The vertical line indicates the unweighted median. The shaded areas indicate the range between the 20th and 80th percentile. Quarters are measured from start of implementation.

10. Remaining major capital issues

(1) SIFI surcharge

- Systemically important banks (SIBs) should have loss absorbency capacity beyond the Basel III standards. Integrated approach could include combinations of capital surcharges, contingent capital and bail-in debt.
- BCBS will complete by mid-2011 a study of the magnitude of additional loss absorbency that global SIBs should have. FSB will make recommendations on additional degree of loss absorbency and instruments by December 2011.

(2) Fundamental review of trading book

- This review is studying, in particular, whether or not the distinction between the banking and the trading book should be maintained, how trading activities are defined and how risks in trading books should be captured by regulatory capital.
- The work will be completed by end 2011.