INTRODUCTION TO BASEL III

IMPLICATIONS AND CONSEQUENCES

CORPORATE & INSTITUTIONAL BANKING

April 2016

BNP PARIBAS

The bank for a changing world

Contents

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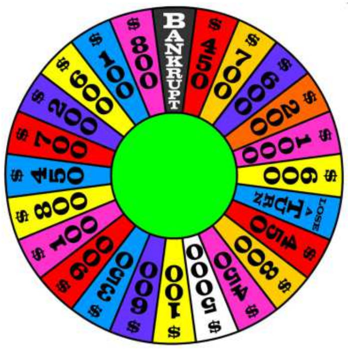
INTRODUCTION

Quiz time !



- **Capital adequacy requirements aim to:**

  A. Provide a buffer against Bank losses

  B. Protect deposit in event of Bank failure

  C. Create disincentive for excessive risk taking in the Banking sector

  D. Increase the aspirin consumption in the Bankers community

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WHY DOES BASEL III MATTER

What is it and Why a Basel Framework

- Basel III framework is a set of **international standard** which objective is to determine how much capital the bank needs to hold to manage the exposure it has.
  - International standards that local regulator will enforce plus or minus homogeneously….

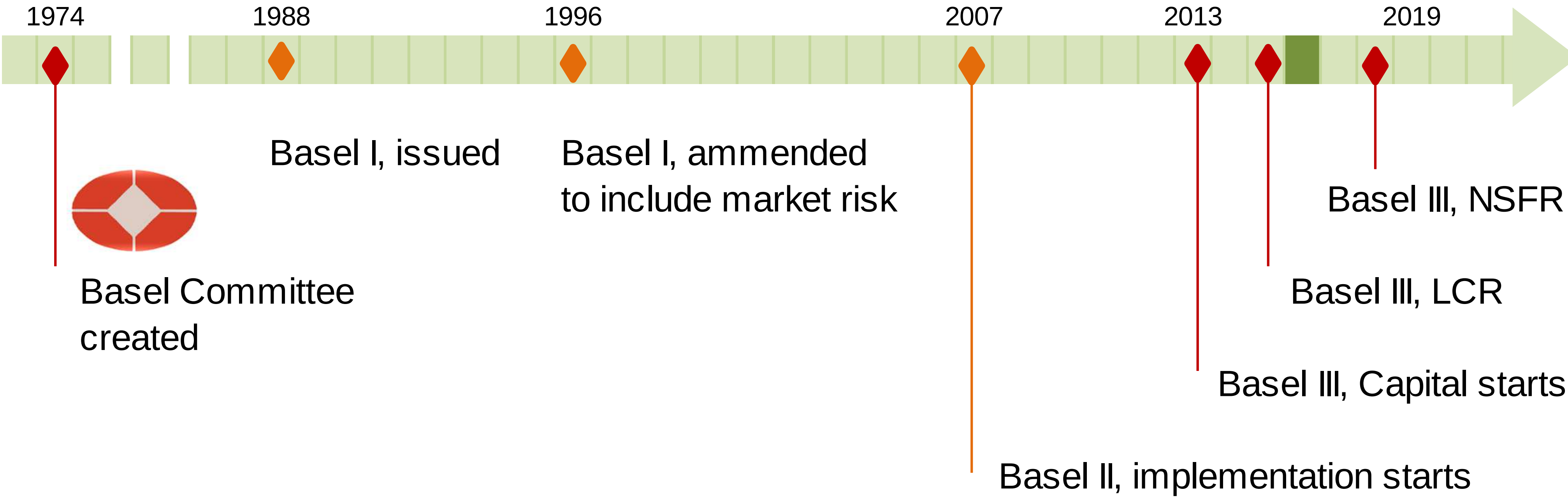
- **The main aim** of the banking reform is to ensure that governments never again have to bail out the sector
  - Remove the implicit guarantee that governments will back large banks if they get into trouble

Why is it important for Shipping industry

- The shipping industry is a **capital intensive industry** which requires constant inflow of liquidity
  - Bank loans are a main source of funding
  - Industry relies heavily on long-term loans

- Net Stable Funding Ratio creates challenges for banks to extend substantial **long-term loans** as it requires equivalent long-term funding.

Evolution of the Basel Framework



- **Basel II** provided a more sophisticated framework by introducing operational risk, additional risk sensitivity and advanced approach for calculating credit risk regulatory requirements

- The main focus of the changes in **Basel III**, is to **increase banks' equity capital requirements**
  - This emphasis is a reflection of the conclusions drawn from the crisis: that bank fragility is more prevalent than previously thought

Solvency Principles

- **Solvency** addresses the availability of own funds to cover losses

- **Own funds** are a resource that allows a bank to pursue activities:
  - Each activity mobilizes own funds depending on its level of risk
  - **Regulatory** and **Economic** own funds measure the amount of own funds required for an activity as seen respectively by the **Regulatory** or internally assessed by the **Bank**

- **Solvency Ratio:**

Regulatory ratio (Basel II)

$$\frac{\textbf{Own funds}}{\textbf{Risk weighted assets (RWA)}} = \frac{\textbf{Tier 1 + Tier 2 + Tier 3}}{\textbf{Risk weighted assets (RWA)}} \geq \textbf{8\%}$$

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BASEL III FRAMEWORK

Basel III, Main axis

Strengthening the Resilience of the Banking Sector
&
Establishing an International Framework for Liquidity Risk Measurement, Standards and Monitoring

- Raising the quality of the capital base
- Strengthening risk coverage
- Leverage ratio
- Reducing cyclicality & systemic risks
- Minimum liquidity standards

Raising quality, consistency and transparency of capital

Quality, consistency & transparency | Strengthening risk coverage | Leverage ratio | Reducing cyclicality & systemic risk | Global min. liquidity standards

- **Directive**: Redefinition / limitation of eligible criteria for Common Equity Tier 1 and additional Tier 1

Common Equity Tier 1

- **Common shares**
  - **Stricter definition applies**
- Share premium
- Retained earnings
- Regulatory adjustments (deduction)
  - Deduction of Goodwill
  - Deferred Tax Assets (DTA)
  - Gain & Losses due to changes in own credit risk on fair value financial liabilities
  - Defined benefit pension fund assets & liabilities
  - Investment in own shares

Additional Tier 1 Characteristics

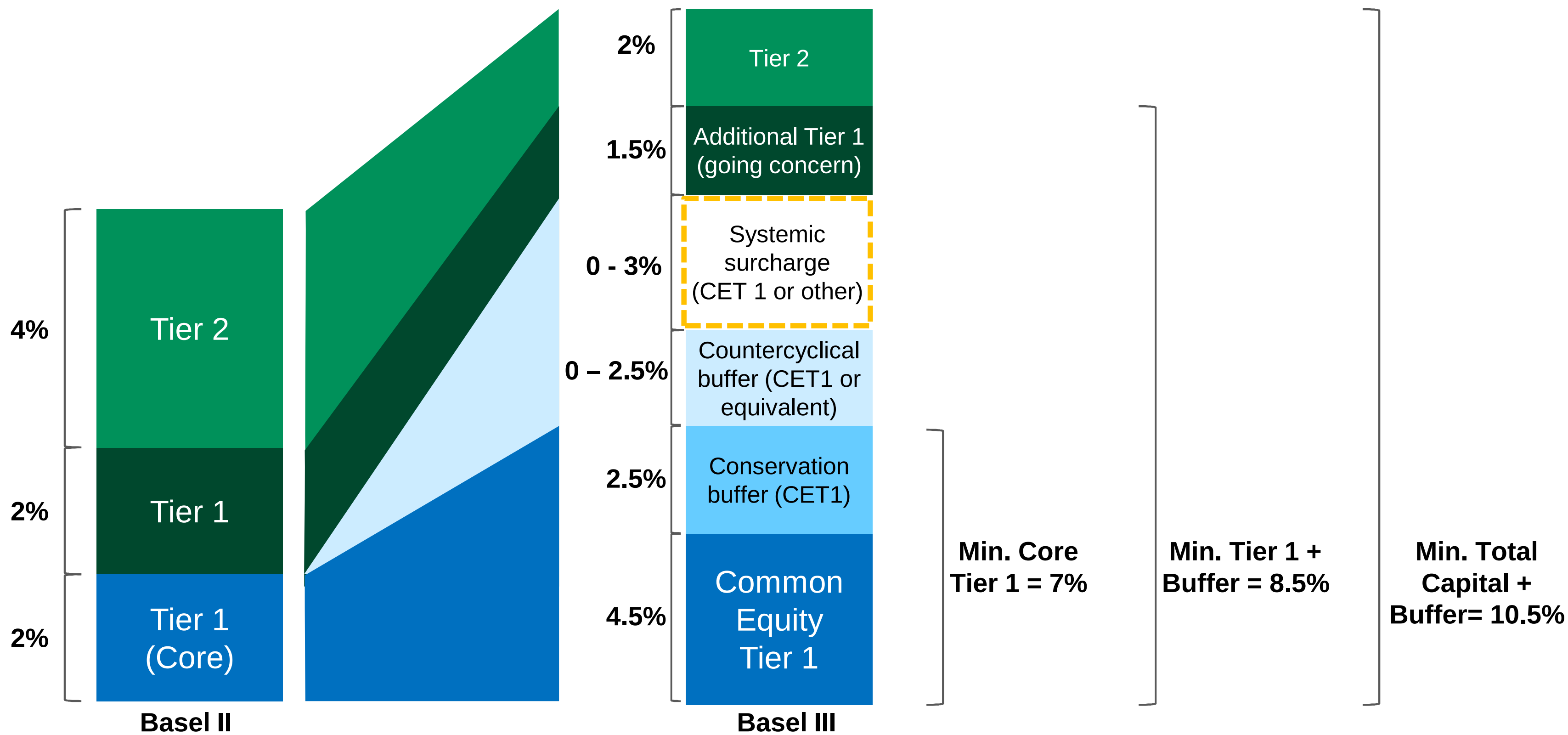
- Subordinated to general creditors and subordinated debt
- Perpetual and no incentive to redeem the instrument
- Callable only after 5 years and subject to prior approval
- Call must not be exercised unless replaced by an instrument of equivalent quality or because the bank's capital position is well above the min.
- Full discretion to cancel distribution/payments
- Dividends/coupons must be paid out of distributable items

Raising quality, consistency and transparency of capital

Quality, consistency & transparency | Strengthening risk coverage | Leverage ratio | Reducing cyclicality & systemic risk | Global min. liquidity standards

- **Directive**: Narrowing the capital definition and tightening the risk measurement

↑ Tier 1 (Core) ratio $= \dfrac{\textbf{Tier 1} \downarrow}{\textbf{Risk weighted assets (RWA)} \uparrow}$



Strengthening risk coverage

Quality, consistency & transparency | **Strengthening risk coverage** | Leverage ratio | Reducing cyclicality & systemic risk | Global min. liquidity standards

Increase in bilateral trades' capital requirements

- Exposure calculation for counterparty risk must be determined with stressed inputs
- Additional capital charge to cover Mark to Market, unexpected counterparty risk losses is introduced
- Standards for collateral management and initial margin are strengthened
- Counterparty risk management standards are raised
- Risk-weights for exposures to financials are raised
- Reduce reliance on external ratings

Push for mandatory clearing of standardized OTC derivatives through CCPs

- Implementation to be completed by end of 2012
- Stronger standards for central counterparties and exchanges will be established
- Contribution to default funds will attract a much higher capital charge
- Bank collateral and MtM exposures to central counterparties meeting the criteria will qualify for 2% risk-weight

Additional requirement for Real Estate exposures

- Possibility to impose higher risk-weight to exposure secured by residential and commercial real estate

Collaterals and guarantees

- Stricter requirements for physical collaterals
- Balance sheet netting allowed only in the same currency

Leverage ratio

- **Leverage ratio** acts as a non-risk sensitive backstop measure to reduce risk of a build-up of excessive leverage
  - Designed as a baseline ratio providing a "simple, transparent and independent" measure of risk based on gross exposure

$$\text{Leverage ratio} = \frac{\text{Available Tier 1 Capital}}{\text{Total Exposure}} \geq 3\%$$

- **Characteristics and limitations:**
  - Exposure is implemented at gross and unweighted basis, not taking into account risks related to the assets
    - Could potentially incentivise banks to focus on higher-risk/higher-return lending
    - Pressure to sell low margin assets, driving down prices
  - Differences in accounting regime could cause significant variations in reported leverage
  - Proved to be a poor safeguard during the financial crisis

- Testing of the ratio runs from 2013 to 2017

Cyclicality and Systemic risk

Quality, consistency & transparency | Strengthening risk coverage | Leverage ratio | **Reducing cyclicality & systemic risk** | Global min. liquidity standards

- **Counter- cyclical capital buffer** requires banks to raise capital in in the build-up phase of the credit cycle
  - Buffer range is provided by standards but actual implementation ratio is subject to local regulators' assessment

- **SIFIs: Global Systemically Important Financial Institutions must have higher absorbency capacity**
  - To reflect the greater risk they pose to the financial system
  - Quantitative indicators and qualitative elements are used to identify such institutions
    - E.g. size, interconnectedness, global activity, complexity, etc.

- These SIFIs are required to bear additional capital buffer to discourage them from becoming more systematically important

Global minimum liquidity standards

Two additional standards were developed for liquidity risk supervision:

- **Liquidity Coverage Ratio (LCR):** Promote the short-term resilience of the liquidity risk profile of banks by ensuring that they have **sufficient unencumbered*, high-quality liquid assets to survive a significant stress scenario lasting 30 calendar days**
  - Introduction of minimum standards from **1 Jan 2015**

- **Net Stable Funding Ratio (NSFR):** Promote resilience over a longer time horizon (over a year) by creating additional incentives for banks to **fund their activities with more stable sources of funding on an ongoing basis**
  - To be implemented from **1 Jan 2018**

* Free of claims by creditors

Liquidity Coverage Ratio (LCR)

Quality, consistency & transparency | Strengthening risk coverage | Leverage ratio | Reducing cyclicality & systemic risk | **Global min. liquidity standards**

- Banks are expected to meet this requirement continuously and hold a stock of unencumbered, high-quality liquid assets as a defense against potential onset of severe liquidity stress

$$\textbf{LCR} = \frac{\textbf{High Quality Liquid Assets (HQLA)}}{\textbf{Total net cash outflows over the next 30 calendar days}} \geq \textbf{100\%}$$

High Quality Liquid Assets (HQLA)

can be easily and immediately converted into cash at little or no loss of value with following characteristics:

- Low credit and market risk
- Ease and certainty of valuation
- Low correlation with risk assets
- Listed on a developed and recognized exchange market

Cash Outflows

Application of a **withdrawal rate** of deposits received, maturing to a 30 days horizon, or non-term deposits:

- Retail & SME deposits: 3%, 5% , 10%
- Corporate deposits: 25% or 40%

Funding commitment:

- Credit line to a corporate: 10%
- Any credit line to a financial: 100%
- Liquidity line to corporate: 30%

Cash Inflows

Application of a **non-renewal rate** to the credit facilities granted by the bank:

- 50% to retail and corporate
- 100% to financial institutions

Net Stable Funding Ratio (NSFR)

Quality, consistency & transparency | Strengthening risk coverage | Leverage ratio | Reducing cyclicality & systemic risk | **Global min. liquidity standards**

- The **NSFR** is designed to encourage and incentivise banks to use stable sources to fund activities and reduce dependency on short-term wholesale funding
  - Aims to reduce maturity mismatches between asset and liability in the balance sheet, therefore reducing funding risk

$$\text{NSFR} = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} \geq 100\%$$

Available Stable Funding

- Capital (Tier 1 and 2, preferred shares)
- Other liabilities with effective maturity ≥ 1 year
- Non-maturity or maturity < 1year retail deposit covered by a public guarantee scheme
- Wholesale funding non-maturity or with maturity < 1year
- No call options < 1 year

Required Stable Funding

- Decreasing weight of balance sheet assets in line with maturity, quality, and liquidity
- Unsecured instrument with maturity < 1 year
- Unencumbered qualified residential mortgage

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BASEL III IMPLICATIONS

Implications of the Liquidity Ratios on banks

Liquidity Coverage Ratio

- Risk of impact from a bank-run should be reduced, **improving the overall stability** of financial sector
- Require bank to hold significantly more liquid, low-yielding assets, which in turn **affect profitability** negatively
- Funding profile changed, leading to more demand for long-term funding

Net Stable Funding Ratio

- Incentive to **reduce reliance on short-term wholesale funding** and increase funding mix
- Need to increase wholesale and corporate deposits with maturity > 1 year
- However, limited market demand likely to lead to **higher funding costs**
- Increasing short-term assets in managing ratio will reduce yield
- Stronger banks with higher ratio will be able to influence market pricing of assets
- Opportunities for arbitrage as legal implementation of NSFR is likely to differ between countries

Basel III Impact on the Financial sector

Impact on individual Banks	Impact on financial system
Weaker banks crowded out Raising capital and funding will be more difficult for weaker players	**Reduced risk of systemic banking crisis** Enhanced capital and liquidity buffers, and risk management should lead to reduced risk of individual bank failure and interconnectivity
Significant pressure on profitability and ROE Increased capital and funding cost will put pressure on margins and operating capacity	**Reduced lending capacity** Increase cost of provision due to the additional requirements will reduce capacity
Change in demand from short-tem to long-term funding Introduction of 2 ratios will likely move short-term funding to long-term funding	**Reduced investor appetite for bank debt and equity** ROE and profitability likely to decrease
Legal entity reorganization Increased supervisory focus on proprietary trading, coupled with treatment of minority investments is likely to drive disposals of portfolios and entities	**Inconsistent implementation of Basel III leading to international arbitrage** Inconsistent application may disrupt the overall stability of the financial system

BNP Paribas answer for Shipping Finance

- **BNP Paribas** is amongst few banks where Shipping is a core business – with a 40-year track record, global coverage, long-standing expertise and wide range of product offering (beyond loans).

  - In today's difficult environment for shipping, BNPP seeks to **support clients to build up sufficient liquidity** by facilitating access to additional sources of liquidity like financial investors, syndication, equity and debt capital markets.

    For example this week we announced a US$ 151 mio fully underwritten "1 for 1" rights issues for Pacific Basin to repay some debt due 2018 and to seize consolidation opportunities.

  - Developing client intimacy (creating operational links such as cash management services) is also a key answer to address some of the new liquidity constrains.

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APPENDIX

Implementation depends on local timeline

- Basel III implementation will be **phased-in** as financial conditions improve and economic recovery is assured
- Observation periods will be used to assess any unintended consequences and adjust ratios if needed

	BCBS	Singapore	Malaysia	Thailand	Indonesia
Minimum CET1	4.5%	6.5%[1]	4.5%	4.5%	4.5%
Minimum Tier 1	6.0%	8.0%[1]	6.0%	6.0%	6.0%
Minimum Total Capital	8.0%	10.0%	8.0%	8.5%	8.0%
Full Compliance	Jan-15	Jan-15	Jan-15	Jan-13	Jan-14
Capital Conservation Buffer	2.5%	2.5%	2.5%	2.5%	2.5%
Full Compliance	Jan-19	Jan-19	Jan-19	Jan-19	Jan-19
Countercyclical Capital Buffer[2]	Up to 2.5%	Up to 2.5%	Up to 2.5%	Up to 2.5%	Up to 2.5%
Full Compliance	Jan-19	Jan-19	Pending	Jan-19	Jan-19
D-SIB	-	2.0%	Pending	Pending	1.0% - 3.5%
G-SIB	1.0% - 3.5%	n/a	n/a	n/a	n/a
Minimum Leverage Ratio	3.0%	Pending	Pending	3.0%	3.0%
Full Compliance	2018	Pending	Pending	2018	2018

1.Includes capital buffer for D-SIB.
2.Determined by each local regulator based on its own appreciation of excessive economic/credit expansion.

THANK YOU !