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Chapter 3 Overview of Basel III

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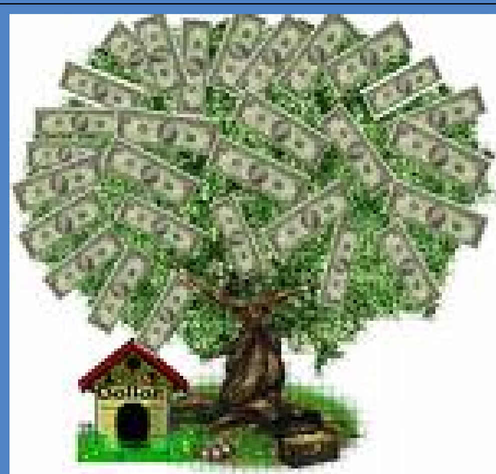

Confidentiality Statement

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Chapter – 3 Overview of Basel III

Introduction

This chapter deals with the Basel III guidelines which have been introduced by Basel Committee on Banking Supervision. The Basel committee was already in the process of bringing out changes to Basel II guidelines when the world was stuck with financial crisis in 2008. Then instead of bringing out those small changes which were termed as Basel 2.5, BCBS think tank decided to make significant changes and implement Basel 3. This chapter deals with the Basel III guidelines and how it impacts the financial institutions.

Learning Objective

After reading this chapter you will:

- Overview Of Basel III
- Main Components of Basel III
- Basel III Implementation
- Liquidity Coverage Ratio
- Major Challenges of Basel III

3.1 Basel III

Basel Committee on Banking Supervision (BCBS) came out with draft guidelines for the implementation of Basel III after the financial crisis of 2008 which started in US and subsequently affected the whole world. Until then, banks were following Basel II guidelines which did not cover the risk that was witnessed by the world in 2008. Earlier, with the implementation of Basel II, the banks faced huge financial losses due to the liquidity crunch which was not addressed in Basel I and II.

A global regulatory standard on bank capital adequacy stress testing and market liquidity risk with a set of reform measures to improve Regulation supervision and risk management. Basel III is a set of standards and practices created to ensure that international banks maintain adequate capital to sustain themselves during periods of economic strain.

BASEL norm will be something like this

Example-If a Bank loans 1crore rupee to a company with "B" Credit Rating, it must keep capital worth 20 lakhs aside for crisis. And out of that 20 lakhs, Rs.15 lakhs must in form of Tier 1 Capital and 5 lakhs can be in form of Tier 2.

If the Company has credit rating of "AAA" then Capital worth Rs xyz and so on.

Governor of RBI signs on this BASEL agreement comes back home and forces all the Indian banks to follow these norms. Same thing will be done by French, Chinese, and Americans etc. and thus banks in every country will function prudently thus preventing another Global financial crisis.

Latest is BASEL III accord, came in 2010. It has stringent provisions keeping in mind the sub-prime crisis.

The Basel accords are a series of recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision (BSBS). The name for the accords is derived from Basel, Switzerland, where the committee that maintains the accords meets.

The standards are not enforced by the Committee; however, countries that adopt the standards are expected to create and enforce regulations created from their specification

Why do we need Basel Norms?

Consider this case- ICICI bank collapse hoax-

Back in 2003, someone started a rumour in Ahmedabad that ICICI bank is going to collapse. Suddenly thousands of panicked account holders lined up at the nearest ICICI branch to take out their money and hence there was such a money-shortage in ICICI's Ahmedabad branches, they had to actually call up trucks loaded with cash from their Mumbai branches Things settled out after a while and it was confined only to a few cities of Gujarat, but if it was an entire-countrywide hoax, just imagine the fallout!

Here comes BASEL in picture

- The BASEL Norm is safeguards / backup plan for banking sector.
- It provides internationally accepted detailed guidelines about how much money should a bank keep aside, to deal with such financial crisis.
- Even if loan-takers run away without paying, Bank should have money to give back to deposit holders.

According to the BCBS, the Basel 3 proposals have two main objectives:

- To strengthen global capital and liquidity regulations with the goal of promoting a more resilient banking sector.

- To improve the banking sector's ability to absorb shocks arising from financial and economic stress.

Basel III is a comprehensive set of reform measures, developed by the Basel Committee on Banking Supervision, to strengthen the regulation, supervision and risk management of the banking sector .To achieve these objectives, the BCBS Basel 3 proposals are broken down into three main areas that address:

- Capital reform (including quality and quantity of capital, complete risk coverage, leverage ratio and the introduction of capital conservation buffers and a counter-cyclical capital buffer).
- Liquidity reform (short term and long term ratios) and other elements relating to general improvements to the stability of the financial system.
- More risk the bank takes, more money it has to keep aside in reserve to counter the risk.

Timeline for agreement of the Basel 3 proposal

The Basel 3 proposals are incremental to the Basel 2.5 proposals published in July 2009 that have been finalised for implementation in Europe through CRD3 from 31 December 2011. The Basel 2.5 proposals deal principally with the trading book and securitisation positions.

The timeline for agreement of the Basel 2.5 and Basel 3 proposals has been extremely rapid compared with the agreement and implementation of the Basel 2 proposals over the period from 1999 to 2008.

Many detailed elements of the Basel 3 package remain to be finalised in 2011 including the treatment of Credit Valuation Adjustments (CVA) and SIFIs.

It was agreed upon by the members of the Basel Committee on Banking Supervision in 2010–11, and was scheduled to be introduced from 2013 until 2015, it changes from April 1, 2013 extended implementation until March 31, 2018. The Basel 3 proposals are phased in over a period up to 2019 when full implementation will have been achieved, although many firms will need or seek to execute change at a much earlier stage.

Comparison of capital requirements under Basel II and Basel III

Requirements	Under Basel II	Under Basel III
Minimum Ratio of total capital to RWAs	8	10..50%
Minimum ratio of common equity to RWAs	2	4.50%-7.00%
Tier I capital to RWAs	4	6.00%
Core Tier I capital to RWAs	2	5.00%
Capital conservation buffers to RWA	None	2.50%
Leverage ratio	None	3.00%
Countercyclical Buffer	None	0%-2.50%
Minimum liquidity coverage ratio	None	TBD(2015)
Minimum net stable funding ratio	None	TBD(2018)

Source: www.allbankingsolution.com

3.2 Main Components of Base III

Basel norms are a set of international banking regulations formulated by BCBS, which set out the minimum capital requirements to sustain banks the world over. Under Basel III accord, banks have to maintain Tier-one capital (equity and reserves) at 7 per cent of risk weighted assets (RWA) and a capital conservation bugger of 2.5 per cent of RWA.

Areas	Main Basel III Components
Capital Ratios and Targets	1 Capital Definition
	2 Countercyclical Buffers
	3 Leverage Ratio
	4 Minimum Capital Standards
	5 Systemic Risk
RWA Requirements	6 Counterparty Risk
	7 Trading Book and Securitization (also known as Basel II.5)
Liquidity Standards	8 Coverage Ratio
	9 Net Stable Funding Ratio

Figure 1 *Key Basel III Compone*nts

Source: www.pwc.com

Basel III presents the details of global regulatory standards on bank capital adequacy and liquidity agreed by the Governors and Heads of Supervision, and endorsed by the G20 Leaders at their November Seoul summit. The Committee also published the results of its comprehensive quantitative impact study (QIS).

The Framework sets out higher and better-quality capital, better risk coverage, the introduction of a leverage ratio as a backstop to the risk-based requirement, measures to promote the buildup of capital that can be drawn down in periods of stress, and the introduction of two global liquidity standards.

i. Capital Quality

- Raises the quality and "purity" of the capital base by mandating that Tier 1 capital become mostly common shares, retained earnings, and certain subordinated instruments.
- Raises the consistency of the capital base by harmonizing the list of regulatory adjustments across Basel Committee countries.
- Increases transparency by requiring banks to disclose all elements of capital together with detailed reconciliation to the reported accounts.
- Proposes the introduction of limits (to be calibrated after the impact assessment) for all elements of regulatory capital (i.e., Common Equity, Tier 1 Capital).

ii. Counterparty credit risk (Enhancing risk coverage)

- Enhances risk coverage by strengthening the capital requirements and risk management requirements for counterparty credit risk exposures arising from derivatives, repos, and securities financing activities. For example:
- Capital incentives to move OTC derivative exposures to central counterparties; i.e., capital incentives to use central clearinghouses (zero risk weight in some circumstances)
- Introduces higher capital requirements for lending to financial institutions
- Increases CCR capital for trades with financial institutions, with inclusion of capital charges for mark-to-market losses (credit value adjustments, CVA risk), wrong way risk; stress EPE (Expected Positive Exposure)

iii. Leverage Ratio

- Aims to contain the buildup of excessive leverage, introducing additional safeguards against attempts to "game" risk-based requirements and address model risk
- Introduces a harmonized international minimum leverage ratio to constrain the build-up of gross leverage in the banking sector
- The precise details of the calculation and calibration of the leverage ratio are still to be determined at the country level, although on the assets side it is worth noting that certain off-balance sheet items will be included, potentially using a flat 100% credit conversation factor
- Netting of financial and physical collateral is not allowed to reduce exposures (e.g., for repo/derivatives, no netting is allowed for the leverage ratios)

iv. Counter Cyclicality

- Reducing cyclicality and promoting countercyclical buffers
- Countercyclical framework to encourage the building of capital buffers
- Rules to address pro-cyclicality are still at an early stage of development but include:
- Reducing the cyclicality of the minimum capital requirements under Pillar 1 via using a "downturn probability of default" measure in the capital calculations

- Promoting stronger provisioning practices; i.e., more forward- looking provisioning to capture actual losses more transparently and reduce pro-cyclicality (including supporting the initiative of the international accounting standards body {IASB] to move to an expected loss approach)

v. Liquidity standard

- Introduction of global minimum liquidity standards
- The Liquidity Coverage Ratio (LCR) that makes banks more resilient to potential short-term disruptions
- Stock of high-quality liquid assets
- Total net cash outflows
- The Net Stable Funding Ratio (NSFR) that addresses longer-term structural liquidity mismatch.

vi. Liquidity Coverage Ratio

- The Liquidity Coverage Ratio (LCR) requires institutions to hold a sufficient buffer of "high quality" liquid assets to cover net liquidity outflows during a 30-day period of stress.
- From 2013 on, there is a general requirement for banks to keep appropriate liquidity coverage. The LCR will be introduced by 2015 after an observation period to avoid possible unintended consequences.
- It will help ensure that global banks have sufficient unencumbered, high-quality liquid assets to offset the net cash outflows it could encounter under an acute short-term stress scenario.
- The stock of high quality liquid assets (numerator) should include assets of high credit and liquidity quality.

$$\frac{\text{High Quality Liquid Assets}}{\text{Total Net Cash Outflows over 30-Day Stress Period}} \geq 100\%$$

LCR: high-quality highly-liquid assets available must exceed the net cash Outflow of the next 30 days

- **High-quality highly-liquid assets:**
  - Recognized at 100%: cash, sovereign debt of countries weighted at 0% (which include the PIIGS as they are part of the Eurozone), deposit at central bank
  - Recognized at 85% and must not represent more than 40% of the assets: sovereign debt weighted at 20% (countries rated below AA-), corporate bonds and covered bonds rated at least AA.

- **Net cash outflows = cash outflows – cash inflows**

  Cash outflows:
  - 100% of any repayment in the next 30 days
  - 5% of retail banking deposits
  - 75% of deposits from non-financial corporates and public sector entities
  - 100% of deposits from other financial institutions
  - between 0% and 15% of secured funding backed with "high quality highly-liquid" assets
  - 10% of credit lines to corporates, sovereign and public sector

Cash inflows
  - 50% of loan repayments by non-financial counterparties (it is considered that banks, even in difficult times, will have no choice than to renew at least 50% of the maturing loans)
  - 100% of loan repayments by financial institutions
  - 100% of bonds repayments (whoever the issuers)

vii. Net Stable Funding Ratio

- The NSFR requires a minimum amount of stable sources of funding at a bank relative to the liquidity profiles of the assets, as well as the potential for contingent liquidity needs arising from off-balance sheet commitments, over a one-year horizon.

- The NSFR aims to limit over-reliance on short-term wholesale funding during times of buoyant market liquidity and encourage better assessment of liquidity risk across all on- and off-balance sheet items.

NSFR: long-term financial resources must exceed long-term commitments
(Long term = and more than 1 year)

- **Stable funding:**
  - equity and any liability maturing after one year
  - 90% of retail deposits
  - 50% of deposits from non-financial corporates and public entities

- **Long-term uses:**
  - 5% of long-term sovereign debt or equivalent with 0%-Basel II Standard approach risk-weighting (see comment above for LCR) with a residual maturity above 1 year
  - 20% of non-financial corporate or covered bonds at least rated AA- with a residual maturity above 1 year
  - 50% of non-financial corporate or covered bonds at least rated between A- and A+ with a residual maturity above 1 year
  - 50% of loans to non-financial corporates or public sector
  - 65% of residential mortgage with a residual maturity above 1 year
  - 5% of undrawn credit and liquidity facilities.

Basel Committee on Banking Supervision reforms - Basel III

Strengthens microprudential regulation and supervision, and adds a macroprudential overlay that includes capital buffers.

	Capital				
	Pillar 1			Pillar 2	Pillar 3
	Capital	Risk coverage	Containing leverage	Risk management and supervision	Market discipline
All Banks	**Quality and level of capital** Greater focus on common equity. The minimum will be raised to 4.5% of risk-weighted assets, after deductions. **Capital loss absorption at the point of non-viability** Contractual terms of capital instruments will include a clause that allows – at the discretion of the relevant authority – write-off or conversion to common shares if the bank is judged to be non-viable. This principle increases the contribution of the private sector to resolving future banking crises and thereby reduces moral hazard. **Capital conservation buffer** Comprising common equity of 2.5% of risk-weighted assets, bringing the total common equity standard to 7%. Constraint on a bank's discretionary distributions will be imposed when banks fall into the buffer range. **Countercyclical buffer** Imposed within a range of 0-2.5% comprising common equity, when authorities judge credit growth is resulting in an unacceptable build up of systematic risk.	**Securitisations** Strengthens the capital treatment for certain complex securitisations. Requires banks to conduct more rigorous credit analyses of externally rated securitisation exposures. **Trading book** Significantly higher capital for trading and derivatives activities, as well as complex securitisations held in the trading book. Introduction of a stressed value-at-risk framework to help mitigate procyclicality. A capital charge for incremental risk that estimates the default and migration risks of unsecuritised credit products and takes liquidity into account. **Counterparty credit risk** Substantial strengthening of the counterparty credit risk framework. Includes: more stringent requirements for measuring exposure; capital incentives for banks to use central counterparties for derivatives; and higher capital for inter-financial sector exposures. **Bank exposures to central counterparties (CCPs)** The Committee has proposed that trade exposures to a qualifying CCP will receive a 2% risk weight and default fund exposures to a qualifying CCP will be capitalised according to a risk-based method that consistently and simply estimates risk arising from such default fund.	**Leverage ratio** A non-risk-based leverage ratio that includes off-balance sheet exposures will serve as a backstop to the risk-based capital requirement. Also helps contain system wide build up of leverage.	**Supplemental Pillar 2 requirements.** Address firm-wide governance and risk management; capturing the risk of off-balance sheet exposures and securitisation activities; managing risk concentrations; providing incentives for banks to better manage risk and returns over the long term; sound compensation practices; valuation practices; stress testing; accounting standards for financial instruments; corporate governance; and supervisory colleges.	**Revised Pillar 3 disclosures requirements** The requirements introduced relate to securitisation exposures and sponsorship of off-balance sheet vehicles. Enhanced disclosures on the detail of the components of regulatory capital and their reconciliation to the reported accounts will be required, including a comprehensive explanation of how a bank calculates its regulatory capital ratios.

Figure 2 Basel III Pillars

Source: www.bis.org

Key out comings of Basel III

- In accordance with Basel III norms, Indian banks will have to maintain their capital adequacy ratio at 9 per cent as against the minimum recommended requirement of 8 per cent.
- Under Basel III accord, banks have to maintain Tier-one capital (equity and reserves) at 7 per cent of risk weighted assets (RWA) and a capital conservation bugger of 2.5 per cent of RWA.
- Basel norms are a set of international banking regulations formulated by the Basel committee on bank supervision, which set out the minimum capital requirements to sustain banks the world over. The committee operates from Basel in Switzerland.
- According to a recently published RBI financial stability report, Indian banks will require an additional capital of Rest 5 trillion to comply with Basel III norms.

3.3 Implementation of Basel III

BCBS has given the deadlines for the implementation of Basel III for its participating countries.

Basel III phase-in arrangements
(All dates are as of 1 January)

	Phases	2013	2014	2015	2016	2017	2018	2019
Capital	Leverage Ratio	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%
	Capital Conservation Buffer				0.625%	1.25%	1.875%	2.5%
	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*		20%	40%	60%	80%	100%	100%
	Minimum Tier 1 Capital	4.5%	5.5%	6.0%				6.0%
	Minimum Total Capital		8.0%					8.0%
	Minimum Total Capital plus conservation buffer		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					
Liquidity	Liquidity coverage ratio – minimum requirement			60%	70%	80%	90%	100%
	Net stable funding ratio						Introduce minimum standard	

* Including amounts exceeding the limit for deferred tax assets (DTAs), mortgage servicing rights (MSRs) and financials.
- - - transition periods

Figure 3 Basel III phase-in arrangements

Source: www.bis.org

The blue dotted line in fig 1 shows the transition period. For example, BCBS suggests banks to increase the minimum tier 1 capital from 4.5% to 5.5% gradually over a span of two years (1st Jan 2013 to 1st Jan 2015).

In July, Basel committee related to the measurement of risks for calculating regulatory capital for securitization and trading book exposures (Pillar 1), risk management and supervisory review (Pillar 2) and disclosure (Pillar 3). The central banks have to sequentially follow the Basel III guidelines which range from January 2013 to January 2019.

Implementation of Basel III in Indian Banks

In India, the Basel III regulations were to be implemented from January 1, 2013 onwards but it has been now deferred to April 1, 2013. Reserve Bank of India (RBI) has prepared draft guidelines and awaiting the approval from the Finance Ministry. It is due to be approved in the current fiscal (before 31st March, 2013) and shall be subsequently adopted by majority of the banks in India.
The following are the guidelines that RBI has asked the banks functioning in Indian banking industry to follow. These are stringent measures than what are asked by BCBS to its participating nations.

Minimum Capital Requirements (by RBI)

- Common Equity Tier 1 (CET 1) capital must be at least 5.5% of risk-weighted assets (RWAs).
- Tier 1 capital must be at least 7% of RWAs; and
- Total capital must be at least 9% of RWAs.

Challenges of Basel III implementation

Banks usually have three types of challenges-

1) **Functional Challenges**

- Developing specifications for the new regulatory requirements, such as the mapping of positions (assets and liabilities) to the new liquidity and funding categories in the LCR calculations.

- The specifications of the new requirements for trading book position and within the CCR framework.
- Crucial is the integration of new regulatory requirements into existing capital and risk management as some measures to improve new ratios might have negative effect on existing figures.

2) Technical Challenges

- The technical challenges include availability of data, data completeness, and data quality and data consistency to calculate the new ratios.
- The financial reporting system with regard to the new ratios and the creation of effective interfaces with the existing risk management system.

3) Operational Challenges

- The operational challenges include stricter capital definition lower's bank available capital. At the same time risk weighted assets for securitization and trading books position and certain counter party risk exposure are increased.
- The stricter capital requirements, the introduction of LCR and the NSFR will force banks to rethink their quality position and require banks to increase their stock of high quality liquid assets.
- Basel III also introduces a non risk based leverage ratio of 3 %. Groups1 banks are failed in maintaining this leverage ratio.

3.4 Major Recommendations and Implications

The proposals are structured around the following regulatory objectives, with the key changes and implications highlighted below:

1) Increased quality of capital
2) Increased quantity of capital
3) Reduced leverage through introduction of backstop leverage ratio
4) Increased short term liquidity coverage
5) Increased stable long term balance sheet funding
6) Strengthen risk capture notably counterparty risk

i. Increased quality of capital

Basel 3 contains various measures aimed at improving the quality of capital, with the ultimate aim to improve loss-absorption capacity in both going concern and liquidation scenarios.

- BCBS measures are already discounted by markets so banks are likely to clean up their balance sheets as soon as possible.
- Likely to see significant capital raising by banks along with retention of profits and reduced dividends.
- National regulators will have less flexibility to allow capital instruments to be included in Tier 1 or Tier 2 capital.
- Systemically important banks (and potentially all banks) may be allowed to issue contingent convertibles to meet additional capital requirements.

ii. Increased Quantity of Capital

Basel 3 contains various measures aimed at increasing the level of capital held by institutions as well as providing counter-cyclical mechanisms.

- Banks will face a significant additional capital requirement and the bulk of this shortfall will be need to be raised as common equity, or otherwise by retaining dividends
- In principle, banks will be able to draw on the capital conservation buffer during periods of stress, but it seems unlikely that they would choose to do so, given the associated constraints on their earnings distributions
- Consequently, banks are likely to target a higher common equity ratio and the market expectation for common equity tier 1 appears to be moving to approximately 9%.
- There is likely to be further add-ons for Pillar 2 risks, systemically important firms and the counter-cyclical capital buffer and so banks may target a total capital ratio of 13-15%.

iii. Reduced leverage through introduction of backstop leverage ratio

The leverage ratio acts as a non-risk sensitive backstop measure to reduce the risk of a buildup of excessive leverage in the institution and in the financial system as a whole. The leverage ratio remains controversial and there remains ambiguity about certain aspects of the exact mechanics.

- The introduction of the leverage ratio could lead to reduced lending and is a clear incentive to banks to strengthen their capital position, although it remains to be seen whether the ratio will bite for individual firms.
- The non-risk adjusted measure could incentivize banks to focus on higher-risk / higher return lending.
- Pressure arises on banks to sell low margin assets (e.g. mortgages) which could drive down prices on these assets.
- Banks may be required by the market and the rating agencies to maintain a higher leverage ratio than required by the regulator.

iv. Increased short term liquidity coverage

The regulatory response to the financial crisis has seen a long overdue rebalancing towards the importance of liquidity risk management and to complement its "Principles for Sound Liquidity" Risk Management and Supervision, the Basel Committee has further strengthened its liquidity framework by developing two minimum standards for funding liquidity.

- Risk of impact from bank-run should be reduced which would improve the overall stability of the financial sector.
- The introduction of the LCR will require banks to hold significantly more liquid, low-yielding assets to meet the LCR which will have a negative impact on profitability.
- Banks will change their funding profile which will lead to more demand for longer term funding. This funding may not be available from institutional investors that generally seek to reduce their holdings in the financial sector.

v. Increased Stable long term balance sheet funding

The Net Stable Funding Ratio (NSFR) is designed to encourage and incentivize banks to use sheet funding stable sources to fund their activities to reduce the dependency on short term wholesale funding.

- The NSFR incentivizes banks to reduce their reliance on short-term wholesale funding and increase stability of the funding mix.

- Banks will need to increase the proportion of wholesale and corporate deposits with maturities greater than one year, but currently the appetite for term debt is limited.
- Managing the NSFR by altering the asset mix will result in an increase in the proportion of short term assets, reducing yield.
- Stronger banks with a higher NSFR will be able to influence market pricing of assets. Weaker banks will see their competitiveness reduced, which will potentially decrease the level of competition.

vi. Strengthen risk capture notably counterparty risk

The BCBS seeks to ensure full Coverage of risks in the Pillar 1 framework, increasing the capital counterparty risk requirements against risks not adequately captured in the Basel 2 framework. The Basel 3 proposals primarily modify the treatment of exposures to financial institutions and the counterparty risk on derivative exposures.

- Still a degree of uncertainty over the final capital impact as CVA charge being revised to reflect significant industry criticism.
- Controls and quality of CCPs' risk management is critical as risk is focused on central bodies.
- Reduce level of intra-financial sector business arising from increased capital charges intra-sector.
- Costs of dealing with financial counterparties need to be priced into business leading to review of business model.

Summary

- BCBS came out with draft guidelines for the implementation of Basel III after the financial crisis of 2008.
- Basel III points towards the measure of liquidity risk and marks some stringent measures for the banks.
- Under Basel III accord, banks have to maintain Tier-one capital (equity and reserves) at 7 % of risk weighted assets (RWA) and a capital conservation bugger of 2.5 % of RWA.
- Basel III aims to improve the banking sector's ability to absorb shocks arising from financial and economic stress bank transparency and disclosures.
- There are some important components of Basel III – capital ratio and targets, RWA requirements and Liquidity Standards.

References

This document is prepared from the material available at www.bis.org.

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