



# **BERMUDA MONETARY AUTHORITY**

IMPLEMENTATION OF BASEL III IN BERMUDA

DISCUSSION PAPER

DECEMBER 2011

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## Abbreviations

“Basel III Capital Paper”	“Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems” (June 2011) - published by the Basel Committee on Banking Supervision (BCBS)
“Basel III Liquidity Paper”	“Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring” (December 2010) – published by BCBS
“Basel 2.5 Main Paper”	“Enhancements to the Basel II Framework” (July 2009) – published by BCBS
“Basel 2.5 Market Risk Paper”	“Revisions to the Basel II Market Risk Framework” (July 2009) – published by BCBS
BCBS	Basel Committee on Banking Supervision
CARP	Capital Assessment and Risk Profile
CEM	Current Exposure Method
CET1	Core Equity Tier 1
DvP	Delivery-versus-Payment
“Handbook”	“Banks and Deposit Companies Act 1999: Revised Framework for Regulatory Capital Assessment” published by the Bermuda Monetary Authority
IMM	Internal Model Method
IRB	Internal Ratings Based Approach
LCR	Liquidity Coverage Ratio
NSFR	Net Stable Funding Ratio
PvP	Payment-versus-Payment
RWA	Risk-weighted Assets

SIB

Systemically Important Bank

SRP

Supervisory Review Process

## Introduction

- 0.1. Bermuda banks and deposit companies are required to meet, on an ongoing basis, the minimum licensing criteria set out in the Second Schedule to the Banks and Deposit Companies Act 1999 ('the Act'). This provides, among other requirements, that institutions must conduct their business in a prudent manner, including that they maintain capital commensurate with the nature and scope of their operations. The setting and monitoring of requirements for capital adequacy and the effective assessment and management of risk within institutions represent key elements in the framework of prudential oversight and control applied by the Bermuda Monetary Authority (the Authority) to help protect the interests of depositors and potential depositors. The approach developed and applied by the Authority in that regard under the Act has reflected the regulatory standards designed and promulgated by the Basel Committee on Banking Supervision ("BCBS"), the international standard-setting body for banks. Since January 2009, banks licensed in Bermuda have been required to comply with the framework set out in the Authority's December 2008 Handbook "Banks and Deposit Companies Act 1999: Revised Framework for Regulatory Capital Assessment"<sup>1</sup> (the Handbook) which conforms to the BCBS' "International Convergence of Capital Management and Capital Standards: A Revised Framework"<sup>2</sup>, more commonly referred to as Basel II.
  
- 0.2. Since the adoption in Bermuda of a Basel II consistent framework there has been significant turmoil in the global economy and financial markets and in the banking sectors of certain developed economies in particular. This has led to a broad consensus amongst policy-makers that banking regulation

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<sup>1</sup> [http://www.bma.bm/uploaded/268-090109\\_Revised\\_Framework\\_for\\_Regulatory\\_Capital\\_Assessment.pdf](http://www.bma.bm/uploaded/268-090109_Revised_Framework_for_Regulatory_Capital_Assessment.pdf)

<sup>2</sup> <http://www.bis.org/publ/bcbs128.pdf>

needs to be strengthened, with particular emphasis on capital, liquidity and risk management.

0.3. In response, the BCBS has published a number of proposals for revising the Basel II framework, broadening the scope of international standards for the prudential supervision of banks. This work can be divided into two elements:

0.3.1. Basel 2.5 – in 2009, as an immediate response to the financial crisis, the BCBS published certain policy enhancements<sup>3</sup> to Basel II seeking to address flaws identified in the existing framework; and

0.3.2. Basel III – at the end of 2010 the BCBS agreed the key elements of a more comprehensive set of standards<sup>4</sup> which not only strengthen the capital adequacy and risk management provisions of the Basel II framework but which also introduce international prudential liquidity standards.

0.4. This Discussion Paper provides a summary of the Basel 2.5 and Basel III standards (focusing on provisions relevant to this jurisdiction) and seeks the views of Bermuda’s banks and other stakeholders with respect to future implementation in Bermuda.

0.5. Adoption of these new standards is important to protect the interests of depositors, the Bermuda financial system and the reputation of the Bermuda banking market and its participants. The incorporation of these standards,

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<sup>3</sup> See “Enhancements to the Basel II framework” ( July 2009), available at <http://www.bis.org/publ/bcbs157.pdf> - and “Revisions to the Basel II market risk framework” (July 2009) available at <http://www.bis.org/publ/bcbs158.pdf>.

<sup>4</sup> See “Basel III: A global regulatory framework for more resilient banks and banking systems” (June 2011), available at <http://www.bis.org/publ/bcbs189.pdf>, “Basel III: International framework for liquidity risk measurement, standards and monitoring” (December 2010), available at <http://www.bis.org/publ/bcbs188.pdf>

however, must be carefully implemented taking a number of considerations into account.

- 0.5.1. First, as was the case with Basel II, consideration must be given to areas where national discretion may be applied in adoption of the new standards. While one of the objectives of Basel III is to create a global level playing field (and limit opportunities for regulatory arbitrage) there remain several areas where national supervisors may apply discretion in implementation. Careful judgement will be required in applying such discretion to ensure that the Bermuda framework remains appropriate to local conditions while continuing to meet international best practice. (Areas where national discretion may be applied are highlighted throughout this paper and summarised in Annex 3.)
- 0.5.2. Second, the timetable for implementation must be agreed. Annex 1 sets out the proposed BCBS timetable, which provides for measured implementation encompassing transitional arrangements over several years and monitoring arrangements where appropriate. Caution is necessary given that, at the time of writing, while the key elements of the BCBS framework have been finalised certain elements remain to be agreed (e.g. capital buffers for Global Systemically Important Banks<sup>5</sup>) while other elements are to undergo a period of monitoring and may, as a result, be subject to further amendment in the future. It is not, therefore, possible to set out a precise implementation timetable at this point. In line with its implementation of Basel II, the Authority will not necessarily seek to be amongst the first wave of countries implementing Basel III. It would, however, want to ensure that implementation in Bermuda was not unduly delayed. Whatever timetable is ultimately set, the Authority and Bermuda's banks will have to begin the planning process at an early stage to ensure that the transition to Basel III is managed effectively.

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<sup>5</sup> While Bermuda is not home to a Global Systemically Important Bank, additional capital requirements for banks of domestic systemic importance may be considered – see section 1.29 to 1.32 of this paper.

0.5.3. While some Bermuda banks may be affected directly by only some of the new standards (as under Basel II, certain banks may not be required to report Risk-weighted Assets under the Market Risk rules for example), without question all Bermuda banks will be impacted by the proposals of Basel III. In mapping out a firm proposal for implementation it is important that all stakeholders understand the extent of any potential quantitative impact and the implications this may have for ongoing business models in addition to increased data requirements. The Authority will begin in 2012 to work with banks to identify the likely quantitative impact of implementation.

0.6. It should be noted that if adopted these amendments would apply at both consolidated (group) and unconsolidated (solo) bank level.

0.7. This paper summarises the key elements of Basel 2.5 and Basel III but does not seek to replicate the detailed provisions of the material issued by the BCBS (the reader is advised to read this material in conjunction with this paper). Interested stakeholders are encouraged to provide comment both on the specific questions posed throughout the paper (and summarised in Annex 2) and, more broadly, on any element of Basel 2.5 or Basel III.

0.8. This paper does not seek to present the provisions of Basel 2.5 and Basel III as two distinct sets of amendments, rather as one comprehensive group of amendments to the policy framework. Accordingly, the paper is set out in a consolidated thematic basis and highlights the following key elements:

**a) Revised Capital Framework –**

- Quality of capital is strengthened, with a focus on Core Equity Tier 1 capital (“CET1”), the elimination of Tier 3 and more prudent rules for regulatory adjustments and deductions.
- Revised minimum standards, with minimum regulatory requirements set at 4.5%, 6% and 8% of Risk-weighted Assets (“RWA”) for CET1, Tier 1 and Total Regulatory Capital respectively.

- Implementation of a 2.5% Capital Conservation Buffer.
- Implementation of a Countercyclical Buffer (up to maximum of 2.5%) to be applied as the risk of system wide stress increases and released during a stress period.
- Additional capital requirements for systemically important banks (“SIBs”).
- More prudent capital charges relating to Counterparty Credit Risk, central counterparties, securitisation, market risk and illiquid positions.
- The introduction of a 3% leverage ratio based on unweighted exposures, designed to constrain the build up of leverage.

**b) Pillar 2** – enhancements to the risk management guidance under Pillar 2.

**c) Liquidity** –

- Introduction of a Liquidity Coverage Ratio, designed to ensure a stock of liquid assets is maintained sufficient to withstand an acute 30-day stress scenario.
- Introduction of a Net Stable Funding Ratio, requiring stable funding and limiting reliance on short-term wholesale funding.
- Proposals for complementary liquidity monitoring tools.

**d) Pillar 3** – expansion of the existing market discipline and transparency rules under Basel II.

0.9. These proposals should be viewed in the broader context of the Authority’s efforts to promote high standards of risk management and corporate governance within Bermuda’s banks. While Pillar 1 of the Basel 2.5 and Basel III standards focuses on quantitative regulatory capital and liquidity requirements, the Authority is of the view that observance of quantitative regulatory prudential minima is only one, if important, element in a comprehensive framework. Equally important is the adoption within an

institution of a sound framework of governance and risk management under Pillar 2 and appropriate public disclosure under Pillar 3. In addition the Authority has sought to promote strengthened internal risk management practices with the publication of liquidity risk management principles in 2010<sup>6</sup> and has recently published a consultation paper setting out proposals for principles of sound corporate governance to be adopted by Bermuda's banks.

0.10. Responses should be sent to [policy@bma.bm](mailto:policy@bma.bm) by 29 February 2012.

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<sup>6</sup> See [http://www.bma.bm/uploaded/608-101216\\_Principles\\_for\\_Sound\\_Liquidity\\_Risk\\_Management\\_and\\_Supervision.pdf](http://www.bma.bm/uploaded/608-101216_Principles_for_Sound_Liquidity_Risk_Management_and_Supervision.pdf)

# 1. Revised Capital Framework

## Regulatory Capital

1.1. Under the BCBS proposals the types of instrument that qualify as regulatory capital should be tightened with a view to raising the quality of capital. A lesson of the financial crisis was that losses came out of banks' tangible common equity, and that Tier 2 and Tier 3 capital could not be used to absorb losses on a going concern basis. (In some cases government bailout packages were used to support distressed banks, protecting from loss not only depositors but also holders of non-common equity capital instruments.) Accordingly, the BCBS proposes a re-definition of regulatory capital that will require banks to hold a greater proportion of capital in the form of Common Equity Tier 1. The details are set out below.

1.2. Regulatory capital will consist of :

- Tier 1 Capital (going-concern capital)
  - CET1
  - Additional Tier 1
- Tier 2 Capital (gone-concern capital).

1.3. CET1 capital generally comprises:

- Common shares<sup>7</sup>
- Stock surplus/share premium resulting from the issue of instruments included as CET1
- Retained earnings
- Accumulated other comprehensive income and other disclosed reserves
- Common shares issued by consolidated subsidiaries of the bank and held by third parties (i.e. minority interest) that meet the criteria for inclusion in CET1 capital (see section 1.8); and

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<sup>7</sup> See Annex 5 of this paper for detailed criteria for classification as common shares for regulatory purposes.

- Regulatory adjustments applied in the calculation of CET1. Deductions from capital would generally be applied fully at the level of common equity (under our current rules these have been applied to aggregate regulatory capital).

Paragraphs 52 to 53 of the Basel III Capital Paper<sup>8</sup> set out detailed eligibility criteria.

- 1.4. The remainder of the Tier 1 capital base, known as Additional Tier 1 capital, must be comprised of instruments that are subordinated, have fully discretionary noncumulative dividends or coupons and have neither a maturity date nor an incentive to redeem. Innovative hybrid capital instruments with an incentive to redeem through features such as step-up clauses<sup>9</sup>, currently limited to 15% of the Tier 1 capital base, would be phased out [see Annex 6 of this paper and paragraphs 54 to 56 of the Basel III Capital Paper for detailed eligibility criteria].
- 1.5. The objective of Tier 2 is to provide loss absorption on a gone-concern basis. Paragraphs 57 to 61 of the Basel III Capital Paper set out the detailed eligibility criteria for Tier 2 capital.
- 1.6. There is one further requirement for qualification as Additional Tier 1 capital or Tier 2 capital<sup>10</sup> which is designed to ensure that all classes of capital instruments fully absorb losses at the point of non-viability before taxpayers could potentially be exposed to loss. Such capital instruments are required to have a provision for writing off or conversion to equity upon occurrence of the earlier of:

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<sup>8</sup> Basel III: A global regulatory framework for more resilient banks and banking systems - <http://www.bis.org/publ/bcbs189.pdf>

<sup>9</sup> A “step-up clause” makes provision for an increase in an instrument’s coupon rate at a future date or upon the occurrence of a future event.

<sup>10</sup> See BCBS Press Release 13 January 2011 <http://www.bis.org/press/p110113.pdf>

- a decision that a write-off, without which the firm would become non-viable, is necessary has been determined by the regulator; or
- a decision has been made to make a public sector injection of capital, or equivalent support, without which the firm would have become non-viable.

Instruments issued before the date of implementation that no longer qualify as Additional Tier 1 or Tier 2 capital will be phased out over ten years, initially capped at 90%, with the cap reducing by 10 percentage points in each subsequent year.

- 1.7. Tier 3 capital instruments – generally not issued by Bermuda banks – are eliminated.

### **Minority interests**

- 1.8. Minority interests, comprising Tier 1 and Tier 2 qualifying capital issued by consolidated subsidiaries, may be recognised as regulatory capital provided such instruments, if issued by the bank, meet all the criteria for classification as Tier 1 or Tier 2 and subject to a deduction relating to surplus capital attributable to third party investors. (See paragraphs 62 to 65 and Annex 3 of the Basel III Capital Paper for detailed rules.)

### **Regulatory adjustments and deductions**

- 1.9. There are a number of changes with respect to regulatory adjustments, the most significant perhaps being that these adjustments are now applied in the calculation of CET1, thus reducing the amount of CET1 that can be used to meet regulatory minimum standards.

### *Defined benefit pension fund assets and liabilities*

1.10. Defined benefit pension fund liabilities, as included on the balance sheet, are fully recognised in the calculation of CET1 (i.e. CET1 is not increased through derecognising these liabilities). For each defined benefit pension fund that is an asset on the balance sheet, the asset is deducted in the calculation of CET1 net of any associated deferred tax liability which would be extinguished if the asset should become impaired or derecognised under the relevant accounting standards. Assets in the fund to which the bank has unrestricted and unfettered access can, with supervisory approval, offset the deduction. Such offsetting assets are given the risk weight they would receive if they were owned directly by the bank.

### *Double counting*

1.11. A number of deductions are required to prevent double counting of capital within a banking group and throughout the banking sector as follows:

- Investments in own shares (treasury stock) are deducted;
- Investments in the capital of banking, financial and insurance entities outside the scope of regulatory consolidation where the bank holds less than 10% of the common equity are deducted;
- Reciprocal cross-holdings in the capital of banking, financial and insurance entities are deducted; and
- Significant investments (where the bank owns more than 10% of issued common equity or is an affiliate) in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation are deducted (subject to Threshold Deductions rules explained below).

***National discretion*** may be applied to allow banks to exclude temporarily from the above deduction requirement certain investments where these have been made in the context of resolving or providing financial assistance to reorganise a distressed institution. The Authority is minded to give due consideration to the use of such discretion in relevant circumstances.

### *Other deductions*

1.12. A number of other changes<sup>11</sup> include:

- The derecognition of cash flow hedge reserves in certain circumstances (IAS39 related)
- The deduction in respect of a shortfall of the stock of provisions to expected losses under the IRB approach
- The derecognition of gain on sale related to securitisation transactions
- The derecognition of unrealised gains and losses resulting from changes to the fair value of liabilities that are due to changes in the bank's own credit risk
- The deduction of Mortgage Servicing Rights (MSRs)
- The deduction of Deferred Tax Assets (DTAs)

### *Threshold Deductions*

1.13. Instead of full deduction the following items each receive limited recognition when calculating CET1 with recognition capped at 10% of the bank's common equity individually and 15% in aggregate:

- Significant investments in the common shares of unconsolidated financial institutions;
- MSRs; and
- DTAs (relating to temporary differences only).

The amount of the three items that are not deducted in the calculation of CET1 is risk-weighted at 250%.

### *Former deductions from capital*

1.14. The following items, which under Basel II are deducted from regulatory capital would receive a 1,250% risk weight:

- Certain securitisation exposures;
- Certain equity exposures under the PD/LGD approach;

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<sup>11</sup> These changes may be of limited applicability to Bermuda banks.

- Non-payment/delivery on non-DvP and non-PvP transactions; and
- Significant investments in commercial entities.

1.15. The detailed provisions for regulatory adjustments and deductions can be found in paragraphs 66 to 90 of the Basel III Capital Paper.

### **Limits and minima**

1.16. Under Basel III new higher regulatory minimum capital levels are set and applied at three levels as follows:

- CET1 must be at least 4.5% of RWA at all times.
- Tier 1 Capital must be at least 6.0% of RWA at all times.
- Total Capital (Tier 1 Capital plus Tier 2 Capital) must be at least 8.0% of RWA at all times.

N.B. Regulatory minima do not include Pillar 2 related add-ons or additional buffers. Please see Annex 4 for an illustration of how the components of capital are aggregated.

### **Transitional provisions**

1.17. Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital will be phased out over 10 years while new minima and deduction rules will also be phased in over time. Annex 1 sets out the timetable of phase-in arrangements proposed by the BCBS but note the comments in 0.5.2 relating to implementation in Bermuda.

<p><b>QUESTIONS: Regulatory Capital</b></p>
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<p>A: Do you agree that Bermuda should adopt the Basel III rules to amend the calculation of regulatory capital?</p>
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B: What practical issues do you foresee in structuring and issuing securities which would meet the new definition of regulatory capital?

C: Do you have any views on what would be an appropriate timetable for Bermuda to transition to the Basel III-based rules?

D: Do you believe there is a need to make any significant adaptations to the Basel III rules for the calculation of regulatory capital in their application in this jurisdiction? If so, what should these be?

## **Capital Conservation Buffer**

1.18. Basel III introduces a capital conservation buffer designed to ensure that banks build up and retain capital buffers outside periods of stress which can be drawn down as losses are incurred. A buffer of 2.5%, comprised of CET 1, is established above the regulatory minimum requirement, producing a target CET1 requirement of 7% (4.5%+2.5%) in normal circumstances. Capital distribution constraints (i.e. restriction on the payment of dividends and share buy-backs) would be imposed on a bank whose capital levels fell within this range.

1.19. Banks with CET1 ratios within certain bands are required to retain rather than distribute a percentage of earnings<sup>12</sup> in the subsequent financial year as shown in the table below.

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<sup>12</sup> Earnings are defined as distributable profits calculated prior to the deduction of elements subject to the restriction on distributions. Earnings are calculated after the tax which would have been reported had none of the distributable items been paid. As such, any tax impact of making such distributions are reversed out. Where a bank does not have positive earnings and has a CET1 ratio less than 7%, it would be restricted from making positive net distributions.

Individual bank minimum capital conservation standards	
CET1 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%

- 1.20. As indicated in the table, the constraints on the distribution of earnings increase as the buffer is used up. This reflects an expectation that banks' capital levels will from time to time fall into this range. The constraints for entering the range are therefore designed not to be so restrictive as to result in the range being viewed as establishing a new capital requirement. The Basel III provisions do attempt to recognise, however, that greater effort to rebuild buffers is required the more they have been depleted. Therefore, in the absence of raising capital in the private sector, the share of earnings retained by banks for the purpose of rebuilding their capital buffers increases the nearer their actual capital levels fall to the minimum capital requirement.
- 1.21. The Authority is likely to make use of the *national discretion*, on a case-by-case basis, to impose a time limit on banks operating within the buffer range. Banks should not choose in normal times to operate in the buffer range simply to increase competitiveness, hence the Authority would use its power to ensure that any bank rebuild its capital buffer over an appropriate timeframe.
- 1.22. Detailed provisions can be found in section III of the Basel III Capital Paper.

**QUESTIONS: Capital Conservation Buffer**

E: Is implementation of a capital conservation buffer requirement appropriate for Bermuda?

F: Do you agree with the suggested transitional arrangements?

## **Countercyclical Buffer**

- 1.23. Basel III also introduces a buffer designed to ensure that banking sector capital requirements take account of the macro-financial environment. The countercyclical buffer builds up capital defences where the risks of system-wide stress are growing and releases the capital during the stress period.
- 1.24. The countercyclical buffer can vary from 0 to 2.5% and when in place is treated as an extension of the capital conservation buffer.
- 1.25. Under this proposal regulators are required to monitor system-wide risk, which includes the assessment of build-ups of vulnerabilities, such as excessive credit growth, which entail adverse effects for the real economy. Based on its assessment the regulator would put in place a countercyclical buffer when warranted. The BCBS has identified the aggregate private sector credit-to-GDP gap as the primary indicator of risk build up.
- 1.26. Banks with credit exposures outside the jurisdiction would calculate a bank specific buffer as a weighted average of the buffer requirements that are being applied in jurisdictions to which they have credit exposure.

- 1.27. Detailed provisions can be found in section IV of the Basel III Capital Paper and in the BCBS paper “Guidance for National Authorities Operating the Countercyclical Capital Buffer” (December 2010)<sup>13</sup>.
- 1.28. Implementation of a countercyclical buffer would coincide with the introduction of the capital conservation buffer. The suggested implementation timetable can be found at Annex 1.

**QUESTIONS: Countercyclical Buffer**

G: Is implementation of a countercyclical capital buffer requirement appropriate for Bermuda?

H: If a countercyclical buffer requirement were to be implemented, would aggregate private sector credit-to GDP be the appropriate risk measure? What other measures might be appropriate for this jurisdiction?

**Add-on for Systemically Important Banks (SIBs)**

- 1.29. The BCBS has agreed on a set of measures applicable to Global SIBs. Additional loss absorbency requirements have been set ranging from 1% to 2.5%, depending on a bank’s systemic importance<sup>14</sup>. The requirement must be met with CET1 capital and is introduced in parallel with the Basel III capital conservation and countercyclical buffers.

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<sup>13</sup>See <http://www.bis.org/publ/bcbs187.pdf>

<sup>14</sup><http://www.bis.org/press/p110625.htm>

- 1.30. The assessment of systemic importance is based on five indicators: size, interconnectedness, lack of substitutability, global (cross-jurisdictional) activity and complexity.
- 1.31. While at present it is reasonable to assume that Bermuda is not home to any Global SIB, it does have banks that would qualify as Domestic SIBs on any reasonable definition. Such assessment, however, is likely to be based on factors that may also form part of the existing Pillar 2 capital add-on for Bermuda banks.
- 1.32. While acknowledging that the Global SIB measures were not designed for banks which pose purely domestic systemic risk, the Authority believes strongly that the importance of local banks to the Bermuda financial system and the potential threat a banking failure would pose to financial stability cannot be ignored in the Authority's regulatory risk assessment. There are, in addition, a number of features particular to Bermuda that need to be taken into account when assessing the appropriate level of capital for Bermuda's banks. These include the size of the sector and of some individual banks relative to the size of the economy and the absence of a central bank which can act as lender of last resort. The Authority plans to undertake further work in this area before putting forward specific proposals. As a general proposition, however, the Authority believes there is a strong case for requiring those banks which pose material systemic risk to Bermuda to hold additional capital. The Authority will, therefore, consider the need for an add-on to the minimum capital standards in its supervisory assessment process under Pillar 2, consistent with the final Global SIB methodology.

**QUESTIONS: SIBs**

I: Do you agree with the Authority's intended approach with respect to SIBs?

## Risk Coverage

### Counterparty credit risk

- 1.33. Basel III introduces measures to strengthen the capital requirements for counterparty credit exposures arising from a bank's derivatives, repo and securities financing activities<sup>15</sup>. The Basel III amendments are summarised below.
- 1.34. Under Basel III banks are subject to a capital charge for potential mark-to-market losses (i.e. credit valuation adjustment (CVA) risk) associated with the deteriorating credit-worthiness of a counterparty. While the Basel II standard covers the risk of a counterparty default, it does not address such CVA risk, which during the financial crisis was a greater source of losses than those arising from outright defaults. This charge applies irrespective of the type of approach used, i.e. the Internal Model Method (IMM)<sup>16</sup>, Standardised Method or Current Exposure Method (CEM)<sup>17</sup>.
- 1.35. Under the IMM, for CVA risk:
- Banks have to identify and manage exposures that give rise to “wrong way” risk<sup>18</sup> and a specific risk charge will be applicable;

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<sup>15</sup> It is likely that the impact of these changes, if implemented in Bermuda, would not be significant. At present counterparty credit risk is not a significant contributor to the overall risk assessment of the Bermuda banking sector. Moreover, the changes generally relate to more advanced, internal models based regulatory reporting not currently adopted by the Bermuda banking sector. Nevertheless some of these provisions, if implemented, may be applicable to certain institutions in the future as alternative reporting methodologies are adopted or business strategies evolve.

<sup>16</sup> Under the Internal Model Method, an institution may employ an internal model on the condition that it is subject to supervisory review, meets all of the requirements set out in section V of Annex 2.3 of the Handbook and is applied to all material exposures subject to a CCR-related capital charge, with the exception of long settlement transactions and immaterial exposures.

<sup>17</sup> Under the Current Exposure Method, institutions must calculate the current replacement cost by marking contracts to market, thus capturing the current exposure without any need for estimation, and then adding a factor to reflect the potential future exposure over the remaining life of the contract - see Annex 2.9 of the Handbook.

<sup>18</sup> Institutions are said to be exposed to "specific wrong-way risk" if future exposure to a specific counterparty is expected to be high when the counterparty's probability of default is also high. For example, a company writing put options on its own stock creates wrong-way exposures for the buyer that is specific to the counterparty.

- close out periods for certain portfolios are extended from 10 to 20 business days to better reflect market practice;
  - the capital requirement for counterparty credit risk must use stressed inputs; and
  - Counterparty Credit Risk management requirements, particularly those related to stress testing and backtesting models are enhanced.
- 1.36. Under the credit risk Internal Ratings Based Approach an asset correlation multiplier of 1.25 is used in the calculation of RWA to reflect correlation among large Financial Institutions.
- 1.37. A qualitative collateral management requirement is added to the Credit Risk Mitigation (CRM) requirements while supervisory haircuts applicable to securitisation collateral is doubled and resecuritised exposure are excluded from eligible financial collateral under the CRM Comprehensive Approach.
- 1.38. The detailed provisions can be found in paragraphs 97 to 117 of the Basel III Capital Paper.

**QUESTIONS: Counterparty Credit Risk**

J: Do you agree that the Counterparty Credit Risk amendments of Basel III should be incorporated into the Bermuda framework?

K: Should such amendments be considered for immediate or near-term implementation? If not, over what timeframe?

**Central counterparties**

- 1.39. To address the systemic risk arising from the interconnectedness of banks and other financial institutions through the derivatives markets, the BCBS is

supporting the efforts of the Committee on Payments and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) to establish strong standards for financial market infrastructures, including central counterparties. The capitalisation of bank exposures to central counterparties (CCPs) will be based in part on the compliance of the CCP with such standards, and will be finalised after a consultative process in 2011. A bank's collateral and mark-to-market exposures to CCPs meeting these enhanced principles will be subject to a low risk weight, proposed at 2%; and default fund exposures to CCPs will be subject to risk-sensitive capital requirements. These criteria will create incentives for banks to move exposures to such CCPs. The Authority will continue to monitor the progress of the BCBS policy development in this area.

**QUESTIONS: CCP**

L: Do you agree that the CCP amendments of Basel III should be incorporated into the Bermuda framework?

**Revisions to External Credit Assessment Institution (ECAIs) Eligibility Criteria**

1.40. Another way in which the BCBS have sought to strengthen risk coverage is through mitigating the reliance on external ratings in the Basel II framework. One mitigating measure introduced by Basel III is the incorporation of key elements of the IOSCO *Code of Conduct Fundamentals for Credit Rating Agencies*<sup>19</sup> into the Committee's eligibility criteria for the use of external credit ratings.

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<sup>19</sup> See <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD180.pdf>

1.41. If implemented in this jurisdiction the eligibility criteria for recognition by the Authority as an External Credit Assessment Institution, in section B (ii) of the Handbook, would be amended but it is anticipated that existing approved ECAs would continue to be eligible. The detailed provisions can be found in Part II B of the Basel III Capital Paper.

### **Securitisation Framework**

1.42. As part of Basel 2.5 the BCBS made a number of proposals for the enhancement of Pillar 1 in the area of securitisation and re-securitisation. The detailed provisions can be found on pages 1 to 8 of the Basel 2.5 Main Paper.

### **Revisions to the Market Risk Framework**

1.43. The BCBS have made several amendments to the Market Risk Framework to address gaps identified in the Basel II rules.<sup>20</sup>

1.44. The changes to the market risk rules are as follows:

- Under the Standardised Measurement Method specific risk of securitisation positions held in the trading book is to be calculated according to the banking book method.
- Under the Internal Models Approach, an additional ‘stressed value-at-risk’ component is added to the capital requirement.
- Under the Internal Models Approach an additional capital charge for default risk and migration risk in positions subject to a capital charge for specific

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<sup>20</sup> It should be noted that the Authority will continue to permit institutions for which the total market risk component remains at de minimis levels (as defined in Annex 2.1 of the Handbook), to be exempt from reporting under the Market Risk Framework and to report all their positions under the Credit Risk Framework. At present all Bermuda banks are exempt from reporting under the Market Risk Framework on this basis and, therefore, the incorporation of the Basel amendments in the local policy framework would have no immediate impact on the local banking sector.

interest rate risk, that are incremental to the risks captured by the VaR-based calculation, is introduced.

- 1.45. The detailed amendments to the market risk rules can be found in the Basel 2.5 Market Risk Paper.

**QUESTIONS: Revisions to the Market Risk Framework**

M: Do you agree that the revisions should be adopted into the Bermuda market risk framework?

N: Do you agree that the exemption from reporting under the market risk framework where the market risk component remains at de minimis levels should continue to be available?

**Prudent valuation guidance**

- 1.46. The BCBS have made additional revisions with respect to the regulatory treatment of illiquid positions. The existing prudent valuation guidance of Basel II (interpreted in Annex 2.1 of the Handbook) which currently apply only to the trading book are amended to also apply to the valuation of positions in the banking book accounted for at fair value.

- 1.47. A framework for prudent valuation practices should include at a minimum:

- Systems and controls to assure management of valuation prudence and reliability
- Valuation methodologies
  - Marking to market as a general rule.
  - Marking to model when this is not possible or does not reflect a true economic value of the position

- Incorporating independent price verification
- Procedures for consideration of valuation adjustments.

1.48. The guidance is not intended to require banks to change valuation procedures for financial reporting purposes but requires banks to consider adjustment for regulatory reporting purposes to reflect any current illiquidity. (Detailed rules are in Section VIII of the Basel 2.5 Market Risk paper.)

**QUESTIONS: Prudent valuation guidance**

O: Do you agree that the prudent valuation guidance should be extended to cover the positions fair valued in the banking book?

P: What are the implications of differences between regulatory and financial reporting values?

**Leverage Ratio**

1.49. Basel III proposes the introduction of a minimum regulatory leverage ratio to supplement risk-based capital requirements. The Basel II risk-based capital requirements failed to prevent the build-up of excessive on- and off-balance sheet leverage in the global banking system prior to the financial crisis. The objective of the leverage ratio is to constrain leverage build up while providing a simple, transparent “backstop” measure to reinforce risk-based requirements.

1.50. The leverage ratio would be calculated as follows:

## Total Tier 1 Capital / Total Exposure

- 1.51. Total Tier 1 Capital would be calculated under the same rules applicable to the calculation of regulatory capital under the risk-based model.
- 1.52. Total Exposure includes both on-balance sheet exposures (generally measured following the accounting measure of exposure) and off-balance sheet exposures, generally as defined under existing Basel II rules and subject to a credit conversion factor of 100%) and generally measured following the accounting measure of exposure. (Detailed calculation rules are set out in paragraphs 157 to 164 of the Basel III Capital Paper).
- 1.53. The leverage ratio would be calculated quarterly based on the average of the monthly leverage ratio over the quarter.
- 1.54. The BCBS have yet to fully commit to the implementation of a leverage ratio and have announced a lengthy transitional period. During this period the following will be monitored and considered:
- Whether the calibration of the minimum requirement is appropriate. At present a minimum of 3% is proposed.
  - Whether or not Tier 1 Capital (as opposed to Core Tier 1 Capital or Total Regulatory Capital) is the appropriate numerator in the leverage ratio.
- 1.55. The Authority will wait until the BCBS has finalised its guidance in this area before determining how a leverage ratio should be incorporated into Bermuda's banking capital framework. The Authority is, however, conscious that the Bermuda timetable for implementation must provide adequate time to incorporate locally any international policy developments and to monitor impact of implementation in the jurisdiction.

<b>QUESTIONS: Leverage ratio</b>
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Q: Do you agree that Bermuda should adopt a leverage ratio based on the Basel III rules?

R: Do you agree with the proposed timetable for transitioning to formal adoption of the leverage ratio?

S: Do you believe there is a need to make any significant adaptations to the Basel III rules for the calculation of the leverage ratio in their application in this jurisdiction? If so, what should these be?

## 2. Pillar 2

2.1. Basel 2.5 provides additional guidance intended to supplement Basel II Pillar 2 with respect to institution's firm-wide risk management and capital planning processes. Generally, the Authority's existing guidance on Pillar 2 in the Handbook was wider in scope than Basel II and therefore much of this additional guidance is already covered therein or in the wider policy framework. While there is no intention to publish an updated Pillar 2 policy until 2013, institutions' observance of principles in the Authority's wider policy framework (including principles relating to corporate governance, which the Authority plans to promulgate in 2012) will form part of CARP assessments going forward. The likely policy amendments arising from the Pillar 2 guidance of Basel 2.5 are considered in the following paragraphs.

### **Firm-wide risk oversight**

2.2. Under current rules<sup>21</sup> the Authority assesses the robustness of the governance and capital planning arrangements of an institution as part of the Supervisory Review Process (SRP). Basel 2.5 gives additional supervisory guidance with respect to the enhancement of firm-wide risk oversight. This guidance is entirely consistent with the BCBS' "Principles for enhancing corporate governance" published in October 2010, upon which the Authority's aforementioned proposals for principles of sound corporate governance are based. To avoid unnecessary duplication in the policy framework the Authority's initial thinking is simply to amend the Pillar 2 framework, making an assessment of an institution's adoption of the corporate governance principles part of the SRP.

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<sup>21</sup> Paragraph 27 of Part 3 of the Handbook

### **Specific risk management topics**

2.3. Basel 2.5 also offers additional guidance with respect to the assessment of specific risks which is more comprehensive than that offered within Basel II. The Authority's policy framework already addresses a number of these risks and therefore adoption of Basel 2.5 would not require wholesale amendment. The risk areas and the Authority's initial thoughts on adoption are set out below:

- 2.3.1. *Risk concentration* - the existing Handbook already requires institutions to have in place effective internal policies, systems and controls to identify, measure, monitor, and control their material risk concentrations and consider these within the CARP. Minimal amendment to the Handbook would be required.
- 2.3.2. *Off-balance sheet exposures and securitisation* – the existing framework addresses the need to address off-balance sheet and securitisation risk exposures to a bank which are not already captured under Pillar 1. It is considered that minimal amendment may be made to the Pillar 2 framework to incorporate the similar provisions of Basel 2.5.
- 2.3.3. *Reputational risk and implicit support* – While the Handbook Pillar 2 provisions address reputational risk, it is not considered in relation to the issue of implicit support (i.e. where a firm goes beyond contractual obligation to support sponsored securitisations and off- balance sheet vehicles). Appropriate amendment to the Handbook would be required to ensure consistency with Basel 2.5.
- 2.3.4. *Valuation practices* – Basel 2.5 expects banks to have adequate governance structures and control processes for calculating fair value of exposures for risk management and financial reporting purposes. As this is not a feature of the current framework amendment would be required to incorporate these provisions.

2.3.5. *Liquidity risk management and supervision* – Basel 2.5 highlights the “Principles for Sound Liquidity Risk Management and Supervision”<sup>22</sup> published in September 2008. The Authority’s liquidity risk management principles published in 2010 are closely based on this document and amendment of the Pillar 2 framework to incorporate a reference to these principles would appear appropriate.

2.3.6. *Sound stress testing practices* – Basel 2.5 requires institutions to strengthen stress testing practices in line with the BCBS May 2009 paper “Principles for sound stress testing practices”<sup>23</sup>. The Authority’s current Handbook and stress testing guidelines<sup>24</sup> are already in line with the Basel principles, but set out guidelines on stress and scenario testing, applied to the specificities of the Bermuda market. It is not felt that any amendment would be required to the policy framework in respect of this area.

2.3.7. *Sound compensation practices* – The provisions in relation to compensation practices in Basel 2.5 are covered in more detail in the Basel Corporate Governance Principles which the Authority has incorporated in its own corporate governance policy. Again to avoid unnecessary duplication in the policy framework the Authority suggests a simple amendment to the Pillar 2 framework, referencing these principles.

2.4. The relevant detailed provisions of Basel 2.5 can be found in paragraphs 27 to 94 of the Basel 2.5 Main Paper.

#### *Assessment of credit risk*

2.5. Basel III, as part of an attempt to mitigate the reliance on external ratings of Basel II, requires banks as part of their Pillar 2 assessments of credit risk to

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<sup>22</sup> See [http://www.bma.bm/uploaded/608-101216\\_Principles\\_for\\_Sound\\_Liquidity\\_Risk\\_Management\\_and\\_Supervision.pdf](http://www.bma.bm/uploaded/608-101216_Principles_for_Sound_Liquidity_Risk_Management_and_Supervision.pdf)

<sup>23</sup> See <http://www.bis.org/publ/bcbs155.pdf>

<sup>24</sup> See [http://www.bma.bm/uploaded/483-100219\\_Guidelines\\_on\\_Stress\\_Testing\\_for\\_the\\_Bermuda\\_Banking\\_Sector.pdf](http://www.bma.bm/uploaded/483-100219_Guidelines_on_Stress_Testing_for_the_Bermuda_Banking_Sector.pdf)

consider whether weights applied under the Standardised Approach are appropriate for the exposures' inherent risk. Where the risk is significantly higher than that implied by the risk weighting under Pillar 1 a bank should consider additional capital needs under Pillar 2.

**QUESTIONS: Pillar 2**

T: Do you agree with the Authority's suggested approach to Pillar 2 guidance?

U: Are there any other areas of Pillar 2 for which you think additional guidance from the Authority might be helpful?

### 3. Liquidity

3.1. Prior to the publication of the Basel III rules there were no internationally harmonised standards in the area of liquidity, with Basel II focusing primarily on capital. During the financial crisis many international banks, despite adequate capital levels, experienced difficulties in maintaining adequate liquidity. The BCBS has responded by seeking to promote liquidity risk management through its Principles for Sound Liquidity Risk Management and Supervision<sup>25</sup> (adopted into the Bermuda policy framework in 2010<sup>26</sup>). In addition, with a view to promoting an international level playing field, two complementary minimum liquidity standards have been devised as part of Basel III: the Liquidity Coverage Ratio and the Net Stable Funding Ratio.

#### Liquidity Coverage Ratio (LCR)

3.2. The LCR is intended to promote resilience to potential liquidity disruptions over a thirty day horizon and ensure that global banks have sufficient unencumbered, high quality liquid assets to offset the net cash outflows encountered under an acute short term stress scenario. The LCR ratio must be maintained at or above 100%.

3.3. The LCR is calculated as follows:

$$\frac{\text{Stock of high-quality liquid assets}}{\text{Total net cash outflows over the next 30 calendar days}} \geq 100\%$$

#### Stock of high-quality liquid assets

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<sup>25</sup> See [www.bis.org/publ/bcbs144.htm](http://www.bis.org/publ/bcbs144.htm)

<sup>26</sup> See [http://www.bma.bm/uploaded/608-101216\\_Principles\\_for\\_Sound\\_Liquidity\\_Risk\\_Management\\_and\\_Supervision.pdf](http://www.bma.bm/uploaded/608-101216_Principles_for_Sound_Liquidity_Risk_Management_and_Supervision.pdf)

3.4. In addition to a set of characteristics and operational requirements (set out in paragraphs 22 to 33 of the Basel III Liquidity Paper) the BCBS also defines high-quality liquid assets into two categories: **Level 1 Assets** which can be included without limit and **Level 2 Assets** which can only comprise up to 40% of the stock.

3.5. **Level 1 Assets** comprise:

3.5.1. Cash

3.5.2. Central bank reserves (not applicable in Bermuda)

3.5.3. Marketable securities representing claims on or claims guaranteed by sovereigns, central banks, non-central government PSEs, the Bank for International Settlements, the International Monetary Fund, the European Commission, or multilateral development banks. Claims must be 0% risk-weighted under Basel II (standardised approach), traded in a deep, liquid market, be proven as a source of liquidity in stressed markets and not be an obligation of a financial institution.

3.5.4. In the case of non 0% risk-weighted sovereigns, sovereign or central bank debt securities issued in domestic currency (or in foreign currencies to the extent that holdings match the currency needs of the bank's operations in that jurisdiction).

3.6. **National discretion** - Level 1 assets can comprise an unlimited share of the pool, are held at market value and are not subject to a haircut under the LCR. However, national supervisors may wish to require haircuts for Level 1 securities based on, among other things, their duration, credit and liquidity risk, and typical repo haircuts. At this stage the Authority has not yet taken a view on this.

3.7. **Level 2 Assets** are subject to a minimum 15% haircut to current market value and comprise:

3.7.1. Marketable securities representing claims on or claims guaranteed by sovereigns, central banks, non-central government PSEs or multilateral development banks that satisfy all of the following conditions. Claims must be 20% risk-weighted

- under Basel II (standardised approach), traded in a deep, liquid market, be proven as a source of liquidity in stressed markets and not be an obligation of a financial institution.
- 3.7.2. Corporate bonds and covered bonds, not issued by a financial institution, with a credit rating of at least AA-, traded in a deep, liquid market and proven as source of liquidity in stressed markets.
- 3.8. *National discretion* - Level 2 assets are subject to a minimum 15% haircut but the national supervisor may apply a higher haircut percentage. At this stage the Authority has not yet taken a view on this.
- 3.9. The BCBS make available additional discretionary treatments for jurisdictions which may have an insufficient supply of liquid assets in their domestic currency. Supervisors will be permitted to choose to allow banks that evidence a shortfall of Level 1 assets in the domestic currency to hold liquid assets in a currency that does not match the currency of the associated liquidity risk provided that the resulting mismatch is justifiable and controlled within limits agreed by the supervisor. There is also an option to allow a higher proportion of domestic currency Level 2 assets in the total stock of liquid assets subject to a higher haircut.
- 3.10. *National discretion* – as an alternative to the above treatments, given the nature of the relationship between the Bermuda dollar and the US Dollar, there is an argument for permitting US Dollar assets to be fully eligible as Level 1 assets in the Bermuda interpretation of the LCR calculation (a similar approach to that taken under the current framework).

**Total net cash outflows over the next 30 calendar days**

- 3.11. The term total net cash outflows is defined as the total expected cash outflows minus total expected cash inflows in the specified stress scenario

for the subsequent 30 calendar days. Total expected cash outflows are calculated by multiplying the outstanding balances of various categories or types of liabilities and off-balance sheet commitments by the rates at which they are expected to run off or be drawn down during an acute stress scenario. Total expected cash inflows are calculated by multiplying the outstanding balances of various categories of contractual receivables by the rates at which they are expected to flow in under the stress scenario up to an aggregate cap of 75% of total expected cash outflows.

3.12. Respective assumed run-off and flow-in rates are described in detail in Annex 1 and paragraphs 54 to 118 of the Basel II Liquidity Paper. The Authority is, however, minded to apply the following approach with respect to certain discretions as detailed below.

3.12.1. **National Discretion – Higher run-off rates** – Generally, the run-off rates for retail deposits set out in Basel III are minimum floors, with higher run-off rates established at the discretion of individual jurisdictions as appropriate to capture depositor behaviour in a period of stress in each jurisdiction. In addition supervisory authorities are expected to develop additional buckets with higher run-off rates as necessary to apply to classes of potentially less stable retail deposits (e.g. internet deposits, uninsured deposits, high value deposits etc.) subject to a minimum run-off rate of 10%. The Authority would need to consider the appropriate application of this discretion in implementing the LCR framework.

3.12.2. **National Discretion – Small Businesses depositors** - Unsecured wholesale funding provided by small business customers is treated the same way as retail deposits for the purposes of the LCR. It is likely that, as opposed to adopting the

Basel III definition, in defining “small business” the Authority would look to the definition used in the deposit insurance framework<sup>27</sup>.

3.12.3. **National Discretion - Other contingent funding obligations** – these obligations, which may be either contractual or non-contractual (and which are defined in paragraphs 100 to 103 of the Basel III Liquidity paper), are not attributed a minimum run-off rate. The national supervisor should work with institutions to determine the liquidity risk impact of such contingent liabilities and the required off-setting stock of liquid assets. The Authority would consider the liquidity treatment of such obligations on a case-by- case basis.

### **Net Stable Funding Ratio (NSFR)**

3.13. 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. The ratio must be greater than 100%.

3.14. The NSFR is calculated as follows:

$$\frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} > 100\%$$

#### **Available amount of stable funding**

3.15. Available stable funding (ASF) is defined as the total amount of a bank’s:

- capital;

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<sup>27</sup> A company that is registered in the Register of Small Businesses maintained by the Bermuda Small Business Development Corporation under the Bermuda Small Business Corporation Act 1980.

- preferred stock with maturity equal to or greater than one year;
- liabilities with effective maturities of one year or greater;
- that portion of non-maturity deposits and/or term deposits with maturities of less than one year that would be expected to stay with the institution for an extended period in an idiosyncratic stress event; and
- the portion of wholesale funding with maturities of less than a year that is expected to stay with the institution for an extended period in an idiosyncratic stress event.

3.16. Table 1 of the Basel III Liquidity Paper (page 27) further defines the components of ASF and weighting factors to be applied in calculating an institution's total amount of available stable funding under the standard.

### **Required amount of stable funding**

3.17. The amount of stable funding is to be measured using supervisory assumptions on the broad characteristics of the liquidity risk profiles of an institution's assets, off-balance sheet exposures and other selected activities. The required amount of stable funding is calculated as the sum of the value of the assets held and funded by the institution, multiplied by a specific required stable funding (RSF) factor assigned to each particular asset type, added to the amount of off-balance sheet activity (or potential liquidity exposure) multiplied by its associated RSF factor. The RSF factor applied to the reported values of each asset or off-balance sheet exposure is the amount of that item that supervisors believe should be supported with stable funding. Assets that are more liquid and more readily available to act as a source of extended liquidity in the stressed environment identified above receive lower RSF factors (and require less stable funding) than assets considered less liquid in such circumstances and, therefore, require more stable funding. The RSF factors assigned to various types of assets are parameters intended to approximate the amount of a particular asset that

could not be monetised through sale or use as collateral in a secured borrowing on an extended basis during a liquidity event lasting one year. Under this standard such amounts are expected to be supported by stable funding.

- 3.18. Table 2 of the Basel III Liquidity Paper (page 29 - 30) further defines the components of RSF and weighting factors to be applied in calculating an institution's total amount of required stable funding under the standard.

### **Reporting currency**

- 3.19. It is expected under Basel III that the LCR and NSFR will be met and reported in a single common currency but banks are also expected to be able to meet their liquidity needs in each currency and maintain high-quality liquid assets consistent with the distribution of their liquidity needs by currency. In addition, banks and supervisors are expected to monitor the LCR in significant currencies, to allow the tracking of potential currency mismatch issues. In implementing the LCR in Bermuda the Authority would need to discuss the significance of exposures to currencies, and any related reporting requirements, with individual institutions (see **Monitoring Tools** section below).

### **Reporting frequency**

- 3.20. The LCR is intended to be reported on a monthly basis while the NSFR would be reported quarterly.

### **Transitional provisions**

- 3.21. The BCBS has proposed that the LCR and NSFR be subject to observation periods prior to implementation. During the observation period the BCBS expects institutions to begin reporting and intends to monitor the impact of the standards on institutions and address outstanding specific issues such as

the development of additional criteria for Level 2 asset eligibility (reducing reliance on external credit ratings). At the latest, the BCBS would make any revisions to the LCR by mid-2013 and to the NSFR by mid-2016.

3.22. Given the above approach of the Basel Committee there is an element of uncertainty as to the final form of the liquidity measures. The Authority will monitor closely any new developments from Basel but at the same time work must begin in the jurisdiction to understand the impact of the new global standards and institutions' ability to measure and meet them.

3.23. Prior to the beginning of a formal observation period the Authority will begin a preliminary quantitative impact study in an effort to gain an initial perspective on the impact of the two new standards and also to identify at an early stage any data or other reporting challenges which might arise. This study will take place in mid to late 2013 and will be based on current Basel III rules. Institutions will be asked to participate on a best effort basis.

## **Monitoring Tools**

3.24. Basel III outlines several metrics which are designed to be used as consistent monitoring tools, complementing the standards. Five metrics are outlined:

### *Contractual maturity mismatch*

3.24.1. This metric would measure contractual cash and security inflows and outflows from all on- and off-balance sheet items, mapped to defined time bands based on their respective maturities. This approach is of course the basis of the current regulatory standard in Bermuda, but the Basel III basis of calculation is not entirely consistent with that currently in place in this jurisdiction (e.g. no behavioural assumptions are made). The Authority recognises the value of this

metric which addresses limitations in the LCR standard (the tracking of liquidity mismatches within and over a 30-day period) and will likely amend the current mismatch reporting framework at the same time as the introduction of the LCR. At this point the mismatch reporting would transition from a liquidity standard to a monitoring tool.

#### *Available unencumbered assets*

3.24.2. This metric measures available unencumbered assets that are marketable as collateral in secondary markets. A bank is to report the amount, type and location of available unencumbered assets that could serve as collateral for secured borrowing in secondary markets at prearranged or current haircuts at reasonable costs. It is likely that the Authority would link this metric to the contractual maturity mismatch reporting, allowing this to be treated as a potential source of cash inflow.

#### *Concentration of funding*

3.24.3. This metric is meant to identify significant sources of wholesale funding which if withdrawn could trigger liquidity problems. The metric gathers data on the largest funding liabilities sourced from each significant counterparty and each significant product/instrument. Basel III identifies a significant counterparty and a significant instrument/product as amounting in aggregate to more than 1% of a bank's total balance sheet. The current regime already addresses to some extent funding concentration through the large depositor reporting. In adopting this monitoring tool the current regime would require augmentation particularly in the addition of significant product/instrument reporting. Clear categories of product and instrument may need to be agreed.

#### *LCR by significant currency*

3.24.4. Under Basel III a currency is considered "significant" if the aggregate liabilities denominated in that currency amount to 5% or more of the bank's total liabilities. This metric not designed to be a standard and therefore the Authority would need

to agree with each institution both the currencies for which monitoring may be required and whether minimum monitoring ratios, at which the Authority should be alerted, would be set.

#### *Market-related monitoring tools*

3.24.5. Basel II also considers a number of monitoring tools available to the supervisor based on market data. The Authority will consider application of such tools but recognises that there may be less bank specific data for Bermuda banks as opposed that available for major, internationally active banks.

3.25. In addition, Basel III suggests that supervisors may need to supplement the above framework by using additional tools and metrics tailored to help capture elements of liquidity risk specific to their jurisdictions. At present the Authority has no plans to add additional tools but reserves the right to do so in the future where deemed necessary. It is hoped that through the appropriate tailoring of the above metrics that a monitoring framework appropriate to the jurisdiction can be designed.

### **Scope**

3.26. It should be noted that the LCR, NSFR and monitoring tools have been designed to apply at the consolidated level. Currently regulatory liquidity reporting in this jurisdiction applies only to the Bermuda bank. It is the Authority's initial intention to apply the new liquidity requirements at both the consolidated and unconsolidated level.

3.27. The above section on liquidity provides a high-level summary of the liquidity provisions of Basel III. Interested parties should consult the Basel III Liquidity Paper for full, detailed provisions.

**QUESTIONS: Liquidity**

**Liquidity Coverage Ratio (LCR)**

V: Do you agree that Bermuda should adopt the Basel III rules to introduce the LCR regulatory standard?

W: Do you agree that qualifying USD assets should count in full as level 1 assets under the LCR? If not, what alternative approaches might be used to address the issue of limited liquid BMD denominated assets?

X: Are there classes of asset for which a haircut higher than the Basel III minimum may be appropriate?

Y: Which categories of deposit may require a run-off assumption higher than the Basel III minimum?

Z: Do you agree with the suggested approach to defining Small Business Depositors?

**Net Stable Funding Ratio (NSFR)**

AA: Do you agree that Bermuda should adopt the Basel III rules to introduce the NSFR regulatory standard?

**Monitoring tools**

AB: Do you agree with the Authority's intended approach to the implementation of monitoring tools?

**General**

AC: Would the implementation of the Basel III liquidity rules present significant data challenges to your institution?

AD: Do you agree with the suggested timetable for transitioning to the Basel III-based rules?

AE: Do you believe there is a need to make any significant adaptations to the Basel III rules for the calculation of regulatory liquidity standards in this jurisdiction? If so, what should these be?

## 4. Pillar 3 and Public Disclosure

4.1. The BCBS has made several recommendations to address weaknesses in the existing Pillar 3 guidance. In addition public disclosures, which may not specifically be required to compute capital requirements under Pillar 1, but which help market participants to better understand an institution's overall risk profile continue to be a key element of the BCBS policy framework. Augmented Pillar 3 requirements and additional public disclosures are highlighted below.

### *Regulatory Capital*

- 4.2. To help improve transparency of regulatory capital and improve market discipline, under Basel III banks are required to disclose the following:
- a full reconciliation of all regulatory capital elements back to the balance sheet in the audited financial statements;
  - separate disclosure of all regulatory adjustments and threshold deductions (see section 1);
  - a description of all limits and minima, identifying the elements of capital (what is a negative element of capital?) to which the limits and minima apply;
  - a description of the main features of capital instruments issued;
  - banks which disclose ratios involving components of regulatory capital (e.g. "Equity Tier 1", "Core Tier 1" or "Tangible Common Equity" ratios) must accompany such disclosures with a comprehensive explanation of how these ratios are calculated.
  - Banks are also required to make available on their websites the full terms and conditions of all instruments included in regulatory capital.

*Countercyclical buffer*

- 4.3. Under Basel III countercyclical buffer requirements must be publicly disclosed in the same manner as minimum capital requirements.

*Securitisation disclosure*

- 4.4. Basel 2.5 introduces additional disclosure with respect to securitisation exposures. It is unlikely that this change will impact significantly the disclosures of Bermuda banks. The details of the proposed changes to Tables 9 and 7 (Tables 8 and 6 in the Handbook) are set out in the Appendix to the Basel 2.5 Main Paper.

*Market risk disclosure*

- 4.5. Basel 2.5 introduces additional market risk disclosure related to the Pillar 1 changes detailed in section 1 of this paper. This change will not impact the disclosures of Bermuda banks until such time as reporting is made under the Market Risk Framework. The details of the proposed changes to Tables 10 and 11 (Tables 9 and 10 in the Handbook) are set out in Part VII of the Basel 2.5 Market Risk Paper.

*Leverage ratio*

- 4.6. Under Basel III the leverage ratio must also be publicly disclosed.

**Transition**

- 4.7. Generally speaking the Authority favours disclosure at the point that related rules are implemented within the Bermuda regulatory framework.

**QUESTIONS: Pillar 3**

AF: Do you agree with the Authority's suggested approach to Pillar 3 implementation?

## Annex 1 - BCBS Timetable

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Leverage Ratio - BCBS</b>	Supervisory Monitoring		Parallel Run 1 Jan 2013 to 1 Jan 2017 starts 1 Jan 2015			Disclosure		Migration to Pillar 1				
<b>Minimum Common Equity Capital Ratio - BCBS</b>			3.50%	4.00%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
<b>Capital Conservation Buffer - BCBS</b>						0.625%	1.25%	1.875%	2.50%	2.50%	2.50%	2.50%
<b>Minimum common equity plus capital conservation buffer - BCBS</b>			3.50%	4.00%	4.50%	5.125%	5.75%	6.375%	7%	7%	7%	7%
<b>Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials ) - BCBS</b>				20%	40%	60%	80%	100%	100%	100%	100%	100%
<b>Minimum Tier 1 Capital - BCBS</b>			4.50%	5.50%	6%	6%	6%	6%	6%	6%	6%	6%
<b>Minimum Total Capital - BCBS</b>			8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
<b>Minimum Total Capital plus conservation buffer - BCBS</b>			8%	8%	8%	8.625%	9.25%	9.875%	10.50%	10.50%	10.50%	10.50%
<b>Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital - BCBS</b>			Phased out over 10 year horizon beginning 2013									
<b>Enhanced risk coverage</b>	Implemented											
<b>Pillar 2 Amendment</b>												
<b>Pillar 3 Amendment</b>												
<b>Liquidity coverage ratio - BCBS</b>	Observation period begins				Introduce minimum standard							
<b>Net stable funding ratio - BCBS</b>	Observation period begins							Introduce minimum standard				

## **Annex 2 - Summary of discussion points/questions**

### **Regulatory Capital**

A: Do you agree that Bermuda should adopt the Basel III rules to amend the calculation of regulatory capital?

B: What practical issues do you foresee in structuring and issuing securities which would meet the new definition of regulatory capital?

C: Do you have any views on what would be an appropriate timetable for Bermuda to transition to the Basel III-based rules?

D: Do you believe there is a need to make any significant adaptations to the Basel III rules for the calculation of regulatory capital in their application in this jurisdiction? If so, what should these be?

### **Capital Conservation Buffer**

E: Is implementation of a capital conservation buffer requirement appropriate for Bermuda?

F: Do you agree with the suggested transitional arrangements?

### **Countercyclical Buffer**

G: Is implementation of a countercyclical capital buffer requirement appropriate for Bermuda?

H: If a countercyclical buffer requirement were to be implemented, would aggregate private sector credit-to GDP be the appropriate risk measure? What other measures might be appropriate for this jurisdiction?

**Systemically Important Banks (SIBs)**

I: Do you agree with the Authority's intended approach with respect to SIBs?

**Counterparty Credit Risk**

J: Do you agree that the counterparty credit risk amendments of Basel III should be incorporated into the Bermuda framework?

K: Should such amendments be considered for immediate or near-term implementation? If not, over what timeframe?

**Central Counterparty (CCP)**

L: Do you agree that the CCP amendments of Basel III should be incorporated into the Bermuda framework?

**Revisions to the Market Risk Framework**

M: Do you agree that the revisions should be adopted into the Bermuda market risk framework?

N: Do you agree that the exemption from reporting under the market risk framework where the market risk component remains at de minimis levels should continue to be available?

**Prudent valuation guidance**

O: Do you agree that the prudent valuation guidance should be extended to cover the positions fair valued in the banking book?

P: What are the implications of differences between regulatory and financial reporting values?

**Leverage ratio**

Q: Do you agree that Bermuda should adopt a leverage ratio based on the Basel III rules?

R: Do you agree with the proposed timetable for transitioning to formal adoption of the leverage ratio?

S: Do you believe there is a need to make any significant adaptations to the Basel III rules for the calculation of the leverage ratio in their application in this jurisdiction? If so, what should these be?

**Pillar 2**

T: Do you agree with the Authority's suggested approach to Pillar 2 guidance?

U: Are there any other areas of Pillar 2 for which you think additional guidance from the Authority might be helpful?

**Liquidity Coverage Ratio (LCR)**

V: Do you agree that Bermuda should adopt the Basel III rules to introduce the LCR regulatory standard?

W: Do you agree that qualifying USD assets should count in full as level 1 assets under the LCR? If not, what alternative approaches might be used to address the issue of limited liquid BMD denominated assets?

X: Are there classes of asset for which a haircut higher than the Basel III minimum may be appropriate?

Y: Which categories of deposit may require a run-off assumption higher than the Basel III minimum?

Z: Do you agree with the suggested approach to defining Small Business Depositors?

**Net Stable Funding Ratio (NSFR)**

AA: Do you agree that Bermuda should adopt the Basel III rules to introduce the NSFR regulatory standard?

**Monitoring tools**

AB: Do you agree with the Authority's intended approach to the implementation of monitoring tools?

**Liquidity - General**

AC: Would the implementation of the Basel III liquidity rules present significant data challenges to your institution?

AD: Do you agree with the suggested timetable for transitioning to the Basel III based rules?

AE: Do you believe there is a need to make any significant adaptations to the Basel III rules for the calculation of regulatory liquidity standards in this jurisdiction? If so, what should these be?

**Pillar 3**

AF: Do you agree with the Authority's suggested approach to Pillar 3 implementation?

### Annex 3 - Summary of National Discretions

Ref.	National Discretion	Authority's position
1.11	Discretion to allow banks to exclude temporarily from the deduction requirement (in the calculation of regulatory capital) certain investments where these have been made in the context of resolving or providing financial assistance to reorganise a distressed institution.	The Authority is minded to give due consideration to the use of such discretion in relevant circumstances.
1.21	Discretion to impose a time limit on banks operating within the conservation buffer range.	The Authority is likely to make use of the discretion on a case-by-case basis
3.6	Discretion to require haircuts for Level 1 securities based on, among other things, their duration, credit and liquidity risk, and typical repo haircuts.	The Authority has not yet taken a view on this.
3.8	Discretion to apply a haircut percentage higher than 15% to Level 2 assets.	The Authority has not yet taken a view on this.
3.9	Discretion to allow banks that evidence a shortfall of Level 1 assets in the domestic currency to hold liquid assets in a currency that does not match the currency of the associated liquidity risk or to allow a higher proportion of domestic currency Level 2 assets in the total stock of liquid assets subject to a higher haircut.	The Authority is considering an alternative treatment, permitting US Dollar assets to be fully eligible as Level 1 assets in the Bermuda interpretation of the LCR calculation (a similar approach to that taken under the current framework).
3.12.1	Discretion to establish higher run-off rates,	The Authority has not yet

	above Basel III minimum floors, as appropriate to capture depositor behaviour in a period of stress. Discretion to develop additional buckets with higher run-off rates as necessary to apply to classes of potentially less stable retail deposits.	taken a view on this.
3.12.2	Unsecured wholesale funding provided by small business customers is treated the same way as retail deposits for the purposes of the LCR.	It is likely that, as opposed to adopting the Basel III definition, in defining “small business” the Authority would look to the definition used in the deposit insurance framework.
3.12.3	Discretion to work with institutions to determine the liquidity risk impact of contingent funding obligations and the required off-setting stock of liquid assets.	The Authority would consider the liquidity treatment of such obligations on a case-by- case basis.

## Annex 4 - Illustration of capital requirement aggregation

Basel III			
	Capital Type		Capital requirement incremental total
Pillar 2 Add-ons (if applicable)	CET1 or Additional Tier 1 or Tier 2	Agreed under SRP	15.5%+
SIB add-on (if applicable)	CET1	2.5%	15.5%
Countercyclical Buffer (if in place)	CET1	2.5%	13.0%
Capital Conservation Buffer	CET1	2.5%	10.5%
Pillar 1	CET1 or Additional Tier 1 or Tier 2	2.0%	8.0%
Pillar 1	CET1 or Additional Tier 1	1.5%	6.0%
Pillar 1	CET1	4.5%	4.5%

### Notes

1. Banks will be required to maintain minimum regulatory capital levels for CET1, Total Tier 1 and Total Regulatory Capital (see section 1.16).
2. The Countercyclical Buffer may vary from 0 to 2.5%. It is set by national supervisors based on monitoring of the macro-financial environment (see sections 1.24 to 1.29).
3. Under Basel III the SIB add-on will apply only to a limited number of large, internationally active banking groups (see sections 1.30 to 1.33).
4. Pillar 2 add-ons are institution specific and may be set by the regulator as part of the SRP.

## **Annex 5 - Criteria for classification as common shares for regulatory capital purposes**

1. Represents the most subordinated claim in liquidation of the bank.
2. Entitled to a claim on the residual assets that is proportional with its share of issued capital, after all senior claims have been repaid in liquidation (i.e. has an unlimited and variable claim, not a fixed or capped claim).
3. Principal is perpetual and never repaid outside of liquidation (setting aside discretionary repurchases or other means of effectively reducing capital in a discretionary manner that is allowable under relevant law).
4. The bank does nothing to create an expectation at issuance that the instrument will be bought back, redeemed or cancelled nor do the statutory or contractual terms provide any feature which might give rise to such an expectation.
5. Distributions are paid out of distributable items (retained earnings included). The level of distributions is not in any way tied or linked to the amount paid in at issuance and is not subject to a contractual cap (except to the extent that a bank is unable to pay distributions that exceed the level of distributable items).
6. There are no circumstances under which the distributions are obligatory. Non payment is therefore not an event of default.
7. Distributions are paid only after all legal and contractual obligations have been met and payments on more senior capital instruments have been made. This means that there are no preferential distributions, including in respect of other elements classified as the highest quality issued capital.
8. It is the issued capital that takes the first and proportionately greatest share of any losses as they occur<sup>28</sup>. Within the highest quality capital, each instrument absorbs losses on a going concern basis proportionately and *pari passu* with all the others.
9. The paid in amount is recognised as equity capital (i.e. not recognised as a liability) for determining balance sheet insolvency.
10. The paid in amount is classified as equity under the relevant accounting standards.
11. It is directly issued and paid-in and the bank can not directly or indirectly have funded the purchase of the instrument.

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<sup>28</sup> In cases where capital instruments have a permanent write-down feature, this criterion is still deemed to be met by common shares.

12. The paid in amount is neither secured nor covered by a guarantee of the issuer or related entity<sup>29</sup> or subject to any other arrangement that legally or economically enhances the seniority of the claim.
13. It is only issued with the approval of the owners of the issuing bank, either given directly by the owners or, if permitted by applicable law, given by the Board of Directors or by other persons duly authorised by the owners.
14. It is clearly and separately disclosed on the bank's balance sheet.

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<sup>29</sup> A related entity can include a parent company, a sister company, a subsidiary or any other affiliate. A holding company is a related entity irrespective of whether it forms part of the consolidated banking group.

## **Annex 6 - Criteria for inclusion in Additional Tier 1 capital**

1. Issued and paid-in
2. Subordinated to depositors, general creditors and subordinated debt of the bank
3. Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis bank creditors
4. Is perpetual, i.e. there is no maturity date and there are no step-ups or other incentives to redeem
5. May be callable at the initiative of the issuer only after a minimum of five years:
  - a. To exercise a call option a bank must receive prior supervisory approval; and
  - b. A bank must not do anything which creates an expectation that the call will be exercised; and
  - c. Banks must not exercise a call unless:
    - i. They replace the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the bank<sup>30</sup>; or
    - ii. The bank demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised.<sup>31</sup>
6. Any repayment of principal (e.g. through repurchase or redemption) must be with prior supervisory approval and banks should not assume or create market expectations that supervisory approval will be given
7. Dividend/coupon discretion:
  - a. the bank must have full discretion at all times to cancel distributions/payments
  - b. cancellation of discretionary payments must not be an event of default
  - c. banks must have full access to cancelled payments to meet obligations as they fall due
  - d. cancellation of distributions/payments must not impose restrictions on the bank except in relation to distributions to common stockholders.
8. Dividends/coupons must be paid out of distributable items

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<sup>30</sup> Replacement issues can be concurrent with but not after the instrument is called.

<sup>31</sup> Minimum refers to the Authority's prescribed minimum requirement, which may be higher than the Basel III Pillar 1 minimum requirement.

9. The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the banking organisation's credit standing.
10. The instrument cannot contribute to liabilities exceeding assets if such a balance sheet test forms part of national insolvency law.
11. Instruments classified as liabilities for accounting purposes must have principal loss absorption through either (i) conversion to common shares at an objective pre-specified trigger point or (ii) a write-down mechanism which allocates losses to the instrument at a pre-specified trigger point. The write-down will have the following effects:
  - a. Reduce the claim of the instrument in liquidation;
  - b. Reduce the amount re-paid when a call is exercised; and
  - c. Partially or fully reduce coupon/dividend payments on the instrument.
12. Neither the bank nor a related party over which the bank exercises control or significant influence can have purchased the instrument, nor can the bank directly or indirectly have funded the purchase of the instrument
13. The instrument cannot have any features that hinder recapitalisation, such as provisions that require the issuer to compensate investors if a new instrument is issued at a lower price during a specified time frame
14. If the instrument is not issued out of an operating entity or the holding company in the consolidated group (e.g. a special purpose vehicle – “SPV”),<sup>32</sup> proceeds must be immediately available without limitation to an operating entity<sup>32</sup> or the holding company in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in Additional Tier 1 capital

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<sup>32</sup> An operating entity is an entity set up to conduct business with clients with the intention of earning a profit in its own right.