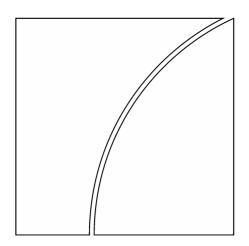
### Financial Stability Institute



# The implementation of the new capital adequacy framework in the Caribbean

Summary of responses to the Basel II Implementation Assistance Questionnaire

July 2004



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#### Summary of responses to the Basel II Implementation Assistance Questionnaire

#### 1. General implementation plans

The Questionnaire was sent to 8 countries that have actively participated in FSI seminars directly related to the new capital adequacy framework (Basel II). Responses were received from 7 countries<sup>1</sup> (collectively referred to as respondents) and are summarised in this note.

More than 70% of the respondents to the Questionnaire (5 countries²) have taken the decision to implement Basel II.³ Banks in these countries control around 26% of banking assets⁴ ⁵ in Caribbean respondent countries. The rest of the respondents (2 countries) are still undecided regarding the implementation of Basel II. They consider that further quantitative impact analyses are necessary in order to assess the implications of the new framework for their banking industry and supervisory resources.

With regard to the timeframe for implementing Basel II, as illustrated by Chart 1, banks controlling 23% of banking assets in respondent countries are expected to move to Basel II during 2007-09. This percentage increases to 26% for the period 2010-15. It is also interesting to note in Chart 1 that almost all banking assets moving to Basel II in the 2007-09 period belong to foreign-controlled or foreign-incorporated banks.

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Refer to Annex 1 for a listing of all Caribbean countries that responded to the Questionnaire.

<sup>&</sup>lt;sup>2</sup> In some countries, not all banking sector assets will be captured by Basel II

Basel II requires the implementation of three mutually reinforcing pillars: Pillar 1 - minimum regulatory capital for credit, market and operational risks; Pillar 2 - a supervisory review process intended to ensure that banks have adequate capital to support their risks as well as sound risk management techniques; and Pillar 3 - a set of disclosures that will promote market discipline by allowing market participants to assess key pieces of information related to Pillar 1 and Pillar 2. Because the 1998 recommendations on regulatory capital for market risks remain unchanged by Basel II, the Questionnaire and this note deal only with the proposals related to credit and operational risks in Pillar 1.

<sup>&</sup>lt;sup>4</sup> The size of banking assets was obtained from responses to question 3 in the Questionnaire. In all cases and where available, the guidance was to provide information on the size of banking assets as of 31 December 2003 in US dollars. However, we acknowledge that there may be some inconsistencies with regard to banking asset data.

All calculations in this paper, unless otherwise stated, are based on weighted averages of banking sector assets indicated by each country.

Because the results presented in this paper are based on weighted averages of banking assets, they may sometimes be skewed towards countries with larger banking systems in terms of assets. If we remove the respondent with the largest banking system in the region, the percentage of banking assets moving to Basel II in the Caribbean increases from around 26% to close to 100%.

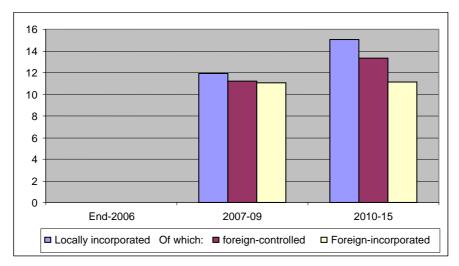
<sup>&</sup>lt;sup>6</sup> If we remove the respondent with the largest banking system, this percentage increases from 23% to a little more than 85%.

If we remove the respondent with the largest banking system, this percentage increases from 26% to close to a 100%.

Recognising that there is no common definition for foreign-controlled banks, the Questionnaire allowed each authority to provide information about foreign-controlled assets in its system according to its own rules and definitions. However, when guidance was requested, our advice was to include subsidiaries of foreign banks and, in general, to focus on the decisionmaking process within banks.

<sup>&</sup>lt;sup>9</sup> Defined in question 3 of the Questionnaire as local branches of foreign banks

# Chart 1 Banks adopting Basel II by percentage of total banking assets (weighted average)



#### 2. Specific implementation plans

#### 2.1 Pillar 1 - minimum capital requirements

Regarding the Basel II framework for credit risk,<sup>10</sup> Chart 2 shows that the respondents implementing Basel II expect the majority of their banks (in terms of banking assets) to apply the (simplified) standardised approach between 2007-09. It should be highlighted that, during the same period of time, a few respondents expect several banks to implement the advanced internal ratings-based (IRB) approach<sup>11</sup>. The application of the foundation IRB approach is restricted to a significant part of Basel II banking assets in one respondent from 2010 onwards.

With regard to capital requirements for operational risk, <sup>12</sup> Chart 3 shows that the basic indicator approach is expected to be applied widely among respondents implementing Basel II. During the same timeframe, a few respondents expect implementation of the (alternative) standardised approach. Only one respondent expects a meaningful part of its banking assets to be subject to the advanced measurement approaches (AMAs) from 2010 onwards.

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With regard regard to calculating regulatory capital requirements for credit risk, Basel II offers a choice between two broad methodologies. One alternative, the standardised approach, proposes to measure credit risk based on external credit assessments provided by rating agencies, export credit agencies, etc. The simplest options for calculating regulatory capital are contained in the simplified standardised approach. The alternative methodology, the IRB approach, would allow banks to use their internal rating systems, subject to supervisory approval, to calculate their capital requirements for credit risk. Within the IRB framework, the BCBS is offering two options: the foundation IRB and advanced IRB approaches. Banks using the foundation IRB approach should calculate the probability of default associated with each of their borrowers' grades and rely on supervisory estimates for other risk components, eg exposure at default (EAD). Banks using the advanced IRB approach should be able to provide all risk components related to their borrowers.

The Questionnaire was completed prior to the Committee's decision to defer implementation of the most advanced approaches of Basel II from year-end 2006 to year-end 2007. This may have an impact on responses regarding the implementation of the advanced IRB approach

With regard to calculating regulatory capital requirements for operational risk, the BCBS proposes a choice between three broad methodologies. The first, the basic indicator approach, proposes that a single indicator, ie gross income, be used for calculating the bank's regulatory capital for operational risk. The second, the standardised approach, would allow banks to calculate their capital requirements for each business line, again using gross income, although on a business line basis. An alternative standardised approach would allow banks applying the standardised approach to use a different indicator, ie loans and advances for two specific business lines: commercial and retail banking, respectively. Finally, the advanced measurement approaches (AMAs) would allow banks to use their internal measurement systems, subject to supervisory approval, to calculate their regulatory capital requirements for operational risk.

Chart 2

Basel II credit risk approaches by percentage of total banking assets expected to be subject to Basel II (weighted average)

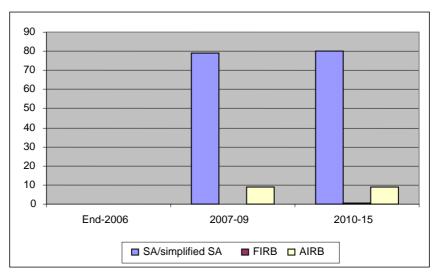
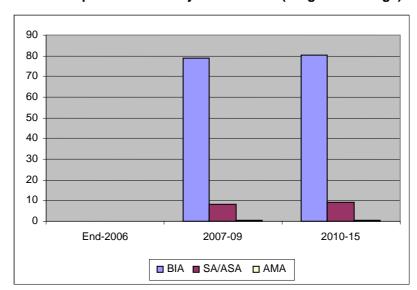


Chart 3

Basel II operational risk approaches by percentage of total banking assets expected to be subject to Basel II (weighted average)



#### 2.2 Pillar 2 - supervisory review process

Although a few respondents mention that Pillar 2 is implemented to some extent in their countries, most of them highlight the various challenges associated with a comprehensive implementation of this pillar. A common challenge indicated by the majority of respondents can be summarised as "training and recruiting quality staff", particularly to assess the most sophisticated methodologies for capital allocation. Some of these respondents stress that it is also important for the supervisory authority to "educate" the industry on Basel II-related topics. Examples of additional challenges where there is common agreement between respondents include the implementation of the framework on a consolidated basis; coordination between host and home supervisors; and determining the additional capital requirements applicable to individual banks based on the Pillar 2 process. Some respondents consider that the implementation of Pillar 2 will require legislative changes to allow supervisory

authorities to impose capital requirements above Pillar 1 and to use their banking intervention powers more effectively.

#### 2.3 Pillar 3 - market discipline

Despite recognising the importance of Pillar 3, most respondents consider promoting a culture of disclosure in banks as a major challenge for the implementation of this pillar. An equally challenging task noted by respondents in this group refers to educating depositors as to the meaning of disclosures. Another challenge mentioned by some respondents refers to enacting the necessary legal and/or regulatory framework that will allow for the implementation of this pillar.

#### 3. Capacity building

Two respondents indicate that they have formulated internal plans for applying Basel II. This seems to be an area on which several respondents will be focusing in the near future. Some mention that their internal plans will be elaborated or adjusted taking into account Basel II quantitative impact studies that are to take place across the region in the near future.

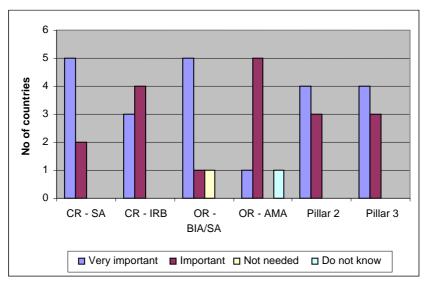
Table 1
Supervisory staff requiring training on Basel II implementation issues in the Caribbean

	Number of supervisory staff	Number of supervisory staff to be trained on Basel II	
Total	273	216	

All respondents share the view that upgrading staff expertise is key to proper implementation of Basel II. It is not surprising to find out in Table 1 that respondents expect to offer Basel II training to more than 200 supervisors, representing almost 80% of the supervisory staff in respondent countries.

Chart 4

Important training areas



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In terms of specific areas of Basel II assistance, Chart 4 shows that more than 70% of respondents assign the highest importance to training related to the foundation methodologies for allocating capital, ie the (simplified) standardised approach for credit risk and the basic indicator and (alternative) standardised approaches for operational risk. A second level of priority for the majority of respondents relates to assistance with the implementation of Pillars 2 and 3. A distant third level of priority concerns assistance related to the most sophisticated approaches for calculating capital requirements for credit and operational risks, ie the IRB approach and the AMAs. Specific training needs perceived by respondents are included in Annex 2 to this note.

Finally, 100% of respondents consider that opportunities to share information, practices and experiences on Basel II are highly important for the region. Respondents believe that discussion forums would greatly facilitate the Basel II implementation process.

# Annex 1: Respondents to Basel II Implementation Assistance Questionnaire

Bahamas

Barbados

British Virgin Islands

Cayman Islands

Jamaica

The Eastern Caribbean Currency Union (includes territories of Anguilla, Antigua and Barbuda, Dominica, Montserrat, Grenada, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines)

Trinidad and Tobago

#### Annex 2: Specific training requirements identified by national supervisors responding to the Questionnaire

Pillar 1 Credit risk		
Standardised approach/ simplified standardised approach	<ul> <li>Credit risk mitigation</li> <li>Technical calculations</li> <li>Operational requirements</li> <li>External ratings</li> <li>Treatment of (higher-risk) sovereigns</li> <li>Treatment of off-balance sheet activities</li> <li>Development of eligibility criteria for external credit assessment institutions (ECAIs) and how supervisors should assess compliance with these requirements</li> <li>Mapping of external ratings to risk weights</li> <li>Securitisation framework</li> </ul>	
IRB approach	<ul> <li>Rating systems (model development, implementation and validation)</li> <li>Data requirement</li> <li>IRB concepts</li> <li>PD, LGD and EAD estimation and validation techniques</li> <li>Derivation of supervisory IRB inputs (LGD, EAD)</li> <li>Supervisory assessment and validation of internal models</li> <li>Assessment of PD/LGD/EAD calculations</li> <li>Securitisation framework under the IRB approach</li> <li>Stress testing techniques</li> </ul>	
	Operational risk	
Basic indicator approach/ standardised approach	Operational risk management requirements for banks intending to adopt these two approaches     Gross income     Definition and calculation of gross income     Allocation/mapping of gross income into eight business lines	
Advanced measurement approach	<ul> <li>Operational risk loss database development</li> <li>Development of appropriate methodology and approach for measurement of operational risk         <ul> <li>Modelling techniques</li> </ul> </li> <li>Supervision of qualifying criteria         <ul> <li>Modelling and data validation</li> </ul> </li> <li>Use of risk mitigation</li> </ul>	

Pillar 2		
	<ul> <li>Additional banking risks captured under Pillar 2 and the assessment of these risks:</li> <li>Interest rate risk in the banking book</li> </ul>	
	<ul> <li>Adequacy of the legislative and regulatory framework</li> </ul>	
	<ul> <li>Review of banks' capital adequacy assessment process</li> <li>Supervisory review techniques and validation of internal ratings and AMAs</li> </ul>	
	<ul> <li>Adequacy of the basic indicator and standardised approaches for determining the operational risk profile of individual banks</li> </ul>	
	<ul> <li>Stress testing</li> </ul>	

Pillar 3		
	<ul> <li>Guiding principles on implementation of Pillar 3</li> <li>Best practices on disclosure requirements</li> </ul>	
	<ul> <li>Development of legislation and/or regulatory framework to facilitate market discipline</li> </ul>	
	Disclosure of material information	