Financial Stability Institute

Occasional Paper
No 4

Implementation of the new capital adequacy framework in non-Basel Committee member countries

Summary of responses to the Basel II implementation assistance Questionnaire

July 2004

BANK FOR INTERNATIONAL SETTLEMENTS

Foreword

The banking supervisory community has been focusing a great deal in the recent past on changes to the capital adequacy requirements originally set out by the Basel Committee on Banking Supervision in 1988 (Basel I). This standard has been applied in most countries around the world. The Committee has just issued its paper entitled International Convergence of Capital Measurement and Capital Standards: a Revised Framework (Basel II), which includes new options available to supervisors and banks for assessing capital adequacy.

Basel II incorporates much of the latest “technology” in the financial arena for managing risk and allocating capital to cover risk. The ultimate goal of Basel II is to strengthen financial systems, both in the Basel Committee member countries and elsewhere. The revised framework offers a range of options from which supervisors may choose. The most sophisticated options require extensive preparation and adequate resource allocation on the part of both banks and their supervisory authorities.

Earlier this year, the Financial Stability Institute developed a Basel II Implementation Assistance Questionnaire for selected non-Basel Committee member countries. This fourth FSI Occasional Paper summarises the results of the Questionnaire. I want to emphasise that the responses were received prior to completion of Basel II and, therefore, in some instances represent the preliminary views of responding supervisory authorities.

Many of the FSI staff were involved in the analysis of the Questionnaire results; however, I would like to acknowledge the contribution made by Mr Juan Carlos Crisanto in overseeing this initiative, as well as the work of two of our short-term secondees: Mr Qaiser Anwarudin of the Central Bank of Malaysia and Ms Suwathana Khemaphirom of the Bank of Thailand.

Josef Tošovský
Chairman
Financial Stability Institute
July 2004

Executive summary

The new capital adequacy framework (Basel II) not only promotes improvements in risk management and regulatory capital allocation but also raises a variety of implementation challenges for both supervisors and banks. Taking these challenges into account, the Financial Stability Institute (FSI), in coordination with the Basel Committee on Banking Supervision (BCBS), developed a Basel II Implementation Assistance Questionnaire. The objective of the Questionnaire was to identify Basel II implementation plans and to determine corresponding capacity building needs in the non-BCBS supervisory community. The results of the Questionnaire would allow the FSI to provide structured assistance to supervisory authorities intending to implement Basel II. The Questionnaire was sent to 115 jurisdictions in Africa, Asia, the Caribbean, Latin America, the Middle East and non-BCBS Europe. Responses were received from 107 jurisdictions.

This paper presents the responses to the Questionnaire from a global perspective, highlighting some key regional trends. From these responses, 88 non-BCBS jurisdictions intend to adopt Basel II. Therefore, taking into account the 13 BCBS member countries, more than 100 countries worldwide will be implementing Basel II. With regard to the timeframe for adopting the new capital adequacy framework, Basel II appears to be implemented widely across regions in 2007-09. During this timeframe, a little more than 5,000 banks controlling almost 75% of banking assets in 73 non-BCBS jurisdictions are expected to be subject to Basel II. One of the major drivers for moving to Basel II in non-BCBS jurisdictions seems to be the intended implementation of this framework locally by foreign-controlled banks or local branches of foreign banks.

For Pillar 1 - minimum capital requirements - the foundation internal ratings-based (IRB) approach is envisaged to be the most used methodology for calculating capital requirements for credit risk (in terms of banking assets moving to Basel II). However, the (simplified) standardised approach ranks closely behind the foundation IRB. As regards allocating capital for operational risk, the basic indicator approach is anticipated to be widely employed across regions. The most advanced methodologies for credit and operational risks are expected to be applied in a few cases across jurisdictions.

Several challenges were identified with respect to the implementation of Pillar 2 - the supervisory review process - and Pillar 3 - market discipline. The most common Pillar 2 challenge relates to acquiring and upgrading the human and technical resources necessary for the review of banks' responsibilities under Pillar 1. An additional area of concern is the coordination of home and host supervisors in the cross-border implementation of Basel II. With Pillar 3, the primary challenge seems to be that of aligning supervisory disclosures with international and domestic accounting standards.

In terms of capacity building issues, close to 9,400 supervisors worldwide are expected to need training on Basel II-related topics. Areas where most assistance has been requested relate to the implementation of Pillar 2 and the application of IRB approaches in calculating capital requirements for credit risk.

Based on the results of this Questionnaire, the FSI, in close coordination with the BCBS, will work to develop ways to assist supervisory authorities with Basel II issues. This could include high-level meetings to share regional experiences; seminars to disseminate technical expertise; and an online information resource - FSI Connect - to provide cost-effective capacity-building.

This paper constitutes the first part of a two-part summary of Basel II implementation plans and associated needs in non-BCBS jurisdictions. The second part includes six papers which provide an in-depth regional analysis of Basel II implementation issues in Africa, Asia, Latin America, non-BCBS Europe, the Caribbean and the Middle East. These regional papers are available at www.bis.org/fsi/fsipapers.htm.

1. Introduction

The International Convergence of Capital Measurement and Capital Standards - A Revised Framework (Basel II) represents a major revision of the international standard on bank capital adequacy that was introduced in 1988 by the Basel Committee on Banking Supervision (BCBS). It promotes improvements in risk management and is intended to enhance financial stability worldwide. However, considering that Basel II introduces a far more comprehensive framework for regulatory capital and risk management, a variety of challenges to both supervisors and banks are anticipated. In order to determine what assistance banking supervisors intending to implement Basel II may require, the Financial Stability Institute (FSI), in coordination with the Secretariat of the BCBS, developed a Basel II Implementation Assistance Questionnaire (Questionnaire). The objective of the Questionnaire was to identify Basel II implementation plans and to determine corresponding capacity building needs in the non-BCBS supervisory community. Furthermore, the results of the Questionnaire would allow the FSI to provide structured assistance to supervisory authorities working towards the implementation of Basel II.

Table 1

Responses to the Questionnaire: regional and total

Number of jurisdictions	Regions						Total
	Asia	**Africa**	**Latin America**	**Caribbean**	**Middle East**	**Non-BCBS Europe**	
Received Questionnaire	18	25	16	8	9	39	115
Responded Questionnaire	18	22	15	7	8	37	107
Percentage of responses obtained	100	88	94	88	89	95	93

The Questionnaire was sent to 115 jurisdictions[1] in Africa, Asia, the Caribbean, Latin America, the Middle East and non-BCBS Europe that have actively participated in FSI activities directly related to Basel II. Responses were received from 107 jurisdictions (collectively referred to as respondents - Annex 1). There was a minimum participation level of close to 90% in each region (Table 1). It should also be mentioned that these respondents represent more than 90% of non-BCBS country banking assets globally.

This paper presents the responses to the Questionnaire from a global perspective, highlighting some key regional trends while observing the confidentiality commitment with regard to individual countries' responses. This paper is organised as follows: the next section describes general plans regarding the adoption of the new framework, including references to potential timeframes and the role of foreign banks operating locally. Section 3 describes specific plans and challenges related to the implementation of each of the Basel II components. Section 4 deals with capacity building issues, reviews supervisory arrangements for applying Basel II and highlights areas where assistance has been requested. The final section outlines a comprehensive proposal to assist countries with the implementation of Basel II and the role that the FSI could potentially play. This paper constitutes the

[1] The Questionnaire was originally developed in response to a request from the Asian Consultative Council (ACC) for "systematic" FSI/BIS support with the implementation of Basel II. The Questionnaire was sent to Asian jurisdictions at the end of November 2003 and responses were received by December 2003. Africa, Latin America, non-BCBS Europe, the Middle East and the Caribbean received the Questionnaire at the beginning of March 2004 and responses were returned by the beginning of May 2004.

first part of a two-part summary of Basel II implementation plans and associated needs in non-BCBS jurisdictions. The second part includes six papers which provide an in-depth regional analysis of Basel II implementation issues in Africa, Asia, Latin America, non-BCBS Europe, the Caribbean and the Middle East. These regional papers are available at www.bis.org/fsi/fsipapers.htm.

2. Basel II implementation plans

From the responses to the Questionnaire, it is evident that Basel II will be implemented[2] widely around the world. Eighty-eight respondents,[3] representing 87% of banking assets[4] in these jurisdictions, intend to adopt Basel II (Table 2). Taking into account the 13 BCBS member countries, we can conclude that more than 100 countries worldwide will be implementing Basel II.

Table 2

Respondents intending to adopt Basel II

Regions	**Number of respondents**	**Respondents intending to adopt Basel II**
Asia	18	15
Africa	22	16
Latin America	15	11
Caribbean	7	5
Middle East	8	7
Non-BCBS Europe	37	34
Total	107	88

Taking into account regional responses to the Questionnaire (Chart 1), Basel II will apply to almost 100% of banking assets in non-BCBS Europe and approximately 95% of banking assets in Latin America and the Middle East. Moreover, around 90% of banking assets in Asia and Africa will also be subject to Basel II. On the other hand, Caribbean respondents whose banks control around 26%[5] of regional banking assets have indicated their intention to move to Basel II. Undecided respondents in

2 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 risk remain unchanged by Basel II, the Questionnaire and this paper deal only with the proposals related to credit and operational risks in Pillar 1.

3 In some jurisdictions, not all banking sector assets will be captured by Basel II.

4 The size of banking assets in each region, except for Asia, was obtained from responses to question 3 in the Questionnaire. Although the Questionnaire sent to Asia did not include a question on the size of banking assets, the designated contact persons for Questionnaire purposes in reporting jurisdictions were later approached and asked to provide this information. In all cases and to the extent possible, the guidance was to provide information on the size of banking assets as of 31 December 2003 in US dollars. In spite of this, 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 jurisdictions.

5 Because the results presented in this paper are based on weighted averages of banking assets, they may sometimes be skewed towards jurisdictions with larger banking systems in terms of assets. In the case of the Caribbean, if we remove the respondent with the largest banking system in the region, the percentage of banking assets moving to Basel II increases considerably. Specifically, this percentage would increase from 26% to close to 100%.

this region 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.

Chart 1

Percentage of banking assets expected to be subject to Basel II, by region

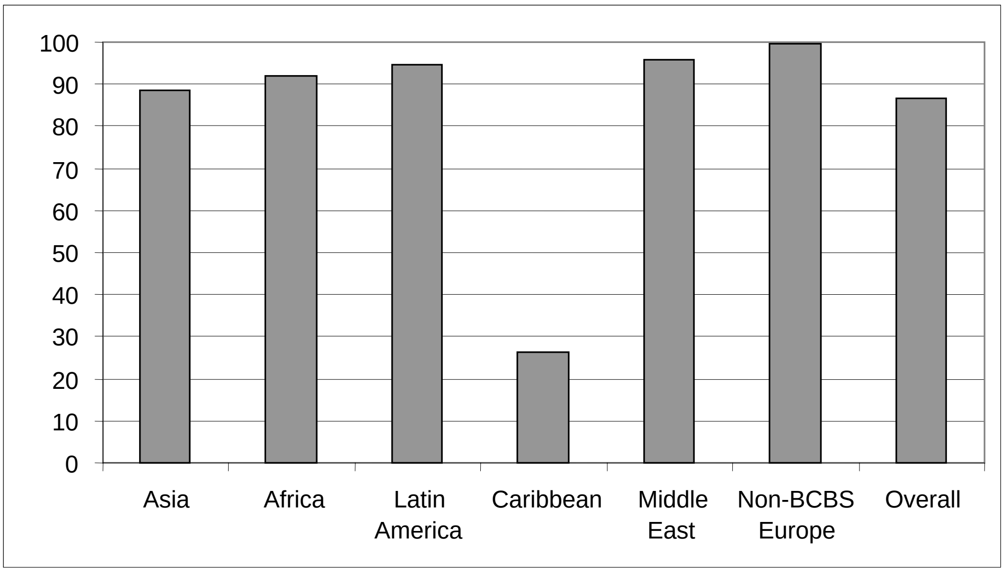
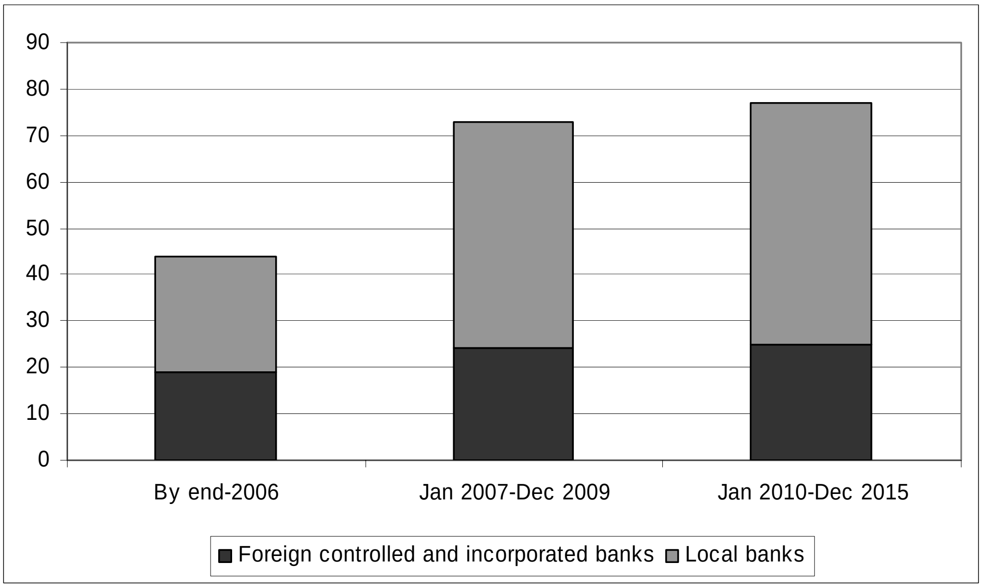


Chart 2

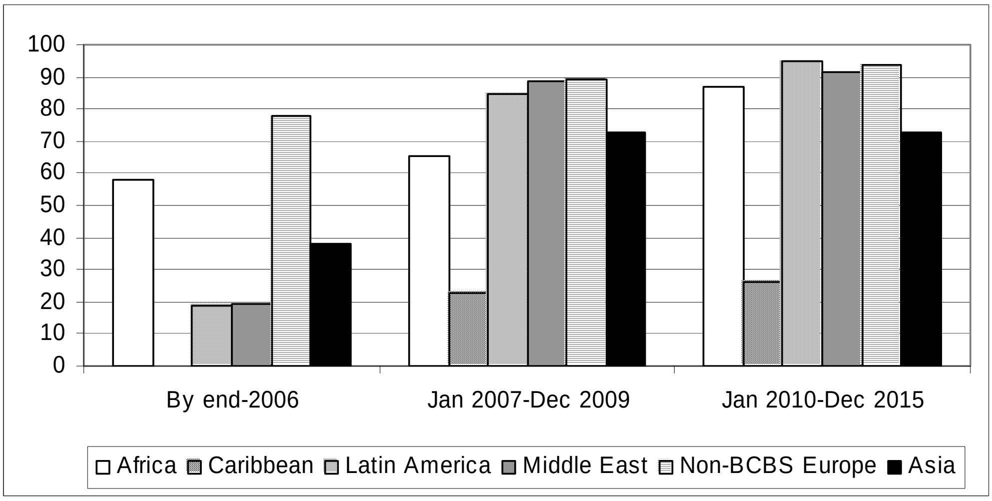
Overall percentage of banking assets expected to be subject to Basel II in different timeframes (weighted average)



As regards the timeframe for adopting the new capital adequacy framework, almost 2,500 banks controlling close to 45% of banking assets in 31 non-BCBS jurisdictions will become subject to Basel II rules by year-end 2006[6] (Chart 2). The level of Basel II implementation during this timeframe is mainly explained by the plans of banks in non-BCBS Europe, Africa and Asia (Chart 3). Non-BCBS European respondents expect banks representing 78% of their banking assets to move to Basel II by year-end 2006. This seems to be related to the fact that 15 non-BCBS European respondents are members of the EU and as such will be required to implement Basel II at year-end 2006. During the same timeframe, close to 60%[7] of banking assets in responding African countries will be subject to Basel II. Banks controlling almost 40% of banking assets in responding Asian jurisdictions expect to adopt the new capital adequacy framework at year-end 2006.

Chart 3

Percentage of banking assets expected to be subject to Basel II, by region, in different timeframes (weighted average)



During 2007-09, the implementation of Basel II will increase substantially, not only in terms of percentage of banking assets but also across regions. In this period, a little more than 5,000 banks controlling almost 75% of banking assets in 73 non-BCBS jurisdictions are expected to be subject to Basel II (Chart 2). Looking in more detail at the different regions surveyed (Chart 3), we can observe that, during 2007-09, banks controlling 85% of banking assets in Latin America and around 90% of banking assets in non-BCBS Europe and the Middle East will be adopting Basel II. During the same timeframe, banks controlling a little more than 70% of banking assets in Asia will be adopting the new capital adequacy framework. African respondents indicate that banks representing 65%[8] of their banking assets should be moving to Basel II between 2007 and 2009. Most respondents in this region mention that their banks will do so gradually and underscore the need to move at a measured pace.

6 The BCBS believes that the proposals contained in Basel II are suitable for a wide range of banks in different countries. BCBS member countries have agreed on a common implementation date for Basel II of year-end 2006 for the standardised and foundation approaches, and year-end 2007 for the most advanced approaches. In these countries, the implementation of Basel II is intended to encompass internationally active banks, and other significant banks as national supervisors deem appropriate.

7 Because the results presented in this paper are based on weighted averages of banking assets, they may sometimes be skewed towards jurisdictions with larger banking systems in terms of assets. In the case of Africa, if we remove the respondent with the largest banking system in the region, the percentage of banking assets moving to Basel II diminishes considerably. Specifically, this percentage would decrease from almost 60% to a little more than 20%.

8 In the case of Africa, if we remove the respondent with the largest banking system in the region, the amount of assets that will be covered by the Basel II rules decreases significantly. Specifically, the percentage would decrease from 65% to 34% of banking assets expected to be subject to Basel II in 2007-09. However, the percentage increases dramatically from 2010 onwards, when 75% of banking assets are expected to be captured by the Basel II framework.

From 2010 onwards, the implementation of Basel II appears to increase only slightly in relation to 2007-09 (Chart 2). Around 5,600 banks controlling 77% of banking assets in 82 non-BCBS jurisdictions are expected to be subject to Basel II. During this timeframe, Caribbean banks representing 26%[9] of banking assets in the region are expected to be implementing Basel II (Chart 3).

One of the major drivers for Basel II adoption in several regions appears to be foreign-controlled[10] and foreign-incorporated banks[11] (Chart 2). This is particularly the case in non-BCBS Europe, the Middle East and Latin America, where roughly a third of banking assets moving to Basel II in 2007-09 are related to foreign banking institutions. The role of foreign players is even more evident in the Caribbean region. Almost all banking assets moving to Basel II in the Caribbean region are foreign-owned and/or controlled. Half of the banking assets in countries expected to be subject to Basel II in Asia by year-end 2006 are owned or controlled by foreign banking institutions (Annexes 2 and 3).

3. Specific implementation plans

3.1 Pillar 1 - Minimum capital requirements

Credit risk

Considering the capital adequacy framework related to credit risk[12] (Chart 4), the foundation internal ratings-based (IRB) approach is expected to be the most widely used methodology for calculating capital requirements for credit risk (in terms of banking assets moving to Basel II). The same analysis shows that the (simplified) standardised approach ranks closely behind the foundation IRB. Although several banks across regions will shift to advanced IRB, this methodology is expected to be used by banks controlling a relatively small portion of non-BCBS banking assets worldwide in the foreseeable future.[13]

From a more detailed analysis (Chart 5), the foundation IRB approach seems to be widely preferred by banks in almost all regions surveyed. Banking assets in non-BCBS European countries will principally be subject to foundation IRB when Basel II is implemented by year-end 2006. In Asia, Latin America, Africa[14] and the Middle East, banks controlling approximately 50% of banking assets moving to Basel II are expected to apply the foundation IRB between 2007 and 2009. Focusing on the

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9 In the case of the Caribbean, if we remove the respondent with the largest banking system in the region, the amount of assets that will be covered by the Basel II rules increases considerably. Specifically, this percentage would increase from 26% to close to 100% from 2010 onwards.

10 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 decision-making process within banks.

11 Defined in question 3 of the Questionnaire as local branches of foreign banks.

12 With 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.

13 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.

14 In the case of Africa, if we remove the respondent with the greatest amount of banking assets in the region, the above-mentioned percentage is considerably reduced to less than 10% of banking assets moving to Basel II within the corresponding timeframe.

(simplified) standardised approach, this methodology is expected to apply, during 2007-09, to a significant portion of Basel II banking assets in the Caribbean (91%) and the Middle East (50%). The remainder of regional respondents expect close to 40% of their Basel II banking assets to be subject to the (simplified) standardised approach in 2007-09. Regarding advanced IRB, a meaningful use of this methodology is expected from 2010 onwards. During this timeframe, around 30% of Basel II banking assets in Latin America, non-BCBS Europe and Africa,[14] respectively, are expected to become subject to advanced IRB (Annexes 4 and 5).

Chart 4

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

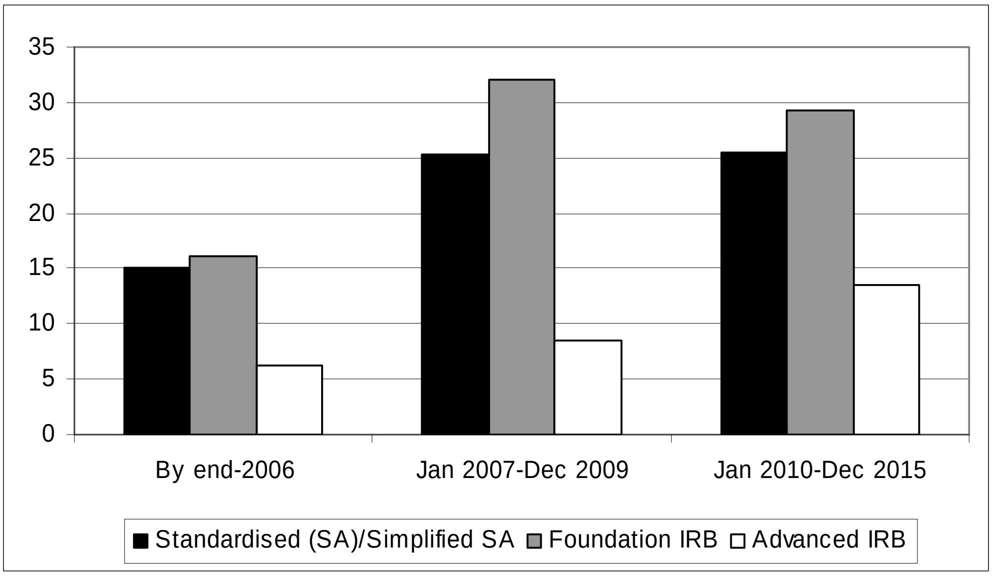
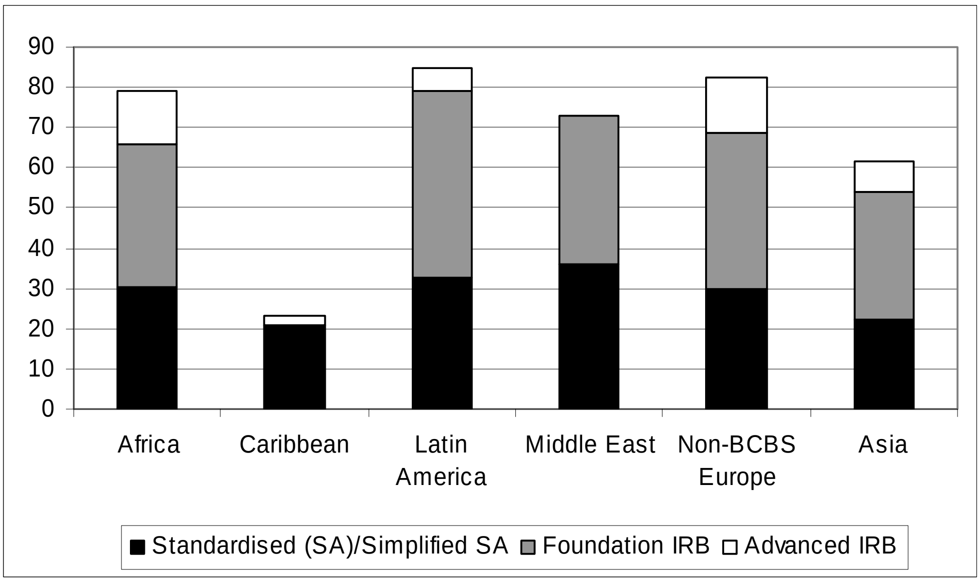


Chart 5

Percentage of banking assets expected to be subject to credit risk approaches in Basel II during 2007-09, by region (weighted average)

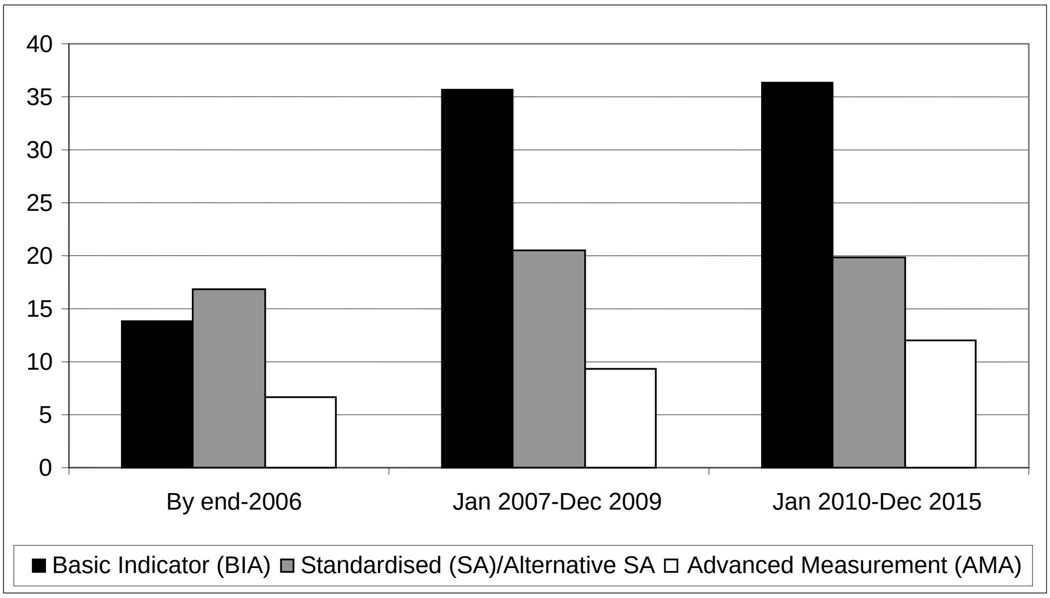


Operational risk

Turning to capital requirements for operational risk[15] (Chart 6), respondents expect banks controlling the greatest portion of their Basel II banking assets to apply the basic indicator approach. The standardised and/or alternative standardised approach are expected to be used by a smaller, but not insignificant number of banks around the world. In general, respondents believe that few banks will be implementing the Advanced Measurement Approaches (AMAs).[16]

Chart 6

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



The preference for the basic indicator approach, as described above, is mainly driven by banks in Asia, non-BCBS Europe, the Middle East and the Caribbean (Chart 7). Banks controlling the majority of Basel II banking assets in these regions (or a figure close to this number) are expected to allocate capital for operational risk, during 2007-09, using the basic indicator approach. On the other hand, during the same period, Latin American respondents expect banks controlling a substantial part of their Basel II banking assets to allocate capital based on the standardised and/or alternative standardised approach. Moreover, Latin America and Africa[17] are the only regions where a meaningful part of Basel II banking assets, ie around 30% and 50%, respectively, are expected to initiate the implementation of AMAs from 2010 onwards (Annexes 6 and 7).

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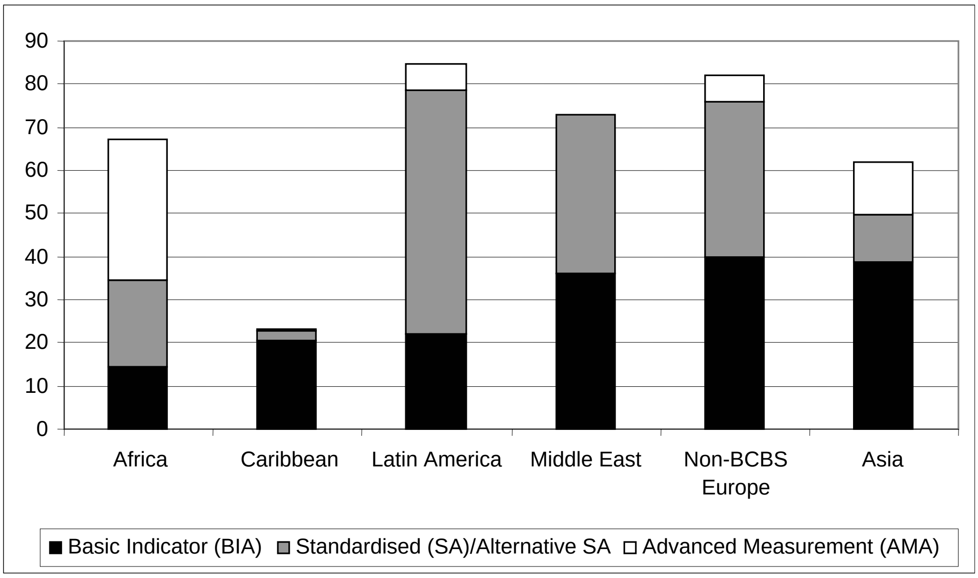
[15] With regard to calculating regulatory capital requirements for operational risk, the BCBS proposes a choice between three broad methodologies. The first, the basic indicator approach, proposes that a single indicator, ie gross income, be used for calculating the bank's regulatory capital for operational 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.

[16] 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 AMAs.

[17] In the case of Africa here, if we remove the respondent with the greatest amount of banking assets in the region, this percentage is dramatically reduced to less than 5% of banking assets implementing Basel II within the same timeframe.

Chart 7

Percentage of banking assets expected to be subject to operational risk approaches in Basel II during 2007-09, by region (weighted average)



3.2 Pillar 2 - Supervisory review process

Although most respondents acknowledge the importance of Pillar 2 in improving their supervisory regimes, they also recognise that significant challenges will arise with the implementation of this Pillar. The most common challenge mentioned by respondents is the need to acquire additional resources and/or upgrade the expertise of existing resources to enable a comprehensive review of banks' responsibilities under Pillar 1. This need is mainly related to the implementation of the IRB methodologies in credit risk. A closely linked challenge cited by the majority of respondents refers to supervisory responsibilities related to the validation of IRB systems used for capital purposes. Furthermore, an area of common concern is the coordination of home and host supervisors regarding the cross-border implementation of Basel II. Respondents also widely agree on the challenge involved in establishing and implementing an objective methodology to require individual banks to maintain capital at a level above that stipulated under Pillar 1. There are two issues raised by respondents in this regard. The first has been highlighted by several Caribbean and European respondents. They widely agree that legal changes would need to take place to empower supervisory authorities to require capital in excess of regulatory minima. The second issue has been consistently raised by Asian and Middle East respondents. This relates to capturing and measuring the overall risk profile of a bank, including the additional banking risks not addressed by Pillar 1.

3.3 Pillar 3 - Market discipline

Several respondents indicate that they have already carried out important work that promotes transparency and market discipline in their financial systems. Nevertheless, most of them seem to agree on some challenges for implementing Pillar 3. Respondents from all regions consider that the primary challenge is to align supervisory disclosures with international and domestic accounting standards. Another common challenge relates to the "cultural change" that banks in several jurisdictions will need to undergo in response to the requirement that key information should be disclosed on a continuous basis. A further frequently mentioned challenge refers to the additional resources that both supervisors and banks will need to allocate to ensure that the information disclosed to the markets is adequate and accurate.

On a regional basis, several Latin American, African and Asian respondents stated that their most pressing challenge in Pillar 3 is finding a proper balance between transparency and dealing with proprietary and confidential information. Trying to avoid exposing banks to competitive disadvantages through the implementation of Pillar 3 is also a key challenge for several respondents in these regions. A number of Caribbean respondents are concerned about educating depositors on the meaning of bank disclosures. These respondents fear that deposit runs may be induced by the implementation of Pillar 3 if depositors are not properly educated.

4. Capacity building needs

According to responses on the development of internal plans for implementing Basel II (Table 3), it appears that the majority of respondents have not developed such a plan. However, specific regional responses to this question seem polarised. For example, in the Middle East 75% of respondents indicate that they have developed internal plans for implementing Basel II, whereas in Latin America this percentage is 20%. Having said that, aside from the Middle East, the regions where a significant number of respondents have internal plans for implementing Basel II are Asia (61%) and non-BCBS Europe (46%).

Table 3

Internal plans for Basel II implementation, by region

Regions	Internal plans	No internal plans yet	N/A
Africa	6	13	3
Caribbean	2	5	0
Latin America	3	11	1
Middle East	6	1	1
Non-BCBS Europe	17	17	3
Asia	11	7	0
Total	45	54	8

With respect to the training of supervisory staff (Table 4), respondents expect to offer training on Basel II-related topics to close to 9,400 supervisors. This number represents roughly a quarter of the total supervisory staff in responding supervisory authorities. On a regional basis, the largest number of supervisory staff to be trained on Basel topics are in Asia (slightly less than 3,500 supervisors) and non-BCBS Europe (almost 2,400 supervisors). In terms of proportion, approximately 80% of supervisory staff in the Caribbean region and 70% in Africa are expected to upgrade their expertise on Basel II-related issues.

Most Basel II assistance in training of supervisory staff has been requested in the areas of Pillar 2 implementation and the application of IRB approaches for calculating capital requirements for credit risk (Chart 8). Eighty per cent of respondents assign the highest priority to support in the implementation of Pillar 2. The second highest priority for assistance is accorded to the IRB methodologies for calculating capital requirements for credit risk. Assistance in this area is requested by more than 70% of respondents.

The need for Pillar 2 support is particularly high in Asia, non-BCBS Europe, Latin America and the Middle East. Close to 90% of respondents in these regions assign the highest priority to training on the implementation of Pillar 2. More than 70% of respondents from the same regions, including 90% of respondents in Africa, consider support for IRB implementation as the most relevant assistance in their jurisdictions. Assistance related to the foundation techniques for calculating capital requirements for credit and operational risk under Basel II has received the highest priority from around 65% of respondents worldwide. Conversely, less than half of total respondents consider training on the AMAs and Pillar 3 as important (Annex 8).

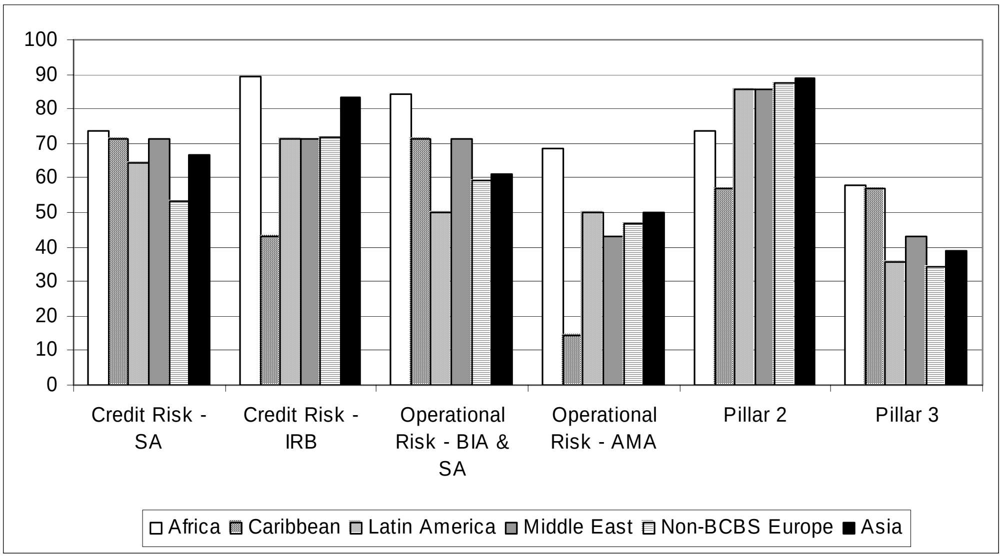
Table 4

Supervisory staff to be trained on Basel II, by region

Regions	Staff		% of total staff to receive Basel II training
	Total	To receive Basel II training	
Africa	1,897	1,269	67
Caribbean	273	216	79
Latin America	2,771	1,667	60
Middle East	571	356	62
Non-BCBS Europe	7,307	2,375	32
Asia	25,710	3,483	14
Total	**38,529**	**9,366**	**24**

Chart 8

Percentage of training in Basel II cited as "Very important", by region



Focusing on specific training topics, it should be noted that most respondents request training on subjects dealing with IRB components and their supervisory validation, credit risk mitigation techniques and practical application of Pillar 2 elements. African respondents are consistently interested in receiving assistance to overcome the lack or paucity of data on historical default rates in the region. Middle East respondents commonly cite credit risk transfer, including credit derivatives and asset securitisation, as a key area for training.

In terms of capacity building tools, 85 respondents consider as a high priority the establishment of discussion platforms, ie venues to share knowledge, practices and experiences on Basel II implementation issues on a regional basis (Table 5). On the other hand, only one respondent assigned a low priority to such forums.

Table 5

Importance of discussion forums

Regions	High	Medium	Low	N/A
Africa	18	1	0	3
Caribbean	7	0	0	0
Latin America	14	0	0	1
Middle East	6	1	0	1
Non-BCBS Europe	25	7	1	4
Asia	15	3	0	0
Total	**85**	**12**	**1**	**9**

On a regional basis, recognition of the need for discussion forums came from 100% of respondents or a figure very close to this in Africa, the Caribbean, the Middle East and Latin America. A little more than 80% of respondents in Asia and close to 70% in non-BCBS Europe also assign the highest importance to the establishment of discussion platforms in their regions.

5. Proposed FSI assistance with the implementation of Basel II

Based on the results of the Questionnaire, the FSI, in close coordination with the BCBS, will work to develop ways to assist supervisory authorities with Basel II issues. This will be based on promoting an open exchange of ideas, facilitating technical expertise and promoting capacity building. FSI assistance will be provided on a regional basis taking into account the particular requests and specific needs expressed by respondents in different regions of the world. Successful implementation of this proposal will require close cooperation and coordination among the FSI, the jurisdictions concerned, regional supervisory groups and the BCBS, particularly its Secretariat, Accord Implementation Group (AIG)[18] and Core Principles Liaison Group (CPLG).[19]

5.1 Meetings for discussing Basel II implementation issues

Most respondents considered discussion forums as highly important for the implementation of Basel II. In response, the FSI proposes to establish regional meetings for supporting the implementation process. The objective of these meetings would be to share information, practices and experiences regarding specific challenges associated with the implementation of Basel II in a particular region of the world. At these meetings, participants will also have the opportunity to discuss their training and staff development plans with respect to Basel II. These meetings would not be intended to produce policies or agreements related to Basel II and its implementation. It is expected that participants in these meetings will be senior banking supervisors and/or central bankers responsible for implementing or dealing with Basel II in their respective organisations. In order to promote an open and active exchange of ideas, we propose that these meetings remain as small as possible, with one participant appointed per organisation. In terms of procedures, we envisage these forums to be a two-day meeting, at maximum. To promote a level playing field and permit cross-regional comparisons, experts from the Basel Committee member countries and central banks or supervisory institutions from other regions could be invited to share their knowledge and experience on particular topics, as appropriate.

[18] The AIG was established by the BCBS to serve as a means for supervisors to share information and approaches to the implementation of Basel II and, thereby, promote consistency.

[19] The CPLG was established in 1996 by the BCBS to provide a mechanism for its member countries as well as bank supervisors from non-G10 countries to exchange views on universally applicable banking supervision standards.

Basel II implementation meetings for Asian jurisdictions and several jurisdictions in the non-BCBS European region took place at the beginning of July 2004. The same activities directed to other regions will take place during the last quarter of 2004.

5.2 Seminars on Basel II-related issues

Respondents expressed a strong desire to benefit from expertise on specialised issues related to the implementation of Basel II. In response, the FSI will continue to offer seminars on Basel II-related issues. However, going forward, Basel II-related seminars will put even more emphasis on technical issues, practical applications and regional challenges associated with the implementation of the new framework. Moreover, taking into account the feedback received on the Questionnaire, the FSI will tailor the agenda and content of its seminars to tackle the particular needs and concerns expressed by respondents. Participation in these seminars will continue to target senior banking supervisors and technical experts on Basel II issues.

The FSI has scheduled 16 seminars during 2004, both in Switzerland and at regional venues, that will address most of the issues respondents raised related to Basel II (Annex 9). During 2005 and 2006, the FSI will assess the progress of the Basel II implementation process worldwide and adjust the number of seminars on Basel II issues such that it continues to meet the needs of respondents.

5.3 FSI Connect tutorials on Basel II

Respondents mentioned that they need to train close to 9,400 supervisors on Basel II-related issues. Given the magnitude of this requirement, FSI Connect would be a very effective and efficient tool to help understand the different components of Basel II. FSI Connect is an online information and learning resource that has been developed by the FSI for banking supervisors worldwide. FSI Connect offers tutorials on a wide range of supervisory topics, including all aspects of the Basel II framework. FSI Connect tutorials are designed for all staff in agencies responsible for financial sector supervision, examination and/or policy. It may be used by junior staff as well as more experienced supervisors who need to further their understanding of supervisory issues, including specialised Basel II topics.

These tutorials utilise an appropriate blend of content, graphical elements and interactive components, such as exercises and case studies. The tutorials are available through the internet or on a CD ROM version for users in regions where the telecommunications infrastructure is not reliable. Supervisors using FSI Connect are able to take the tutorials at their own pace.

The initial phase of FSI Connect was launched at the end of June 2004, with tutorials on bank capital, as well as selected issues related to credit, market and operational risks, from fundamental to advanced level (Annex 10). All of the key components of Basel II - the three pillars, the various approaches to credit, market and operational risk, etc - will be covered by the various tutorials. Further tutorials on these and other key supervisory topics will continue to be developed during the second half of 2004 and in 2005 and 2006.

Annex 1:
Respondents to Basel II
Implementation Assistance Questionnaire

Asia	Africa	Latin America	Caribbean	Middle East	Europe
Australia	Angola	Argentina	Bahamas	Bahrain	Albania
Bangladesh	Botswana	Bolivia	Barbados	Jordan	Armenia
China	COBAC[1]	Brazil	British Virgin Islands	Kuwait	Austria
Hong Kong SAR	Egypt	Chile	Cayman Islands	Lebanon	Azerbaijan
India	Ethiopia	Colombia	Jamaica	Oman	Belarus
Indonesia	Ghana	Costa Rica	St Kitts and Nevis	Qatar	Bosnia-Herzegovina
Korea	UMOA[2]	Ecuador	Trinidad and Tobago	Saudi Arabia	Bulgaria
Malaysia	Kenya	El Salvador		UAE	Croatia
Mongolia	Lesotho	Guatemala			Czech Republic
Nepal	Libya	Honduras			Cyprus
New Zealand	Mauritius	Mexico			Denmark
Pakistan	Morocco	Panama			Estonia
Philippines	Mozambique	Peru			Finland
Singapore	Namibia	Uruguay			Georgia
Sri Lanka	Nigeria	Venezuela			Greece
Taiwan, China	Sierra Leone				Guernsey
Thailand	South Africa				Hungary
Vietnam	Sudan				Isle of Man
	Tanzania				Israel
	Uganda				Jersey
	Zambia				Kyrgyz Republic
	Zimbabwe				Latvia
					Lithuania
					Macedonia
					Malta
					Moldova
					Norway
					Poland
					Portugal
					Romania
					Russia
					Slovakia
					Slovenia
					Tajikistan
					Turkey
					Turkmenistan
					Ukraine

[1] COBAC represents six countries: Cameroon, Central African Republic, Congo, Gabon, Equatorial Guinea and Chad.
[2] UMOA represents eight countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.

Annex 2:
Banking sector assets expected to be subject to Basel II (weighted average)

Regions	Type	By end-2006	Jan 2007-Dec 2009	Jan 2010-Dec 2015
Africa	Locally-incorporated	53%	60%	81%
	Of which: foreign-controlled	3%	6%	10%
	Foreign-incorporated	5%	5%	6%
	Total	**58%**	**65%**	**87%**
Caribbean	Locally-incorporated	0%	12%	15%
	Of which: foreign-controlled	0%	11%	13%
	Foreign-incorporated	0%	11%	11%
	Total	**0%**	**23%**	**26%**
Latin America	Locally-incorporated	19%	83%	93%
	Of which: foreign-controlled	15%	27%	29%
	Foreign-incorporated	0%	2%	2%
	Total	**19%**	**85%**	**95%**
Middle East	Locally-incorporated	13%	76%	79%
	Of which: foreign-controlled	0%	13%	14%
	Foreign-incorporated	6%	13%	13%
	Total	**19%**	**89%**	**92%**
Non-BCBS Europe	Locally-incorporated	73%	84%	89%
	Of which: foreign-controlled	21%	27%	27%
	Foreign-incorporated	5%	5%	5%
	Total	**78%**	**89%**	**94%**
Asia	Locally-incorporated	25%	59%	60%
	Of which: foreign-controlled	7%	8%	8%
	Foreign-incorporated	13%	13%	13%
	Total	**38%**	**73%**	**73%**

Note: Total percentages may not add up exactly due to roundings.

Annex 3:
Banking sector assets expected to be subject to Basel II, excluding the jurisdiction with the greatest banking assets (weighted average)

Regions	Type	By end-2006	Jan 2007-Dec 2009	Jan 2010-Dec 2015
Africa	Locally-incorporated	20%	32%	72%
	Of which: foreign-controlled	6%	10%	18%
	Foreign-incorporated	1%	2%	3%
	Total	**21%**	**34%**	**75%**
Caribbean	Locally-incorporated	0%	45%	57%
	Of which: foreign-controlled	0%	42%	50%
	Foreign-incorporated	0%	42%	42%
	Total	**0%**	**87%**	**99%**
Latin America	Locally-incorporated	35%	68%	86%
	Of which: foreign-controlled	29%	40%	44%
	Foreign-incorporated	0%	3%	4%
	Total	**36%**	**71%**	**91%**
Middle East	Locally-incorporated	17%	67%	71%
	Of which: foreign-controlled	0%	18%	19%
	Foreign-incorporated	9%	18%	18%
	Total	**26%**	**85%**	**88%**
Non-BCBS Europe	Locally-incorporated	66%	81%	86%
	Of which: foreign-controlled	21%	28%	28%
	Foreign-incorporated	6%	6%	6%
	Total	**72%**	**87%**	**92%**
Asia	Locally-incorporated	40%	58%	59%
	Of which: foreign-controlled	12%	13%	13%
	Foreign-incorporated	21%	22%	22%
	Total	**61%**	**80%**	**80%**

Note: Total percentages may not add up exactly due to roundings.

Annex 4:
Banking assets expected to be subject to Basel II credit risk approaches (weighted average)

Regions	Approaches	By end-2006	Jan 2007-Dec 2009	Jan 2010-Dec 2015
Africa	Standardised (SA)/simplified SA	11%	30%	28%
	Foundation IRB	43%	36%	35%
	Advanced IRB	4%	13%	25%
	Total	**58%**	**79%**	**89%**
Caribbean	Standardised (SA)/simplified SA	0%	21%	21%
	Foundation IRB	0%	0%	0%
	Advanced IRB	0%	2%	2%
	Total	**0%**	**23%**	**24%**
Latin America	Standardised (SA)/simplified SA	2%	33%	41%
	Foundation IRB	16%	46%	23%
	Advanced IRB	0%	5%	31%
	Total	**19%**	**85%**	**95%**
Middle East	Standardised (SA)/simplified SA	4%	36%	33%
	Foundation IRB	0%	37%	43%
	Advanced IRB	0%	0%	0%
	Total	**4%**	**73%**	**76%**
Non-BCBS Europe	Standardised (SA)/simplified SA	26%	30%	33%
	Foundation IRB	36%	39%	28%
	Advanced IRB	9%	14%	26%
	Total	**72%**	**82%**	**87%**
Asia	Standardised (SA)/simplified SA	15%	22%	20%
	Foundation IRB	9%	32%	34%
	Advanced IRB	7%	8%	8%
	Total	**30%**	**62%**	**62%**

Note: Total percentages may not add up exactly due to roundings.

Annex 5:
Banking assets expected to be subject to Basel II credit risk approaches, excluding the jurisdiction with the greatest banking assets (weighted average)

Regions	Approaches	By end-2006	Jan 2007-Dec 2009	Jan 2010-Dec 2015
Africa	Standardised (SA)/simplified SA	18%	55%	51%
	Foundation IRB	3%	5%	25%
	Advanced IRB	0%	1%	3%
	Total	**21%**	**61%**	**79%**
Caribbean	Standardised (SA)/simplified SA	0%	78%	79%
	Foundation IRB	0%	0%	1%
	Advanced IRB	0%	9%	9%
	Total	**0%**	**87%**	**89%**
Latin America	Standardised (SA)/simplified SA	4%	26%	42%
	Foundation IRB	31%	34%	35%
	Advanced IRB	0%	10%	13%
	Total	**36%**	**71%**	**90%**
Middle East	Standardised (SA)/simplified SA	6%	50%	45%
	Foundation IRB	0%	13%	21%
	Advanced IRB	0%	0%	0%
	Total	**6%**	**63%**	**67%**
Non-BCBS Europe	Standardised (SA)/simplified SA	25%	30%	35%
	Foundation IRB	29%	32%	27%
	Advanced IRB	11%	16%	22%
	Total	**65%**	**78%**	**84%**
Asia	Standardised (SA)/simplified SA	24%	36%	33%
	Foundation IRB	14%	14%	18%
	Advanced IRB	11%	13%	13%
	Total	**49%**	**62%**	**63%**

Note: Total percentages may not add up exactly due to roundings.

Annex 6: Banking assets expected to be subject to Basel II operational risk approaches (weighted average)

Regions	Approaches	By end-2006	Jan 2007- Dec 2009	Jan 2010- Dec 2015
Africa	Basic indicator (BIA)	10%	15%	25%
	Standardised (SA)/alternative SA	35%	20%	19%
	Advanced measurement (AMA)	12%	32%	44%
	Total	**58%**	**67%**	**87%**
Caribbean	Basic indicator (BIA)	0%	21%	21%
	Standardised (SA)/alternative SA	0%	2%	2%
	Advanced measurement (AMA)	0%	0%	0%
	Total	**0%**	**23%**	**24%**
Latin America	Basic indicator (BIA)	2%	22%	32%
	Standardised (SA)/alternative SA	16%	57%	32%
	Advanced measurement (AMA)	0%	6%	30%
	Total	**19%**	**85%**	**95%**
Middle East	Basic indicator (BIA)	4%	36%	35%
	Standardised (SA)/alternative SA	0%	37%	40%
	Advanced measurement (AMA)	0%	0%	2%
	Total	**4%**	**73%**	**76%**
Non-BCBS Europe	Basic indicator (BIA)	36%	40%	39%
	Standardised (SA)/alternative SA	33%	36%	39%
	Advanced Measurement (AMA)	2%	6%	9%
	Total	**71%**	**82%**	**87%**
Asia	Basic indicator (BIA)	7%	39%	39%
	Standardised (SA)/alternative SA	12%	11%	11%
	Advanced measurement (AMA)	11%	12%	12%
	Total	**30%**	**62%**	**62%**

Note: Total percentages may not add up exactly due to roundings.

Annex 7:
Banking assets expected to be subject to Basel II operational risk approaches, excluding the jurisdiction with the greatest banking assets (weighted average)

Regions	Approaches	By end-2006	Jan 2007-Dec 2009	Jan 2010-Dec 2015
Africa	Basic indicator (BIA)	17%	27%	46%
	Standardised (SA)/alternative SA	3%	11%	27%
	Advanced measurement (AMA)	0%	0%	3%
	Total	**21%**	**39%**	**76%**
Caribbean	Basic indicator (BIA)	0%	78%	79%
	Standardised (SA)/alternative SA	0%	8%	9%
	Advanced measurement (AMA)	0%	1%	1%
	Total	**0%**	**87%**	**89%**
Latin America	Basic indicator (BIA)	4%	6%	25%
	Standardised (SA)/alternative SA	31%	53%	54%
	Advanced measurement (AMA)	0%	11%	12%
	Total	**36%**	**71%**	**90%**
Middle East	Basic indicator (BIA)	6%	50%	48%
	Standardised (SA)/alternative SA	0%	13%	17%
	Advanced measurement (AMA)	0%	0%	2%
	Total	**6%**	**63%**	**67%**
Non-BCBS Europe	Basic indicator (BIA)	37%	41%	41%
	Standardised (SA)/alternative SA	26%	32%	34%
	Advanced measurement (AMA)	2%	5%	9%
	Total	**65%**	**78%**	**84%**
Asia	Basic indicator (BIA)	12%	25%	25%
	Standardised (SA)/alternative SA	19%	18%	18%
	Advanced measurement (AMA)	18%	20%	20%
	Total	**49%**	**62%**	**63%**

Note: Total percentages may not add up exactly due to roundings.

Annex 8:
Level of importance of Basel II training areas

Training Areas	Very important	Important	Not needed	Do not know
Credit risk - standardised approach				
Africa	74%	26%	0%	0%
Caribbean	71%	29%	0%	0%
Latin America	64%	29%	7%	0%
Middle East	71%	29%	0%	0%
Non-BCBS Europe	53%	44%	3%	0%
Asia	67%	28%	6%	0%
Overall	***67%***	***31%***	***3%***	***0%***
Credit risk - IRB approach				
Africa	89%	5%	0%	5%
Caribbean	43%	57%	0%	0%
Latin America	71%	29%	0%	0%
Middle East	71%	29%	0%	0%
Non-BCBS Europe	72%	28%	0%	0%
Asia	83%	11%	6%	0%
Overall	***72%***	***26%***	***1%***	***1%***
Operational risk - BIA and SA				
Africa	84%	16%	0%	0%
Caribbean	71%	14%	14%	0%
Latin America	50%	43%	7%	0%
Middle East	71%	29%	0%	0%
Non-BCBS Europe	59%	34%	6%	0%
Asia	61%	33%	6%	0%
Overall	***66%***	***28%***	***6%***	***0%***
Operational risk - AMA				
Africa	68%	26%	0%	5%
Caribbean	14%	71%	0%	14%
Latin America	50%	29%	14%	7%
Middle East	43%	43%	0%	14%
Non-BCBS Europe	47%	50%	0%	3%
Asia	50%	33%	11%	6%
Overall	***45%***	***42%***	***4%***	***8%***
Pillar 2				
Africa	74%	26%	0%	0%
Caribbean	57%	43%	0%	0%
Latin America	86%	14%	0%	0%
Middle East	86%	14%	0%	0%
Non-BCBS Europe	88%	13%	0%	0%
Asia	89%	6%	6%	0%
Overall	***80%***	***19%***	***1%***	***0%***
Pillar 3				
Africa	58%	42%	0%	0%
Caribbean	57%	43%	0%	0%
Latin America	36%	64%	0%	0%
Middle East	43%	43%	14%	0%
Non-BCBS Europe	34%	59%	3%	3%
Asia	39%	39%	17%	6%
Overall	***44%***	***48%***	***6%***	***1%***

Note: Overall percentages refer to simple averages across regions in each training area.

Annex 9:
FSI activities on Basel II-related issues in 2004

Dates	Meetings (venue)
5-6 July	Meeting on Practical Applications of the Basel II Framework (Singapore)
7-8 July	Meeting on Practical Applications of the Basel II Framework (Basel)
14-15 October	Meeting on Practical Applications of the Basel II Framework (Mexico City)
16-17 November	Meeting on Practical Applications of the Basel II Framework (Pretoria)

Dates	Seminars (venue)
8-11 February	The New Basel Capital Accord (Abu Dhabi)
17-19 February	Basel Capital Accord and Risk Based Supervision (Accra)
9-11 March	The New Basel Capital Accord (Sao Paulo)
14-17 March	The New Basel Capital Accord and Financial Engineering (Kuala Lumpur)
5-7 April	Risk Management (Xian)
20-22 April	The New Basel Capital Accord - Practical Application Issues (Manila)
11-13 May	Building an IRB System (Minsk)
8-11 June	Credit Risk Management (Bishkek)
16-23 July	The New Capital Accord and Risk Management (Basel & Beatenberg)
31 August-2 September	Risk Management (Santiago de Chile)
5-8 September	Operational Risk and IRB in the New Basel Capital Accord (Kuwait)
28-30 September	Credit Risk Transfer (Warsaw)
18-20 October	Credit and Operational Risks in the New Basel Capital Accord (Mexico City)
26-28 October	Specifics of the Internal Rating Based Approach (Bangkok)
9-11 November	Securitisation and Credit Risk Transfer (Basel)
9-11 November	Risk Management (Sao Paulo)

Annex 10:
FSI Connect: provisional list of courses to be offered in 2004

Overview

Banks and Bank Risks

Supervisory Approaches

The BIS and the Basel Committee on Banking Supervision

Core Principles for Effective Banking Supervision - An Introduction

Core Principles - Methodology

Core Principles - Assessment Process

Capital and Basel II

Fundamental

Bank Capital

Basel I

Basel II - An Overview

Basel II and Cross-border Implementation Issues

Basel II - Scope of Application

Basel II's Pillar 2 - Supervisory Review Process

Basel II's Pillar 3 - Market Discipline

Basel II's Basic Indicator and Standardised Approaches for Operational Risk*

Intermediate

Basel II and Areas of National Discretion

Credit Risk Components (PD, LGD and EAD)*

Basel II's Standardised Approach - Use of External Credit Assessments*

Basel II's Simplified Standardised Approach

Basel II's Standardised Approach - Risk Weight Framework*

Basel II and Credit Risk Mitigation - An Overview*

Basel II and Securitisation - Operational Requirements*

Basel II and Securitisation - Standardised Approach*

Advanced

Basel II and IRB - Minimum Requirements*

Basel II and IRB Portfolios (several tutorials)*

Basel II and IRB - The Underlying Math and Theory*

Basel II and Credit Risk Mitigation (several tutorials)*

Basel II's Advanced Measurement Approach for Operational Risk*

Basel II and IRB - Supervisory Validation*

Note: * denotes courses that are also included in the credit risk and operational risk modules.

Market risk

Fundamental

Bonds - An Introduction

Equities - An Introduction

Commodities - An Introduction

Interest Calculations and Compounding

Present Value, Future Value and Discount Factor

NPV, IRR and Reinvestment Risk

Duration and Convexity

Futures - An Introduction

Options - An Introduction

Swaps - An Introduction

Market Risk - An Introduction

VAR - An Introduction

Intermediate

Probability and Expected Return

Distributions and Confidence Level

Volatility

Bond Strategies - Fundamentals

Forwards - Pricing and Contract Valuation

Futures - Hedging

Futures - Examples of Hedges

Futures - Trading

Futures - Arbitrage

Options - Pricing Models

Options - The Binomial Option Pricing Model

Swaps - Interest Rate Swap Pricing

Swaps - Currency Swap Pricing and Valuation

Regulation of Market Risk - Standardised Approach

Advanced

Options - Trading Strategies

Options - Exotic Options

VAR - Variance/Covariance Approach

VAR - Monte Carlo Simulation

VAR - Historical Simulation and Other Issues

Regulation of Market Risk - Internal Models Approach

Credit risk

Fundamental

Credit Risk in the Loan Portfolio - An Introduction

Credit Risk Environment

Credit Granting and Administration

Credit Analysis

Accounts Receivable and Inventory Financing

Agricultural Loans

Claims on Banks and Securities Firms

Claims on Sovereigns and Government Entities

Commercial Loans

Real Estate Loans

Retail Loans

Specialised Lending

Trade Finance

Country Risk

Loan Grading

Loan Loss Provisioning (3 tutorials)

Problem Loan Management

Supervisory Credit Classification

Intermediate

Credit Risk Components (PD, LGD and EAD)

Basel II's Standardised Approach - Use of External Credit Assessments

Basel II's Standardised Approach - Risk Weight Framework

Basel II and Credit Risk Mitigation - An Overview

Basel II and Securitisation - Operational Requirements

Basel II and Securitisation - Standardised Approach

Credit Derivatives - An Introduction

Credit Derivatives - Types

Credit Derivatives - Uses and Applications

Credit Derivatives - Pricing Methods

Securitisation - Fundamentals

Securitisation - Asset-Backed Securities

Securitisation - Mortgage-Backed Securities

Advanced

Basel II and IRB - Minimum Requirements

Basel II and IRB Portfolios (several tutorials)

Basel II and Credit Risk Mitigation (several tutorials)

Credit Risk Modeling - An Introduction

Credit Risk Modeling - CreditMetrics

Credit Risk Modeling - CreditRisk+
Credit Risk Modeling - KMV and Comparison of Models
Basel II and IRB - The Underlying Math and Theory
Credit Risk Modeling - Economic Capital and Allocation
Basel II and IRB - Supervisory Validation

Operational risk

Fundamental

Operational Risk - An Introduction
Operational Risk Management - Sound Practices
Operational Risk - Case Study
Basel II's Basic Indicator and Standardised Approaches for Operational Risk

Advanced

Basel II's Advanced Measurement Approach for Operational Risk

Coming next

Accounting
Anti-Money Laundering
Bank Licensing
Capital Allocation
Contagion Risk
Corporate Governance
Electronic Banking
Foreign Bank Supervision
Interest Rate Risk in the Banking Book
Islamic Banking
IT in Banking
Liquidity Risk
Macroeconomic Issues
On- and Off-site Supervision
Problem Bank Resolution
Supervision of Financial Conglomerates