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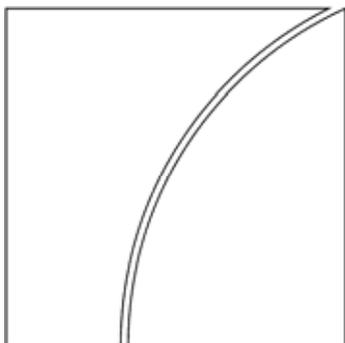
## Occasional Paper

No 6

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

Summary of responses to the 2006  
follow-up Questionnaire on Basel II  
implementation

September 2006



BANK FOR INTERNATIONAL SETTLEMENTS

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## Foreword

Basel II seeks to promote the adoption of stronger risk practices by the banking industry and to align regulatory capital with a bank's risk profile. Implementation of Basel II poses a number of challenges for supervisors, particularly with regard to acquiring and maintaining appropriate human, financial and technical resources. At the same time it presents an opportunity for supervisors to enhance their supervisory frameworks.

Due to these ongoing challenges and opportunities and to the decision of the Basel Committee on Banking Supervision (BCBS) to defer implementation of Pillar 1 advanced approaches, this year the Financial Stability Institute (FSI) decided to follow up on its original Basel II implementation Questionnaire, conducted in 2004. The objective of the follow-up Questionnaire was to take stock of developments during the two years between the Questionnaires.

This paper presents the results of the 2006 follow-up Questionnaire on Basel II implementation. Consistent with the results of the 2004 Questionnaire, they show that the new capital adequacy framework will be implemented by the overwhelming majority of non-BCBS countries. Taking into account these results, the FSI plans to continue with its broad range of meetings and seminars related to Basel II implementation in order to support the global supervisory community in its implementation efforts.

I would like to take this opportunity to thank the FSI staff members who were involved in the review of the Questionnaire results. I would also like to thank the Board of Governors of the Federal Reserve System, which provided the excellent assistance of Ms Terry Muckleroy in processing and analysing the Questionnaire, and the Reserve Bank of New Zealand, which seconded Ms Margaret Griffin to the BIS to work on this and other projects.

Josef Tošovský  
Chairman  
Financial Stability Institute  
September 2006



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## 1. Executive summary

The new capital adequacy framework (Basel II) is a comprehensive framework for determining regulatory capital requirements and measuring risk. The process of implementing Basel II presents a variety of challenges for both supervisors and banks. For instance, some countries are developing or revising laws and regulations in order to implement the new framework. In addition, banks and supervisory organisations are in the process of acquiring additional human, financial and technical resources in order to implement Basel II effectively.

The Financial Stability Institute (FSI) decided to follow up on its 2004 Basel II implementation Questionnaire this year in order to see whether the plans reported in 2004 had changed significantly.<sup>1</sup> The Questionnaire was sent to 115 jurisdictions in Africa, Asia<sup>2</sup>, the Caribbean, Latin America, the Middle East and non-BCBS Europe. BCBS member countries were not included in the Questionnaire. Responses were received from 98 jurisdictions, representing an overall response rate of 85%. The results from the Questionnaire indicate that 95 countries<sup>3</sup> are currently planning to implement Basel II.<sup>4</sup> A number of other countries are still undecided as to whether or not they will implement the new capital adequacy framework.

Based on the 2006 Questionnaire responses, each of the three credit risk approaches under Basel II will be implemented by more countries than indicated by the 2004

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<sup>1</sup> In recognition of the variety of implementation challenges confronting both supervisors and banks in the process of implementing Basel II, the FSI, in coordination with the Basel Committee on Banking Supervision (BCBS), conducted a questionnaire on Basel II implementation in 2004. The results of the Questionnaire were used to identify Basel II implementation plans and to determine corresponding capacity building needs in the non BCBS supervisory community.

<sup>2</sup> Excluding Japan.

<sup>3</sup> Comprising 82 non-BCBS jurisdictions plus 13 BCBS member countries.

<sup>4</sup> Some countries which state that they are adopting Basel II do not yet have firm plans for implementing some aspects of the new framework.

Questionnaire results.<sup>5</sup> The standardised approach is expected to be the most widely used of the three credit risk methodologies for calculating capital requirements - 85% of respondents adopting Basel II plan to implement this approach. The foundation internal ratings-based (FIRB) approach ranks behind the standardised approach, at 67%, while 55% of respondents adopting Basel II intend to offer the advanced internal ratings-based (AIRB) approach. Some countries have decided to implement only the standardised approach for credit risk, while others will offer only one or both of the advanced approaches.

Similar trends are evident for the operational risk approaches. The number of jurisdictions intending to implement one or more of these approaches under Pillar 1 has increased significantly since 2004, with the basic indicator approach expected to be the most widely used of the three possible approaches.

A number of countries have decided to offer one but not both of the basic indicator or standardised approaches for operational risk. This partly explains why the number of jurisdictions adopting the basic indicator approach for operational risk is lower than the number of jurisdictions adopting the standardised approach for credit risk.

Relative to the 2004 Questionnaire results, more countries are now expecting to implement Pillars 2 and 3 before the end of 2015. Most intend to implement both at the same time; however, a few will implement Pillar 2 before Pillar 3.

Overall the results of the 2006 Questionnaire confirm that, since the previous Questionnaire was carried out, many supervisory agencies have firmed up their Basel II implementation plans. This is reflected in higher implementation rates for Pillar 2, Pillar 3 and the various Pillar 1 approaches, and in greater specificity about the timing of implementation.

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<sup>5</sup> Some countries which responded to the 2006 Questionnaire did not respond to the 2004 Questionnaire and vice versa.

This paper presents the responses to the Questionnaire from global and regional perspectives while observing the confidentiality commitment made in respect of individual countries' responses. The paper is organised as follows: Section 2 discusses the global results from the Questionnaire, while Sections 3-8 describe specific plans related to the implementation of each of the Basel II components in individual regions.

## 2. Global results

As indicated in Table 1, the Questionnaire was sent to 115 non-BCBS jurisdictions in Africa, Asia, the Caribbean, Latin America, the Middle East and Europe. Responses were received from 98 jurisdictions (collectively referred to as respondents), representing an overall response rate of 85%.

Table 1

### Questionnaire responses: regional and total

	Regions						Total
	Africa	Asia <sup>1</sup>	Caribbean	Latin America	Middle East	Non-BCBS Europe	
Questionnaires sent	25	18	8	16	9	39	115
Responses obtained	17	16	7	14	8	36	98
Response rate	68%	89%	88%	88%	89%	92%	85%

<sup>1</sup> Excludes Japan since BCBS members were not asked to complete the Questionnaire.

Based on the responses to the 2006 Questionnaire and consistent with the results from the 2004 Questionnaire, it is evident that Basel II will be implemented<sup>6</sup> widely around the world. As indicated in Table 2 below, 82 respondents<sup>7</sup> intend to adopt Basel II. Including BCBS member countries in the total brings the number of jurisdictions adopting Basel II to 95.

Table 2  
**Respondents intending to adopt Basel II**

Regions	Number of respondents	Respondents intending to adopt Basel II
Africa	17	12
Asia <sup>1</sup>	16	16
Caribbean	7	4
Latin America	14	12
Middle East	8	8
Non-BCBS Europe	36	30
<b>Total</b>	<b>98</b>	<b>82</b>

<sup>1</sup> Excludes Japan since BCBS members were not asked to complete the Questionnaire.

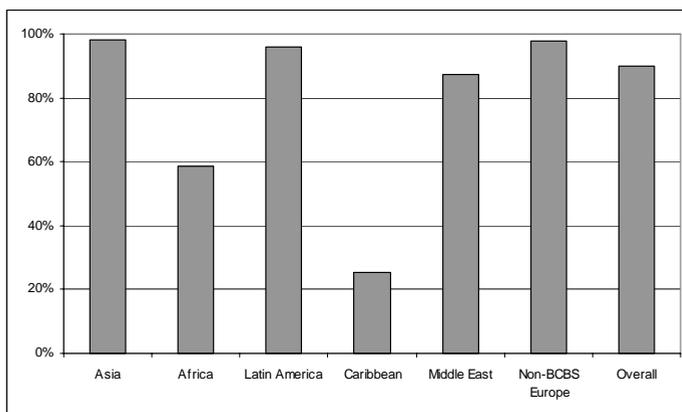
<sup>6</sup> Basel II requires the implementation of three mutually reinforcing pillars: Pillar 1 - minimum regulatory capital for credit, market and operational risks; Pillar 2 - a supervisory review process intended to ensure that banks have adequate capital to support their risks as well as sound risk measurement 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.

<sup>7</sup> In some jurisdictions, not all banking sector assets will be captured by Basel II.

Chart 1 shows the proportion of countries in each region intending to adopt Basel II, calculated on a weighted basis.<sup>8</sup> Consistent with the 2004 Questionnaire results, the 2006 Questionnaire shows that on this basis an overwhelming majority of countries intend to implement Basel II in most regions.<sup>9</sup>

Chart 1

**Weighted<sup>1</sup> percentage of countries adopting Basel II by region**



<sup>1</sup> Data were weighted according to the size of the banking system in each country, measured by banking assets. Asset data were obtained from the 2004 Questionnaire. Where asset data were not available from this source, estimates based on GDP data were used. In some jurisdictions, not all banking sector assets will be captured by Basel II.

Overall the results of the 2006 Questionnaire confirm that, since the previous Questionnaire was carried out, many supervisory agencies have firmed up their Basel II

<sup>8</sup> Data on the number of countries implementing Basel II were weighted according to the size of the banking system in each country, measured by banking assets. The asset data used came from the 2004 Questionnaire. Where asset data were not available from this source estimates based on GDP data were used.

<sup>9</sup> In some regions results are dominated by one relatively large country.

implementation plans and are now able to be more specific about when and how the new framework will be introduced.

## Pillar 1 - Minimum capital requirements

### ***Credit risk***

Based on the 2006 Questionnaire responses, implementation rates for each of the three credit risk approaches will be higher than indicated by the 2004 Questionnaire results<sup>10</sup> (Charts 2-4). For Pillar 1 - minimum capital requirements - the standardised approach is expected to be the most widely used methodology for calculating capital requirements for credit risk, with plans for implementation by 85% of respondents adopting Basel II (Chart 2).<sup>11</sup> The FIRB approach ranks behind the standardised approach, at 67% (Chart 3). A majority - 55% - of respondents adopting Basel II will be making the AIRB approach available (Chart 4).

A small number of countries (five) have decided to implement Basel II but have not identified a timeframe for adoption or made decisions on which credit risk approaches to use. Also, some countries have decided to implement only the standardised approach or only one or both of the advanced approaches, although a majority of those implementing Basel II - 52% - have indicated that they intend to implement all three credit risk approaches.

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<sup>10</sup> With regard to calculating regulatory capital requirements for credit risk, Basel II offers a choice between two broad methodologies. One alternative, the standardised approach, measures credit risk based on external credit assessments provided by rating agencies, export credit agencies, etc. The alternative methodologies, the IRB approaches (foundation or advanced), on the other hand, allow banks to use their own internal rating systems, subject to supervisory approval, to calculate their capital requirements for credit risk. Banks using the FIRB approach calculate the probability of default associated with each of their borrower's grades and rely on supervisory estimates for other risk components, eg exposure at default (EAD). Banks using the AIRB approach provide all risk components related to their borrowers themselves.

<sup>11</sup> The difference between the overall total of Basel II adopters and the number of countries adopting the standardised approach results from two factors: some countries intend to offer only one or both of the advanced approaches while others have not yet chosen which approaches they will adopt.

Chart 2

**Number of countries adopting the standardised approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

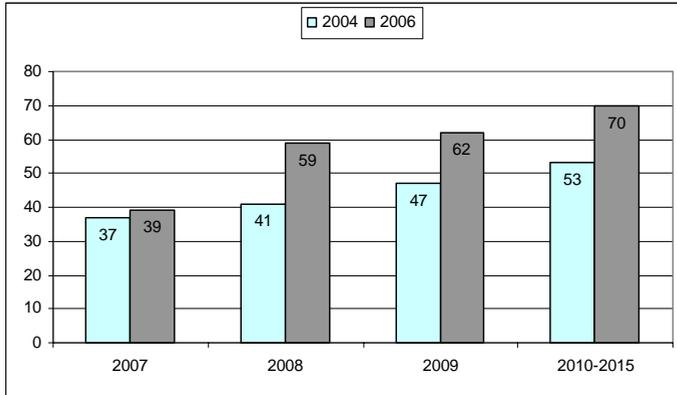


Chart 3

**Number of countries adopting the FIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

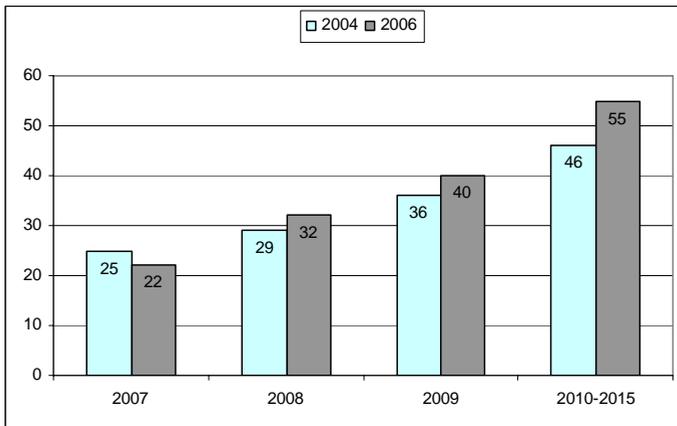
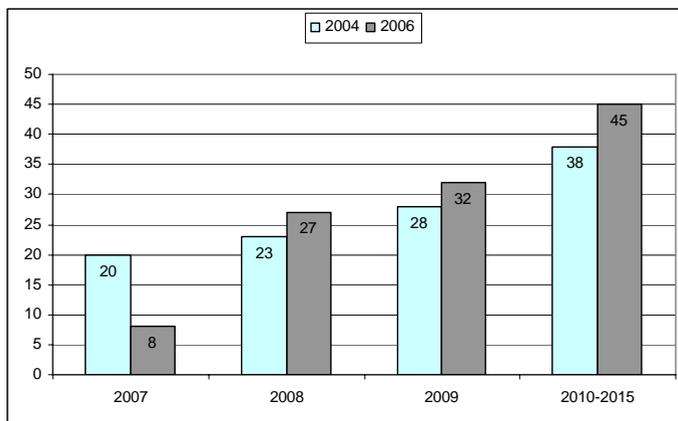


Chart 4  
**Number of countries adopting the  
AIRB approach to credit risk,  
2004 vs 2006 Questionnaire**

Cumulative figures over time



### ***Operational risk***

Based on a comparison of the 2004 and 2006 Questionnaire responses, more jurisdictions are now planning to implement each of the three approaches for allocating capital for operational risk<sup>12</sup> (Charts 5-7). Consistent with the 2004 Questionnaire results, the basic indicator approach is anticipated to be the most widely employed - by 79% of

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<sup>12</sup> 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. An alternative standardised approach would allow banks to use a different indicator, ie loans and advances for two specific business lines: commercial and retail banking. Finally, the advanced measurement approaches would allow banks to use their own internal measurement systems, subject to supervisory approval, to calculate their regulatory capital requirements for operational risk.

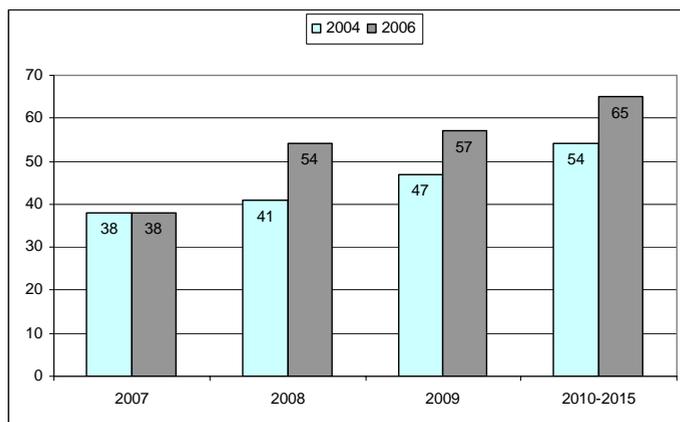
respondents adopting Basel II (Chart 5) - followed by the standardised approach (Chart 6), at 70%. A majority of respondents adopting Basel II - 51% - expect to make the advanced measurement approaches (AMA) to operational risk available (Chart 7). At the same time, a significant number of countries appear to be deferring implementation plans for all three approaches.<sup>13</sup>

A number of countries have decided to offer one but not both of the standardised or basic indicator approaches for operational risk. This partly explains why the number of countries adopting the simplest operational risk approach is lower than the number implementing the standardised credit risk approach.

Chart 5

**Number of countries adopting the basic indicator approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



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<sup>13</sup> The BCBS decided that implementation of Pillar 1 advanced approaches would be deferred from 2006 to end-2007.

Chart 6

**Number of countries adopting the standardised approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

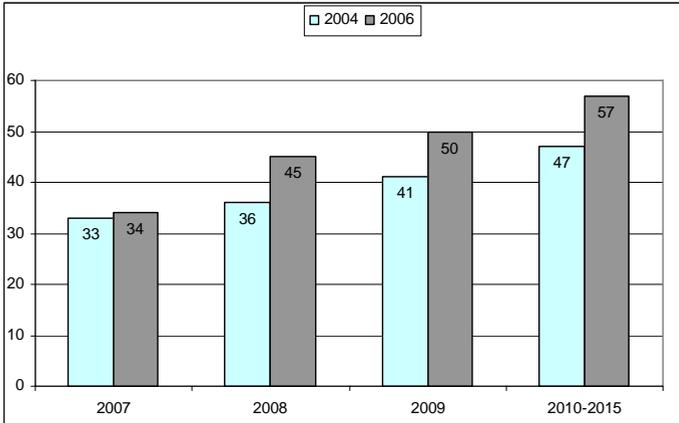
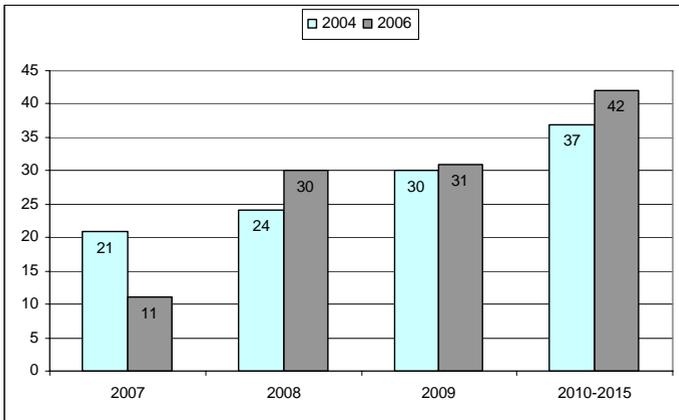


Chart 7

**Number of countries adopting the AMA to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



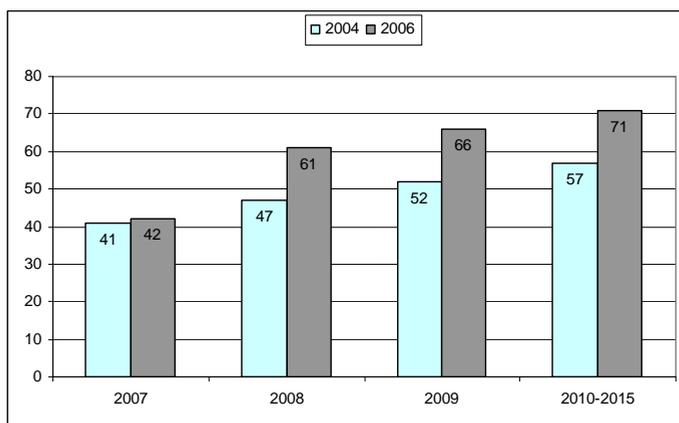
## Pillar 2 - Supervisory review process

Based on the 2006 Questionnaire results, 88% of respondents adopting Basel II expect to implement Pillar 2 and most of these expect to do so during 2007-2008 (Chart 8).<sup>14</sup> Relative to the 2004 Questionnaire results, more countries are now expecting to implement Pillar 2. A significant number of them appear to have adjusted the timing of implementation in order to align it with their revised Pillar 1 implementation dates.<sup>15</sup>

Chart 8

### Number of countries adopting Pillar 2, 2004 vs 2006 Questionnaire

Cumulative figures over time



## Pillar 3 - Market discipline

Based on the 2006 Questionnaire results, 82% of respondents adopting Basel II expect to implement Pillar 3 and most of

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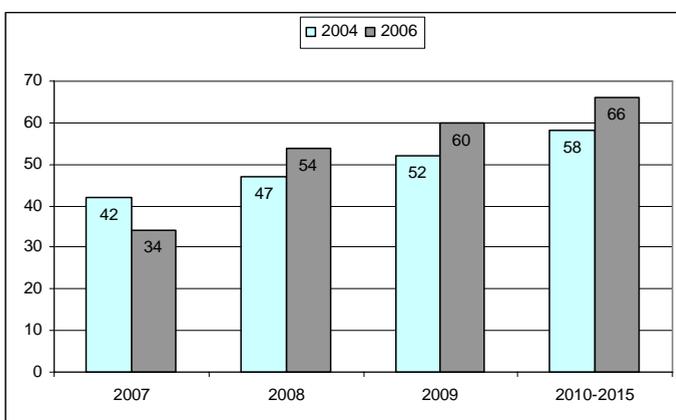
<sup>14</sup> One country has indicated that it will implement Pillar 2 after the timeframe shown in the graph.

<sup>15</sup> The BCBS decided that implementation of Pillar 1 advanced approaches would be deferred from 2006 to end-2007.

these expect to do so during 2007-2008 (Chart 9).<sup>16</sup> Relative to the 2004 Questionnaire results, more countries are now expecting to implement Pillar 3, although a significant number of countries appear to have deferred their implementation plans for this pillar. A few countries intend to implement Pillar 3 after the other two pillars.

Chart 9  
**Number of countries adopting Pillar 3,  
 2004 vs 2006 Questionnaire**

Cumulative figures over time



### 3. Specific implementation plans: Africa

The Questionnaire was sent to 25 jurisdictions in Africa. Responses were received from 17 jurisdictions, representing a response rate of 68%. Twelve respondents intend to adopt Basel II. Based on the 2006 Questionnaire results, more countries in Africa expect to implement Basel II than was the case at the time of the 2004 Questionnaire.

<sup>16</sup> One country has indicated that it intends to implement Pillar 3 after the timeframe shown in the graph.

## Pillar 1 - Minimum capital requirements

### ***Credit risk***

As compared to the 2004 Questionnaire, the 2006 Questionnaire reveals an increase in the number of countries planning to implement one or more of the three credit risk approaches (Charts 3.1-3.3). The standardised approach to credit risk is expected to be the most widely used methodology - 75% of respondents adopting Basel II plan to offer this approach (Chart 3.1). The other credit risk approaches are being less widely implemented. Half the respondents adopting Basel II plan to implement the FIRB approach (Chart 3.2) while a third expect to offer AIRB approach, albeit in the medium term (Chart 3.3). Three countries have decided to adopt Basel II but are yet to make decisions about the timing of implementation and which credit risk approaches to adopt.

Chart 3.1

### **Number of countries adopting the standardised approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

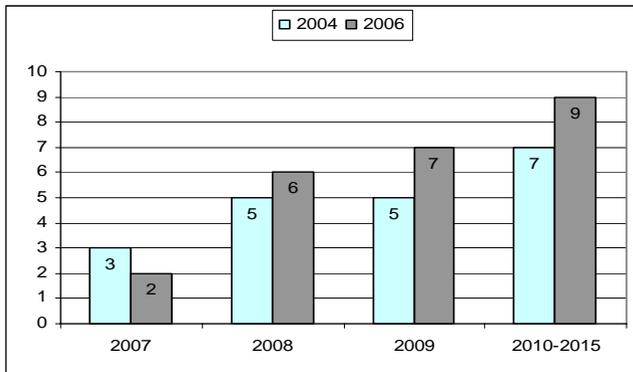


Chart 3.2

**Number of countries adopting the FIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

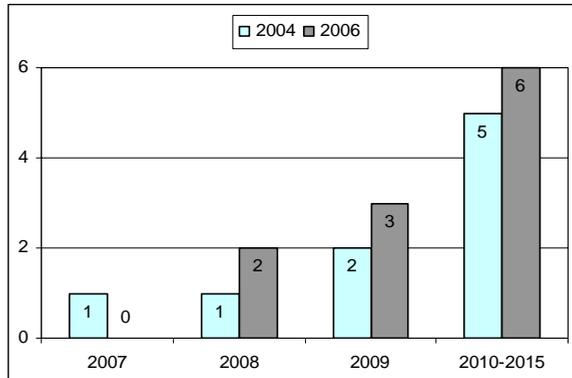
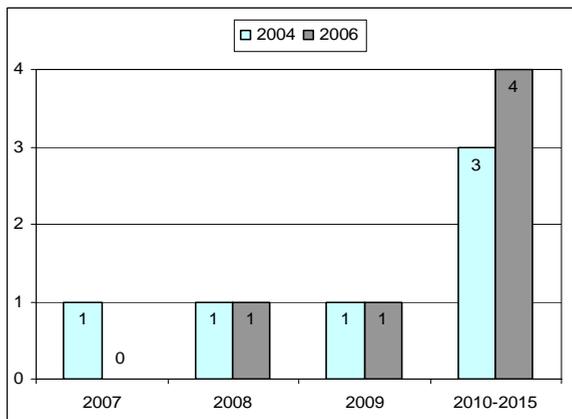


Chart 3.3

**Number of countries adopting the AIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



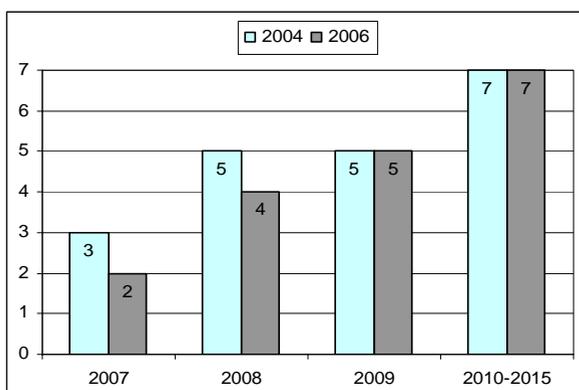
## ***Operational risk***

For Pillar 1 - minimum capital requirements - 58% of respondents adopting Basel II envisage offering the basic indicator approach for calculating capital requirements for operational risk (Chart 3.4), followed by the standardised methodology, at 50% (Chart 3.5). A smaller proportion - 42% - expect to offer the advanced measurement approaches, albeit in the medium term (Chart 3.6).<sup>17</sup>

Chart 3.4

### **Number of countries adopting the basic indicator approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



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<sup>17</sup> The BCBS decided that implementation of Pillar 1 advanced approaches would be deferred from 2006 to end 2007.

Chart 3.5

**Number of countries adopting the standardised approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

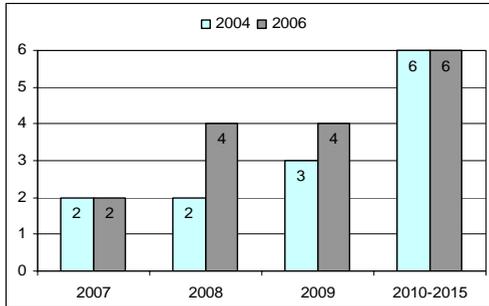
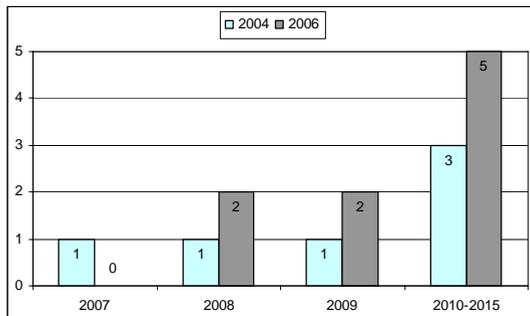


Chart 3.6

**Number of countries adopting the AMA to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



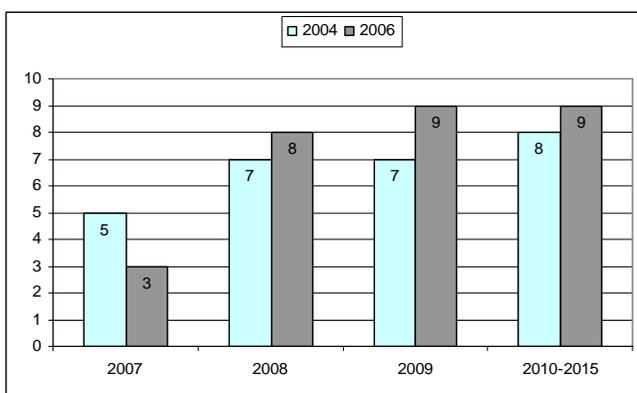
## Pillar 2 - Supervisory review process

Based on the 2006 Questionnaire results, 10 jurisdictions are planning to implement Pillar 2 and most of these expect to do so by end-2008 (Chart 3.7).<sup>18</sup> A few countries have deferred implementation plans for Pillar 2 since the last Questionnaire was carried out.

Chart 3.7

### Number of countries adopting Pillar 2, 2004 vs 2006 Questionnaire

Cumulative figures over time



## Pillar 3 - Market discipline

Based on the 2006 Questionnaire results, 10 jurisdictions are planning to implement Pillar 3 and most of these respondents expect to do so by end-2008 (Chart 3.8).<sup>19</sup> Relative to the 2004 Questionnaire results, several countries in the region have decided to defer implementation of Pillar 3 beyond 2007.

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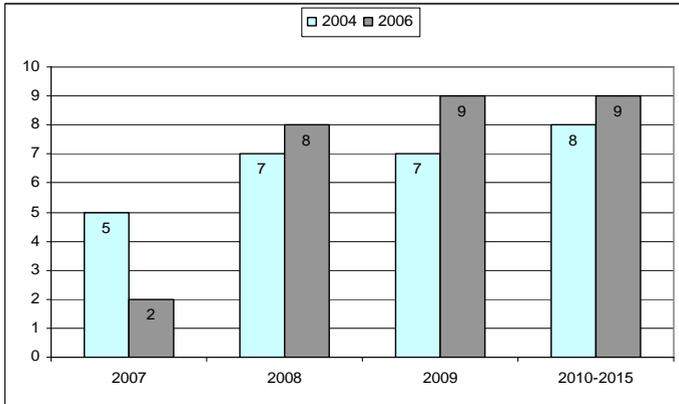
<sup>18</sup> One country intends to implement Pillar 2 after the timeframe covered in the graph.

<sup>19</sup> One country plans to implement Pillar 3 after the timeframe covered in the graph.

Chart 3.8

**Number of countries adopting Pillar 3,  
2004 vs 2006 Questionnaire**

Cumulative figures over time



#### **4. Specific implementation plans: Asia**

The 2006 Questionnaire was sent to supervisory agencies in 18 jurisdictions in Asia, of which 16, or 89%, responded. Evidencing the strong support for Basel II and generally advanced state of preparedness in the region, all of the respondents<sup>20</sup> indicated that they intend to adopt Basel II, with most planning to have implemented the basic approaches for credit and operational risk under Pillar 1, as well as Pillars 2 and 3, by year-end 2008.

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<sup>20</sup> In some jurisdictions, not all banking sector assets will be captured by Basel II.

## Pillar 1 - Minimum capital requirements

### *Credit risk*

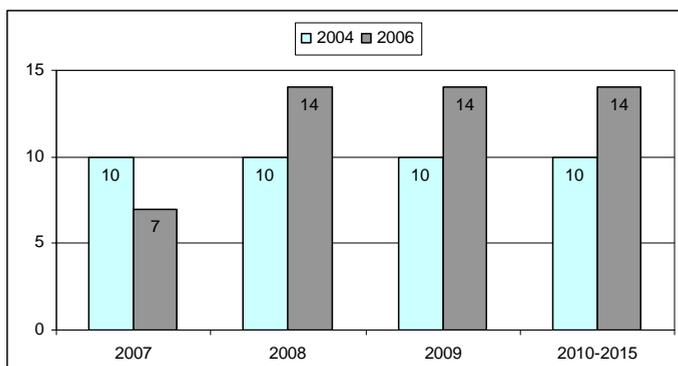
Comparing the 2004 and 2006 Questionnaire responses, it appears that supervisory agencies in the region have stepped up their efforts to prepare for implementation of Basel II credit risk approaches in the period between the two Questionnaires (Charts 4.1-4.3).

Currently 14 jurisdictions, or 88% of respondents, plan to permit banks to use the standardised approach for calculating their credit risk capital charge, an increase from the 56% reported in 2004. All 14 of these jurisdictions expect to have completed implementation of the standardised approach by the end of 2008 (Chart 4.1).

Chart 4.1

### **Number of countries adopting the standardised approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



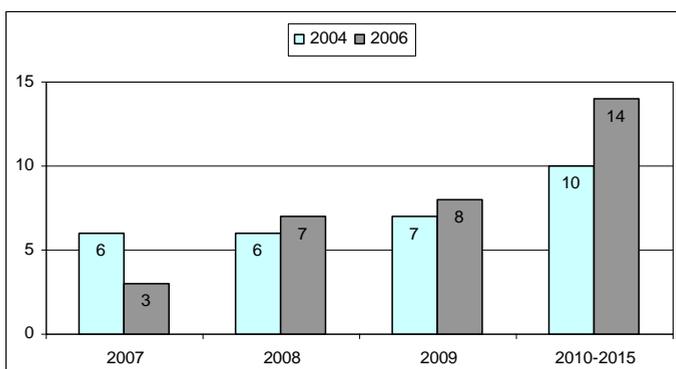
With regard to the FIRB methodology, 14 jurisdictions, or 88% of respondents, will ultimately permit this approach, also representing a significant increase from the 10 jurisdictions (56%) that had such plans when the 2004 Questionnaire was completed (Chart 4.2). A further analysis of responses shows that several jurisdictions have deferred their FIRB implementation plans slightly, contributing to a more gradual

pace of implementation for this approach than for the standardised approach. On a region-wide basis implementation of the FIRB approach is not expected to be fully completed until 2015. Interestingly, the results show that two agencies that plan to permit the use of the FIRB approach will not be allowing use of the standardised approach.

Chart 4.2

**Number of countries adopting the FIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



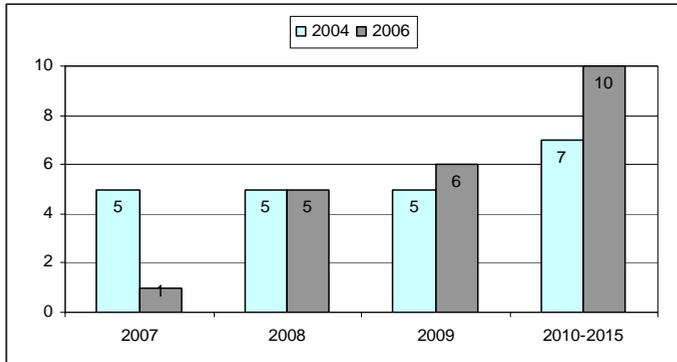
A majority of respondents - 63% - expect to offer the AIRB approach, a figure that is higher than the average for all non-BCBS Questionnaire respondents (Chart 4.3). Of the 10 agencies that will permit the use of this approach, three were not planning to do so when the 2004 Questionnaire was distributed, and five have deferred their implementation plans by between one and three years.<sup>21</sup>

<sup>21</sup> In 2004, the BCBS deferred the implementation date for Pillar 1 advanced approaches from year-end 2006 to year-end 2007.

Chart 4.3

**Number of countries adopting the  
AIRB approach to credit risk,  
2004 vs 2006 Questionnaire**

Cumulative figures over time



***Operational risk***

While all jurisdictions plan to offer some or all of the approaches for calculating operational risk capital requirements, most have revised their implementation plans in one way or another. More specifically, according to the 2006 Questionnaire results, the basic indicator approach will be more widely adopted than was expected in 2004 - 13 jurisdictions in 2006 compared with 11 in 2004 (Chart 4.4). Of the 11 jurisdictions that were planning to offer the basic indicator approach when the 2004 Questionnaire was completed, three have now decided not to and say that they will offer only the standardised approach and the AMA. Five jurisdictions that did not envisage including operational risk in Pillar 1 will now do so, while four have decided to delay their implementation plans for operational risk.

Chart 4.4

**Number of countries adopting the basic indicator approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

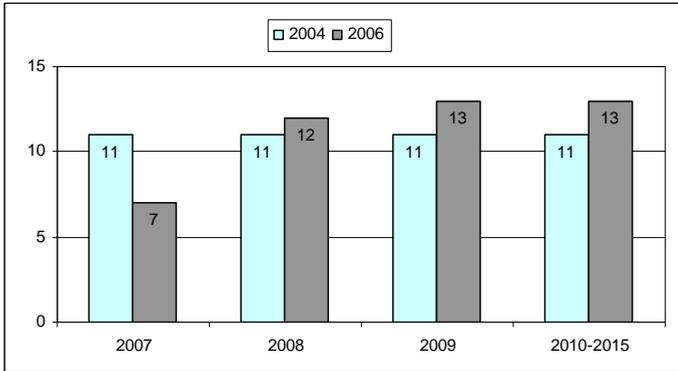
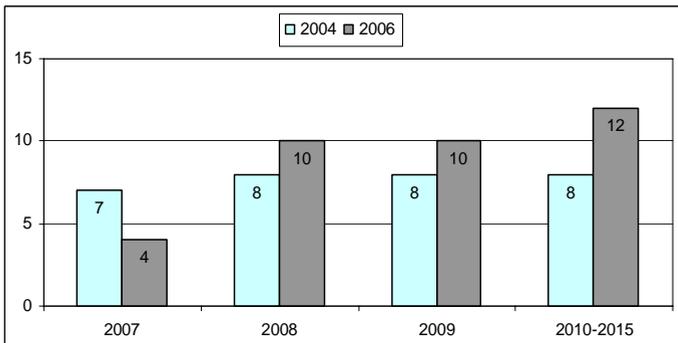


Chart 4.5

**Number of countries adopting the standardised approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



The standardised approach to measuring operational risk capital charges in Pillar 1 will ultimately be permitted in 75% of the responding jurisdictions, or 12 out of 16 (Chart 4.5). This compares favourably to the 2004 responses, when eight jurisdictions planned to offer this approach. Of these eight

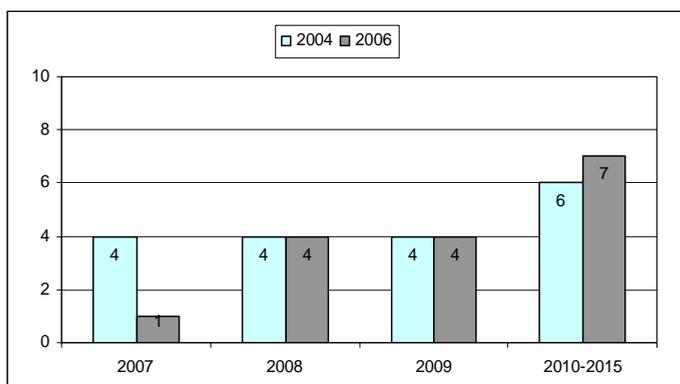
jurisdictions, six have since indicated a delay in their implementation plans while one has brought forward the expected implementation date for this approach.

The AMA will be implemented by 43% of Asian region respondents (Chart 4.6).<sup>22</sup>

Chart 4.6

**Number of countries adopting the AMA to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



**Pillar 2 - Supervisory review process**

Based upon responses to the 2006 Questionnaire, 94% of respondents - 15 jurisdictions - expect to have implemented Pillar 2 by year-end 2009, and approximately half of these expect to have done so by year-end 2007 (Chart 4.7). Relative to the 2004 results, more countries in the region now expect to implement Pillar 2 and five countries have deferred their implementation plans by one or, in most cases, two years.

<sup>22</sup> The BCBS decided that implementation of Pillar 1 advanced approaches would be deferred until end-2007.

Chart 4.7

**Number of countries adopting Pillar 2,  
2004 vs 2006 Questionnaire**

Cumulative figures over time

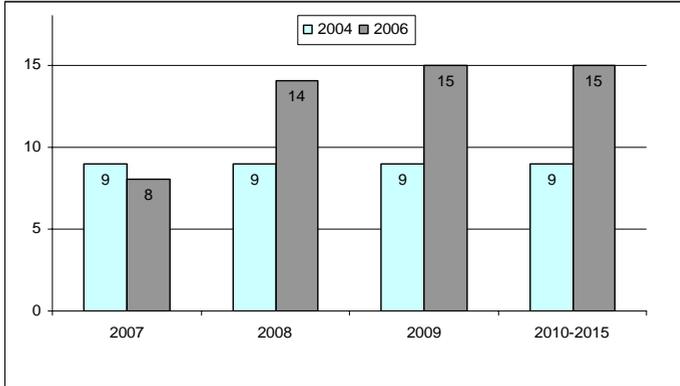
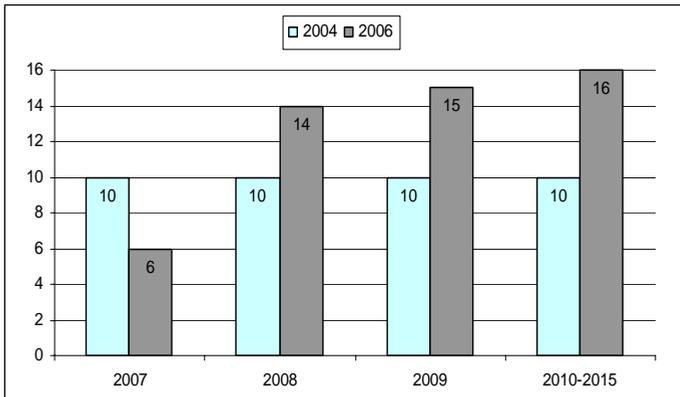


Chart 4.8

**Number of countries adopting Pillar 3,  
2004 vs 2006 Questionnaire**

Cumulative figures over time



### **Pillar 3 - Market discipline**

All respondents to the 2006 Questionnaire indicate that they intend to implement Pillar 3. Approximately 37% of the jurisdictions expect to do so by year-end 2007, while most of the remainder expect to implement the requirements by year-end 2008 (Chart 4.8). Thus, in comparison to the 2004 results, a greater percentage of jurisdictions in the region now expect to implement Pillar 3, although seven countries have deferred their implementation plans by one or two years and one has deferred implementation by six years.

## **5. Specific implementation plans: Caribbean**

The Questionnaire was sent to eight jurisdictions in the Caribbean. Responses were received from seven jurisdictions, representing a response rate of 88%. Four of the respondents stated that they were intending to adopt Basel II, one fewer than in 2004.

### **Pillar 1 - Minimum capital requirements**

#### ***Credit risk***

Since the 2004 Questionnaire was carried out, several Caribbean countries have decided to focus on implementation of the standardised credit risk approach and thus no longer intend to offer either of the advanced credit risk approaches.

All of the respondents adopting Basel II envisage offering the standardised methodology for calculating capital requirements for credit risk (Chart 5.1). Only one country is currently expecting to offer both the FIRB and AIRB methodologies (Charts 5.2-5.3).

Chart 5.1

**Number of countries adopting the standardised approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

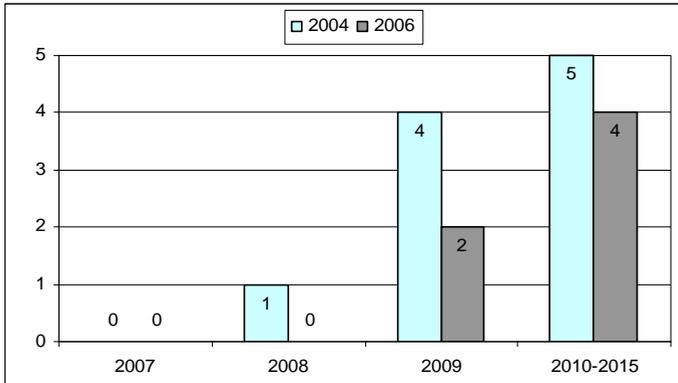


Chart 5.2

**Number of countries adopting the FIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

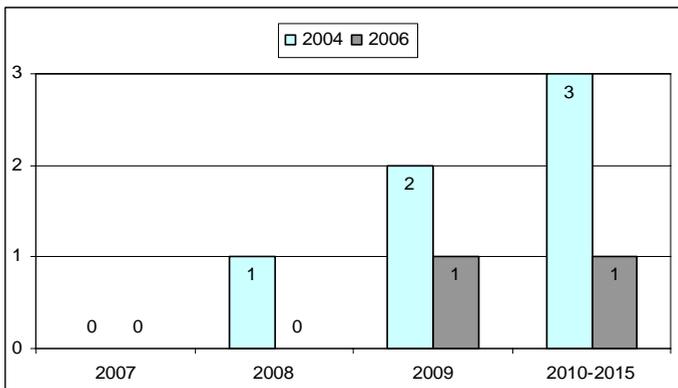
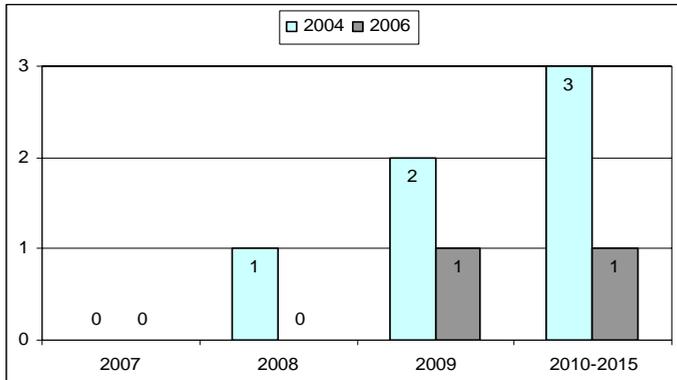


Chart 5.3

**Number of countries adopting the AIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



***Operational risk***

Based on the 2006 Questionnaire results, the number of Caribbean countries implementing the operational risk part of Pillar 1 is lower than indicated by the 2004 Questionnaire results. Three respondents envisage offering the basic indicator methodology for calculating capital requirements for operational risk (Chart 5.4). Similarly three respondents intend offering the standardised approach for operational risk (Chart 5.5). However, only one country is currently expecting to offer the AMA (Chart 5.6).

Chart 5.4

**Number of countries adopting the basic indicator approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

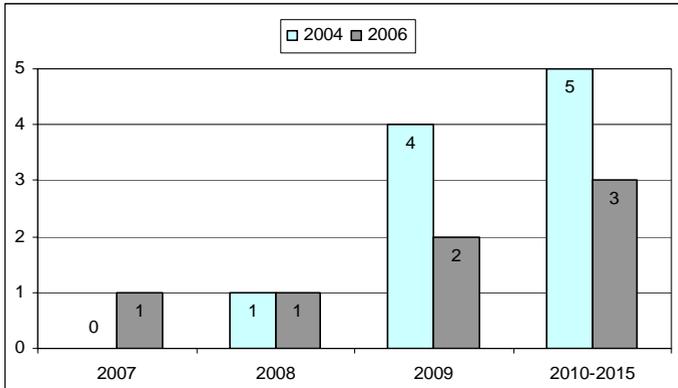


Chart 5.5

**Number of countries adopting the standardised approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

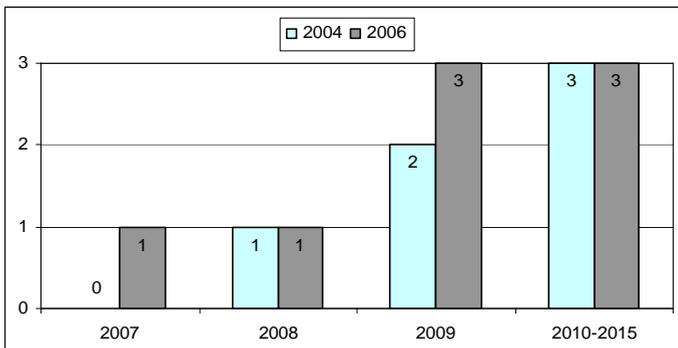
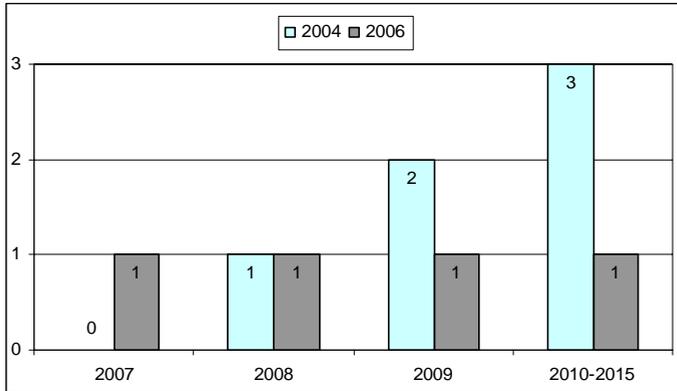


Chart 5.6

**Number of countries adopting the AMA to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



**Pillar 2 - Supervisory review process**

Based on the 2006 Questionnaire results, 100% of respondents adopting Basel II are planning to implement Pillar 2 and all of these respondents expect to do so by 2009 (Chart 5.7). Relative to the 2004 Questionnaire results, implementation plans for Pillar 2 have been brought forward in the region.

**Pillar 3 - Market discipline**

Based on the 2006 Questionnaire results, 75% of respondents adopting Basel II plan to implement Pillar 3 and expect to do so by 2009 (Chart 5.8).

Chart 5.7

**Number of countries adopting Pillar 2,  
2004 vs 2006 Questionnaire**

Cumulative figures over time

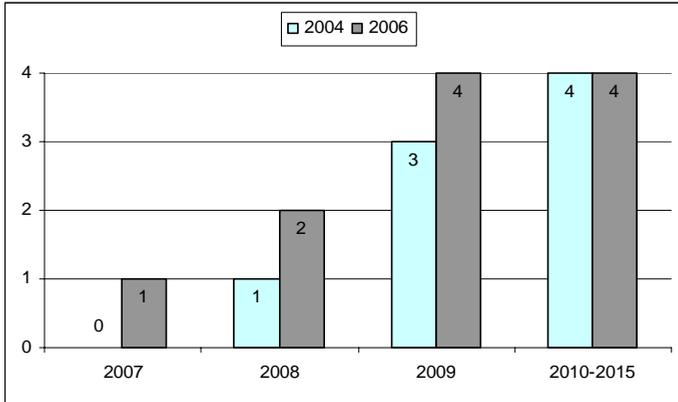
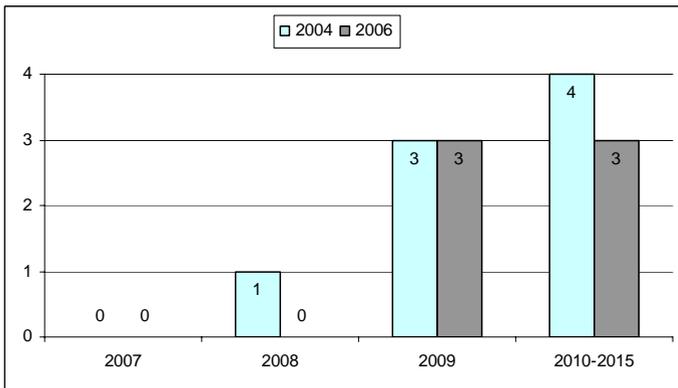


Chart 5.8

**Number of countries adopting Pillar 3,  
2004 vs 2006 Questionnaire**

Cumulative figures over time



## **6. Specific implementation plans: Latin America**

The Questionnaire was sent to 16 jurisdictions in Latin America. Responses were received from 14 jurisdictions, representing a response rate of approximately 88%. Twelve of the respondents<sup>23</sup> intend to adopt Basel II.

### **Pillar 1 - Minimum capital requirements**

#### ***Credit risk***

Based on the 2006 Questionnaire results for Pillar 1 - minimum capital requirements - 75% of Latin American respondents implementing Basel II envisage offering the standardised methodology for calculating capital requirements for credit risk (Chart 6.1). Slightly over 40% of Questionnaire respondents implementing Basel II expect to offer the FIRB approach, while some countries have deferred their FIRB implementation timeframes from 2007-2009 to the 2010-2015 time period (Chart 6.2).<sup>24</sup> Half of the Latin American countries expect to offer the AIRB approach compared with 55% of all non-BCBS Questionnaire respondents (Chart 6.3).

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<sup>23</sup> In some jurisdictions, not all banking sector assets will be captured by Basel II.

<sup>24</sup> The BCBS decided that implementation of Pillar 1 advanced approaches would be deferred from 2006 to end-2007.

Chart 6.1

**Number of countries adopting the standardised approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

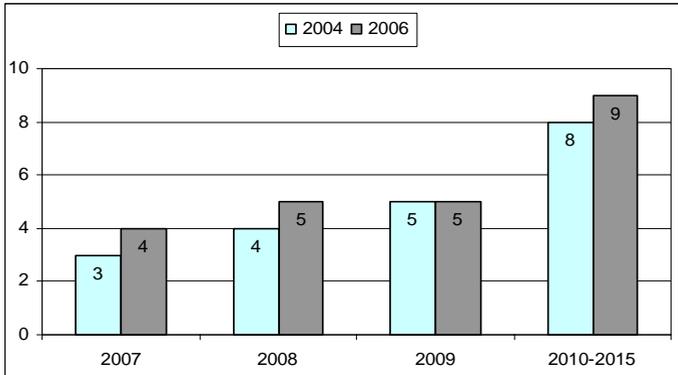


Chart 6.2

**Number of countries adopting the FIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

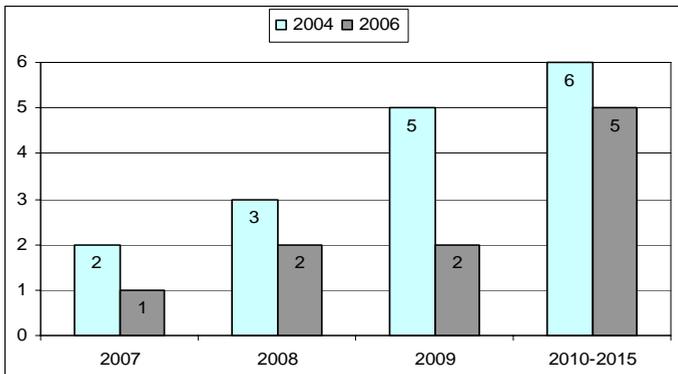
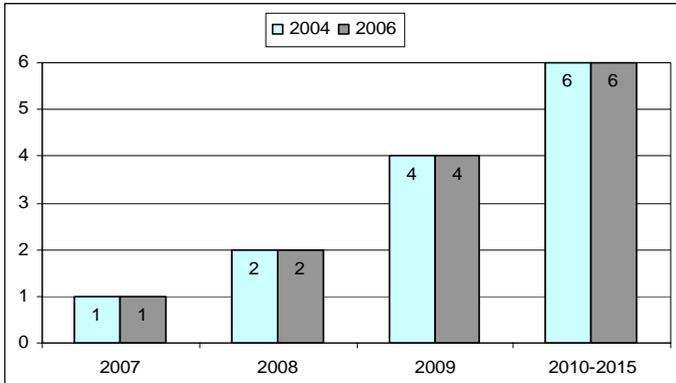


Chart 6.3

**Number of countries adopting the AIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



**Operational risk**

For Pillar 1 - minimum capital requirements - 67% of respondents adopting Basel II envisage offering the basic methodology for calculating capital requirements for operational risk (Chart 6.4), followed by the standardised methodology, at 50% (Chart 6.5). Some countries have deferred the implementation timeframes for the standardised approach from 2007-2009 to the 2010-2015 time period. A significant percentage of countries - 42% - expect to offer the AMA; however, some countries have deferred their implementation plans for these approaches from 2009 until the 2010-2015 time period (Chart 6.6).<sup>25</sup>

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<sup>25</sup> The BCBS decided that implementation of Pillar 1 advanced approaches would be deferred to end-2007.

Chart 6.4

**Number of countries adopting the basic indicator approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

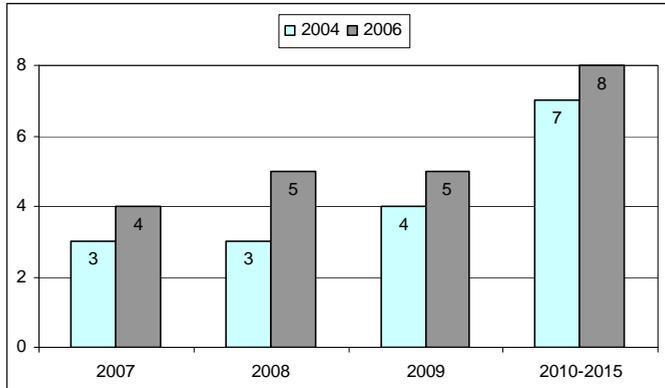


Chart 6.5

**Number of countries adopting the standardised approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

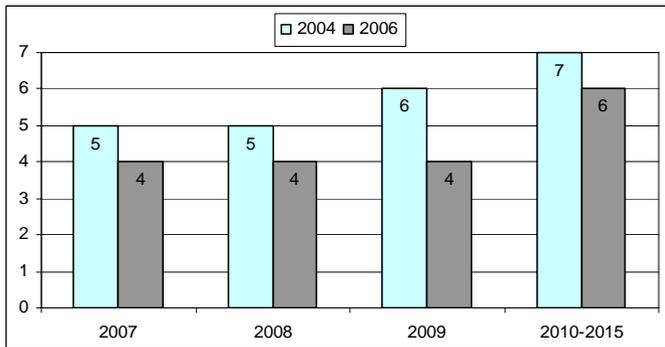
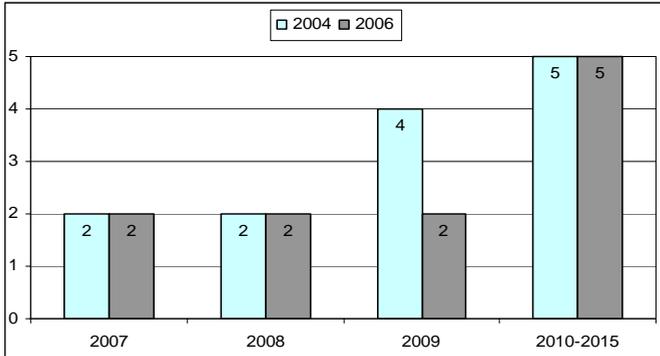


Chart 6.6

**Number of countries adopting the AMA to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



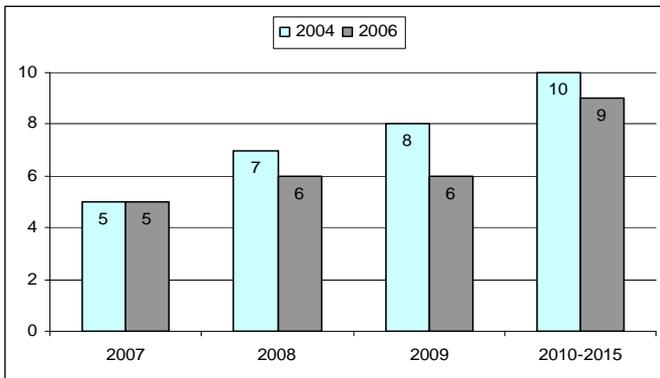
**Pillar 2 - Supervisory review process**

Based on the 2006 Questionnaire results, 75% of respondents implementing Basel II expect to implement Pillar 2 (Chart 6.7). Approximately half of these are expecting to do so by end-2007, while all but one of the remainder expect to wait until the 2010-2015 time period to go ahead.

Chart 6.7

**Number of countries adopting Pillar 2, 2004 vs 2006 Questionnaire**

Cumulative figures over time



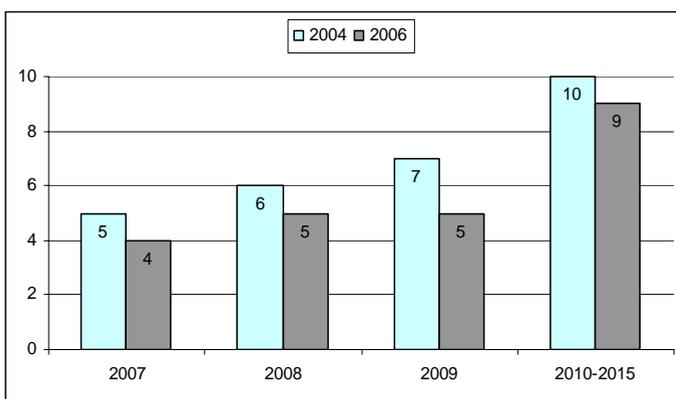
### Pillar 3 - Market discipline

Based on the 2006 Questionnaire results, 75% of respondents implementing Basel II expect to implement Pillar 3 (Chart 6.8). Almost half of these countries are expecting to go ahead with implementation by the end of 2007, while most of the remainder expect to wait until the 2010-2015 time period to go ahead.

Chart 6.8

#### Number of countries adopting Pillar 3, 2004 vs 2006 Questionnaire

Cumulative figures over time



## 7. Specific implementation plans: Middle East

The Questionnaire was sent to nine jurisdictions in the Middle East and responses were received from eight. All of the jurisdictions responding to the Questionnaire intend to adopt Basel II. Based on the 2006 Questionnaire results, more countries in the Middle East are planning to implement Basel II than was the case at the time of the 2004 Questionnaire.

## Pillar 1 - Minimum capital requirements

### *Credit risk*

At the time of the 2004 Questionnaire, most jurisdictions in the Middle East had not decided which credit risk approach to implement. Results from the 2006 Questionnaire show that all jurisdictions now have firm plans for implementing one or more of the three credit risk approaches. In terms of Pillar 1 - minimum capital requirements - all of the respondents envisage offering the standardised methodology for calculating capital requirements for credit risk by the end of 2008 (Chart 7.1), while 75% expect to offer the FIRB approach. Thirty-eight percent of the respondents are expecting to bring in the AIRB approach - all within the 2010-2015 time period (Chart 7.3).

Chart 7.1

### **Number of countries adopting the standardised approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

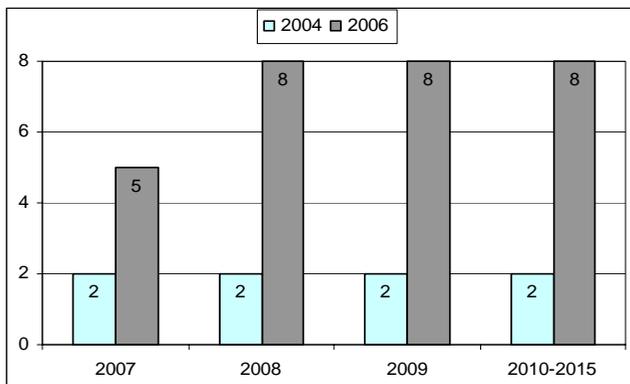


Chart 7.2

**Number of countries adopting the FIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

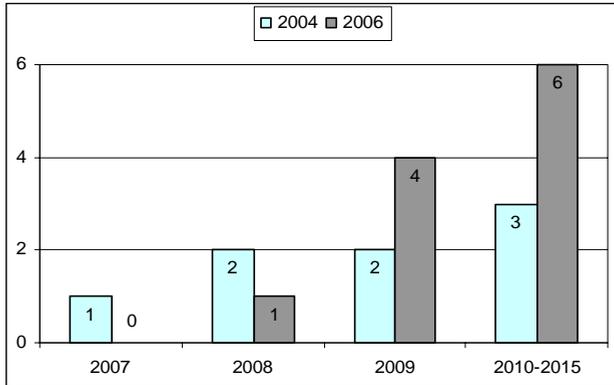
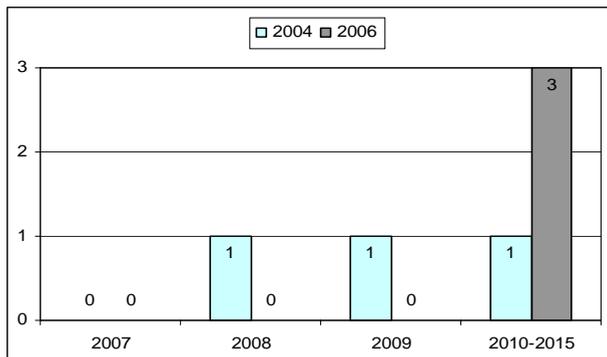


Chart 7.3

**Number of countries adopting the AIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



## ***Operational risk***

Based on the 2006 Questionnaire results, more countries in the Middle East are expecting to offer the basic operational risk approaches as compared to the 2004 results. In terms of Pillar 1 - minimum capital requirements - 88% of the respondents envisage offering the basic and standardised methodologies for calculating capital requirements for operational risk, mostly by the end of 2008 (Charts 7.4 and 7.5), while 25% plan to bring in the AMA within the 2010-2015 time period (Chart 7.6).

Chart 7.4

### **Number of countries adopting the basic indicator approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

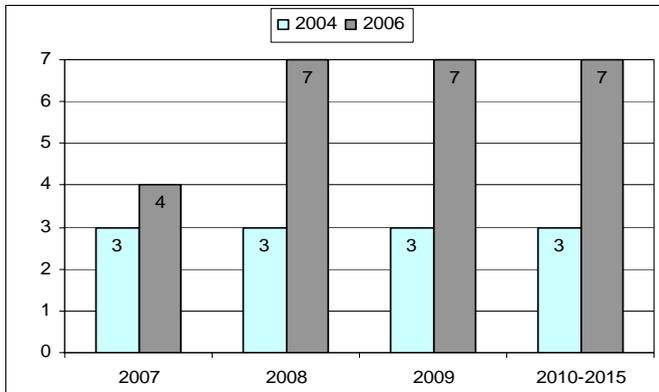


Chart 7.5

**Number of countries adopting the standardised approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

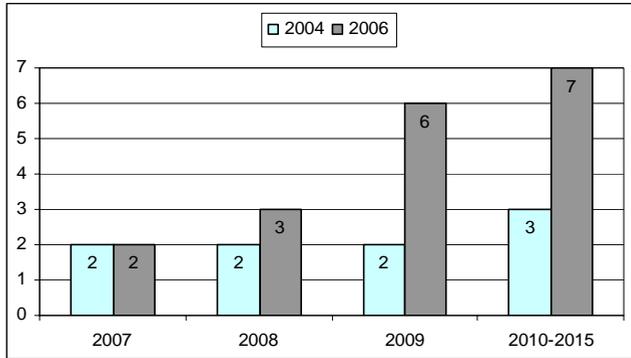
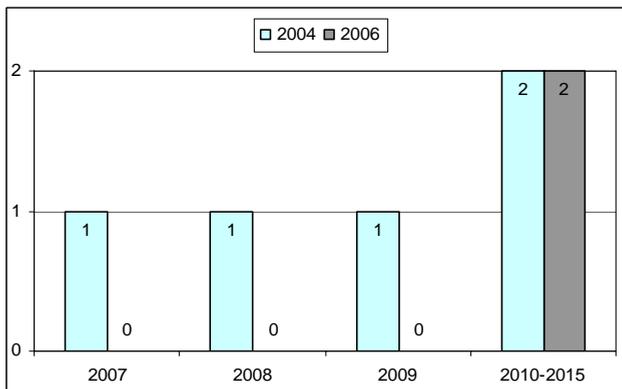


Chart 7.6

**Number of countries adopting the AMA to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



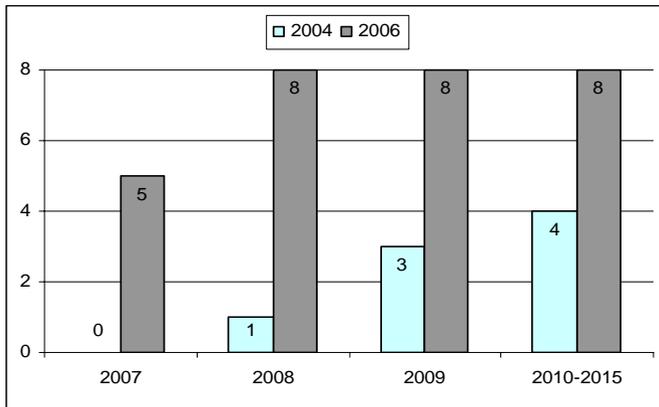
## Pillar 2 - Supervisory review process

Based on the 2006 Questionnaire results, all respondents expect to implement Pillar 2 (Chart 7.7), compared with 50% of respondents at the time the 2004 Questionnaire was conducted. Furthermore, all respondents in the Middle East expect to implement Pillar 2 by 2008.

Chart 7.7

### Number of countries adopting Pillar 2, 2004 vs 2006 Questionnaire

Cumulative figures over time



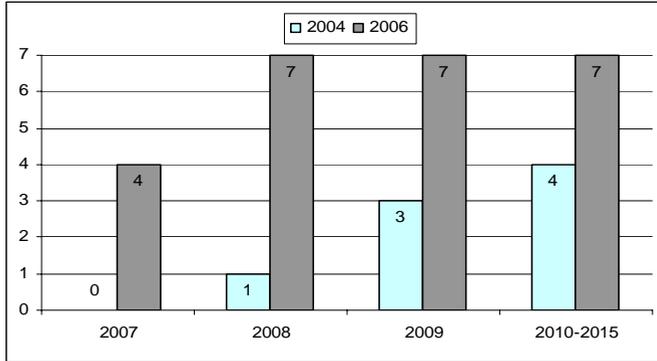
## Pillar 3 - Market discipline

Based on the 2006 Questionnaire results, 88% of respondents expect to implement Pillar 3 (Chart 7.8), nearly double the number indicated by the 2004 results. All jurisdictions implementing Pillar 3 expect to do so by end-2008.

Chart 7.8

**Number of countries adopting Pillar 3,  
2004 vs 2006 Questionnaire**

Cumulative figures over time



**8. Specific implementation plans:  
non-BCBS Europe**

The 2006 Questionnaire was sent to 39 jurisdictions in non-BCBS Europe. Responses were received from 36 jurisdictions, representing a response rate of approximately 92%. With roughly 83% of the respondents intending to adopt Basel II, more countries in non-BCBS Europe are showing support for Basel II than was the case when the 2004 Questionnaire was conducted. Most respondents are expecting to offer the full menu of approaches, including the most advanced and Pillars 2 and 3, by the end of 2008.

These results are partly driven by the fact that 16 of the countries which completed the Questionnaire are members of the European Union and therefore required to implement the Capital Requirements Directive (the EU legislation that puts Basel II into EU law).

## Pillar 1 - Minimum capital requirements

### *Credit risk*

Reflecting global trends, the 2006 regional Questionnaire responses show higher adoption rates for all three credit risk approaches (Charts 8.1-8.3). For Pillar 1 - minimum capital requirements - 87% of respondents adopting Basel II envisage offering the standardised methodology for calculating capital requirements for credit risk (Chart 8.1), followed by the FIRB approach, at 76% (Chart 8.2). In addition, a substantial majority - 70% - of respondents adopting Basel II expect to offer the AIRB approach, well above the average for all non-BCBS Questionnaire respondents (Chart 8.3). No respondents appear to have delayed their implementation plans in the period since the 2004 Questionnaire was completed. Interestingly, most respondents are expecting to offer the basic approaches by the end of 2007 and the advanced approaches by the end of 2008. Only two respondents indicated that, although they would be adopting Basel II, they had not yet made firm decisions on either the timing of implementation, or the selection of credit risk approaches.

Chart 8.1

### **Number of countries adopting the standardised approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

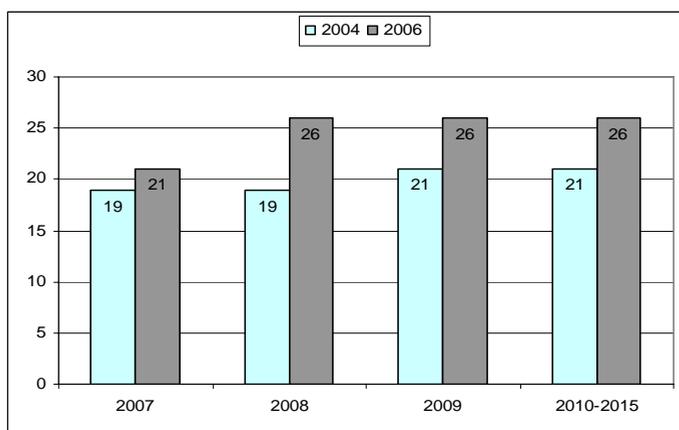


Chart 8.2

**Number of countries adopting the FIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

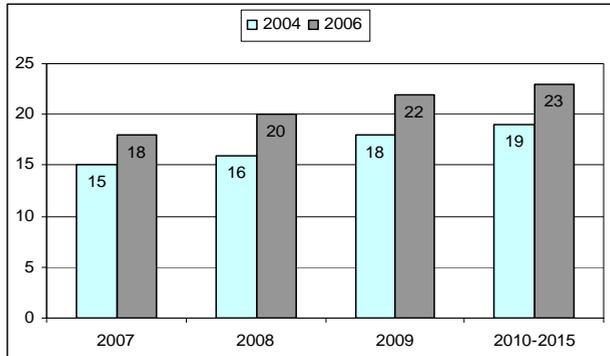
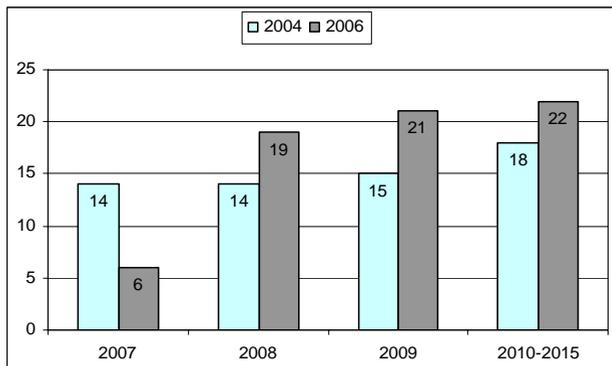


Chart 8.3

**Number of countries adopting the AIRB approach to credit risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



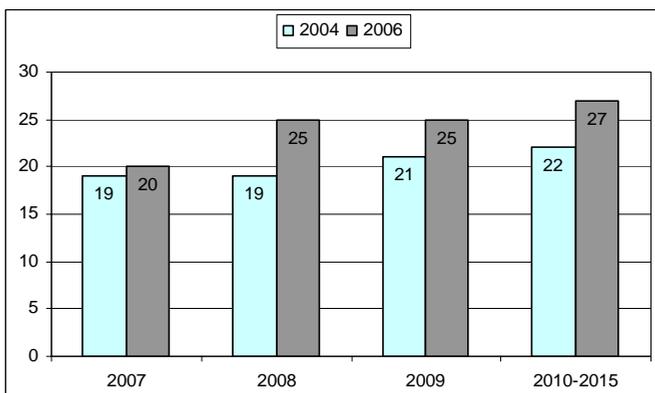
## Operational risk

As with credit risk, the 2006 Questionnaire results demonstrate strong support for Pillar 1 operational risk requirements in non-BCBS Europe. Most respondents envisage offering the basic methodology for calculating capital requirements for operational risk (Chart 8.4), followed by the standardised methodology, at 77% (Chart 8.5). A substantial majority of respondents - 73% - expect to offer the AMA, which is well above the average for all non-BCBS Questionnaire respondents (Chart 8.6). Most respondents are expecting to offer the basic approaches by end-2007 and the AMA by end-2008.<sup>26</sup>

Chart 8.4

### Number of countries adopting the basic indicator approach to operational risk, 2004 vs 2006 Questionnaire

Cumulative figures over time



<sup>26</sup> The BCBS decided that implementation of Pillar 1 advanced approaches would be deferred from 2006 to end-2007.

Chart 8.5

**Number of countries adopting the standardised approach to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time

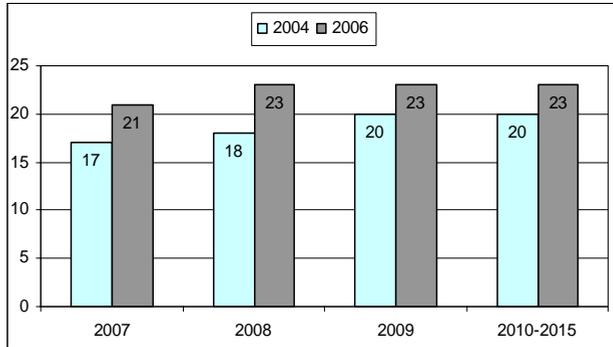
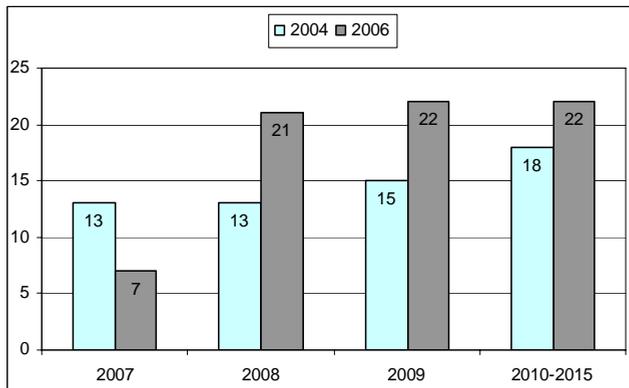


Chart 8.6

**Number of countries adopting the AMA to operational risk, 2004 vs 2006 Questionnaire**

Cumulative figures over time



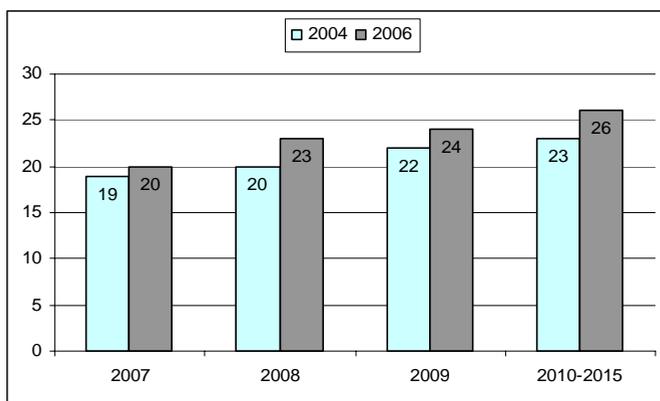
## Pillar 2 - Supervisory review process

Based on the 2006 results, 87% of non-BCBS European countries implementing Basel II are expecting to implement Pillar 2 (Chart 8.7), mostly by the end of 2007. Relative to the 2004 Questionnaire results, more countries in the region now expect to implement Pillar 2.

Chart 8.7

### Number of countries adopting Pillar 2, 2004 vs 2006 Questionnaire

Cumulative figures over time



## Pillar 3 - Market discipline

Based on the 2006 results, 77% of non-BCBS European countries implementing Basel II are expecting to implement Pillar 3 (Chart 8.8), mostly by the end of 2007. The actual number of countries implementing Pillar 3 has remained unchanged between the dates on which the two Questionnaires were completed.

Chart 8.8

**Number of countries adopting Pillar 3,  
2004 vs 2006 Questionnaire**

Cumulative figures over time

