

## **Adoption of Basel 2: The 2006 Survey of the Financial Stability Institute**

Andrew Cornford

In October 2006 the Financial Stability Institute (FSI) published the results of its second survey of plans for the implementation of Basel 2 - a follow-up of a similar exercise in 2004.<sup>1</sup> The 2006 survey is based on a questionnaire sent like its predecessor to 115 countries, of which 98 (85 per cent) responded in comparison with 107 (93 per cent) for the 2004 survey.

- Of the respondents 82 or 84 per cent intend to adopt Basel 2 – in comparison with 82 per cent for the 2004 survey. A country's intention to adopt Basel 2 and its approaches, options, or other rules means that the country's regulators will make them available to financial firms in their jurisdictions.
- The data in the 2006 survey are in the form of numbers of countries intending to adopt Basel 2 in six regions (Asia, Africa, Caribbean, Middle East, and non-BCBS Europe) rather than - as in the 2004 survey - the proportion of banks' assets in these regions expected to be covered by Basel 2.
- The data include not only the numbers of countries intending to adopt Basel 2 at the time of the 2006 survey but also the corresponding totals for 2004 (which were not published in the 2004 survey). In neither survey is the identity of individual responding countries disclosed.
- A new feature of the 2006 survey is the proportions of countries intending to adopt Pillar 2 (supervisory review) and Pillar 3 (market discipline or transparency) of Basel 2. (See Box 1) The reviews of progress and outstanding problems under these two Pillars in the 2004 survey were qualitative and not quantitative.

---

### ***Box 1. Basel 2: approaches, options and rules***

Under Pillar 1 of Basel 2, requirements for minimum regulatory capital for credit risk are calculated according to two alternative approaches, the Standardised and the Internal Ratings-Based. Under the Standardised Approach (SA), the measurement of credit risk is based on external credit assessments provided by external credit assessment institutions such as credit rating agencies or export credit agencies. Under the internal ratings-based approach (IRBA), subject to supervisory approval as to the satisfaction of certain conditions, banks use their own rating systems to measure some or all of the determinants of credit risk. Under the foundation version (FIRBA), banks calculate the probability of default (PD) on the basis of

---

<sup>1</sup> Financial Stability Institute, *Implementation of the New Capital Adequacy Framework in non-Basel Committee Member Countries. Summary of the Responses to the 2006 Follow-Up Questionnaire on Basel II Implementation*, Occasional Paper No. 6 (Basel: BIS, September 2006); and *Implementation of the New Capital Adequacy Framework in non-Basel Committee Member Countries. Summary of the Responses to the Basel II Implementation Assistance Questionnaire*, Occasional Paper No. 4 (Basel: BIS, July 2004)

their own ratings but rely on their supervisors for measures of the other determinants of credit risk. Under the advanced version (AIRBA), banks estimate their own measures of all the determinants of credit risk, including loss given default and exposure at default.

Under the regulatory capital requirements for operational risk, there are three options of progressively greater sophistication. Under the Basic Indicator Approach (BIA), the capital charge is a percentage of banks' gross income. Under the Standardised Approach (SAOR), the capital charge is the sum of percentages of banks' gross income from specified business lines (or alternatively for two of the business lines, retail and commercial banking, of percentages of loans and advances). Under the Advanced Measurement Approach (AMA), subject to the satisfaction of more stringent supervisory criteria, banks estimate the required capital with their own internal systems for measuring operational risk.

Pillars 2 and 3 of Basel 2 contain rules for supervisory review of capital adequacy and setting supplementary levels of minimum required capital for risks not covered or inadequately covered under Pillar 1, and for the achievement of market discipline through disclosure.

-----

This paper is devoted to a review of the data of the 2006 survey, region by region. For this purpose the focus is mainly on the two years, 2007 and 2009.

- If a country intends to adopt a Basel 2 approach, option or Pillars 2 or 3 by the first of these dates, 2007, it is reasonable to assume that progress towards implementation is already well advanced.
- Regarding 2009, the number of countries intending to adopt an approach, option, or Pillars 2 and 3 by this date is a cumulative figure that includes not only the totals for 2007 but also other countries likely to already have in place implementation plans but ones less advanced than the first group of countries.

The 2006 FSI survey also contains data for countries intending adoption by 2008 and 2010-2015. The former group has been omitted from the discussion in the interests of clarity. The inclusion of a country's plans for adoption in the latter group is taken to indicate that these plans are still preliminary, and the data for this period is deployed only as needed in particular contexts.

The review pays particular attention to the following subjects:

1. the frequency of the intended adoption of different approaches, options, and rules by 2007 and 2009;
2. deferment and abandonment of the adoption of intended approaches and options between the 2004 and 2006 FSI surveys;
3. the timing of the intended adoption of the approaches and options for minimum required capital for credit and operational risk and of Pillars 2 and 3; and
4. other issues related to the adoption of Pillars 2 and 3.

The problems posed by adoption of the rules of Pillar 2 and 3 vary with the development of countries' financial sectors and supervisory regimes. To quote the 2006 Revised Framework on Pillar 2, "The supervisory review process of the Framework is intended not only to ensure

that banks have adequate capital to support all the risks of their business, but also to encourage banks to develop and use better risk management techniques in monitoring and managing their risks."<sup>2</sup> Thus the responsibilities of supervisors under Pillar 2 are not restricted to ensuring mechanical compliance by financial firms with the levels of minimum required capital for credit and operational risks but also entail assessment - and thus understanding - of major parts of their governance and systems for internal reporting and control. Moreover these responsibilities include setting levels of supplementary capital for risks not covered, or not adequately covered, under Pillar 1. The burden of these responsibilities will obviously be greater for countries with limited supervisory capacity.

In countries where the shares of banks are listed on the stock exchange, fulfilment of the transparency requirements of Pillar 3 will generally overlap to a significant extent with the exchange's disclosure rules. Technical problems involving reconciliation of accounting standards and Pillar 3 requirements may none the less still have to be addressed as part of Basel 2 implementation. Moreover, where Pillar 3 is not fully covered by the exchange's and other existing disclosure rules, banks will have to deploy alternative means to comply with Pillar 3 such as providing the information on a publicly accessible internet website or including it in public regulatory reports to bank supervisors (as suggested in the 2006 Revised Framework<sup>3</sup>). Nevertheless in countries with such disclosure, much of the legal and institutional infrastructure for meeting Pillar 3 requirements already exists.

On the other hand, in many developing countries and other countries with still undeveloped financial sectors this statement does not necessarily hold.

- Banks may not be listed on the local stock exchange owing either to private ownership or to ownership by foreign banks (which themselves may not be not so listed).
- Moreover, more rudimentary accounting standards may also contribute to disclosure falling well short of Pillar 3 transparency.

Ways of tackling these problems exist. Foreign banks' ownership can be limited to a specified percentage of its local subsidiary's equity, thus leaving a residual amount which is listed on the local stock exchange. Alternatively, the foreign banks owning local ones can be subject to the requirement that they themselves be listed. Moreover accounting standards and disclosure rules can be upgraded to deal with the second deficiency. However, such solutions are generally not simple to implement and can be expected to take significant amounts of time.

### *Africa*

Overall intentions as to adoption of Basel 2 have not radically changed since the 2004 survey. The percentage of respondents intending to adopt Basel 2 remains at a little above 70 per cent. The SA for credit risk and the BIA for operational risk remain the approaches and options likely to be most widely adopted.

- There have been increases since 2004 in the percentages of countries intending to adopt both the SA and the FIRBA for credit risk and the BIA and the SAOR for operational risk by 2009, and the same is true for Pillars 2 and 3.

---

<sup>2</sup> BCBS, *International Convergence of Capital Measurement and Capital Standards A Revised Framework Comprehensive Version* (Basel: Bank for International Settlements, June 2006), para. 720.

<sup>3</sup> See *ibid.*, para. 815.

- A higher percentage of countries is intending to adopt Pillars 2 and 3 by 2009 than the approach for credit risk and the option for operational risk (SA and BIA) expected to be most widely adopted by the same date. This suggests a widespread tendency to give priority in plans for the implementation of Basel 2 to strengthening supervisory capacity and disclosure standards.
- The figures in the 2006 survey for 2010-2015 confirm this impression with evidence concerning respondents' plans after 2009: the percentage of countries intending to adopt the SA increases to the same level as that for those intending to adopt Pillars 2 and 3, and the gap between the percentages narrows for BIA.
- In the 2004 survey, under Pillars 2 and 3, concern was expressed by African respondents concerning limitations on supervisory capacity, banks' lack of the historical data (an impediment to the adoption of the IRBA as well as to risk-based supervision and capital management more generally), and to problems regarding transparency and financial reporting.
- The increases found by the 2006 survey in the percentages of countries intending to adopt the FIRBA for credit risk and Pillars 2 and 3 by 2009 point to the efforts of African respondents to tackle these difficulties.

### *Asia*

The percentage of respondents intending to adopt Basel 2 has increased since the 2004 survey from 83 to 100 per cent but adoption of Basel 2 is now expected to take place in accordance with a more gradual timetable.

- The percentage intending to adopt the SA in 2007 has fallen from 67 to 44 per cent, while that intending adoption in 2009 has increased from 67 to 88 per cent, and a similar pattern of deferment until 2009 is also evident for most of the other approaches and options as well as for Pillars 2 and 3.
- A significant proportion of respondents intend to offer the most advanced approach and option for credit and operational risk by 2009.
- The great majority of respondents (94 per cent) intend to adopt Pillars 2 and 3 by 2009. This percentage is even higher than that for those intending to adopt the SA by the same date and indicates that in at least some countries more immediate priority in plans for implementation of Basel 2 is being given to strengthening supervisory capacity and disclosure standards than to setting levels of minimum required capital for credit and operational risk.
- In the 2004 survey, major challenges mentioned under Pillar 2 were the development of supervisory techniques and skills for such purposes as setting levels of minimum required capital to supplement those under Pillar 1 in response to local requirements, and under Pillar 3 the introduction of enhanced disclosure in countries unfamiliar with such transparency.
- The substantially increased percentages of countries intending to adopt Pillars 2 and 3 by 2009 in the 2006 survey suggests that progress is being made towards these objectives.

### *Caribbean*

The number of countries in a sample of seven intending to adopt Basel 2 has decreased by one since the 2004 survey, the percentage of respondents involved (57 per cent) being the smallest amongst the six regions. The low level of intended adoption may be due to the importance to the region of offshore banking, a substantial proportion of whose operations consists of fiduciary services which are not especially well adapted to the rules of Basel 2<sup>4</sup>.

- The figures indicate widespread deferment of the dates at which levels of minimum required capital for credit risk are intended to be adopted.
- The percentages of respondents intending to adopt Pillars 2 and 3 by 2009 has increased since 2004, suggesting the greater priority the majority of respondents are now according to strengthening supervisory capacity and disclosure standards in plans to implement Basel 2.
- In the 2004 survey, the challenges mentioned under Pillar 2 included recruiting and training high-quality staff, coordination between the supervisors of banks' home and host countries, and implementation of Basel 2 on a consolidated basis. Under Pillar 3 mention was made of the need to promote a culture of transparency in countries where this was still underdeveloped.
- The 2006 survey points to progress under both headings.

### *Latin America*

The percentage of respondents intending to adopt Basel 2 has increased from 73 to 86 per cent since the 2004 survey.

- Changes since 2004 in the percentages intending to adopt different approaches and options for minimum required capital for credit and operational risk and in the pace at which adoption is expected to take place are minor.
- However, there have been decreases since 2004 in the percentages of respondents intending to adopt Pillars 2 and 3 by 2009.
- Significant increases in the adoption of the different approaches and options and of Pillars 2 and 3 are expected during 2010-2015.
- In the 2004 survey, attention was drawn under Pillar 2 to the widespread need in the region to strengthen supervisory capacity, especially for the implementation of the more advanced approaches and options for credit risk, and to the problems posed by Basel 2 for cross-border supervisory coordination. Under Pillar 3, various legal and cultural problems posed by requirements for increased transparency were emphasised.
- The figures under the two headings in the 2006 survey suggest that these problems continue to be a source of time-consuming difficulties.

---

<sup>4</sup> A well known example of such services is the provision of fiduciary deposits under which a bank lends a customer's money at the customer's and not its own risk.

### *Middle East*

One additional country has declared its intention to adopt Basel 2 since the 2004 survey.

- There have been substantial increases in the percentages of respondents intending to adopt the SA and FIRBA for credit risk, the BIA for operational risk, and Pillars 2 and 3 by 2009.
- In the 2004 survey, special attention was drawn under Pillar 2 to the need for training supervisors to enable them to set levels of additional required minimum capital to cover risks not covered or inadequately covered under Pillar 1. Under Pillar 3 the principal challenge mentioned was to achieve convergence between supervisory and accounting requirements for reporting and disclosure.
- The increases in the percentages of respondents intending to adopt Pillars 2 and 3 in the 2006 survey suggest that significant progress has been made under both headings.

### *Non-BCBS Europe*

There has been a decrease in the proportion of respondents intending to adopt Basel 2 from 92 to 83 per cent since 2004.

- However, among these respondents there have been increases in the percentages intending to adopt the great majority of different approaches and options and Pillars 2 and 3 by both 2007 and 2009.
- The exception is the advanced approaches and options for credit and operational risk, for which decreases since 2004 in the percentages of countries intending to adopt AIRBA and AMA by 2007 are accompanied by increases by 2009, a change which suggests deferment of plans in comparison with 2004.
- An anomalous feature of intentions in this region is that by 2007 the regulator in one country is making available SAOR but not BIA – in other words only the more advanced of these two options for operational risk.
- In the 2004 survey, attention was drawn under Pillar 2 to weaknesses in both supervisory capacity and legal authority. These were a source of especially important problems for the validation of the more advanced approaches and options of Basel 2 and for setting supplementary levels of minimum required capital for risk not covered or not adequately covered under Pillar 1. Under Pillar 3, attention was drawn to the challenges related to aligning supervisory requirements and accounting standards and to ensuring the accuracy of banks' disclosures.
- Comparison of the percentages intending to adopt Pillars 2 and 3 in 2004 and 2006 suggests that progress is being achieved under both headings.

It would probably still be a mistake to read too much into the precise dates in this survey. In many countries adoption of Pillars 1 and 2 will be a strain on supervisory capacity for a considerable time to come. Moreover for both these Pillars as well as for Pillar 3, legal changes may still be required. However, once the 13 member countries of the BCBS are added to the 82 countries which responded to the FSI's 2006 survey, the sheer scale of the global count-down is evident.

**Region: Africa**

*Number of respondents: 17/22 in 2006/2004 survey of which 12/16 intend to adopt Basel 2*

*Percentages of respondents planning adoption which intend to adopt different approaches, options and rules*

<i>Credit risk</i>	survey	SA	FIRBA	AIRBA
2007	2006	17	0	0
	2004	19	6	6
2009	2006	58	25	8
	2004	31	13	6

---

<i>Operational risk</i>	survey	BIA	SAOR	AMA
2007	2006	17	17	0
	2004	19	13	6
2009	2006	42	33	17
	2004	31	19	6

---

<i>Pillar 2</i>	survey		<i>Pillar 3</i>	survey	
2007	2006	25	2007	2006	17
	2004	31		2004	31
2009	2006	75	2009	2006	75
	2004	44		2004	44

---

**Region: Asia**

*Number of respondents: 16/18 in 2006/2004 survey of which all/15 intend to adopt Basel 2*

*Percentages of respondents planning adoption which intend to adopt different approaches, options and rules*

<i>Credit risk</i>	survey	SA	FIRBA	AIRBA
2007	2006	44	19	6
	2004	67	40	33
2009	2006	88	50	38
	2004	67	47	33

---

<i>Operational risk</i>	survey	BIA	SAOR	AMA
2007	2006	44	25	6

	2004	73	47	27
2009	2006	81	63	25
	2004	73	53	27

---

<i>Pillar 2</i>	survey		<i>Pillar 3</i>	survey	
2007	2006	50	2007	2006	38
	2004	60		2004	60
2009	2006	94	2009	2006	94
	2004	60		2004	67

---

**Region: Caribbean**

*Number of respondents: 7/7 in 2006/2004 survey of which 4/5 intend to adopt Basel 2*

*Percentages of respondents planning adoption which intend to adopt different approaches, options and rules*

<i>Credit risk</i>	survey	SA	FIRBA	AIRBA
2007	2006	0	0	0
	2004	0	0	0
2009	2006	50	25	25
	2004	80	40	40

---

<i>Operational risk</i>	survey	BIA	SAOR	AMA
2007	2006	25	25	25
	2004	0	0	0
2009	2006	50	75	25
	2004	80	40	40

---

<i>Pillar 2</i>	survey		<i>Pillar 3</i>	survey	
2007	2006	25	2007	2006	0
	2004	0		2004	0
2009	2006	100	2009	2006	75
	2004	60		2004	60

**Region: Latin America**

*Number of respondents: 14/15 in 2006/2004 survey of which 12/11 intend to adopt Basel 2*

*Percentages of respondents planning adoption which intend to adopt different approaches, options and rules*



<i>Credit risk</i>	survey	SA	FIRBA	AIRBA
2007	2006	33	8	8
	2004	27	18	9
2009	2006	42	17	33
	2004	45	45	36

---

<i>Operational risk</i>	survey	BIA	SAOR	AMA
2007	2006	33	33	17
	2004	27	36	18
2009	2006	42	33	17
	2004	45	36	18

---

<i>Pillar 2</i>	survey		<i>Pillar 3</i>	survey	
2007	2006	42	2007	2006	33
	2004	45		2004	45
2009	2006	50	2009	2006	42
	2004	73		2004	64

---

***Region: Middle East***

*Number of respondents: 8/8 in 2006/2004 survey of which all/7 intend to adopt Basel 2*

*Percentages of respondents planning adoption which intend to adopt different approaches, options and rules*

<i>Credit risk</i>	survey	SA	FIRBA	AIRBA
2007	2006	63	0	0
	2004	29	14	0
2009	2006	100	50	0
	2004	29	29	0

---

<i>Operational risk</i>	survey	BIA	SAOR	AMA
2007	2006	50	25	0
	2004	43	29	14
2009	2006	88	75	0
	2004	43	29	14

---

<i>Pillar 2</i>	survey		<i>Pillar 3</i>	survey	
2007	2006	63	2007	2006	50
	2004	0		2004	0
2009	2006	100	2009	2006	88
	2004	43		2004	43

***Region: Non-BCBS Europe***

*Number of respondents: 36/37 in 2006/2004 survey of which 30/34 intend to adopt Basel 2*

*Percentages of respondents planning adoption which intend to adopt different approaches, options, and rules*

<i>Credit risk</i>	survey	SA	FIRBA	AIRBA
2007	2006	70	60	20
	2004	56	44	41
2009	2006	87	73	70
	2004	62	53	44

---

<i>Operational risk</i>	survey	BIA	SAOR	AMA
2007	2006	67	70	23
	2004	55	50	38
2009	2006	83	77	73
	2004	62	59	44

---

<i>Pillar 2</i>	survey		<i>Pillar 3</i>	survey	
2007	2006	67	2007	2006	63
	2004	56		2004	56
2009	2006	80	2009	2006	73
	2004	65		2004	65

---