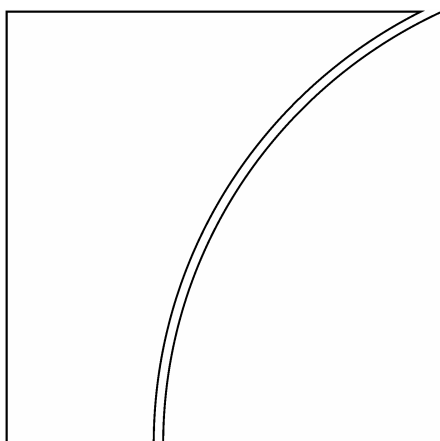


# Financial Stability Institute



## The implementation of the new capital adequacy framework in the Middle East

Summary of responses to the Basel II Implementation  
Assistance Questionnaire

July 2004



BANK FOR INTERNATIONAL SETTLEMENTS



# The implementation of the new capital adequacy framework in the Middle East

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

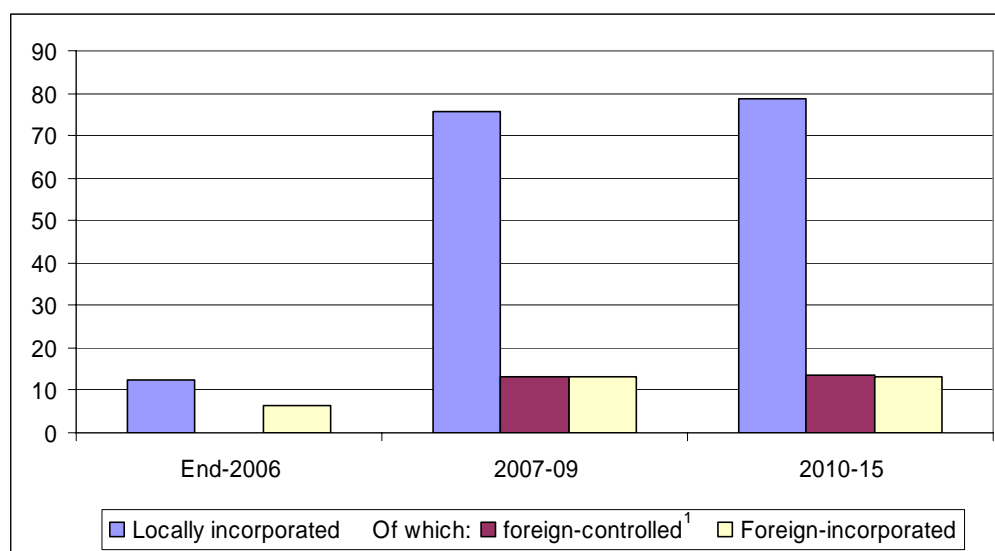
### 1. General implementation plans

The Questionnaire was sent to nine jurisdictions in the Middle East. Complete responses were received from seven.<sup>1</sup> Of the two remaining jurisdictions, one wrote a short note on general preparatory work indicating that it had not yet decided on implementation of Basel II, without responding to any of the specific issues raised in the Questionnaire. The other did not respond.

Most of the respondents recognise the important role that Basel II will play in the strengthening of their financial systems. All seven responding countries intend to implement Basel II starting in the period 2007-09. However, the majority of the respondents (four of the countries) were undecided on the scope of the implementation programme. Therefore, most of the responses on the scope of implementation and approaches to be adopted should be considered tentative. Three countries indicated that the new capital framework will be adopted in stages, progressing from the simple to the more sophisticated approaches between 2007 and 2009. As shown in Chart 1, only 13% of total banking assets (of locally incorporated banks) will move to Basel II at end-2006, but this figure increases dramatically for the period 2007-09. Table 1 shows that 89% of banking assets in the Middle East are expected to be covered by Basel II during the period 2007-09.

Chart 1

**Banks adopting Basel II by percentage of total banking assets (weighted average)**



<sup>1</sup> 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.

<sup>1</sup> Refer to Annex 1 for a listing of the Middle East countries that responded to the Questionnaire.

Table 1

**Percentage of total banking assets expected to be subject to Basel II in different timeframes**

Banking assets	End-2006	2007-09	2010-15
Weighted averages	19	89	92
Foreign-incorporated banks (weighted)	6	13	13

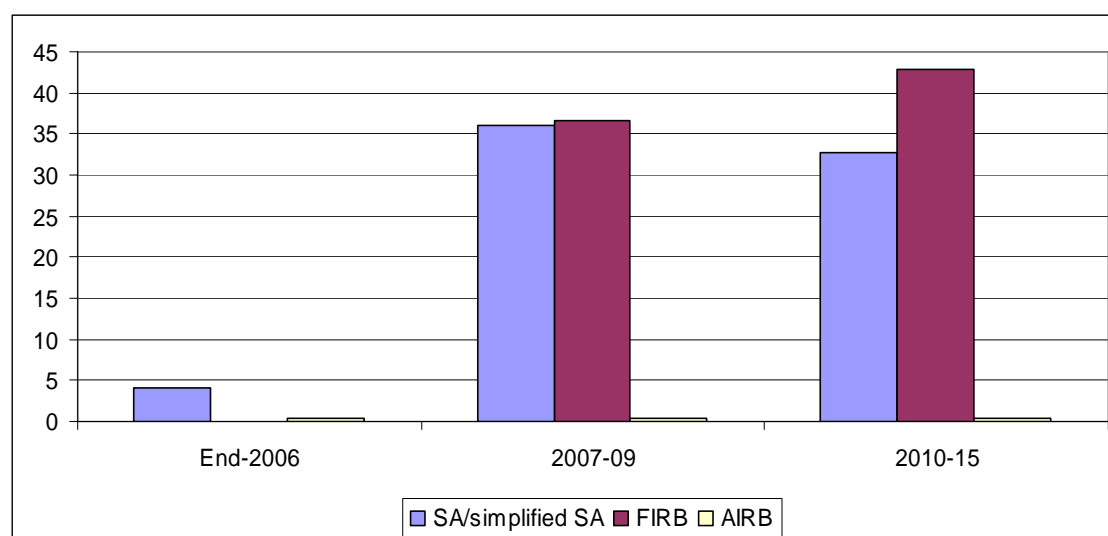
## 2. Specific implementation plans

### 2.1 Pillar 1 - minimum capital requirements

Chart 2 provides an overview of the scope of implementation of the various options for the measurement of capital for credit risk.<sup>2</sup> As can be observed, the bulk of banking assets in the region will fall under either the standardised approach (36%) or the foundation IRB approach (37%) for the period up to 2009. None of the region's banks are expected to adopt the advanced IRB approach in the near future.

Chart 2

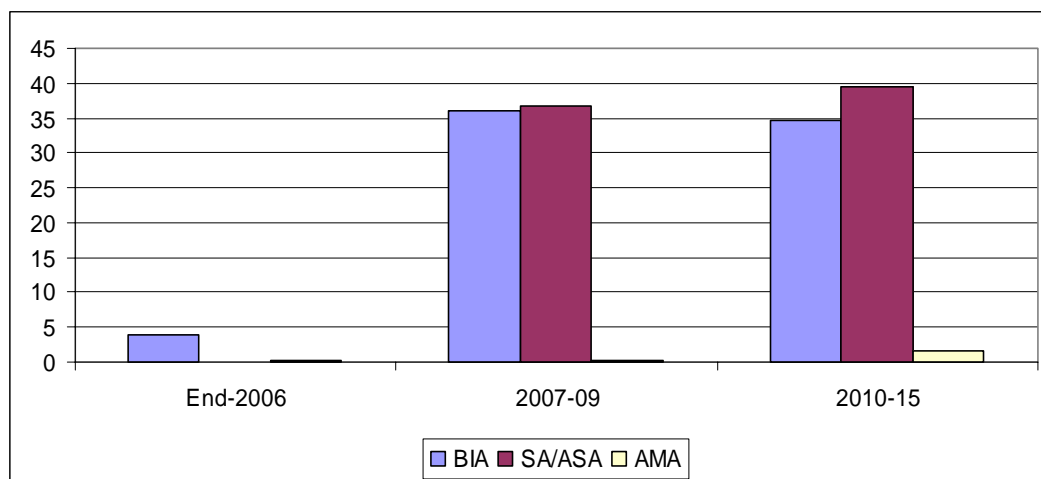
**Basel II credit risk approaches adopted by banks by percentage of total banking assets (weighted average)**



<sup>2</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, 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 internal ratings-based (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.

Chart 3 provides an overview of the scope of implementation of the various components for the measurement of regulatory capital for operational risk.<sup>3</sup> Most banks in the Middle East are expected to use the basic indicator approach (36%) or the standardised approach (37%) for calculating the capital charge for operational risk. The advanced measurement approaches for operational risk will not be adopted in the medium term.

Chart 3  
**Basel II operational risk approaches adopted by banks  
 by percentage of total banking assets (weighted average)**



## 2.2 Pillar 2 - supervisory review process

Most countries in the Middle East consider the supervisory review process (Pillar 2) to be the most important area requiring training. Many observed that assessing “whether a bank is holding adequate capital in relation to its risk profile” would pose a serious practical challenge, particularly as regards approval and validation of internal capital allocation models for banks. More guidance and training would thus be required on appropriate techniques for the determination of any incremental amount of capital as a result of high or additional risks in a bank that may not have been captured by the bank’s internal model.

## 2.3 Pillar 3 - market discipline

While Pillar 3 did not feature as prominently as Pillars 1 and 2, a number of challenges were identified in this area, including the need for convergence between accounting and supervisory requirements for reporting and disclosure, as well as ensuring that disclosure regimes comply with international accounting standards.

<sup>3</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, 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.

### 3. Capacity building

Most respondents recognise that upgrading their expertise and sharing information are crucial in order to achieve their Basel II implementation objectives. Six of the seven countries that have made the decision to adopt Basel II, in principle, have developed internal training plans to prepare their staff for implementation of Basel II. In the Middle East, 86% of the respondents rate training on Pillar 2 as “very important”. However, training in all other components of the Basel II framework is also considered to be “very important” or “important”, particularly the standardised and IRB approaches for credit risk.

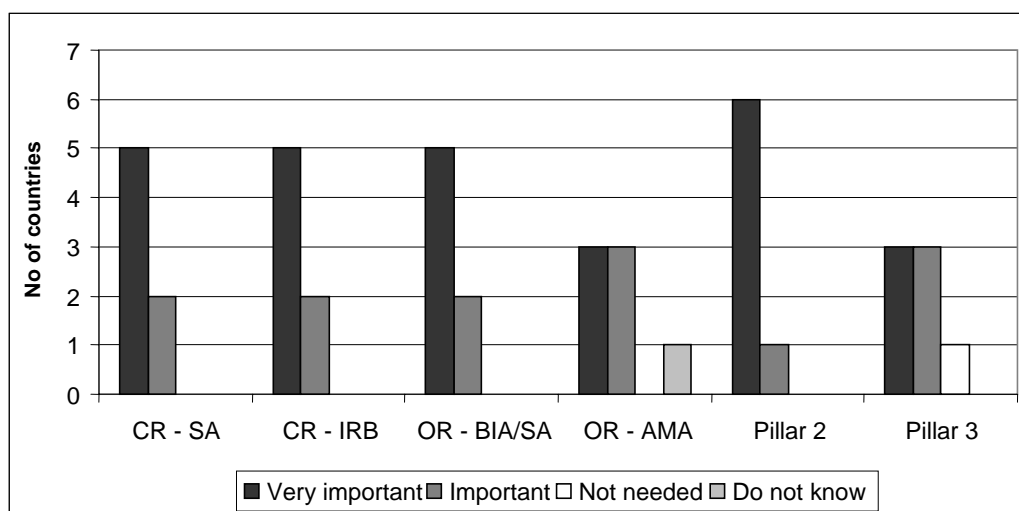
With respect to specific training requirements, the commonly cited important training areas are credit risk mitigation techniques/credit risk transfers, including credit derivatives, and asset securitisation. Overall, the results of the Questionnaire show strong demand for training opportunities and sharing of information, practices and experiences. Respondents believe that discussion forums would greatly facilitate the Basel II implementation process. Six of the seven countries responding rated discussion forums as being of “high” importance. This supports the view expressed by the Basel Committee that such information sharing mechanisms would be critical to the successful implementation of the framework. Table 2 shows that of the 456 supervisory staff in jurisdictions that have decided to implement Basel II, more than half (53%) would require specific training on Basel II-related issues. Interestingly, jurisdictions which have not made a decision on the scope of implementation of Basel II indicate that all of their supervisory staff will require specific training.

Table 2  
Supervisory staff requiring training on Basel II implementation issues in the Middle East

Decision on Basel II	Number of supervisory staff	Number of supervisory staff to be trained on Basel II
Decided	456	241
Undecided	115	115
<b>Total</b>	<b>571</b>	<b>356</b>

Chart 4 shows the relative importance of various training areas as indicated by the respondents. As can be observed, Pillar 2 was the most frequently cited area requiring training.

Chart 4  
Important training areas



**Annex 1:  
Basel II Implementation Assistance Questionnaire**

**Participating countries in the Middle East**

Bahrain

Kuwait

Lebanon

Oman

Qatar

Saudi Arabia

United Arab Emirates

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

<b>Pillar 1</b>	
<b>Credit risk</b>	
Standardised approach/ simplified standardised approach	<ul style="list-style-type: none"> <li>– General               <ul style="list-style-type: none"> <li>• Application of the simplified standardised approach</li> <li>• Definition of higher risk categories and their risk weights</li> <li>• Treatment of SME exposures</li> </ul> </li> <li>– Credit risk mitigation               <ul style="list-style-type: none"> <li>• Technical calculations</li> <li>• Operational requirements</li> </ul> </li> <li>– External ratings               <ul style="list-style-type: none"> <li>• Methodologies of external rating agencies</li> <li>• Methodology of OECD ratings</li> <li>• Development of eligibility criteria for external credit assessment institutions (ECAIs) and how supervisors should assess compliance with these requirements</li> <li>• Mapping of external ratings to risk weights</li> </ul> </li> <li>– Areas of national discretion               <ul style="list-style-type: none"> <li>• Definition of retail exposures</li> <li>• Determination of an appropriate LTV ratio for residential mortgages</li> </ul> </li> <li>– Securitisation framework</li> </ul>
IRB approach	<ul style="list-style-type: none"> <li>– Rating systems (model development, implementation and validation)               <ul style="list-style-type: none"> <li>• Core criteria of rating system</li> <li>• Classification (segregation) of borrowers</li> <li>• Credit risk modelling (available methodologies, their strengths and weaknesses)</li> <li>• Data requirements</li> </ul> </li> <li>– The IRB approach               <ul style="list-style-type: none"> <li>• PD, LGD and EAD estimation and validation techniques</li> <li>• Derivation of supervisory IRB inputs (LGD, EAD)</li> <li>• Derivation of IRB formulas</li> <li>• Specialised lending</li> </ul> </li> <li>– Supervisory assessment of internal models               <ul style="list-style-type: none"> <li>• Initial IRB model approval process</li> <li>• Review process of internal rating systems and compliance with IRB minimum requirements</li> <li>• Assessment of PD/LGD/EAD accuracy</li> <li>• Validation of correlation</li> <li>• Qualitative aspects and calibration of IRB models</li> </ul> </li> <li>– Securitisation framework under the IRB approach</li> <li>– Stress testing techniques</li> </ul>
<b>Operational risk</b>	
Basic indicator approach/ standardised approach	<ul style="list-style-type: none"> <li>– Operational risk management requirements for banks intending to adopt these two approaches               <ul style="list-style-type: none"> <li>• Detailed criteria for using the alternative standardised approach</li> </ul> </li> <li>– Gross income               <ul style="list-style-type: none"> <li>• Definition and calculation of gross income</li> <li>• Allocation/mapping of gross income into eight business lines</li> <li>• Treatment for negative gross income</li> </ul> </li> <li>– Formulas to derive alpha and beta</li> </ul>



---

## Pillar 1 (cont)

---

### Credit risk

---

Advanced measurement approach

- Operational risk loss database development
    - Identification of risk events
    - Segregation according to business lines
    - Collection and mapping of operational risk loss data
    - Mathematical techniques to overcome lack of data
  - Development of appropriate methodology and approach for measurement of operational risk
    - Core criteria (qualitative and quantitative aspects of the AMA)
    - Approaches for model development (top-down vs bottom-up)
    - Optimal risk scorecard approach/scenario approach and loss distribution approach
  - Supervision of qualifying criteria
    - Requirements for supervisory validation
    - Model and data validation
  - Use of risk mitigation
    - Types and application
- 

### Other areas

---

- Cross-border implementation and issues
  - Formulation of supervisory legal documents, establishment of supervisory information systems and development of methodologies for supervision, analysis and categorisation of financial institutions
- 

---

## Pillar 2

---

- Implementation of Pillar 2
  - Risks captured under Pillar 2 and the assessment of these risks:
    - Concentration risk
    - E-banking risk
    - Liquidity risk
    - Interest rate risk in the banking book
  - Methodology for providing non-Pillar 1 capital charges
  - Review of banks' capital adequacy assessment process
    - Supervisory review techniques and validation of internal ratings and risk management systems
    - Methods for deciding individual capital ratio requirements
  - Determination of appropriate prompt corrective actions
  - Stress testing
- 

---

## Pillar 3

---

- Guiding principles on implementation of Pillar 3
    - Best practices on disclosure requirements
    - Development of skills/expertise of regulators to facilitate effective analysis and review of Pillar 3 requirements
  - Guidance on interaction between Basel II requirements and IAS 39
  - Approaches adopted by countries for quarterly reporting requirements under Pillar 3
-