

CONSULTATION PAPER

P011 - 2004  
July 2004

# IRB Approach Definition of Default

MAS

Monetary Authority of Singapore

## PREFACE

The Basel Committee on Banking Supervision's ("BCBS"), *International Convergence of Capital Measurement and Capital Standards: A Revised Framework* ("Basel II"), specifies a reference definition of default ("reference definition") to be used for recording defaults and estimating probability of default, loss given default and exposure at default when using the internal ratings-based ("IRB") approach.<sup>1</sup>

MAS is proposing standard interpretations of certain requirements of the reference definition. These standard interpretations are proposed in order to provide further guidance on the "unlikely to repay" default criterion, to set out how MAS will exercise national discretions associated with the reference definition, and to facilitate a consistent application of Basel II in Singapore. The standard interpretations will eventually form part of the prudential standards for the IRB approach to credit risk that MAS will issue at a later date.

We invite comments from Singapore-incorporated banks and other interested parties. Please note that all submissions received may be made public unless confidentiality is specifically requested for all or part of the submission. Electronic submission is encouraged.

Please submit your comments in writing by 31 August 2004 to:

Prudential Policy Department  
Monetary Authority of Singapore  
10 Shenton Way, MAS Building  
Singapore 079117  
Fax: 62203973  
Email: [policy@mas.gov.sg](mailto:policy@mas.gov.sg)

---

<sup>1</sup> Basel Committee on Banking Supervision ("BCBS"), *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*, June 2004, paragraph 456.

# TABLE OF CONTENTS

<b>PREFACE</b> .....	<b>i</b>
<b>TABLE OF CONTENTS</b> .....	<b>ii</b>
<b>SECTION 1 BACKGROUND</b> .....	<b>1</b>
<b>SECTION 2 UNLIKELY TO REPAY IN FULL</b> .....	<b>2</b>
Liquidation of Collateral.....	2
Specific Provisions .....	3
Material Credit Loss .....	4
Distressed Restructuring .....	4
Additional Indicators.....	5
Related Obligor Default .....	5
<b>SECTION 3 DAYS PAST DUE</b> .....	<b>6</b>
Material Credit Obligation .....	6
Start of Day Count.....	7
Re-ageing .....	7
PSE and Retail Days Past Due .....	8
<b>SECTION 4 OBLIGATION-LEVEL APPLICATION OF DEFINITION</b> .....	<b>8</b>

## SECTION 1 BACKGROUND

1.1 According to the reference definition, a default occurs when:

- The bank considers that an obligor is unlikely to repay in full its credit obligations to the banking group, without recourse by the bank to actions such as realising security; or
- The obligor is past due for more than 90 days on any material credit obligation to the banking group.<sup>2</sup>

1.2 In addition, the following six elements are to be taken as indications that an obligor is unlikely to repay in full:

- The bank puts the credit obligation on non-accrued status.
- The bank makes a charge-off or account-specific provision resulting from a significant perceived decline in credit quality subsequent to the bank taking on the exposure.
- The bank sells the credit obligation at a material credit-related economic loss.
- The bank consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees.
- The bank has filed for the obligor's bankruptcy or a similar order in respect of the obligor's credit obligation to the banking group.
- The obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of the credit obligation to the banking group.<sup>3</sup>

---

<sup>2</sup> BCBS, *ibid.*, paragraph 452.

<sup>3</sup> BCBS, *ibid.*, paragraph 453.

1.3 This consultation paper sets out our proposed standard interpretations of the reference definition and the six elements indicating unlikelihood to pay. It also sets out our proposed position on the national discretions for days past due on public sector entity (“PSE”) and retail exposures. These standard interpretations will eventually form part of MAS’ prudential standards for the IRB approach to credit risk, although banks will be free to apply more conservative internal standards.

1.4 Apart from seeking banks’ views on the proposed positions, we also seek views on the degree of supervisory prescription which they consider appropriate. While some level of supervisory prescription may be desirable to facilitate data sharing to mitigate data paucity at the level of individual banks, such prescription may have implications on the risk management practices and compliance costs of banks operating in multiple jurisdictions. One possible solution is to stipulate some level of supervisory prescription only for selected asset classes where appropriate. We welcome banks’ views on whether differing degrees of supervisory prescription for different asset classes is viable, and for which asset classes the case for supervisory prescription is more compelling because of data paucity.

## **SECTION 2 UNLIKELY TO REPAY IN FULL**

2.1 In this section, we propose standard interpretations of the first criterion of the reference definition (see paragraph 1.1) and the six elements indicating unlikelihood to pay (see paragraph 1.2).

### **LIQUIDATION OF COLLATERAL**

*(Reference: Basel II, paragraph 452, first bullet)*

2.2 We propose that, in general, a bank must consider a default to have occurred with regard to a particular obligor when the bank liquidates collateral to satisfy a credit obligation. It can be reasonably presumed that prior to liquidating collateral, the bank has judged that the obligor was “unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realising security.”

2.3 However, we also recognise that this presumption may not hold with certain types of facilities, e.g. securities financing, when collateral is liquidated not owing to the deterioration of the customer's creditworthiness but to a fall in the value of the collateral. In such cases, we propose that a bank may choose not to record a default if the following conditions are met:

- The facility was granted to finance a customer's position in a financial instrument that qualifies as eligible financial collateral under the comprehensive approach to credit risk mitigation in Basel II,<sup>4</sup> and the collateral comprises that financial instrument and other eligible financial collateral; and
- The collateral was liquidated to restore an agreed collateral coverage ratio after a fall in the value of the collateral, as a standard practice for such facilities and where such practice has been disclosed to the customer in writing at the inception of the facility.

## **SPECIFIC PROVISIONS**

*(Reference: Basel II, paragraph 453, second bullet)*

2.4 The reference definition requires a default to be recorded against an account for which specific provisions are made. We recognise that the existing rule-based provisioning practised by banks in Singapore and proposed as a revision to MAS Notice 612 may conflict with this requirement.<sup>5</sup> We therefore propose that a bank that has been permitted by MAS to adopt the IRB approach pursuant to Section 10(2) of the Banking Act may use its internal ratings system, instead of the proposed MAS 612 provisioning rules, to determine the timing and quantum of provisions for banking book exposures.

---

<sup>4</sup> BCBS, *ibid.*, paragraphs 145 and 146.

<sup>5</sup> The existing rule-based provisioning may also be in conflict with the impairment provisioning requirements under a new accounting standard, i.e., FRS 39, with which banks must comply from 1 January 2005. A separate review is in progress to address the differences between rule-based provisioning and FRS 39.

## **MATERIAL CREDIT LOSS**

*(Reference: Basel II, paragraph 453, third bullet)*

2.5 While a hard threshold on the amount of credit-related loss (i.e., excluding gains and losses due to interest rate movements) as a percentage of the original book value would be a clear and easy way to implement this indication of default, this may lead to inaccurate default data. It may therefore be preferable that the materiality of the credit-related loss be determined relative to the risk of the asset sold to avoid capturing credit deteriorations that are not equivalent to default or near default, if this is possible. We seek banks' views on how this indication of default can best be implemented.

## **DISTRESSED RESTRUCTURING**

*(Reference: Basel II, paragraph 453, fourth bullet)*

2.6 Basel II describes a distressed restructuring in terms of its objective consequences, that is, a "reduced financial obligation". However, a reduction in the financial obligation is only a necessary, but not sufficient, condition for a distressed restructuring. Sometimes, a bank may re-price a facility to retain an obligor whose creditworthiness has improved. In addition to a reduced financial obligation, we propose that a distressed restructuring be identified by:

- The intention of the restructuring, i.e., to accommodate deterioration in the borrower's financial position or the borrower's inability to meet the original repayment schedule; or
- The "non-commercial" nature of the revised repayment terms, i.e., where the interest rate, fees or repayment period are not what would normally be granted by the bank to a new borrower of similar creditworthiness.

2.7 Banks must implement detailed internal guidelines containing the above criteria (and any others they consider appropriate) and internal procedures to ensure that restructured exposures are classified appropriately.

## **ADDITIONAL INDICATORS**

2.8 As national supervisor for banks incorporated in Singapore, we propose to adopt five additional indicators of default:

- Acceleration of an obligation;
- Where the obligor is a bank, revocation of authorisation to operate;<sup>6</sup>
- Where the obligor is a sovereign, announcement of a downgrade to a default rating by an External Credit Assessment Institution approved by MAS for the Standardised Approach;
- Default by the obligor on credit obligations to other financial creditors, e.g., financial institutions or bondholders (where such information is available); and
- The default of a related obligor (as described in paragraphs 2.9 and 2.10 below).

## **RELATED OBLIGOR DEFAULT**

2.9 We further propose that when a default is recorded for an obligor for IRB purposes, a bank must review all ratings of related obligors<sup>7</sup> to determine if that default is an indication of unlikelihood to pay by any other related obligor.

2.10 Such determination should be based on the bank's judgment of the degree of economic interdependence and integration between the obligors concerned. That is, there is no presumption that related entities would necessarily default together. Instead, this would depend on a bank's credit judgment expressed in its certified internal ratings systems, in particular:

---

<sup>6</sup> This indication of default does not include voluntary surrender of licenses, e.g., in the course of a business combination.

<sup>7</sup> For example, other obligors that are treated as a related group entity under Section 29(1)(a) of the Banking Act, or obligors that are linked in the bank's rating process.



- If a bank rates a group of obligors together as a single economic unit, a default by any obligor in the group will be considered a default by all the obligors.
- If the ratings of individual obligors are stand-alone ratings or “notched” ratings, a default by any obligor in the group need not be considered a default by all the obligors. It should, however, be noted that this is not to override the result of the mandatory ratings review.

## **SECTION 3    DAYS PAST DUE**

3.1 The second criterion of the reference definition considers a default to have occurred with regard to a particular obligor when the obligor is past due more than 90 days on any material credit obligation to the banking group (see paragraph 1.1). National discretions to increase this up to 180 days are available for retail and PSE obligations. Basel II requires banks to have clearly articulated and documented policies in respect of the counting of days past due, in particular the re-ageing of facilities.<sup>8</sup> In this section, we propose standard interpretations of this default test.

### **MATERIAL CREDIT OBLIGATION**

*(Reference: Basel II, paragraph 452, second bullet)*

3.2 The 90-day default test applies to “material” credit obligations. Rather than set a materiality threshold based on exposure, we propose that all credit obligations that are 90 days past due are to be considered material. Credit obligations would include not only principal and accrued interest but also fees related to the credit obligation, e.g., in the case of corporate exposures, annual facility fees or in the case of retail, annual card fees, inasmuch as they are part of the return that banks receive on the credit risk they underwrite.

---

<sup>8</sup> BCBS, op. cit., paragraph 458.

## **START OF DAY COUNT**

*(Reference: Basel II, paragraph 452, second bullet; paragraph 459)*

3.3 We propose to align the IRB 90-day day count criterion with current practice. An IRB default will be recorded when:

- For overdrafts, the approved limit remains breached for 90 days;
- For revolving corporate exposures, an amount is overdue for 90 days;
- For revolving retail (e.g. credit card) exposures, a minimum monthly payment is not paid in full on the due date and within the 90 days thereafter, and subsequent minimum monthly payments billed are also not paid in full; and
- For loans with periodic principal instalments and/or interest payments, an amount due and payable is not paid in full within 90 days of the instalment/payment due date.

## **RE-AGEING**

*(Reference: Basel II, paragraph 458)*

3.4 In addition to the Basel II requirement that a bank must have a detailed re-ageing policy, as national supervisor, we propose that re-ageing is permissible only when:

- For overdrafts, the outstanding amount is reduced to or below the approved limit;
- For revolving corporate exposures, the amount overdue is repaid in full;
- For revolving retail exposures where an unpaid minimum monthly payment is rolled into the following month's minimum payment, the latest minimum monthly payment is paid in full; and

- For loans with periodic instalments and/or interest payments, the earliest overdue amount is repaid in full, inclusive of accrued interest and penalties, in which case the start date of the days past due count is then reset to the due date of the next instalment/payment that has not been fully repaid.

3.5 We propose that when granting extensions, deferrals, renewals and rewrites, a bank should consider if these are in fact distressed restructurings under the reference definition of default. If so, the bank must record an IRB default.

### **PSE AND RETAIL DAYS PAST DUE**

*(Reference: Basel II, paragraph 452, second bullet, footnote 82)*

3.6 We propose not to extend days past due for Singapore PSE obligors beyond 90 days. For foreign PSE obligors, in general, we do not intend to extend days past due beyond 90 days. However, we may permit such an extension for a specific obligor if a bank requests such permission and provides strong justification for the extension.

3.7 We propose not to extend days past due for retail exposures beyond 90 days.

## **SECTION 4 OBLIGATION-LEVEL APPLICATION OF DEFINITION**

4.1 Basel II permits, for retail exposures, the reference definition to be applied at the level of the particular facility rather than at the level of the obligor.<sup>9</sup> We propose that banks may use this permission.

---

<sup>9</sup> BCBS, op. cit., paragraph 455.



Monetary Authority of Singapore