



Monetary Authority of Singapore

**THEMATIC REVIEW OF CREDIT  
REVIEW STANDARDS AND PRACTICES  
OF CORPORATE LENDING BUSINESS**

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MAS Information Paper  
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## 1 Executive Summary

1.1 Banks are expected to actively manage their credit risks to ensure their credit portfolios remain resilient to vulnerabilities in the external environment. This would entail putting in place adequate credit risk management policies, as well as effective credit review and monitoring processes to identify and manage problem loans at an early stage. With this expectation in mind and against a backdrop of continuing uncertainties in the global macroeconomic environment, MAS conducted a thematic review of selected banks' credit review standards and processes for their corporate loan portfolios between October 2016 and June 2017<sup>1</sup>. The thematic review focused on assessing the banks':

- credit grading standards and practices against the credit grading requirements under MAS Notice 612 on Credit Files, Grading and Provisioning (“the Notice”);
- credit monitoring framework and controls; and
- loan portfolio management framework and processes.

1.2 The review found that the banks had established policies and processes to monitor and manage the exposures of their corporate borrowers. However, there is room to improve the robustness of their credit grading, credit monitoring and portfolio management processes. In particular, while the Notice sets out both quantitative and qualitative criteria for credit grading, there were instances where banks had placed stronger emphasis on quantitative factors, such as repayment conduct, in determining the credit grade without adequate consideration of the qualitative factors. There were also instances of restructured loans not being classified appropriately in line with the requirements of the Notice. The watch-list<sup>2</sup> process could be enhanced for more effective identification and management of accounts with signs of credit weaknesses. On portfolio management, some banks did not conduct adequate credit stress tests on a regular and timely basis to assess the impact of economic shocks or worrying trends in the local operating environment. Stress test scenarios should also be enhanced to incorporate macroeconomic and industry trends.

1.3 The banks reviewed have taken active steps to address the specific issues highlighted to them. MAS encourages all banks to consider the thematic review findings as part of their continuous efforts to strengthen credit risk management, and address any gaps where necessary. Furthermore, as credit grades could be one of the inputs used to determine the amount of loan loss provisions under FRS 109, banks should ensure that their credit grading standards are sufficiently robust. Notwithstanding that the general credit environment has

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<sup>1</sup> In 2015, MAS conducted a thematic inspection of several banks in Singapore to assess the credit underwriting standards and practices of their corporate lending business. An information paper of this review was issued in February 2016 ([Thematic Review of Credit Underwriting Standards and Practices of Corporate Lending Business](#)).

<sup>2</sup> Watch-list is an internal listing comprising accounts that exhibit certain red flags or signs of weaknesses with the potential to deteriorate further. Generally, banks place the accounts on the watch-list for closer monitoring upon identifying such accounts.

improved, banks should continue to strengthen their credit review standards and practices. This is necessary to enable the banks to:

- identify problem loans appropriately and promptly;
- develop and implement appropriate actions to minimise credit losses;
- ensure the adequacy of provisions; and
- assign appropriate credit grades to borrowers in line with the Notice.

## **2 Credit Grading**

2.1 A bank in Singapore is required to conduct regular and systematic reviews of the creditworthiness of all borrowers, and to assign the appropriate credit grade based on the criteria in the Notice.

### **Credit grading of loans**

2.2 The review found cases of inappropriate assignment of regulatory credit grades and delays in downgrading loans. Specifically, some banks had placed too much emphasis on past repayment conduct for loan classification. Insufficient consideration was given to signs of credit deterioration or definable weaknesses<sup>3</sup>. In particular, factors such as inability of borrowers to generate sufficient cash flows to service future repayments, difficulties experienced by borrowers in repaying other credit facilities, and failure to meet key loan covenants were not holistically considered in determining the appropriate credit grade.

2.3 There were also instances where restructured loans were not assigned the appropriate classified grade despite signs of credit deterioration or definable weaknesses. In determining the appropriate grade, banks should assess the borrowers' financial condition and their ability to repay based on the restructured terms, as set out in the Notice.

2.4 Furthermore, there was inadequate challenge by credit approvers on the credit grades proposed by the business (refer to paragraph 2.6).

### **Mapping of internal credit ratings to MAS Notice 612**

2.5 A number of banks did not map their internal credit ratings appropriately to the regulatory credit grades defined in the Notice. This largely arose from a mechanical mapping of the internal credit ratings to the Notice by bank staff without an adequate understanding of the regulatory credit grading requirements. As a result, some loans were not assigned the

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<sup>3</sup> Definable weaknesses are either in respect of the business, cash flow or financial position of the borrower that may jeopardise repayment on existing terms, as specified in the Notice.

appropriate credit grades. For example, loans characterised by factors that met the definition of “special mention” and “substandard” under the Notice, were not downgraded accordingly.

### Challenge by credit approvers

2.6 Credit approvers, as the second line of defence, play a crucial role in assessing the appropriateness of the credit grades assigned by the business. In some instances, the credit approvers failed to provide effective challenge to the credit grades proposed, even though the credit grades were not in line with the requirements specified in the Notice. Banks should ensure that the relevant risk management and control functions provide a robust check and balance to the business on the determination of credit grades.

#### Good Practices

- *Banks have a dedicated independent unit, separate from the credit approvers, to review the appropriateness of credit grades and timely classification of loans in accordance with the Notice. The unit serves as a check on the credit approvers.*
- *As part of the credit review process, banks have industry specialists to monitor industry developments closely and identify emerging risks for more in-depth loan evaluation, particularly for the more specialised industries such as shipping.*

#### Attention Areas

- *Banks should consider both quantitative and qualitative factors in credit grading and give sufficient consideration to signs of credit deterioration. For example, banks should not classify a loan only when there are arrears of 90 days or more. Qualitative factors such as ability of borrower to generate sufficient cash flows to service the repayments should also be considered.*
- *For restructured credit facilities, banks should similarly give due consideration to assessing the borrower’s underlying credit condition when determining the appropriate classified grade.*
- *Banks should map their internal credit ratings to the appropriate regulatory credit grades that are defined in the Notice. Bank staff should be adequately trained to ensure that they understand and comply with the credit grading requirements under the Notice.*
- *Credit approvers should satisfy themselves that the credit grades proposed by the business are appropriate, and provide appropriate checks and balances and challenge to the business. They should independently review and/or substantiate the information provided by the business to satisfy themselves that all relevant factors have been taken into account in determining the regulatory credit grades.*

### **3 Credit Monitoring**

3.1 It is important for banks to have in place a robust process to monitor the credit condition of individual loans. Key indicators of credit condition should be specified and monitored to identify accounts with red flags or those that exhibit early signs of credit deterioration.

#### **Loan covenants/conditions and credit reviews**

3.2 Some banks allowed the business to monitor certain loan covenants and conditions stipulated for borrowers solely. These were not tracked, monitored and included in reports for covenant/condition breaches by an independent credit control unit. There were also cases where banks did not monitor loan covenants and conditions at the requisite frequency.

3.3 Banks reviewed their corporate borrowers at least annually. Weaker loans such as watch-list, “special mention” and non-performing loans (“NPLs”) were reviewed more frequently. However, a few banks did not consistently adhere to the credit review timelines stipulated in their policies. In some cases, the relationship managers (“RMs”) deferred their credit reviews beyond the stipulated timelines without obtaining the requisite approvals. Regular and timely reviews of credit facilities are necessary to ascertain that loan covenants and conditions are complied with and to assess if there are changes in the risk profile of the borrower.

#### **Early warning indicators and watch-list**

3.4 Banks had established red flags or early warning indicators to trigger an immediate review of an account or place accounts with potential weaknesses on their internal watch-list for closer monitoring. This process would help banks to identify accounts that exhibit early signs of credit deterioration. However, a few banks did not establish indicators to identify and place borrowers from vulnerable sectors or those with weak financials on the watch-list. In some other cases, the watch-list process was managed entirely by the business, including the decision to place or remove an account on the watch-list, with no independent oversight by a risk function. Furthermore, there were instances where the banks failed to identify and place accounts on the watch-list, despite the accounts satisfying the established criteria.

#### **Monitoring of credit developments**

3.5 A few banks did not conduct ongoing monitoring of adverse news to identify adverse factors that could impact their borrowers’ repayment ability. Banks should ensure that there are systems or processes in place to promptly identify negative news pertaining to borrowers and assess the implications on the quality of the loans.

### Good Practices

- *Banks have a structured process to monitor signs of credit deterioration exhibited by borrowers. For example, a few banks have established indicators (e.g. borrower's stock price and external credit agencies' ratings) and set triggers/thresholds to facilitate the early identification of potentially weakening borrowers, so that prompt actions can be taken before the loans deteriorate further.*
- *Banks make use of technology to enhance and achieve greater efficiencies in credit monitoring, e.g. implementing system-based solutions instead of relying on manual spreadsheets to generate reminders and track due dates of credit reviews and loan covenants.*

### Attention Areas

- *An independent function should perform ongoing checks of credit covenants that are time-triggered to ascertain their compliance with the covenant requirements. For example, in the case of borrowers that are public listed companies and publish quarterly results, banks should ensure that financial covenants that require ongoing compliance are checked as and when the quarterly results are released, and not only during the annual credit reviews, which is not timely.*
- *For proper accountability and oversight, banks should ensure that RMs seek approval and provide justifications for any deferment of credit reviews.*
- *Banks should ensure there is oversight of the watch-list process by a party independent of the business.*

## **4 Loan Portfolio Management**

4.1 Apart from monitoring loans individually, banks should consider the inter-relationships between loans within the portfolio. This would provide the bank with a more comprehensive view of its credit risk profile and enable it to manage its loan portfolio more effectively. Key elements of portfolio management include conducting portfolio reviews and credit stress tests, as well as reviewing the overall quality of loan assets.

4.2 The larger banks typically reviewed their credit portfolios regularly, with a greater focus on the more significant or vulnerable sectors. Credit stress tests of selected portfolios were also carried out to identify vulnerable accounts. For the smaller banks, while their head office could be responsible for overseeing and stress testing credit portfolios on a global basis, the Singapore branch is encouraged to perform regular reviews and credit stress tests of its credit portfolios that are tailored to the local operating environment.

4.3 The main purpose of performing credit stress tests is to determine the potential exposure to credit risks arising from adverse market conditions based on a set of predefined assumptions or scenarios. In general, there is room for banks to improve their credit stress test policies, methodologies, and processes. For instance, a number of banks did not have credit stress test policies and procedures in place. In some cases, while the banks had identified the vulnerable sectors, the credit stress tests on those sectors were not performed on a timely basis.

#### Good Practices

- *Banks subject credit portfolios in the more vulnerable segments to more frequent reviews (e.g. quarterly or semi-annually).*
- *Banks identify areas of significant concentration risks in their overall credit portfolios, and monitor them closely. Banks also set limits and triggers to cap their concentration risks to acceptable levels. Areas of significant concentration risks are reported to senior management for their attention.*

#### Attention Areas

- *Apart from mandatory regulatory stress tests, banks should conduct other types of credit stress tests on a regular and timely basis to assess the impact of economic shocks or worrying trends in the credit environment on their credit portfolios.*
- *The stress test scenarios should be forward looking, incorporate macroeconomic and industry trends, consider the correlations between different risk factors and be tailored to the local operating environment.*
- *Stress test scenarios, assumptions and results should be reported to senior management and credit risk committee for review and deliberation. Where stress test results exceed the established tolerance levels, appropriate follow-up actions, e.g. identifying weaker loans to be placed on the watch-list or downgrading such loans for closer monitoring, should be taken where necessary.*
- *Banks should ensure that the scope and frequency of their credit stress tests, as well as the roles and responsibilities of various staff and stakeholders, are properly set out in the stress test policies and procedures.*



## **5 Other Areas**

### **Post-mortem on NPLs**

5.1 Some banks conducted a post-mortem on NPLs to identify reasons for their deterioration, and determine whether there were pre-emptive actions that could have been taken before the loans turned non-performing. A few banks also assessed whether the business and credit approver had performed proper evaluations of the loans and adhered to the banks' credit underwriting standards. The post-mortem was generally performed by units that were independent of the business such as internal audit and remedial management. The outcome of the reviews was reported to senior management who would ensure that appropriate and timely actions were taken to rectify any weaknesses noted. The lessons learned from such reviews were also shared with relevant staff within the bank.

5.2 The practice of conducting a post-mortem on NPLs is encouraged as it enables banks to learn from past failures and put in place measures to minimise future occurrences.