# PILLAR 3 DISCLOSURE

# PILLAR 3 DISCLOSURE

## 1.0 OVERVIEW

The Pillar 3 Disclosure is part of Bank Negara Malaysia's (BNM) requirements under its Risk-Weighted Capital Adequacy Framework (RWCAF) which consists of 3 Pillars:

**Pillar 1** Sets out the minimum capital requirements for credit, market and operational risks.

**Pillar 2** Aims to ensure that banking institutions maintain adequate capital levels consistent with their risk profile and business plan at all times.

**Pillar 3** Aims to promote transparency through enhanced disclosure on risk management practices and capital adequacy.

From the regulatory standpoint, Cagamas Berhad (including its subsidiaries) (collectively referred to herein as Cagamas) is not required to comply with BNM's RWCAF Basel II Pillar 3 requirements but has chosen to adopt the disclosure requirement as a matter of best practice. The organisation's Pillar 3 disclosure is governed by the approved Disclosure Policy on Risk-Weighted Capital Adequacy Framework (Basel II Pillar 3) which documents the content, materiality, frequency of disclosure and internal controls over the disclosure process.

In determining the capital requirement for credit risk, Cagamas has adopted the Advanced Internal Rating Based (AIRB) Approach for the Purchase Without Recourse (PWOR) portfolio and Standardised Approach for Purchase With Recourse (PWR) portfolio and investments.

For market risk, the Standardised Approach is adopted whilst the risk-weighted capital requirement for operational risk is based on the Basic Indicator Approach which is the average of a percentage fixed by BNM of positive annual gross income over the previous three years.

Under BNM's RWCAF Basel II Pillar 3 requirements, the information disclosed herein is not required to be audited by external auditors. However, the disclosure has been reviewed and verified by internal auditors and approved by the Board of Directors. The Pillar 3 disclosure will be published annually together with the annual report which is available on Cagamas' website, www.cagamas.com.my.

## 2.0 SCOPE OF APPLICATION

The basis for consolidation is described in Note 2 to the financial statements. There are no capital deficiencies in any of the subsidiary companies of the Group during the year.

For the purpose of this Pillar 3 disclosure, the scope shall be restricted to the subsidiary which is material in relation to the Group's assets i.e., Cagamas Berhad and its subsidiaries only (i.e., "Cagamas"). The disclosure published is for the year ended 31 December 2019 and is based on the consolidated financial statements of Cagamas Berhad. Information on other subsidiaries of the Group is available in the notes to the financial statements.

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 3.0 CAPITAL MANAGEMENT

Cagamas' capital management is guided by its Capital Management Framework which sets out the minimum policies and procedures required to be put in place to ensure adequate capital is maintained to support the development of its businesses.

The framework aims to ensure that capital requirements are reviewed over a minimum 3-year period, consistent with the organisation's risk profile and business plan and also to maintain an adequate capital level at all times. This involves the following key initiatives:

- Focus on measuring return on capital employed in evaluating business proposals that require incorporating Cagamas' unique developmental role in the debt capital market and as a liquidity provider;
- Continuous monitoring of the robustness of its capital position and the efficient use of capital through the 3-year capital plan;
- Implementation of the Internal Capital Adequacy Assessment Process (ICAAP) as well as ensuring that capital requirements under stressed scenarios are taken into account in capital planning.

The capital management strategy is dynamic and forward-looking, incorporates the capital needs of existing and new businesses and takes into account the business environment that impacts the needs and values of the organisation.

The strategy requires the proactive management of Cagamas' capital structure to be effective whilst maintaining a strong and robust capital position aligned with the risk profile and supporting business growth. This involves ongoing review and monitoring of the level and quality of capital by the Board of Directors, assessed based on the following key objectives:

- Maintaining a high level of financial strength, correlated to the overall risk profile and risk appetite;
- Preserving financial flexibility for funding internal growth;
- Be able to withstand capital demands under market shocks and stress conditions;
- Maintaining strong external credit ratings; and
- Satisfying the expectations of the various stakeholders, counterparties, debt obligors, rating agencies and shareholders.

The capital adequacy requirements are computed in accordance with BNM's Capital Adequacy Framework (Capital Component) and Capital Adequacy Framework (Basel II – Risk Weighted Assets) which sets out the general requirements concerning regulatory capital adequacy, components of eligible regulatory capital and requirements for computing risk-weighted assets (RWA).

### 3.1 Capital Adequacy Ratios

The following table details the capital adequacy ratios for Cagamas:

| | 2019 | 2018 |
|---|---|---|
| *Before deducting the proposed final dividend* | | |
| CET1 Capital Ratio | **29.3%** | 28.3% |
| Total Capital Ratio | **30.7%** | 29.9% |
| *After deducting the proposed final dividend* | | |
| CET1 Capital Ratio | **29.1%** | 28.1% |
| Total Capital Ratio | **30.5%** | 29.7% |

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 3.0 CAPITAL MANAGEMENT (CONTINUED)

### 3.2 Capital Structure

The following table details the capital structure for Cagamas:

| | 2019 RM'000 | 2018 RM'000 |
|---|---|---|
| ***CET I/Tier I Capital*** | | |
| Issued capital | **150,000** | 150,000 |
| Retained profits | **3,731,398** | 3,520,998 |
| Financial assets at FVOCI reserves | **16,909** | 878 |
| Less: Deferred tax assets | **(17,451)** | (29,179) |
| Less: Regulatory reserves | **(109,779)** | (144,472) |
| | **3,771,077** | 3,498,225 |
| ***Tier II Capital*** | | |
| Allowance for impairment losses | **71,037** | 53,182 |
| Add: Regulatory reserves | **109,779** | 144,472 |
| Total Capital | **3,951,893** | 3,695,879 |

### 3.3 Minimum Regulatory Capital Requirement

The following table presents the minimum capital requirements to support Cagamas' RWA:

| Exposure Class | 2019 RM'000 | 2018 RM'000 |
|---|---|---|
| **Risk-weighted assets** | | |
| i) Credit Risk | **12,197,228** | 11,672,578 |
| ii) Operational Risk | **694,875** | 685,542 |
| Total Risk-Weighted Assets | **12,892,103** | 12,358,120 |
| **Minimum capital requirement at 10.5% (2018: 8.0%)** | | |
| i) Credit Risk | **1,280,709** | 933,806 |
| ii) Operational Risk | **72,962** | 54,843 |
| Total | **1,353,671** | 988,649 |

# PILLAR 3 DISCLOSURE
***(CONTINUED)***

## 4.0 RISK MANAGEMENT

The Group takes a holistic and enterprise-wide view in managing risk across the subsidiaries with regular evaluation of risks.

### 4.1 Enterprise Risk Management (ERM) Framework

ERM forms part of the Group's culture and is embedded into business, operations and decision-making processes and practices. The ERM Framework is geared towards achieving the Group's objectives in the four categories below:

- Strategic – high-level goals, aligned with and supporting its mission
- Operations – effective and efficient use of its resources
- Financial – optimise return and sustainability of performance
- Reporting & Compliance – reliability of reporting and compliance with applicable laws and regulations

In line with the ERM, three lines of defence in managing risks are adopted within the Group. Business units, being the first line of defence have the primary responsibility of identifying, mitigating and managing risks within their lines of business. They also ensure that their day-to-day activities are carried out within established risk policies, procedures and limits.

An independent Risk Management and Compliance Division (RMD) plays the role of the second line of defence by providing specialised resources to proactively manage risks. This includes the assessment of risk exposures and the coordination of risk management on an enterprise-wide basis. RMD is also responsible for ensuring that risk policies are implemented accordingly.

The Internal Audit Department (IAD) being the third line of defence is responsible for independently reviewing the adequacy and effectiveness of risk management processes, the system of internal controls and compliance with internal risk policies.

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 4.0 RISK MANAGEMENT (CONTINUED)

### 4.2 Risk Governance Structure

**Board of Directors (BOD or "the Board")**

- Sets the overall strategic direction for the Group;
- Provides oversight to ensure that management has appropriate risk management systems and practices to manage risks associated with the Group's operations and activities;
- Sets the risk appetite and tolerance levels that are consistent with the Group's overall business objectives and desired risk profile;
- Reviews and approves all significant risk management policies and risk exposures.

**Board Risk Committee (BRC)**

Assists the Board by ensuring that there is effective oversight and development of strategies, policies and infrastructure to manage the Group's risks. The BRC is supported by management committees which address key risks identified.

| Management Executive Committee (MEC) | Asset Liability Committee (ALCO) |
|---|---|
| Undertake the oversight function for overall risk limits, aligning them to the risk appetite set by the Board. | Undertake the oversight function for liquidity management and capital allocation, aligning them to the risk appetite set by the Board. |

**Management**

Responsible for the implementation of policies laid down by the Board and ensuring there are adequate and effective operational procedures, internal controls and systems to support these policies.

| First Line of Defence<br>*Business and Support Function* | Second Line of Defence<br>*Risk Management & Compliance Division* | Third Line of Defence<br>*Internal Audit Department* |
|---|---|---|
| Primary responsibility of identifying, mitigating and managing risks within their lines of business. They also ensure that their day-to-day activities are carried out within established risk policies, procedures and limits. | Monitoring and reporting of risk exposures independently and coordinating the management of risks on an enterprise-wide basis. It is independent of other departments involved in risk taking activities and reports directly to the BRC. | Responsible for independently reviewing the adequacy and effectiveness of risk management processes, system of internal controls and compliance with internal policies. |

*Note: The External Auditor conducts independent review in order to obtain reasonable assurance that the Group's financial statements are free from material misstatement.*

# PILLAR 3 DISCLOSURE
***(CONTINUED)***

## 4.0 RISK MANAGEMENT (CONTINUED)

### 4.3 Internal Capital Adequacy Assessment Process (ICAAP)

ICAAP primarily involves a comprehensive assessment of all material risks that Cagamas is exposed to, including assessing the adequacy of the capital in relation to its risks and setting capital targets that are commensurate with its risk profile and operating environment, taking into consideration Cagamas' business strategy and risk appetite. The following are the main components in the organisation's ICAAP:

**Risk Appetite**

Risk appetite is the acceptable risk tolerance for each material risk category and other related parameters in achieving business objectives. It does not seek to prevent risk taking. Instead, it ensures that the risks undertaken are aligned to chosen business strategies.

**Material Risk Assessment & Quantification**

This component requires analysis of all risks that occur in business activities and recognition of the risks that Cagamas can be exposed to in the future. These include quantifiable and non-quantifiable risks. Risks are aggregated in order to determine the overall risk under the ICAAP, including impact assessment of stress on the internal Total Capital Ratio target.

**Stress Testing**

Rigorous and forward-looking stress testing is an integral part of ICAAP, enabling assessment of the impact to capital adequacy arising from adverse events or changes in market conditions. Further stress testing would enable Cagamas to assess the vulnerability of its statement of financial position and resilience of financial plans to extreme but plausible stress events.

To ensure effectiveness of stress test results, a range of scenarios is considered which includes at least an adverse economic scenario that is severe but plausible, such as a severe economic downturn and/or a system-wide shock to liquidity. The stress test would be conducted company-wide covering all relevant risk areas and material entities. Results of the stress test are deliberated by the MEC and reported to the BRC and the Board.

**Capital Management**

Measurement of the available capital and capital instruments is detailed out in the Capital Management Framework. The components considered as available capital are reviewed or enhanced as and when required to ensure its relevance.

**Independent Review**

An independent review of ICAAP is performed to review the processes or systems for assessing the various risks that Cagamas is exposed to and for relating the risks to capital levels. The scope includes review of the appropriateness of the ICAAP, the identification of material risks, the reasonableness of stress testing scenarios, the integrity, verifiability and completeness of data inputs and the assumptions used.

## 5.0 CREDIT RISK

Credit risk is defined as the potential for financial loss resulting from the failure of a borrower or counterparty to fulfil its financial or contractual obligations. Credit risk arises from PWR and PWOR business, investments and treasury hedging activities. Cagamas seeks to take credit risk that meets the underwriting standards while ensuring that the risk taken is commensurate with the return.

**Credit Risk Management Oversight and Organisation**

The MEC is the management committee responsible for the organisation's overall credit risk exposure, taking a proactive view of risks and positioning the credit portfolio. MEC, which is chaired by the CEO, also reviews the credit risk management framework, the credit profile of material portfolios, and aligns credit risk management with business strategy.

Business Units undertake thorough credit assessment prior to submission to the Credit Risk Section of the RMD. The Credit Risk Section will independently assess the credit risk of the counterparty taking into consideration the financial strength and business profile prior to recommendation to the MEC. The Credit Risk Section is also responsible for formulating and developing credit risk policies and procedures for identifying, measuring, monitoring and reporting credit risk. Credit limits are approved by the MEC within the risk appetite set by the Board.

Regular risk reporting which includes quality of portfolio, changes in counterparties' rating and concentration risk exposures is made to the BRC and the Board for their oversight.

**Credit Risk Management Approach**

Credit risk management includes the establishment of credit risk policies and procedure manuals wherein the credit processes, controls, approval authority, risk rating/scoring and review are documented. These standards cover credit origination, measurement and documentation as well as problem recognition, classification and remedial actions.

Cagamas manages its credit risk via a thorough assessment of the counterparties, stipulates prudent eligibility criteria and conducts due diligence on loans and financings to be purchased. There is an internal rating system in place, which sets out the maximum credit limit permissible for each category of rating.

Credit limits are reviewed periodically and are determined based on the combination of external ratings, internal credit assessment and business requirements. Financing activities are also guided by internal credit policies, procedure manuals and the Risk Appetite Framework approved by the Board.

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 5.0 CREDIT RISK (CONTINUED)

**Key areas of credit exposures:**

**(a) Purchase With Recourse (PWR)**

Under the PWR scheme, Cagamas takes on counterparty risk i.e., credit risk of the selling institutions given the latter's undertaking to repurchase or replace ineligible loans. Reviews on counterparties are conducted at least once a year with updated information. There are strict limits on counterparty exposures based on rating and internal credit assessment. In addition, concentration risk under PWR is managed and monitored via concentration limits established based on the type of counterparty and the type of assets.

**(b) Purchase Without Recourse (PWOR)**

As for the PWOR scheme, Cagamas absorbs all the credit risk of the loans and financing acquired wherein purchases are restricted to the approved sellers and assets. Purchase of these loans is managed via adherence to stringent eligibility criteria and due diligence on a sample of the portfolio prior to the purchase. To further mitigate credit risks, PWOR purchases may include loans with an automated salary deduction feature. These portfolios are monitored via concentration limits based on property types and location.

**(c) Investment and Derivatives Activities**

The management of credit risk arising from the investment of surplus funds is primarily via the setting of counterparty credit limits. These credit limits are established following an assessment of the counterparty's creditworthiness and is subject to the credit policy on investment which stipulates the minimum investment grade for debt securities and the maximum tenure. The policy is subject to regular review. Credit exposures are also controlled through independent monitoring and reporting of excesses and breaches against approved limits and risk mitigation thresholds.

Cagamas' exposures to Interest Rate Swaps (IRS), Islamic Profit Rate Swaps (IPRS), Cross Currency Swaps (CCS) and Islamic Cross Currency Swaps (ICCS) are for hedging purposes only.

### 5.1 Credit Risk Mitigation

Credit limits are assigned on the basis of the counterparty's credit standing, source of repayment, debt servicing ability and business requirements.

Under the PWR scheme, Cagamas accepts guarantee from the parent company of corporate and institutional counterparties to mitigate credit risk subject to internal guidelines and policy. Credit exposure which is secured by a guarantee from an eligible guarantor, is weighted according to the risk weight appropriate to the guarantor. In accordance with BNM's RWCAF guidelines, this guarantee shall not be considered again for credit risk mitigation purposes as the rating has already taken into account the guarantee provided by the parent of the counterparty.

## 5.0 CREDIT RISK (CONTINUED)

### 5.1 Credit Risk Mitigation (continued)

The following table presents the minimum regulatory capital requirement for credit risk:

| | Total Exposures before Credit Risk Mitigation RM'000 | Total Exposures after Credit Risk Mitigation RM'000 | Risk-Weighted Assets RM'000 | Minimum Capital Requirement at at 10.5% (2018: 8.0%) RM'000 |
|---|---|---|---|---|
| **2019** | | | | |
| **Exposure Class Credit Risk** | | | | |
| ***On-balance sheet exposure:*** | | | | |
| Sovereign & Central Banks | **1,483,669** | **1,483,669** | **–** | **–** |
| Banks, Development Financial Institutions & Multilateral Development Banks | **27,535,704** | **27,535,704** | **6,659,760** | **699,275** |
| Corporates & Leasing Companies | **1,329,689** | **1,329,689** | **371,083** | **38,963** |
| Mortgage Assets | **10,263,642** | **10,263,642** | **4,761,754** | **499,984** |
| Hire Purchase Assets | **101** | **101** | **46** | **5** |
| Other Assets | **38,730** | **38,730** | **38,730** | **4,067** |
| Defaulted Exposures | **83,135** | **83,135** | **329,910** | **34,641** |
| **Total** | **40,734,670** | **40,734,670** | **12,161,283** | **1,276,935** |
| ***Off-balance sheet exposure:*** | | | | |
| Derivative Financial Instruments | **179,724** | **179,724** | **35,945** | **3,774** |
| **Total Credit Exposures** | **40,914,394** | **40,914,394** | **12,197,228** | **1,280,709** |
| **2018** | | | | |
| **Exposure Class Credit Risk** | | | | |
| ***On-balance sheet exposure:*** | | | | |
| Sovereign & Central Banks | 1,384,619 | 1,384,619 | – | – |
| Banks, Development Financial Institutions & Multilateral Development Banks | 30,879,026 | 30,879,026 | 7,304,430 | 584,354 |
| Corporates & Leasing Companies | 1,197,322 | 1,197,322 | 315,687 | 25,255 |
| Mortgage Assets | 11,152,743 | 11,152,743 | 3,414,251 | 273,140 |
| Hire Purchase Assets | 728 | 728 | 201 | 16 |
| Other Assets | 75,070 | 75,070 | 75,070 | 6,006 |
| Defaulted Exposures | 107,548 | 107,548 | 428,795 | 34,304 |
| **Total** | 44,797,056 | 44,797,056 | 11,538,434 | 923,075 |
| ***Off-balance sheet exposure:*** | | | | |
| Derivative Financial Instruments | 670,721 | 670,721 | 134,144 | 10,731 |
| **Total Credit Exposures** | 45,467,777 | 45,467,777 | 11,672,578 | 933,806 |

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 5.0 CREDIT RISK (CONTINUED)

### 5.2 Distribution of Credit Exposures

Cagamas' counterparties are mainly the Government of Malaysia (GOM), financial institutions, development financial institutions and corporate companies in Malaysia. The following tables present the analysis of credit exposure of financial assets before the effect of credit risk mitigation by:

**(a) Industrial analysis based on industrial distribution:**

| 2019 | Cash and short-term funds RM'000 | Derivatives financial instruments RM'000 | Financial assets at FVOCI RM'000 | Financial assets at FVTPL RM'000 | Amount due from counter parties RM'000 | Islamic financing assets RM'000 | Mortgage assets-Conventional RM'000 | Mortgage assets-Islamic RM'000 | Hire purchase assets-Islamic RM'000 | Other assets RM'000 | Total RM'000 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Government bodies | – | – | 1,069,398 | – | – | – | – | – | – | 469 | 1,069,867 |
| Financial institutions: | | | | | | | | | | | |
| – Commercial banks | 247,189 | 58,422 | 158,961 | – | 16,114,189 | 10,480,965 | – | – | – | – | 27,059,726 |
| – Investment banks | 94,118 | – | – | – | – | – | – | – | – | – | 94,118 |
| – Development banks | – | – | 91,848 | – | – | 361,267 | – | – | – | – | 453,115 |
| Communications, electricity, gas and water | – | – | 179,509 | – | – | – | – | – | – | – | 179,509 |
| Transportation | – | – | 384,292 | – | – | – | – | – | – | – | 384,292 |
| Leasing | – | – | – | – | 542,965 | – | – | – | – | – | 542,965 |
| Consumers | – | – | – | – | – | – | 4,836,313 | 5,510,428 | 136 | – | 10,346,877 |
| Corporates | – | – | 221,164 | 141,383 | – | – | – | – | – | – | 362,547 |
| Construction | – | – | 35,615 | – | – | – | – | – | – | – | 35,615 |
| Others | – | – | 167,778 | – | – | – | – | – | – | 8,978 | 176,756 |
| Total | 341,307 | 58,422 | 2,308,565 | 141,383 | 16,657,154 | 10,842,232 | 4,836,313 | 5,510,428 | 136 | 9,447 | 40,705,387 |

## PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 5.0 CREDIT RISK (CONTINUED)

### 5.2 Distribution of Credit Exposures

#### (a) Industrial analysis based on industrial distribution (continued):

| 2018 | Cash and short-term funds RM'000 | Derivatives financial instruments RM'000 | Financial assets at FVOCI RM'000 | Amount due from counter parties RM'000 | Islamic financing assets RM'000 | Mortgage assets- Conventional RM'000 | Mortgage assets- Islamic RM'000 | Hire purchase assets- Islamic RM'000 | Other assets RM'000 | Total RM'000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Government bodies | – | – | 952,666 | – | – | – | – | – | 773 | 953,439 |
| Financial institutions: | | | | | | | | | | |
| – Commercial banks | 144,550 | 362,078 | 364,632 | 19,875,677 | 10,029,953 | – | – | – | – | 30,776,890 |
| – Investment banks | 42,242 | – | – | – | – | – | – | – | – | 42,242 |
| – Development banks | – | – | 151,135 | – | – | – | – | – | – | 151,135 |
| Communications, electricity, gas and water | – | – | 100,565 | – | – | – | – | – | – | 100,565 |
| Transportation | – | – | 365,378 | – | – | – | – | – | – | 365,378 |
| Leasing | – | – | – | 529,247 | – | – | – | – | – | 529,247 |
| Consumers | – | – | – | – | – | 5,344,710 | 5,915,527 | 781 | – | 11,261,018 |
| Corporates | – | – | 192,685 | – | – | – | – | – | – | 192,685 |
| Construction | – | – | 76,090 | – | – | – | – | – | – | 76,090 |
| Others | – | – | 273,134 | – | – | – | – | – | 6,878 | 280,012 |
| Total | 186,792 | 362,078 | 2,476,285 | 20,404,924 | 10,029,953 | 5,344,710 | 5,915,527 | 781 | 7,651 | 44,728,701 |

#### (b) Geographical location analysis is not applicable because all credit exposures comprise domestic exposures.

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 5.0 CREDIT RISK (CONTINUED)

### 5.2 Distribution of Credit Exposures (continued)

#### (c) Maturity analysis based on the residual contractual maturity

| 2019 | Within one year RM'000 | One to three years RM'000 | Three to five years RM'000 | More than five years RM'000 | Non-interest/ non-profit bearing RM'000 | Total RM'000 |
|---|---|---|---|---|---|---|
| ***On-balance sheet exposure:*** | | | | | | |
| Cash and short-term funds | 230,501 | – | – | – | 110,806 | 341,307^1 |
| Financial assets at FVOCI | 587,652 | 538,057 | 500,125 | 682,859 | (128) | 2,308,565^2 |
| Financial assets at FVTPL | 141,383 | – | – | – | – | 141,383 |
| Amount due from counterparties | 7,491,962 | 8,527,330 | – | 637,921 | (59) | 16,657,154^3 |
| Islamic financing assets | 2,513,118 | 5,823,131 | 2,506,636 | – | (653) | 10,842,232^4 |
| Mortgage assets: | | | | | | |
| – Conventional | 879,063 | 1,114,449 | 933,455 | 2,527,182 | (617,836) | 4,836,313^5 |
| – Islamic | 732,210 | 967,240 | 905,246 | 3,557,112 | (651,380) | 5,510,428^6 |
| Hire purchase assets: | | | | | | |
| – Conventional | 2 | – | – | – | (2) | –^7 |
| – Islamic | 147 | – | – | – | (11) | 136^8 |
| Other assets | 22,854 | 16,004 | 492 | 22,506 | 35,296 | 97,152 |
| **Total on-balance sheet exposure** | 12,598,892 | 16,986,211 | 4,845,954 | 7,427,580 | (1,123,967) | 40,734,670 |
| ***Off-balance sheet exposure:*** | | | | | | |
| IRS/IPRS | 4,860 | 29,165 | 3,300 | 44,725 | – | 82,050 |
| CCS/ICCS | 73,068 | 24,606 | – | – | – | 97,674 |
| **Total** | 12,676,820 | 17,039,982 | 4,849,254 | 7,472,305 | (1,123,967) | 40,914,394 |

^1 Includes impairment losses on cash and short-term funds of RM105,036.
^2 Includes impairment losses on financial assets at FVOCI of RM127,815.
^3 Includes impairment losses on amount due from counterparties of RM59,047.
^4 Includes impairment losses on Islamic financing assets of RM653,198.
^5 Includes impairment losses on conventional mortgage assets of RM34,992,500.
^6 Includes impairment losses on Islamic mortgage assets of RM35,084,485.
^7 Includes impairment losses on conventional hire purchase assets of RM2,059.
^8 Includes impairment losses on Islamic hire purchase assets of RM12,461.

## 5.0 CREDIT RISK (CONTINUED)

### 5.2 Distribution of Credit Exposures (continued)

#### (c) Maturity analysis based on the residual contractual maturity (continued)

| 2018 | Within one year RM'000 | One to three years RM'000 | Three to five years RM'000 | More than five years RM'000 | Non-interest/ non-profit bearing RM'000 | Total RM'000 |
|---|---|---|---|---|---|---|
| ***On-balance sheet exposure:*** | | | | | | |
| Cash and short-term funds | 116,537 | – | – | – | 70,255 | 186,792 |
| Financial assets at FVOCI | 518,227 | 475,208 | 676,771 | 806,079 | – | 2,476,285 |
| Amount due from counterparties | 6,004,319 | 8,420,632 | 5,345,008 | 635,032 | (67) | 20,404,924^1 |
| Islamic financing assets | 1,835,052 | 4,269,044 | 3,926,484 | – | (627) | 10,029,953^2 |
| Mortgage assets: | | | | | | |
| – Conventional | 893,068 | 1,150,650 | 1,007,432 | 3,013,592 | (720,032) | 5,344,710^3 |
| – Islamic | 732,631 | 986,926 | 944,979 | 3,979,811 | (728,820) | 5,915,527^4 |
| Hire purchase assets: | | | | | | |
| – Conventional | 2 | – | – | – | (2) | –^5 |
| – Islamic | 795 | – | – | – | (14) | 781^6 |
| Other assets | 356,716 | 1,699 | 795 | 6,900 | 71,974 | 438,084 |
| **Total on-balance sheet exposure** | 10,457,347 | 15,304,159 | 11,901,469 | 8,441,414 | (1,307,333) | 44,797,056 |
| ***Off-balance sheet exposure:*** | | | | | | |
| IRS/IPRS | – | 38,456 | 20,750 | 30,739 | – | 89,945 |
| CCS/ICCS | 375,388 | 205,388 | – | – | – | 580,776 |
| **Total** | 10,832,735 | 15,548,003 | 11,922,219 | 8,472,153 | (1,307,333) | 45,467,777 |

^1 Includes impairment losses on amount due to counterparties of RM66,581.
^2 Includes impairment losses on Islamic financing assets of RM627,130.
^3 Includes impairment losses on conventional mortgage assets of RM28,210,459.
^4 Includes impairment losses on Islamic mortgage assets of RM24,261,116.
^5 Includes impairment losses on conventional hire purchase assets of RM2,059.
^6 Includes impairment losses on Islamic hire purchase assets of RM14,937.

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 5.0 CREDIT RISK (CONTINUED)

### 5.3 Off-Balance Sheet Exposure and Counterparty Credit Risk (CCR)

CCR on derivative financial instruments is the risk that a counterparty in a foreign exchange, interest rate, commodity, equity, option or credit derivative contract defaults prior to or on maturity date of the contract and Cagamas, at the relevant time has a claim on the counterparty. Derivative financial instruments restricted to interest rate and foreign exchange related contracts are entered into solely for hedging purposes.

| Off-Balance Sheet Exposures | Principal Amount RM'000 | Positive Fair Value of Derivatives Contracts RM'000 | Credit Equivalent Amount RM'000 | Risk-Weighted Assets RM'000 |
|---|---|---|---|---|
| **2019** | | | | |
| **Derivative Financial Instruments** | **6,148,652** | **58,422** | **179,724** | **35,945** |
| IRS/IPRS | | | | |
| – Less than 1 year | **1,560,000** | **1,710** | **4,861** | **972** |
| – 1 year to less than 5 years | **1,755,000** | **7,265** | **32,465** | **6,493** |
| – 5 years and above | **160,000** | **20,725** | **44,725** | **8,945** |
| CCS/ICCS | | | | |
| – Less than 1 year | **2,399,965** | **20,537** | **73,067** | **14,614** |
| – 1 year to less than 5 years | **273,687** | **8,185** | **24,606** | **4,921** |
| **2018** | | | | |
| **Derivative Financial Instruments** | 7,873,652 | 362,078 | 670,721 | 134,144 |
| IRS/IPRS | | | | |
| – 1 year to less than 5 years | 3,315,000 | 856 | 59,206 | 11,841 |
| – 5 years and above | 160,000 | 5,139 | 30,739 | 6,148 |
| CCS/ICCS | | | | |
| – Less than 1 year | 1,725,000 | 319,325 | 375,387 | 75,077 |
| – 1 year to less than 5 years | 2,673,652 | 36,758 | 205,389 | 41,078 |

### 5.4 Credit Rating

#### 5.4.1 Assignment of risk-weights under the Standardised Approach

Under the Standardised Approach, the credit rating assigned by the credit rating agencies is used in the calculation of credit risk-weighted assets for PWR, investment, IRS and CCS assets in accordance with BNM RWCAF. Rating agencies or External Credit Assessment Institutions ("ECAI") recognised by BNM are as follows:

(i) Standard & Poor's Rating Services (S&P);

(ii) Moody's Investors Service (Moody's);

(iii) Fitch Ratings (Fitch);

(iv) RAM Rating Services Berhad (RAM);

(v) Malaysian Rating Corporation Berhad (MARC); and

(vi) Rating & Investment Information, Inc (R&I).

## 5.0 CREDIT RISK (CONTINUED)

### 5.4 Credit Rating (continued)

#### 5.4.1 Assignment of risk-weights under the Standardised Approach (continued)

In accordance with BNM's RWCAF, where the exposure is rated by more than one external rating agency, risk-weight shall be determined based on the second highest rating. For Cagamas, if exposure is denominated in local currency and where the exposure is rated by more than one external rating agency, risk weight is determined based on the second highest local rating. The counterparty shall be deemed as unrated when an exposure is not rated by the rating agency whilst the exposure which is secured by an explicit guarantee issued by an eligible or rated guarantor, rating similar to that of the guarantor is assigned. For the purpose of internal rating, the lowest rating is adopted in cases where the counterparty is rated by more than one external rating agency.

The following table presents the credit exposures of Cagamas after the effect of credit risk mitigation by risk-weights:

| Risk Weights | Sovereign & Central Banks RM'000 | FI & DFI* RM'000 | Corporates & Leasing Companies RM'000 | Other Assets RM'000 | Total Risk-Weighted Assets RM'000 |
|---|---|---|---|---|---|
| **2019** | | | | | |
| 0% | **1,483,669** | **–** | **–** | **1** | **–** |
| 10% | **–** | **–** | **–** | **–** | **–** |
| 20% | **–** | **23,873,365** | **979,205** | **–** | **4,970,514** |
| 50% | **–** | **3,842,063** | **350,484** | **–** | **2,096,275** |
| 100% | **–** | **–** | **–** | **38,729** | **38,729** |
| **Total** | **1,483,669** | **27,715,428** | **1,329,689** | **38,730** | **7,105,518** |
| Average Risk Weights | **0.0%** | **24.2%** | **27.9%** | **100.0%** | **23.2%** |
| **2018** | | | | | |
| 0% | 1,384,619 | – | – | – | – |
| 10% | – | – | – | – | – |
| 20% | – | 27,787,664 | 943,246 | – | 5,746,090 |
| 50% | – | 3,762,083 | 254,076 | – | 2,008,171 |
| 100% | – | – | – | 75,070 | 75,070 |
| **Total** | 1,384,619 | 31,549,747 | 1,197,322 | 75,070 | 7,829,331 |
| Average Risk Weights | 0.0% | 23.6% | 26.4% | 100.0% | 22.9% |

* FI – Financial Institutions DFI – Development Financial Institutions

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 5.0 CREDIT RISK (CONTINUED)

### 5.4 Credit Rating (continued)

#### 5.4.1 Assignment of risk weights under the Standardised Approach (continued)

The following table is a summary of the risk weight mapping matrix and the allocation of risk weights under the Standardised Approach:

| **Exposure class:** | **Rating of Counterparties by Approved ECAIs** | | | | |
|---|---|---|---|---|---|
| Moody's | Aaa to Aa3 | A1 to A3 | Baa1 to Ba3 | B1 to C | Unrated |
| S&P | AAA to AA– | A+ to A– | BBB+ to BB– | B+ to D | Unrated |
| Fitch | AAA to AA– | A+ to A– | BBB+ to BB– | B+ to D | Unrated |
| RAM | AAA to AA3 | A to A3 | BBB1 to BB3 | B1 to C | Unrated |
| MARC | AAA to AA– | A+ to A– | BBB+ to BB– | B+ to D | Unrated |
| R&I Inc | AAA to AA– | A+ to A– | BBB+ to BB– | B+ to D | Unrated |

| ***On and Off-balance sheet exposure*** | **RM'000** | **RM'000** | **RM'000** | **RM'000** | **RM'000** |
|---|---|---|---|---|---|
| **2019** | | | | | |
| Sovereign/Central Banks# | **1,483,669** | **–** | **–** | **–** | **–** |
| FI and DFI | **23,873,365** | **3,842,063** | **–** | **–** | **–** |
| Corporates and Leasing Companies | **979,205** | **350,484** | **–** | **–** | **–** |
| Other Assets | **–** | **–** | **–** | **–** | **38,730** |
| **Total** | **26,336,239** | **4,192,547** | **–** | **–** | **38,730** |
| **2018** | | | | | |
| Sovereign/Central Banks# | 1,384,619 | – | – | – | – |
| FI and DFI | 27,787,664 | 3,762,083 | – | – | – |
| Corporates and Leasing Companies | 943,246 | 254,076 | – | – | – |
| Other Assets | – | – | – | – | 75,070 |
| **Total** | 30,115,529 | 4,016,159 | – | – | 75,070 |

# Under BNM RWCAF, exposures to and/or guaranteed by the Federal Government of Malaysia are accorded a preferential sovereign risk weight of 0%.

## 5.0 CREDIT RISK (CONTINUED)

### 5.4 Credit Rating (continued)

#### 5.4.2 Assignment of risk-weights under the Advanced Internal Rating Based (AIRB) Approach

Cagamas adopts the AIRB approach for its PWOR exposure which primarily consists of mortgage loans and hire purchase loans using 3 key parameters i.e. PD, LGD and Exposure at Default (EAD) to quantify credit risk.

The risk estimates are developed based on internal historical data wherein study on the historical behaviour of the portfolio forms the basis for the computation of PD and LGD. EAD is the exposure when default occurs.

Disclosure on exposure by PD range:-

| | EAD RM'000 | LGD % | Exposure Weighted Average RW % | RWA RM'000 |
|---|---|---|---|---|
| **2019** | | | | |
| **Mortgage assets** | | | | |
| PD range: up to 0.5% | **–** | **–** | **–** | **–** |
| >0.5% to 3% | **11,480,796** | **32.08%** | **40.95%** | **4,701,371** |
| >3% to <100% | **36,013** | **32.08%** | **167.67%** | **60,383** |
| 100% | **83,097** | **32.08%** | **396.84%** | **329,759** |
| **Hire purchase assets** | | | | |
| PD range: up to 0.5% | **–** | **–** | **–** | **–** |
| >0.5% to 3% | **112** | **32.08%** | **40.95%** | **46** |
| >3% to <100% | **–** | **–** | **–** | **–** |
| 100% | **38** | **32.08%** | **396.84%** | **151** |
| **Total** | **11,600,056** | | | **5,091,710** |
| **2018** | | | | |
| **Mortgage assets** | | | | |
| PD range: up to 0.5% | – | – | – | – |
| >0.5% to 3% | 12,601,597 | 32.08% | 27.09% | 3,414,251 |
| >3% to <100% | – | – | – | – |
| 100% | 107,491 | 32.08% | 398.71% | 428,576 |
| **Hire purchase assets** | | | | |
| PD range: up to 0.5% | – | – | – | – |
| >0.5% to 3% | 743 | 32.08% | 27.09% | 201 |
| >3% to <100% | – | – | – | – |
| 100% | 55 | 32.08% | 398.71% | 219 |
| **Total** | 12,709,886 | | | 3,843,247 |

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 5.0 CREDIT RISK (CONTINUED)

### 5.5 Past Due and Impaired Loans

Refer to Note 2 of the Financial Statements for the accounting policies and accounting estimates on impairment assessment for loans, advances and financing. This credit impairment policy is applicable to the Group.

(a) The following table is a summary of the impairment allowance by economic purposes:

| | Neither more than 90 days past due nor individually impaired RM'000 | More than 90 days past due but not individually impaired RM'000 | Total RM'000 | Impairment allowance RM'000 | Total carrying value RM'000 |
|---|---|---|---|---|---|
| **2019** | | | | | |
| Purchase of mortgage assets | **37,290,826** | **83,097** | **37,373,923** | **70,760** | **37,303,163** |
| Purchase of motor vehicles/equipment | **543,105** | **38** | **543,143** | **43** | **543,100** |
| | **37,833,931** | **83,135** | **37,917,066** | **70,803** | **37,846,263** |
| **2018** | | | | | |
| Purchase of mortgage assets | 41,092,628 | 107,491 | 41,200,119 | 53,142 | 41,146,977 |
| Purchase of motor vehicles/equipment | 530,011 | 57 | 530,068 | 40 | 530,028 |
| Personal use | 18,890 | – | 18,890 | – | 18,890 |
| | 41,641,529 | 107,548 | 41,749,077 | 53,182 | 41,695,895 |

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 5.0 CREDIT RISK (CONTINUED)

### 5.5 Past Due and Impaired Loans (continued)

(b) The following table is a summary of the impairment allowance by product-type:

| | Neither more than 90 days past due nor individually impaired RM'000 | More than 90 days past due but not individually impaired RM'000 | Total RM'000 | Impairment allowance RM'000 | Total carrying value RM'000 |
|---|---|---|---|---|---|
| **2019** | | | | | |
| Amount due from counterparties (inclusive hire purchase assets) | **16,657,213** | **–** | **16,657,213** | **59** | **16,657,154** |
| Islamic financing assets | **10,842,885** | **–** | **10,842,885** | **653** | **10,842,232** |
| Mortgage assets | | | | | |
| – Conventional | **4,826,374** | **44,932** | **4,871,306** | **34,993** | **4,836,313** |
| – Islamic | **5,507,347** | **38,165** | **5,545,512** | **35,084** | **5,510,428** |
| Hire purchase assets | | | | | |
| – Conventional | **–** | **2** | **2** | **2** | **–** |
| – Islamic | **112** | **36** | **148** | **12** | **136** |
| | **37,833,931** | **83,135** | **37,917,066** | **70,803** | **37,846,263** |
| **2018** | | | | | |
| Amount due from counterparties (inclusive hire purchase assets) | 20,404,991 | – | 20,404,991 | 67 | 20,404,924 |
| Islamic financing assets | 10,030,580 | – | 10,030,580 | 627 | 10,029,953 |
| Mortgage assets | | | | | |
| – Conventional | 5,312,311 | 60,609 | 5,372,920 | 28,210 | 5,344,710 |
| – Islamic | 5,892,906 | 46,882 | 5,939,788 | 24,261 | 5,915,527 |
| Hire purchase assets | | | | | |
| – Conventional | – | 2 | 2 | 2 | – |
| – Islamic | 741 | 55 | 796 | 15 | 781 |
| | 41,641,529 | 107,548 | 41,749,077 | 53,182 | 41,695,895 |

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 6.0 MARKET & LIQUIDITY RISK

Market risk is the potential loss arising from adverse movement of market prices and rates. Market risk exposure is limited to interest rate and foreign exchange as Cagamas is not engaged in any equity or commodity trading activities. There is also no exposure to interest rate and foreign exchange risk arising from trading activities as it is prohibited.

Liquidity risk arises when funds are insufficient to meet financial obligations when they fall due.

**Market and Liquidity Risk Management Oversight and Organisation**

The ALCO is the management committee responsible for the management of market and liquidity risk activities including the setting of risk limits. The ALCO, which is chaired by the CEO, reviews Cagamas' market and liquidity risk policies, funding strategy, aligns market and liquidity risk management with business strategies and reviews performance of the investment portfolio, hedged positions, risk limits/compliance and stress test results.

RMD supports ALCO at the working level and is an independent risk control unit responsible for developing the market and liquidity risk policy and ensuring adequate risk control oversight.

**Market and Liquidity Risk Management Approach**

Cagamas manages market and liquidity risks by imposing threshold limits which are approved by management within the parameters approved by the Board based on a risk-return relationship.

Further, a strict match-funding policy is adhered to where all asset purchases are funded by bonds of closely matched size as well as duration and each transaction is self-sufficient in terms of cash flow. A forward looking liquidity mechanism is in place to promote efficient and effective cash flow management while avoiding excessive concentration of funding.

Cagamas plans its cash flow and monitors closely every business transaction to ensure that available funds are sufficient to meet business requirements at all times. Liquidity reserves which comprises marketable debt securities are also set aside to meet any unexpected shortfall in cash flow or adverse economic conditions in the financial market.

Derivatives instruments such as interest rate swaps and cross currency swaps are used to manage and hedge market risk exposures against fluctuation in interest rates and foreign exchange. Liquidity management processes involve regular monitoring against liquidity risk limits and establishing contingency funding plans. These processes are subject to regular review. Liquidity based on Basel III liquidity coverage ratio and net stable funding ratio are also monitored.

### 6.1 Management of Interest Rate Risk in the Banking Book

The interest rate risk in the banking book is monitored on a monthly basis and exposure is minimal given the match funding approach adopted by Cagamas for its assets and liabilities. The impact on net interest income is simulated and the following table summarises the impact arising from a 100 basis points parallel shift.

| Type of Currency | Impact on Position as at 31 December 2019 | |
|---|---|---|
| | **(–100 basis points) Parallel Shift** | **(+100 basis points) Parallel Shift** |
| | Decline in Net Interest Income RM'000 | Increase in Net Interest Income RM'000 |
| MYR | **(5,398)** | **5,404** |

## 6.0 MARKET & LIQUIDITY RISK (CONTINUED)

### 6.1 Management of Interest Rate Risk in the Banking Book (continued)

| Type of Currency | Impact on Position as at 31 December 2018 | |
|---|---|---|
| | (–100 basis points) Parallel Shift | (+100 basis points) Parallel Shift |
| | Decline in Net Interest Income RM'000 | Increase in Net Interest Income RM'000 |
| MYR | (3,685) | 3,691 |

### 6.2 Management of Non-Traded Foreign Exchange Risk

Cagamas is exposed to foreign exchange risk from Treasury funding activities when functional currencies are not in *Ringgit Malaysia*. Foreign currency risk is managed/hedged by entering into CCS/ICCS with selected counterparties concurrently with bond issuance and asset purchase to ensure that there is no timing mismatch amongst cash flows from the underlying assets, obligations on the foreign currency bonds as well as the hedge instrument.

## 7.0 OPERATIONAL RISK

Operational risk is the potential loss resulting from inadequate or failed internal processes, people and systems or from external events. It includes reputational risk associated with the organisation's business practices or market conduct. It also includes the risk of failing to comply with applicable laws and regulations.

**Operational Risk Management Oversight and Organisation**

The MEC governs the overall operational risk within the organisation. The Committee meets at least on a quarterly basis and discusses operational risk related issues.

RMD established the Operational Risk Management (ORM) Framework which clearly defines Cagamas' approach to operational risk management that includes the Risk & Control Self-Assessment/Operational Risk Policy and Standards ("The Policy"). The Operational Risk Section of RMD provides independent oversight of operational risk monitoring and control. Legal Risk is managed by the Legal Department and where necessary, in consultation with external legal counsel.

**Operational Risk Management Approach**

The Operational Risk Management policy codifies the core governing principles for operational risk management and provides a consistent, value added framework for assessing and communicating operational risk and the overall effectiveness of the internal control environment.

Business/Support Units constitute an integral part of the operational risk management framework and are primarily responsible for the day-to-day management of operational risk. These units are responsible for establishing and maintaining their respective operational manuals and ensuring that activities undertaken comply with the Group's operational risk management framework. Each Business/Support unit undertakes self-assessment of the risk and control environment to identify, assess and manage its operational risks. Operational risk losses and incidents are reported to management and BRC through RMD which provides independent assessment.

# PILLAR 3 DISCLOSURE
*(CONTINUED)*

## 7.0 OPERATIONAL RISK (CONTINUED)

**Operational Risk Management Approach (continued)**

The management places a very high value on maintaining an effective control environment to mitigate operational risk. Therefore, a number of tools have been put in place to mitigate this risk. These tools range from:

- Risk & Control Self-Assessment ("RCSA") which is a process of continual assessment of inherent operational risks and controls to identify control gaps and to develop action plans to close the gaps. It is a risk profiling tool which facilitates effective operational risk management for the organisation. The RCSA is signed-off by the respective department's management;
- Key risk indicators as early warning signals of increasing risk and/or control failures by flagging up given frequencies of events as a mechanism for continuous risk assessment/monitoring;
- Incident management which is a structured process and system to identify and focus attention on operational 'hotspots' and to minimise the risk impact; and
- Operational loss reporting involves the process of collecting, evaluating, monitoring and reporting operational risk loss, including near-misses, data which provides an important metric in the measurement of key operational risk.

Improvements in controls and safeguards against cyber security threats and technology risk to protect confidentiality, integrity and availability of critical information assets and critical systems of the company. RMD works closely with business units and this is a continuous effort. In order to ensure uninterrupted services and to safeguard staff and assets during disaster, Cagamas has put in place a well defined Business Continuity Management Framework (BCM) for its various critical functions. BCM comprises of Business Continuity Plan (BCP) and Disaster Recovery (DR), which can be activated in the event of business disruption/disaster. The resilience of these plans under different scenarios is being tested on an ongoing basis through regular DR exercises.

The Basic Indicator approach is used for calculating Operational Risk Capital.

## 8.0 SHARIAH GOVERNANCE DISCLOSURE

Cagamas consults and obtains endorsement/clearance from an independent Shariah Advisor for its Islamic products and transactions to ensure compliance with Shariah requirements. In addition, the approval of the Shariah Advisory Councils of Bank Negara Malaysia and/or Securities Commission Malaysia is obtained for its Islamic products, if required.

Periodic Shariah reviews/audits are performed to verify that Islamic products and operations are in compliance with the Shariah opinions or endorsements issued by the independent Shariah Advisor and the Joint Shariah Advisors for sukuk programmes, where applicable. Incidences of Shariah non-compliance are reported to the independent Shariah Advisor, the Group Board Audit Committee, BRC and the Board. Remedial actions are presented for the endorsement of the independent Shariah Advisor and for notification to the BRC or the Board.

During the financial period under review, no Shariah non-compliance event has been reported.

This page has been intentionally left blank.

This page has been intentionally left blank.