

Pillar 3 Disclosure

1.0 OVERVIEW

Cagamas Berhad and its subsidiaries (collectively referred to herein as Cagamas) is not required to comply with Bank Negara Malaysia's (BNM) Risk-Weighted Capital Adequacy Framework (RWCAF) – Disclosure Requirements ("Pillar 3") 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 ("BIA") 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 significant restrictions or impediments to the transfer of funds or regulatory capital within the Cagamas Holdings Group ("The Group"). 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. The disclosure published is for the year ended 31 December 2021 and is based on the consolidated financial statement 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 as well as 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 on 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 as well as takes into account the business environment that impacts the needs and value 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 which is assessed based on the following key objectives:



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").

Pillar 3 Disclosure (Continued)

3.0 CAPITAL MANAGEMENT (CONTINUED)

3.1 Capital Adequacy Ratios

The following table details the capital adequacy ratios for Cagamas:

	2021	2020
<i>Before deducting the proposed final dividend</i>		
CET1 Capital Ratio	41.0%	43.6%
Tier 1 Capital Ratio	41.0%	43.6%
TCR	42.4%	45.3%
<i>After deducting the proposed final dividend</i>		
CET1 Capital Ratio	40.8%	43.4%
Tier 1 Capital Ratio	40.8%	43.4%
TCR	42.1%	45.0%

Common Equity Tier 1 ("CET1") and Tier 1 Capital Ratios refer to the Total Tier 1 capital to RWA. Total Capital Ratio ("TCR") is the total capital to RWA.

3.2 Capital Structure

The following table details the capital structure of Cagamas:

	2021 RM'000	2020 RM'000
<i>CET1/Tier 1 Capital</i>		
Issued capital	150,000	150,000
Retained profits	4,004,195	3,925,320
	4,154,195	4,075,320
Financial assets at FVOCI* reserves	25	32,585
Less: Deferred tax assets	(20,627)	(23,331)
Less: Regulatory reserves**	(89,723)	(99,778)
Total CET1/Tier 1 Capital	4,043,870	3,984,796
<i>Tier 2 Capital</i>		
Allowance for impairment losses	45,533	54,623
Add: Regulatory reserves**	89,723	99,778
Total Tier 2 Capital	135,256	154,401
Total Capital	4,179,126	4,139,197

* Fair Value through Other Comprehensive Income ("FVOCI")

** comprise qualifying regulatory reserves for non-impaired loans and financing of Cagamas

Pillar 3 Disclosure *(Continued)*

3.0 CAPITAL MANAGEMENT (CONTINUED)

3.3 Minimum Regulatory Capital Requirement

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

Exposure Class	2021 RM'000	2020 RM'000
Risk-weighted assets		
i) Credit Risk	9,212,424	8,464,774
ii) Operational Risk	649,569	673,290
Total RWA	9,861,993	9,138,064
Minimum capital requirement at 10.5%		
i) Credit Risk	967,305	888,802
ii) Operational Risk	68,205	70,695
Total	1,035,510	959,497

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	Operations	Financial	Reporting & Compliance
high-level goals, aligned with and supporting the Group's mission	effective and efficient use of resources	profitability and sustainability of performance	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 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 Division ("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.

4.0 RISK MANAGEMENT (CONTINUED)

4.2 Risk Governance Structure

Board of Directors ("BOD" or "the Board")		
<ul style="list-style-type: none"> • 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")		
<p>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.</p>		
Management Executive Committee ("MEC")	Asset Liability Committee ("ALCO")	
<p>Undertake the oversight function for overall risk limits, aligning them to the risk appetite set by the Board.</p>	<p>Undertake the oversight function for liquidity management and capital allocation, aligning them to the risk appetite set by the Board.</p>	
Management		
<p>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.</p>		
First Line of Defence <i>Business and Support Function</i>	Second Line of Defence <i>Risk Management & Compliance Division ("RMD")</i>	Third Line of Defence <i>Internal Audit Department ("IAD")</i>
<p>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.</p>	<p>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.</p>	<p>Responsible for independently reviewing the adequacy and effectiveness of risk management processes, system of internal controls and compliance with internal policies.</p>

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 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

A 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, Capital Management Solution, 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 senior 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 President/Chief Executive Officer ("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 Department of the RMD. The Credit Department will independently assess the counterparty taking into consideration the credit strength of the counterparty and business requirement prior to recommendation to the MEC. The Credit Department 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 parameter 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 credit review are documented. These standards cover credit origination, measurement and documentation as well as problem recognition, classification and remedial actions.

Credit risk is managed via a thorough assessment of the counterparties, stipulates prudent eligibility criteria and conducts due diligence on loans and financings to be purchased. Credit limits are reviewed periodically and are determined based on the combination of external ratings, internal credit assessment and business requirements. Cagamas has in place an internal credit rating methodology and Management Credit Approving Limit, which sets out the maximum credit approving limit by the MEC.

All credit exposures are monitored on a regular basis and non-compliance is independently reported to the Management and BRC/BOD for remedy. 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, type of assets and counterparty rating band.

(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 type of 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) Capital Management Solutions (“CMS”), 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, the portion of the exposure 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	RWA RM'000	Minimum Capital Requirement at 10.5% RM'000
2021				
Exposure Class Credit Risk				
<i>On-balance sheet exposure:</i>				
Sovereign & Central Bank	1,682,433	1,682,433	–	–
Banks, Development Financial Institutions & Multilateral Development Banks	28,397,557	28,397,557	7,033,432	738,511
Corporates & Leasing Companies	1,189,662	1,189,662	283,173	29,733
Mortgage Assets	8,527,555	8,527,555	1,625,906	170,720
Other Assets	40,207	40,207	40,206	4,222
Defaulted Exposures	50,887	50,887	204,058	21,426
Total	39,888,301	39,888,301	9,186,775	964,612
<i>Off-balance sheet exposure:</i>				
Derivative Financial Instruments	157,851	157,851	25,649	2,693
Total Credit Exposures	40,046,152	40,046,152	9,212,424	967,305
2020				
Exposure Class Credit Risk				
<i>On-balance sheet exposure:</i>				
Sovereign & Central Bank	1,705,080	1,705,080	–	–
Banks, Development Financial Institutions & Multilateral Development Banks	23,521,588	23,521,588	5,765,590	605,387
Corporates & Leasing Companies	1,351,831	1,351,831	345,464	36,274
Mortgage Assets	9,418,233	9,418,233	1,948,445	204,587
Other Assets	123,323	123,323	123,323	12,949
Defaulted Exposures	64,226	64,226	257,547	27,042
Total	36,184,281	36,184,281	8,440,369	886,239
<i>Off-balance sheet exposure:</i>				
Derivative Financial Instruments	122,027	122,027	24,405	2,563
Total Credit Exposures	36,306,308	36,306,308	8,464,774	888,802

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 its industrial distribution:

	Cash and short-term funds RM'000	Deposits and placements with financial institutions RM'000	Derivative financial instruments RM'000	Financial assets at FVOCI* RM'000	Financial assets at FVTPL** RM'000	Financial asset at amortised cost RM'000	Amount due from counterparties 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
2021	-	-	-	1,326,500	-	-	-	-	-	-	-	377	1,326,877
Government bodies	-	-	-	1,326,500	-	-	-	-	-	-	-	-	-
Financial institutions:													
- Commercial banks	248,888	172,021	29,607	326,901	123,132	354,353	16,548,478	9,954,993	-	-	-	-	27,758,373
- Development banks	70,055	-	-	260,617	-	-	-	318,754	-	-	-	-	649,426
Communications, electricity, gas and water	-	-	-	242,565	-	-	-	-	-	-	-	-	242,565
Transportation	-	-	-	286,218	-	-	-	-	-	-	-	-	286,218
Leasing	-	-	-	-	-	-	592,697	-	-	-	-	-	592,697
Consumers	-	-	-	-	-	-	-	-	-	-	62	-	8,578,442
Corporate	-	-	-	225,882	-	-	-	-	3,886,956	4,691,424	-	-	8,578,442
Construction	-	-	-	98,377	-	-	-	-	-	-	-	-	225,882
Others	-	-	-	25,034	-	-	-	-	-	-	-	5,167	98,377
Total	318,943	172,021	29,607	2,792,094	123,132	354,353	17,141,175	10,273,747	3,886,956	4,691,424	62	5,544	39,789,058

* Fair Value through Other Comprehensive Income ("FVOCI")

** Fair Value through Profit or Loss ("FVTPL")

5.0 CREDIT RISK (CONTINUED)

5.2 Distribution of Credit Exposures (continued)

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

	Cash and short-term funds	Deposits and placements with financial institutions	Derivative financial instruments	Financial assets at FVOCI	Financial assets at FVTPL**	Amount due from counter parties	Islamic financing assets	Mortgage assets- Conventional	Mortgage assets- Islamic	Hire purchase assets- Islamic	Other assets	Total
2020	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
Government bodies	-	-	-	1,345,939	-	-	-	-	-	-	415	1,346,354
Financial institutions:												
- Commercial banks	109,071	102,886	57,904	30,002	120,802	13,397,099	9,322,362	-	-	-	-	23,140,126
- Development banks	-	-	-	61,731	-	-	340,299	-	-	-	-	402,030
Communications, electricity, gas and water	-	-	-	166,516	-	-	-	-	-	-	-	166,516
Transportation	-	-	-	389,730	-	-	-	-	-	-	-	389,730
Leasing	-	-	-	-	-	672,096	-	-	-	-	-	672,096
Consumers	-	-	-	-	-	-	-	4,366,916	5,115,509	34	-	9,482,459
Corporate	-	-	-	238,790	72,664	-	-	-	-	-	-	311,454
Construction	-	-	-	62,703	-	-	-	-	-	-	-	62,703
Others	-	-	-	87,905	-	-	-	-	-	-	6,004	93,909
Total	109,071	102,886	57,904	2,383,316	193,466	14,069,195	9,662,661	4,366,916	5,115,509	34	6,419	36,067,377

(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

2021	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	299,456	–	–	–	19,487	318,943
Deposits and placements with financial institutions	172,021	–	–	–	–	172,021
Financial assets at FVOCI	123,132	–	–	–	–	123,132
Financial assets at FVTPL	677,907	594,477	341,312	1,178,398	–	2,792,094
Financial asset at amortised cost	–	–	–	355,508	(1,155)	354,353
Amount due from counterparties	9,612,698	6,890,791	226,134	411,571	(19)	17,141,175
Islamic financing assets	2,768,566	7,505,242	–	–	(61)	10,273,747
Mortgage assets:						
– Conventional	652,653	846,026	715,011	1,694,605	(21,339)	3,886,956
– Islamic	595,770	755,159	739,961	2,623,166	(22,632)	4,691,424
Hire purchase assets:						
– Islamic	74	–	–	–	(12)	62
Other assets	6,623	2,656	–	20,367	104,747	134,393
Total on-balance sheet exposure	14,908,900	16,594,351	2,022,418	6,283,615	79,016	39,888,300
Off-balance sheet exposure:						
IRS/IPRS	2,325	9,556	–	41,167	–	53,048
CCS	42,607	62,196	–	–	–	104,803
Total	14,953,832	16,666,103	2,022,418	6,324,782	79,016	40,046,151

5.0 CREDIT RISK (CONTINUED)

5.2 Distribution of Credit Exposures (continued)

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

2020	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	89,355	–	–	–	19,716	109,071
Deposits and placements with financial institutions	102,886	–	–	–	–	102,886
Financial assets at FVOCI	342,574	727,173	334,100	979,469	–	2,383,316
Financial assets at FVTPL	193,466	–	–	–	–	193,466
Amount due from counterparties	6,093,353	7,338,049	226,133	411,679	(19)	14,069,195
Islamic financing assets	3,528,607	5,218,907	915,246	–	(99)	9,662,661
Mortgage assets:						
– Conventional	729,768	923,536	774,026	1,965,556	(25,970)	4,366,916
– Islamic	637,751	806,481	766,538	2,933,185	(28,446)	5,115,509
Hire purchase assets:						
– Islamic	46	–	–	–	(12)	34
Other assets	19,119	–	–	38,802	123,306	181,227
Total on-balance sheet exposure	11,736,925	15,014,146	3,016,043	6,328,691	88,476	36,184,281
Off-balance sheet exposure:						
IRS/IPRS	16,294	17,650	–	61,202	–	95,146
CCS	26,881	–	–	–	–	26,881
Total	11,780,100	15,031,796	3,016,043	6,389,893	88,476	36,306,308

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	RWA RM'000
2021				
Derivative Financial Instruments	4,478,240	29,607	157,851	25,649
IRS/IPRS				
– Less than 1 year	1,165,000	11	2,324	463
– 1 year to less than 5 years	590,000	2,656	9,556	1,380
– 5 years and above	160,000	20,368	41,168	4,160
CCS				
– Less than 1 year	1,526,640	6,572	42,607	7,207
– 1 year to less than 5 years	1,036,600	–	62,196	12,439
2020				
Derivative Financial Instruments	3,284,927	57,904	122,027	24,405
IRS/IPRS				
– Less than 1 year	1,100,000	13,994	16,295	3,259
– 1 year to less than 5 years	1,355,000	–	17,650	3,530
– 5 years and above	160,000	38,802	61,202	12,240
CCS				
– Less than 1 year	669,927	5,108	26,880	5,376

5.0 CREDIT RISK (CONTINUED)

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, IRS/IPRS and CCS/ICCS 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”).

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 an ECAI 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.

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

Risk Weights	Sovereign & Central Bank	FI & DFI*	Corporates & Leasing Companies	Other Assets	RWA
	RM’000	RM’000	RM’000	RM’000	RM’000
2021					
0%	1,682,433	–	–	1	–
10%	–	–	–	–	–
20%	–	24,042,336	1,038,860	–	5,010,317
50%	–	4,513,072	150,802	–	2,331,937
100%	–	–	–	40,206	40,206
Total	1,682,433	28,555,408	1,189,662	40,207	7,382,460
Average Risk Weights	0.0%	24.7%	23.8%	100.0%	23.5%
2020					
0%	1,705,080	–	–	1	–
10%	–	–	–	–	–
20%	–	20,106,044	1,101,504	–	4,241,510
50%	–	3,537,571	250,327	–	1,893,950
100%	–	–	–	123,322	123,322
Total	1,705,080	23,643,615	1,351,831	123,323	6,258,782
Average Risk Weights	0.0%	24.5%	25.6%	100.0%	23.3%

* Financial Institutions (“FI”)
Development Financial Institutions (“DFI”)

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				
	Aaa to Aa3	A1 to A3	Baa1 to Ba3	B1 to C	Unrated
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	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	RM'000	RM'000	RM'000	RM'000	RM'000
On and Off-balance sheet exposure					
2021					
Sovereign/Central Bank [#]	1,682,433	-	-	-	-
FI and DFI	24,042,335	4,513,073	-	-	-
Corporates and Leasing Companies	1,038,860	150,802	-	-	-
Other Assets	-	-	-	-	40,207
Total	26,763,628	4,663,875	-	-	40,207
2020					
Sovereign/Central Bank [#]	1,705,080	-	-	-	-
FI and DFI	20,106,044	3,537,571	-	-	-
Corporates and Leasing Companies	1,101,504	250,327	-	-	-
Other Assets	-	-	-	-	123,323
Total	22,912,628	3,787,898	-	-	123,323

[#] 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. Probability of Default (“PD”), Loss Given Default (“LGD”) and Exposure at Default (“EAD”) to quantify credit risk.

The risk estimates are developed based on internal historical data wherein 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
2021				
<u>Mortgage assets</u>				
PD range:				
up to 3%	9,409,894	32.08%	17.20%	1,618,803
>3% to <100%	3,961	32.08%	179.14%	7,096
100%	50,852	32.08%	401.00%	203,918
<u>Hire purchase assets</u>				
PD range:				
up to 3%	40	32.08%	17.20%	7
>3% to <100%	-	-	-	-
100%	35	32.08%	401.00%	140
Total	9,464,782			1,829,964
2020				
<u>Mortgage assets</u>				
PD range:				
up to 3%	10,466,525	32.08%	18.56%	1,942,523
>3% to <100%	3,332	32.08%	177.68%	5,920
100%	64,191	32.08%	401.00%	257,407
<u>Hire purchase assets</u>				
PD range:				
up to 3%	11	32.08%	18.56%	2
>3% to <100%	-	-	-	-
100%	35	32.08%	401.00%	140
Total	10,534,094			2,205,992

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 and financing. This credit impairment policy is applicable to the Group.

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

	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
2021					
Purchase of mortgage assets	35,393,803	50,851	35,444,654	44,049	35,400,605
Purchase of motor vehicles/equipment	592,737	36	592,773	14	592,759
	35,986,540	50,887	36,037,427	44,063	35,993,364
2020					
Purchase of mortgage assets	32,532,522	64,190	32,596,712	54,527	32,542,185
Purchase of motor vehicles/equipment	672,113	36	672,149	19	672,130
	33,204,635	64,226	33,268,861	54,546	33,214,315

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
2021					
Amount due from counterparties	17,141,194	–	17,141,194	19	17,141,175
Islamic financing assets	10,273,808	–	10,273,808	61	10,273,747
Mortgage Assets:					
– Conventional	3,880,901	27,394	3,908,295	21,339	3,886,956
– Islamic	4,690,599	23,457	4,714,056	22,632	4,691,424
Hire Purchase Assets:					
– Islamic	38	36	74	12	62
	35,986,540	50,887	36,037,427	44,063	35,993,364
2020					
Amount due from counterparties	14,069,214	–	14,069,214	19	14,069,195
Islamic financing assets	9,662,760	–	9,662,760	99	9,662,661
Mortgage Assets:					
– Conventional	4,360,127	32,759	4,392,886	25,970	4,366,916
– Islamic	5,112,524	31,431	5,143,955	28,446	5,115,509
Hire Purchase Assets:					
– Islamic	10	36	46	12	34
	33,204,635	64,226	33,268,861	54,546	33,214,315

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 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 comprise 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 is also monitored.

6.0 MARKET & LIQUIDITY RISK (CONTINUED)

6.1 Management of Interest/Profit Rate Risk in the Banking Book

The interest/profit 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/profit income is simulated and the following table summarises the impact arising from a 100 basis points parallel shift.

Impact on position as at 31 December	(-100 basis points) Parallel Shift	(+100 basis points) Parallel Shift
	Decline in Net Interest/ Profit Income RM'000	Increase in Net Interest/ Profit Income RM'000
2021	(14,708)	14,666
2020	(12,316)	12,319

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 between 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 Department 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.

Pillar 3 Disclosure *(Continued)*

7.0 OPERATIONAL RISK (CONTINUED)

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.

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 Senior 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.

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 ("BCM") Framework and Policy at enterprise level. BCM comprises Business Continuity Plan ("BCP") and Disaster Recovery Procedures ("DRP"), which can be activated in the event of business disruption/disaster. The resilience of these plans under different scenarios are being tested on an ongoing basis through regular BC/DR exercises.

In managing the global emerging of cyberattacks and cybersecurity risks, Cagamas has implemented robust frameworks and policies, namely Technology Risk Management Framework ("TRMF"), Cyber Resilience Framework ("CRF") and Information Technology Risk Management Policy ("ITRMP"). Additionally, comprehensive Data Loss Protection ("DLP") Policy and DLP tool were also implemented to safeguard Cagamas' critical data.

The Basic Indicator Approach (BIA) is used for calculating Operational Risk Capital.

8.0 SHARIAH GOVERNANCE DISCLOSURE

Cagamas consults and obtains endorsements/clearance from an independent Shariah Advisor for all the Islamic products, transactions and operations to ensure compliance with Shariah requirements. From a regulatory standpoint, Cagamas does not have direct access to the Shariah Advisory Council (“SAC”) of BNM and/or the Securities Commission of Malaysia (“SC”) (collectively referred as SACs), for Shariah ruling/advice. Where applicable, Cagamas will obtain the approval of the SACs through counterparty or intermediary that falls under the purview of BNM, and/or through the principal adviser of sukuk programme for submission of the Islamic financial products.

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. Any 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.