PUBLIC DISCLOSURE
IN PURSUANCE OF MAS NOTICE 124 “PUBLIC DISCLOSURE REQUIREMENTS” FOR FINANCIAL YEAR ENDED 31 DECEMBER 2022

1. **Information about our company profile, including the nature of the business, a general description of our key products, the external environment in which we operate, our objectives and our strategies in place to achieve these objectives**

   Singapore Life Ltd. (formerly known as Aviva Ltd.) (the “Company”) is a private limited liability company which is domiciled and incorporated in the Republic of Singapore. The registered office is located at 4 Shenton Way, #01-01, SGX Centre II, Singapore 018961.

   The principal activities of the Company consist of transacting general and life insurance businesses. The Company’s business covers a board spectrum of insurance solutions, including, protection & health, savings and investments, general insurance as well as group insurance.

   For more information on the objectives and strategies of the Company, please refer to the website of Singapore Life Ltd[1].

2. **Key features of our corporate governance framework and management controls, including information on the implementation of the framework and controls**

   Please refer to the “Corporate Governance” Section on our Singapore Life Ltd website[2] as well as the latest available Corporate Governance Report[3].

3. **Quantitative and qualitative information about our enterprise risk management framework including our asset-liability management (“ALM”) for our entire business and, where appropriate, at a segmented level as appropriate to the business, the methodology and key assumptions employed in the measurement of assets and liabilities for ALM purposes, and any capital or provisions held as a consequence of a mismatch between assets and liabilities**

   Enterprise Risk Management (“ERM”) Framework

   The Company seeks to optimise its performance, subject to remaining within risk appetite and meeting the expectations of stakeholders, employees and customers. This is achieved by embedding rigorous and consistent risk management across the Company. The Group Risk Management Policy which is approved by the Board, outlines the Company’s risk strategy, risk management principles, risk appetite, culture, governance arrangements, accountabilities of the three lines of defence, as well as the enterprise-wide approach to managing risks.

   The Company’s risk management process enables it to identify, measure, monitor, manage and report on key and emerging risks which may impact the business strategy, achievement of financial targets, solvency position, liquidity, regulatory and reputational risks. For all

[1] https://www.singlife.com/en/about-us
[2] https://www.singlife.com/en/about-us/corporate-governance
[3] https://singlife.com/content/dam/public/sg/documents/corporate-governance/coporate-governance-report.pdf

material business propositions, the business owners must identify and document the key risks and risk mitigating actions and assess the residual risk exposure against the risk appetite. In addition, the Company has adopted an Integrated Assurance Framework (“IAF”) to ensure the Company adequately manages and controls the key risks consistent with the approved risk appetite.

Asset-Liability Management

ALM is the practice of managing a business so that decisions and actions taken with respect to all assets and liabilities are coordinated. ALM looks at all risks arising from an insurer’s assets in relation to its liabilities, including insurance risk, liquidity risk, market risk and counterparty risk.

As an insurer, the Company accepts the transfer of uncertainty from its policyholders and seeks to add value through the aggregation and management of these risks. The inherent uncertainty in the insurance operation has translated into uncertainty in the Company’s cash outflow requirements.

It is the Company’s policy to maintain adequate liquidity and sufficient marketable assets to meet its cash outflows requirement at all time.

In order to match the unexpected cash outflow requirements, the Company is cautious in its choice of asset types and holds sufficient liquid and marketable assets which provide the Company with acceptable level of liquidity risk, market risk and counterparty risk, taking into account the Company’s risk tolerances and objectives for growth and profit.

The Investment Policy (“IP”) itself acts as an ALM Policy as both investment & liability strategy/Policy. The Strategy Asset Allocation (“SAA”) are liability-driven investment strategy to ensure the policyholders’ liabilities can be met with high certainty.

The ALM policy/strategy shall include investment and liability strategies adopted by the insurer. The strategies should allow for the interaction between assets and liabilities. The strategies are reviewed and approved by the Board Risk Committee and Board with the support from the Investment Committee/ Asset Liability Committee (“IC/ALCO”) on a regular basis. Liability Profile and Investment Mandates (assets) for different funds can be found in the Investment Policy.

As for the liability cash flows met by the cash inflows are also monitored through liquidity management and we have already had the policy put in place and reported / presented to IC/ALCO on a regular basis.

4. Quantitative and qualitative information on all our reasonably foreseeable and relevant material insurance risk exposures, and the management of such risk exposures, including:

(i) objectives and policies, models and techniques for the management of insurance risk exposures and underwriting process controls;

(ii) the nature, scale and complexity of risks arising from insurance contracts;

(iii) the use of reinsurance or other forms of risk transfer;

(iv) an understanding of the interaction between capital adequacy and risk; and

(v) a description of risk concentrations;

The Company follows the Group Risk Management Policy and Integrated Assurance Framework to manage its risk exposures and how controls are established to mitigate these risks.

<u>Reinsurance</u>

The Company limits its exposure to loss within its insurance operations through the use of reinsurance arrangements. The business ceded is placed on both quota share and surplus basis with retention limits varying by product line and territory. Amounts recoverable from reinsurers are calculated in a manner consistent with the assumptions used for ascertaining policy benefits.

<u>Risk concentrations</u>

The Company write mainly Singapore risks and therefore its risk concentration is almost 100% in Singapore.

5. **Quantitative and qualitative information about the determination of technical provisions, including future cash flow assumptions, the rationale for the choice of discount rates, and a description of methodology used to determine technical provisions (e.g. risk adjustment methodology) which shall be presented in appropriate segments.**

(i) Long term insurance provision

Major classes of business written under this category include individual life and retail health (guaranteed renewability) business.

For long term insurance contracts, economic assumptions are continually reviewed and updated. Non-economic assumptions are reviewed at least annually. Non-economic assumptions are presented to the Company's Assumptions Committee and are subject to the committee's approval before these assumptions are adopted in the valuation of the Company's liabilities. Key assumptions are highlighted below:

Mortality and morbidity rates

Mortality and morbidity assumptions will have regard to the Company's and industry's historical experience and rates recommended by reinsurers, where available, and are generally differentiated by sex and policy type.

Annuity and long-term contracts, on the other hand, are sensitive to longevity risks, such that a lower mortality assumption would result in an increase in expected annuity payments, therefore increasing policy liabilities.

Valuation interest rates

The valuation interest rate assumption is the underlying interest rate at which future cash flows are discounted in determining insurance contract liabilities. With effect from 31 Mar, 2020, in calculating the liability for the Minimum Condition Liability of the Company's Participating and Non-participating business and non-unit reserves of Investment-Linked funds, future expected cash flows are discounted at risk-free rates as prescribed under MAS 133. Illiquidity premium is applied to the spot risk-free discount rates as prescribed under MAS 133. In calculating the Company's Participating Fund liabilities, future cash flows are discounted using the Company's best estimate long-term investment return it expects to earn on its Participating Fund assets.

Expenses and commission rates

Expense studies are conducted annually, and the expense assumptions will reflect both the Company's actual expenses as well as budgeted expenses based on the Company's business plan. Any recommendations resulting from these studies will be reflected in the valuation of policy liabilities subject to the approval of the Company's Assumption Committee.

Commission rates are assumed to be the same as those contracted with the various channels. Higher expense and commission assumptions will increase policy liabilities.

Surrender rates

Surrender rates assumed in the calculation of policy liabilities will reflect the Company's historical experience and are differentiated by duration in-force and policy type.

Higher surrender rates would tend to lead to a decrease in policy liabilities. However, the impact on policy liabilities will depend on the product design, and whether the surrender value is high relative to other benefits available under the policy.

Bonus rates

Future bonus rates are assumed to be the same as those declared in the latest bonus declaration, with suitable adjustments where necessary to ensure that bonus rates continue to meet the policyholders' reasonable expectation and be in line with the Company's Internal Governance Policy on the management of its Participating Fund under changing investment conditions.

Inflation rates

Inflation rates assumption is set to reflect long-term inflation expectations, allowing for the proportion of staff and non-staff expenses.

In general, higher inflation assumptions will lead to higher expected expenses outgo which in turn, will lead to an increase in policy liabilities.

Sensitivities

	Increase/ (decrease) from Base		
Sensitivity of Policy Liabilities	Non-Participating Fund $'000	Unit-Linked Fund $'000	Total $'000
2022			
Mortality and Morbidity – Non-annuities			
+ 5%	279	29	308
- 5%	188	(30)	158
Mortality and Morbidity – Annuities			
+ 5%	(1,489)	–	(1,489)
- 5%	1,553	–	1,553
Expenses			
+ 10%	9,175	3,232	12,407
- 10%	(8,283)	(3,008)	(11,291)
Surrender			
+ 10%	(33,009)	(284)	(33,293)
- 10%	44,672	313	44,985
Interest rate			
+ 1%	(72,893)	(1,609)	(74,502)
- 1%	115,444	2,143	117,587
2021			
Mortality and Morbidity – Non-annuities			
+ 5%	(182)	2	180
- 5%	230	(2)	228
Mortality and Morbidity – Annuities			
+ 5%	(1,689)	–	(1,689)
- 5%	1,770	–	1,770
Expenses			
+ 10%	1,162	322	1,484
- 10%	(1,116)	(268)	(1,385)
Surrender			
+ 10%	(9,172)	(108)	(9,280)
- 10%	12,592	127	12,719
Interest rate			
+ 1%	(36,478)	(213)	(36,691)
- 1%	53,636	244	53,880

In accordance with the regulations, the Company values the liabilities of the participating fund based on the value of policy assets of the fund. The above changes in the stated variables will have no impact on the participating fund policy liabilities because the change in assumptions would not cause the policy liabilities to be greater than the policy assets of the fund.

(ii) Short term insurance provision

The major classes of business written under this category can be classified broadly into Group Life, Group Accident and Health, Retail Health and General Insurance.

Group Life business includes group term life, group living care and group disability income business. Group Accident and Health business includes group personal accident, group in-patient medical plans and group outpatient medical plans. These risks may be written locally or overseas. Retail Health includes yearly (non-guaranteed) renewable individual medical expense insurance. General Insurance includes motor, travel, home content, personal accident, commercial property, public liability, employers' liability, maid insurance (surety and credit insurance) and health insurance.

For these contracts, claims provisions (comprising outstanding claims and claims incurred but not reported) are established to cover the ultimate cost of settling the liabilities in respect of claims that have occurred, according to insurance regulations and guidelines.

Outstanding claims provisions are reviewed on a monthly basis and comprise claims reported by policyholders. Claims incurred but not reported provisions are reviewed on a quarterly basis and are updated to reflect the development of claims experience over the quarter, including settlement of claims and new claims reported. Claims provisions are not discounted for future time value of money.

Future claims costs are projected through the use of generally accepted actuarial techniques e.g. the Chain Ladder, Bornhuetter Ferguson and Expected Loss Ratio methods. As prescribed under the local regulations, provisions for adverse deviation is made to provide for claims liabilities at a 75% confidence level. This is determined using Bootstrapping or Mack's method.

<u>Assumptions</u>

The principal assumption underlying the Chain Ladder method is that the development of historical claims pattern will be expected to continue in the future.

The assumptions underlying the Bornhuetter Ferguson method is that the development of historical claims pattern will be expected to continue in the future and the assumed loss ratios are reflective of future claims experience.

The assumptions underlying the Expected Loss Ratio method is that the assumed loss ratios are reflective of future claims experience.

No discounting is applied to the claims provisions and hence, no interest assumption is required.

<u>Sensitivities</u>

The claims provision is sensitive to the delays that arise between occurrence of a claim and its subsequent notification and eventual settlement.

6. **Quantitative and qualitative information about capital adequacy to evaluate the objectives, policies and processes for managing capital and to assess our capital adequacy, generic solvency requirements as imposed by legislation or otherwise directed by the Authority, the capital available to cover regulatory capital requirements, and information on any internal model used to determine capital resources and requirements;**

The objective of the Company's Capital Management Policy is to provide the principles to ensure the efficient management of capital for Aviva Ltd, in a way which optimises returns to shareholders in the context of the Group's risk appetite. The group's risk appetite is set by the the board and will include consideration of the interests of our policyholders and debt holders. Management of regulatory requirements are key elements of this.

The Company's objective is to maintain effective capital management processes and a prudent level of capital resources, consistent with the risk appetite agreed by the Board ("Board") from time to time, to provide assurance that the above risks will not materialise. The IC/ALCO will have primary responsibility for recommending risk appetite to the Board.

Our current long-term capital risk appetite, as derived from the Group's risk appetite, is described below:

- To maintain sufficient regulatory capital, in line with minimum capital requirements prescribed by the regulator, Monetary Authority of Singapore, (MAS). The Company has no appetite for any breach of MAS regulatory requirements and failure to identify and respond to future changes in regulatory capital requirements.

- To hold sufficient local surplus capital, at company level, to withstand a reasonable level of stress, in addition to the sufficient regulatory capital described above.

The Company uses the regulatory risk-based capital model to determine it capital resources and requirements.

Pursuant to the Insurance Act and Insurance (Valuation and Capital) Regulations 2004, all Singapore licensed insurers are required to maintain a capital adequacy ratio of not less than a 120% of its total risk requirements or S$5million, whichever is higher, or otherwise as directed by the Authority.

The Company's capital adequacy ratio under the RBC2 framework for 31 December 2022 was 184% and under the RBC2 framework for 31 December 2021 was 247%. Both exceeded the minimum regulatory requirement.

7. Quantitative and qualitative information about financial instruments and other investments by class, including:

(i) investment objectives;

(ii) policies and processes;

(iii) values, assumptions and methods used for general purpose financial reporting and solvency purposes, as well as an explanation of the differences (where applicable); and

(iv) information concerning the level of sensitivity to market variables associated with the disclosed amounts;

<u>Investment objectives</u>

The Company's investment objective is to optimise investment returns whilst ensuring that sufficient assets are held to meet future liabilities and regulatory requirements. The aim is to match the investments held to support a line of business to the nature of the underlying liabilities, whilst at the same time considering local regulatory requirements, the level of risk inherent within different investments, and the desire to generate superior investment returns, where compatible with this stated strategy and risk appetite.

Assets must be managed in a sound and prudent manner taking into account the profile of the liabilities of each fund and the impact on its solvency position. Investments are made in compliance with the prevailing regulatory requirements with due consideration given to the exposures arising from the various financial risks.

An important part of the Company's business activities involves investing policyholders' and shareholder's funds in permitted financial instruments, including equities and permitted debt instruments.

Equity exposures are managed within the approved Strategic Asset Allocation that are set with reference to the overall appetite for market risk. The credit quality of the underlying debt securities within investment vehicles is managed by the safeguards built into the investment mandates for these funds which determine the funds' risk profiles.

The Company uses derivative financial instruments to mitigate the impact of adverse market movement and facilitate efficient portfolio management. The Company does not hold derivative financial instruments for speculative purposes.

Derivative financial instruments are classified as held for trading and accounted for at fair value through profit or loss.

<u>Policies and processes</u>

The Company's investment activities are managed in accordance to the Company's Board of Directors (the "Board") approved Investment Policy, which provides guidelines for decision-making regarding the investment of funds in a manner to ensure safety of investments, while managing liquidity to meet the business requirements and policyholder obligations and providing adequate investment return using authorised instruments.

The Board delegates the authority to make all investment decisions to the IC/ALCO. The IC/ALCO meet on a regular basis, at least quarterly, and report to the Board all material investment decisions.

The role of the ALCO/IC is to review and approve the asset allocation of non-linked funds, ensure that the investment policy is consistent with the asset-liability management strategies, ensure investment limits are complied with, decide on whether any investments are inappropriate and ensure that adequate resources are dedicated to the investment functions.

The following sections provide details regarding the Company's exposure to the above-mentioned financial risks and the objectives, policies and processes for the management of these risks.

As the impact of the above-mentioned financial risks on the unit-linked fund (unitised portion) is borne by the policyholders and that the impact on the assets of the participating fund will be offset by a corresponding change in the policy liabilities, the net impact to the Company is assessed to be insignificant. Therefore, the analysis in the following sections will not include these funds.

Assumptions and methods used for financial reporting and solvency purposes

Best estimate assumptions on future experience are made by an Appointed Actuary using professional judgment, training and experience. This is taking into regard to available statistical and other evidences. The expected future payment and receipts of the policies are determined using best estimate assumptions.

The best estimate assumptions take into various considerations like the experience of the company; relevant industry experience; the credibility of data; likely future trends; the interaction of assumptions e.g. mortality and lapses, asset mix and investment returns; the impact of reinsurance arrangements; and possible correlations between the assumptions.

Sensitivities of investment valuation to the various risks

Sensitivity of investment valuation to interest rate risk	**+10%**	**-10%**
	Impact on profit or loss	**Impact on profit or loss**
	$'000	$'000
2022	(5,414)	5,477
2021	(7,637)	7,709

Sensitivity of investment valuation to foreign currency risk	+10%	-10%
	Impact on profit or loss	Impact on profit or loss
	$’000	$’000
2022	495	(495)
2021	800	(800)

*as almost 100% of our foreign currency denominated investments are hedged, we do not have material exposure to foreign currency risk for our investments.

Sensitivity of investment valuation to market risk	+10%	-10%
	Impact on profit or loss	Impact on profit or loss
	$’000	$’000
2022	232	(232)
2021	12,194	(12,194)

8. **Quantitative and qualitative information on financial performance in total and at a segmented level, including quantitative source of earnings analysis, claims statistics (including claims development), pricing adequacy, information on returns on investment assets and components of such returns.**

Income Statement	**2022** $'000	**2021** $'000
Gross premiums	3,475,852	2,676,632
Outward reinsurance premiums	(1,622,578)	(423,404)
Investment revenue	(1,421,302)	106,230
Investment expenses	(28,068)	(27,809)
Other income	7,445	7,445
Total Income	**411,079**	**2,339,094**
Gross claims settled	(2,455,401)	(1,348,349)
Reinsurance recoveries	573,234	161,664
Management expenses	(312,370)	(240,376)
Distribution expenses	834,201	(287,072)
(Increase)/decrease in net policy liabilities	1,856,688	(498,070)
Provision for doubtful debts	(70)	(6)
Taxation expenses	(125,490)	(34,855)
Total Outgoing	**370,792**	**(2,247,064)**
Net Income	**781,871**	**92,030**

The slight drop in net income was attributable to lower investment revenue from rising interest rates and partially offset by an increase in gross premiums.

Returns on investment assets and component of such returns

	2022 $'000	2021 $'000
Dividend income	53,816	48,371
Interest income from:		
- Bonds and loan stocks	90,935	77,951
- Government and public authority securities	59,000	52,390
- Fixed deposits, discounted bills and loans	4,187	3,757
- Loan to subsidiary	120	120
Exchange gain/(loss) - net	7,895	(1,046)
Government Grants	1,753	3,147
Other income	5,901	4,320
Gross investment and other income	223,607	189,010
Less: Investment expenses and other charges	(28,244)	(27,883)
Net investment and other income	195,363	161,127

Summary of the development of past years' GI net claims liabilities as at FY2022 ($ '000)

Accident Year	2013 & prior	2014	2015	2016	2017	2018	2019	2020	2021	2022
End of Accident Year	34,188	19,393	17,586	15,735	17,279	18,456	19,657	15,068	16,418	22,958
1 Year Later	32,412	18,782	18,126	15,444	15,919	17,305	18,350	13,797	15,488	
2 Years Later	32,451	18,783	17,898	15,248	15,894	17,456	17,671	13,289		
3 Years Later	31,831	18,985	17,942	14,957	15,587	17,113	17,054			
4 Years Later	32,099	19,003	18,141	14,905	15,416	16,900				
5 Years Later	32,473	18,949	18,127	14,959	15,396					
6 Years Later	32,748	18,987	18,152	15,373						
7 Years Later	32,859	18,937	18,185							
8 Years Later	32,773	18,967								
9 Years Later	32,773									

Accident Year	2013 & prior	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Estimate of net claims incurred	32,773	18,967	18,185	15,373	15,396	16,900	17,054	13,289	15,488	22,958	186,383
Cumulative net claims paid	32,577	18,737	17,915	15,031	14,859	15,906	16,178	11,304	11,749	10,306	164,562
Total net claims outstanding	196	230	270	342	537	994	876	1,985	3,739	12,652	21,821
Provision for adverse development											3,165
Total net claims liabilities											24,986