TRANSAMERICA®
LIFE BERMUDA LTD

RISK MANAGEMENT DISCLOSURE
UNDER MAS NOTICE 124[1]
(SINGAPORE BRANCH)

June 2020

[1]The figures disclosed in this document are summarised to provide relevant and concise information to the readers. This document is published on 30 June 2020. More detailed and complete information is available at the MAS statistics page which can be found at http://www.mas.gov.sg/Statistics/Insurance-Statistics/Insurance-Company-Returns/I556L.aspx.

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The following commentary is intended to provide you with relevant, timely and adequate information to give you a clear view of the business activities, performance and financial position of Transamerica Life (Bermuda) Ltd. (TLB). We also hope that the information provided will enhance your understanding of the risks to which we are exposed and the way we manage these risks.

COMPANY PROFILE

From its foundation in 1906 to the present, Transamerica has helped individuals, families, and businesses to protect and preserve their wealth. TLB has inherited this tradition of providing quality financial products and services. Transamerica Life Insurance Company (TLIC) owns approximately 94.07% of the shares in TLB, with Aegon International B.V. owning the remaining shares (being approximately 5.93% of the shares in TLB). TLIC is a wholly owned indirect subsidiary of Aegon International B.V., and both TLIC and Aegon International B.V. are wholly owned subsidiaries of Aegon N.V., a leading, international financial services group providing life insurance, pensions and asset management based in The Hague, Netherlands with a presence in over 20 countries in the Americas, Europe and Asia.

Leveraging on Transamerica's experience in managing universal life insurance portfolios of nearly 40 years and with TLB's singular focus on serving High Net Worth (HNW) customers, TLB is recognised as a leading HNW life insurer and has developed extensive expertise in all aspects of HNW wealth protection, including handling large sums assured and complex cases supporting legacy and business planning. Incorporated in Bermuda, TLB currently has two full-service branch offices located in Hong Kong and Singapore.

The Singapore branch, which is subject to regulatory oversight by the Monetary Authority of Singapore ("MAS"), adopts a business-to-business (B2B) model. Solicitation and distribution are conducted through insurance brokers, licensed financial advisers, capital markets intermediaries and banks that primarily target the HNW segment.

Our vision is to be an Asia-based leader in the HNW life insurance market by helping our HNW customers achieve a lifetime of financial security and provide them with peace-of-mind of knowing their wealth is safeguarded for generations.

We adopt the following strategic priorities:

- **Innovative Product Offerings**
  We offer a variety of universal life products and term products for uncompromising individuals. Our commitment to building truly innovative products has always been of paramount importance to us.

- **Embedded Business Partner Relationships**
  We strive to select business partners with specialised experience in serving the HNW market that who share and demonstrate a mutual commitment in providing exceptional customer service.

- **Exceptional Local Customer Service**
  We have always strived to create a leading customer experience. Our commitment to quality service for our customers over the past century is something which we are very proud of.

- **Empowered Employees**
  Investing in our employees is one of our critical strategic priorities. By continuing to invest in the personal and professional capabilities of our employees, we will help enable and empower them to better serve our customers.

CORPORATE GOVERNANCE

Board Responsibilities

TLB's board of directors ("the Board") oversees TLB's affairs, including those of the Singapore branch.

The Board meets at least four times a year to review business performance and key activities, and to ensure that adequate corporate governance frameworks are in place across the organisation. It also ensures that any reliance placed on group-level corporate governance practices are in accordance with any local regulatory requirements. The Board has established a separate Audit Committee, Risk and Capital Committee and an Investment Committee (a sub-committee of the Risk and Capital Committee), all of which are constituted with written and approved charters.

Risk Governance

Aegon's risk governance structure comprises a set of risk and capital committees on different organisational levels: group level, regional level, and at an entity level for TLB. TLB's risk team and committees have matrix reporting to the risk function of Aegon's regional level.

Three Lines of Defense Model

In order to ensure conscious risk-return decision making and to limit the magnitude of potential losses to within defined thresholds, a risk management structure has been established based on a 'Three Lines of Defense' model.

The 'Three Lines of Defense' are: risk owners, risk management and internal audit. The application of the 'Three Lines of Defense' structure promotes a professional risk culture where risk management is embedded within the business.

The risk owners are directly responsible for managing and taking risk in accordance with defined risk tolerances and risk policies. This first Line of Defense embeds risk management into all elements of TLB's value chain as well as in its supporting processes.

The risk management function facilitates and oversees the effectiveness and integrity of the Enterprise Risk Management framework across the organisation and participates in decision making based on its authority as described in its charters. The role of the risk management function is to advise risk owners, thus resulting in informed decisions.

Finally, the internal audit function, together with the external auditor, provides independent assurance regarding the effectiveness and integrity of the Enterprise Risk Management framework across the organisation. The internal audit function reports its observations directly to the Audit Committee.

Risk Committees

TLB's Risk and Capital Committee ('RCC') is responsible for overseeing the implementation and compliance of TLB's Enterprise Risk Management framework, including its risk policies, guidelines and tolerances.

The RCC ensures that risk management is appropriately integrated into TLB's broader strategy and monitors TLB's overall risk exposure. If TLB breaches a risk tolerance, the RCC supervises and monitors any necessary remediation and if needed, reports the matter to the next level within the risk governance structure as well as to the Board.

The Investment Committee, which is a sub-committee of the RCC, oversees and manages risk issues arising from investing assets to generate income and support contractual liability payments along with the related general account reserves and capital.

ENTERPRISE RISK MANAGEMENT

TLB has established an Enterprise Risk Management framework to provide direction to manage the level of risk consistent with the requirements of various stakeholders, including policyholders, regulators and shareholders. This framework sets the boundaries for seeking an optimal risk profile and capital level, taking into account the risk/return characteristics of the risks that TLB faces. This also ensures that TLB maintains a solvency and liquidity position such that there is no plausible scenario that would cause it to default on its obligations to its policyholders.

The Enterprise Risk Management framework is embedded into TLB's key functional areas such as business planning, capital planning and management, remuneration, pricing and product development, reinsurance as well as sales and operational processes.

TLB's Enterprise Risk Management framework comprises various risk policies and guidelines, including the Asset Liability Management Strategy. This document sets out the risk limits on the mismatch between interest rate sensitivity to TLB's liabilities and those assets used to back those liabilities.

INSURANCE AND FINANCIAL RISK MANAGEMENT

Market Risk

The main investment objective of TLB is to provide investment income sufficient to support TLB's liabilities while preserving its invested capital. Market Risk covers both Investment Risk ("IR") and Mismatch Risk ("MR").

Investment Risk exposure captures the risk that the market value of TLB's investments changes. Underlying risk drivers vary with specific IR risk types and are generally related to the ability of the issuing entity to make good on the promises of the investment. IR affects direct investments in the Singapore branch's non-par Singapore Insurance Fund and Offshore Insurance Fund.

Mismatch Risk captures the risk that arises from assets and liabilities having different sensitivities to interest rates and currency exchange rates. It covers three distinct risk types: interest rate risk, interest rate volatility risk, and currency risk.

TLB has established investment risk policies to manage market risk by setting and monitoring objectives and constraints on investment, diversification and limits on investment in asset allocation, regions, sectors, issuers and market. The investment risk policies also cover asset liability matching, liquidity risk and derivatives use. TLB's Investment Committee has the primary responsibility for investment oversight.

Compliance with the investment risk policies is monitored by the investment manager daily and by the Investment Committee quarterly. This Committee monitors various investment reports as part of its supervision of TLB's investment activities.

As at 31 December 2019, the Singapore branch had approximately SGD3.9 billion in investments as part of TLB's total investment portfolio of approximately SGD9.8 billion [USD7.3 billion]. For details on these investments, please refer to TLB's webpage "Our Strength" which can be found at http://www.transamericalifebermuda.com/en/Home/Our-Strengths/.

Interest Rate Mismatch Risk

TLB holds assets to back its liabilities under its insurance contracts. Mismatch risk is the risk of losses when these assets and liabilities display different sensitivities to certain risk factors (for example, interest rates). Interest rate mismatch risk is a key risk of TLB's business.

Duration is one of the key metrics used to measure how well the assets and liabilities are matched with regard to interest rate sensitivity. This key metric is a measure of change in value as a result of small changes in interest rates. TLB has an Asset Liability Management Strategy to help to ensure that the duration of the assets and associated liabilities are within the risk limit to keep potential losses to within an acceptable limit.

For internal management purposes, capital will be held for any mismatch risk taken, including both interest rate risk and volatility risk. As at 31 December 2019, the Singapore branch's regulatory Debt Investment and Duration Mismatch Risk Requirement was SGD176.8 million. This covers risk charges on interest mismatch risk and credit spread risk as defined by Singapore's Risk-Based Capital framework. At the entity level, the required capital is also determined in line with Aegon's internal Economic Capital Model.

The Singapore branch regularly conducts its Own Risk and Solvency Assessment to measure the impact of changes in market variables to ensure that the Singapore branch's risk tolerance is maintained and remains adequately capitalised.

Insurance Risk

Underwriting risk ("UR"), also referred to as "insurance risk", may arise from deviations in product pricing assumptions. These are typically actuarial assumptions that cover policyholder behavior and claims. UR is the result of both the inaccuracies in projecting liability cash flows over several future time periods, as well as fluctuations in the incidence of claims. Concentration risk refers to the risk of loss arising from a disproportionate exposure to a particular group of customers.

The Board defines the risk tolerance for insurance risks relative to the overall risk capacity by setting specific risk limits. Parameter sensitivity is tested to analyse deviations in the mortality assumptions on both a level and trend basis. In addition, exposures relative to risk tolerances are monitored and stress tests performed at both the TLB entity level and the Singapore branch level, under which both need to remain solvent otherwise a capital management plan must be put in place. This is documented and is part of the Enterprise Risk Management framework.

TLB maintains documented underwriting processes that cover the assessment of proposals against limits to the gathering and reviewing of evidence to support the applications. The processes also ensure that appropriate premium rates are charged based on internal guidelines. These processes are periodically validated by internal quality assurance processes, internal audits and external reinsurer reviews.

As at 31 December 2019, the Singapore branch had 3,808 in-force policies with an aggregated sum assured of SGD19 billion. A majority of the in-force policies are our universal life products, which also dominated the contribution to the Singapore branch's new business in 2019.

Concentration Risk

Mortality concentration risk per life is managed by a retention limit. Any risk exceeding the retention limit is transferred through reinsurance. TLB cedes risk to other companies, including certain affiliated companies through the use of reinsurance. Risks are reinsured with other companies to permit the recovery of a portion of the direct losses incurred.

TLB remains liable even if the reinsuring companies do not meet their obligations under these reinsurance treaties. As such, TLB has established processes to select and periodically monitor partnered reinsurers on their financial strength and service standards.

As of 31 December 2019, the Singapore branch had ceded insurance provisions of SGD3.7 billion. A majority of the risks was ceded to our parent company, TLIC, which holds a credit rating of ‘A+’ issued by Standard & Poor’s on 21 February 2020. After considering the impact of reinsurance, the capital held for the Singapore branch’s regulatory Insurance Risk Requirement as at 31 December 2019 was SGD55 million, as defined by Singapore’s Risk-Based Capital framework.

TLB also conducts experience studies to determine whether any portfolio experience deviate materially from assumptions. Segments that are evaluated as part of the experience studies may include the country of residence, gender, age, risk class and smoker non-smoker status. Higher than expected mortality claims may reduce the available capital; if the deterioration in mortality experience is expected to persist, TLB will reflect such changes in the best estimate mortality assumption as appropriate. Required capital may subsequently increase as a result of this change.

The Singapore branch conducts annually its Own Risk and Solvency Assessment (“ORSA”) to assess the impact on the Singapore statutory capital adequacy given the insurance risk exposure. The ORSA report is presented to the Board and the Board approves the report.

INSURANCE PROVISION AND CAPITAL ADEQUACY

Insurance Provision

The Singapore branch’s statutory reserving basis and capital requirements are set up in accordance with Singapore’s Risk-Based Capital framework.

The reserves for the Singapore branch are set using a Gross Premium Reserve calculation method. This method can also be described as a discounted prospective cash flow method. The assumptions are best estimate assumptions with provisions for adverse deviations.

The best estimate assumptions are set based on past experience. TLB also obtains advice from consulting firms and reinsurers about future expectations which is also considered and reflected in forming the assumptions. TLB conducts experience studies at the entity level to ensure that the experience assumptions continue to be relevant.

Discount rates used for the Singapore statutory valuation of policy reserves are prescribed by the MAS. There are two discount rates used, one is the US risk free rates, the other is the best estimate investment return which is derived based on the expected investment return of assets backing the policy reserves.

Capital Adequacy

The Singapore branch's financial condition is measured in the context of Singapore's Risk-Based Capital framework which takes into consideration insurance risk, mismatch risk and concentration risk. The Singapore branch is required by the MAS to maintain minimum standards in respect of its Capital Adequacy Ratio and financial resources.

The Singapore branch adopted a Capital Management Plan designed to ensure that adequate capital is maintained, while providing the flexibility necessary to take advantage of growth opportunities and to manage the risks associated with the business. This approach to managing capital was developed to ensure an appropriate balance between the internal assessment of capital needs and the regulatory solvency requirements.

The Capital Management Plan sets out risk tolerance levels and any corresponding management actions based on internal and external requirements. The Singapore branch monitors its solvency position on a monthly basis and also on an ad-hoc basis in accordance with procedures to re-evaluate the solvency position triggered by events that are deemed to pose a risk to TLB's and the branch's solvency position. The Singapore branch also conducts annual ORSA exercise and has complied with all capital requirements in 2019. We aim to have an adequate level of capital throughout 2020 for the Singapore branch.

The Singapore branch's financial strength remained healthy throughout 2019 with a Capital Adequacy Ratio of 260% as at 31 December 2019. The Singapore branch categorises its issued policies into two groups, namely 'Singapore' and 'Offshore' policies. Accordingly, premiums in relation to these policies are separated into the Singapore Insurance Fund and Offshore Insurance Fund respectively.

In addition to statutory capital solvency monitoring, TLB also monitors its capital adequacy on an economic basis. Our economic capital methodology is calibrated to ensure that if TLB experiences adverse movement to the 99.5th percentile, adequate surplus is maintained to ensure obligations to customers are met. The various components of the economic capital model cover the various risk exposures of TLB.

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FINANCIAL PERFORMANCE

The financial performance of the Singapore branch in 2019 is presented in the summary below:

2019 STATEMENT OF FINANCIAL PERFORMANCE		
Description	**Singapore Insurance Fund (SGD Million)**	**Offshore Insurance Fund (SGD Million)**
Single Premium	90.7	132.6
FY Premium	1.4	1.9
RY Premium	9.3	10.6
Gross Premiums	**101.4**	**145.1**
Less: Outward reinsurance premiums	108.6	67.2
Investment revenue	85.9	65.9
Less: Investment expenses	2.4	1.8
Other income	0.2	0.3
Total Income	**76.5**	**142.3**
Gross claims settled	92.2	63.4
Less: Reinsurance recoveries	59.8	55.4
Management expenses	7.9	10.5
Distribution expenses	(41.0)	(8.0)
Increase in net policy liabilities	107.9	164.3
Taxation expenses	33.0	26.5
Other expenses	-	0.1
Total Outgo	(140.2)	(201.4)
Net Income	**(63.7)**	**(59.1)**

* Unrealised gain on Investments	225.2	174.0

Total Comprehensive Income	**161.5**	**114.9**

* Under FRS 1 – Presentation of Financial Statements, gains/losses on investments is presented as Other Comprehensive Income (OCI).

Source of Earnings Analysis

The table below provides a summary of the Source of Earnings in FY 2019 for the Singapore branch.

2019 Source of Earnings Analysis	Singapore Insurance Fund (SGD 'Million)	Offshore Insurance Fund (SGD 'Million)
Impact of New Business	1.4	0.1
Experience Gains & Losses - Mortality	1.8	2.5
Experience Gains & Losses - Forfeiture/Surrender	(25.8)	1.7
Experience Gains & Losses - Investment	262.6	208.3
Experience Gains & Losses - Expenses	(16.2)	(28.3)
Change in Valuation Basis	(70.7)	(61.4)
Other	8.4	(8.0)
Total Comprehensive Income	**161.5**	**114.9**

Claims Statistics for the year ending 2019

The table below provides details of claims and termination pay-outs for the 5 year period from 1 January 2015 to 31 December 2019.

	Singapore Insurance Fund (SGD Million)		Offshore Insurance Fund (SGD Million)		
	Death	Surrenders	Death	Surrenders	Annual Total
2015	3.0	8.2	-	15.4	26.6
2016	-	21.0	2.5	26.1	49.6
2017	-	24.4	-	53.8	78.2
2018	2.2	24.4	20.2	51.7	98.5
2019	0.5	91.7	1.4	62.1	155.7

Pricing Adequacy

TLB prices its products in accordance with its internal guidelines, which ensure adequate pricing considerations, all relevant risks are recognised and a profitability target is met under a market consistent basis. For the Singapore branch, premium certificates for all new and re-priced products are filed with the MAS. The premium certificates are prepared in accordance with the Insurance Act (of Singapore).