



## TransRe Europe S.A.

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### Solvency and Financial Condition Report

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As at 31 December 2019



## Table of contents

Table of contents .....	2
About this document .....	3
Directors' statement .....	3
Executive summary .....	4
<b>A. Business and Performance .....</b>	<b>8</b>
A.1 Business .....	8
A.2 Underwriting performance .....	12
A.3 Investment performance .....	14
A.4 Performance of other activities .....	15
A.5 Any other information .....	15
<b>B. System of Governance .....</b>	<b>16</b>
B.1 General information on the system of governance .....	16
B.2 Fit and proper requirements .....	19
B.3 Risk management system including the ORSA .....	20
B.4 Internal control system .....	21
B.5 Internal Audit function .....	22
B.6 Actuarial function .....	23
B.7 Outsourcing .....	23
B.8 Any other information .....	24
<b>C. Risk profile .....</b>	<b>25</b>
C.1 Reinsurance / underwriting risk / life risk .....	25
C.2 Market risk .....	27
C.3 Counterparty default (credit risk) .....	30
C.4 Liquidity risk .....	32
C.5 Operational risk .....	33
C.6 Other material risks .....	34
C.7 Any other information .....	34
<b>D. Valuation for solvency purposes .....</b>	<b>36</b>
D.1 Assets .....	36
D.2 Technical provisions .....	38
D.3 Other liabilities .....	48
D.4 Alternative methods for valuation .....	49
D.5 Any other information .....	49
<b>E. Capital management .....</b>	<b>50</b>
E.1 Own funds .....	50
E.2 SCR and MCR .....	51
E.3 Use of the duration-based equity risk sub-module in the calculation of the SCR .....	53
E.4 Differences between the standard formula and any internal model used .....	53
E.5 Non-compliance with the MCR and non-compliance with the SCR .....	53
E.6 Any other information .....	53
<b>Appendix 1: Abbreviations used in this report .....</b>	<b>54</b>
<b>Appendix 2: Public Quantitative Reporting Templates (QRTs) .....</b>	<b>56</b>



### About this document

This document is the Solvency and Financial Condition Report (“SFCR”) for TransRe Europe S.A. (“TRE” or “the Company”) as at 31 December 2019.

This SFCR covers TRE on a solo basis. TRE’s functional and presentational currency is US dollars (“US\$”).

### Directors’ statement

We acknowledge our responsibility for preparing the SFCR in all material respects in accordance with the Commissariat aux Assurances (“CAA”) Rules and the Solvency II Regulations.

We are satisfied that:

- throughout the financial year in question, TRE has complied in all material respects with the requirements of the CAA Rules and the Solvency II Regulations as applicable to TRE; and
- it is reasonable to believe that, at the date of publication of this SFCR, TRE has continued to comply and subsequently will continue to comply in the future.

On behalf of the Board of Directors

Jonathan Hewitt  
Dirigeant Agréé

7 April 2020



## Executive summary

On 1<sup>st</sup> July 2019, Transatlantic Holdings, Inc. (“TRH”) redomiciled its TransRe Zurich Ltd (“TRZ”) subsidiary to Luxembourg and renamed the subsidiary to TransRe Europe S.A.

Following the re-domiciliation of TRZ, TransRe’s corporate structure has been simplified to enhance its long-term ability to provide underwriting support, reinsurance capacity, financial security and prompt accounting and claims settlement to its Continental European, Middle Eastern and North African customers and brokers through TRE.

TRE is a wholly owned subsidiary of Transatlantic Reinsurance Company (“TRC”) and provides the TransRe group (“TransRe”) with its main platform to write business in Continental Europe and in the Middle East and North Africa region (“MENA”). TRC is domiciled in New York, USA. TRE’s ultimate parent undertaking is Alleghany Corporation (“Alleghany”), incorporated in Delaware, USA.

TRE commenced trading under the name of Guardian Reinsurance Company in January 1977 before being acquired by TRC in 1996. Until it redomiciled on 1<sup>st</sup> July, the Company had a C1 licence to write non-life and life reinsurance and was regulated by the Swiss Financial Market Supervisory Authority FINMA.

As of 1st July, TRE is regulated by the CAA and received authorisation to transact all types of reinsurance business.

TRE benefits from the same financial strength ratings as TRC, being ratings of A+ by both S&P and A.M. Best with a stable outlook.

TRE is a specialist non-life and life reinsurance company concentrating on providing protection for cedants and predominantly not competing with them in their own direct markets. Many of TRE’s senior management and underwriting teams have long tenure with TransRe and place great value on enduring client relationships.

During 2019 TRE continued to enhance its analytical, underwriting and actuarial resources to further concentrate on providing clients with top quality service, expertise and financial security in challenging market conditions; our aim is to be their reinsurer of choice.

In 2020 TRE will continue to focus on underwriting excellence, enhancing client relationships and navigating emerging risks and ever-changing political environments.

## Business and performance

TRE’s strategy is to concentrate foremost on achieving underwriting profitability, not on adding premium volume, consistent with the group target of book value growth over time.

TRE accesses business through both broker and direct distribution channels and writes a diverse portfolio of treaty reinsurance, avoiding over-dependence on any one class. We adopt a lead approach to our business, combining technical analysis with underwriting expertise and strong cycle management. TRE purchases reinsurance protection either on a group or regional basis, in line with our risk tolerances, to manage volatility within our Solvency Capital Requirement (“SCR”). Our business strategy during 2019 was broadly consistent with the prior year.

TRE’s assets are prudently invested to ensure it has access to funds at short notice, if required. At 31 December 2019 the investment portfolio was made up predominantly of fixed income securities. These have been invested taking account of the liquidity requirements of TRE along with the nature and timing of insurance liabilities.

## Covid-19

Effective 11 March 2020, the World Health Organisation (“WHO”) declared Covid-19 as a “pandemic”. The global spread of Covid-19 is unprecedented and the possible effects on TRE are continually evolving with events, consequences and impacts changing on a daily basis.



TRE will have some exposure from our accident and health (“A&H”)/travel, medical expenses and credit portfolios, as well as indirect exposure from our casualty and property portfolios. Furthermore, TRE’s small life book may be impacted by Covid-19. Much of the broader economic loss will be limited by policy forms and coverage, although many of these remain untested by an event of such global reach. We will continue to actively monitor the situation and our own exposure to it and respond to future questions as they arise.

Given TRE’s investment portfolio of fixed income securities, TRE has been largely shielded from the worst effects of recent global stock market large-scale declines.

At an operational level, TransRe has well tested contingency plans in place both locally and within the wider group which allow us to continue to run the business effectively. At the time of publication of this report all TRE staff are working remotely and we anticipate that will continue for some time. Our systems are fully functioning supporting remote working, and we work to ensure that this will remain the case over a longer period. Essential business interactions with clients and brokers continue digitally and all business-critical processes are being reviewed regularly to ensure deadlines can be met. Although there will be some operational inconvenience, TRE remains well positioned to support its staff, clients and brokers during this stressed time.

### System of governance

TRE has an established governance framework and internal control system. The governance structure enables the Board of Directors (the “Board”) to discharge its oversight responsibilities, helping to ensure TRE meets its strategic objectives while managing risks within its stated risk appetite.

The Board maintains ultimate responsibility for the oversight of TRE. The Board delegates authority for day-to-day management of some aspects of the business to certain functions and committees. The Board and the committees operate under the guidance of formal terms of reference, which are agreed by the Board.

TRE adopts an approach to remuneration which supports and encourages appropriate behaviour that is aligned with TransRe’s vision and values and Alleghany’s Code of Business Conduct and Ethics.

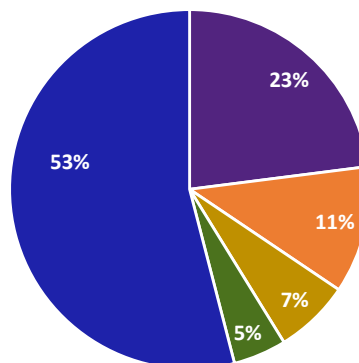
The members of the Board possess the skills, knowledge and experience required to undertake their roles and responsibilities for overseeing TRE.

### Risk profile

TRE underwrites a diversified portfolio of property and casualty reinsurance as well as life reinsurance, across multiple regions and classes. TRE’s SCR risk profile before the impact of diversification is shown in the below chart.

*Figure 1: Basic SCR by risk type before the impact of diversification*

- Market risk
- Counterparty default risk
- Life underwriting risk
- Health underwriting risk
- Non-life underwriting risk





As evidenced in the chart, non-life underwriting risk, including non-life premium and reserve risk make up the largest portion of the SCR risk profile.

In order to help mitigate underwriting risks, TRE maintains a disciplined underwriting philosophy that is supported by risk appetites reflecting TRE's portfolio and risk management tolerances.

TRE benefits from a comprehensive retrocession programme that provides protection for TransRe globally as well as TRE specifically.

The results of the analysis showed that the most material impact on the SCR would arise from a series of significant natural catastrophe events affecting North Western Europe. The analysis undertaken indicates TRE is strongly capitalised and it would take an extreme event (return periods in excess of 1-in-200 years) to breach its SCR. TRE's underwriting risk profile is therefore resilient to severe shocks and is within the Board's approved risk appetite.

### Valuation for Solvency II purposes

An analysis of the differences between the valuation of assets and liabilities under Solvency II in comparison to Lux GAAP is provided in Sections D1, D2 and D3. These sections provide a background to the methods adopted under Solvency II, including the required inputs and any judgements or assumptions made.

Technical provisions are the amount of capital TRE needs to hold in reserve for claims and premiums net of commissions and other expenses for all contractually obliged policies. This is equivalent to the current amount an insurer would have to pay for an immediate transfer of its obligations to another insurer. Technical provisions are made up of the best estimate liabilities and a risk margin.

Best estimate liabilities are the probability weighted average of future cash flows, discounted back to the relevant balance sheet date using risk free discount rates.

The risk margin represents an allowance for the cost of capital necessary to support the policies to which TRE is obligated at the valuation date.

TRE uses its Lux GAAP insurance liabilities as the starting point for determining the Solvency II technical provisions. Adjustments are made to move from the statutory basis to the Solvency II basis. These adjustments are detailed in Section D2.

### Capital management

Under Solvency II, the own funds of an insurance entity are placed into Tiers 1, 2 or 3 based on their ability to absorb losses, Tier 1 being the most able to do so. Below is a summary of the own funds held by TRE and a comparison to TRE's regulatory capital requirements (the amount of capital the firm is required to hold).

Figure 2: Own funds by tier

Tier	Instrument	31 December 2019 (US\$'000s)
Tier 1	Ordinary paid up share capital	27,000
	Share premium account	132,957
	Reconciliation reserve	223,745
Tier 2	Not applicable	-
<b>Total own funds to cover MCR</b>		<b>383,702</b>
Tier 3	Not applicable	-
<b>Total own funds to cover SCR</b>		<b>383,702</b>



A breakdown of the reconciliation reserve is included in Section E1.

*Figure 3: Capital requirements*

	<b>31 December 2019 (US\$'000s)</b>
Minimum Capital Requirement	52,299
Solvency Capital Requirement	209,194

Overall TRE held 183% of its SCR and 733% of its MCR at 31 December 2019.

There have been no instances of non-compliance with the MCR and SCR in the current period.

There are no matching, volatility or transitional adjustments to the relevant risk-free interest rate term structure, or transitional measures on technical provisions.



## A. Business and Performance

### A.1 Business

#### Company information

**TransRe Europe S.A.:** 1, avenue du Bois  
L-1251 Luxembourg

Firm Reference Number: B235795  
Legal Entity Identifier: 213800QMSSWIO7459N54

#### Branch offices

TransRe Europe S.A., Luxembourg, Zurich Branch  
Sihlstrasse 38, 8001 Zurich (Switzerland)  
Firm Reference Number: CHE-282.098.466

TransRe Europe S.A. (DIFC Branch)  
Office No. 106, Level 1, Gate Village Building 4  
DIFC, PO Box 507218, Dubai, UAE  
Firm Reference Number : F002629  
DIFC Registered Number : 1695

TransRe Europe S.A., Munich Branch  
Promenadeplatz 8, 80333 Munich (Germany)  
Firm Reference Number: HRB 253912

TransRe Europe S.A., Paris Branch  
52 rue de la Victoire, 75009 Paris (France)  
Firm Reference Number : 879 465 193 R.C.S. Paris  
(effective as of 1 January 2020)

**External auditors:** Ernst and Young S.A.  
35E avenue John F. Kennedy, L-1855 Luxembourg

**Regulator:** Commissariat aux Assurances  
7, boulevard Joseph II, L-1840 Luxembourg

TRE is a Société Anonyme under the Luxembourg law, limited by shares, with its registered office in Luxembourg. It is a wholly owned subsidiary of TRC, which is a reinsurance company domiciled in New York, USA. TRE provides the TransRe group with its main platform to write business in Continental Europe and the MENA region, not otherwise served by TransRe's wider regional office distribution network.

TRE commenced underwriting risks under the name of Guardian Reinsurance Company effective from 1 January 1977. Guardian Reinsurance Company was acquired by TRC from Guardian Royal Exchange plc, London, UK, in 1996 and renamed to TransRe Zurich Ltd.

In 2014, TRZ established a branch office within the Dubai International Financial Centre ("DIFC"), for which licence was granted by the Dubai Financial Services Authority ("DFSA") on 26 October 2014.

In 2018, TransRe initiated a re-organisation project for its operations in Continental Europe and the Middle East. The goal of the restructuring was to set-up a unified reinsurance entity in Luxembourg as part of the European Economic Area in order to – among other reasons – cover all relevant markets of TransRe in





Continental Europe, consolidate the capital, and benefit from regulatory passporting within the European Single Market.

As of 1 January 2019, TRZ and its sister company, TransRe Europe Services Ltd, merged by way of a merger by absorption in accordance with Art. 3 para. 1 lit. a Swiss Merger Act. All assets and liabilities of the absorbed company were transferred to the absorbing company by way of universal succession and accepted and assumed at book values. TransRe Europe Services Ltd was dissolved without liquidation and deleted from the commercial register as a result of the merger which was registered with the commercial register on 18 June 2019.

Effective 1 July 2019, after having received the approval by the Swiss Financial Market Supervisory Authority FINMA, TRZ was re-domiciled to Luxembourg and renamed to TransRe Europe S.A. TRE received authorisation to transact all types of reinsurance business from the Ministère of Finances, supervised by the CAA, upon its establishment in Luxembourg. Subsequently, the Company established a new branch office in Zurich and changed the name of its existing branch office in Dubai to TransRe Europe S.A. (DIFC Branch).

As of 31 December 2019, the Company established a branch office in Munich and took over the business of TRC Munich by way of a portfolio transfer which was approved by the Federal Financial Supervisory Authority BaFin.

As of 1 January 2020, the Company established a branch office in Paris that commenced operations at that date.

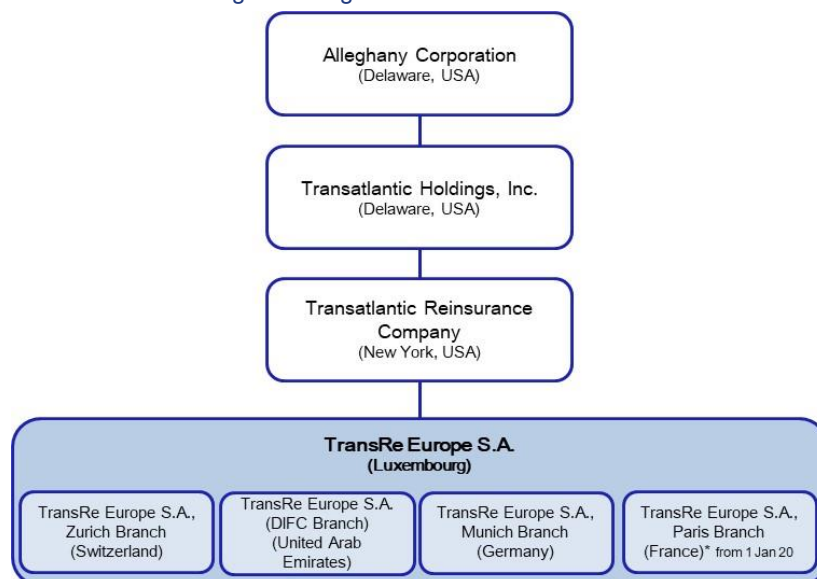
TRE's ultimate parent undertaking is Alleghany Corporation, a company incorporated in Delaware, USA. Alleghany is listed on the New York Stock Exchange (NYSE: Y). Further information on Alleghany is available at [www.alleghany.com](http://www.alleghany.com). In addition to TRC and Alleghany, TRH, incorporated in Delaware, USA, is an indirect parent and holder of a qualifying holding in TRE.

Other than TRC, TRH and Alleghany, there are no other holders of qualifying holdings in TRE.

TRE has no related undertakings as defined in Article 212 of the Solvency II Directive. The Alleghany group is subject to group supervision by the New Hampshire Department of Insurance, New Hampshire, USA.

A simplified group structure chart is shown below.

Figure 4: Organisational structure chart



All subsidiaries are 100% owned and controlled.



TRE offers reinsurance through treaty reinsurance arrangements covering non-life property and casualty as well as life lines of business on either a proportional or non-proportional basis. It underwrites a broad range of risks within those classes in multiple territories, thus maintaining a diversified portfolio without over-dependence on a single line of business. TRE also benefits from shared functions made available through TransRe's support and global operational infrastructure.

The core reinsurance portfolio of property and casualty treaties provides protection to cedants based globally, across a diverse range of classes. The protection provided includes coverage for a wide range of business events, enabling TRE to better navigate underwriting cycles in multiple classes of business.

TRC, together with certain of its subsidiaries including TRE, is rated A+ by both Standard & Poor's and A.M. Best.

### Market commentary

Whilst this document is essentially a review of the 2019 year, the global magnitude of the Covid-19 situation necessitates further commentary.

Effective 11 March 2020, the WHO declared Covid-19 a 'pandemic'. The global spread of Covid-19 is unprecedented and the possible effects on TRE are continually evolving with events, consequences and impacts changing on a daily basis.

TRE will have some direct exposure from our A&H, medical expenses, and credit portfolios, as well as more indirect exposure from our casualty and property portfolios. Furthermore, TRE's small life book may be impacted by Covid-19. Much of the broader economic loss will be limited by policy forms and coverage, although many of these remain untested by an event of such global reach. Whilst it is too early to speculate over quantum to the insurance market, we will continue to actively monitor the situation and our own exposure to it and respond to future developments as they arise.

At the time of publication, all TRE staff are working remotely, and we anticipate that will continue for some time. Employee feedback has been generally positive, and we work to ensure it will remain so over a longer period. Essential business interactions with clients and brokers continue digitally and all business-critical processes are being reviewed regularly to ensure deadlines can be met. Although there will be some operational inconvenience, TRL remains well positioned to support its key stakeholders, including its staff, clients and brokers during this stressed time.

Further information on Covid-19 is provided in section C of this document.

Returning to the wider market, some minor improvements to terms and conditions were experienced for some classes in early 2019 but these did not reach the levels hoped for. Other classes remained soft and TRE maintained underwriting discipline. Excess capacity remained available for most classes and geographies.

Significant world market loss activity continued in 2019, with natural catastrophe events impacting both Japan (typhoons Faxai and Hagibis) and the Australia wildfires. Whilst traditional catastrophe capacity has not diminished in any significant way, insurance linked securities markets have become more discerning in how they deploy their capital, with several cedants forced into changes to their catastrophe protections.

Non-catastrophe loss activity also increased in 2019, with onshore energy losses continuing to mount, including two significant satellite losses, riots in Chile and some property risk losses.

However, TRE does not expect a significant impact to its portfolio from the 2019 catastrophe and risk losses as TRE's main territories had generally benign experience.

TRE continues to see strong interest from clients in finding solutions for property casualty risks and emerging risks. Our specialist teams continue to offer dedicated technical input and support.



**Strategy and portfolio**

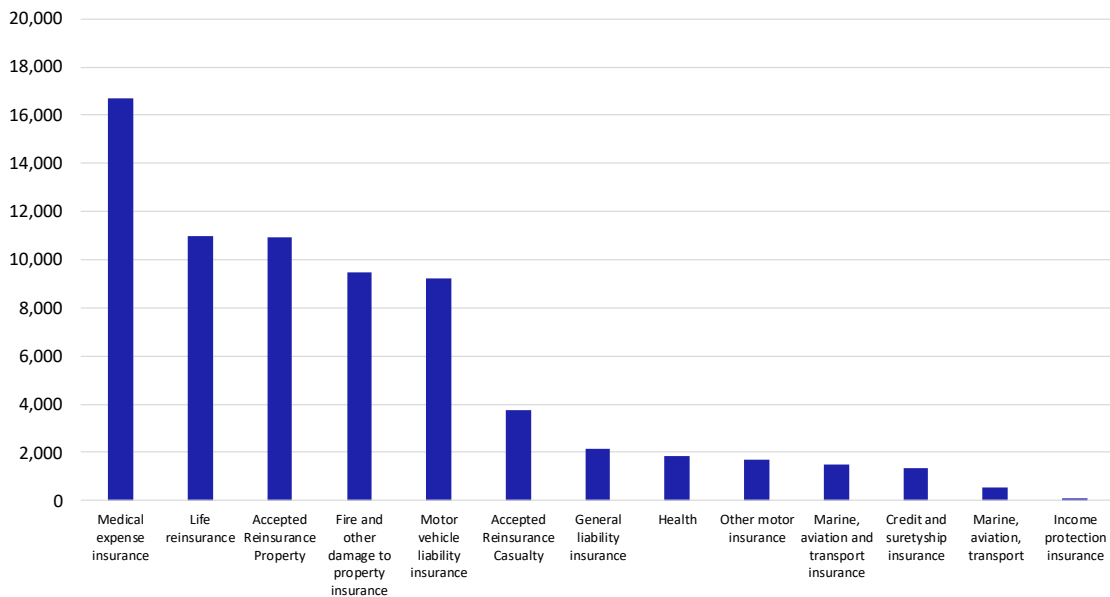
TRE’s strategy is to achieve long-term book value growth throughout the underwriting cycle commensurate with the TransRe group objective of being a global property/casualty reinsurer of choice, maximising the benefits of local presence and global service, writing all products in all territories.

TRE also recognises that should there be a market turning event, the strategy and business plan may rapidly change, due to sudden limitations in available capacity or third party capital.

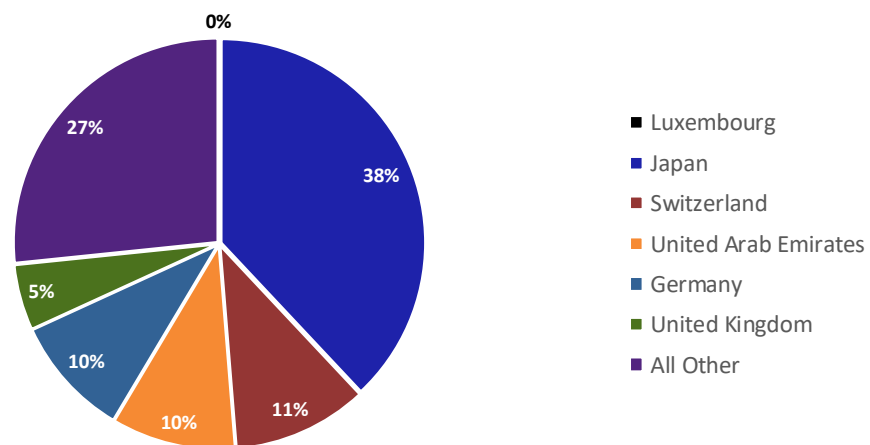
In the current low yield investment environment, TRE’s focus on underwriting profitability is paramount to support the aim of book value growth.

Premium income distribution by line of business and distribution by domicile of cedant is shown in Figures 5 and 6.

*Figure 5: Solvency II line of business (net earned premium US\$'000s)*



*Figure 6: Geographical domicile of cedants as at 31 December 2019*



No significant new classes of business were undertaken in the current financial period. Premium volumes in some lines varied from plan, depending on the expected profitability and contribution to TRE’s business development.



## A.2 Underwriting performance

TRE earned US\$ 138,581k of gross premium income and US\$ 70,220k of net premium income in 2019. TRE writes a diverse book of business with no single class dominating the overall portfolio. On a net basis, medical expense is the largest component, accounting for 23.8%, life reinsurance accounts for 15.7% and accepted non-proportional reinsurance property for 15.5%. These are followed by fire and other damage to property insurance and motor vehicle liability.

The TRE claims ratio for the period was 305% on a gross basis and 89% on a net basis. The total net underwriting result for the period under review was US\$ -2.5 million.

### Top five underwriting performance by line of business

The table below summarises the performance of TRE's top five Solvency II lines of business. Figures are presented on both a gross assumed basis and on a net basis after all outwards reinsurance, including intragroup retrocession described in Section B1. All internal business is presented based on the assumed treaty's underlying line of business.

Figure 7: Underwriting performance by SII line of business (gross) 2019

Gross (US\$'000s)	Proportional			Non- Proportional	Life	Other Line of Business	Total
	Medical expense	Fire and other damage to property	Motor vehicle liability	Reinsurance property	Life reinsurance		
Premiums written	17,113	6,464	3,881	75,607	11,080	10,836	124,981
Premiums earned	17,413	9,591	9,625	77,434	10,998	13,520	138,581
Claims incurred	-16,047	-7,012	-9,253	-363,271	-10,195	-16,989	-422,767
Change in other TP	-	-	-	-	420	-	420
Expenses	-2,250	-1,185	-5,009	-1,967	-1,078	-896	-12,385
<b>Underwriting profit/(loss)</b>	<b>-884</b>	<b>1,395</b>	<b>-4,638</b>	<b>-287,803</b>	<b>144</b>	<b>-4,366</b>	<b>-296,152</b>

Figure 8: Underwriting performance by SII line of business (net) 2019

Net (US\$'000s)	Proportional			Non- Proportional	Life	Other Line of Business	Total
	Medical expense	Fire and other damage to property	Motor vehicle liability	Reinsurance property	Life reinsurance		
Premiums written	14,463	5,962	2,167	9,004	11,080	9,782	52,458
Premiums earned	16,712	9,451	9,202	10,913	10,998	12,944	70,220
Claims incurred	-15,416	-6,909	-8,942	-5,503	-10,195	-15,914	-62,879
Change in other TP	-	-	-	-	420	-	420
Expenses	-1,799	-1,019	-4,544	-1,159	-1,078	-618	-10,217
<b>Underwriting profit/(loss)</b>	<b>-503</b>	<b>1,523</b>	<b>-4,284</b>	<b>4,252</b>	<b>144</b>	<b>-3,588</b>	<b>-2,456</b>



### Medical expense

Medical expense is the biggest proportional line of business. Ceding companies are mainly domiciled in the Middle East e.g. United Arab Emirates, Saudi Arabia, Jordan and Oman. The medical expense business is short-tail and performed in line with expectation with a claims ratio of 92%.

### Fire & other damage to property

This portfolio contains property risk as well as agricultural treaties. The biggest treaties cover fire risks in Switzerland and agricultural risks in Switzerland, France and Italy. The claims ratio for the period was 73%.

### Motor vehicle liability

TRE writes a number of proportional motor treaties in Europe, the Middle East and in Israel. Various negative loss developments resulted in a claims ratio of 97%.

### Accepted reinsurance property

TRE's property catastrophe business focus is ceding companies domiciled in Continental Europe. However, a significant proportion was assumed through affiliated operations (refer to section B1). The typhoons in Japan i.e. Faxai and Hagibis had a material impact on the gross results. The positive net results reflect the effective retrocession covers in place (claims ratio 50%).

### Life reinsurance

The life reinsurance portfolio consists mainly of run-off treaties. The overall performance was in line with expectation.

### Other lines of business

Other lines of business include general liability, credit and suretyship and marine, aviation and transport (proportional and accepted non-proportional reinsurance). The negative result was due to the increased loss frequency in the marine, aviation and transport line of business.

Figure 9: Underwriting performance by material geographical area (net) 2019

Net (US\$'000s)	Home Country	Japan	United Arab Emirates	Germany	United Kingdom	Switzerland	Other countries	Total
Premiums written	21	55,803	18,451	10,114	7,625	13,504	-53,061	52,458
Premiums earned	21	55,615	14,390	14,060	7,625	15,677	-37,168	70,220
Claims incurred	-1	-353,990	-12,552	-9,445	-7,284	-6,654	327,047	-62,879
Change in other TP	-	-	-	-	-	-	420	420
Expenses	-3	-1,176	3,501	1,503	344	1,562	9,130	-10,217
<b>Underwriting profit/(loss)</b>	<b>18</b>	<b>-299,551</b>	<b>5,339</b>	<b>3,112</b>	<b>-3</b>	<b>7,461</b>	<b>281,169</b>	<b>-2,456</b>

### Japan

The origin of the assumed business is mainly through affiliated operations which was significantly impacted by the large loss events i.e. typhoons Faxai and Hagibis.

### United Arab Emirates

Comprises business originated from the Dubai branch and various medical expense business.



### Germany

Business assumed with large and medium-sized insurance companies in Germany.

### United Kingdom

This business relates mainly to run-off treaties in life reinsurance.

### Switzerland

Business in ceding companies domiciled in Switzerland consists mainly of property and property cat business.

### Other countries

TRE underwrites business on a global basis with a wide distribution of territories and classes of business. This also includes Spain, Italy, Israel and other countries in the Middle East and Northern Africa region. Negative premium is due to retrocession covers as outlined in section C.1.

For more details and the breakdown of premiums, claims and expenses by geographical spread please refer to Quantitative Reporting Template ("QRT") in Appendix 2.

## A.3 Investment performance

### Net investment income

Net investment income recognised in the profit and loss account includes investment income (comprising interest, and the amortisation of any discount or premium on debt securities for the period) and realised and unrealised gains and losses, net of interest payable, investment expenses and impairment losses on financial assets.

Interest income is recognised as accrued based on the effective interest method. Acquisition costs related to the purchase of bonds are capitalised and expensed over the duration of the investment.

### Financial investments

TRE's investment portfolio is made up of fixed income securities (97.5% of the portfolio by market value at 31 December 2019) and an investment fund, which earned combined net investment income of US\$ -870k during the period. The result was driven by an impairment loss on a bond security.

Figure 10: Investment portfolio performance for 2019

Asset Category (US\$'000s)	Income	Gains/ (losses)	Net income/gain or (loss)	Total SII Value (as at 31 December 2019)
Cash and deposits to cedants	353	-	353	513,421
Fixed income securities	3,726	-5,440	-1,714	451,306
Collective Investments Undertakings	-	491	491	11,254
<b>Total</b>	<b>4,078</b>	<b>-4,948</b>	<b>-870</b>	<b>964,726</b>

### Securitisations

TRE's investment portfolio includes only government-backed securitisations.

### Covid-19

Given the Company's investment portfolio of fixed income securities, TRE has been largely shielded from the worst effects of recent global stock market large-scale declines seen during the first quarter of 2020. TRE is mindful of credit spread and liquidity stresses in global corporate bond markets and keeps the investment allocation under constant review. While TRE does not have significant holdings at the lower end of investment grade corporate bonds, it continues to monitor the emerging risks surrounding possible corporate downgrades across all of its portfolio triggered by the economic fallout.



#### **A.4 Performance of other activities**

TRE does not receive any income other than from its underwriting and investment activities. TRE has no financial or operating lease arrangements.

#### **A.5 Any other information**

##### **Brexit**

On 31 January 2020, the UK formally left the EU. Under the terms of the EU/UK Withdrawal Agreement, a transition period is in place until 31 December 2020 (unless extended).

Uncertainties continue with respect to the EU/UK relationship at the end of the transition period, particularly from a regulatory perspective, although the EU/UK Political Declaration does commit both parties to prompt assessment of equivalence. Theoretically the principal risk of Brexit to TRE is the ability to access UK reinsurance markets in the future. However the UK market is served by TRE's affiliated entity TransRe London Limited, and is outside of TRE's geographic focus.

##### **Climate change**

Longer-term natural catastrophe trends may be affected by climate change, a phenomenon that has been associated with extreme weather events linked to rising temperatures, and includes effects on global weather patterns, greenhouse gases, sea, land and air temperatures, sea levels, rain and snow. Climate change, to the extent it produces rising temperatures and changes in weather patterns, could impact the frequency or severity of weather events such as hurricanes, tornado activity, other windstorms, floods and wildfires. As regards climate change increasing the frequency and severity of such weather events, TRE may face increased claims, particularly with respect to properties located in coastal areas. TRE takes certain measures to mitigate the impact of such events by considering these risks in underwriting and pricing decisions, including management of aggregate exposure levels and through the purchase of reinsurance. To the extent broad environmental factors, exacerbated by climate change or otherwise, lead to increases in insured losses, particularly if those losses exceed expectations, our financial condition could be materially and adversely affected.

TRE does not consider there to be any other material information to disclose on its business and performance.



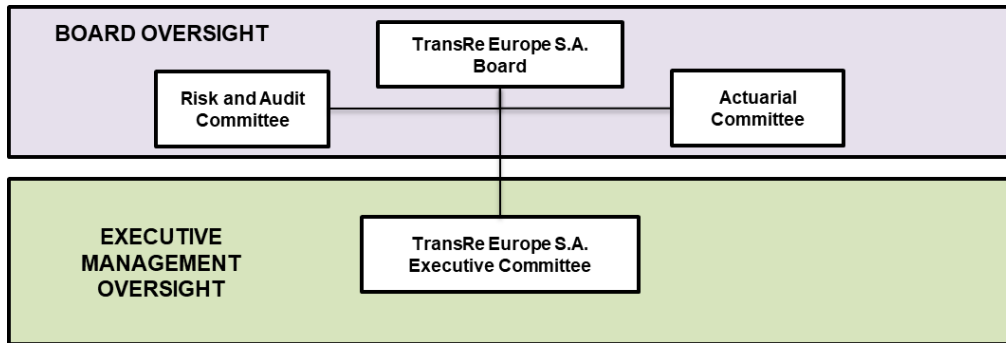
## B. System of Governance

### B.1 General information on the system of governance

TRE’s governance structure reflects its membership of a large international group of companies, while ensuring that it maintains robust local governance arrangements.

The structure of TRE’s key governance bodies is shown in Figure 11.

Figure 11: Governance oversight and reporting lines



The Board maintains ultimate responsibility for overseeing the running of TRE. Its responsibilities include:

- setting, promoting and demonstrating TRE’s culture, vision and values;
- setting TRE’s business strategy and monitoring performance against its business plan;
- approving TRE’s risk appetite and tolerances;
- reviewing the adequacy and appropriateness of TRE’s reserves;
- maintaining oversight of TRE’s compliance with relevant laws and regulation;
- maintaining oversight over the effectiveness of TRE’s corporate governance framework and internal control framework.

The members of the Board at 31 December 2019 are identified in Figure 12.

Figure 12: Board members and committee memberships

Board Member	Role	Committees
Alain D. Manfré	Independent non-executive Chair, Class A-Director	Actuarial*
Matthew Mahoney	Non-executive director, Class A-Director	Actuarial, Risk & Audit
Julian Spence	Non-executive director, Class A-Director	Risk & Audit*
Pierre-Michaël de Waersegger	Independent non-executive director, Class B-Director	Risk & Audit
Jonathan Hewitt	Executive director, Class B-Director	Actuarial

(\* denotes chair of the respective committee)

As shown in Figure 11 above, TRE’s Board maintains two committees.

#### Risk & Audit Committee

The Risk & Audit Committee’s responsibilities include:

#### Risk

- providing oversight and challenge to the effectiveness of TRE’s Risk Management function, Enterprise Risk Management (“ERM”) framework and risk management culture, including the adherence to the





Board agreed appetites and tolerances, engagement with TRE's key business functions and progress embedding ERM in TRE;

- discussing and reviewing guidelines and policies governing the process by which the management of TRE and the relevant operations of TRE assess, monitor and manage TRE's exposure to risk;
- monitoring the effectiveness of TRE's risk management and internal control systems, including financial, operational and compliance controls and reporting any recommendations to the Board; and
- providing oversight and challenge to the effectiveness of TRE's Compliance function and approving the Compliance Monitoring and Training Plan and overseeing progress against it.

#### Audit

- monitoring and reviewing the effectiveness of TRE's Internal Audit function;
- approving the annual Internal Audit Plan and overseeing progress against it;
- reviewing Internal Audit reports and findings and monitoring the status of actions and recommendations;
- monitoring the integrity of the financial statements of TRE and any formal announcements relating to TRE's financial performance;
- reviewing TRE's internal financial controls;
- making recommendations to the TRE Board in relation to the appointment, re-appointment and removal of the external auditor and approving the remuneration and terms of engagement of the external auditor;
- approving the external audit plan and overseeing progress against it; and
- reviewing and monitoring the external auditor's independence and objectivity and the effectiveness of the audit process.

The Risk & Audit Committee meets at least four times per year.

#### Actuarial Committee

The objectives of the Actuarial Committee include:

- overseeing the calculation of technical provisions;
- ensuring the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions;
- assessing the sufficiency and quality of the data used in the calculation of technical provisions;
- informing the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions;
- expressing an opinion on the overall underwriting policy;
- expressing an opinion on the adequacy of reinsurance arrangements;
- contributing to the effective implementation of the risk-management system, in particular with respect to the risk modelling underlying the calculation of TRE's capital requirements and the own risk and solvency assessment.

The Actuarial Committee meets at least four times per year.

#### Executive Committee

TRE's Executive Committee is led by the CEO and reports to the Board. It is responsible for:

- management and oversight of the day-to-day business;
- development and execution of TRE's strategy, financial management, risk management and compliance oversight;
- operational performance (including performance of third party outsourcers) and change management;
- agreeing and recommending to the Board the annual budget and business plan;
- monitoring underwriting and investment performance; and
- ensuring the effectiveness of the three lines of defence model and ultimately, TRE's internal control framework.



The Executive Committee reports to the Board through the CEO as a standing agenda item.

### Key functions

TRE fulfils the requirements of the Solvency II directive with regard to the key functions of risk management, compliance, actuarial and internal audit with four suitably qualified individuals.

The key functions have their own teams and reporting lines. Each key function reviews its resource needs on at least an annual basis and the key function holder is responsible for ensuring the key function has the necessary authority, resources and operational independence.

All key functions report to the Board or a committee of the Board and/or the Executive Committee. Further information on the authority, resources and operational independence of the key control functions is included in Sections B3 (Risk Management function), B4 (Compliance function), B5 (Internal Audit function) and B6 (Actuarial function).

*Figure 13: Key functions*

Key Function	Holder
Risk Management System	Head of Risk
Compliance	Head of Legal and Compliance
Internal Audit	Director of Internal Audit
Actuarial	Head of Actuarial

### Remuneration policies and practices

#### Approach to remuneration

TRE adopts an approach which supports and encourages appropriate behaviour that is aligned with TransRe's vision and values and Alleghany's Code of Business Conduct and Ethics.

#### Assessment of performance

Reviews are performed by line managers and reviewed by senior management and Human Resources. This is a key component of the appraisal process to ensure TRE performance is linked to rewards.

Financial and non-financial criteria are taken into account when assessing an individual's performance. A key element of an individual's performance assessment is his/her adherence to the Alleghany Code of Business Conduct and Ethics and compliance with policies and procedures.

#### Fixed and variable components of remuneration

Remuneration is made up of two key elements, fixed and variable. The fixed element is base salary. The variable element includes an annual bonus and, in some instances, deferred compensation. Base salary, bonus and deferred compensation are reviewed annually taking the previous assessment of performance into consideration.

There are no entitlements to share options or shares.

#### Benefits

The TRE Executive Committee considers all elements of the benefit package (including pension, private medical, health and life insurance) offered to employees. The benefits are designed to be both competitive and to provide health and retirement benefits.

There are no supplementary pensions or early retirement schemes for the members of the Board.

### Material transactions with shareholders

TRE assumes two intragroup excess of loss solvency covers from TRC branches in Sydney and Tokyo. Additionally – until the day of the portfolio transfer – TRE assumed an intragroup whole account quota share agreement from the TRC branch office in Munich.



On the other hand, TRE has an excess of loss whole account retrocession agreement with TRC as reinsurer (the “TRC Whole Account XL”) which covers losses on the non-life reinsurance book of business (per risk or event) written prior to the re-domiciliation to Luxembourg on 1 July 2019.

TRE benefits furthermore from a 60% quota share treaty with TRC as reinsurer (the “TRC Quota Share”, effective for all new or renewed business on or after 1 July 2019). In addition to the above, TRC entered into a Capital Support Guarantee Agreement (the “TRC Guarantee”) in favour of TRE. Under the TRC Guarantee, TRC agrees to maintain TRE’s regulatory capital in an amount greater than TRE’s SCR.

Other than the inwards solvency covers, TRC Whole Account XL, TRC Quota Share, TRC Guarantee and the outsourcing arrangements described in Section B7, TRE does not have any material transactions with the shareholders, members of the management body or those who can exert significant influence over the business.

TRE has assessed the nature and scale of complexity of its business against its governance structure and considers its system of governance to be adequate.

## **B.2 Fit and proper requirements**

The members of TRE’s Board collectively possess appropriate qualifications, experience and knowledge about at least:

- insurance and financial markets;
- business strategy and business model;
- system of governance;
- financial and actuarial analysis; and
- regulatory framework and requirements.

TRE ensures that senior management and key function holders are at all times fit and proper persons.

In deciding whether a person is fit and proper, TRE must be satisfied that the person has:

- the personal characteristics (including being of good repute and integrity);
- the level of competence, knowledge and experience; and
- the qualifications required,
- undergone or is undergoing all training, required to enable that person to perform his or her function effectively and in accordance with any relevant regulatory requirements and to enable sound and prudent management of TRE.

Any breaches of the fit and proper requirements are internally reported to the Heads of Risk and Legal & Compliance. TRE’s Head of Risk is responsible for notifying the relevant regulator of the change in circumstances and any remedial action that is being undertaken by TRE.

### **Training and competency**

TRE’s training and competency ethos is designed to promote learning and development within TransRe and to ensure that TRE employs personnel with the skills, knowledge and expertise necessary for the discharge of the responsibilities allocated to them.

TransRe actively encourages staff to further develop and pursue professional qualifications. Development is the responsibility of each staff member.

In addition to the above, all staff who possess professional qualifications are expected to maintain Continuing Professional Development points in line with their relevant professional body requirements.



### B.3 Risk management system including the ORSA

TRE's ERM framework has been developed to enable the Board and senior management to understand and appropriately manage and mitigate the risks associated with its objectives over the short, medium and longer term in a manner that is commensurate with TRE's risk profile and business arrangements.

The ERM framework seeks to engender a culture of no significant surprises, ensure adequate tools are available to manage the most important risks to TRE, improve decision-making and support the achievement of TRE's business objectives. In summary, the purpose of TRE's ERM framework is to:

- actively sponsor and foster a risk aware culture across TRE, supporting staff in making risk management based judgements, encouraging effective management of exposures within TRE's stated risk appetite;
- ensure a clear, coherent risk strategy that includes policies, standards, risk appetites and clarity of ownership for risks;
- ensure risk is taken into account in key business decisions;
- ensure risk taking activities are consistent with TransRe's broader risk management vision and appetites;
- ensure that the 'three lines of defence' model operates effectively;
- implement risk strategies and policies that align with TransRe's and TRE's strategic and operational objectives;
- ensure risks and emerging risks are identified, understood and assessed on a forward-looking basis to allow management to take proactive steps; and
- sustain a robust Own Risk and Solvency Assessment ("ORSA") process that informs management's view of risk and capital.

TRE's ERM framework is supported by a comprehensive set of risk policies and guidelines to help ensure adequate processes and procedures are in place to manage all types of risk, which are supported by a comprehensive suite of management information. The framework is aligned with the regulatory requirements under the Solvency II regime as adopted by CAA and good business practice.

By adopting this approach, TRE believes it is able to effectively identify, measure, monitor, manage and report risks at an individual/contract level and at an aggregated level on an ongoing basis.

TRE senior management and risk owners identify key risks to the business, as part of a rolling risk identification and assessment programme. Risk causes and consequences, together with mitigating controls, are identified for each risk. Key risks, owners and mitigating controls are recorded in a risk register; which is presented to management (and ultimately the Board) on a quarterly basis for review and discussion.

The risks recorded in the register form part of TRE's ORSA process and are key inputs in the development of TRE's internal audit programme. The Risk & Audit Committee receives regular reports from TRE's Head of Risk which consider key risks to TRE, aggregations and exposures across the key ERM pillars.

TRE's Risk Management function is integrated into TRE, TransRe and Alleghany through the governance reporting lines to TRE's CEO, Head of Risk International and the Risk & Audit Committee and involvement in key decision making forums. In addition, the Risk Management function's roles and responsibilities include:

- working alongside other key control functions and ensuring existing control activities and reports are developed into the risk and control reporting framework;
- coordinating with the key control functions to ensure internal policies, controls and procedures for identifying and managing key risks are documented in sufficient detail to allow for effective compliance, testing and auditing;
- coordinating documentation of the key internal policies, procedures and controls for the management of risks identified in the risk register; and
- providing input and challenge into the development of realistic stress and reverse stress tests for TRE.



By adopting such an approach, ERM is a key consideration in the decision making process.

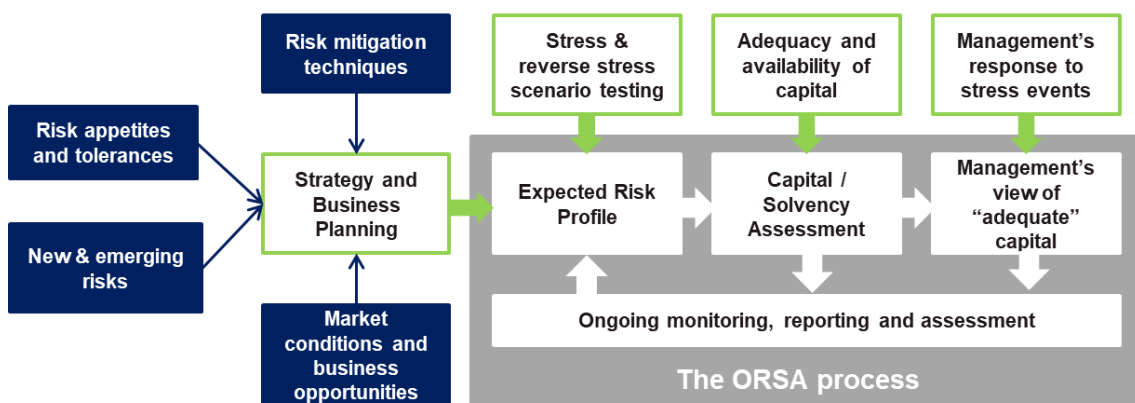
### Own Risk and Solvency Assessment

The ORSA process considers TRE's own solvency assessment against its risk profile, business objectives and capital management strategy in comparison to its regulatory solvency requirement in order to determine whether additional capital is required. The ORSA also considers the impact on TRE should it be subject to significant losses arising from both insurance and non-insurance events; against such extreme events, the ORSA considers what actions TRE management would undertake to mitigate the impact of such events.

TRE produces an ORSA report on at least an annual basis. The ORSA is considered a key management tool and is linked to TRE's business planning and strategy, risks TRE is exposed to and the associated capital.

The ORSA process can be diagrammatically represented as follows:

Figure 14: TRE's ORSA process



The ORSA process provides TRE with a mechanism to assess the risks it faces and to determine the necessary level of capital required to ensure TRE meets its strategic and business objectives. The ORSA is TRE's view of its exposure to underwriting and non-underwriting risks and its solvency position and its conclusions are documented in an ORSA report. The ORSA aims to assess, in a continuous and forward looking manner, the overall solvency needs of TRE, whilst being mindful of its risk profile and business environment.

The Board and senior management provide input and review the scenarios considered within the ORSA stress tests. In addition, senior management has identified a number of triggers that would result in the ORSA being re-run at any point during the year; these triggers are tracked by the Risk Management function and are reported to the Risk & Audit Committee every quarter. In addition to the tracking of the ORSA triggers, every quarter the ORSA capital target against eligible own funds is presented to the Risk & Audit Committee; this aids senior management in monitoring TRE's capital adequacy.

The Risk Management function coordinates the relevant processes with subject matter experts across the business and prepares the ORSA report for review and discussion by the Executive Committee, the Risk & Audit Committee and ultimately the Board. Once the report is reviewed, the ORSA and the amount of capital TRE intends to maintain, based on its expected risk profile, is approved by the Board and the ORSA report is shared with the CAA.

## B.4 Internal control system

Within TRE, there is a robust internal control system that includes:

- the corporate governance framework, procedures and controls;
- a financial control framework;



- independent control functions which comprise the Actuarial, Compliance and Risk Management functions; and
- independent assurance provided by the Internal Audit function.

The financial control framework is designed to ensure that:

- risks relevant to the preparation and fair presentation of the financial statements in accordance with the applicable financial reporting framework have been identified and documented;
- TRE is in compliance with group Sarbanes Oxley requirements; and
- there are sufficient and effective controls in place (both manual and automated) to mitigate these risks and to prevent or detect material misstatements in the financial statements and disclosures.

The statutory financial statements are subject to rigorous controls in the production and review leading up to publishing. The actuarial liabilities are produced using best practice actuarial practices that are subject to independent review with the financial statements subject to internal review and external audit review. The financial statements are presented to the Board for sign-off prior to publishing.

In addition to the above, TRE's Internal Audit function, through planned and commissioned reviews of TRE's processes, provides an independent opinion on the internal control framework of TRE's business.

### **Compliance function**

TRE's Compliance function seeks to promote an organisational culture committed to integrity, ethical conduct and compliance with the law. The function sets standards, policies and procedures that provide reasonable assurance that TRE acts in a manner consistent with its local compliance and regulatory obligations and within TransRe's overarching compliance requirements.

The Compliance function is headed up by TRE's Head of Legal & Compliance who has a direct reporting line to the CEO of TRE and TRC's Chief Compliance Officer ("CCO"). The Head of Legal & Compliance is responsible for ensuring that TransRe's compliance mission is implemented, coordinated and enforced within TRE and reports any compliance violations or issues to the CCO.

TRE's Compliance function reports on a quarterly basis to the Board, Risk & Audit Committee and Executive Committee, as well as to TransRe's group compliance department. The Compliance function is responsible for reporting to senior management any breaches of, or non-compliance with, its policy or any other relevant policy, rules and regulations. The Compliance function has sufficient authority to carry out its functions on its own initiative without obstruction from management and other staff members.

The Compliance function's responsibilities include:

- advising the Board on compliance with Solvency II and related law and regulation;
- providing training and guidance regarding applicable law and regulation and TransRe's and TRE's policies and clearly communicating ethical guidance;
- assessing the possible impact of any changes in the legal and regulatory environment on the operations of TRE;
- identifying and assessing compliance risks relevant to TRE and managing the control environment that mitigates those risks;
- undertaking compliance monitoring and making recommendations to improve the effectiveness of compliance practices; and
- identifying TRE compliance training needs and working with TransRe's Corporate Compliance Department and Human Resources to implement effective compliance training programmes.

### **B.5 Internal Audit function**

The TRE Internal Audit function is led by the TransRe Director of Internal Audit, based in New York, USA under the oversight of the TRE Internal Audit function holder. Internal Audit is an independent function that provides objective challenge and assurance over TRE. Internal Audit supports TRE in accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk



management, control, and governance processes. Those carrying out the Internal Audit function do not assume any other key functions.

The Internal Audit function is supervised by the Risk & Audit Committee, with ultimate oversight provided by the Board and the Alleghany's Audit Committee. Rolling three-year audit plans are submitted annually to the Risk & Audit Committee and TRH Audit Committee for approval. Results of internal audits are distributed to TRE's senior management, the Risk & Audit Committee and to TRH's Audit Committee. Outstanding internal audit actions are tracked and progress reported to the Risk & Audit Committee and TRH Audit Committee.

In addition to reporting into the Risk & Audit Committee, the Internal Audit function holds regular meetings with the International Head of Risk to evaluate the effectiveness and adequacy of the internal control system and other areas of governance, as well as to discuss progress against the annual internal audit plan.

## **B.6 Actuarial function**

The TRE Head of Actuarial is responsible for the overall management and day-to-day leadership of the TRE Actuarial function and has a direct reporting line to the CEO of TRE and to the TransRe group Chief Actuary.

The Actuarial function is responsible for:

- coordinating the calculation of technical provisions;
- ensuring the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions;
- assessing the sufficiency and quality of the data used in the calculation of technical provisions;
- comparing best estimates against experience;
- informing the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions;
- expressing an opinion on the overall underwriting policy;
- expressing an opinion on the adequacy of reinsurance arrangements; and
- contributing to the effective implementation of the risk-management system.

The Actuarial function reports on a quarterly basis to the Actuarial Committee, which is a sub-committee of the Board. In addition, an annual internal Actuarial Function Report is provided to the Board.

## **B.7 Outsourcing**

### **Outsourcing management**

For each outsourcing arrangement, a TRE manager (the "Outsourcing Owner") is identified in TRE's outsourcing register. The Outsourcing Owner is responsible for identifying whether the activity to be outsourced is critical or important, carrying out pre-contract due diligence including know your counterparty ("KYC") checks and agreeing the terms of the engagement. The Outsourcing Owner is also responsible for the ongoing oversight and management of outsourcing arrangements.

TRE's Head of Legal & Compliance maintains the outsourcing register.

### **Outsourcing of critical or important operational functions**

Details of outsourcing in respect of TRE's critical or important operational functions are set out in Figure 15.



Figure 15: Outsourcing of critical or important operational functions

Outsourcing	Jurisdiction
Certain intra-group services and support services are provided by TRC.	New York, USA
TRE outsources the day-to-day activities of its Internal Audit function to TRC, as described in Section B5.	New York, USA
TRE's day-to-day investment management activities are outsourced to BlackRock Investment Management (UK) Limited ("BlackRock"), a member of the BlackRock group. BlackRock's performance is monitored by Alleghany's and TransRe's treasury and investment management functions, both based in New York, USA with further oversight provided by TRE's CFO.	UK

### B.8 Any other information

TRE does not consider there to be any other material information to disclose on its system of governance.

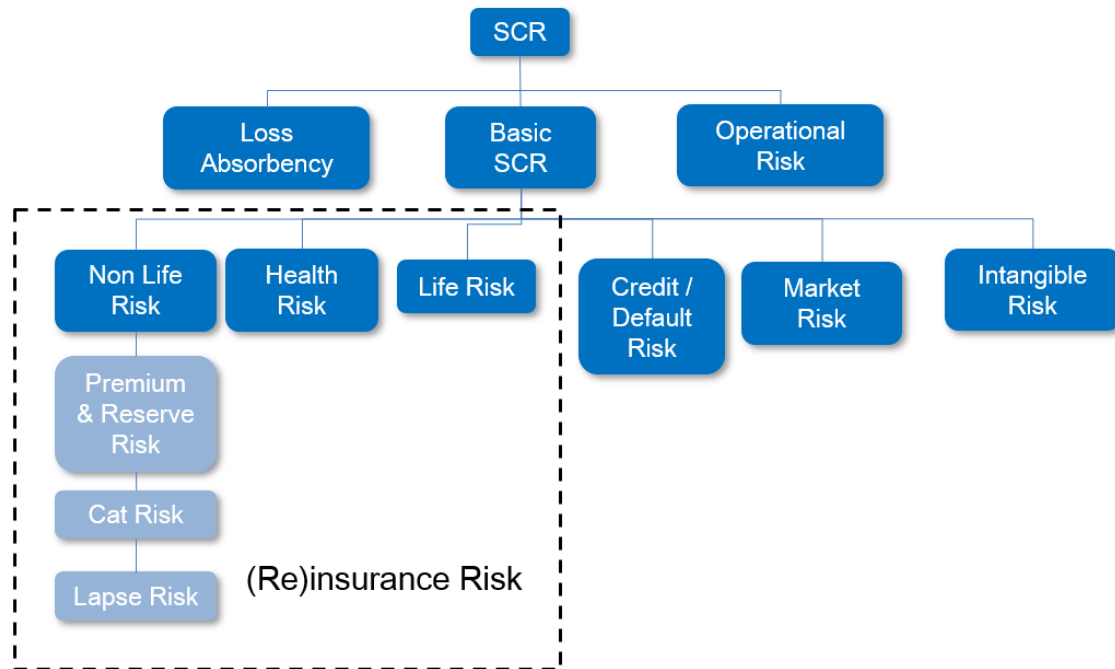




### C. Risk profile

TRE is a wholly owned subsidiary of TRC and provides specialist non-life and life reinsurance. Under Solvency II, TRE's SCR is calculated using the Standard Formula for all components. The Standard Formula is a risk based capital requirement that covers underwriting risk, market risk, credit risk and operational risk in a formulaic way and can be diagrammatically represented as follows:

Figure 16: Standard Formula risk modules



Each of the key risk categories and keys risks relevant to TRE are described in further detail below.

#### C.1 Reinsurance / underwriting risk / life risk

TRE underwrites a diversified portfolio of property and casualty as well as life reinsurance across multiple regions and classes.

Key underwriting risks to which TRE is exposed include:

- Premium / underwriting risk
  - underwriting outside of appetite;
  - excess exposures in certain classes and/or territories;
  - underwriting below the technical price or without adequate risk transfer;
- Retrocession risk
  - failure to follow retrocession procedures and guidelines, or design and operation of retrocession programmes;
- Reserve risk
  - inadequate reserving due to flaws in the provisioning/reserving methodology or in the application of the methodology, inadequate Incurred But Not Reported ("IBNR") and inadequate Incurred But Not Enough Reported ("IBNER");
- Catastrophe Risk
  - excessive aggregation/catastrophe risks in a single region/location;
- Lapse risk
  - uncertainty arising from the risk of loss or adverse change in the value of insurance liabilities as a result of the discontinuance of reinsurance policies.



TRE maintains a number of risk mitigation techniques and approaches to manage the risks associated with its underwriting risk profile. Further information on the monitoring and approach is provided below.

#### **Premium / underwriting risk management and mitigation techniques**

TRE maintains a clear underwriting philosophy that is supported by risk appetites and tolerances set at the aggregate level as well as at individual class and per risk. These are in turn supported by procedures and controls in relation to pricing, rigorous risk selection criteria and the ability to underwrite a diverse range of risks across multiple classes and geographies.

TRE assesses and mitigates these risks by having in place a number of key controls and processes, including:

- exposures assessed and tracked against risk tolerances; and
- performing, on an ongoing basis, a range of extreme events and stress tests.

TRE utilises a third party catastrophe model to model the occurrence and severity of events for windstorm, hurricane, earthquake and flood. The model uses actual exposure sets of in-force policies as a proxy for future exposures which is further enhanced by monitoring trends and claims development.

Ongoing reviews of underwriting activities, including quarterly underwriting performance reviews, pricing adequacy reviews and rate monitoring supplement the oversight framework. The adequacy of the risk mitigation techniques is considered as part of the ORSA process that is discussed further above.

TRE's main risk concentration continues to relate to natural catastrophe exposure in North Western Europe.

#### **Retrocession risk management**

TRE benefits from a comprehensive retrocession programme that provides protection for TransRe globally as well as TRE specifically. Risks associated with retrocession are managed and mitigated by ensuring that all retrocession placements are subject to approval and must comply with TransRe's group-wide retrocession procedures (which include minimum credit quality and counterparty limits approved by the Alleghany Reinsurance Security Committee) and delegated retrocession purchasing authorities.

TRE benefits from protection provided by special purpose vehicles ("SPV") as follows:

- a series of fully collateralised reinsurance sidecars (referred to as Pangaea); and
- collateralised catastrophe bonds which provide the TransRe group with protection for predominantly US and Canadian natural catastrophe risks.

These arrangements are overseen by TransRe Capital Partners and focus on protecting TransRe and TRE from excessive natural catastrophe losses. Liabilities are fully collateralised (when not using rated paper) with assets that meet, as a minimum, the aggregate limit of the SPVs' obligations, with liabilities measured in a manner consistent with the Solvency II Directive.

TRE benefits from a comprehensive retrocession programme that provides protection for TransRe globally as well as for TRE specifically.

#### **Reserve risk management**

Reserve risk is managed by TRE's Actuarial function with oversight provided by the Actuarial Committee and ultimately the Board. Key controls to manage this risk include:

- a comprehensive annual reserve study;
- quarterly reserve reviews;
- reserving risk Management Information that include major activity reports, high cost claim alerts, major loss memos and retrocession transaction alerts; and
- independent validation of reserves.



### Risk sensitivity for underwriting risks

TRE undertakes detailed stress and scenario testing on an annual and ad-hoc basis with the results presented at the Risk & Audit Committee and at the Board and as part of its ORSA process.

As part of the ORSA process, the current and projected solvency position over the business planning period are calculated following adverse stresses at different return periods for the material underwriting risks (each risk's stress is considered individually) in addition to multiple losses arising from non-correlating events (for example market risks and underwriting risks or a series of underwriting events). Consideration is also given to a material deterioration in TRE's reserves, including adverse development in claims ratios and IBNR. The most material impact on the SCR continues to arise from a natural catastrophe windstorm event affecting North Western Europe. TRE is strongly capitalised, and the analysis undertaken indicates that only extreme events (return periods in excess of 1-in-200 years) would cause TRE to breach its SCR. TRE's underwriting risk profile is therefore resilient to severe shocks and events and is within the Board approved risk appetite.

### Processes for monitoring the effectiveness of risk mitigation techniques

As a subsidiary of a globally active reinsurance company, TRE benefits from a robust risk management framework enabling effective oversight of TRE's risk profile via various governance committees throughout TRE, TransRe and Alleghany, the ORSA process, TRE's risk register and the stress and scenario testing TRE performs.

In relation to Reserve Risk, TRE's actuarial function conducts quarterly reserve reviews of its portfolio to determine appropriate reserve levels and expected IBNR adequacy. TRE's reserves are also subject to review by TransRe's group actuarial function, based in New York, USA. Finally, as part of the annual statutory audit, TRE's reserves are subject to independent review.

## C.2 Market risk

Market risk is the risk of loss or adverse change in TRE's financial situation resulting from changes in the value of its assets and its financial obligations caused by the volatility of market prices of assets, liabilities and financial instruments. It includes risks associated with the use of financial instruments, including movements in interest rates, foreign exchange exposure (currency risk) and equity investments; and changes in valuation processes.

For TRE, market risk comprises the following key components:

*Figure 17: Standard Formula market risk sub-modules*



The Board reviews, at least annually, TRE's investment strategy which is based on four key principles, to:

1. preserve capital;
2. increase surplus;
3. maintain liquidity; and
4. optimise after tax total return on investments, subject to 1 to 3 above.

TRE's investment strategy forms the basis for the mandate given to TRE's investment managers (BlackRock). BlackRock manages TRE's fixed income investment portfolio in line with the agreed investment mandate provided to it. The mandate includes limits on certain classes and types of investments, restriction on investments in certain industries, sector and geographical limits and a prohibited list of companies which would result in excessive concentration of underwriting and investment risk. The execution of TRE's



investment strategy is subject to ongoing monitoring and scrutiny by the TRE CFO and by ongoing oversight by the Board.

TRE has a material risk concentration to US Government Bonds.

TRE is exposed to the following key market risks:

#### **Interest rate risk**

Movements in interest rates affect the amount and timing of cash flows for TRE and the fair value of fixed income securities. As interest rates rise, the fair value of fixed income portfolios declines and conversely, as interest rates decline, their fair value rises. To minimise this risk, TRE adheres to investment policy guidelines developed by the Board in line with TRE's strategy and TransRe's overall objectives. These guidelines direct TRE to invest in high-quality issuers and, in particular, the strategy is to position its fixed income securities based on its view of future interest rates and the yield curve, balanced with liquidity requirements and the duration of TRE's technical liabilities.

#### **Spread risk**

This risk relates to the potential financial loss TRE may suffer due to a change in the spread that a fixed interest security trades at relative to a comparable government bond.

#### **Equity Risk**

The potential financial loss arising from the reduction in the value of the investment portfolio due to changes in prices of equities, mutual funds and equity-linked capital market instruments. The Company's exposure to equity risk is immaterial because the collective investment undertaking is composed of bonds.

#### **Currency risk**

Assets backing the equity and liabilities of TRE are typically maintained in currencies matching the currencies of its technical provisions, other liabilities and share capital (denominated in US dollars) thereby mitigating the potential impact of foreign exchange and interest rate risk on TRE's solvency position.

#### **Market risk management and mitigation techniques**

TRE maintains a number of risk mitigation techniques and approaches to manage market risk. Key techniques and controls in place include:

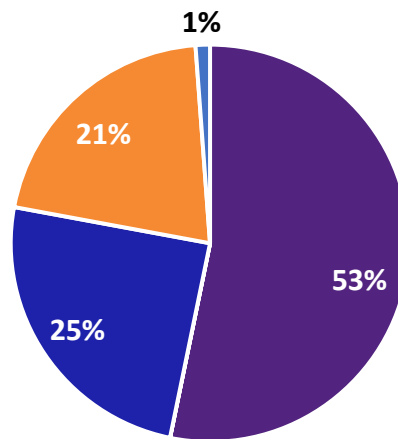
- investment risk and underwriting risk accumulation reporting, including issuer accumulations;
- mandates and guidelines provided to external investment managers, which include:
  - regulatory compliance;
  - duration;
  - benchmark portfolio;
  - credit quality;
  - sector limitations;
  - issuer limitations; and
  - currency;
- Board of Directors mandate and oversight;
- stress testing; and
- market risk analyses, including extreme market and currency stress tests (+/-300bps movement).



As at the end of December 2019, TRE's investment portfolio is split across the following asset classes:

Figure 18: Asset breakdown as at 31 December 2019

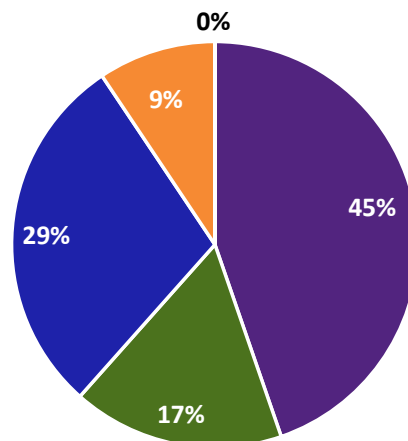
- Cash and deposits
- Corporate Bonds
- Government Bonds
- Collective Investment Undertaking



The credit quality of TRE's investment portfolio is split as follows:

Figure 19: Credit quality of portfolio (excluding cash and deposits) – as at 31 December 2019

- AAA
- AA
- A
- BBB
- Unrated



#### Risk sensitivity for market risks

TRE performs stress and scenario testing as part of its approach to managing market risk. Results are presented at the Board and considered as part of the ORSA process.

TRE's ORSA process, includes recalculating the solvency position and the projected solvency position over the business planning period following adverse stresses, including a 300bps change in interest rates in both directions and a prolonged economic downturn, in which more severe low interest rate environment scenarios are considered.



### **Prudent person principle**

When making investment decisions, TRE considers the risks associated with the investments, including the potential impacts of any economic shock, their liquidity and their treatment under the Solvency II rules.

TRE's investment principles underpin its investment strategy. The strategy is ultimately approved by the Board and is reviewed on an ongoing basis by the Board and TRE's CFO. Assets covering the technical provisions must be invested in assets that meet the criteria set out in the investment mandate and must be appropriate to the nature and duration of TRE's reinsurance liabilities. TRE does not permit investment in any asset category that is not included in its investment mandate.

All assets, in particular those covering the Minimum Capital Requirement and the Solvency Capital Requirement, are invested in liquid and highly rated assets that aim to ensure the security, quality, liquidity and profitability of the portfolio as a whole. All assets are held in TRE designated portfolios which ensures their availability to TRE only.

### **Processes for monitoring the effectiveness of risk mitigation techniques**

TRE benefits from ongoing oversight of its investment portfolio by TransRe's Treasury function, supplemented by oversight provided by TRE's CFO. Furthermore, the extreme stress tests incorporated into the ORSA process, TRE's risk register and the quarterly stress and scenario testing TRE performs supplement these controls.

TRE's investment managers are provided with an investment mandate and are subject to quarterly compliance attestations confirming they have operated in accordance with the mandate.

TRE does not use derivative instruments. Assets are managed in such a way as to limit excessive reliance on any particular asset, issuer or group of undertakings, or geographical area that would represent an excessive accumulation of risk to the portfolio as a whole.

## **C.3 Counterparty default (credit risk)**

Credit risk is assumed whenever TRE is exposed to a loss if another party fails to perform its financial obligations to TRE, including the failure to perform them in a timely manner. This includes default by brokers, retrocessionaires, customers and investment counterparties. Included within this category is the management of the credit risk associated with the intragroup retrocessions described in Section B1.

### **Brokers / intermediaries / retrocessionaires**

Similar to other insurance and reinsurance companies, TRE has a concentration risk with brokers and intermediaries, as they represent a major conduit of business to TRE. All brokers, intermediaries and retrocessionaires are subject to ongoing review.

Prior to transacting with brokers, cedants or ceded reinsurers for the first time, a KYC check is carried out.

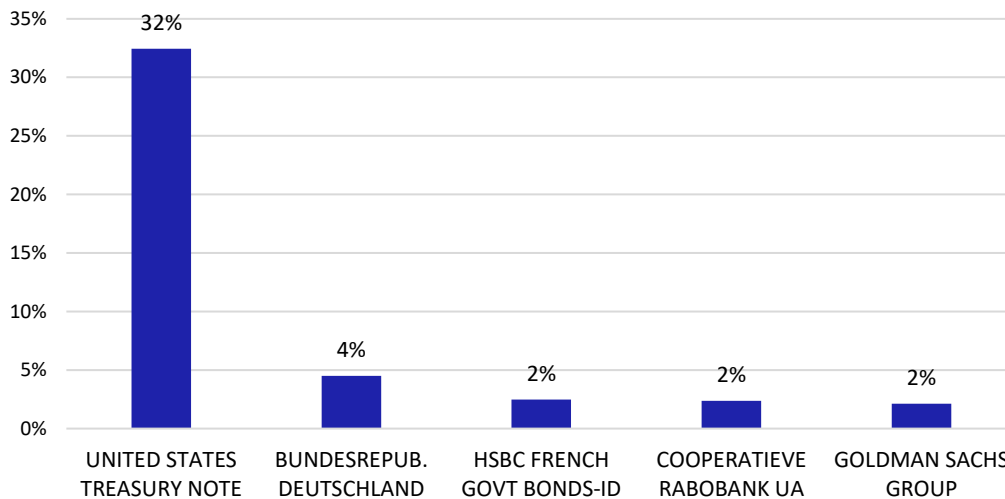
Retrocessionaires must go through a credit and security assessment which is overseen by Alleghany's Reinsurance Security Committee and TransRe's Global Risk Management function ("GRM") based in New York and monitored by the Risk & Audit Committee. Once approved, they are placed on TransRe's approved Security List. All prospective markets and proposed programme limits are reviewed against the Security List prior to placement and in some cases require specific GRM approval prior to placement. The Security List designates separate short-tail and long-tail programme limits for each retrocessionaire.



### Investment counterparties

TRE maintains a diversified highly rated investment portfolio in its three functional currencies: US\$, EUR and CHF with its main investment exposure being to the US Government Bonds.

Figure 20: Top five portfolio issuer exposures as at 31 December 2019



TRE's credit risk management strategies outline the credit rating requirements for its investments. Adherence helps to ensure investments are selected in a way that enables the effective management of the risk of counterparty default to an acceptable level in line with TRE and TransRe approved risk appetite and tolerances. The credit management strategy also takes into account the exposure to credit spreads.

To aid the monitoring of compliance with the credit rating requirements of TRE's credit risk management strategy and to minimise the risk of counterparty failure arising from external parties, TRE has established key risk indicators which are consistent with its investment strategy and investment risk appetite and tolerances. These indicators take into account, but do not rely solely on, the financial security rating and credit rating assigned by external rating agencies.

TRE uses external credit assessments primarily to review the credit quality:

- of assets in its investment portfolios; and
- of its retrocessionaires.

TRE and TransRe do not rely solely on one rating agency and give consideration to a range of views provided by rating agencies as well as their own market knowledge and intelligence provided by professional investment managers.

### TRC Whole Account XL and TRC Quota Share

The retrocession provided by TRC represent TRE's largest credit risk. To manage this risk, the adequacy of TRC capital is monitored on an ongoing basis, with regular updates provided by the GRM function. This is further supplemented by the presence of TransRe Group's CFO being a non-executive director of TRE.

### Cash held at banks

As part of TRE's commitment to paying claims in a timely manner, TRE maintains cash deposits at local banks domiciled within the EU and Switzerland. Amounts held at these institutions vary throughout the year and are based on cashflow forecasting and expected claims payment patterns.



### Key controls

Key controls to mitigate credit risk include:

- investment risk and underwriting risk reporting;
- approved retrocessionaire lists; and
- mandates and guidelines provided to external investment managers, which include:
  - regulatory compliance;
  - duration;
  - benchmark portfolio;
  - credit quality;
  - sector limitations; and
  - issuer limitations.

### Risk sensitivity for credit risks

The sensitivity of the solvency ratio to credit defaults or rating downgrades of TRE's counterparties has been considered as part of the risk management system (which includes the credit risk associated with the TRC Whole Account XL and TRC Quota Share). The analysis demonstrated that TRE is resilient to a range of events including severe counterparty rating downgrades.

### Prudent person principle applied to credit risks

Counterparties are selected taking into account their credit rating and reputation and, where appropriate, advice from professional investment managers. Credit ratings are used as a way of identifying and managing counterparty credit risk and TRE ensures only counterparties with sufficiently high credit ratings are used. TRE does not rely on a single rating agency; instead, it uses a number of agencies combined with its own analysis. TRE seeks to avoid excessive counterparty exposures.

Retrocessionaires are selected from a group wide approved retrocessionaires list, with all other retrocessionaires not on the list subject to individual review and approval by either GRM or the Alleghany Reinsurance Security Committee.

### Processes for monitoring the effectiveness of risk mitigation techniques

TRE is able to leverage its membership of a globally active reinsurance group to continually monitor and assess the effectiveness of its controls. The Risk Management function reviews the risks and effectiveness of controls on a regular basis as well as TRE's risk profile, presenting the outcome of the review to the Risk & Audit Committee. Information is provided to key fora to enable the monitoring of reinsurance recoverable and excessive counterparty exposures to be tracked and action taken to enhance existing processes where appropriate.

Furthermore, TRE benefits from the additional oversight provided by both the TransRe Counterparty & Credit Risk Committee and Alleghany's Reinsurance Security Committee, which approves counterparties and monitors the credit quality of the retrocessionaires on TransRe's Security List.

In addition, reports showing counterparty exposures (both investment and retrocession) are provided to the Board for oversight and review.

## C.4 Liquidity risk

Liquidity risk would arise if TRE did not have sufficient financial resources available to enable it to meet its obligations as they fall due or could secure them only at excessive cost.

As at 31 December 2019, TRE continued to maintain assets in high quality liquid investments held in functional currencies matching TRE's net liabilities and claim duration profile. Key controls to mitigate this risk include:

- asset/liability assessment performed every quarter;





- quarterly case reserving exercise;
- Board monitoring;
- quarterly balance sheet review; and
- half-yearly profitability reviews.

#### **Prudent person principle as applied to liquidity risks**

Assets are prudently invested taking into account the liquidity requirements of the business and the nature and timing of TRE's reinsurance liabilities. TRE manages its liquidity risk by maintaining a diversified liquid investment portfolio.

#### **Risk sensitivity for liquidity risk**

TRE has carried out stress and scenario testing as part of its approach to managing liquidity risk. Results have been reviewed by the Risk & Audit Committee and the Board. TRE does not consider liquidity to be a material risk.

#### **Process for monitoring the effectiveness of risk mitigation techniques**

TRE has established a liquidity risk framework which includes the establishment of a liquidity risk appetite. Adherence to the appetite is reviewed every quarter with TRE reviewing its ability to meet its short and medium term financial commitments in a timely manner in both normal and stressed conditions.

#### **Expected profit included in future premiums ("EPIFP")**

The EPIFP as at 31 December 2019 is US\$ 47,113k.

### **C.5 Operational risk**

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. Operational risk is diverse in nature and permeates all business activities but remains a distinct form of risk in its own right. Operational risk within TRE is divided into the following key risk areas:

- Regulatory and legal – the risk of legal or regulatory sanctions or loss caused by a failure to comply with applicable laws, regulations, internal policy and standards of best practice.
- Financial crime, including internal and external fraud – the risk that the firm might be used as a vehicle for financial crime.
- Cyber threats / data breaches and data privacy – the risks associated with unauthorised access to TRE's systems caused by internal and external security breaches.
- Financial & accounting – the risks associated with financial reporting and integrity of financial information.
- People – the risk that people do not follow TRE's procedures, practices and/or rules, thus deviating from expected behaviour in a way that could damage TRE.
- Business continuity management – the risk associated with the failure to appropriately manage unforeseen events.
- Processing failures, including IT system failures – the risks associated with IT systems.
- Model risk – the risk that the output from the models used by TRE is incorrect or flawed due to errors in the design or operation or management's failure to understand the models' limitations.
- Outsourcing – failures relating to the outsourcing of key activities.
- External events and other changes – failure to react to changes in the external business environment.

TRE does not have any material concentrations to operational risk.

Each quarter, TRE's Directors and senior managers identify the key risks, causes and consequences together with relevant mitigating controls, within their ownership and span of control. The results of the assessment are recorded in TRE's risk register and reviewed by the Risk & Audit Committee.

TRE maintains an Operational Risk policy that sets out TRE's approach to mitigating operational risks.



### Key controls

Key mitigating controls include:

- Risk & Audit Committee oversight of key operational risk metrics;
- policies and procedures, the group's code of conduct, penetration and attack testing, business continuity plans and succession planning;
- service level agreements;
- purchase of insurances; and
- underwriting audits.

### Risk sensitivities for operational risk

On an ongoing basis, TRE carries out stress and scenario testing as part of its approach to managing operational risk. Results are presented to the Risk & Audit Committee and considered as part of the ORSA process.

Within TRE's ORSA process, current and projected solvency positions over the business planning period are re-calculated following a range of adverse operational risk stresses to ensure that under a range of modelled scenarios, TRE is able to withstand these stresses without breaching its SCR.

### Process for monitoring the effectiveness of risk mitigation techniques

TRE and TransRe have established an operational risk framework that monitors and records:

- key risks facing TRE, including mitigating controls and their effectiveness;
- operational risk events and losses;
- the environment in which TRE operates; and
- emerging risks and the mitigating steps taken to monitor and address them.

The framework is supported by a range of policies and procedures and a strong corporate culture that encourages early notification of operational events or losses. This enables the business to learn from operational events or near losses and to continually enhance its risk management framework.

## C.6 Other material risks

Franchise/reputation risk: TRE recognises that its long-term success depends on its relationship with clients, brokers, credit rating agencies, regulators and capital providers and on the strength of the TransRe brand. Consequently, TRE and TransRe will not accept risks, both underwriting and non-underwriting, that may materially impair or impact the reputation of TRE or TransRe.

Group risk: As a wholly owned subsidiary of a large international group, there is a risk TRE could be adversely affected by the actions of another company within the group. Should such an event arise TRE is able to rely on its own unencumbered capital.

Emerging risks: On an ongoing basis, TransRe and TRE undertake horizon scanning with a view to identifying new and emerging risks. Annually, TransRe holds a Global Emerging Risk Forum in New York with senior level executives and employees from across the world attending. Where new and emerging risks are identified, these are tracked and reported on at key fora. This helps to ensure TRE is able to react quickly should the environment in which it operates in change.

## C.7 Any other information

### Covid-19

Underwriting Risk: As stated in Section A, TRE will have modest direct exposure to our underwriting portfolio through our A&H and credit portfolios, as well as more indirect exposure from our casualty and property portfolios. In addition, there may be some losses to TRE's small life portfolio; however, this remains a very small part of TRE's exposure. It is too early to assess the impact of Covid-19 on TRE's life and non-life



underwriting portfolio as new events and losses arise daily throughout the world and governments take steps to manage the virus; however, through the application of risk limits and aggregate monitoring, TRE is well placed to absorb any losses arising from Covid-19.

**Market, Counterparty & Liquidity Risk:** Given TRE's high quality investment portfolio, TRE has been largely shielded from the worst effects of recent global stock market large-scale declines. Management continues to monitor the impact of the volatile investment markets and will take proactive steps to ensure TRE's investment portfolio remains resilient to the current investment market volatility.

**Operational Risk:** TransRe and TRE maintain comprehensive and well tested contingency plans which allow us to run the business effectively during times of operational stress. TRE has followed different governments' directives and asked employees to minimise their travel; consequently, all TRE staff are working remotely, and we anticipate that this will continue for some time. During this time, regular meetings are held between TRE's senior management team and with TransRe's senior executive team to ensure business processes continue to operate effectively.

All TRE staff have access to TransRe's and TRE's IT infrastructure remotely. Essential business interactions with staff, clients and brokers continue digitally and all business-critical processes are reviewed regularly to ensure deadlines can be met. Although there will be some operational inconvenience, TRE remains well positioned to support its key stakeholders including its staff, clients and brokers during this stressed time.

#### **Risk Sensitivity**

TRE's SCR coverage ratio as at 31 December 2019 is 185.1%. The below table shows the absolute change in the coverage ratio under several hypothetical scenarios.

*Figure 21: SCR coverage ratio sensitivity analysis*

<b>Scenario</b>	<b>% change to coverage ratio</b>
Exchange rates: +10%	-9%
Exchange rates: -10%	9%
Interest rates: +1%	-3%
Interest rates: -1%	3%
Credit spreads: +1%	-4%
Credit spreads: -1%	4%
Catastrophe loss: €100m net of all reinsurance	-73%

TRE does not consider there to be any other material information to disclose on its risk profile.



## D. Valuation for solvency purposes

TRE's Solvency II assets and liabilities are presented on an economic basis consistent with the "fair value" accounting concept. TRE prepares its statutory financial statements in accordance with Lux GAAP.

TRE's statutory valuation is used where consistent with Solvency II's economic basis. Assets and liabilities measured at cost or amortised cost in TRE's financial statements have been revalued to economic value. Solvency II also requires specific valuation approaches for some assets and liabilities; these have been followed.

TRE exercises judgement in selecting each of its accounting policies. The law on "Accounts of insurance and reinsurance undertakings" from 8 December 1994 (as amended from time to time) require management to select suitable accounting policies, apply them consistently and make judgements and estimates that are reasonable and prudent when preparing the financial statements, and TRE has followed a consistent approach in selecting its valuation approaches for Solvency II. These judgements and estimates are based on management's knowledge as well as current factors and circumstances that may impact business performance, together with appropriate predictions of future events and actions. Actual results may differ from those estimates, possibly significantly. To the extent that actual experience differs from the assumptions used, TRE's financial position, results of operations and cash flows could be materially affected.

The following sections describe the approaches used by TRE for valuing its assets and liabilities.

### D.1 Assets

The material classes of assets shown on TRE's Solvency II Balance Sheet, their Solvency II values and corresponding values shown in TRE's financial statements (all in US\$) are summarised in the table below.

Figure 22: Summary assets as at 31 December 2019

US\$'000s	Solvency II	Financial statements	Difference
<i>Investments (including accrued interest)</i>			
Government bonds	201,749	195,280	6,469
Corporate bonds	238,257	227,986	10,271
Collateralised securities	45	44	1
Collective Investments Undertakings	11,254	9,812	1,442
<i>Reinsurance recoverable</i>			
Non-life excluding health	322,645	431,578	-108,933
Health similar to non-life	1,921	2,848	-927
Deposits to cedants	221,352	221,352	-
<i>Total receivables</i>			
Insurance and intermediaries receivables	-	57,327	-57,327
Reinsurance receivables	34,392	34,434	-42
Receivables (trade, not insurance)	2,184	404	1,780
Cash and cash equivalents	292,069	292,069	-
Any other assets, not elsewhere shown	1,074	1,074	-
<b>Total assets</b>	<b>1,326,942</b>	<b>1,474,207</b>	<b>-147,265</b>

The following sections provide further details on the specific valuation policies that TRE has applied to produce its Solvency II balance sheet, explaining the differences between these and the financial statement values set out within the table above.



## Financial instruments

### Recognition and derecognition of investments

A financial asset is initially recognised on the date TRE becomes committed to purchase the asset at its fair value plus directly related acquisition costs. A financial asset is de-recognised when TRE's rights to receive cash flows from the asset have expired or where the risks and rewards of ownership have been substantially transferred by TRE.

### Fair value of investments

TRE defines fair value as the price that would be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between willing, able and knowledgeable market participants as at the measurement date.

All TRE's investment assets recorded at fair value under Solvency II are measured and classified in a hierarchy. TRE applies the IFRS 13 fair value hierarchy as described below for all financial assets and liabilities, which is consistent with the one defined in the Solvency II Regulations. This hierarchy consists of three levels based on the observability of inputs available in the marketplace and is used to classify the fair values as discussed below:

- Level 1: Fair value measurements that are quoted prices in active markets that the Company has the ability to access for identical assets. Market price data is generally obtained from exchange or dealer markets.
- Level 2: Fair value measurements based on inputs other than quoted prices included in Level 1 that are observable for the asset, either directly or indirectly. Level 2 inputs include quoted prices for similar assets in active markets and inputs other than quoted prices that are observable for the asset, such as interest rates and yield curves that are observable at commonly quoted intervals.
- Level 3: Fair value measurements based on valuation techniques that use significant inputs that are unobservable. These measurements may be made under circumstances in which there is little, if any, market activity for the asset. Further information on alternative valuation methods is included in Section D4.

TRE's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgement. In making the assessment, TRE considers factors specific to the asset. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the investment's level in the fair value hierarchy is determined by the lowest level input that is significant to the measurement of the investment's fair value.

### Impairment

TRE assesses the valuation of its investment portfolio on a regular basis. Impairments are considered if the market value is significantly below the cost value. An investment is further analysed based on qualitative principles e.g. rating downgrade of the issuer of the security, credit default, hair-cut on the principles, etc.

### Valuation differences between the Solvency II and Lux GAAP balance sheets

TRE considers its policy on the fair value of investments, as described above, to be consistent with the hierarchy of valuation methods required for Solvency II for both assets and liabilities within the balance sheet. All investments in TRE's investment portfolio as at 31 December 2019 are carried at fair value.

On a statutory basis, fixed income securities are valued based on amortised costs, the investment fund is based on the initial cost value. The amortisation of discount and premium on fixed income securities is recognised under the net investment income.

Additionally, the value of investments in the Solvency II balance sheet includes interest accrued since the last coupon payment, while the statutory financial statements disclose accrued interest separately.



### Fair value sources and use of pricing vendors

TRE uses New England Asset Management to provide fair value pricing of its investments.

Although TRE outsources the portfolio valuation function to its pricing vendor and investment accountant, TRE is responsible for ensuring that the valuation methods and assumptions they employ provide reliable fair values.

### Reinsurance recoverable

For the differences in the valuation methodology between Lux GAAP and Solvency II see Section D2.

### (Re)insurance and intermediaries receivable and payables

Insurance and reinsurance receivables and payables are recognised on a Solvency II basis once notified as due for payment. These include amounts due to and from insurers, retrocessionaires, agents and brokers. Receivables and payables are recognised at the amount expected to be received or paid when due. Due to the short-term nature of TRE's (re)insurance receivables and payables, amounts are not discounted on a either a Lux GAAP or Solvency II basis.

The presentation of (re)insurance receivables and payables on the Solvency II balance sheet differs from TRE's statutory financial statements. (Re)insurance receivables and payables for financial reporting purposes include estimated premiums and commissions, which are included in technical provisions in the Solvency II balance sheet as they are not yet due.

### Other receivables (trade not insurance)

The valuation and presentation of TRE's other receivables and payables, in the Solvency II balance sheet, is consistent with the treatment for TRE's statutory financial statements. TRE's other receivables are considered to be short term and therefore do not need to be discounted.

### Cash and cash equivalents

Cash and cash equivalents comprises cash in hand and on demand deposits with banks. Cash balances held in accounts with investment fund managers and custodians are treated as cash equivalents.

### Foreign currency transactions and balances

TRE presents its financial statements and Solvency II reporting in US dollars, which is TRE's primary functional currency. TRE applies a consistent policy for translating transactions and balances in currencies other than the relevant currency of presentation between its financial statements and Solvency II reporting.

Foreign currency transactions are accounted for at the exchange rates prevailing at the date of the transactions. For TRZ gains and losses resulting from the settlement of such transactions, and from the translation of monetary assets and liabilities denominated in non-US\$ currencies, are recognised in the income statement.

### Leasing arrangements

TRE had no operating or financial leasing arrangements during 2019.

## D.2 Technical provisions

TRE holds technical provisions to represent the current amount it would have to pay for an immediate transfer of its obligations to another insurer. The technical provisions are comprised of two key elements:

- Best estimate liabilities ("BEL") are the probability weighted average of future cash flows, discounted back to the relevant balance sheet date using risk free discount rates. These include all of the relevant cash inflows and outflows to meet the requirements of the policies TRE is obligated to at the valuation date.
- The risk margin represents an allowance for the cost of capital necessary to support the policies TRE is obligated to at the valuation date over their lifetime. It is calculated by taking 6% of future capital



requirements attributable to the policies and discounting back to the relevant balance sheet date using risk free discount rates.

TRE calculates its technical provisions using the sum of the best estimate liability (“BEL”) and risk margin, therefore:

$$\text{Technical Provisions} = \text{Best Estimate Liability} + \text{Risk Margin}$$

### Segmentation into lines of business

BELs are segmented into twelve lines of business for non-life insurance obligations (with additional segmentation for non-proportional reinsurance accepted), three lines of business for health insurance obligations pursued on a similar basis to non-life insurance (with additional segmentation for non-proportional reinsurance accepted) and one line of business for life reinsurance. TRE has no non-life nor life annuities and therefore there is no line of business disclosed for this category.

Lines of business for financial reporting purposes under Lux GAAP are mapped to Solvency II lines of business according to “sub-department” classification in TRE’s technical accounting system. The mapping is subject to allocations for certain sub-departments, which include private and commercial motor and multi-class lines of business. With the exception of these allocations, the sub-departments and Solvency II lines of business are in one-to-one correspondence.

*Figure 23: Technical provisions by Solvency II line of business as at 31 December 2019*

Solvency II line of business (US\$'000s)	Gross Best Estimate	Recoverable	Net	Risk Margin	Net TPs
Medical expenses insurance	19,706	-1,663	18,044	1,339	19,383
Income protection insurance	519	-9	510	38	548
Motor vehicle liability insurance	37,232	42	37,274	2,767	40,041
Other motor insurance	6,728	-5	6,722	499	7,221
Marine, aviation and transport insurance	14,983	-311	14,672	1,089	15,761
Fire and other damage to property insurance	51,737	-8,381	43,356	3,218	46,574
General liability insurance	93,429	313	93,742	6,958	100,700
Credit and suretyship insurance	8,321	1,585	9,906	735	10,642
Non-proportional health reinsurance	7,049	-249	6,801	505	7,305
Non-proportional casualty reinsurance	67,966	-527	67,439	5,006	72,445
Non-proportional marine, aviation and transport reinsurance	2,175	-253	1,922	143	2,065
Non-proportional property reinsurance	351,820	-315,108	36,712	2,725	39,438
Life reinsurance	15,862	-	15,862	1,177	17,039
<b>Total</b>	<b>677,528</b>	<b>-324,565</b>	<b>352,962</b>	<b>26,200</b>	<b>379,162</b>

### Technical provisions bases, methodologies and key assumptions

#### Basis

TRE uses the Lux GAAP financial reporting framework as the starting basis for determining the Solvency II technical provisions.

The following sections outline the key methodologies and assumptions in determining the technical provisions. Where relevant, adjustments to the Lux GAAP basis to move to the Solvency II basis are highlighted.





Figure 24: Lux GAAP to Solvency II reconciliation as at 31 December 2019

Solvency II line of business (US\$'000s)	Assumed	Ceded	Net
<b>Lux GAAP Technical Provisions</b>	<b>838,411</b>	<b>-434,425</b>	<b>403,985</b>
Add contingent acquisition costs	-7,167	-42	-7,209
Reserving margins	-9,926	-5,421	-15,346
Future premiums & acquisition costs	-76,410	46,908	-29,502
Future other expenses	7,831	-	7,831
Legally obliged unaccepted business	-18,380	12,183	-6,198
Discounting	-56,830	55,446	-1,384
Counterparty default	-	785	785
<b>Solvency II Best Estimate</b>	<b>677,528</b>	<b>-324,565</b>	<b>352,962</b>
Risk margin			26,200
<b>Solvency II Technical Provisions</b>	<b>677,528</b>	<b>-324,565</b>	<b>379,162</b>

Figure 25: Lux GAAP to SII reconciliation of gross technical provisions for top 5 Solvency II lines of business as at 31 December 2019

Solvency II Line of Business Gross (US\$'000s)	Medical expense (Prop)	Motor Vehicle Liability (Prop)	Fire and other damage to property insurance (Prop)	Reinsurance property (Non-prop)	Life reinsurance	Other	Total
Lux GAAP technical provisions	28,009	49,730	55,763	473,530	15,861	215,518	<b>838,411</b>
Contingent commission costs	-1,635	-2,270	-202	38	-	-3,098	<b>-7,167</b>
Reserving margins	-1,389	-2,003	-943	-3,385	-	-2,206	<b>-9,926</b>
Future premiums & acquisition costs	-7,958	-9,001	-5,279	-46,364	-	-7,808	<b>-76,410</b>
Future other expenses	1,255	1,037	853	3,043	-	1,642	<b>7,831</b>
Legally obliged unaccepted business	1,826	94	1,499	-19,990	-	-1,810	<b>-18,380</b>
Discounting	-403	-355	45	-55,052	-	-1,066	<b>-56,830</b>
Counterparty default	-	-	-	-	-	-	<b>-</b>
<b>Solvency II best estimate</b>	<b>19,706</b>	<b>37,232</b>	<b>51,737</b>	<b>351,820</b>	<b>15,861</b>	<b>201,171</b>	<b>677,528</b>
Risk margin	1,339	2,767	3,218	2,725	1,177	14,973	<b>26,200</b>
<b>Solvency II technical provisions</b>	<b>21,046</b>	<b>39,999</b>	<b>54,955</b>	<b>354,545</b>	<b>17,039</b>	<b>216,144</b>	<b>703,728</b>

Included within "other" are General liability insurance which has gross Lux GAAP technical provisions of US\$ 94,271k (SII best estimate: US\$ 93,429k), non-proportional casualty reinsurance of US\$ 69,075k (SII best estimate: US\$ 67,966k) and marine, aviation and transport (proportional and non-proportional) of US\$ 19,150k (SII best estimate: US\$ 17,158k).





Figure 26: Lux GAAP to SII reconciliation of net technical provisions for top 5 Solvency II lines of business as at 31 December 2019

Solvency II Line of Business Net (US\$'000s)	Medical expense (Prop)	Motor Vehicle Liability (Prop)	Fire and other damage to property insurance (Prop)	Reinsurance property (Non-prop)	Life reinsurance	Other	Total
Lux GAAP technical provisions	25,430	48,141	55,244	46,279	15,861	213,030	403,985
Contingent commission costs	-1,502	-2,163	-203	-204	-	-3,138	-7,209
Reserving margins	-1,408	-1,473	-8,211	-3,277	-	-977	-15,346
Future premiums & acquisition costs	-6,241	-8,019	-4,969	-2,829	-	-7,444	-29,502
Future other expenses	1,255	1,037	853	3,043	-	1,642	7,831
Legally obliged unaccepted business	748	38	593	-6,938	-	-639	-6,198
Discounting	-243	-288	45	-117	-	-780	-1,384
Counterparty default	5	2	3	754	-	21	785
<b>Solvency II best estimate</b>	<b>18,044</b>	<b>37,274</b>	<b>43,356</b>	<b>36,712</b>	<b>15,861</b>	<b>201,714</b>	<b>352,962</b>
Risk margin	1,339	2,767	3,218	2,725	1,177	14,973	26,200
<b>Solvency II technical provisions</b>	<b>19,383</b>	<b>40,041</b>	<b>46,574</b>	<b>39,438</b>	<b>17,039</b>	<b>216,687</b>	<b>379,162</b>

#### BEL calculation method

The BEL is calculated as the sum of the following two components:

#### *Claims provision*

TRE holds a claims provision that relates to claims events that are already incurred, regardless of whether these claims have been reported or not. The provision includes all cash flows associated with future benefits, expenses and premiums related to the claim events. TRE considers the expected incidence and cost of future claims, including infrequent, high severity claims and latent claims. The best estimate claims provision is calculated as:

- the best estimate of outstanding losses, and any expenses in loss adjustment (Loss Adjustment Expenses, "LAE");
- plus the best estimate of incurred-but-not-reported claims ("IBNR") based on earned premiums;
- plus the best estimate of unpaid non-contingent acquisition costs that have been incurred;
- plus the best estimate of unpaid contingent commission on earned premiums;
- plus the best estimate of unpaid other expenses that have been incurred;
- less the best estimate of unpaid premiums that have been earned.

Further information on the calculation of these items is discussed in the following sections.

#### *Premiums provision*

TRE holds a premium provision for events which may happen in the future that fall within the contract boundary. The provision includes all cash flows associated with all future premiums, claims and expenses



related to these events. TRE considers the expected incidence and cost of future claims, including infrequent, high severity claims and latent claims. The best estimate premium provision is calculated as:

- the best estimate of IBNR claims based on unearned premiums;
- plus the best estimate of unpaid non-contingent acquisition costs that have not been incurred;
- plus the best estimate of unpaid contingent acquisition costs based on unearned premiums;
- plus the best estimate of unpaid other expenses based on unearned premiums;
- less the best estimate of unpaid premiums that have not been earned.

Further information on the calculation of these items is discussed in the following sections.

#### Methodologies for loss reserves and IBNR

The methods employed to estimate loss reserves include the following:

##### *Paid loss development, incurred loss development methods*

In the loss development methods, paid and incurred losses are projected to the time period by which the liabilities are extinguished (known as the 'ultimate' time period) by applying appropriate development factors to the inception-to-date paid and incurred losses to date.

##### *Paid Bornhuetter-Ferguson ("BF") and incurred BF methods*

In the Bornhuetter Ferguson methods, estimates of unpaid and unreported losses based on earned premiums (on an ultimate basis) are calculated by multiplying earned or ultimate premiums for each contract by an expected loss ratio ("ELR") and an estimated percentage of unpaid or unreported losses. The percentages of unpaid or unreported losses are derived from the loss development factors described below.

In establishing reserves for IBNR losses, three key actuarial judgements are used to project losses:

- Loss development factors ("LDF") – these are used to arrive at the ultimate amount of losses incurred for each underwriting year based on reported loss information. These factors, which are calculated initially based on historical loss development patterns (i.e. the emergence of reported losses over time relative to the ultimate losses to be paid), may then be adjusted for current trends.
- Loss trend factors ("LTF") – these typically focus on any underlying trends which may progress through the projection into the future, such as provisions for inflation, including social inflation (awards by judges and juries which increase progressively in size at a rate exceeding that of general inflation) and trends in court interpretations of coverage.
- Expected loss ratios ("ELR") – for the latest underwriting years these generally reflect the ELRs from prior underwriting years adjusted for LTFs, as well as the impact of changes in rating strength and other quantifiable factors.

These methods yield an indication of the ultimate losses for each underwriting year. The IBNR reserve is then determined by subtracting the reported losses from the indicated ultimate losses.

Estimates of reserves for IBNR claims take into account a number of assumptions with respect to factors that will affect ultimate losses. The techniques TRE uses (described above) are employed to estimate ultimate losses, including the delay between the claim being reported to the insurer, and the insurer reporting the claim to TRE. Expert judgement is employed to select the most appropriate method, particularly when the delays previously identified within the data fluctuate between claims.

During the loss settlement period, additional facts regarding individual claims and trends will emerge. As these facts and trends emerge, it usually becomes necessary to refine and adjust the loss reserves upward or downward; and even then the ultimate net liability calculated by TRE may be materially different from the original estimates. There is potential for significant variation in the development of loss reserves when actual costs differ from those costs implied by the use of the assumptions employed in the process of setting reserves.



#### Methodologies for expired and unexpired periods of coverage

With respect to expired periods of coverage, IBNR amounts calculated under Lux GAAP are intended to reflect undiscounted best estimates of unpaid and unreported obligations, without margins for prudence.

With respect to unexpired periods of coverage, the valuation of technical provisions under Solvency II includes future cash flows with respect to premiums, losses (including claims management costs) and acquisition costs. Consequently, differences arise between the valuation of technical provisions in the Lux GAAP financial statements of TRE and the corresponding valuation of technical provisions for Solvency II.

The estimation of unpaid and unreported losses arising from unexpired periods of coverage is based on the same principles underlying the corresponding calculations for expired periods of coverage. TRE estimates ultimate losses for each contract by multiplying:

- ultimate premiums calculated for each contract, by
- the expected loss ratio; and
- an estimated percentage of unpaid or unreported losses.

The percentages of unpaid or unreported losses are derived from loss development factors and the indicated IBNR reserve is then determined by subtracting the reported losses from the indicated ultimate losses.

#### Future premiums & acquisition costs

Under Lux GAAP, unpaid premiums and acquisition costs are shown separately on the balance sheet at the accounting date as insurance and reinsurance receivables and payables.

Under Solvency II, the cash flows in respect of future claims are reduced by the amount of expected future premium cash inflows and increased by the amount of expected future acquisition costs cash outflows.

#### Future other expenses

Under Lux GAAP, unpaid other income or expenses are shown separately on the balance sheet at the accounting date as other receivables or payables as appropriate.

Under Solvency II, technical provisions are increased by the amount of expected future cash outflows in respect of other expenses. TRE estimates the reserves for other expenses, as:

- other acquisition costs;
- claims management costs;
- general administration costs;
- overhead costs; and
- investment management costs.

Undiscounted best estimates of unpaid other expenses are then allocated by contract and Solvency II line of business and discounted back to the valuation date using risk free rates.

The starting point for the calculation of the future other expense cash flows is historical data for the payment of other expenses by calendar period. TRE calculates paid claims management costs and investment management costs, expressed as percentages of paid and incurred losses, and paid other acquisition costs, general administration costs and overhead costs, expressed as percentages of linear combinations of paid and written premiums. Best estimates of unreported claims management costs and investment management costs are then calculated by multiplying the relevant percentages by linear combinations of outstanding and IBNR losses. Best estimates of unreported other acquisition costs, general administration costs and overhead costs are calculated by multiplying the relevant percentages by linear combinations of accrued and unreported premiums.

#### Legally obliged unaccepted business

At any given time, TRE may have contracts that have been written but have not yet incepted (i.e. the cover has not yet commenced). For example, a contract that was bound on 28 December 2019 which incepts on 1 January 2020 would be included within legally obliged unaccepted business at 31 December 2019.



Under Lux GAAP, the valuation of insurance reserves does not include legally obliged unaccepted contracts.

Under Solvency II, cashflows arising from these contracts are included within the premium provision. The calculations of technical provisions relating to legally obliged unaccepted business use the same principles as the calculations for existing business; estimates of ultimate losses for each contract are obtained by multiplying ultimate premiums by an expected loss ratio for the forthcoming underwriting year. Expected loss ratios for forthcoming underwriting years are generally calculated based on the expected loss ratios from prior underwriting years, with adjustments to allow for loss trend factors and other quantifiable factors.

#### Events not in data

TRE accounts for events not in data (“ENID”) using a scenario approach, based on the business profile and data available.

TRE has more than 40 years of credible claims experience, which is used to derive assumptions. This historical claims experience contains many significant natural and man-made catastrophe losses.

Natural and man-made catastrophe scenarios, with associated severities and return periods, are established using expert judgement through discussions with underwriters and the catastrophe modelling team.

These scenarios, along with the historic data, are used in the selection of actuarial assumptions underlying the calculation of technical provisions for both solvency purposes and for the valuation in financial statements. As a result, ENID are implicitly included in underlying reserving patterns.

The specific ENID claim and premium provisions are split out using calculated factors for each line of business.

#### Discounting

Technical provisions are not discounted under Lux GAAP.

Under Solvency II, TRE calculates best estimates separately for obligations in different currencies using the relevant risk-free term structures of interest rates prescribed by EIOPA. The set of currencies for which spot discount curves are provided by EIOPA form a subset of the complete table of currencies defined in the accounting system of TRE. Where, for a given currency, spot discount curves are not provided by EIOPA, the spot discount curve for US dollars is used by default or, if deemed material to the calculation of fair values, the relevant term structure determined according to the methodology specified in the Solvency II technical specifications.

The allocation of unpaid cash flows to different currencies with respect to premiums, losses, acquisition costs and other expenses is estimated for each contract based on corresponding historical allocations of inception-to-date cash flows and accruals, and other relevant information.

Development factors of paid premiums, losses and acquisition costs are used to separate expected future cash flows into incremental amounts in future calendar periods. Incremental expected cash flows are then discounted at the risk-free discount rate applicable for the relevant maturity at the accounting date. Discounting estimates of unpaid other expenses for the time value of money is based on development patterns of paid premiums for other acquisition costs, general administration costs and overheads; and paid losses for claims management costs and investment management costs.

#### Counterparty default

TRE does not adjust the technical provisions calculated under Lux GAAP for potential counterparty default.

Under Solvency II, the calculations of ceded technical provisions are adjusted to reflect the potential for default events, which are defined to occur whenever counterparties fail to meet all of their obligations in full, whether arising from insolvency or dispute. The adjustment, which is given by the expected present value of the change in cash flows underlying the amounts recoverable, is calculated by multiplying:

$$\text{Probability of default} \quad x \quad \text{Loss given default}$$



These are defined as follows:

- Probability of default — cash flows are adjusted to reflect the likelihood of default at different time periods, considering that cumulatively, counterparties are more likely to default as time moves on. The distribution of the time of default is assumed to have an exponential distribution, calibrated according to credit quality and the corresponding probability of default over one year. The derivation of credit quality is based on official credit ratings corresponding to those attributed by a commercial rating agency such as A.M. Best, S&P, Moody's and Fitch, where such credit ratings are available. Where more than one official credit rating is available for a counterparty, the second-highest credit quality step is used.
- Loss given default — this is the estimated impact of the default. Unless reliable estimates of these losses are available, the adjustment is calculated using an assumed loss of 50%. TRE does not adjust the amounts recoverable to allow for deposits or collateralisation arrangements.

#### Risk margin

The risk margin is calculated as the present value of future SCRs, multiplied by the prescribed rate for the cost of capital of 6% per annum, as determined by Solvency II regulation.

The following risks from the SCR are projected into the future:

- insurance risk (both reserve and premium risk) with respect to obligated business, whether inception or not;
- counterparty default risk;
- operational risk; and
- unhedgeable or unavoidable market risk.

The cost of capital at each time period is discounted back to the valuation date using the risk free rate.

#### Reinsurance arrangements within the technical provisions

Under Solvency II, TRE reflects the value of reinsurance agreements where risk is ceded to a third party (which includes consideration of the counterparty default calculations above) within the technical provisions. This allows TRE to denote a technical provision figure net of reinsurance.

#### *Existing reinsurance*

TRE employs both proportional and non-proportional retrocession.

With respect to proportional retrocession, outwards premiums and recoveries are calculated and included on the basis of correspondence, i.e. future premiums are included only to the extent that any associated liabilities are also included in the technical provisions. If a contractual liability does not exist, then the associated future premium cash flows are not taken into account within the valuation of technical provisions under Solvency II.

With respect to existing non-proportional retrocession, the calculation of recoverables is based on the principle of correspondence, but future premiums are subject to contractual minimums.

#### *Future reinsurance purchases*

To the extent that TRE has a history of renewing outwards non-proportional retrocession, the purchase of future outwards retrocession is assumed in the assessment of technical provisions under Solvency II. In particular, expected cash flows arising from future retrocession that will cover existing inwards contracts, but have not yet been purchased at the valuation date, are included in the valuation of the best estimate according to the principle of correspondence.

#### Uncertainty within the technical provisions

TRE writes a variety of coverages whose major risk factors materially impact the variability of TRE's loss reserves. In particular, TRE's portfolio has exposure to long-tail casualty lines of reinsurance business



including some high excess layers of coverage in volatile long-tail classes such as professional indemnity and directors and officers.

At the primary insurance level (i.e. the insurer as opposed to reinsurer level), there are significant risk factors which contribute to the variability and unpredictability of loss cost trends and loss emergence patterns. As a reinsurer, TRE faces additional risk factors arising from its dependence upon the claims reserving and reporting practices of its cedants, which vary greatly by size, specialisation, degree of sophistication, and country of operation, and are subject to change without notice.

It is also inherently more difficult for reinsurers to quantify unpaid liabilities under long-tail coverages because it takes longer for credible loss experience to emerge compared to the initial writer of the risks. Similarly, the loss experience under non-proportional coverages can take relatively longer to emerge. TRE's portfolio includes exposure to high excess liability layers and casualty lines of business, for which loss cost trends are especially difficult to assess. In addition, a reinsurer's loss experience may vary due to a concentration of small risks occurring close together, which can impact several layers of coverage across different lines of business and across different cedants.

The variability in the loss cost trends, the difficulty inherent in estimating developing losses and infrequent but high impact events, and the correlation across reinsurance coverages and cedants all contribute to the risk of material uncertainty and deviation in TRE's loss reserves.

TRE continually assesses the reserve adequacy of IBNR in light of the following factors:

- current levels of reserves for reported claims and expectations with respect to reporting lags;
- catastrophe events;
- historical data;
- legal developments; and
- economic conditions, including the effects of inflation.

The actuarial methodologies employed to calculate loss and IBNR development incorporate the inherent lag from the time claims occur to when they are reported to an insurer and to when the insurer reports the claims to their reinsurers. Certain actuarial methodologies may be more appropriate than others in instances where this lag may not be consistent from period to period. Consequently, additional actuarial judgement is employed in the selection of methodologies to best incorporate that potential impact. Information gathered through underwriting and claims audits is also considered.

The estimation of TRE's loss reserves is made more difficult and subjective in view of changing legal and economic environments that impact the development of claims. Such factors, both internal and external, which contribute to the variability and unpredictability of loss costs, include:

- trends relating to jury awards;
- social trends;
- medical inflation;
- worldwide economic conditions;
- tort reforms;
- court interpretations of coverages;
- the regulatory environment;
- underlying policy pricing;
- terms and conditions; and
- claims handling.

Consequently, quantitative techniques are frequently supplemented by subjective considerations and expert judgement. In addition, TRE is mindful that trends that have affected development of liabilities in the past may not necessarily occur or affect liability development to the same degree in the future. Owing to the inherent uncertainties in the process of establishing these liabilities, the actual ultimate loss from a claim is likely to differ, perhaps materially, from the liability initially recorded.



The uncertainty inherent in estimating IBNR relating to unexpired periods of coverage is exacerbated by the application of the same underlying valuation techniques to the calculation of technical provisions in respect of unexpired periods of coverage, including obligations arising from legally obliged unaccepted business.

With respect to unexpired periods of coverage, TRE's loss reserves include exposure to extreme or exceptional events, both natural and man-made. Unexpired periods of coverage relating to property and casualty reinsurance contracts of TRE cover unpredictable events, including exposures to natural catastrophes such as:

- hurricanes;
- windstorms;
- tornadoes;
- earthquakes;
- floods; and
- other natural disasters;

and man-made catastrophes such as:

- fires;
- industrial explosions;
- marine and aviation accidents
- riots; and
- other man-made disasters, including those that may result from terrorist activity.

Management expects that the loss experience of TRE will include infrequent events of great severity from time to time and the occurrence of losses from such events will cause substantial volatility in the financial results of TRE.

The frequency and severity of catastrophe losses are inherently unpredictable. Insured losses arising out of a single occurrence have the potential to impact a wide range of lines of business.

The severity of catastrophe losses is subject to a high level of uncertainty arising out of extremely complex causation and coverage issues, which can include:

- attribution of losses to different perils;
- potential legal and regulatory developments related to losses; and
- inflation in repair costs owing to the limited availability of labour and materials after the occurrence of catastrophic events.

With respect to discounting for the time value of money, the difficulty inherent in estimating the currency and timing of future cash flows, including tail factors for long-tail classes of business, contribute to the risk of adverse deviation in the technical provisions of TRE.

#### Sensitivity analysis for technical provisions

The following table considers sensitivities on the key assumptions underlying the technical provisions and shows the percentage change in gross technical provisions for each of these sensitivities.

*Figure 27: Technical provision sensitivities as at 31 December 2019*

	Exchange Rates		Interest Rates		Reserving Assumptions*	
Key assumptions	10%	-10%	1%	-1%	5%	-5%
Technical provisions	5%	-5%	-6%	5%	6%	-6%

\* This sensitivity includes a +/-5% change to the ELR assumptions along with an adjustment of +/- 5% to the tail of the loss development.





### Exclusions from technical provisions

There are a number of additional aspects of the Solvency II regime that firms can apply for:

#### *Matching adjustment*

TRE does not use the matching adjustment within the calculation of technical provisions.

#### *Volatility adjustment*

The volatility adjustment to risk free rates is not used by TRE in the calculation of technical provisions.

#### *Transitional measures to Technical Provisions*

TRE does not apply any transitional arrangements to the Solvency II balance sheet.

#### *Transitional risk-free interest rate-term structure*

TRE does not apply the transitional risk-free interest rate term structure in the calculation of technical provisions.

### **D.3 Other liabilities**

The material classes of other liabilities shown on TRE's Solvency II balance sheet, their Solvency II values and corresponding values shown in the 2019 financial statements are summarised in the table below.

*Figure 28: Other liabilities – Lux GAAP & Solvency II reconciliation as at 31 December 2019*

(US\$'000s)	Solvency II	Financial Statements	Difference
Deposits from reinsurers	195,266	195,266	-
Deferred tax liabilities	1,968	-	1,968
Insurance and intermediary payables	26,302	-	26,302
Reinsurance payables	7,720	54,628	-46,908
Payables (trade, not insurance)	-	1,278	-1,278
<b>Total other liabilities</b>	<b>231,256</b>	<b>251,173</b>	<b>-19,917</b>
Technical provisions	703,728	838,411	-134,683
<b>Total liabilities</b>	<b>934,983</b>	<b>1,089,584</b>	<b>-154,600</b>

The main valuation differences between Solvency II and financial statement balances presented in figure above are as follows:

- reinsurance payable include technical accruals, but for Solvency II technical provisions are subsumed within technical provisions;
- trade payables include accrued "other expenses" but for Solvency II, accrued "other expenses" are subsumed within technical provisions;
- deferred tax liabilities on valuation differences due to the differing treatment of investment valuation; and,
- technical provisions differences arise due to the differing treatments of technical accruals and accrued other expenses referred to above.

TRE has no financial or operating lease arrangements.

The following sections provide further details on the specific valuation policies that TRE has applied to produce its Solvency II balance sheet.

#### **(Re)insurance and intermediaries payable**

Please see Section D1 (Re)insurance and intermediaries receivable.



**Payables (trade not insurance)**

Please see Section D1 Other receivables (trade not insurance). The reduction in payables under Solvency II relates to accrued insurance related expenses not yet due, which have been moved to technical provisions (see Figure 23).

**Provisions**

At 31 December 2019, TRE held no provisions in its Financial Statements or on its Solvency II balance sheet.

**Contingent liabilities**

TRE does not consider any contingent liabilities exist as at 31 December 2019.

**Employee benefits**

TRE does not consider any employee benefit liabilities exist as at 31 December 2019.

**Aggregation of liabilities**

TRE does not aggregate liabilities into material classes other than those reported in the balance sheet QRT (S.02.01.02).

**D.4 Alternative methods for valuation**

Further information on alternative methods used for the valuation of assets is included in D.1 under “Fair value of investments”. There are no alternative valuation techniques for any of those material classes of other liabilities described in D.3.

**D.5 Any other information**

TRE does not consider there to be any other material information to disclose on its valuation for solvency purposes.



## E. Capital management

### E.1 Own funds

TRE's own funds comprise mostly ordinary paid-up share capital and the share premium account which are classified as Tier 1 own funds.

In addition, TRE recognises a reconciliation reserve of US\$ 223.7 million which is classified as Tier 1 own funds. As at 31 December 2019, the available own funds of TRE were as follows:

*Figure 29: Eligible own funds by tier*

Tier	Instruments	At 31 December 2019 (US\$'000s)
Tier 1	Ordinary share capital	27,000
	Share premium account	132,957
	Reconciliation reserve	223,745
Tier 2	Not applicable	
<b>Total own funds to cover MCR</b>		<b>383,702</b>
Tier 3	Not applicable	
<b>Total own funds to cover SCR</b>		<b>383,702</b>

As at 31 December 2019, TRE had no ancillary own funds.

The reconciliation reserve of US\$ 223.7 million is calculated below and is dependent on the level of excess assets over liabilities, the values of Ordinary share capital and share premium account. The reconciliation reserve is not considered to be significantly volatile; however the potential for volatility does exist and is discussed in the sensitivity analyses provided in sections C.7 and D.2 of this report.

*Figure 30: Reconciliation Reserve*

Reconciliation Reserve	At 31 December 2019 (US\$'000s)
<b>Excess of assets over liabilities</b>	<b>391,958</b>
Less:	
Ordinary share capital	-27,000
Share premium account	-132,957
Restricted Own Fund items	-8,256
<b>Reconciliation reserve</b>	<b>223,745</b>

Every quarter TRE reviews its own funds against the MCR and SCR requirements. The review is undertaken by the Risk Management function and is presented to the Risk Management Committee and Risk & Audit Committee as part of the ongoing review process. Included in the analysis is a forward looking review that takes into consideration TRE's three year planning horizon. There have been no material changes to own funds during the year.

The overall objective of TRE, in relation to own funds, is to maintain a suitable buffer of Tier 1 capital above the SCR ensuring the levels of own funds within TRE are within its risk appetite.

As part of TRE's ORSA process (see Section B) a number of stress tests are undertaken to determine the impact on TRE's own funds and whether they would deteriorate below the required Tier 1 buffer.

TRE has a range of actions at its disposal, which are designed to mitigate the impact of any extreme or unusual scenarios causing its capital position to deteriorate. These include:

- the ability to call on additional capital under a Capital Maintenance Agreement with its parent company TRC;
- revisions to the TRE business plan, such as changes to the composition of business; and



- the purchase of additional retrocession.

As set out in TRE's Articles of Association, the Board has the ability to cancel any dividend or other distribution at any time before actual payment if they consider that payment of the dividend or other distribution would cause TRE to fail to meet any applicable capital or solvency requirement, including its SCR.

Below is an explanation of material differences between the net assets in TRE's 2019 Financial Statements and the excess of assets over liabilities as calculated for solvency purposes:

*Figure 31: Lux GAAP to Solvency II Reconciliation as at 31 December 2019*

	(US\$'000s)	Description
<b>Lux GAAP net assets</b>	<b>384,623</b>	
Change in:		
Investments	18,184	Adjustment on valuation of investments
(Re)insurance receivables and other receivables	-55,588	Estimated premium and contingent commission reserve not yet due moved to TPs
(Re)insurance recoverable	-109,860	Adjustment from reinsurer's share of statutory insurance reserves to Solvency II TPs
(Re)insurance payables	20,606	Estimated premium and contingent commission reserve not yet due moved to TPs
Other payables	1,278	Accrued insurance related expenses not yet due moved to TPs
Technical provisions	160,883	Adjustment from statutory insurance reserves to Solvency II TPs
Deferred tax liabilities	-1,968	Adjustment from statutory insurance reserves to Solvency II TPs
Risk margin	-26,200	Inclusion of Solvency II risk margin
<b>Solvency II excess of assets over liabilities</b>	<b>391,958</b>	

The principal differences between Lux GAAP and Solvency II own funds are due to differences in technical provisions and the inclusion of the risk margin. The differences in (re)insurance payables and receivables and other payables are due to the removal of estimated premium, accruals and/or contingent commission reserves, which are contained within the Solvency II technical provisions.

Please see Section D1 for further information on the valuation of assets under Solvency II, Section D2 for a reconciliation between the Lux GAAP and Solvency II technical provisions and Section D3 for other liabilities.

A reduction to own funds (via the reconciliation reserve) is made for any restricted own fund items within a ring-fenced fund. TRE has deposits to cedants a portion of which represents ring-fenced funds. Given their immateriality, TRE estimates the surplus assets in such deposits, and deducts them from eligible own funds as an adjustment to own funds for ring-fenced funds.

TRE has not applied to use any transitional measures for the calculation of own funds. Grandfathering is not required because all own funds items meet the Solvency II classification criteria.

TRE does not voluntarily disclose any other solvency ratios other than those reported on the own funds QRT (S.23.01).

## E.2 SCR and MCR

TRE uses the Solvency II Standard Formula ("SF") to calculate its SCR.



Figure 32: Solvency II capital requirements as at 31 December 2019

	2019 (US\$'000s)
Eligible Own Funds to cover SCR	383,702
Eligible Own Funds to cover MCR	383,702
Minimum Capital Requirement	52,299
Basic Solvency Capital Requirement	189,273
Operational risk	19,921
<b>Solvency Capital Requirement</b>	<b>209,194</b>
Market risk	59,369
Counterparty default risk	29,621
Life underwriting risk	17,500
Health underwriting risk	12,331
Non-life underwriting risk	142,186
less Diversification	-71,734
<b>Basic Solvency Capital Requirement:</b>	<b>189,273</b>
Non-life catastrophe risk	64,800
Non-life premium & reserve risk	110,325
Non-life lapse risk	16,478
less diversification	49,418
<b>Non-life underwriting risk:</b>	<b>142,186</b>

TRE's SCR amounted to US\$ 209.2 million as of 31 December 2019.

TRE does not use any undertaking specific parameters in the calculation of the SCR.

Simplifications have been used only where specified in the Solvency II Delegated Acts. The simplifications used by TRE are listed below:

- Article 107: simplified calculation of the risk mitigating effect for reinsurance arrangements or securitisation;
- Article 111: simplified calculation of the risk mitigating effect; and
- Article 112: simplified calculation of the risk adjusted value of collateral to take into account the economic effect of the collateral.

These simplifications relate to the counterparty default risk module.

No other simplifications are used by TRE in the calculation of the SCR.

The final amount of the Solvency Capital Requirement is still subject to supervisory assessment.



### **Calculation of the MCR**

In order to calculate the MCR, TRE uses the net written premiums on a Solvency II basis split by Solvency II line of business. Written premiums are defined in Article 1(11) of Delegated Regulation (EU) 2015/35 as the premiums due to be received by the undertaking during the period under consideration regardless of whether such premiums relate in whole or in part to insurance or reinsurance cover provided in a different time period.

The inputs applied to the calculation of the MCR are made up of the technical provisions (excluding the risk margin) and net written premiums over the last year (for line of business), together with the prescribed minimum (or “absolute floor”) and the most recently calculated SCR.

TRE’s linear MCR falls below the SCR corridor of between 25% and 45% of the SCR. Accordingly TRE’s MCR has been adjusted upwards to equal 25% of its SCR, as required by Solvency II.

There have been no changes to TRE’s business or operations, which would have resulted in a material change to the MCR or SCR calculation.

### **E.3 Use of the duration-based equity risk sub-module in the calculation of the SCR**

TRE does not use the duration-based equity risk sub-module to calculate the SCR.

### **E.4 Differences between the standard formula and any internal model used**

TRE does not use an internal model.

### **E.5 Non-compliance with the MCR and non-compliance with the SCR**

There have been no instances of non-compliance with the MCR and SCR by TRE.

### **E.6 Any other information**

TRE does not consider there to be any other material information to disclose regarding capital management.



## Appendix 1: Abbreviations used in this report

A.M. Best	A.M. Best Company, Inc. and/or its affiliates
Alleghany	Alleghany Corporation
BEL	Best Estimate Liabilities
BF	Bornhuetter-Ferguson
BlackRock	BlackRock, Inc and BlackRock Investment Management (UK) Limited
bps	Basis points (0.01%)
CAA	Commissariat aux Assurances
CCO	Chief Compliance Officer (New York)
CEO	Chief Executive Officer
CFO	Chief Financial Officer
Covid-19	2019 Novel Coronavirus
DFSA	Dubai Financial Services Authority
DIFC	Dubai International Financial Centre
EIOPA	European Insurance and Occupational Pensions Authority
ELR	Expected Loss Ratio
ENID	Events not in Data
EPIFP	Expected Profit included in Future Premiums
ERM	Enterprise Risk Management
EU	European Union
Fitch	Fitch Ratings, Inc., Fitch Ratings, Ltd. and its subsidiaries
GRM	Global Risk Management
IBNER	Incurred but not Enough Reported
IBNR	Incurred but not Reported
IFRS	International Financial Reporting Standards
IT	Information Technology
KYC	Know Your Counterparty
LAE	Loss Adjustment Expenses
LDF	Loss Development Factors
Lux GAAP	Generally Accepted Accounting Principles in Luxembourg
LTF	Loss Trend Factors
MCR	Minimum Capital Requirement
MENA	Middle East and North Africa region
Moody's	Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their affiliates
(NYSE: Y)	New York Stock Exchange
ORSA	Own Risk and Solvency Assessment
QRT	Quantitative Reporting Template
S&P	Standard & Poor's Financial Services LLC and/or its affiliates
SCR	Solvency Capital Requirement
SF	Standard Formula
SFCR	Solvency and Financial Condition Report
SII	Solvency II Directive
SPV	Special Purpose Vehicles



TPs	Technical Provisions
TransRe	Collective term for TRH, its subsidiaries, branches and representatives
TRC	Transatlantic Reinsurance Company
TRC Guarantee	The guarantee agreement described in Section B1
TRC Quota Share	The quota share reinsurance agreement described in Section B1
TRC Whole Account XL	The whole account excess of loss reinsurance agreement described in Section B1
TRH	Transatlantic Holdings, Inc.
TRE	TransRe Europe S.A.
US or USA	United States of America
US\$	United States of America Dollar
WHO	World Health Organisation



## Appendix 2: Public Quantitative Reporting Templates (QRTs)

Templates		
S.02.01.02	Balance Sheet	Relevant element
S.05.01.02	Premiums, claims and expenses by line of business	Other information
S.05.02.01	Premiums, claims and expenses by country	Other information
S.17.01.02	Life and Health SLT Technical Provisions	Relevant element
S.17.01.02	Non-Life Technical Provisions	Relevant element
S.23.01.01	Own funds	Relevant element
S.25.02.02	Solvency Capital Requirement – for undertakings on Standard Formula	Relevant element
S.28.01.01	Minimum Capital Requirement – Only life or only non-life insurance or reinsurance activity	Relevant element



S.02.01.02

Balance sheet

		Solvency II value
		C0010
<b>Assets</b>		
R0030	Intangible assets	0
R0040	Deferred tax assets	0
R0050	Pension benefit surplus	0
R0060	Property, plant & equipment held for own use	0
R0070	Investments (other than assets held for index-linked and unit-linked contracts)	451,306
R0080	<i>Property (other than for own use)</i>	0
R0090	<i>Holdings in related undertakings, including participations</i>	0
R0100	<i>Equities</i>	0
R0110	<i>Equities - listed</i>	0
R0120	<i>Equities - unlisted</i>	0
R0130	<i>Bonds</i>	440,051
R0140	<i>Government Bonds</i>	201,749
R0150	<i>Corporate Bonds</i>	238,257
R0160	<i>Structured notes</i>	0
R0170	<i>Collateralised securities</i>	45
R0180	<i>Collective Investments Undertakings</i>	11,254
R0190	<i>Derivatives</i>	0
R0200	<i>Deposits other than cash equivalents</i>	0
R0210	<i>Other investments</i>	0
R0220	Assets held for index-linked and unit-linked contracts	0
R0230	Loans and mortgages	0
R0240	<i>Loans on policies</i>	0
R0250	<i>Loans and mortgages to individuals</i>	0
R0260	<i>Other loans and mortgages</i>	0
R0270	Reinsurance recoverables from:	324,565
R0280	<i>Non-life and health similar to non-life</i>	324,565
R0290	<i>Non-life excluding health</i>	322,645
R0300	<i>Health similar to non-life</i>	1,921
R0310	<i>Life and health similar to life, excluding index-linked and unit-linked</i>	0
R0320	<i>Health similar to life</i>	0
R0330	<i>Life excluding health and index-linked and unit-linked</i>	0
R0340	<i>Life index-linked and unit-linked</i>	0
R0350	Deposits to cedants	221,352
R0360	Insurance and intermediaries receivables	0
R0370	Reinsurance receivables	34,392
R0380	Receivables (trade, not insurance)	2,184
R0390	Own shares (held directly)	0
R0400	Amounts due in respect of own fund items or initial fund called up but not yet paid in	0
R0410	Cash and cash equivalents	292,069
R0420	Any other assets, not elsewhere shown	1,074
R0500	<b>Total assets</b>	<b>1,326,942</b>

## S.02.01.02

## Balance sheet

		Solvency II value
		C0010
<b>Liabilities</b>		
R0510	Technical provisions - non-life	686,689
R0520	<i>Technical provisions - non-life (excluding health)</i>	657,532
R0530	<i>TP calculated as a whole</i>	0
R0540	<i>Best Estimate</i>	634,391
R0550	<i>Risk margin</i>	23,141
R0560	<i>Technical provisions - health (similar to non-life)</i>	29,157
R0570	<i>TP calculated as a whole</i>	0
R0580	<i>Best Estimate</i>	27,275
R0590	<i>Risk margin</i>	1,882
R0600	Technical provisions - life (excluding index-linked and unit-linked)	17,039
R0610	<i>Technical provisions - health (similar to life)</i>	0
R0620	<i>TP calculated as a whole</i>	0
R0630	<i>Best Estimate</i>	0
R0640	<i>Risk margin</i>	0
R0650	<i>Technical provisions - life (excluding health and index-linked and unit-linked)</i>	17,039
R0660	<i>TP calculated as a whole</i>	0
R0670	<i>Best Estimate</i>	15,862
R0680	<i>Risk margin</i>	1,177
R0690	Technical provisions - index-linked and unit-linked	0
R0700	<i>TP calculated as a whole</i>	0
R0710	<i>Best Estimate</i>	0
R0720	<i>Risk margin</i>	0
R0740	Contingent liabilities	0
R0750	Provisions other than technical provisions	0
R0760	Pension benefit obligations	0
R0770	Deposits from reinsurers	195,266
R0780	Deferred tax liabilities	1,968
R0790	Derivatives	0
R0800	Debts owed to credit institutions	0
R0810	Financial liabilities other than debts owed to credit institutions	0
R0820	Insurance & intermediaries payables	26,302
R0830	Reinsurance payables	7,720
R0840	Payables (trade, not insurance)	0
R0850	Subordinated liabilities	0
R0860	<i>Subordinated liabilities not in BOF</i>	0
R0870	<i>Subordinated liabilities in BOF</i>	0
R0880	Any other liabilities, not elsewhere shown	0
R0900	<b>Total liabilities</b>	934,983
R1000	<b>Excess of assets over liabilities</b>	391,958







## S.05.02.01

## Premiums, claims and expenses by country

## Life

	C0150	C0160	C0170	C0180	C0190	C0200	C0210
	Top 5 countries (by amount of gross premiums written) - life obligations						Total Top 5 and home country
Home Country	GB	US	BH	JP			
	C0220	C0230	C0240	C0250	C0260	C0270	C0280
<b>Premiums written</b>							
R1400 Gross	0	7,625	1,053	890	835		10,404
R1420 Reinsurers' share	0	0	0	0	0		0
R1500 Net	0	7,625	1,053	890	835		10,404
<b>Premiums earned</b>							
R1510 Gross	0	7,625	1,045	890	643		10,204
R1520 Reinsurers' share	0	0	0	0	0		0
R1600 Net	0	7,625	1,045	890	643		10,204
<b>Claims incurred</b>							
R1610 Gross	0	7,284	935	815	503		9,537
R1620 Reinsurers' share	0	0	0	0	0		0
R1700 Net	0	7,284	935	815	503		9,537
<b>Changes in other technical provisions</b>							
R1710 Gross	0	0	-85	0	0		-85
R1720 Reinsurers' share	0	0	0	0	0		0
R1800 Net	0	0	-85	0	0		-85
R1900 Expenses incurred	0	344	133	95	235		807
R2500 Other expenses							0
R2600 Total expenses							807



Non-Life Technical Provisions

		Direct business and accepted proportional reinsurance											Accepted non-proportional reinsurance				Total Non-Life obligation	
		Medical expense insurance	Income protection insurance	Workers' compensation insurance	Motor vehicle liability insurance	Other motor insurance	Marine, aviation and transport insurance	Fire and other damage to property insurance	General liability insurance	Credit and suretyship insurance	Legal expenses insurance	Assistance	Miscellaneous financial loss	Non-proportional health reinsurance	Non-proportional casualty reinsurance	Non-proportional marine, aviation and transport reinsurance		Non-proportional property reinsurance
		C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C0110	C0120	C0130	C0140	C0150	C0160	C0170	C0180
R0010	<b>Technical provisions calculated as a whole</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP calculated as a whole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Technical provisions calculated as a sum of BE and RM Best estimate</b>																	
	<b>Premium provisions</b>																	
R0060	Gross	8,477	-49	0	-144	-23	365	978	-2,314	-4,062	0	0	0	-155	767	-382	-24,643	-21,183
	Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	983	9	0	-422	-62	150	8,230	-313	-2,356	0	0	0	-15	371	-311	-13,133	-6,868
R0150	<b>Net Best Estimate of Premium Provisions</b>	7,495	-58	0	279	39	215	-7,252	-2,001	-1,706	0	0	0	-140	397	-71	-11,510	-14,315
	<b>Claims provisions</b>																	
R0160	Gross	11,229	568	0	37,376	6,751	14,618	50,759	95,743	12,383	0	0	0	7,204	67,199	2,557	376,462	682,849
	Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	680	0	0	380	67	161	151	0	771	0	0	0	263	157	563	328,240	331,434
R0250	<b>Net Best Estimate of Claims Provisions</b>	10,549	568	0	36,996	6,684	14,457	50,608	95,743	11,612	0	0	0	6,941	67,042	1,993	48,222	351,416
R0260	<b>Total best estimate - gross</b>	19,706	519	0	37,232	6,728	14,983	51,737	93,429	8,321	0	0	0	7,049	67,966	2,175	351,820	661,666
R0270	<b>Total best estimate - net</b>	18,044	510	0	37,274	6,722	14,672	43,356	93,742	9,906	0	0	0	6,801	67,439	1,922	36,712	337,101
R0280	<b>Risk margin</b>	1,339	38	0	2,767	499	1,089	3,218	6,958	735	0	0	0	505	5,006	143	2,725	25,023
	<b>Amount of the transitional on Technical Provisions</b>																	
R0290	Technical Provisions calculated as a whole																	0
R0300	Best estimate																	0
R0310	Risk margin																	0
R0320	<b>Technical provisions - total</b>	21,046	557	0	39,999	7,227	16,072	54,955	100,387	9,057	0	0	0	7,554	72,972	2,318	354,545	686,689
	Recoverable from reinsurance contract/SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	1,663	9	0	-42	5	311	8,381	-313	-1,585	0	0	0	249	527	253	315,107	324,565
R0330	<b>Technical provisions minus recoverables from reinsurance/SPV and Finite Re - total</b>	19,383	548	0	40,041	7,221	15,761	46,574	100,700	10,642	0	0	0	7,305	72,445	2,065	39,438	362,123



5.23.01.01

**Own Funds**

Basic own funds before deduction for participations in other financial sector as foreseen in article 68 of Delegated Regulation 2015/35

R0010	Ordinary share capital (gross of own shares)
R0030	Share premium account related to ordinary share capital
R0040	Initial funds, members' contributions or the equivalent basic own-fund item for mutual and mutual-type undertakings
R0050	Subordinated mutual member accounts
R0070	Surplus funds
R0090	Preference shares
R0110	Share premium account related to preference shares
R0130	Reconciliation reserve
R0140	Subordinated liabilities
R0160	An amount equal to the value of net deferred tax assets
R0180	Other own fund items approved by the supervisory authority as basic own funds not specified above
R0220	<b>Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds</b>
R0230	<b>Deductions for participations in financial and credit institutions</b>
R0290	<b>Total basic own funds after deductions</b>

**Ancillary own funds**

R0300	Unpaid and uncalled ordinary share capital callable on demand
R0310	Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual - type undertakings, callable on demand
R0320	Unpaid and uncalled preference shares callable on demand
R0330	A legally binding commitment to subscribe and pay for subordinated liabilities on demand
R0340	Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC
R0350	Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC
R0360	Supplementary members calls under first subparagraph of Article 96(3) of the Directive 2009/138/EC
R0370	Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC
R0390	Other ancillary own funds
R0400	<b>Total ancillary own funds</b>

**Available and eligible own funds**

R0500	Total available own funds to meet the SCR
R0510	Total available own funds to meet the MCR
R0540	Total eligible own funds to meet the SCR
R0550	Total eligible own funds to meet the MCR

R0580	<b>SCR</b>
R0600	<b>MCR</b>
R0620	<b>Ratio of Eligible own funds to SCR</b>
R0640	<b>Ratio of Eligible own funds to MCR</b>

**Reconciliation reserve**

R0700	Excess of assets over liabilities
R0710	Own shares (held directly and indirectly)
R0720	Foreseeable dividends, distributions and charges
R0730	Other basic own fund items
R0740	Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds
R0760	<b>Reconciliation reserve</b>

**Expected profits**

R0770	Expected profits included in future premiums (EPIFP) - Life business
R0780	Expected profits included in future premiums (EPIFP) - Non- life business
R0790	<b>Total Expected profits included in future premiums (EPIFP)</b>

Total	Tier 1 unrestricted	Tier 1 restricted	Tier 2	Tier 3
C0010	C0020	C0030	C0040	C0050
27,000	27,000		0	
132,957	132,957		0	
0	0		0	
0		0	0	0
0	0			
0		0	0	0
0		0	0	0
223,745	223,745			
0		0	0	0
0				0
0	0	0	0	0
0				
0	0	0	0	0
383,702	383,702	0	0	0

0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				

383,702	383,702	0	0	0
383,702	383,702	0	0	
383,702	383,702	0	0	0
383,702	383,702	0	0	

209,194
52,299
183.42%
733.68%

C0060
391,958
0
159,957
8,256
223,745

0
47,113
47,113

S.25.01.21

Solvency Capital Requirement - for undertakings on Standard Formula

- R0010 Market risk
- R0020 Counterparty default risk
- R0030 Life underwriting risk
- R0040 Health underwriting risk
- R0050 Non-life underwriting risk
- R0060 Diversification

R0070 Intangible asset risk

R0100 **Basic Solvency Capital Requirement**

**Calculation of Solvency Capital Requirement**

- R0130 Operational risk
- R0140 Loss-absorbing capacity of technical provisions
- R0150 Loss-absorbing capacity of deferred taxes
- R0160 Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC
- R0200 **Solvency Capital Requirement excluding capital add-on**
- R0210 Capital add-ons already set
- R0220 **Solvency capital requirement**

**Other information on SCR**

- R0400 Capital requirement for duration-based equity risk sub-module
- R0410 Total amount of Notional Solvency Capital Requirements for remaining part
- R0420 Total amount of Notional Solvency Capital Requirements for ring fenced funds
- R0430 Total amount of Notional Solvency Capital Requirements for matching adjustment portfolios
- R0440 Diversification effects due to RFF nSCR aggregation for article 304

Gross solvency capital requirement	USP	Simplifications
C0110	C0090	C0120
59,369		
29,621		
17,500		
12,331		
142,186		
-71,734		

0
189,273

C0100

19,921
0
0
209,194
0
209,194

**USP Key**

**For life underwriting risk:**

- 1- Increase in the amount of annuity benefits
- 9 - None

**For health underwriting risk:**

- 1- Increase in the amount of annuity benefits
- 2 - Standard deviation for NSLT health premium risk
- 3 - Standard deviation for NSLT health gross premium risk
- 4 - A adjustment factor for non-proportional reinsurance
- 5 - Standard deviation for NSLT health reserve risk
- 9 - None

**For non-life underwriting risk:**

- 4 - A adjustment factor for non-proportional reinsurance
- 6 - Standard deviation for non-life premium risk
- 7 - Standard deviation for non-life gross premium risk
- 8 - Standard deviation for non-life reserve risk
- 9 - None


S.28.01.01

Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

Linear formula component for non-life insurance and reinsurance obligations

C0010

R0010 MCR<sub>NL</sub> Result

48,196
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Net (of reinsurance/SPV) best estimate and TP calculated as a whole	Net (of reinsurance) written premiums in the last 12 months
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- R0020 Medical expense insurance and proportional reinsurance
- R0030 Income protection insurance and proportional reinsurance
- R0040 Workers' compensation insurance and proportional reinsurance
- R0050 Motor vehicle liability insurance and proportional reinsurance
- R0060 Other motor insurance and proportional reinsurance
- R0070 Marine, aviation and transport insurance and proportional reinsurance
- R0080 Fire and other damage to property insurance and proportional reinsurance
- R0090 General liability insurance and proportional reinsurance
- R0100 Credit and suretyship insurance and proportional reinsurance
- R0110 Legal expenses insurance and proportional reinsurance
- R0120 Assistance and proportional reinsurance
- R0130 Miscellaneous financial loss insurance and proportional reinsurance
- R0140 Non-proportional health reinsurance
- R0150 Non-proportional casualty reinsurance
- R0160 Non-proportional marine, aviation and transport reinsurance
- R0170 Non-proportional property reinsurance

C0020	C0030
18,044	20,542
510	94
0	0
37,274	10,255
6,722	1,886
14,672	1,467
43,356	5,657
93,742	2,479
9,906	1,383
0	0
0	0
0	0
6,801	1,848
67,439	3,700
1,922	633
36,712	9,096

Linear formula component for life insurance and reinsurance obligations

C0040

R0200 MCR<sub>L</sub> Result

333
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Net (of reinsurance/SPV) best estimate and TP calculated as a whole	Net (of reinsurance/SPV) total capital at risk
---	--

- R0210 Obligations with profit participation - guaranteed benefits
- R0220 Obligations with profit participation - future discretionary benefits
- R0230 Index-linked and unit-linked insurance obligations
- R0240 Other life (re)insurance and health (re)insurance obligations
- R0250 Total capital at risk for all life (re)insurance obligations

C0050	C0060
0	
0	
0	
15,862	
	0

Overall MCR calculation

C0070

- R0300 Linear MCR
- R0310 SCR
- R0320 MCR cap
- R0330 MCR floor
- R0340 Combined MCR
- R0350 Absolute floor of the MCR
- R0400 Minimum Capital Requirement

48,529
209,194
94,137
52,299
52,299
4,015
52,299