

# **Financial Condition Report (“FCR”) For the year ending December 31, 2018**

RenaissanceRe Holdings Ltd. and subsidiaries (collectively,  
the “RenaissanceRe Group”)

*As submitted to the Bermuda Monetary Authority on May 31, 2019*

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*RenaissanceRe*

## NOTE ON FORWARD-LOOKING STATEMENTS

This FCR for the year ended December 31, 2018 of the RenaissanceRe Group contains forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Forward-looking statements are necessarily based on estimates and assumptions that are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which, with respect to future business decisions, are subject to change. These uncertainties and contingencies can affect actual results and could cause actual results to differ materially from those expressed in any forward-looking statements made by, or on behalf of, us. In particular, statements using words such as “may”, “should”, “estimate”, “expect”, “anticipate”, “intend”, “believe”, “predict”, “potential”, or words of similar import generally involve forward-looking statements. For example, we may include certain forward-looking statements in the discussion and analysis of our financial condition and results of operations with regard to trends in results, prices, volumes, operations, investment results, margins, combined ratios, fees, reserves, market conditions, risk management and exchange rates. This FCR may also contain forward-looking statements with respect to our business and industry, such as those in relation to our strategy and management objectives, market standing and product volumes, competition and new entrants in our industry, industry capital, insured losses and regulatory matters affecting the reinsurance and insurance industries.

The inclusion of forward-looking statements in this FCR should not be considered as a representation by us or any other person that our current objectives or plans will be achieved. Numerous factors could cause our actual results to differ materially from those addressed by the forward-looking statements, including the following:

- the frequency and severity of catastrophic and other events we cover;
- the effectiveness of our claims and claim expense reserving process;
- risks that the TMR Stock Purchase (as defined herein) disrupts or distracts from current plans and operations;
- the ability to recognize the benefits of the TMR Stock Purchase;
- the amount of the costs, fees, expenses and charges related to the TMR Stock Purchase;
- our ability to maintain our financial strength ratings;
- the effect of climate change on our business;
- collection on claimed retrocessional coverage, and new retrocessional reinsurance being available on acceptable terms and providing the coverage that we intended to obtain;
- the effects of United States (“U.S.”) tax reform legislation and possible future tax reform legislation and regulations, including changes to the tax treatment of our shareholders or investors in our joint ventures or other entities we manage;
- the effect of emerging claims and coverage issues;
- soft reinsurance underwriting market conditions;
- our reliance on a small and decreasing number of reinsurance brokers and other distribution services for the preponderance of our revenue;
- our exposure to credit loss from counterparties in the normal course of business;
- the effect of continued challenging economic conditions throughout the world;
- a contention by the Internal Revenue Service that Renaissance Reinsurance Ltd. (“Renaissance Reinsurance”), or any of our other Bermuda subsidiaries, is subject to taxation in the U.S.;

- the success of any of our acquisitions or strategic investments, including our ability to manage our operations as our product and geographical diversity increases;
- our ability to retain our key senior officers and to attract or retain the senior management and employees necessary to manage our business;
- the performance of our investment portfolio;
- losses we could face from terrorism, political unrest or war;
- the effect of cybersecurity risks, including technology breaches or failure, on our business;
- our ability to successfully implement our business strategies and initiatives;
- our ability to determine the impairments taken on our investments;
- the effects of inflation;
- the ability of our ceding companies and delegated authority counterparties to accurately assess the risks they underwrite;
- the effect of operational risks, including system or human failures;
- our ability to effectively manage capital on behalf of investors in joint ventures or other entities we manage;
- foreign currency exchange rate fluctuations;
- our ability to raise capital if necessary;
- our ability to comply with covenants in our debt agreements;
- changes to the regulatory systems under which we operate, including as a result of increased global regulation of the insurance and reinsurance industry;
- changes in Bermuda laws and regulations and the political environment in Bermuda;
- our dependence on the ability of our operating subsidiaries to declare and pay dividends;
- aspects of our corporate structure that may discourage third-party takeovers and other transactions;
- the cyclical nature of the reinsurance and insurance industries;
- adverse legislative developments that reduce the size of the private markets we serve or impede their future growth;
- consolidation of competitors, customers and insurance and reinsurance brokers;
- the effect on our business of the highly competitive nature of our industry, including the effect of new entrants to, competing products for and consolidation in the (re)insurance industry;
- other political, regulatory or industry initiatives adversely impacting us;
- our ability to comply with sanctions and foreign corrupt practices laws with respect to our international operations;
- increasing barriers to free trade and the free flow of capital;
- international restrictions on the writing of reinsurance by foreign companies and government intervention in the natural catastrophe market;
- the effect of Organisation for Economic Co-operation and Development (the “OECD”) or European Union (“EU”) measures to increase our taxes and reporting requirements;
- the effect of the vote by the United Kingdom (the “U.K.”) to leave the EU;
- changes in regulatory regimes and accounting rules that may impact financial results irrespective of business operations; and
- our need to make many estimates and judgments in the preparation of our financial statements.

As a consequence, our future financial position and results may differ from those expressed in any forward-looking statements made by or on behalf of us. The factors listed above should not be construed as exhaustive.

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# 1. INTRODUCTION

Unless otherwise indicated, references in this Financial Condition Report (“FCR”) to “RenaissanceRe” refer to RenaissanceRe Holdings Ltd. (the parent company) and references to the “Company”, “we”, “us”, “our”, “Group” or the “RenaissanceRe Group” refer to RenaissanceRe Holdings Ltd. and its subsidiaries, which include Renaissance Reinsurance Ltd. (“Renaissance Reinsurance”) and RenaissanceRe Specialty U.S. Ltd. (“RenaissanceRe Specialty U.S.”). The Company also underwrites reinsurance on behalf of joint ventures, including Top Layer Reinsurance Ltd. (“Top Layer Re”) and DaVinci Reinsurance Ltd. (“DaVinci”). The financial results of DaVinci and DaVinci’s parent company, DaVinciRe Holdings Ltd. (“DaVinciRe”), are consolidated in the Company’s financial statements.

This FCR is prepared in accordance with the Bermuda Monetary Authority’s (“BMA”) Insurance (Public Disclosure) Rules 2015 and Insurance (Group Supervision) Rules 2011. The FCR documents the measures governing the business operations, corporate governance framework, solvency and financial performance of the RenaissanceRe Group for the year ended December 31, 2018 and for each of Renaissance Reinsurance, RenaissanceRe Specialty U.S., DaVinci, and Top Layer Re (collectively our “Bermuda Operating Subsidiaries”). The report is prepared to provide information to enable an informed assessment on how the RenaissanceRe group’s business is run in a prudent manner.

The results of the Bermuda Operating Subsidiaries presented within this report are presented on a consolidated basis.

## 1.1. REGULATORY SUPERVISOR

### ***Insurance Supervisor***

Bermuda Monetary Authority  
BMA House  
43 Victoria Street, Hamilton  
Bermuda

### ***Group Supervisor***

Bermuda Monetary Authority  
BMA House  
43 Victoria Street, Hamilton  
Bermuda

## 1.2. APPROVED AUDITOR

The Insurance Act 1978 requires the appointment of an independent auditor, which must be approved by the BMA. Ernst & Young, whose contact details are shown below, is RenaissanceRe’s approved auditor for both statutory and U.S. Generally Accepted Accounting Principles (“GAAP”) reporting.

Organization:	Ernst & Young Ltd.
Jurisdiction:	Bermuda
Address:	3 Bermudiana Road, Hamilton, HM08
Email Address:	<a href="mailto:ernst.young@bm.ey.com">ernst.young@bm.ey.com</a>
Phone Number:	+1441 295 7000

## 1.3. ORGANIZATION

### 1.3.1. Overview

RenaissanceRe is a global provider of reinsurance and insurance. RenaissanceRe provides property, casualty and specialty reinsurance and certain insurance solutions to customers, principally through intermediaries. Established in 1993, we have offices in Bermuda, Australia, Ireland, Singapore, Switzerland, the U.K., and the U.S.

### 1.3.2. Bermuda Operating Subsidiaries

#### 1.3.2.1. Renaissance Reinsurance

Renaissance Reinsurance is RenaissanceRe's principal reinsurance subsidiary and provides property, casualty and specialty reinsurance solutions to customers on a worldwide basis.

#### 1.3.2.2. DaVinci

DaVinci was established in 2001 and principally provides property catastrophe reinsurance and certain low frequency, high severity specialty reinsurance lines of business on global basis. In general, we seek to construct for DaVinci a portfolio with risk characteristics similar to those of Renaissance Reinsurance's property catastrophe reinsurance portfolio, and from time to time, certain lines of specialty reinsurance written by Renaissance Reinsurance such as terrorism and workers' compensation. In accordance with DaVinci's underwriting guidelines, it can only participate in business also underwritten by Renaissance Reinsurance.

Because RenaissanceRe owns a noncontrolling equity interest in, but controls a majority of the outstanding voting power of DaVinci's parent, DaVinciRe, the results of DaVinci and DaVinciRe are consolidated in RenaissanceRe's financial statements and all significant intercompany transactions are eliminated. Redeemable noncontrolling interest in DaVinciRe represents the interests of external parties with respect to the net income and shareholders' equity of DaVinciRe.

#### 1.3.2.3. RenaissanceRe Specialty U.S.

RenaissanceRe Specialty U.S. provides property, casualty and specialty reinsurance on both a quota share and excess of loss basis. RenaissanceRe Specialty U.S. has made a submission to the IRS to elect, pursuant to s953(d) of Internal Revenue Code of 1986, to operate subject to U.S. federal income tax.

#### 1.3.2.4. Top Layer Re

Top Layer Re was established in 1999 and provides high layer, non-U.S. property reinsurance written on an excess of loss basis. Top Layer Re is a joint venture between Renaissance Reinsurance and State Farm Mutual Automobile Insurance Company ("State Farm"), a U.S. company. We account for our equity ownership in Top Layer Re under the equity method of

accounting with our investment recorded in investment in other ventures in our consolidated balance sheets.

### **1.3.3. Other Managed Joint Ventures**

In addition to DaVinci and Top Layer Re, we pursue a number of other joint venture opportunities through our ventures unit, which allow us to leverage our access to business and our underwriting capabilities on a larger capital base.

#### **RenaissanceRe Medici Fund Ltd. (“Medici”)**

Medici is an exempted fund, incorporated under the laws of Bermuda. Medici’s objective is to invest substantially all of its assets in various insurance-based investment instruments that have returns primarily correlated to property catastrophe risk. Third-party investors subscribe for the majority of the participating, non-voting common shares of Medici.

RenaissanceRe maintains majority voting control of Medici’s parent, RenaissanceRe Fund Holdings Ltd. (“Fund Holdings”), therefore the results of Medici and Fund Holdings are consolidated in RenaissanceRe’s financial statements.

#### **Upsilon RFO Re Ltd. (“Upsilon RFO”)**

We formed and launched a managed joint venture, Upsilon RFO, a Bermuda-domiciled special purpose insurer, to provide additional capacity to the worldwide aggregate and per-occurrence primary and retrocessional property catastrophe excess of loss market. Upsilon RFO’s creation further enhances our efforts to match desirable reinsurance risk with efficient capital through a strategic capital structure. Original business is written directly by Upsilon RFO under fully-collateralized reinsurance contracts capitalized through the sale of non-voting shares to us and RenaissanceRe Upsilon Fund Ltd. (“Upsilon Fund”). Upsilon RFO is considered a variable interest entity (“VIE”) as it has insufficient equity capital to finance its activities without additional financial support and RenaissanceRe is the primary beneficiary. As a result, Upsilon RFO is consolidated in RenaissanceRe’s financial statements.

#### **RenaissanceRe Upsilon Fund Ltd. (“Upsilon Fund”)**

We incorporated Upsilon Fund, an exempted Bermuda limited segregated accounts company, in 2014. Upsilon Fund was formed to provide a fund structure through which third party investors can invest in property reinsurance risk managed by us. As a segregated accounts company, Upsilon Fund is permitted to establish segregated accounts to invest in and hold identified pools of assets and liabilities. Each pool of assets and liabilities in each segregated account is ring-fenced from any claims from the creditors of Upsilon Fund’s general account and from the creditors of other segregated accounts within Upsilon Fund. Third party investors purchase redeemable, non-voting preference shares linked to specific segregated accounts of Upsilon Fund and own 100% of these shares. Upsilon Fund is managed by RenaissanceRe Fund Management Ltd. in return for a management fee and performance based incentive fee. We have not provided any financial or other support to



Upsilon Fund that we were not contractually required to provide. Currently, Upsilon Fund is invested in Upsilon RFO and Medici.

### **Fibonacci Reinsurance Ltd. (“Fibonacci Re”)**

In 2016, Fibonacci Re, a Bermuda-domiciled SPI, was formed to provide collateralized capacity to Renaissance Reinsurance and its affiliates. Fibonacci Re raised capital from third party investors and us via a private placement of participating notes that are listed on the Bermuda Stock Exchange. This arrangement enables Renaissance Reinsurance to support its clients with additional property catastrophe reinsurance capacity and we believe it provides attractive risk-adjusted returns to our capital partners. Fibonacci Re is a VIE but RenaissanceRe is not the primary beneficiary of Fibonacci Re and, as a result, we do not consolidate the financial position and results of operations of Fibonacci Re.

### **Langhorne Holdings LLC (“Langhorne Holdings”) and Langhorne Partners LLC (“Langhorne Partners”) (collectively, “Langhorne”)**

Effective December 22, 2017, we set up a joint venture with Reinsurance Group of America, which was incorporated to source third party capital to support reinsurers targeting large in-force life and annuity blocks. Langhorne Holdings is a company that owns and manages certain reinsurance entities within Langhorne. Langhorne Partners is the general partner for Langhorne and the entity which manages the third-party investors investing into Langhorne Holdings in return for a management and performance-based incentive fee. We concluded too that Langhorne Holdings meets the definition of a VIE. We are not the primary beneficiary of Langhorne Holdings and as a result, we do not consolidate the financial position or results of operations of Langhorne Holdings. We concluded that Langhorne Partners was not a VIE. We account for our investments in Langhorne Holdings and Langhorne Partners under the equity method of accounting, one quarter in arrears. We anticipate that our investment in Langhorne will increase, perhaps materially, as in-force life and annuity blocks of businesses are written. Other than our current and committed future equity investment in Langhorne, we have not provided financial or other support to Langhorne that we were not contractually required to provide.

### **Vermeer Reinsurance Ltd. (“Vermeer”)**

Effective December 17, 2018, we formed Vermeer, an exempted Bermuda reinsurer, with PGGM, a Dutch pension fund manager. Vermeer provides capacity focused on risk remote layers in the U.S. property catastrophe market. Vermeer is managed by Renaissance Underwriting Managers (RUM) in return for a management fee. We maintain majority voting control of Vermeer, while PGGM retains economic benefits. Vermeer is considered a VIE, as it has voting rights that are not proportional to its participating rights and we are the primary beneficiary. As a result, we consolidate Vermeer and all significant inter-company transactions have been eliminated. The portion of Vermeer’s earnings owned by third parties is recorded in the consolidated statements of operations as net income attributable to redeemable noncontrolling interests.

### **1.3.4. Organizational structure**

A simplified group organizational chart is set out in Appendix One. The chart depicts the position of the Bermuda Operating Subsidiaries in the RenaissanceRe Group.

## 1.3.5. Share ownership

### 1.3.5.1. RenaissanceRe Holdings Ltd.

The following table sets forth information with respect to the beneficial ownership of RenaissanceRe’s common shares as of March 13, 2019 for each person known by us to own beneficially 5% or more of our outstanding common shares:

Name and Address of Beneficial Owner	Number of common shares	Percentage of class <sup>1</sup>
BlackRock, Inc. <sup>2</sup> 40 East 52nd Street New York, NY 10022	4,898,599	11.6%
The Vanguard Group, Inc. <sup>3</sup> 100 Vanguard Blvd. Malvern, PA 19355	4,228,123	10.0%
State Street Corporation <sup>4</sup> State Street Financial Center One Lincoln Street, Boston, MA 02111	2,081,581	4.9%
FMR LLC <sup>5</sup> 245 Summer Street, Boston, MA 02110	2,055,557	4.9%

<sup>1</sup> The percentage of class shown is based on the common shares reported as beneficially owned on Schedule 13G or Schedule 13G/A and 42,247,927 common shares outstanding as of March 13, 2019.

<sup>2</sup> According to a Statement on Schedule 13G/A filed on January 31, 2019 by BlackRock, BlackRock was the beneficial owner of 4,898,599 common shares as of December 31, 2018. BlackRock has the sole power to vote or to direct the voting of 4,597,951 common shares and sole power to dispose of or to direct the disposition of 4,898,599 common shares. On November 15, 2016, we granted BlackRock a limited waiver from the restrictions on the acquisition of share ownership set forth in our Bye-laws, up to a maximum amount of shares representing 15% of our shares outstanding. BlackRock has agreed that, in accordance with our Bye-laws, the voting rights attributable to shares owned or controlled by BlackRock will not exceed 9.9% of the voting rights attached to all of our issued and outstanding capital shares.

<sup>3</sup> According to a Statement on Schedule 13G/A filed on February 11, 2019 by The Vanguard Group, Inc. (“Vanguard”), Vanguard was the beneficial owner of 4,228,123 common shares as of December 31, 2018. Vanguard has the sole power to vote or to direct the voting of 28,074 common shares, shared power to vote or direct the vote of 19,494 common shares, sole power to dispose of or to direct the disposition of 4,181,920 common shares and shared power to dispose or direct the disposition of 46,230 common shares. On May 11, 2018, we granted Vanguard a limited waiver from the restrictions on the acquisition of share ownership set forth in our Bye-laws, up to a maximum amount of shares representing 15% of our shares outstanding. Vanguard has agreed that, in accordance with our Bye-laws, the voting rights attributable to shares owned or controlled by Vanguard will not exceed 9.9% of the voting rights attached to all of our issued and outstanding capital shares.

<sup>4</sup> According to a Statement on Schedule 13G filed on February 13, 2019 by State Street Corporation (“State Street”), State Street was the beneficial owner of 2,081,581 common shares as of December 31, 2018. State Street has the sole power to vote or to direct the voting of 0 common shares, shared power to vote or direct the vote of 1,919,157 common shares, sole power to dispose of or to direct the disposition of 0 common shares and shared power to dispose or direct the disposition of 2,081,581 common shares.

<sup>5</sup> According to a Statement on Schedule 13G/A filed on February 13, 2019 by FMR LLC, FMR LLC was the beneficial owner of 2,055,557 common shares as at December 31, 2018. Abigail P. Johnson (Director, Vice Chairman, Chief Executive Officer and President of FMR LLC) and FMR LLC each has the sole power to dispose of the 2,055,557 common shares owned by various Fidelity funds. FMR LLC reported sole voting power over 282,005 common shares. According to this Schedule 13G/A, members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders’ voting agreement under which all Series B shares will be voted in accordance with the majority vote of Series B shares. Accordingly, through their ownership of voting common stock and the execution of the shareholders’ voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither Abigail P. Johnson nor FMR LLC has the sole power to vote or direct the voting of the shares owned directly by the various Fidelity funds advised by Fidelity Management & Research Company (“FMR Co”), a wholly owned subsidiary of FMR LLC, which power resides with the funds’ Boards of Trustees. FMR Co carries out the voting of the shares under written guidelines established by the funds’ Boards of Trustees.

### 1.3.5.2. Ownership of Bermuda Operating Subsidiaries

The following table sets forth information with respect to the ownership of Bermuda-domiciled insurers which are affiliated with the RenaissanceRe Group. Ownership presented is as of December 31, 2018.

<b>Entity</b>	<b>Owner Name</b>	<b>Ownership Percentage</b>
Renaissance Reinsurance	RenaissanceRe*	100.0%
DaVinci	RenaissanceRe*	22.1%
	Third parties	77.9%
RenaissanceRe Specialty U.S.	RenaissanceRe*	100.0%
Top Layer Re	RenaissanceRe*	50.0%
	State Farm	50.0%

*\*Indicates that RenaissanceRe is the ultimate owner. Shares are directly held by other entities within the RenaissanceRe Group.*

## 2. BUSINESS AND PERFORMANCE

### 2.1. OVERVIEW

RenaissanceRe is a global provider of reinsurance and insurance. We aspire to be the world's best underwriter by matching well-structured risks with efficient sources of capital and our mission is to produce superior returns for our shareholders over the long term. We seek to accomplish these goals by being a trusted, long-term partner to our customers for assessing and managing risk, delivering responsive and innovative solutions, leveraging our core capabilities of risk assessment and information management, investing in these core capabilities in order to serve our customers across the cycles that have historically characterized our markets and keeping our promises. Our strategy focuses on superior risk selection, superior customer relationships and superior capital management. We provide value to our customers and joint venture partners in the form of financial security, innovative products, and responsive service. We are known as a leader in paying valid claims promptly. We principally measure our financial success through long-term growth in tangible book value per common share plus the change in accumulated dividends, which we believe is the most appropriate measure of our financial performance and in respect of which we believe we have delivered superior performance over time.

Our core products include property, casualty and specialty reinsurance and certain insurance products principally distributed through intermediaries, with whom we seek to cultivate strong long-term relationships. We believe we have been one of the world's leading providers of catastrophe reinsurance since our founding. In recent years, through the strategic execution of a number of initiatives, including organic growth and acquisitions, we have expanded our casualty and specialty platform and products and believe we are a leader in certain casualty and specialty lines of business. We have determined our business consists of the following reportable segments: (1) Property, which is comprised of catastrophe and other property reinsurance and insurance written on behalf of our operating subsidiaries and certain joint ventures managed by our ventures unit, and (2) Casualty and Specialty, which is comprised of casualty and specialty reinsurance and insurance written on behalf of our operating subsidiaries and certain joint ventures managed by our ventures unit.

To best serve our clients in the places they do business, we have operating subsidiaries, joint ventures and underwriting platforms around the world, including DaVinci, Renaissance Reinsurance, Top Layer Re, Fibonacci Re, Upsilon RFO and Vermeer in Bermuda, Renaissance Reinsurance U.S. Inc. in the U.S., Syndicate 1458 in the U.K., and RenaissanceRe Europe AG ("RenaissanceRe Europe") in Switzerland, with branches in Australia, Bermuda, the U.K. and the U.S. We write property and casualty and specialty reinsurance through our wholly owned operating subsidiaries, joint ventures and Syndicate 1458 and certain insurance products primarily through Syndicate 1458. Syndicate 1458 provides us with access to Lloyd's extensive distribution network and worldwide licenses and also writes business through delegated authority arrangements. The underwriting results of our operating subsidiaries

and underwriting platforms are included in our Property and Casualty and Specialty segment results as appropriate.

Since a meaningful portion of the reinsurance and insurance we write provides protection from damages relating to natural and man-made catastrophes, our results depend to a large extent on the frequency and severity of such catastrophic events, and the coverages we offer to customers affected by these events. We are exposed to significant losses from these catastrophic events and other exposures we cover. Accordingly, we expect a significant degree of volatility in our financial results and our financial results may vary significantly from quarter-to-quarter and from year-to-year, based on the level of insured catastrophic losses occurring around the world. We view our exposure to casualty and specialty lines of business as an efficient use of capital given these risks are generally less correlated with our property lines of business. This has allowed us to bring additional capacity to our clients, across a wider range of product offerings, while continuing to be good stewards of our shareholders' capital.

We continually explore appropriate and efficient ways to address the risk needs of our clients and the impact of various regulatory and legislative changes on our operations. We have created and managed, and continue to manage, multiple capital vehicles across a number of jurisdictions and may create additional risk bearing vehicles or enter into additional jurisdictions in the future. In addition, our differentiated strategy and capability position us to pursue bespoke or large solutions for clients, which may be non-recurring. This, and other factors including the timing of contract inception, could result in significant volatility of premiums in both our Property and Casualty and Specialty segments. As our product and geographical diversity increases, we may be exposed to new risks, uncertainties and sources of volatility.

Our revenues are principally derived from three sources: (1) net premiums earned from the reinsurance and insurance policies we sell; (2) net investment income and realized and unrealized gains from the investment of our capital funds and the investment of the cash we receive on the policies which we sell; and (3) fees and other income received from our joint ventures, advisory services and various other items.

Our expenses primarily consist of: (1) net claims and claim expenses incurred on the policies of reinsurance and insurance we sell; (2) acquisition costs which typically represent a percentage of the premiums we write; (3) operating expenses which primarily consist of personnel expenses, rent and other operating expenses; (4) corporate expenses which include certain executive, legal and consulting expenses, costs for research and development, transaction and integration-related expenses, and other miscellaneous costs, including those associated with operating as a publicly traded company; (5) redeemable noncontrolling interests, which represent the interests of third parties with respect to the net income of DaVinciRe, Vermeer and Medici; and (6) interest and dividend costs related to our debt and preference shares. We are also subject to taxes in certain jurisdictions in which we operate. Since the majority of our income is currently earned in Bermuda, which does not have a corporate income tax, the tax impact to our operations has historically been minimal, notwithstanding the impact of the write-down of a portion of our deferred tax asset

in the fourth quarter of 2017 associated with the adoption of the U.S. tax reform legislation, commonly referred to as the Tax Cuts and Jobs Act. In the future, our net tax exposure may increase as our operations expand geographically, or as a result of adverse tax developments.

## 2.2. MATERIAL INCOME AND EXPENSES

RenaissanceRe's main revenue source is premiums. Gross premiums written increased by \$512.9 million, or 18.3%, to \$3.3 billion in 2018, compared to 2017, driven primarily by increases of \$320.5 million in the Property segment and \$192.4 million in the Casualty and Specialty segment.

RenaissanceRe's major expenses arise from net claims and claim expenses. RenaissanceRe generated underwriting income of \$244.9 million in 2018, compared to generating an underwriting loss of \$651.5 million in 2017. Our Property segment generated a net claims and claim expense ratio of 47.4%, an underwriting expense ratio of 27.7%, and a combined ratio of 75.1% compared to 139.4%, 22.3%, and 161.7%, respectively, in 2017. Our Casualty and Specialty segment incurred an underwriting loss of \$17.0 million in 2018, compared to an underwriting loss of \$78.2 million in 2017. Our Casualty and Specialty segment incurred net claims and claims expense ratio of 67.3%, an underwriting expense ratio of 34.5%, and a combined ratio of 101.8% in 2018 compared to 71.8%, 38.1% and 109.9% in 2017.

Included in our underwriting results for 2018 were Typhoons Jebi, Mangkhut and Trami, Hurricane Florence and the wildfires in California during Q3 2018 (the "Q3 2018 Catastrophe Events"), Hurricane Michael and the wildfires in California during Q4 2018 (the "Q4 2018 Catastrophe Events"), and certain losses associated with aggregate loss contracts (the "2018 Aggregate Losses" and, collectively with the Q3 2018 Catastrophe Events and Q4 2018 Catastrophe Events, the "2018 Large Loss Events") which had a net negative impact on our underwriting result of \$340.2 million. This was partially offset by changes in the estimates relating to Hurricanes Harvey, Irma, Maria, the Mexico City Earthquake, wildfires in California during Q4 2017 and losses associated with aggregate loss contracts in 2017 (collectively, the "2017 Large Loss Events"), which had a positive impact on the underwriting result of \$157.8 million and reduced the combined ratio by 8.0 percentage points.

In addition, as a result of the Q4 2018 California Wildfires, RenaissanceRe's underwriting result was negatively impacted by certain casualty liability exposures within the Casualty and Specialty segment. In comparison, in 2017 the underwriting result experienced a net negative impact of \$989.2 million, or an increase in the combined ratio of 59.4 percentage points, associated with the 2017 Large Loss Events.

RenaissanceRe also generates significant investment revenue from its assets, as discussed in detail in section 2.6.3. below.

## 2.3. BUSINESS SEGMENT RESULTS

Our reportable segments are defined as follows: (1) Property, which is comprised of catastrophe and other property reinsurance and insurance written on behalf of our operating subsidiaries and certain joint ventures managed by our ventures unit, and (2) Casualty and Specialty, which is comprised of casualty and specialty reinsurance and insurance written on behalf of our operating subsidiaries and certain joint ventures managed by our ventures unit. In addition to our two reportable segments, we have an Other category, which primarily includes our strategic investments, investments unit, corporate expenses, capital servicing costs, noncontrolling interests, certain expenses related to the acquisition of Platinum and the remnants of our former Bermuda-based insurance operations.

The following table shows our gross premiums written allocated between each of our segments:

<b>Year ended December 31,</b>	<b>2018</b>	<b>2017</b>
(in thousands)		
Property	\$ 1,760,926	\$ 1,440,437
Casualty and Specialty	1,549,501	1,357,110
Other category	-	(7)
Total gross premiums written	<b>\$ 3,310,427</b>	<b>\$ 2,797,540</b>

We write proportional business as well as excess of loss business. In addition, we maintain delegated authority arrangements through Syndicate 1458, which are included in our Property and Casualty and Specialty segments, as appropriate. Our relative mix of business between proportional business and excess of loss business has fluctuated in the past and will likely vary in the future. Proportional business and delegated authority business typically have relatively higher premiums per unit of expected underwriting income, together with a higher combined ratio, than traditional excess of loss reinsurance. In addition, these coverages tend to be exposed to relatively more attritional, and frequent, losses while being subject to less expected severity.

### 2.3.1. Property segment

Our Property segment includes our catastrophe class of business, principally comprised of excess of loss reinsurance and excess of loss retrocessional reinsurance to insure insurance and reinsurance companies against natural and man-made catastrophes, and our other property class of business, primarily comprised of proportional reinsurance, property per risk, property (re)insurance, binding facilities and regional U.S. multi-line reinsurance. We write catastrophe reinsurance and insurance coverage protecting against large natural catastrophes, such as earthquakes, hurricanes and tsunamis, as well as claims arising from other natural and man-made catastrophes such as winter storms, freezes, floods, fires, windstorms, tornadoes, explosions and acts of terrorism. We offer this coverage to insurance companies and other reinsurers primarily on an excess of loss basis. This means



we begin paying when our customers' claims from a catastrophe exceed a certain retained amount. We also offer proportional coverages and other structures on a catastrophe-exposed basis and may increase these offerings on an absolute or relative basis in the future.

Our excess of loss property contracts generally cover all natural perils, as outlined above. Our predominant exposure under such coverage is to property damage. However, other risks, including business interruption and other non-property losses, may also be covered under our property reinsurance contracts when arising from a covered peril. We offer our coverages on a worldwide basis. Because of the wide range of possible catastrophic events to which we are exposed, including the size of such events and the potential for multiple events to occur in the same time period, our property business is volatile and our financial condition and results of operations reflect this volatility. To moderate the volatility of our risk portfolio, we may increase or decrease our presence in the property business based on market conditions and our assessment of risk-adjusted pricing adequacy. We frequently purchase reinsurance or other protection for our own account for a number of reasons, including, to optimize the expected outcome of our underwriting portfolio, to manage capital requirements for regulated entities and to reduce the financial impact that a large catastrophe or a series of catastrophes could have on our results.

### **2.3.2. Casualty and specialty segment**

We write casualty and specialty reinsurance and insurance covering primarily targeted classes of business where we believe we have a sound basis for underwriting and pricing the risk we assume. Principally all of the business is reinsurance, however our book of insurance business has been increasing in recent periods and may continue to do so.

In recent years, we have expanded our Casualty and Specialty segment operations through organic growth initiatives and the acquisition of Platinum, and we plan to continue to expand these operations over time if market conditions are appropriate.

Our Casualty and Specialty segment gross premiums written may be subject to significant volatility as certain lines of business in this segment can be influenced by a small number of relatively large transactions. Our team of experienced professionals seeks to underwrite these lines using a disciplined underwriting approach and sophisticated analytical tools. We generally target lines of business where we believe we can adequately quantify the risks assumed and provide coverage where we believe our underwriting is robust and the market is attractive. We also seek to identify market dislocations and write new lines of business whose risk and return characteristics are estimated to exceed our hurdle rates. Furthermore, we also seek to manage the correlations of this business with our overall portfolio. We believe that our underwriting and analytical capabilities have positioned us well to manage our casualty and specialty business.

We offer our casualty and specialty reinsurance products principally on a proportional basis, and we also provide excess of loss coverage. These products frequently include tailored features such as limits or sub-limits which we believe help us manage our exposures. Any liability exceeding, or otherwise not subject to, such limits reverts to the cedant. Our

Casualty and Specialty segment frequently provides coverage for relatively large limits or exposures, and thus we are subject to potential significant claims volatility.

Our Casualty and Specialty segment offers certain casualty insurance products through Syndicate 1458 including, but not limited to, general liability, medical malpractice and professional liability. Syndicate 1458 also writes business through delegated authority arrangements.

As a result of our financial strength, we have the ability to offer significant capacity and, for select risks, we have made available significant limits. We believe these capabilities, the strength of our casualty and specialty reinsurance underwriting team, and our demonstrated ability and willingness to pay valid claims are competitive advantages of our casualty and specialty reinsurance business. While we believe that these and other initiatives will support growth in our Casualty and Specialty segment, we intend to continue to apply our disciplined underwriting approach which, together with current and forecasted market conditions, is likely to temper such growth in current and near-term periods.

### **2.3.3. Other**

Our Other category primarily includes the results of: (1) our share of strategic investments in certain markets we believe offer attractive risk adjusted returns or where we believe our investment adds value, and where, rather than assuming exclusive management responsibilities ourselves, we partner with other market participants; (2) our investment unit which manages and invests the funds generated by our consolidated operations; (3) corporate expenses, certain expenses related to the acquisition of Platinum, capital servicing costs and noncontrolling interests; and (4) the remnants of our former Bermuda-based insurance operations.

## **2.4. GEOGRAPHICAL EXPOSURES**

Our exposures are generally diversified across geographic zones but are also a function of market conditions and opportunities. Our largest exposure has historically been to the U.S. and Caribbean market, which represented 49.7% of our gross premiums written for the year ended December 31, 2018. A significant amount of our U.S. and Caribbean premium provides coverage against windstorms (mainly U.S. Atlantic hurricanes), earthquakes and other natural and man-made catastrophes.

The following table sets forth the amounts and percentages of our gross premiums written allocated to the territory of coverage exposure:

Year ended December 31, (in thousands except percentages)	2018		2017	
	Gross Premiums Written	Percentage of Gross Premiums Written	Gross Premiums Written	Percentage of Gross Premiums Written
<i>Property Segment</i>				
U.S. and Caribbean	\$ 978,063	29.4 %	\$ 954,269	34.1 %
Worldwide	464,311	14.0 %	305,915	10.9 %
Japan	71,601	2.2 %	49,821	1.8 %
Europe	144,857	4.4 %	49,486	1.8 %
Worldwide (excluding U.S.)(1)	66,872	2.0 %	48,182	1.7 %
Australia and New Zealand	19,273	0.6 %	14,151	0.5 %
Other	15,949	0.5 %	18,613	0.7 %
Total Property Segment	1,760,926	53.1 %	1,440,437	51.5 %
<i>Casualty and Specialty Segment</i>				
Worldwide	776,976	23.4 %	686,253	24.5 %
U.S. and Caribbean	667,125	20.2 %	622,757	22.3 %
Europe	15,296	0.5 %	10,104	0.3 %
Worldwide (excluding U.S.)(1)	31,734	1.0 %	9,752	0.4 %
Australia and New Zealand	3,667	0.1 %	4,141	0.1 %
Other	54,703	1.7 %	24,103	0.9 %
Total Casualty and Specialty Segment	1,549,501	46.9 %	1,357,110	48.5 %
<i>Other category</i>	-	- %	(7)	%
Total Gross premiums written	<b>\$ 3,310,427</b>	<b>100.0 %</b>	<b>\$ 2,797,540</b>	<b>100.0 %</b>

(1) The category "Worldwide (excluding U.S.\*)" consists of contracts that cover more than one geographic region (other than the U.S.).

## 2.5. BERMUDA OPERATING SUBSIDIARY RESULTS

Gross and net premiums written by each of our Bermuda Operating Subsidiaries was as follows:

Year ended December 31, (in thousands)	2018		2017	
	Gross	Net	Gross	Net
Renaissance Reinsurance	\$ 2,032,235	\$ 1,186,002	\$ 1,823,108	\$ 1,139,320
RenaissanceRe Specialty U.S.	767,303	601,826	757,154	440,519
DaVinci	386,796	317,172	322,186	281,492
Top Layer Re	41,959	21,911	41,772	22,461

## 2.6. INVESTMENT PERFORMANCE

### 2.6.1. Composition of asset portfolio

#### 2.6.1.1. RenaissanceRe Group

Our investment guidelines stress preservation of capital, market liquidity, and diversification of risk. Most of our investments consist of highly rated fixed income securities. We also hold a significant amount of short-term investments which are managed as part of our investment portfolio and have a maturity of one year or less when purchased. In addition, we have an allocation to other investments including private equity investments, catastrophe bonds, senior secured bank loan funds and hedge funds, and to certain equity securities. We may from time to time re-evaluate our investment guidelines and explore investment allocations to other asset classes. Our investments are subject to market-wide risks and fluctuations, as well as to risks inherent in particular securities.

At December 31, 2018, we held investments totaling \$11.9 billion, compared to \$9.5 billion at December 31, 2017.

The table below shows the invested assets of the RenaissanceRe Group:

<b>At December 31,</b> (in thousands, except percentages)	<b>2018</b>		<b>2017</b>	
U.S. treasuries	\$ 3,331,411	28.0%	\$ 3,168,763	33.3%
Agencies	174,883	1.5%	47,646	1.0%
Municipal	6,854	0.1%	509,802	5.6%
Non-U.S. government (Sovereign debt)	279,818	2.4%	287,660	3.6%
Non-U.S. government-backed corporate	160,063	1.3%	163,651	1.4%
Corporate	2,450,244	20.6%	2,063,459	20.2%
Agency mortgage-backed	817,880	6.8%	500,456	5.0%
Non-agency mortgage-backed	278,680	2.4%	300,331	2.7%
Commercial mortgage-backed	282,294	2.4%	202,062	4.4%
Asset-backed	306,743	2.6%	182,725	2.0%
Total fixed maturity investments, at fair value	8,088,870	68.1%	7,426,555	74.0%
Short term investments, at fair value	2,586,520	21.8%	991,863	14.7%
Equity investments trading, at fair value	310,252	2.6%	388,254	4.1%
Other investments, at fair value	784,933	6.5%	594,793	5.9%
Total managed investment portfolio	11,770,575	99.0%	9,401,465	98.7%
Investments in other ventures, under equity method	115,172	1.0%	101,974	1.3%
<b>Total investments</b>	<b>\$ 11,885,747</b>	<b>100.0%</b>	<b>\$ 9,503,439</b>	<b>100.0%</b>

As the reinsurance coverages we sell include substantial protection for damages resulting from natural and man-made catastrophes, as well as for potentially large casualty and specialty exposures, we expect from time to time to become liable for substantial claim payments at short notice. Accordingly, our investment portfolio as a whole is structured to seek to preserve capital and provide a high level of liquidity which means that the large majority of our investment portfolio consists of highly rated fixed income securities, including U.S. treasuries, agencies, municipals, highly rated sovereign and supranational securities, high-grade corporate securities and mortgage-backed and asset-backed securities. During the second quarter of 2018, we reduced our allocation to municipal fixed maturity investments and invested the proceeds in certain other sectors of fixed maturity and short term investments that we believe will provide a higher net after-tax yield to maturity, however, we cannot assure you of this. We also have an allocation to publicly traded equities reflected on our consolidated balance sheet as equity investments trading and an allocation to other investments (including catastrophe bonds, private equity partnerships, senior secured bank loan funds, hedge funds and other investments). At December 31, 2018, our portfolio of equity investments trading totaled \$310.3 million, or 2.6%, of our total investments (2017 - \$388.3 million or 4.1%). Our portfolio of other investments totaled \$784.9 million, or 6.5%, of our total investments (2017 - \$549.8 million or 6.3%).

The following table summarizes the composition of our investment portfolio, including the amortized cost and fair value of our investment portfolio and the ratings as assigned by S&P, or Moody's and/or other rating agencies when S&P ratings were not available, and the respective effective yield.

December 31, 2018	Amortized Cost	Fair Value	% of Total Investment Portfolio	Weighted Average Yield to	Credit Rating (1)					
					AAA	AA	A	BBB	Non- Investment Grade	Not Rated
(in thousands, except										
<b>Short term investments</b>	\$ 2,586,520	\$ 2,586,520	21.8%	2.1%	\$ 2,579,900	\$ 2,541	\$ 553	\$ 1,511	\$ 751	\$ 1,264
		100.0%			99.8%	0.1%	—%	0.1%	—%	—%
<b>Fixed maturity investments</b>										
U.S. treasuries	3,336,969	3,331,411	28.0%	2.5%	—	3,331,411	—	—	—	—
Agencies	175,185	174,883	1.5%	3.0%	—	174,883	—	—	—	—
Municipal	6,070	6,854	0.1%	4.8%	—	1,044	4,546	504	—	760
Non-U.S. government	284,965	279,818	2.4%	2.7%	207,103	61,233	8,216	—	3,266	—
Non-U.S. government-backed	160,286	160,063	1.3%	2.8%	55,843	49,635	54,188	397	—	—
Corporate	2,513,434	2,450,244	20.6%	4.9%	41,668	197,653	854,801	607,745	719,459	28,918
Agency mortgage-backed	825,365	817,880	6.8%	3.5%	262	817,618	—	—	—	—
Non-agency mortgage-backed	266,705	278,680	2.4%	4.7%	18,521	12,485	3,890	11,216	177,969	54,599
Commercial mortgage-backed	284,495	282,294	2.4%	3.6%	214,161	57,704	895	9,534	—	—
Asset-backed	310,488	306,743	2.6%	4.3%	232,199	41,641	1,669	29,429	—	1,805
Total fixed maturity investments	8,163,962	8,088,870	68.1%	3.5%	769,757	4,745,307	928,205	658,825	900,694	86,082
		100.0%			9.5%	58.7%	11.5%	8.1%	11.1%	1.1%
<b>Equity investments trading</b>		310,252	2.6%		—	—	—	—	—	310,252
		100.0%			—%	—%	—%	—%	—%	100.0%
<b>Other investments</b>										
Catastrophe bonds		516,571	4.3%		—	—	—	—	516,571	—
Private equity investments		242,647	2.0%		—	—	—	—	—	242,647
Senior secured bank loan funds		14,482	0.1%		—	—	—	—	—	14,482
Hedge funds		11,233	0.1%		—	—	—	—	—	11,233
Total other investments		784,933	6.5%		—	—	—	—	516,571	268,362
		100.0%			—%	—%	—%	—%	65.8%	34.2%
<b>Investments in other ventures</b>		115,172	1.0%		—	—	—	—	—	115,172
		100.0%			—%	—%	—%	—%	—%	100.0%
<b>Total investment portfolio</b>		\$ 11,885,747	100.0%		\$ 3,349,657	\$ 4,747,848	\$ 928,758	\$ 660,336	\$ 1,418,016	\$ 781,132
		100.0%			28.2%	39.9%	7.8%	5.6%	11.9%	6.6%

(1) The credit ratings included in this table are those assigned by S&P. When ratings provided by S&P were not available, ratings from other nationally recognized rating agencies were used. We have grouped short term investments with an A-1+ and A-1 short term issue credit rating as AAA, short term investments with an A-2 short term issue credit rating as AA and short term investments with an A-3 short term issue credit rating as A.

### 2.6.1.3. Bermuda Operating Subsidiaries

The following tables summarize the fair value of investments at RenaissanceRe's Bermuda Operating Subsidiaries:

<b>At December 31, 2018</b> <i>(in thousands of USD)</i>	<b>Renaissance Reinsurance</b>	<b>DaVinci</b>	<b>RenaissanceRe Specialty U.S.</b>	<b>Top Layer Re</b>
U.S. Treasuries	\$ 1,844,362	\$ 553,310	\$ 604,283	\$ 29,518
Agencies	78,036	35,569	26,836	403
Municipal	760	2,697	-	
Non-U.S. government (sovereign debt)	177,630	27,243	69,452	2,427
Non U.S. government backed corporate	124,932	20,835	7,476	1,277
Corporate	518,056	673,120	320,411	29,804
Agency mortgage-backed	259,789	255,030	145,596	4,574
Non-agency mortgage- backed	-	4,629	7,625	328
Commercial mortgage- backed	3,396	72,708	118,164	1,248
Asset backed securities	-	44,764	208,276	5,093
<b>Total fixed maturity investments</b>	<b>3,006,961</b>	<b>1,689,905</b>	<b>1,508,119</b>	<b>74,672</b>
Short term investments	262,057	227,097	176,171	12,377
Other investments	27,487	-	-	
Equity investments		170	96,508	
Investments in affiliates (equity method)	680,360	-	-	
<b>Total investments</b>	<b>3,976,865</b>	<b>1,917,172</b>	<b>1,780,798</b>	<b>87,049</b>

<b>At December 31, 2017</b> <i>(in thousands of USD)</i>	<b>Renaissance Reinsurance</b>	<b>DaVinci</b>	<b>RenaissanceRe Specialty U.S.</b>	<b>Top Layer Re</b>
U.S. Treasuries	\$ 1,784,393	\$ 745,532	\$ 375,451	\$ 39,717
Agencies	28,045	10,495	5,909	404
Municipal	-	2,884	503,307	-
Non-U.S. government (sovereign debt)	174,872	21,413	54,204	2,630
Non U.S. government backed corporate	108,547	9,550	12,632	1,280
Corporate	406,622	597,893	184,629	36,175
Agency mortgage-backed	101,999	196,815	52,835	4,743
Non-agency mortgage- backed	-	5,467	2,172	511
Commercial mortgage- backed	5,964	70,528	72,493	2,934
Asset backed securities	-	63,090	84,933	6,001
<b>Total fixed maturity investments</b>	<b>2,610,442</b>	<b>1,723,667</b>	<b>1,348,565</b>	<b>94,395</b>
Short term investments	259,186	197,832	72,438	2,504
Other investments	38,315	-	-	-
Equity investments	-	281	100,712	-
Investments in affiliates (equity method)	995,008	-	-	-
<b>Total investments</b>	<b>\$ 3,902,951</b>	<b>\$ 1,921,780</b>	<b>\$ 1,521,715</b>	<b>\$ 96,899</b>



## 2.6.2. Overall performance

Year ended December 31, (in thousands)	2018	2017
Net investment income	\$ 261,866	\$ 222,209
Net realized and unrealized gains (losses) on investments	(175,069)	135,822
Total investment result	<b>\$ 86,797</b>	<b>\$ 358,031</b>

Our total investment result, which includes the sum of net investment income, net realized and unrealized gains and losses on investments, was \$86.8 million in 2018, compared to \$358.0 million in 2017, a decrease of \$271.2 million. The decrease was primarily driven by net realized and unrealized losses on investments of \$175.1 million in 2018, compared to net realized and unrealized gains on investments of \$135.8 million in 2017. The net realized and unrealized losses in 2018 were driven by net realized and unrealized losses on the equity investments trading portfolio. Partially offsetting these items was higher net investment income from our portfolio of fixed maturity investments trading and short-term investments, primarily driven by higher average invested assets and the impact of interest rate increases during recent periods.

## 2.6.3. Net investment income

### 2.6.3.1. RenaissanceRe Group

The components of net investment income were as follows:

Year ended December 31, (in thousands)	2018	2017
Fixed maturity investments	\$ 211,973	\$ 179,624
Short term investment	33,571	11,082
Equity investments	4,474	3,628
Other investments		
Private Equity investments	477	33,999
Other	22,475	8,067
Cash and cash equivalents	3,810	1,196
	276,780	237,596
Investment expenses	(14,914)	(15,387)
Net investment income	<b>\$ 261,866</b>	<b>\$ 222,209</b>

Net investment income was \$261.9 million in 2018, compared to \$222.2 million in 2017, an increase of \$39.7 million. Impacting our net investment income for 2018 were higher average invested assets in our fixed maturity and short-term investment portfolios, combined with the impact of interest rate increases during recent periods. In addition, our catastrophe bonds, which are included in other investments, experienced an increase in net investment income as these investments benefited from higher interest rates and high

invested assets, and were less impacted by the catastrophe events in 2018, compared to 2017.

Our private equity and other investment portfolios are accounted for at fair value with the change in fair value recorded in net investment income, which included net unrealized losses of \$8.3 million and \$24.7 million in 2018 and 2017, respectively.

### 2.6.3.2. Bermuda Operating Subsidiaries

The components of net investment income at RenaissanceRe's Bermuda Operating Subsidiaries are as follows:

<b>Year ended December 31, 2018</b>	<b>Renaissance Reinsurance</b>	<b>DaVinci</b>	<b>RenaissanceRe Specialty U.S.</b>	<b>Top Layer Re</b>
<i>(in thousands)</i>				
Fixed maturity investments	\$ 64,348	\$ 46,136	\$ 36,880	\$ 1,604
Short term investment	4,780	3,746	2,951	81
Equity investments	-	-	2043	-
Other investments	1,104	-	-	-
Cash and cash equivalents	2,468	419	200	147
	72,700	50,301	42,074	1,832
Investment expenses	(4,131)	(3,245)	(1,979)	(115)
Net investment income	<b>\$ 68,569</b>	<b>\$ 47,056</b>	<b>\$ 40,095</b>	<b>\$ 1,717</b>

<b>Year ended December 31, 2017</b>	<b>Renaissance Reinsurance</b>	<b>DaVinci</b>	<b>RenaissanceRe Specialty U.S.</b>	<b>Top Layer Re</b>
<i>(in thousands)</i>				
Fixed maturity investments	\$ 48,426	\$ 34,856	\$ 28,012	\$ 1,614
Short term investment	2,959	1,921	1,306	8
Equity investments	-	-	1,453	-
Other investments	1,432	-	-	-
Cash and cash equivalents	1,112	-	25	-
	53,929	36,777	30,796	1,622
Investment expenses	(4,767)	(3,134)	(2,230)	(125)
Net investment income	<b>\$ 49,162</b>	<b>\$ 33,643</b>	<b>\$ 28,566</b>	<b>\$ 1,497</b>

## 3. GOVERNANCE, RISK AND COMPLIANCE STRUCTURE

### 3.1. BOARD AND SENIOR MANAGEMENT

RenaissanceRe’s Board of Directors (the “Board”) and management have a strong commitment to effective corporate governance. We believe we have a comprehensive corporate governance framework for our operations, the key components of which are set forth in the following documents:

- our Bye-laws (the “Bye-laws”);
- our Guidelines on Significant Corporate Governance Issues (the “Corporate Governance Guidelines”);
- our Code of Ethics and Conduct (the “Code of Ethics”);
- our Audit Committee Charter (the “Audit Committee Charter”); and
- our Compensation and Corporate Governance Committee Charter (the “Compensation Committee Charter”).

A copy of each of these documents is published on our website at [www.renre.com](http://www.renre.com) under “Investor Information—Corporate Governance,” except our Bye-laws, which are filed with the Securities and Exchange Commission (“SEC”) and can be found on the SEC website at [www.sec.gov](http://www.sec.gov).

#### 3.1.1. Structure of the Board

##### 3.1.1.1. RenaissanceRe Holdings Ltd. Board

Appendix Two sets forth the current Board of RenaissanceRe. The Board of RenaissanceRe is responsible for overseeing the Group’s risk management and internal control systems. Generally, the Board delegates its risk management responsibilities to its committees as set forth in the committee charters and described within the RenaissanceRe’s Proxy Statement for our 2019 Annual General Meeting of Shareholders filed with the SEC on April 2, 2019 (the “Proxy Statement”). The Board maintains five standing committees: the Audit Committee, the Compensation and Corporate Governance Committee (the “Compensation Committee”), the Investment and Risk Management Committee (“IRMC”), the Transaction Committee and the Offerings Committee. The membership of each Board Committee as of May 31, 2019 is shown in the table below:

	<b>Audit Committee</b>	<b>Compensation and Corporate Governance Committee</b>	<b>Investment and Risk Management Committee</b>	<b>Transaction Committee</b>	<b>Offerings Committee</b>
David C. Bushnell	Chair				
James L. Gibbons				X	X
Brian G. J. Gray			X	X	X
Jean D. Hamilton		X		X	X
Duncan P. Hennes			X		
Henry Klehm III		Chair			
Kevin J. O'Donnell				Chair	Chair
Valerie Rahmani	X				
Carol P. Sanders	X				
Anthony M. Santomero			Chair		
Cynthia Trudell		X			

### 3.1.1.2. Subsidiary-level Boards

RenaissanceRe's subsidiaries and joint ventures generally operate pursuant to RenaissanceRe Group policies, procedures and activities for risk management. The directors of Renaissance Reinsurance and RenaissanceRe Specialty U.S., and certain directors of DaVinci and Top Layer Re are senior officers of the RenaissanceRe Group. As such, the strong commitment to effective corporate governance within RenaissanceRe is implemented across all Group entities. See Appendix Two for details of our Bermuda Operating Subsidiary Board membership.

### 3.1.2. Executive Officers

RenaissanceRe's executive officers provide functional oversight of our business units and have primary responsibility for setting company policy and decision-making authority. Our executive officers, as defined in the Exchange Act, include our Chief Executive Officer, Chief Financial Officer, Group Chief Underwriting Officer, Group Chief Risk Officer, and Group General Counsel, each of whom is also a named executive officer for purposes of our Proxy Statement, and our Chief Accounting Officer.

### 3.1.3. Segregation of responsibilities

The Board of RenaissanceRe is responsible for overseeing enterprise-wide risk management and is actively involved in the monitoring of risks that could affect us. The members of the Board have regular, direct access to the senior executives and other officers responsible for coordinating enterprise-wide risk management, including our Chief Financial Officer, Group Chief Risk Officer, and Group General Counsel and Chief Compliance Officer, each of whom reports directly to our Chief Executive Officer, as well as other senior personnel such as our Chief Accounting Officer and the Head of Internal Audit.

As noted in section 3.1.1., generally, the Board delegates its risk management responsibilities to its committees as set forth in the committee charters. Responsibilities of those committees are summarized below:

#### **3.1.3.1. Audit Committee**

The Audit Committee's primary purposes are to assist the Board with the oversight of: (i) the integrity, quality and accuracy of our financial statements, including internal controls; (ii) our compliance with legal and regulatory requirements; (iii) our independent auditor's qualifications, independence and performance; and (iv) the performance of our internal audit function. The Audit Committee's responsibilities and duties are described in its charter.

#### **3.1.3.2. Compensation and Corporate Governance Committee**

The Compensation Committee's primary purposes are to assist the Board in carrying out its responsibilities with respect to: (i) Board and key executive compensation; (ii) Board nomination and evaluation matters; and (iii) corporate governance matters. The Compensation and Corporate Governance Committee's responsibilities and duties are described in its charter.

#### **3.1.3.3. Investment and Risk Management Committee**

The IRMC's primary purpose is to assist the Board with oversight of our investment activities and financial risk management. The IRMC's responsibilities and duties are described in its charter.

#### **3.1.3.4. Transaction Committee**

The Transaction Committee has the authority of the Board to consider and approve, on behalf of the full Board, certain strategic investments and other possible transactions.

#### **3.1.3.5. Offerings Committee**

The Offerings Committee has the authority to consider and approve, on behalf of the full Board, transactions pursuant to our shelf registration program, including setting the terms, amount and price of any such offering.

### **3.1.4. Remuneration policy**

RenaissanceRe's Compensation Committee reviews our compensation programs for consistency with our risk management practices and to assist us in ensuring that our programs align our executives and employees with the long-term interests of shareholders in light of the market cycles and earnings volatility that characterizes our industry. Our executive officers and key members of our human resources function help support the Compensation Committee's process and the Chief Executive Officer and Group General Counsel regularly attend and participate in portions of the Compensation Committee's

meetings. Our Chief Executive Officer provides the Compensation Committee with strategic context regarding our products, underwriting and operational risks, strategy and performance, and shareholder value creation over time. He also advises the Compensation Committee on matters such as the alignment of our incentive plan performance measures with our overall strategy and the impact of the design of our equity incentive awards on our ability to attract, motivate and retain highly talented executive officers and employees. The Chief Executive Officer also makes recommendations to the Compensation Committee regarding the compensation of key executive officers who report to him, including our named executive officers, and reports to the Compensation Committee regarding his evaluation of the performance of our named executive officers (other than the Chief Executive Officer). Our Group General Counsel provides input on the Board's and the Compensation Committee's governance and legal obligations and analyses of developments relating to the legal and regulatory environment applicable to us. In addition, our executive officers collaborate on the development of our strategic plans which the Compensation Committee uses as the basis for setting the goals and targets for our performance-based compensation.

The key principles of our executive compensation philosophy include:

- Requiring our named executive officers to own a significant number of our shares and forbidding pledging, hedging and similar transactions in our shares;
- Making a meaningful portion of named executive officer compensation pay "at-risk" through performance-based annual incentive bonuses and long-term equity-based incentive awards; and
- Rewarding our named executive officers based primarily on our overall performance, rather than the performance of individual business units or functions.

In addition, the Compensation Committee has the authority to retain and terminate outside advisors, including compensation consultants and counsel, to assist it with its responsibilities, including its evaluation of our compensation plans and programs and determination of the actual and proposed compensation for executive officers and directors. The Committee's current independent compensation consultant is Mercer (U.S.) Inc. ("Mercer"). Among other things, Mercer has supported the Committee with analysis and data relating to peer groups, broader market data, named executive officer compensation determinations, and programmatic risk assessment.

For detailed information regarding our executive compensation programs, see our Proxy Statement which is available on our website [www.renre.com](http://www.renre.com).

Our remuneration structure also aligns our non-executive employees with the long-term interests of our shareholders. The compensation of most of our non-executive employees includes both fixed and variable compensation components, consisting of a fixed base salary, a variable merit-based discretionary bonus (the amount of which is determined using the same performance metrics as those used for our executive officers), and, for some employees, long-term equity-based incentive awards. The combination of compensation

components is designed to attract, retain and motivate employees, while the long-term remuneration component aligns the interests of employees with those of the shareholders.

### **3.1.5. Executive pensions and retirement schemes**

Our executive officers do not participate in any retirement programs that are not generally available to our employees.

### **3.1.6. Material transactions with related parties**

We have adopted a written policy with respect to the review, approval, and ratification of transactions with related persons. The policy covers, among other things, transactions between us and any of our executive officers, directors, nominees for director, any of their immediate family members or any other related persons as defined in Item 404 of Regulation S-K. Each transaction covered by this policy is reviewed to determine whether the transaction is in the best interests of RenaissanceRe and our shareholders. These transactions are disclosed in detail in the section "Certain Relationships and Related Transactions" in our Proxy Statement, which is available on our website [www.renre.com](http://www.renre.com) (Investors – SEC Filings).

## **3.2. FITNESS AND PROPRIETY**

### **3.2.1. Fit and proper process**

#### **3.2.1.1. Board**

The Compensation Committee's responsibilities, as more fully described in its charter which is available on our website at [www.renre.com](http://www.renre.com) (Investors – Corporate Governance), include being primarily responsible for overseeing and supervising the nominating process for prospective members of the Board, developing our corporate governance principles, overseeing the Board's overall effectiveness reviews, review of individual director performance and similar matters, and overseeing the establishment of criteria for the directors and policies regarding the structure of the Board and its committees, including:

- Establishing the criteria and procedures for the identification, selection and recommendation of new directors;
- Leading the director selection process, including retaining a search firm, if desired, developing a list of potential candidates, evaluating candidates and recommending nominees to the Board;
- Reviewing the skills and competencies the Board needs;
- Reviewing the performance of directors and recommending directors to the Board for re-election;
- Reviewing and recommending changes to committee chairpersons, composition and functions and reviewing committee self-evaluations;

- Evaluating the overall effectiveness of the Board, including compliance with legal and regulatory requirements such as the independence requirements of the New York Stock Exchange (“NYSE”) and qualifications of the Audit Committee members, and recommending any changes in the Board’s practices or personnel;
- Overseeing the new director orientation process and director continuing education policies;
- Reviewing any properly submitted shareholder proposals; and
- Developing, overseeing compliance with and recommending changes to our Corporate Governance Guidelines.

The Compensation Committee is responsible for reviewing with the Board, on a reasonably regular basis, the appropriate skills and characteristics required of Board members in the context of the current make-up of the Board. This assessment includes issues such as experience, age and skills, all in the context of an assessment of the perceived needs of the Board at that point in time.

The Compensation Committee is responsible for identifying and recommending to the Board qualified candidates for nomination to the Board. It regularly assesses the appropriate size and composition of the Board and whether any vacancies are expected due to retirement or other reasons. Candidates may come to the attention of the Compensation Committee through our current Board members or executive officers, professional search firms, shareholders, or other persons. From time to time, the Compensation Committee engages executive recruiters to identify potential nominees to the Board and to provide related services such as background checks and other due diligence.

The Board believes that the backgrounds and qualifications of the directors, considered as a group, should provide a diverse mix of skills, viewpoints, experience, knowledge, and abilities that will allow the Board to fulfil its responsibilities, taking into account our evolving strategic direction and needs. The Compensation Committee evaluates and discusses diversity at both the Board and the committee levels when carrying out its director selection, recruitment and nomination obligations and also when assessing the performance of current directors. This assessment is undertaken by the Compensation Committee at least annually.

The NYSE listing standards require that a majority of our directors be independent. For a director to be considered independent pursuant to the standards, the Board must determine that the director does not have any direct or indirect material relationship with us either directly or as a partner, shareholder or officer of an organization that has a relationship with us. Our Corporate Governance Guidelines provide that a majority of our directors will meet the NYSE’s independence criteria and set forth additional parameters that the Board uses to determine director independence, which we believe are more stringent than the independence requirements in the NYSE listing standards. In addition, the Board considers all relevant facts and circumstances known or reported to it in making independence determinations.

The Compensation Committee has reviewed the independence of each of our current directors and affirmatively determined that each of our directors other than Mr. O’Donnell



is independent. Mr. O'Donnell is not independent because of his employment as our President and Chief Executive Officer.

#### 3.2.1.2. Senior Management

RenaissanceRe's standard recruitment, promotion and on-going performance management processes align with seeking to ensure senior management is fit and proper. During recruiting, candidates are thoroughly vetted via a robust interview process to ensure they possess the integrity, skills, experience, qualifications and abilities required to perform the role to a high standard. In addition, extensive background checks are carried out to ensure candidates meet RenaissanceRe's expectations regarding integrity and compliance. Subsequent to hiring, senior management are regularly assessed against established performance objectives on an annual basis at a minimum, via the RenaissanceRe's standard performance management process which reflect integrity, competency and ability, to ensure they remain fit and proper. Our Corporate Governance Guidelines and Compensation Committee Charter set forth the requirements as to the Compensation Committee's responsibility regarding evaluation of the Chief Executive Officer's performance, management succession planning and establishing compensation and benefit programs for key executive officers.

### 3.2.2. Skills and expertise

#### 3.2.2.1. Board

As discussed in our Corporate Governance Guidelines, we do not set specific criteria for directors but believe that candidates should show evidence of leadership in their particular field and have broad experience and the ability to exercise sound business judgment. The Board considers the diversity, skills, and experience of candidates in the context of the needs of the Board as a whole. In selecting directors, the Board generally seeks a combination of qualities and experience that will contribute to the exercise of the duties of the Board, including active or former chief executive or senior officers of major complex businesses, leading academics and entrepreneurs.

Our Compensation Committee takes a holistic approach to identifying and considering potential director nominees and evaluating the current composition of our Board, focusing on the composition and competencies of our Board as a whole, how the traits possessed by individual director nominees complement one another, the ability of the current and proposed members to operate collegially and effectively, and the intersection of these factors with our current strategy, operational plans and oversight requirements. Accordingly, when evaluating individual director nominees, the Compensation Committee considers, among others, the following factors:

- the personal and professional ethics, integrity and values of the candidate;

- the independence of the candidate under legal, regulatory and other applicable standards, including the ability of the candidate to represent all of our shareholders without any conflicting relationship with any particular constituency;
- the business acumen, leadership qualities and record of accomplishment of the candidate;
- the professional experience and industry expertise of the candidate and whether this will add to or complement that of the existing Board, in light of our evolving strategic and operational plans over time;
- the compatibility of the candidate with the existing Board;
- the ability and willingness of the candidate to devote sufficient time to carrying out Board duties and responsibilities fully and effectively, in particular in light of our Bermuda location;
- the commitment of the candidate to serve on our Board for a potentially extended period of time, given the benefits our Board ascribes to continuity and a breadth of experience with our strategies and risk management processes, and with a view toward effective oversight of management’s efforts to attempt to ensure the safety and soundness of our company in light of the market cycles and earnings volatility that characterize our industry, as well as other matters;
- maintaining a diversity of skills, experience, and viewpoints represented on the Board as a whole; and
- other attributes of the candidate, our business and strategic conditions and external factors that the Compensation Committee deems appropriate.

A summary background of the current members of our Board follows:

<p><b>David C. Bushnell</b> Age: 64 Director Since: 2008 Chair of the Audit Committee</p>	<p>Mr. Bushnell has served as the principal of Bushnell Consulting, a financial services consulting firm, since 2008. Mr. Bushnell retired from Citigroup Inc. (“Citigroup”) in 2007, after 22 years of service. Mr. Bushnell served as the Senior Risk Officer of Citigroup from 2003 through 2007 and retired as Chief Administrative Officer in 2007. Following his retirement from Citigroup, Mr. Bushnell served as a consultant to Citigroup until December 31, 2008. Previously, Mr. Bushnell worked for Salomon Smith Barney Inc. (later acquired by Citigroup) and its predecessors in a variety of positions, including as a managing director and Chief Risk Officer. Mr. Bushnell served on the Board of Directors and as Chief Risk Officer of Cordia Bancorp Inc. (“Cordia”), a public bank holding company, and its wholly owned subsidiary, Bank of Virginia, from 2011 until Cordia was acquired in September 2016.</p>
<p><b>James L. Gibbons</b> Age: 55 Director Since: 2008 Non-Executive Chair of the Board Member of the Transaction and Offerings Committees</p>	<p>Mr. Gibbons, a Bermudian citizen, is Chairman of Harbour International Trust Company Limited and the Treasurer and a Director of Edmund Gibbons Limited (“EGL”). Mr. Gibbons also serves as a Director of Clarien Group Limited (“Clarien”), an international financial company. He was also Non-Executive President of Bermuda Air Conditioning Limited (“BACL”) through March 2019 and currently serves as a Director of BACL. From June 2013 to June 2016, Mr. Gibbons served as a member of the Board of Directors of Nordic American Tankers Limited, a publicly held company. Mr. Gibbons served as Chair of Capital G Bank Limited from 1999 to 2013 and as President and Chief Executive Officer of Capital G Limited from 1999 to 2010, prior to the change of name to Clarien from Capital G in 2014.</p>

<p><b>Brian G. J. Gray</b> Age: 56 Director Since: 2013 Member of the Investment and Risk Management, Transaction and Offerings Committees</p>	<p>From 2008 until his retirement in 2012, Mr. Gray served as Group Chief Underwriting Officer of Swiss Reinsurance Company Ltd. (“Swiss Re”) and was a member of Swiss Re’s Group Executive Committee. From 2005 through 2008, he was a member of the Group Executive Board, responsible for underwriting Property and Specialty Product Lines on a global basis for Swiss Re. Mr. Gray joined Swiss Re in Canada (“Swiss Re Canada”) in 1985, and served in a variety of roles, including President and Chief Executive Officer of Swiss Re Canada from 2001 to 2005 and Senior Vice President of Swiss Re Canada from 1997 to 2001.</p>
<p><b>Jean D. Hamilton</b> Age: 72 Director Since: 2005 Member of the Compensation and Corporate Governance, Transaction, and Offerings Committees</p>	<p>Ms. Hamilton is an independent consultant and private investor and a Member of Brock Capital Group LLC. Previously, she held various positions with Prudential Financial, Inc., including Executive Vice President, and was Chief Executive Officer of Prudential Institutional from 1998 through 2002. Prior to joining Prudential, she held several positions with The First National Bank of Chicago, including Senior Vice President and Head of the Northeastern Corporate Banking Department. She is currently a Trustee, a member of the Audit Committee and Deferred Compensation Committee, and Chair of the Board Valuation and Liquidity Committee, of First Eagle Funds and First Eagle Variable Funds.</p>
<p><b>Duncan P. Hennes</b> Age: 62 Director Since: 2017 Member of the Investment and Risk Management Committee</p>	<p>Mr. Hennes has served as the Co-Founder and Managing Member of Atrevida Partners, LLC (“Atrevida”) since 2007. Prior to co-founding Atrevida, he served as Co-Founder and Partner of Promontory Financial Group from 1999 to 2006. Prior to that, Mr. Hennes served in a number of senior executive positions at Bankers Trust Corporation, including Executive Vice President in charge of Trading, Sales and Derivatives, and as the Chairman of the Board of Oversight Partners I, the consortium that took control of Long Term Capital Management, from 1987 to 1998. From 1998 to 1999 he was the Chief Executive Officer at Soros Fund Management, LLC. Mr. Hennes has served on the Boards of Directors of Citigroup and Citibank, N.A. since 2013, where he currently serves as the Chair of the Personnel and Compensation Committee and as a member of the Risk Management Committee and the Executive Committee.</p>
<p><b>Henry Klehm III</b> Age: 60 Director Since: 2006 Chair of the Compensation and Corporate Governance Committee</p>	<p>Mr. Klehm has been a partner at the law firm Jones Day since 2008 and has been the Practice Leader of the firm’s Securities Litigation and SEC Enforcement Practice since January 2017. From 2002 to 2007, Mr. Klehm served as Global Head of Compliance for Deutsche Bank, AG. Prior to joining Deutsche Bank, AG, Mr. Klehm served as Chief Regulatory Officer and Deputy General Counsel at Prudential Financial from 1999 to 2002. Prior to joining Prudential, Mr. Klehm served in various positions with the SEC, including as Senior Associate Director of the Northeast Regional Office.</p>
<p><b>Kevin J. O’Donnell</b> Age: 52 Director Since: 2013 Chair of the Transaction and Offerings Committees</p>	<p>Mr. O’Donnell has served as our Chief Executive Officer since July 2013 and as our President since November 2012. Mr. O’Donnell previously served in a number of roles since joining RenaissanceRe in 1996, including Global Chief Underwriting Officer, Executive Vice President, Senior Vice President, Vice President, and Assistant Vice President. Mr. O’Donnell also serves as the Chair of the Global Reinsurance Forum and served as the Chair of the Association of Bermuda Insurers and Reinsurers in 2017 and 2018.</p>
<p><b>Valerie Rahmani</b> Age: 61 Director Since: 2017 Member of the Audit Committee</p>	<p>Dr. Rahmani has served as the part-time head of the Innovation Panel at Standard Life Aberdeen plc, a UK-based Financial Times Stock Exchange (“FTSE”) 100 global investment company, since 2017. She has more than 30 years of experience in the technology industry, including more than 25 years at IBM serving in roles of increasing seniority across multiple global business segments from 1981 to 2009, most recently as General Manager of Internet Security Systems. Subsequent to her tenure at IBM, Dr. Rahmani was Chief Executive Officer at Damballa, Inc., a privately held Internet security software company, from 2009 to 2012. She has served on the Board of Directors of Computer Task Group, Incorporated, a publicly traded information technology solutions and software company, since 2015, where she currently serves as Chair of the Compensation Committee and as a member of the Audit Committee and the Nominating and Corporate Governance Committee. In 2017, she joined the Board of the London Stock Exchange, where she is a member of the Risk Committee and the Remuneration Committee. Dr. Rahmani also served on the board of Aberdeen Asset Management PLC, a UK-based FTSE 250 global investment management group, from 2015 to 2017.</p>

<p><b>Carol P. Sanders</b>  Age: 52  Director Since: 2016  Member of the Audit Committee</p>	<p>Ms. Sanders has served as the President of Carol P. Sanders Consulting, LLC, providing consulting services to the insurance and technology industries, since June 2015. From June 2013 until June 2015, she served as Executive Vice President, Chief Financial Officer and Treasurer of Sentry Insurance a Mutual Company. Previously she served as the Executive Vice President and Chief Operating Officer of Jewelers Mutual Insurance Company from November 2012 until June 2013, where she also served as Senior Vice President, Chief Financial Officer and Treasurer from May 2011 until November 2012 and as Chief Financial Officer and Treasurer from 2004 until May 2011, after holding a series of positions of increasing responsibility in finance, accounting, treasury and tax. Ms. Sanders has served on the Board of Directors of Alliant Energy Corporation, a publicly traded public utility holding company, since 2005, where she currently serves as Chair of the Audit Committee and serves as a member of the Nominating and Governance Committee and the Executive Committee. In 2016, she joined the Board of Directors of First Business Financial Services, Inc., a publicly traded registered bank holding company, where she is Chair of the Audit Committee.</p>
<p><b>Anthony M. Santomero</b>  Age: 72  Director Since: 2008  Chair of the Investment and Risk Management Committee</p>	<p>Mr. Santomero served as Senior Advisor at McKinsey &amp; Company from 2006 to 2008. From 2000 to 2006, Mr. Santomero was President and Chief Executive Officer of the Federal Reserve Bank of Philadelphia. Prior to joining the Federal Reserve, Mr. Santomero was the Richard K. Mellon Professor of Finance at the University of Pennsylvania's Wharton School and held various positions there, including Director of the Financial Institutions Center and Deputy Dean. Mr. Santomero serves on the Boards of Directors of Penn Mutual Life Insurance Company, Citigroup, Citibank, N.A. and Columbia Funds. Mr. Santomero currently serves as the Chair of the Risk Management Committee and a member of the Audit Committee and Executive Committee of Citigroup and Chairman of the Board of Directors of Citibank, N.A. In addition, Mr. Santomero served on the Board of Directors of B of A Fund Series Trust from 2008 until 2011.</p>
<p><b>Cynthia Trudell</b>  Age: 65  Director Since: 2019  Member of the Compensation and Corporate Governance Committee</p>	<p>From 2011 until her retirement in September 2017, Ms. Trudell served as Executive Vice President and Chief Human Resources Officer of PepsiCo, Inc. ("PepsiCo"). From 2007 through 2011, she served as Senior Vice President and Chief Personnel Officer of PepsiCo. Prior to her tenure at PepsiCo, Ms. Trudell held a number of executive operating and general management positions with General Motors Corporation from 1981 to 2001, and Brunswick Corporation from 2001 to 2006, including chairwoman and president of Saturn Corporation, president of IBC Vehicles and president of Sea Ray Group. Since 2015, Ms. Trudell has served on the board of ISS A/S, a global facility services provider based in Denmark and publicly traded on the NASDAQ OMX Copenhagen, where she currently serves as a member of the Remuneration Committee and the Nomination Committee. Since 2013, she has served as a member of the Defense Business Board, which provides business advice to the U.S. Department of Defense. She also served on the boards of PepsiCo from 2000 to 2007, Canadian Imperial Bank of Commerce from 2005 to 2008 and The Pepsi Bottling Group, Inc. from 2008 to 2010.</p>

### 3.2.2.2. Executive Officers

A summary background of our current executive officers, as defined in the Exchange Act, follows:

<b>Kevin J. O'Donnell</b> Age: 52 President and Chief Executive Officer	Mr. O'Donnell has served as our Chief Executive Officer since July 2013 and as our President since November 2012. Mr. O'Donnell previously served in a number of roles since joining RenaissanceRe in 1996, including Global Chief Underwriting Officer, Executive Vice President, Senior Vice President, Vice President, and Assistant Vice President. Mr. O'Donnell also serves as the Chair of the Global Reinsurance Forum and served as the Chair of the Association of Bermuda Insurers and Reinsurers in 2017 and 2018.
<b>Robert Qutub</b> Age: 57 Executive Vice President and Chief Financial Officer	Mr. Qutub has served as our Executive Vice President and Chief Financial Officer since August 2016. Prior to joining RenaissanceRe, Mr. Qutub served as Chief Financial Officer and Treasurer for MSCI Inc., a leading provider of portfolio construction and risk management tools and services for global investors, from July 2012 to May 2016. Prior to MSCI Inc., Mr. Qutub was with Bank of America from November 1994 to June 2012, where he held several segment Chief Financial Officer roles. He has served on the Board of Directors of USAA Federal Savings Bank since June 2014 and also served in the United States Marine Corps.
<b>Ross A. Curtis</b> Age: 46 Senior Vice President and Group Chief Underwriting Officer	Mr. Curtis has served as our Senior Vice President and Group Chief Underwriting Officer since July 2014. Mr. Curtis has served in a number of roles since joining RenaissanceRe in 1999 as a Catastrophe Reinsurance Analyst, including Chief Underwriting Officer of European Operations based in London, England from 2010 to 2014 and Senior Vice President of Renaissance Reinsurance Ltd. in Bermuda, primarily responsible for underwriting the international and retrocessional property catastrophe portfolios and assisting in the development of our specialty reinsurance lines, from 2006 to 2010.
<b>Ian D. Branagan</b> Age: 51 Senior Vice President and Group Chief Risk Officer	Mr. Branagan has served as our Senior Vice President and Group Chief Risk Officer since 2009 and as the Head of Group Risk Modelling since 2005. Mr. Branagan joined RenaissanceRe in 1998 to open our Dublin office, later relocating to Bermuda with additional responsibilities for underwriting risk and modelling across our (re)insurance operations. Mr. Branagan subsequently assumed the responsibility of managing risk globally and, in 2013, relocated to our London office. Prior to joining RenaissanceRe, Mr. Branagan led the international activities of Applied Insurance Research Inc. ("AIR"), which included the development and marketing of AIR's catastrophe models and tools.
<b>Stephen H. Weinstein</b> Age: 50 Senior Vice President, Group General Counsel, Corporate Secretary and Chief Compliance Officer	Mr. Weinstein has served as our Group General Counsel and Corporate Secretary since joining RenaissanceRe in 2002, as Chief Compliance Officer since 2004 and Senior Vice President since 2005. From 2002, Mr. Weinstein also served as a Vice President. Prior to joining RenaissanceRe, Mr. Weinstein specialized in corporate law as an attorney at Willkie Farr & Gallagher LLP.
<b>James C. Fraser</b> Age: 43 Senior Vice President and Chief Accounting Officer	Mr. Fraser has served as our Senior Vice President and Chief Accounting Officer since December 2016. He joined RenaissanceRe in 2009, and served as our Vice President and Head of Internal Audit from 2011 through 2016. Prior to joining RenaissanceRe, Mr. Fraser worked in finance and risk management positions at XL Capital and Deloitte. Mr. Fraser is a Chartered Professional Accountant and a Certified Internal Auditor.

## **3.3. RISK MANAGEMENT AND SOLVENCY SELF-ASSESSMENT**

### **3.3.1. Risk management framework**

We believe that high-quality and effective Enterprise Risk Management (“ERM”) is best achieved when it is a shared cultural value throughout the organization and consider ERM to be a key process which is the responsibility of every individual within RenaissanceRe. We have developed and utilize tools and processes we believe support a culture of risk management and create a robust framework of ERM within our organization. We believe that our ERM processes and practices help us to identify potential events that may affect us, quantify, evaluate and manage the risks to which we are exposed, and provide reasonable assurance regarding the achievement of our objectives. We believe that effective ERM can provide us with a significant competitive advantage. We also believe that effective ERM assists our efforts to minimize the likelihood of suffering financial outcomes in excess of the ranges which we have estimated in respect of specific investments, underwriting decisions, or other operating or business activities, although we do not believe this risk can be eliminated. We believe that our risk management tools support our strategy of pursuing opportunities and help us to identify opportunities we believe to be the most attractive. In particular, we utilize our risk management tools to support our efforts to monitor our capital position, on a consolidated basis and for each of our major operating subsidiaries, and to allocate an appropriate amount of capital to support the risks we have assumed in the aggregate and for each of our major operating subsidiaries. We believe that our risk management efforts are essential to our corporate strategy and our goal of achieving long-term growth in tangible book value per share plus the change in accumulated dividends for our shareholders.

Our Board of Directors is responsible for overseeing enterprise-wide risk management and is actively involved in the monitoring of risks that could affect us. The members of the Board have regular, direct access to the senior executives and other officers responsible for identifying and monitoring our risks and coordinating our ERM, including our Group Chief Risk Officer, Chief Financial Officer, and Group General Counsel and Chief Compliance Officer, each of whom reports directly to our Chief Executive Officer, as well as other senior personnel such as our Chief Accounting Officer, Global Corporate Controller and Head of Internal Audit. The Board also receives regular reports from the Controls and Compliance Committee described below.

Our ERM framework operates via a three lines of defense model. The first line of defense consists of individual functions that deliberately assume risks on our behalf and own and manage risk within RenaissanceRe on a day-to-day and business operational basis. The second line of defense is responsible for risk oversight and supports the first line to understand and manage risk. A dedicated risk team led by the Group Chief Risk Officer is responsible for this second line and reports to the Board of Director’s Investment and Risk Management Committee and the Chief Executive Officer. The third line of defense, our Internal Audit team, reports to the Audit Committee of the Board of Directors and provides independent, objective assurance as to the assessment of the adequacy and effectiveness

of our internal control systems and also coordinates risk-based audits and compliance reviews and other specific initiatives to evaluate and address risk within targeted areas of our business.

The principal risk areas that make up our ERM framework are assumed risk (including reserve risk), business environment risk and operational risk:

- **Assumed Risk.** We define assumed risk as activities where we deliberately take risk against our capital base, including underwriting risks and other quantifiable risks such as credit risk and market risk as they relate to investments, ceded reinsurance credit risk and strategic investment risk, each of which can be analyzed in substantial part through quantitative tools and techniques. Of these, we believe underwriting risk to be the most material to us. In order to understand, monitor, quantify and proactively assess underwriting risk, we seek to develop and deploy appropriate tools to estimate the comparable expected returns on potential business opportunities and the impact that such incremental business could have on our overall risk profile. The tools and methods to seek to achieve these objectives are described in Part I., Item 1. Business, Underwriting and Enterprise Risk Management in our Annual Report Form 10-K for the year ended December 31, 2018 ("Form 10-K"). Embedded within our consideration of assumed risk is our management of our aggregate, consolidated risk profile. In part through the utilization of REMS© and our other systems and procedures, we analyze our in-force aggregate assumed risk portfolio on a daily basis. We believe this capability helps us to manage our aggregate exposures and to rigorously analyze and evaluate individual proposed transactions in the context of our in-force portfolio. This aggregation process captures line of business, segment and corporate risk profiles, calculates internal and external capital tests and explicitly models ceded reinsurance. Generally, additional data is added quarterly to our aggregate risk framework to reflect updated or new information or estimates relating to matters such as interest rate risk, credit risk, capital adequacy and liquidity. This information is used in day-to-day decision making for underwriting, investments and operations and is also reviewed quarterly from both a unit level and consolidated financial position perspective. We also regularly assess, monitor and review our regulatory risk capital and related constraints.  
**Reserve Risk** is a subcomponent of assumed risk. We define reserve risk as the risks related to our reserve for net claims and claim expenses, including the amount, both absolute and relative, of our outstanding reserve for net claims and claim expenses, and the impact of economic, social, legal and regulatory matters. Our reserve for net claims and claim expenses is subject to significant uncertainty and has the potential to develop adversely in future periods. While reserve risk may increase in both absolute terms and relative to its overall consideration in our ERM framework, we employ robust resources, procedures and technology to identify, understand, quantify and manage this risk.
- **Business Environment Risk.** We define business environment risk as the risk of changes in the business, political or regulatory environment that could negatively impact our short term or long-term financial results or the markets in which we operate. This risk area also typically includes emerging risks. These risks are predominately extrinsic to us and our ability to alter or eliminate these risks is limited, so we focus our efforts on monitoring developments, assessing potential impacts of any changes, and investing in cost effective means to attempt to mitigate the consequences of and ensure compliance with any new requirements applicable to us.
- **Operational Risk.** We are subject to several additional risks arising out of operational, regulatory, and other matters. We define operational risk to include the risk we fail to

create, manage, control or mitigate the people, processes, structures or functions required to execute our strategic and tactical plans and assemble an optimized portfolio of assumed risk, and to adjust to and comply with the evolving requirements of business environment risk applicable to us. In light of the rapid evolution of our markets, business environment, and business initiatives, we seek to continually invest in the tools, processes and procedures we use to mitigate our exposure to operational risk on a cost-effective basis. As with assumed risk and business environment risk, operational risk presents intrinsic uncertainties, and we may fail to appropriately identify or mitigate applicable operational risk.

**Controls and Compliance Committee (“CCC”).** We believe that a key component of our current operational risk management platform is our CCC. The CCC is comprised of our Chief Financial Officer, Group General Counsel and Chief Compliance Officer, Chief Accounting Officer, Global Corporate Controller, Group Chief Risk Officer, Head of Internal Audit, staff compliance professionals and representatives from our business units. The purpose of the CCC is to establish, assess the effectiveness of, and enforce policies, procedures and practices relating to accounting, financial reporting, internal controls, regulatory, legal, compliance and related matters, and to ensure compliance with applicable laws and regulations, our Code of Ethics and Conduct (the “Code of Ethics”), and other relevant standards. In addition, the CCC is charged with reviewing certain transactions that potentially raise complex and/or significant tax, legal, accounting, regulatory, financial reporting, reputational or compliance issues.

In addition, we address other areas of operational risk through our disaster recovery program, human resource practices such as motivating and retaining top talent, our strict tax protocols and our legal and regulatory policies and procedures.

**Ongoing Development and Enhancement.** We seek to reflect and categorize risks we monitor in part through quantitative risk distributions, even where we believe that such quantitative analysis is not as robust or well developed as our tools and models for measuring and evaluating other risks, such as catastrophe and market risks. We also seek to improve the methods by which we measure risks and believe effective risk management is a continual process that requires ongoing improvement and development. We seek from time to time to identify effective new practices or additional developments both from within our industry and from other sectors. We believe that our ongoing efforts to embed ERM throughout our organization help us produce and maintain a competitive advantage and achieve our corporate goals.

### **3.3.2. Solvency self-assessment**

The RenaissanceRe Group has a risk tolerance framework which dictates tolerance guidelines and applies to all members of the RenaissanceRe Group. The tolerance framework is reviewed with RenaissanceRe’s Board. Direct oversight of those tolerances is discharged to the IRMC, which meets on a quarterly basis to review compliance with tolerance limits through review of various risk test results produced by the risk function.



In order to review compliance, we produce, utilize and report on models which measure our utilization of capital in light of regulatory capital considerations and constraints. RenaissanceRe also performs stress tests in order to test the adequacy of available capital relative to certain scenarios including very large loss occurrences at the individual subsidiary and Group levels. These stress and scenario tests show the approximate losses expected given a series of historical events (actual or hypothetical).

The various capital and liquidity tests performed incorporate a stochastic depiction of all sources of risks and compare the tail outcomes to capital and liquidity on hand. These tests are performed on an operating entity and consolidated group basis, which ensures that cross-group dependencies are explicitly captured. The results of these tests are reviewed by the management team and are shared with the Board as appropriate.

In addition, the internal audit function may, as part of their annual internal audit review process, undertake reviews of various aspects of the solvency assessment process, reporting results of those reviews to the IRMC and Audit Committee.

### **3.3.3. Integration of solvency needs, capital and risk**

RenaissanceRe's strategy is based on integrated management of capital and risk. RenaissanceRe's ability to expand and contract capital is one of its main strengths with respect to capital management. Risk selection is based on a clear vision of the desired risk/reward profile. Deals are assessed incrementally based on marginal-capital attribution and a risk-adjusted score that is consistent across lines of business. This decision-making platform is fully aligned with the planning process allowing us to manage capital to support the expected portfolio. Our finance, underwriting, ventures, and risk teams meet regularly to assess the expected portfolio and plan capital management. We adjust our plans in real time if conditions change unexpectedly in either the reinsurance or capital markets.

### **3.3.4. Solvency self-assessment approval process**

The risk management function is responsible for risk aggregation, coordination and oversight. The IRMC receives quarterly updates of risk positions, concentrations, tail-loss projections, exposures by region and peril, and measures of required capital.

RenaissanceRe's Solvency Self-Assessment Report is provided to the Board for review, enabling the Board to evaluate RenaissanceRe's overall solvency needs taking into account the specific risk profile, approved risk tolerance limits and the group's business strategy.

## **3.4. INTERNAL CONTROLS**

### **3.4.1. Internal control system**

Our management is responsible for establishing and maintaining effective internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting was designed to provide reasonable assurance

regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles and to reflect management's judgments and estimates concerning effects of events and transactions that are accounted for or disclosed.

Management, with the participation of the Chief Executive Officer and Chief Financial Officer, assessed our internal control over financial reporting as of December 31, 2018 using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013). Based on this assessment, management concluded that RenaissanceRe internal control over financial reporting was effective as of December 31, 2018.

Ernst & Young Ltd., the independent registered public accountants who audited our consolidated financial statements included in our Form 10-K, audited our internal control over financial reporting as of December 31, 2018 and their attestation report on our internal control over financial reporting noted that those controls were effective.

### **3.4.2. Compliance function**

RenaissanceRe has a compliance program which we believe addresses identified potentially significant compliance risks. This program is designed and overseen by the Chief Compliance Officer, is resourced by a number of personnel and contains elements designed to: identify significant legal, regulatory and compliance risks; assess the potential likelihood and severity of these identified risks; design and implement responsive mitigants (including policies, training, the availability of relevant resources, etc.); monitor the operating effectiveness of the program, including risk-based compliance testing; and report on the performance of the program to senior management and internal committees. In particular, the compliance function has implemented policies, protocols and guidelines designed to address the most significant or likely risks. These policies are available to all employees on RenaissanceRe's intranet and are reinforced via the training program and other communications referred to above. We ensure awareness of and compliance with these policies by requiring that each employee annually certify as to their understanding and compliance with the policies that apply to them. Specific policies, procedures and documentary tool of relevance to discrete operating platforms, such as regulatory requirements relating to the operations newly acquired from Tokio, or the private investment or insurance manager activities conducted by our Ventures unit, are promulgated to and reinforced with the relevant professional staff engaged in or overseeing such activities. The compliance program is overseen by the CCC. As outlined in the Audit Committee Charter, the Audit Committee oversees various aspects of the compliance program, including aspects related to the Code of Ethics and Conduct, the effectiveness of the compliance program, including the CCC itself, and RenaissanceRe's whistleblowing program.

## **3.5. INTERNAL AUDIT**

The internal audit function operates in accordance with its charter, which outlines the mission, scope, responsibilities and reporting structure of the function. The charter is periodically reviewed and subject to approval by the Board. The scope of internal audit's work is to determine whether operational risk management, internal control and governance processes, as designed and represented by management, are adequate and operating effectively.

Internal audit plans audit activities in response to an assessment of the significant financial, compliance and operational risks of the Group and those plans are reviewed by management and approved by the Audit Committee.

The internal audit team is comprised of professional staff with sufficient knowledge, skills, experience and professional certifications to meet the requirements of the Internal Audit Charter.

The Head of Internal Audit oversees the internal audit function and assists management and the Audit Committee in discharging their responsibilities by: a) furnishing them with analyses, advice and recommendations concerning the key risk areas reviewed and related assurance activities performed; b) promoting effective and efficient controls; and c) pursuing corrective action on significant issues.

The Head of Internal Audit also oversees the activities of any external consultants who are engaged from time-to-time to assist in the completion of Internal Audit projects.

### **3.5.1. Oversight by Audit Committee**

As outlined in its charter, the Audit Committee is responsible for ensuring that the internal audit function provides management and the Audit Committee with ongoing assessments of RenaissanceRe's risk management processes, system of internal control and governance processes. As part of this, the Audit Committee (a) reviews the budget, qualifications, activities, effectiveness and organizational structure of the internal audit function, the performance of the internal auditor, and participate in the appointment, replacement, or dismissal of the internal auditor; (b) conduct private review sessions at least four times a year with the internal auditor; (c) review with the internal auditor the proposed scope and plan for conducting internal audits, any progress reports on the proposed internal audit plan (with explanations for any deviations from the original plan), and (d) review summaries of any significant issues raised during the performance of internal audits and related responses from management.

### **3.5.2. Independence of Internal Audit**

To provide for the independence of internal audit:

- the Head of Internal Audit reports functionally to the Audit Committee of the Board and administratively to the Chief Executive Officer, supported by the Chief Financial Officer;

- the Audit Committee is responsible for assessing performance of the Head of Internal Audit and the internal audit function as a whole;
- the Audit Committee is responsible for reviewing and approving the internal audit function budget and resource plan;
- the Audit Committee reviews and approves the remuneration of the Head of Internal Audit;
- the Audit Committee has the final decision with regards to the hiring and firing of the Head of Internal Audit; and
- the independence of the internal audit function is evaluated by the Audit Committee on an annual basis with assistance from the CCC. In conjunction with this annual evaluation, the Head of Internal Audit will confirm to the Audit Committee, at least annually, the organizational independence of the internal audit function.

### **3.6. ACTUARIAL FUNCTION**

RenaissanceRe directly employs a number of actuaries in key management and operating positions and obtains select actuarial services from third party service providers. RenaissanceRe's actuarial function spans pricing and modelling; reserving; and risk management. The team is proficient with regards to knowledge of actuarial and financial mathematics and can appropriately ensure its correct application commensurate to the complexity of risks inherent in the business.

The function has regular access to senior management and the Board to discuss any actuarial issues.

### **3.7. OUTSOURCING**

The RenaissanceRe Group is a fully staffed global group which views its internal 'integrated system' as both a competitive strength and substantial risk mitigant. RenaissanceRe is committed to conducting its business in an appropriate manner and, where certain delineated business and/or operational functions are outsourced, will take reasonable steps to avoid undue additional operational risk when relying on a third party for the performance of operational functions, critical to the performance of its business. RenaissanceRe will not outsource activities or functions that would:

- allow delegation by senior personnel of their own responsibilities and will ensure that any outsourcing arrangement will not undermine authorization;
- unduly increase operational risk;
- impair the ability of supervisory authorities to monitor the compliance of RenaissanceRe's obligations; and
- undermine continuous and satisfactory services to policy holders

#### **3.7.1. External outsourcing arrangements**

We outsource certain aspects of investment management, risk analytics and investment accounting to third party service providers. These arrangements are subject to rigorous oversight. A meaningful component of the investments of the RenaissanceRe Group are managed by third party asset managers. The managers are selected by the investments team

and the process by which the managers are selected is reviewed and overseen by the IRMC. The mandates and guidelines that govern these arrangements are designed by the investment team, and the investments team oversees and reviews these third-party managers to ensure compliance with investment guidelines for the mandates.

### **3.7.2. Intra-group outsourcing**

The RenaissanceRe Group operates an integrated shared service approach to employees; information technology including tools and systems; investments; compliance; internal audit; and actuarial services.

We believe that high-quality, effective and broadly consistent operational and enterprise wide risk management is a core organizational goal, and that it is best achieved when it is a shared cultural value throughout the organization. We seek to propagate a generally consistent approach to business execution and risk management across our platforms and consider these to be key processes. We have developed and utilize tools and processes we believe support our integrated system approach, fostering a consistent culture of risk management and robust framework of operational risk management across our organization.

## **4. RISK PROFILE**

### **4.1. MATERIAL RISKS**

RenaissanceRe's principal risk areas that make up our enterprise risk management framework are assumed risk, business environment risk, and operational risk. These risks are discussed in section 3.3.1 above.

### **4.2. MITIGATION OF RISKS**

RenaissanceRe believes that effective risk management is best achieved when it is a shared cultural value throughout the organization and considers it to be a key process which is the responsibility of every individual within RenaissanceRe. Risks are mitigated through a variety of ways but are ultimately reported and monitored by the risk management function. The risk management function and the IRMC verify that risks are kept within agreed limits. Further, Internal Audit review the controls in place to mitigate risk exposures for operating effectiveness. The results of various risk tests and control testing are escalated to the Board as appropriate.

### **4.3. MATERIAL RISK CONCENTRATIONS**

Underwriting risk tolerances clearly define how much of a class or type of risk RenaissanceRe is willing to take. The risk tolerance limits are generally overseen by the RenaissanceRe Board. Monitoring against these risk tolerances is done on a quarterly basis via a combination of various tests of capital adequacy, and any breaches would be reported to the IRMC.

The Board, via the IRMC, approves various limits and guidelines for investment asset allocation and compliance with those limits and guidelines is monitored quarterly. In the investment portfolio, we review on a regular basis our asset concentration, credit quality and adherence to credit limit guidelines. In addition, we limit the amount of credit exposure to any one financial institution and, except for U.S. Government securities, none of our investments exceed 10% of shareholders' equity as at December 31, 2018.

### **4.4. INVESTMENT OF ASSETS IN ACCORDANCE WITH PRUDENT PERSON PRINCIPLES**

Our investment portfolio strategy seeks to preserve capital and provide us with a high level of liquidity, which means that the large majority of our investment portfolio consists of highly rated fixed income securities, including U.S. treasuries, agencies, municipals, highly rated sovereign and supranational securities, high-grade corporate securities and mortgage-backed and asset-backed securities. We also have an allocation to publicly traded equities reflected on our consolidated balance sheet as equity investments trading and an allocation to other investments (including catastrophe bonds, private equity partnerships, senior secured bank loan funds, hedge funds and at times, other miscellaneous investments).

The IRMC assists the Board with oversight of our investment activities and financial risk management. The IRMC's responsibilities, as more fully described in its charter, include reviewing management's procedures regarding development and compliance with investment strategies, risk limits, guidelines and objectives; ensuring adequate procedures to monitor adherence to our investment guidelines and limits; and overseeing and reviewing performance measurement systems we use to monitor the performance of our investment portfolio and evaluate our performance.

As previously noted, the majority of the assets of the RenaissanceRe Group are managed by third party asset managers. The investment team selects those managers and oversees and reviews those managers to ensure compliance with investment guidelines.

## **4.5. STRESS AND SCENARIO TESTING**

### **4.5.1. Assumed risk/business environment risk**

We produce, utilize and report on models which measure our utilization of capital in light of regulatory capital considerations and constraints. We also perform stress tests in order to test the adequacy of available capital relative to certain scenarios, including very large loss occurrences, at the individual subsidiary and Group levels.

RenaissanceRe runs various scenario tests (otherwise known as deterministic) based on various catastrophe loss events (both actual and hypothetical). Depending on the facts and circumstances, deterministic tests are run on specific events and their related footprints in order to determine industry ground up losses under each scenario or event. RenaissanceRe is able to run deterministic tests showing approximate losses expected on a deal or (re)insurance program and has the ability to aggregate and/or filter these deterministic statistics to balance sheet level. The underwriting and risk management teams review these results to assess the impact of modelled gross and net losses to the in-force portfolio, including assessing the capital adequacy of RenaissanceRe entities.

The various capital and liquidity tests we perform incorporate a stochastic depiction of all sources of risks and compare the tail outcomes to capital and liquidity on hand. These tests are performed on an operating entity and consolidated group basis, which ensures that cross-group dependencies are explicitly captured. The results of these tests are reviewed by the management team and are shared with the Board as appropriate. These stress tests include:

- Our quarterly stress test which is designed to capture our ability to recapitalize our operating entities following a loss using only the excess capital available at the parent company and undrawn lines of credit, subject to leverage constraints;
- For the RenaissanceRe Group, Renaissance Reinsurance, and DaVinci, we have designed a stress test that tests the adequacy of available liquidity relative to a very large loss occurrence on a gross basis. This test is intended to reflect the fact that the entity is often required to pay its losses before it can collect from its reinsurers.

We also run scenarios prescribed by the BMA to assess the capital adequacy of subsidiaries under adverse financial market and underwriting conditions.

#### **4.5.2. Operational risk**

Operational risk for the RenaissanceRe Group is broad as it includes strategic, regulatory and reputational risks, which are included in the risk register. Operational risk diversifies considerably within our model with other risk categories, making operational risk relatively less material to the overall capital requirement. Variations in our assumptions around operational risk are not estimated by us to be likely to have a material impact on RenaissanceRe's solvency.



## 5. SOLVENCY VALUATION

### 5.1. VALUATION BASES AND ASSUMPTIONS

#### 5.1.1. Valuation of assets

The fundamental approach of the Economic Balance Sheet (“EBS”) regime in Bermuda, is that the EBS should use the insurer’s existing GAAP balance sheet as a starting point. RenaissanceRe has used the valuation principles outlined by the Insurance (Prudential Standards) (Insurance Group Solvency Requirement) Rules 2011; Insurance (Prudential Standards) (Class 4 and Class 3B Solvency Requirement) Rules 2008; BMA Insurance (Prudential Standards) (Class 3A Solvency Requirement) Rules 2011, collectively, the “Solvency Requirement Rules” and the BMA’s “Guidance Note for Statutory Reporting Regime” to prepare its EBS. Those valuation principles are summarized below:

##### **Deferred acquisition costs (“DAC”)**

Under the EBS regime, DAC are valued at nil in order to avoid double counting as DAC are implicitly included in the premium provisions valuation within Technical Provisions.

##### **Intangible assets**

Goodwill is valued at nil. Other intangible assets can be recognized only if they can be sold separately and that the expected future economic benefits will flow to the insurer and the value of the assets can be reliably measured. No intangible assets have been recognized in the EBS of RenaissanceRe or the Bermuda Operating Subsidiaries.

##### **Investments and cash and cash equivalents**

Financial instruments are valued at fair value for EBS purposes. This is consistent with the valuation approach under GAAP.

##### **Accounts and premiums receivable**

Receivables are valued in accordance with GAAP, however, under the EBS regime, a significant amount of premiums receivable (i.e. those that are not yet due at the balance sheet date) are transferred to Technical Provisions.

##### **Funds held by ceding reinsurers**

RenaissanceRe writes certain business on a funds held basis. Under such arrangements, the cedant retains the premiums that would have otherwise been paid to RenaissanceRe. Funds held are recorded in accordance with GAAP.

##### **Deferred tax asset**

RenaissanceRe and RenaissanceRe Specialty U.S. Ltd. each recognize deferred tax assets in their respective EBS in conformity with GAAP principles. Deferred tax primarily relates to net operating loss carryforwards and GAAP versus tax basis accounting differences relating to

reserves for claims and claim expenses, deferred interest expense, accrued expenses, unearned premiums, deferred underwriting results, deferred acquisition expenses, amortization and depreciation and investments.

#### **Other assets**

Other assets are measured consistent with GAAP.

#### **Letters of credit, guarantees and other instruments**

Top Layer Re is the beneficiary of \$75.0 million of letters of credit pledged by Renaissance Reinsurance and State Farm. This has been approved by the BMA as additional statutory economic capital and thus is recognized in Top Layer Re's EBS.

### **5.1.2. Technical provisions and best estimate**

Technical provisions included in the EBS and utilized in the calculations for capital requirements for the RenaissanceRe Group and the individual Bermuda-licensed insurers are calculated in accordance with the requirements of the Solvency Requirement Rules and the BMA's "Guidance Note for Statutory Reporting Regime".

Technical provisions comprise the sum of:

- a best estimate of probability-weighted average of future cash flows, discounted using the relevant risk-free interest rate term structure; and
- a risk margin to reflect the uncertainty associated with the probability-weighted cash flows, which is calculated using the cost of capital approach and a risk-free discount rate term structure.

The best estimate for the loss and loss expense provision is calculated using GAAP reserves as the starting point and then performing a series of adjustments, including:

- removal of prudence margins;
- incorporation of events not in data;
- discounting of cash flows.

The best estimate for the premium provision is calculated by using the unearned premium, adjusting for bound but not incepted business as at December 31, 2018 and applying expected future loss ratios, expense ratios and appropriate claims pay-out patterns to derive cash flows which are then discounted.

The best estimate of premium provision (net of recoveries), loss and loss expense provision (net of recoveries), and risk margin as at December 31, 2018 and December 31, 2017 were as follows:

<b>At December 31, 2018</b> <i>(in thousands)</i>	<b>Best estimate net premium provision</b>	<b>Best estimate net loss and loss expense provision</b>	<b>Risk Margin</b>
RenaissanceRe	\$ (133,588)	\$ 3,299,336	\$ 360,701
Renaissance Reinsurance	(155,829)	1,904,435	194,332
DaVinci Reinsurance	(53,847)	404,757	69,854
RenaissanceRe Specialty U.S.	(78,787)	945,813	104,133
Top Layer Re	6,968	7,109	1,942

<b>At December 31, 2017</b> <i>(in thousands)</i>	<b>Best estimate net premium provision</b>	<b>Best estimate net loss and loss expense provision</b>	<b>Risk Margin</b>
RenaissanceRe	\$ (169,294)	\$ 3,166,035	\$ 330,007
Renaissance Reinsurance	(62,940)	1,947,956	189,193
DaVinci Reinsurance	(73,319)	429,378	50,688
RenaissanceRe Specialty U.S.	(58,922)	770,739	109,982
Top Layer Re	(6,635)	8,735	3,997

### 5.1.3. Reinsurance recoverables

The best estimate of reinsurance recoveries is based on principles similar to, and consistent with, those underlying the gross best estimate. The balance is adjusted for counterparty credit rating based on rating agency and experience default statistics.

### 5.1.4. Valuation of other liabilities

#### Insurance and reinsurance balances payable

Insurance and reinsurance balances payable are recorded in accordance with GAAP, however, under the EBS regime, a significant amount of reinsurance balances payable are transferred to Technical Provisions.

#### Loans and notes payable

Loans and notes payable are recorded in accordance with GAAP.

#### Accounts payable and accrued liabilities

Accounts payable and accrued liabilities are recorded in accordance with GAAP, which approximates fair value due to their short maturities.

#### Sundry liabilities

RenaissanceRe's other liabilities are recorded in accordance with GAAP.

**Letters of credit, guarantees and other instruments**

Renaissance Reinsurance has committed capital to support a \$37.5 million letter of credit facility for Top Layer Re. Renaissance Reinsurance recognizes this \$37.5 million as a liability in its EBS. As the parent entity, RenaissanceRe also recognizes this liability.

All other capital commitments made by RenaissanceRe, including on a contingent basis, are recognized on the EBS in accordance with GAAP and the BMA's EBS valuation rules referenced in 5.1.1 above.

## 6. CAPITAL MANAGEMENT

### 6.1. OVERVIEW

Capital management is a fundamental, firm-wide strategy, inextricably linked to our risk management and underwriting activities.

We seek to write as much attractively priced business as is available to us and then manage our capital accordingly by matching the right risk to the right capital at the right time.

We generally seek to raise capital when we forecast increased demand in the market, at times by accessing capital through joint ventures or other structures, and seek to return capital to our shareholders or joint venture investors when the demand for our coverages appears to decline and when we believe a return of capital would be beneficial to our shareholders or joint venture investors. In using joint ventures, we aim to leverage our access to business and our underwriting capabilities on an efficient capital base, develop fee income, generate profit commissions, diversify our portfolio and provide attractive risk-adjusted returns to our capital providers. We routinely evaluate and review potential joint venture opportunities and strategic investments.

Capital, in aggregate, is primarily managed at the RenaissanceRe group level, while ensuring adequate capital resources at the operating subsidiary levels to meet policyholder obligations. In the normal course of our operations, we may from time to time evaluate additional share or debt issuances given prevailing market conditions and capital management strategies, including for our operating subsidiaries and joint ventures. In addition, we enter into agreements with financial institutions to obtain letter of credit facilities for the benefit of our operating subsidiaries in their reinsurance and insurance business. Our total shareholders' equity attributable to RenaissanceRe and debt was as follows:

<i>(in thousands)</i>	<u>As at December 31, 2018</u>	<u>As at December 31, 2017</u>
Common shareholders' equity	\$ 4,395,080	\$ 3,991,375
Preference shares	650,000	400,000
Total shareholders' equity	<u>5,045,080</u>	<u>4,391,375</u>
3.450% Senior Notes due 2027	295,797	295,303
3.700% Senior Notes due 2025	297,688	297,318
5.75% Senior Notes due 2020	249,602	249,272
4.750% Senior Notes due 2025 (DaVinciRe) <sup>1</sup>	148,040	147,730
Total debt	<u>991,127</u>	<u>989,623</u>
Total shareholders' equity and debt	<u>\$ 6,036,207</u>	<u>\$ 5,380,998</u>

<sup>1</sup> RenaissanceRe does not guarantee or provide credit support for DaVinciRe and RenaissanceRe's financial exposure to DaVinciRe is limited to its investment in DaVinciRe's shares and counterparty credit risk arising from reinsurance transactions.

RenaissanceRe's operating subsidiaries maintain capital levels that are sufficient for the risk exposure at the legal entity level. Excess capital is usually returned to the parent company and if additional capital injections are necessary, the parent company will capitalize the subsidiary accordingly.

### **6.1.1. RenaissanceRe Holdings Ltd.**

As a Bermuda-domiciled holding company, RenaissanceRe has limited operations of its own and its assets consist primarily of investments in subsidiaries, and, to a degree, cash and securities in amounts which fluctuate over time. Accordingly, RenaissanceRe's future cash flows largely depend on the availability of dividends or other statutorily permissible payments from our subsidiaries. As discussed above, the ability to pay such dividends is limited by the applicable laws and regulations in the various jurisdictions in which our subsidiaries operate.

RenaissanceRe's principal uses of liquidity are: (1) common share related transactions including dividend payments to our common shareholders and common share repurchases, (2) preference share related transactions including dividend payments to our preference shareholders and preference share redemptions, (3) interest and principal payments on debt, (4) capital investments in our subsidiaries, (5) acquisition of new or existing companies or businesses, such as our acquisition of Platinum and (6) certain corporate and operating expenses.

We attempt to structure our organization in a way that facilitates efficient capital movements between RenaissanceRe and our operating subsidiaries and to ensure that adequate liquidity is available when required, considering applicable laws and regulations, and the domiciliary location of sources of liquidity and related obligations.

### **6.1.2. Bermuda Operating Subsidiaries**

Bermuda regulations require BMA approval for any reduction of capital in excess of 15% of statutory capital, as defined in the Insurance Act 1978 ("Insurance Act"). The Insurance Act also requires the Bermuda insurance subsidiaries of RenaissanceRe to maintain certain measures of solvency and liquidity. At December 31, 2018, the statutory capital and surplus of our Bermuda insurance subsidiaries exceeded the minimum amount required to be maintained under Bermuda law.

## 6.2. ELIGIBLE CAPITAL

### 6.2.1. Eligible capital categorized by tiers

The eligible capital of RenaissanceRe and our Bermuda Operating Subsidiaries was categorised as follows:

<b>December 31, 2018</b>					
<i>(in thousands)</i>					
<b>Tier</b>	<b>Renaissance Re</b>	<b>Renaissance Reinsurance</b>	<b>DaVinci</b>	<b>Renaissance Re Specialty U.S.</b>	<b>Top Layer Re</b>
Tier 1	\$ 5,090,675	\$ 1,781,610	\$ 1,470,694	\$ 722,428	\$ 85,310
Tier 2	2,068,040	435,824	37,750	157,092	75,000
Tier 3	300,000	-	-	-	-
	<b>\$ 7,458,715</b>	<b>\$ 2,217,434</b>	<b>\$ 1,508,444</b>	<b>\$ 879,520</b>	<b>\$ 160,310</b>

<b>December 31, 2017</b>					
<i>(in thousands)</i>					
<b>Tier</b>	<b>Renaissance Re</b>	<b>Renaissance Reinsurance</b>	<b>DaVinci</b>	<b>Renaissance Re Specialty U.S.</b>	<b>Top Layer Re</b>
Tier 1	\$ 4,519,770*	\$ 1,841,571	\$ 1,441,126	\$ 743,565	\$ 104,881
Tier 2	1,094,919	282,512	35,909	52,121	75,000
Tier 3	-	-	-	-	-
	<b>\$ 5,614,689</b>	<b>\$ 2,124,083</b>	<b>\$ 1,477,035</b>	<b>\$ 795,686</b>	<b>\$ 179,881</b>

\*Revised to appropriately reflect redeemable non-controlling interest.

## 6.2.2. Eligible capital used to meet capital requirements

The eligible capital utilised to meet the minimum solvency margin (“MSM”) and enhanced capital requirement (“ECR”) for each of RenaissanceRe and Bermuda Operating Subsidiaries as at December 31, 2018 was categorised as follows:

### 6.2.2.1. RenaissanceRe

<i>(in thousands)</i>				
<b>Tier</b>	<b>ECR</b>		<b>MSM</b>	
Tier 1	\$	5,090,675	\$	5,090,675
Tier 2		2,068,040		1,272,669
Tier 3		300,000		-
	\$	<u>7,458,715</u>	\$	<u>6,363,343</u>

### 6.2.2.2. Bermuda Operating Subsidiaries

#### Renaissance Reinsurance

<i>(in thousands)</i>				
<b>Tier</b>	<b>ECR</b>		<b>MSM</b>	
Tier 1	\$	1,781,610	\$	1,781,610
Tier 2		435,824		435,824
Tier 3		-		-
	\$	<u>2,217,434</u>	\$	<u>2,217,434</u>

#### DaVinci

<i>(in thousands)</i>				
<b>Tier</b>	<b>ECR</b>		<b>MSM</b>	
Tier 1	\$	1,470,694	\$	1,470,694
Tier 2		37,750		37,750
Tier 3		-		-
	\$	<u>1,508,444</u>	\$	<u>1,508,444</u>



## RenaissanceRe Specialty U.S.

<i>(in thousands)</i>				
Tier	ECR		MSM	
Tier 1	\$	722,428	\$	722,428
Tier 2		157,092		157,092
Tier 3		-		-
	\$	<u>879,520</u>	\$	<u>879,520</u>

## Top Layer Re

<i>(in thousands)</i>				
Tier	ECR		MSM	
Tier 1	\$	85,310	\$	85,310
Tier 2		75,000		21,328
Tier 3		-		-
	\$	<u>160,310</u>	\$	<u>106,638</u>

### 6.2.3. Encumbered assets

RenaissanceRe may deposit cash and investments with various counterparties, or in trust accounts for the benefit of those counterparties, in respect of contracts with cedants that require RenaissanceRe to partially or fully collateralize estimates of its obligations. Assets are released to RenaissanceRe upon the payment of the obligations.

Whilst in deposit for the benefit of counterparties, assets are considered to be encumbered, affecting the availability of those assets to meet the ECR.

Subsequent to December 31, 2018, and principally relating to the closing of our acquisition of TMR, the amount of encumbered assets we manage grew on both an absolute and relative basis. We expect this to decrease over time, as a result of factors including the payment of insurance claims and the winding-up of certain operations acquired from TMR, subject to the occurrence of significant new insured or reinsured losses.

### 6.2.4. Approved Ancillary Capital Instruments

In line with approval received from the BMA, RenaissanceRe recognizes \$300.0 million of Senior Notes issued in 2017 as Tier 3 ancillary capital.

As noted in 5.1.1 above, Top Layer Re has ancillary capital in the form of letters of credit which were approved as eligible Tier 2 capital.

## 6.2.5. GAAP shareholders' equity versus statutory capital and surplus

The impact of employing statutory-based technical provision valuation techniques is the most significant difference between GAAP shareholder equity and available statutory economic capital and surplus.

Other entity-specific significant differences (as applicable) are discussed below.

### 6.2.5.1. RenaissanceRe

Goodwill and intangible assets valued at \$237.4 million and investments in other ventures valued at \$27.7 million under GAAP, each as of December 31, 2018, are eliminated under statutory reporting, reducing the available statutory economic capital.

### 6.2.5.2. Renaissance Reinsurance

Renaissance Reinsurance has committed capital to support a \$37.5 million letter of credit facility for Top Layer Re. This \$37.5 million is recognized as a liability under statutory reporting, thus reducing the available statutory economic capital of Renaissance Reinsurance by the same amount.

### 6.2.5.3. RenaissanceRe Specialty U.S.

Goodwill and intangible assets valued at \$109.2 million under GAAP as of December 31, 2018 are eliminated under statutory reporting, reducing the available statutory economic capital.

### 6.2.5.4. Top Layer Re

As noted in 5.1.1. above, Top Layer Re recognizes \$75.0 million of tier 2 capital in relation to letters of credit backed by State Farm and Renaissance Reinsurance.

## 6.3. REGULATORY CAPITAL REQUIREMENT

The BMA is the group supervisor of the RenaissanceRe Group and of the individual Bermuda licensed insurers. Under the Insurance Act, insurance groups are required to maintain available statutory capital and surplus to an amount that is equal to or exceeds the value of its group ECR, which is calculated at the end of its relevant year by reference to the BSCR model or an approved internal capital model provided that the group ECR shall at all times be an amount equal to or exceeding the Group Minimum Solvency Margin.

RenaissanceRe, and its Bermuda-based insurer subsidiaries, establish their ECR and MSM by reference to the BSCR model.

### 6.3.1. ECR and MSM

As of December 31, 2018, and December 31, 2017 respectively, the regulatory capital requirements were assessed as follows:

<b>Year Ended December 31, 2018</b> <i>(in thousands, except percentages)</i>	<b>ECR</b>		<b>MSM</b>
RenaissanceRe	\$ 3,219,263	234%	\$1,169,799
Renaissance Reinsurance	1,760,645	130%	610,171
DaVinci Reinsurance	1,028,534	147%	257,133
RenaissanceRe Specialty U.S.	361,385	246%	90,346
Top Layer Reinsurance Ltd.	62,350	257%	15,588

<b>Year Ended December 31, 2017</b> <i>(in thousands, except percentages)</i>	<b>ECR</b>		<b>MSM</b>
RenaissanceRe	\$ 2,618,392	216%	\$1,086,622
Renaissance Reinsurance	1,551,097	137%	558,854
DaVinci Reinsurance	808,607	183%	202,152
RenaissanceRe Specialty U.S.	300,698	265%	75,175
Top Layer Reinsurance Ltd.	64,264	280%	16,066

#### 6.3.1.1. Inputs to MSM

The MSMs are calculated as follows:

<b>Entity</b>	<b>MSM inputs</b>
RenaissanceRe	Calculated by the Group MSM (Schedule XII) of the BSCR Model. It is the sum of the entity's proportionate share of the MSM of Group Members.
<b>Class 4 Reinsurers:</b> Renaissance Reinsurance DaVinci	The greater of: <ul style="list-style-type: none"> <li>- \$100.0 million;</li> <li>- 50% of the net amount, after deductions of any premiums ceded by the insurer for reinsurance (not exceeding 25% of gross premiums written), of the premiums written by the insurer in that year in respect of general business;</li> <li>- 15% of net loss reserves; and</li> <li>- 25% of insurer's ECR as reported at the end of its relevant year.</li> </ul>
<b>Class 3B Reinsurers:</b> RenaissanceRe Specialty U.S.	The greater of: <ul style="list-style-type: none"> <li>- \$1.0 million;</li> <li>- Where the net premiums written do not exceed \$6 million, 20% of those net premiums. Where the net premiums written exceed \$6.0 million, \$1.2 million plus 15% of the net premiums written which exceed \$6.0 million;</li> <li>- 15% of net loss reserves; and</li> <li>- 25% of insurer's ECR as reported at the end of its relevant year.</li> </ul>

<p><b>Class 3A Reinsurers:</b> Top Layer Re</p>	<p>The greater of:</p> <ul style="list-style-type: none"> <li>- \$100 thousand;</li> <li>- Where the net premiums written do not exceed \$6.0 million, 20% of those net premiums. Where the net premiums written exceed \$6.0 million, \$1.2 million plus 15% of the net premiums written which exceed \$6.0 million;</li> <li>- 15% of net loss reserves; and</li> <li>- 25% of insurer's ECR as reported at the end of its relevant year.</li> </ul>
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### 6.3.2. Non-compliance with regulatory capital requirements

The RenaissanceRe Group, and its Bermuda-regulated subsidiaries, have not had any instances of non-compliance with the BMA's regulatory capital requirements. We have maintained capital in excess of the MSM and the ECR as calculated by the BSCR model without exception.

## 7. SUBSEQUENT EVENTS

### 7.1. ACQUISITION OF TOKIO MILLENNIUM RE

On March 22, 2019, RenaissanceRe's wholly owned subsidiary, RenaissanceRe Specialty Holdings (UK) Limited, completed its previously announced purchase of all of the share capital of Tokio Millennium Re AG (now known as RenaissanceRe Europe AG) ("RenaissanceRe Europe"), Tokio Millennium Re (UK) Limited (now known as RenaissanceRe (UK) Limited) ("RenaissanceRe UK"), and their respective subsidiaries (collectively, the "TMR Group Entities") pursuant to a Stock Purchase Agreement by and among the Company, Tokio Marine & Nichido Fire Insurance Co. Ltd. ("Tokio") and, with respect to certain sections only, Tokio Marine Holdings, Inc. entered into on October 30, 2018 (the "TMR Stock Purchase Agreement") (the "TMR Stock Purchase").

The aggregate consideration for the TMR Stock Purchase, which closed on March 22, 2019, was \$1.6 billion, consisting of cash, RenaissanceRe common shares and a special dividend from the TMR Group Entities, as described in more detail below. The aggregate consideration paid at closing for the TMR Stock Purchase was based on the Company's good faith estimate of the closing tangible book value of the TMR Group Entities and is subject to post-closing adjustment under the terms of the TMR Stock Purchase Agreement, which we expect to be completed no later than the third quarter of 2019.

In connection with the closing of the TMR Stock Purchase, Tokio, RenaissanceRe Europe and RenaissanceRe UK entered into a reserve development agreement whereby RenaissanceRe Europe and RenaissanceRe UK agreed to cede to Tokio, and Tokio agreed to indemnify and reimburse RenaissanceRe Europe and RenaissanceRe UK for, substantially all of RenaissanceRe Europe and RenaissanceRe UK's adverse development on stated reserves at time of the closing, including unearned premium reserves, subject to certain terms and conditions. The reserve development agreement provides the Company with indemnification on stated reserves, including unearned premium reserves, for RenaissanceRe Europe and RenaissanceRe UK, on a whole-account basis, and takes into consideration adverse performance across the Company's reportable segments. To the extent the combined performance of acquired reserves for claims and claim expenses or unearned premiums is worse than expected on an aggregate basis across reportable segments, the Company is indemnified under the terms of the reserve development agreement and would expect to collect under the reserve development agreement.

At closing, RenaissanceRe Europe and Tokio entered into a retrocessional agreement pursuant to which RenaissanceRe Europe ceded to Tokio all of its liabilities arising from certain stop loss reinsurance contracts RenaissanceRe Europe entered into with third party capital partners which were either in force as of the closing date or which incept prior to December 31, 2021.

The purchase price at closing for the TMR Stock Purchase was based on Parent's good faith estimate of the closing tangible book value of the TMR Group Entities and is subject to post-

closing adjustment under the terms of the Purchase Agreement, which we expect to be completed no later than the third quarter of 2019. We do not currently anticipate any adjustments under this mechanism will be material.

## **7.2. SENIOR NOTES ISSUANCE**

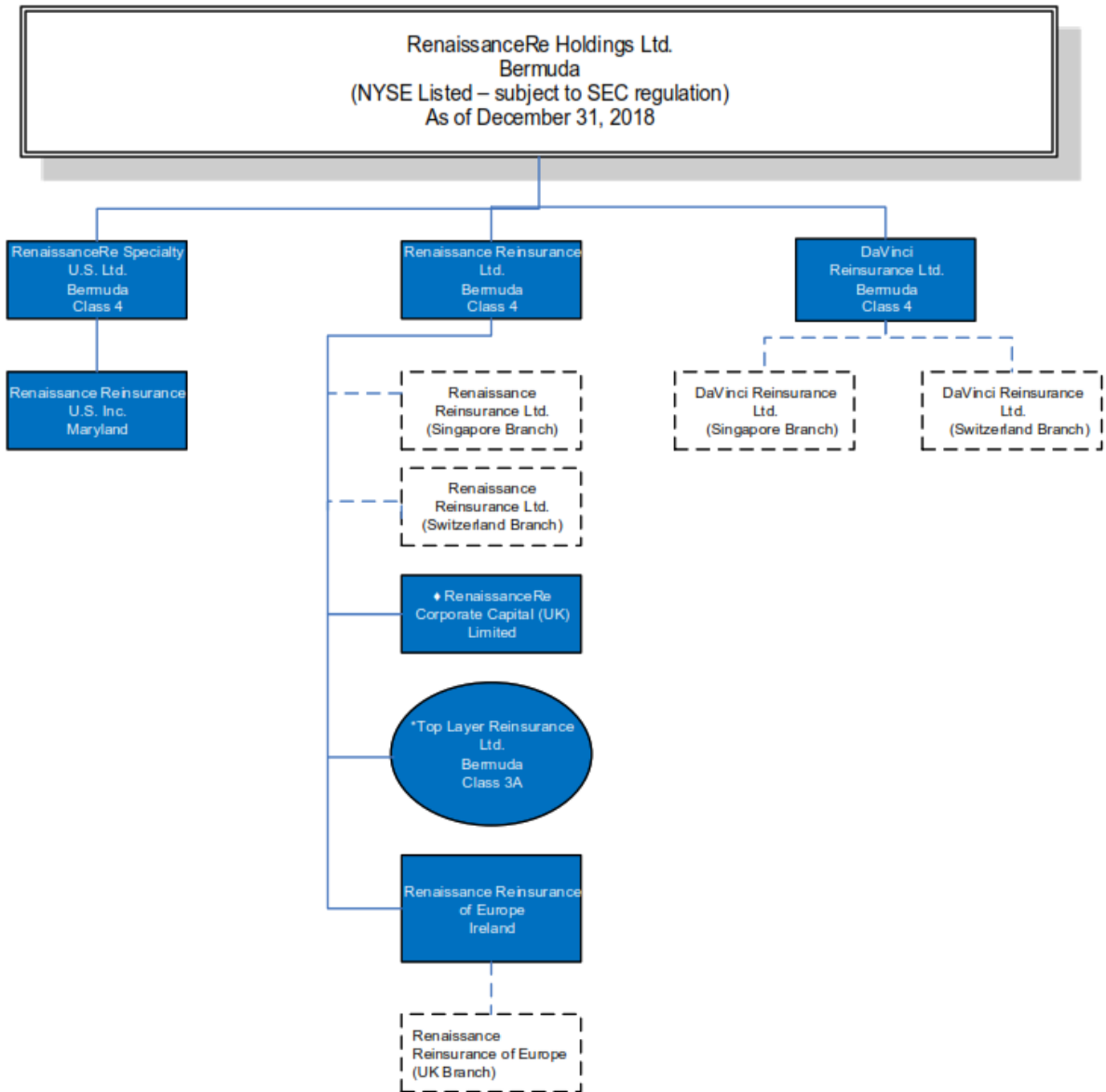
On April 2, 2019, the Company issued \$400.0 million of its 3.600% Senior Notes due April 15, 2029, with interest on the notes payable on April 15 and October 15 of each year, commencing on October 15, 2019. The notes are redeemable at the applicable redemption price, subject to the terms described in the indenture for the notes. However, the notes may not be redeemed prior to April 15, 2022 without approval from the BMA and may not be redeemed at any time prior to their maturity if enhanced capital requirements, as established by the BMA, would be breached immediately before or after giving effect to the redemption of such notes, unless, in each case, the Company replaces the capital represented by the notes to be redeemed with capital having equal or better capital treatment as the notes under applicable BMA rules. The notes contain various covenants including limitations on mergers and consolidations, and restrictions as to the disposition of, and the placing of liens on, the stock of designated subsidiaries. The net proceeds from this offering were used to repay, in full, the \$200.0 million outstanding under the Company's revolving credit facility at March 31, 2019, which the Company used to partially fund the purchase price for the TMR Stock Purchase, and the remainder of the net proceeds will be used for general corporate purposes.

## **7.3. OTHER**

As of the date of filing this report, no other events have occurred which had, or will have, a material impact on the information contained in this report regarding our operations, including but not limited to, acquisitions, divestitures, or new lines of business entered into.

RenaissanceRe's results for the quarter ended March 31, 2019 are discussed in our current report on Form 10-Q filed with the SEC on May 8, 2019.

# APPENDIX ONE: SIMPLIFIED GROUP STRUCTURE



**Key**



\* Not consolidated in RenaissanceRe Holdings Ltd. Financial Statements

◆ RenaissanceRe Corporate Capital (UK) Limited is the Lloyd's sponsor for RenaissanceRe Syndicate 1458

This is a simplified depiction of the Bermuda Operating Subsidiaries within the RenaissanceRe Group as at December 31, 2018. This indicates that RenaissanceRe is the ultimate owner of those Bermuda Operating Subsidiaries. Shares are directly held by other entities within the RenaissanceRe Group.

## APPENDIX TWO: REGISTERS OF DIRECTORS AS OF MAY 31, 2019

### RENAISSANCE RE HOLDINGS LTD.

<u>NAME</u>	<u>DIRECTOR</u>	<u>OFFICE (if applicable)</u>
Jean D. Hamilton	Class I	
James L. Gibbons (Non-Executive Chair)	Class I	
David C. Bushnell	Class I	
Anthony M. Santomero	Class I	
Brian G.J. Gray	Class II	
Duncan P. Hennes	Class II	
Kevin J. O'Donnell	Class II	President and Chief Executive Officer
Henry Khlem III	Class III	
Valerie Rahmani	Class III	
Carol P. Sanders	Class III	
Cynthia Trudell	Class III	



## RENAISSANCE REINSURANCE LTD.

<u>NAME</u>	<u>DIRECTOR</u>	<u>OFFICE</u>
Kevin J. O'Donnell	Director	President and Chief Executive Officer
Robert Qutub	Director	Executive Vice President and Chief Financial Officer
James C. Fraser	Director	Senior Vice President and Chief Accounting Officer

## RENAISSANCE RE SPECIALTY U.S. LTD.

<u>NAME</u>	<u>DIRECTOR</u>	<u>OFFICE</u>
Robert Qutub	Director	Executive Vice President and Chief Financial Officer
James C. Fraser	Director	Senior Vice President and Chief Accounting Officer
Helen L. James	Director	Senior Vice President and Global Corporate Controller

## TOP LAYER REINSURANCE LTD.

<u>NAME</u>	<u>DIRECTOR</u>	<u>OFFICE (if applicable)</u>
Kevin J. O'Donnell	Class C Director	Chief Executive Officer
Aditya K. Dutt	Class C Director	President & Treasurer
Paul J. Smith	Class A Director	
Angela K. Sparks	Class A Director	
Jeffrey McCarty	Class A Director	
Daniel J. Krause	Class A Director	

## APPENDIX THREE: DECLARATION

To the best of my knowledge and belief, RenaissanceRe's Financial Condition Report for the year ended December 31, 2018 fairly represents the financial condition of the insurer in all material respects.

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**Kevin J. O'Donnell**  
Chief Executive Officer  
May 31, 2019

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**Stephen H. Weinstein**  
Chief Compliance Officer, Group General  
Counsel & Corporate Secretary