

# **CONVEX REINSURANCE LIMITED**

## **Financial Condition Report**

**2019** (Expressed in thousands of U.S. Dollars)



## Contents

### Executive summary

#### A. Business and performance

- A.1. Business Overview
- A.2. A description of the ownership details including proportion of ownership interest of the insurance group
- A.3. Group structure chart for the Company
- A.4. Insurance business written by business segment and by geographical region during the reporting period
- A.5. Performance of investments, by asset class and details of material income and expenses incurred during the reporting period
- A.6. Any other material information

#### B. Governance structure

- B.1. Board and senior management
- B.2. Fit and propriety requirements
- B.3. Risk management and solvency self-assessment
- B.4. Internal controls
- B.5. Internal audit – description of how the internal audit function is implemented and how it maintains its independence and objectivity when conducting its functions
- B.6. Actuarial function - a description of how the actuarial function is implemented
- B.7. Outsourcing
- B.8. Any other material information

#### C. Risk profile

- C.1. Material risks that the insurer is exposed to, including how these risks are measured and any material changes that have occurred during the reporting period
- C.2. How risks are mitigated including the methods used and the process to monitor the effectiveness of these methods
- C.3. Material risks concentration
- C.4. How assets are invested in accordance with the prudent person principle as stated in paragraph 5.1.2 of the Code
- C.5. Stress testing and sensitivity analysis to assess material risks, including the methods and assumptions used, and the outcomes
- C.6. Any other material information

#### D. Solvency valuation

- D.1. The valuation bases, assumptions and methods used to derive the value of each asset class
- D.2. The valuation bases, assumptions and methods used to derive the value of technical provisions and the amount of the best estimate. The amount of the risk margin as well as the level of uncertainty to determine the value of the technical provisions should be included
- D.3. Description of recoverables from reinsurance contracts, including special purpose insurers and other risk transfer mechanisms
- D.4. The valuation bases, assumptions and methods used to derive the value of other liabilities
- D.5. Any other information

#### E. Capital management

- E.1. Eligible capital
- E.2. Regulatory capital requirements
- E.3. Approved internal capital model used to derive the ECR

#### F. Significant event

- F.1. A description of the significant event
- F.2. Approximate date(s) or proposed timing of significant event
- F.3. Confirmation of how the significant event has impacted or will impact, any information provided in the most recent financial condition report filed with the Authority
- F.4. Any other material information

## Executive summary

Convex Reinsurance Limited. (the “Company” or “CRL” or “Convex Re”) was incorporated under the laws of Bermuda on November 21, 2018. The Company is 100% owned by Convex Group Limited which was incorporated under the laws of Bermuda on October 24, 2018. CRL is registered as a Class 4 insurer under The Insurance Act 1978 of Bermuda, amendments thereto and related Regulations (“The Act”). The Company primarily offers property and casualty (“P&C”) insurance and reinsurance focused on large commercial clients with complex insurance requirements.

This Financial Condition Report (“FCR”) is based on the Insurance (Public Disclosure) Rules 2015 which came into effect on January 1, 2016. These rules specify the requirement for commercial insurers to prepare an FCR and requires that it be made publicly available on the insurer’s website. This report provides a discussion on the Company’s business and performance (section A), governance structure (section B), risk profile (section C), solvency valuation (section D), capital management (section E) and subsequent events (section F).

This report is primarily based on the Company’s Economic Balance Sheet (“EBS”) as at December 31, 2019. In addition, certain sections include information based on the Company’s consolidated financial statements for the period since the Company’s incorporation on November 21, 2018 to December 31, 2019 which have been prepared in accordance with the accounting principles generally accepted in the United States (U.S. GAAP) and include the accounts of the Company and its subsidiaries.

## A. Business and performance

### A.1. Business Overview

The Company’s focus in 2019 was on hiring the right talent to fill key roles and defining and implementing the processes required to allow it to begin underwriting business. As a result, and as anticipated, written premium volumes in 2019 were limited, although over \$101,482 of gross premium was written by the end of the year. A prudent approach to risk retention resulted in significant use of reinsurance protection. As many of the contracts purchased cover both the 2019 and 2020 underwriting years, this resulted in a significant level of ceded premium, which in turn led to low levels of net written premium.

The ramp up of operations during 2019, from a standing start to a fully-operational insurer/reinsurer, also meant that expenses incurred were significant as a proportion of the premium base, which further reduced the level of net income. As a result, CRL made a net loss of \$19,729 for the year.

The Company views pricing in the insurance industry to be cyclical. Over the past decade there has been a significant decrease in pricing in both the insurance and reinsurance market, which CRL believes is attributable primarily to the emergence of alternative sources of capital, less disciplined underwriting from incumbent providers, intermediary consolidation, and an expansion of delegated authorities.

However, the rate of decline slowed during 2017 and 2018, and both rate flattening and some increases have been seen in the year ending December 31, 2019. In light of these market developments, CRL’s proposition will continue to be underpinned by a disciplined underwriting approach with a focus on profitability over volume. In addition, the cost advantage enabled by the efficient operating model further enhances CRL’s competitive position in a more difficult pricing environment.

CRL believes that the specialty insurance and reinsurance markets offer greater scope for premium growth and profitable underwriting due to on-going dislocation in the market, increasing client demand for underwriting solutions for complex risks and the continued emergence of higher-complexity risk types.

Within these specialty insurance and reinsurance markets, CRL will focus on the most complex end of the risk spectrum, supported by our differentiated operating model and underwriting experience and capabilities. One of the key elements of differentiation within the operating model is CRL's use of outsourcing within Finance, HR, Underwriting Operations and Technology to supplement in-house capabilities. In this, one of our key partners, WNS will continue to provide a breadth and depth of expertise to CRL across a variety of areas.

CRL's differentiated proposition will include the following:

- a focus on large commercial clients and complex risk types;
- appropriate specialist underwriting capabilities and experience of writing consistently profitable business in CRL's target classes of business;
- the ability to provide insurance and/or reinsurance capacity for relatively large risks, with access to additional third-party capacity as appropriate;
- a high-touch client service model supported by a wider operating model tailored to the type of business targeted by CRL; and
- modern supporting technology specifically designed to support the business targeted by CRL, with no outdated legacy systems to be maintained.

In order to guide management in implementing this proposition, CRL has constructed a business plan which considers different potential market-level scenarios for the short and long-tailed insurance markets, and how CRL would respond in each scenario.

#### **A.1.1. Name of the insurance group**

Convex Group Limited  
Victoria Place, 5<sup>th</sup> Floor  
31 Victoria Street  
Hamilton HM10  
Bermuda

#### **A.1.2. Name and contact details of the insurance group supervisor**

Bermuda Monetary Authority  
BMA House  
43 Victoria Street  
Hamilton, Bermuda  
Telephone: (441) 295-5278

#### **A.1.3. Name and contact details of the approved group auditor**

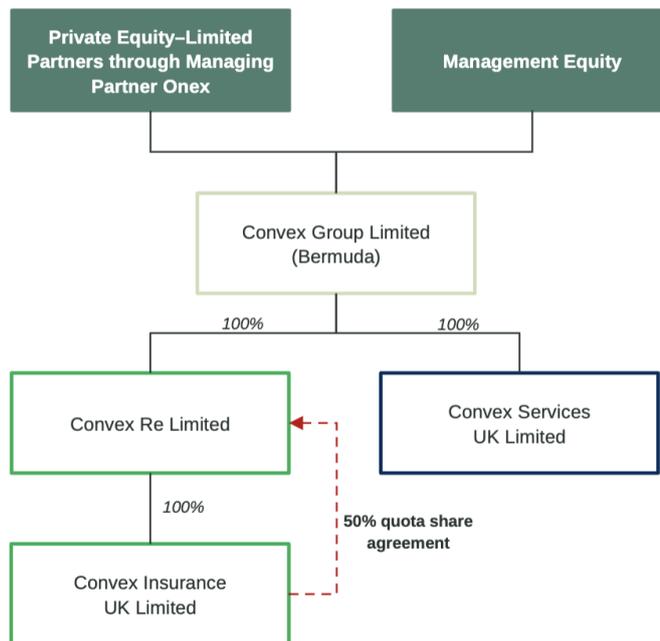
PricewaterhouseCoopers Ltd. (Bermuda)  
Washington House  
4th Floor, 16 Church Street  
Hamilton HM11  
Bermuda

#### **A.2. A description of the ownership details including proportion of ownership interest**

As noted in Section A above, Convex Reinsurance Limited is 100% owned by Convex Group Limited and was incorporated on November 21, 2018.

The ownership interest of the Company can be viewed in the Group structure chart below. Convex Group Limited's private equity-limited partners through managing partner Onex holds 96% of the total voting shares of the Company with the remaining ownership interest (4%) held by the directors and executive officers, their families and friends, and senior management staff of the Company.

### A.3. Group structure chart for the Company



The Company's subsidiary at December 31, 2019 was:

- **Convex Insurance UK Limited:** a UK operating company, closely aligned with the Bermuda operating company: and

### A.4. Insurance business written by business segment and by geographical region during the reporting period

The Company has only one business segment. The following table sets forth the gross premiums written allocated to the territory of coverage exposure for the period ended December 31, 2019:

Geographical region	Period ended, December 31, 2019
North America	\$ 37,020
Europe (Including UK)	35,427
Africa and Middle East	15,249
Rest of world	13,786
<b>Total</b>	<b>\$ 101,482</b>

### A.5. Performance of investments, by asset class and details of material income and expenses incurred during the reporting period

As at December 31, 2019, the fair values of the investment portfolio of the Company totalled \$683,385 and were split by asset class as follows:

	Amortized Cost or Cost	Fair Value
U.S. government and government agency	\$ 194,034	\$ 194,563
Agency residential mortgage-backed securities	54,326	54,410
Non-agency residential mortgage-backed securities	5,542	5,565
U.S. corporate	234,009	235,043
Non-U.S. corporate	2,610	2,628
Non-U.S. government and government agency	2,997	2,997
Asset-backed securities	61,771	61,842
Commercial mortgage-backed securities	3,768	3,769
<b>Total fixed maturities</b>	<b>559,057</b>	<b>560,817</b>
<b>Short-term investments</b>	<b>122,533</b>	<b>122,568</b>
<b>Total investments</b>	<b>\$ 681,590</b>	<b>\$ 683,385</b>

During the period ended December 31, 2019, net investment return was derived from the following sources:

	<b>Period ended December 31, 2019</b>
Fixed maturities and short-term investments	\$ 5,555
Cash and cash equivalents	410
Total gross investment income	5,965
Investment expenses	(1,091)
Total net investment income	4,874
Realized gains on investments	330
Change in unrealized gains on investments	1,796
<b>Total net investment income</b>	<b>\$ 7,000</b>

### Details of Material Income and Expenses for the Period Ended December 31, 2019

The below tables provide summaries of the Company's material income and expenses line items for the period ended December 31, 2019:

#### **Revenues**

Gross premiums written	\$ 101,482
Net premiums earned	7,477
Net investment income	7,000

#### **Expenses**

Losses and loss expenses	
Current period	5,699
Prior years	-
Total losses and loss expenses	<u>\$ 5,699</u>

Policy acquisition costs	1,443
General and administrative expenses	77,146

Highlights for the Company for the period ended December 31, 2019 were as follows:

Gross premiums written for the period ended December 31, 2019 amounted to \$101,482. The Company underwrites a significant amount of its reinsurance business through four brokers: Willis Towers Watson Plc (27.7%), Marsh & McLennan Companies, Inc. (19.2%), Arthur J. Gallagher & Co. (17.7%) and AON Special Risk Resources Inc. (14.2%).

Net premiums earned for the period ended December 31, 2019 amounted to \$7,477.

Reinsurance contracts can be written on a risks-attaching or losses-occurring basis. Under risks-attaching reinsurance contracts, all claims from cedants' underlying policies incepting during the reinsurance contract period are covered, even if they occur after the expiration date of the reinsurance contract. In contrast, losses-occurring reinsurance contracts cover all claims occurring during the period of the contract, regardless of the inception dates of the underlying policies. Any claims occurring after the expiration of the losses-occurring contract are not covered.

Insurance and reinsurance premiums written are recorded at the inception of the policy. Reinsurance premiums are estimated based on information received from brokers, ceding companies and reinsureds, and any subsequent differences arising on such estimates are recorded in the periods in which they are determined.

Premiums written are earned on a pro-rated basis over the term of the related policy or contract. For direct insurance, and for facultative and losses-occurring reinsurance contracts, the earnings period is generally the same as the term of the related contract or policy. For reinsurance contracts written on a risks-attaching basis, the earnings period is based on the terms of the underlying contracts and policies and is generally assumed to be 24 months. The portion of the premiums written applicable to the unexpired terms of the underlying contracts and policies in force is recorded as unearned premiums.

Losses and loss expenses for the period ended December 31, 2019 was \$5,699, a loss ratio of 76.2%. Incurred losses and loss expenses is comprised of gross losses and loss expenses of \$7,132 and estimated reinsurance recoveries of \$1,433.

Event/Non-event losses

Details of the Company's losses and loss expenses for the period ended December 31, 2019 were as follows:

<u>Event</u>	
Current period	\$ -
Prior years	-
Sub-total	<u>-</u>
<u>Non-Event</u>	
Current period	\$ 5,699
Prior years	-
Sub-total	<u>5,699</u>
<b>Total losses and loss expenses</b>	<b>\$ <u>5,699</u></b>

Policy acquisition costs are costs that vary with, and are directly related to, the successful production of new and renewal business, and consist principally of commissions and brokerage expenses. These costs are deferred and amortized over the period in which the related premiums are earned. Acquisition costs are shown net of commissions earned on reinsurance ceded. However, if the sum of a contract's expected losses and loss expenses and deferred acquisition costs exceeds related unearned premiums, a premium deficiency is determined to exist. In this event, deferred acquisition costs are immediately expensed to the extent necessary to eliminate the premium deficiency. If the premium deficiency exceeds deferred acquisition costs, then a liability is accrued for the excess deficiency. There were no significant premium deficiency adjustments recognized during the period ended December 31, 2019. Policy acquisition costs also include profit commissions, which are recognized on a basis consistent with our estimate of losses and loss expenses. Policy acquisition cost ratio for the period ended December 31, 2019 was 19.3%.

General and administrative expenses for the period ended December 31, 2019 totalled \$24,630. General and administrative expenses include staff costs, office and infrastructure related expenses, business expenses and management fees.

#### **A.6. Any other material information**

No other material information to report.

### **B. Governance structure**

#### **B.1. Board and senior management**

The board's role is to be collectively responsible for promoting the long-term sustainability of the company, generating value for shareholders in a manner which also allows it to discharge its responsibilities to its stakeholders whilst maintaining compliance with legal and regulatory requirements.

The board sets the purpose, strategy and values of the company and seeks to ensure that the culture within the company is aligned with these. The board is also responsible for setting the company's risk appetite and satisfies itself that financial controls and risk management systems are robust, while ensuring the company is adequately resourced. It also ensures that there is appropriate dialogue with shareholders on strategy and remuneration.

The board's responsibilities include taking account of other stakeholders including employees, intermediaries, third party partners, policyholders and customers. This includes ensuring that an appropriate system of risk governance is in place throughout the company. To discharge this responsibility, the board has established frameworks for risk management and internal control using a 'three lines of defence model' to ensure that the company is managed in accordance with the risk appetite established by the board.

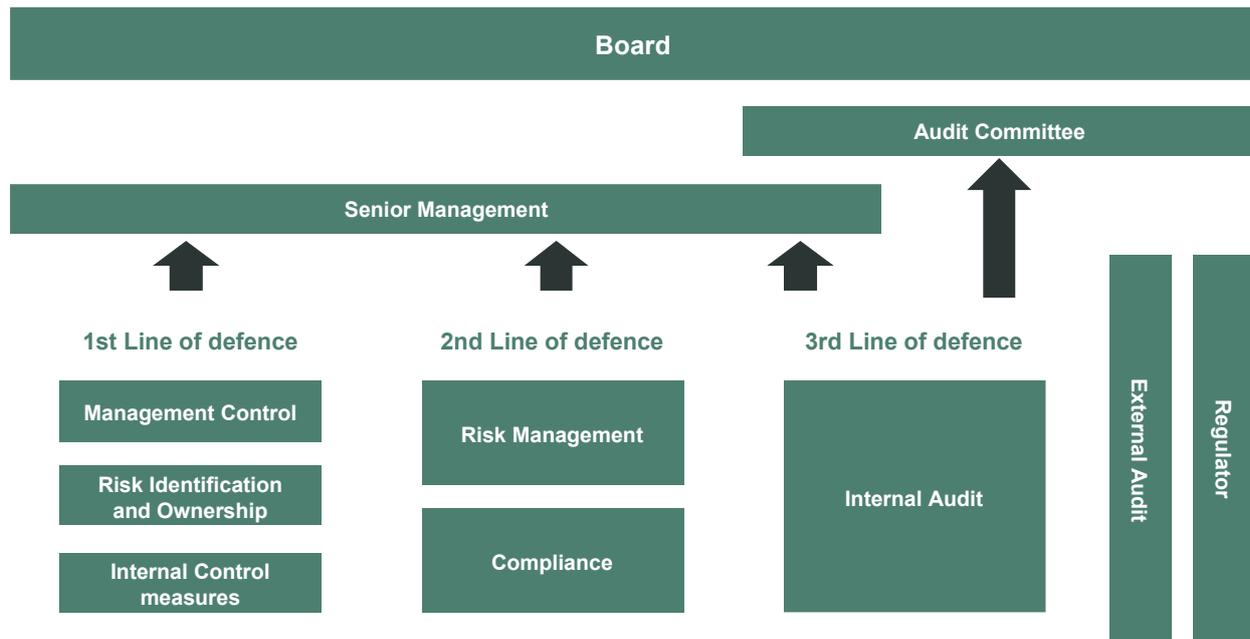
##### **B.1.1. Control Framework**

The Board retains ultimate responsibility for the company's systems of internal control and the risk management framework. They review the effectiveness through the establishment of an effective governance and monitoring process. This includes regular reporting and in-depth monitoring of the establishment and operation of prudent and effective controls.

CRL operates a 'three lines of defence' controls framework whereby the business implements first line controls so as to ensure that the front-line business units comply with the requirements set by the Board

regarding risk appetite and control. The compliance and risk management functions undertake monitoring to provide second line assurance that these controls are effective, meet the expectations of our regulators and are in accordance with the company’s risk appetite. The Internal Audit function provides independent oversight across CRL and reports to the Audit Committee of the CRL Board.

As this is the first year of operation, all three lines are in the process of building out their respective capabilities and further maturing and embedding relevant processes and controls. The respective responsibilities of each line are shown below:



**First line: Management Monitoring**

Management are responsible for implementing and monitoring the system of internal control and for complying with the risk appetite and controls set by the CRL Board.

**Second line: Risk and Compliance functions**

The Risk function is accountable for developing the Risk Management Framework (“RMF”) and for the quantitative and qualitative oversight of the process to identify, measure, manage, monitor and report (“IMMMR”) risk. As the business responds to changing market conditions, customer needs and regulatory requirements, the Risk function reviews the appropriateness of the company’s risk policies and the RMF at least annually.

The Compliance function supports and advises the business on the identification, measurement and management of its regulatory, financial crime and conduct risks; in this regard the Compliance function acts as part of the first line of defence. Compliance also monitors, evaluates and provides assurance on the effectiveness of the first line controls and therefore also acts as part of the second line of defence.

**Third line: Internal Audit**

This function provides independent and objective assessment on the robustness of the RMF and the appropriateness and effectiveness of internal control to the Audit, Risk and Investment Committees, and the Boards.

### **B.1.2. Board of Directors and Executive officers**

The directors of the Company oversee the management of the Company's business and affairs and are responsible for the corporate governance framework. The directors were appointed shortly after the Company was incorporated and as at December 31, 2019, consisted of the following persons:

- Stephen Catlin;
- Paul Brand;
- Robert Marcotte
- Fiona Luck;
- Dr Claus-Michael Dill; and
- Nick Lyons

The Company's executive officers are members of the Bermuda Executive Committee and are responsible for the development and execution of the Company's internal controls, budgets, strategic plans and objectives. As at December 31, 2019, the executive officers consisted of the following persons:

- Paul Brand;
- Heather Kitson;
- Robert Marcotte;
- Lisa Robinson;
- Lorraine Mullins;
- Ben Savill; and
- Pierre-Francois Rodriguez

### **B.1.3. Description of remuneration policy and practices and performance-based criteria governing the board, and its senior executives and employees**

#### *Remuneration*

Convex's reward principles and arrangements are designed to incentivise and reward employees for achieving stated business goals in a manner that is consistent with the company's approach to sound and effective risk management. The remuneration approach is aligned to the company's strategy, incentivises achievement of the company's annual business plan and longer-term sustainable growth of the business and differentiates reward outcomes based on performance and behaviour that is consistent with the company's values.

The remuneration approach provides market competitive remuneration and incentivises all staff members to contribute towards both the annual business plan and the longer-term strategic objectives of the company. Variable remuneration can be zero if performance thresholds are not met.

Remuneration of staff is split between the following components:

- Basic salary informed by individual and business performance, levels of increase for the broader employee population and relevant pay data;
- Variable components;
- Pensions; and
- Benefits.

Non-executive directors receive a basic annual fee in respect of their board duties. Further fees are paid for membership and, where appropriate, chairing board committees. Fees are reviewed annually taking into account market data and trends and the scope of specific board duties.

#### **B.1.4. Description of the supplementary pension or early retirement schemes for members, the board and senior executives**

The Company does not maintain a defined benefit pension or retirement plan for its named executive officers. The Company provides pension benefits to eligible employees through various plans which are managed externally and sponsored by the Company. Contributions are expensed as incurred.

#### **B.1.5. Material transactions with shareholder controllers, persons who exercise significant influence, the board or senior executives**

During the period ended December 31, 2019, the Company incurred expenses for professional services, accommodation, travel and entertainment which were provided by various related parties of the Company and totalled \$109.

### **B.2. Fitness and propriety requirements**

#### **B.2.1. Description of the fit and proper process in assessing the board and senior executives**

Directors and senior executives are required to be assessed for their fitness and propriety at appointment.

Assessing a person's fitness and propriety includes an assessment of:

- His/her honesty, integrity and reputation;
- His/her competence and capability;
- His/her financial soundness.

The Board identifies the skills and experience that are required at Board level, including the appointments of executive directors or independent non-executive directors, so as to ensure the relevant diversity, experience, skills and knowledge required for effective oversight and challenge.

The Company ensures that the individuals it employs are fit and proper in accordance with the requirements set by regulators in the jurisdictions in which the Company and its subsidiaries operate.

To ensure that the Company identifies and recruits appropriate people, the individual is assessed for:

- Fitness: skills and experience must be adequately matched to the role they are being employed to undertake
- Propriety: checks are in place to ensure that an individual is honest, of good reputation, has integrity and is financially sound

A basic level of screening is applied to all employees. Senior executives are also subject to the enhanced screening.

## **B.2.2. Description of professional qualifications, skills and expertise of the board and senior executives to carry out their functions**

The Company's Directors are as follows:

### *Stephen Catlin - Chairman and CEO – Convex Group Limited*

- 45 years of insurance industry experience.
- Founder and CEO of Catlin (1984-2015).
- Executive Deputy Chairman of XL Catlin (2015-17).
- Chairman of The Association of Bermuda Insurers and Reinsurers (2015-17).

### *Paul Brand - Deputy CEO – Convex Group Limited*

- 36 years of insurance industry experience, including 31 years at Catlin and XL Catlin.
- Chief Underwriting Officer at Catlin (2003-15).
- Chief Underwriting Officer (Insurance) at XL Group (2015-17).
- Chairman of Accelerate, XL Catlin's in-house innovation team (2016-18).

### *Fiona Luck –Independent Non-Executive Director*

- 30 years of insurance and finance experience.
- Spent seven years at XL Group.
- Held various senior positions at XL, including executive vice-president of group operations.
- Held senior positions at Ace Bermuda and Marsh & McLennan.

### *Dr. Claus-Michael Dill – Independent Non-Executive Director*

- Extensive industry experience having served as the CEO of Damp Holding AG, Axa Kozern AG and Switzerland General Insurance.
- Previously Non-Executive director of XL Group Ltd., Catlin Group Ltd. and General Reinsurance AG.
- Holds a PhD in Economics from University of Munich.

### *Nick Lyons – Independent Non-Executive Director*

- Extensive experience in Investments banking with 12 years at JP Morgan and 8 years at Lehman Brothers.
- Appointed Chairman of the Board of Directors of Phoenix Group Holdings in 2018.
- Held numerous positions on the boards of other financial institutions including the Pension Insurance Corporation.
- Holds a B.S. in Economics (magna cum laude) from Wharton School, University of Pennsylvania.

The members of the Bermuda Executive Committee are as follows:

### *Paul Brand - Deputy CEO – Convex Group Limited*

- 36 years of insurance industry experience, including 31 years at Catlin and XL Catlin.
- Chief Underwriting Officer at Catlin (2003-15).
- Chief Underwriting Officer (Insurance) at XL Group (2015-17).
- Chairman of Accelerate, XL Catlin's in-house innovation team (2016-18).

### *Heather Kitson – Deputy CEO – Convex Reinsurance Limited*

- 18 years of insurance and financial services experience.
- Held various senior positions in the Bermuda market including General Counsel and Director of Aspen Insurance Limited and Group General Counsel and Chief Compliance Officer of a Bermuda bank.
- Served as Independent Director on various Bermuda company Boards
- Is a qualified lawyer, called to both the English and Bermudian bars, specializing in insurance and reinsurance.

*Robert Marcotte- Chief Financial Officer – Convex Reinsurance Limited*

- 25 years of insurance industry experience.
- Previously held a range of senior finance positions at Validus and Axis.
- Canadian CPA, US CPA and a CFA charterholder.

*Lisa Robinson- Head of Human Resources – Convex Reinsurance Limited*

- 20 year of insurance industry experience.
- Head of Human resources for Catlin Bermuda from 2002 – 2015, before becoming HR business partner at AXA XL.
- Holds PHR, SHRM-CP professional designations.

*Lorraine Mullins – Chief Compliance Officer*

- Extensive regulatory/compliance experience serving at the Investment Management Regulator leading an enforcement team and as Head of Equity Compliance at ING Barings investment bank
- Joined Catlin as Group Compliance Officer and moved to XL Catlin at Chief Regulatory Affairs Officer
- BA Hons Jurisprudence from Oxford University
- Qualified Barrister

*Ben Savill - Chief Underwriting Officer- Convex Reinsurance Limited*

- 22 years of reinsurance Underwriting experience.
- Joined Convex Re in 2019 from Fidelis where he was Group Chief Underwriting Officer and Chief Executive Officer of Fidelis Bermuda.
- Held the senior role of North American Market Unit Head at Amlin.
- Began his career in Lloyd's on Amlin's reinsurance account in 1997 and moved to Bermuda in 2005 to establish Amlin Bermuda.

*Pierre-Francois Rodriguez*

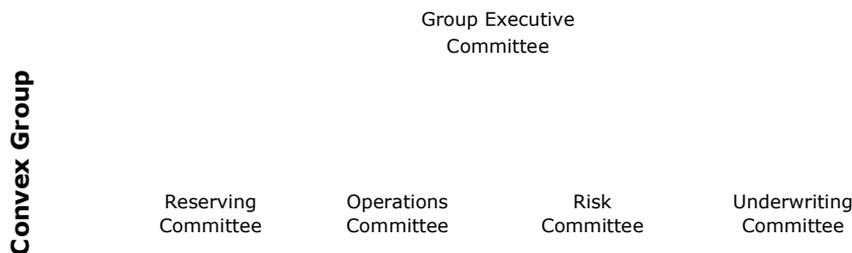
- 16 years financial services experience.
- Held various roles at the UK Regulator of Large Insurance Group Supervision and at AM Best.
- Consulted insurance firms on risk management, governance and regulation while at Deloitte.

### **B.3. Risk management and solvency self-assessment**

#### **B.3.1. Description of the risk management processes and procedures to effectively identify, measure, manage and report on risk exposures**

Risk is defined by Convex Re as being the possibility of an adverse circumstance that will have a negative impact on Convex Re or its objectives. The Risk Management Function provides risk oversight of the business for all risk types and categories. The RMF is in the process of being further embedded together with the further build out of underlying procedures and controls. Oversight of the function's operations is provided by the Group Executive Risk Committee ("ERC") and the Group Executive Committee ("GEC"). The Risk Management Function is led by the Chief Risk Officer ("CRO"), who attends Board and GEC meetings, and chairs the ERC.

The chart below outlines the governance structure throughout the Convex Group.



### **Risk Strategy**

The Risk Management Function and the Risk Management Framework support Convex Re in pursuit of the achievement of its business goals within the established risk tolerances. The Risk Management Function provides oversight, monitoring and challenge. As Convex Re grows, the Risk Management Function and Framework will continue to evolve to remain adequate for the company’s business and risk profile. The Risk Management Function supports Convex Group to achieve the following:

- Setting Board approved risk tolerances, and monitoring against those tolerances;
- Setting an appropriate “tone at the top” and fostering a risk management culture, whilst at the same time facilitating profitable business;
- Maintaining a strong solvency position within the approved thresholds above minimum regulatory solvency, as well as meeting shareholder and rating agencies expectations;
- Maintaining sufficient liquidity to meet the company’s obligations as they fall due and under defined stressed scenarios;
- Identifying, managing and mitigating its risks proactively so they remain within the defined risk appetite;
- Maintaining a diversified underwriting portfolio across P&C and a profitable growth within established underwriting risk tolerances;
- Maintaining a high quality and well diversified investment portfolio, with due regard for interest rate risk, credit risk, equity risk, and foreign exchange risk, and their aggregation in accordance the company’s Investment Guidelines and the Convex Re Financial and Market Risk Framework;
- Maintaining disciplined control of operational risk, including that related to BPO providers;
- Delivering good customer outcomes and treating them fairly; and
- Embedding a strong risk culture within Convex.

## **Risk Governance**

Convex Re operates the 'three lines of defence' structure as defined in Section B.1.

Convex Re takes risk seriously, and a strong risk culture is embedded within the business. Risk and assurance reviews are embedded with the first line to ensure risks are adequately identified and mitigated. For example, the actuarial function is a key stakeholder from the first line in managing underwriting and solvency risks on a day to day basis. Convex Re aims to be different than its peers and its business model requires a strong underwriting and operating cost discipline. As a result, the first line plays a strong role in identifying and managing risks.

The Convex Re Board is responsible for the company's risk and internal control framework, including setting and approving the company's business strategy, determining its risk appetite, establishing appropriate risk policies and monitoring capital requirements and risks against the agreed risk appetite and in line with the risk appetite statements.

A number of processes support the Risk Management Framework including:

- Risk Appetite framework;
- Risk Governance;
- Solvency and Risk Assessment Reports (CISSA);
- Risk registers;
- Regular risk reporting;
- Control Frameworks; and
- Risk policies, procedures, systems processes and controls.

## **Risk identification**

The risk identification process enables Convex Re to identify the risks, including emerging risks, that the Company is facing, and to monitor and mitigate them. The Risk Management Function has defined the Risk Universe in which Convex Re operates.

A key component of the risk identification process at Convex Re is the risk register. Convex Re has comprehensive risk registers for the Company and its regulated entities which are mapped against the risk universe. The top risks included in the risk registers are reported to the Convex Group, Convex Re and Convex UK Boards on a quarterly basis. The risk management function reviews and updates the risk registers on a monthly basis.

The effective management of emerging risks is essential for maintaining Convex Re's business strategy and underwriting performance. It helps to identify external trends, threats and opportunities, and improves risk selection and knowledge of future risk exposures. Convex is implementing an Emerging Risk and Opportunities Working Group that will enable further embedding of emerging risk identification and monitoring.

Emerging risks are included in the CISSA report. Convex Re will embed an annual identification and assessment exercise for emerging risks. The risk management team together with relevant stakeholders from the business will review the emerging risks landscape for the year ahead and assess the impact on Convex's business profile and strategy. This annual emerging risk assessment will continue to feed into the CISSA process and report.

Risk Registers are the repository of all material risks and controls in the company. It is one of the risk management function's most important risk management and monitoring tools and drives a significant portion of risk reporting to the Convex Group Board and entity Boards as well as to the GEC on a quarterly basis.

There are 6 fundamental sources of risk:

- People – Behaviour, skills, experience, knowledge, competence, integrity
- Processes – Failures in design, and effectiveness in operation, lack of supporting data
- Environment – The business, economic, legal and regulatory environment in which the Group operates
- External events – External events beyond the control of the company
- Infrastructure – Failures originating in the company's own operating and IT infrastructure
- Third-parties – External providers of products and services

The fundamental sources of risk give rise to the following top-level risk categories that form the risk universe:

- Credit risk – such as risks of cover holder or reinsurer default
- Market risk – such as investment value risk
- Liquidity risk – such as a forced liquidation of an asset in adverse conditions
- Financial risk – such as foreign exchange rate fluctuations
- Insurance risk – such as aggregate exposures and reserves
- Operational risk – such as operational resilience and disaster recovery
- Regulatory risk – such as conduct risk
- Legal risk – such as receipt of faulty legal opinions
- Strategic risk – such as incorrect assessment of insurance market

### ***Risk Assessment***

Risk Assessment is the process used to identify, evaluate and rank risks that require attention from Senior Management and the Convex Group Board.

The Heads of Function are the risk owners, responsible for the management, mitigation (controls) and monitoring of the risks. The Risk Management function will continue to implement regular risk assessment meetings with risk owners to review and provide challenge on the function's risk profile and validity of controls in place.

All risks in the risk registers are assessed in terms of their inherent and residual likelihood and impact on the business. An inherent risk is the risk in the absence of any controls to alter the likelihood and impact of it occurring. A residual risk is deemed to be the remaining risk to the business, after the application of identified controls.

Inherent and residual risks are assessed in terms of the likelihood of their occurrence and the impact they would have on the business, including the evolution of the risk from the previous quarter.

A matrix of impact and probability is used to rate the size of each risk, and a RAYG (Red, Amber, Yellow, Green) status for the risk is decided for each risk depending on how it sits at a residual level against the desired level of risk.

Impact risk assessment is made up of 4 considerations:

- Financial impact
- Regulatory impact
- Reputational impact
- Operational Impact

All four are considered during the risk assessment process and discussions with the business. The highest score of the four is used for risk rating purposes. The risk banding matrix is reviewed every 6 months to ensure it remains appropriate for the risk assessment according to Convex’s risk profile.

Risk assessments taking place with Heads of Function and have a number of core objectives, including:

- To review, monitor and update the status of existing risks
- To discuss the effectiveness of risk controls
- To understand the impact of risks on Convex Group
- To identify any new risks that have arisen or might arise

The output of these regular risk assessment meetings will be included in the regular risk reporting to the GEC and to the Convex Group, Convex Re and Convex UK Boards, ensuring that regular updates on the risk profile of the business are escalated for consideration by senior management.

In addition to the departmental risk assessment process, the Risk Management Function works with the business on new initiatives being undertaken to ensure the associated risks have been identified and assessed and that risk considerations feature in the decision-making process.

**Risk Mitigation**

Risk Mitigation is the process of reducing the potential adverse effects of a risk down to an acceptable level i.e. within the Company’s risk appetite. Risk mitigation is mainly achieved through the implementation of controls and management actions. It is the responsibility of each function at Convex Re and Convex UK to own and manage their internal control environment. Risk Management and Compliance provide an independent second line view of each function’s internal control environment. Risk Management and Compliance will review the effectiveness of the Convex Re and Convex UK control environment on a quarterly basis.

Each control will be scored for operational effectiveness by the Risk Management Function, following extensive discussions with the respective function. The key controls responsible for the greatest level of risk mitigation will also be noted.

These individual control scores will subsequently be used by the Risk Management Function to provide an overall RAG (Red, Amber, Green) rating for the robustness of the control function. This can be done by risk, control owner, operational function or in other ways.

The RAG assessment scale is provided below.

	Significant number of controls (including key) are ineffective, or not in place
	Majority of controls are in place and effective, including all key controls. Some controls remain ineffective or not operational
	All key controls are in place and working effectively. Some controls are either not fully operational or effective, but this does not greatly impact the risk

### ***Risk Monitoring***

Risk Monitoring is an important part of the risk management process. Effective risk monitoring ensures that Convex Re is operating within risk appetite and tolerances. It is a continuous and dynamic process of keeping track of identified risks and monitoring residual risks for any changes. It is also used to monitor the effectiveness of controls over time.

Effective risk monitoring enables Convex Re to make effective decisions on risks, in advance of these materialising. It helps to ensure that the correct risks continue to be represented on the risk registers, reflecting the changing risk profile of the business and ensures that the correct risk response actions have been implemented and are effectively working.

All identified material risks are monitored through the risk register to ensure risk profile changes are identified early, allowing appropriate mitigating actions to be applied in order to prevent negative outcomes. Any material changes identified form part of the risk reporting to the GEC and the ERC and the relevant entity's Board.

In addition to the risk registers and the regular risk assessment process, the Risk Management function will continue to build out other second line risk monitoring tools and activities such as risk management deep dives, emerging risks working group and reverse stress testing exercises.

### ***Risk reporting***

The purpose of Risk Reporting is to provide management with useful information, allowing them to make effective decisions about the risks the business faces. Risk reporting is a regular, continuous and important process for Convex Re as it builds alignment and transparency of risk information between the business, management and the executive. The Risk Management Framework, system and processes facilitate this reporting throughout the year, allowing the Convex Group Board and the GEC to review and challenge risk information and make informed decisions about the changing risk profile of the business.

Information from the risk registers are aggregated, analysed and presented in the risk report to the Convex Group Board and to the GEC displaying the top risks to the business and quarter on quarter changes in risk profile.

The risk report also provides the Convex Group Board and the GEC with the risk management function's opinion on the risks faced by each area of the business. The report is a combination of qualitative and quantitative information. Qualitative commentary is provided to support understanding of the current risk environment as well as the future risk outlook for the next reporting period. This provides an opportunity for breaches and key trends to be explicitly raised by the risk management function, where relevant.

### **B.3.2. Description of how the risk management and solvency self-assessment systems are implemented and integrated into the Insurer's operations; including strategic planning and organizational and decision-making process**

In line with regulatory requirements, the Board requires that the CISSA is part of the Risk Management Framework processes, with the quarterly risk appetite dashboard and the annual CISSA report being a trigger for management actions in response to changes in the risk profile.

Overall responsibility for the CISSA framework, output and policy lies with the Board. This policy is reviewed annually by the Risk Management Function and any changes approved by the Board in Q4 of each year.

### CISSA Process



The CISSA requires inputs from a number of key business activities including but not limited to:

- Strategic planning – the overall business strategy drives the business plan and hence impacts upon the risk profile of the business;
- Business planning – the business plan is a key driver behind the capital requirements and the risk profile of the business;
- Business monitoring – monitoring of performance of the business. This includes monitoring of the forward looking assessment of the business and capital needs under stressed conditions.
- Corporate Governance – the system of governance is an important input to the CISSA as it determines the extent of control that the business has over its operations and legal and regulatory requirements.

### B.3.3. Description of the relationship between the solvency self-assessment, solvency needs, and capital and risk management systems

Within Convex, the CISSA plays an important part in the activities of the business and to maintain a strong risk management culture. The CISSA provides a framework to enable the Board to be aware of the impact strategic decisions have on the risk and overall solvency needs of the business.

The main outcomes of the exercise reported to the Board in relation to the CISSA are:

- The capital and solvency position – the capital assessment is produced based on the risk profile of the Company and its business plan. Solvency has also been considered under both normal and stressed conditions;

- The risk profile of the Company is reviewed and reported. The CISSA is based on the risk profile of the Company;
- The risk appetite of the Company forms a key part of the risk profile reporting throughout the year and the Board is regularly informed of its position against its agreed risk appetite; and
- The appropriateness of the BSCR.

The Finance function undertakes a periodic assessment of the funds available to support the Company's economic capital requirements ensuring that the proportions of available tier 1, tier 2, and tier 3 capital categories meet or exceed the requirements of the ECR.

The Risk Management Function facilitates the risk identification and monitoring process on a quarterly basis via the risk appetite dashboard to the GEC and the Convex Group Board. Convex Re completes an annual Reverse Stress Testing exercise to identify potential stress events that could lead Convex to fail. The Risk Management Function involves relevant subject matter experts from key business and functional areas in stress and scenario testing development and selection. Sensitivity analysis is carried out on the business plan as part of the planning cycle, and financial impacts of further potential risks to the plan.

The Risk Management Function presents an annual report outlining the findings from the Stress Testing and Scenario Analysis exercise, including management actions (where appropriate) to the Convex Re Executive Risk Committee. The results of the exercise are included in the annual CISSA report.

The Risk Management Function will use the Emerging Risk and Opportunities Working Group to establish a list of the top emerging risks that Convex Re should consider. Additionally, any results of relevant emerging risks scenarios, brainstormed with the business and by the Emerging Risk and Opportunities Working Group will be considered and included in the annual CISSA report.

**B.3.4. Description of the solvency self-assessment approval process including the level of oversight and independent verification by the board and senior executives**

Oversight of the CISSA process and report is provided by the Board and relevant committees, as follows:

Audit Committee	<ul style="list-style-type: none"> <li>• Provide independent oversight of the CISSA process through internal audit reports.</li> </ul>
Board	<ul style="list-style-type: none"> <li>• Review and sign off the CISSA process and annual CISSA report.</li> <li>• Review and challenge the quarterly risk appetite dashboard</li> <li>• Review and sign off the results of any event driven CISSA reports arising from material changes to the business or business operating environment.</li> </ul>
Group Executive Risk Committee	<ul style="list-style-type: none"> <li>• Review the CISSA Policy</li> <li>• Review the quarterly risk appetite dashboard</li> </ul>
Group Executive Reserving Committee	<ul style="list-style-type: none"> <li>• Review the technical provisions and will make recommendations to the CRL Board for sign-off.</li> </ul>

## **B.4. Internal controls**

### **B.4.1. Description of the internal control system**

Convex's internal control function comprises the Risk and Compliance functions, as second line of defence functions. In addition, control activities are carried out by the first line to mitigate risks across the business, and further oversight of this control environment is provided by both internal and external auditors.

Control activities are carried out by control owners within the business as part of the Risk Management Framework. These controls are assessed at least annually, though most will be reviewed on a quarterly basis. These controls serve to reduce the likelihood of occurrence of risks, to ameliorate any impact caused by the risk crystallising, or to enable early detection of the risk's impact.

An assessment of the control framework of the business will be carried out on a quarterly basis in accordance with the Risk Management Framework to ensure that any deficiencies in the environment are known, and appropriate actions can be taken to improve the overall control function.

### **B.4.2. Description of how the compliance function is executed**

The primary purpose of the compliance function is to assess and manage the company's exposure to regulatory risk. The compliance function constitutes a key part of the company's corporate governance. The compliance function manages the relationships with all regulatory bodies and is committed to transparent and constructive relationships with regulators. The compliance function works closely with the legal function and also with the risk management and internal audit functions.

The compliance function activities include:

- Horizon scanning and identification of forthcoming regulatory changes
- Identification of conduct risks and supporting the board in monitoring these risks
- Providing advice, support, guidance, and challenge to the business in regards conduct risk, regulatory requirements and financial crime
- Managing regulatory engagement with regulators, including financial crime and data protection
- Managing compliance risks with outsource partners, ensuring that they are aligned with Convex Re culture and risk appetite
- Setting the financial crime policy and sanctions framework
- Escalating identified risks and breaches to management and the board
- Liaising with internal audit regarding key risk areas and effective use of monitoring and audit inspections

The compliance function is headed by the Chief Compliance Officer who holds the appropriate senior level executive position. The Chief Compliance Officer reports to the Convex Group CEO.

## **B.5. Internal audit - description of how the internal audit function is implemented and how it maintains its independence and objectivity when conducting its functions**

### **B.5.1. Implementation of the internal audit function**

The Purpose, Authority and Responsibility of the Internal Audit function is defined within the Internal Audit Charter. Internal Audit's mission is to provide reliable independent and objective assurance to Convex Group Limited and its subsidiaries Audit Committees, and to the Convex Group Executive Committee and subsidiary Executive Committees on the adequacy, effectiveness and sustainability of the system of internal control.

Adequate and effective risk management, internal control, and governance processes reduce but cannot eliminate the possibility of poor judgment in decision-making, human error, control processes being deliberately circumvented or overridden, and the occurrence of unforeseeable circumstances. Adequate and effective risk management, internal control, and governance processes therefore provide reasonable, but not absolute, assurance that the Company will not be hindered in achieving its business objectives, or in the orderly and legitimate conduct of its business.

Internal Audit maintains a professional audit team with sufficient knowledge, skills, experience and professional qualifications. Where specialist technical support is necessary to supplement Internal Audit resource, this is available through a co-sourcing contract with external specialist firms, ensuring that Internal Audit has immediate access to specialist skills where required.

On an annual basis, Internal Audit confirms to the Audit Committees that the International Standards for the Professional Practice of Internal Auditing of the Chartered Institute of Internal Auditors are complied with. Internal Audit operates within the Company's three lines of defence model. In order to operate an effective framework Internal Audit maintains regular and ongoing dialogue with the first and second line functions to maintain a current and timely perspective of business direction and issues. Demarcation between the third line of defence and the first two lines must be preserved to enable Internal Audit to provide an independent overview to Audit Committees on the effectiveness of risk management and assurance processes within Convex.

Internal Audit's methodology provides a series of different assurance responses to a variety of scenarios to give the stakeholders the most appropriate type of assurance as follows:

- Risk-based internal audits – Internal Audit's standard audit response, this methodology will also be used to respond to most management requests for assurance and focuses on assessing the adequacy and effectiveness of key controls mitigating High risk areas.
- Programme & Project Assurance – a series of risk-based assurance responses to programmes and projects. This differs from standard risk-based audits in that it focuses on key controls as well as the commercial aspects of the programme, such as benefits realisation.
- Close and Continuous – this involves Internal Audit having regular meetings with key stakeholders and attending decision making forums as appropriate. It will also include ongoing assessment of key documents as they are produced. Any concerns will be raised with management at an early stage to allow the programme to address them in a timely manner.

The above are communicated through the following methods:

- Reporting to the Audit Committees, including thematic reporting. Quarterly reporting is provided to the Audit Committees, where the Head of Internal Audit attends to summarise the output within the reporting period and provide an opinion on a number of key risk themes.
- Reporting to the Convex Group Executive Committee, where the Head of Internal Audit presents a summary of the key successes/challenges within the period.
- Internal Audit reports. In addition to the audit client, Internal Audit reports are issued to all executive management and relevant members of the business and the external auditor.

Reporting of issues focuses on describing the control breakdown or failure, who was responsible, and the risk that has materialised or could potentially materialise. In response to the issues raised by Internal Audit, management are required to document the steps they are taking to address the issue, provide a realistic timescale and, importantly, the action is assigned a single owner to enhance accountability.

### **B.5.2. Maintaining the independence of the internal audit function**

To ensure the independence of Internal Audit, the Group Head of Internal Audit, a senior position within the Group, reports functionally to the Chair of the Convex Group Audit Committee, to the Chair of the subsidiary legal entity Audit Committees, and has a secondary reporting line to the Group Chief Executive Officer. The Convex Group Audit Committee approves the performance evaluation, appointment, or removal of the Head of Group Internal Audit, and reviews his/her annual remuneration each year.

Internal Audit is functionally independent from the activities audited and the day-to-day internal control processes of Convex Re and is therefore able to conduct assignments on its own initiative, with free and unfettered access to people and information, in respect of any relevant department, establishment or function of the organisation, including the activities of subsidiaries and outsourced activities.

The Head of Internal Audit and audit staff are not authorised to perform any operational duties for the Company or wider Group or direct the activities of any employee not employed by Internal Audit.

To ensure that the system of governance works efficiently and effectively, Internal Audit will work together and co-operate with the other assurance functions in an appropriate open and collegiate way (for example, Risk Management and Group Compliance). Where such co-operation takes place, the work will be planned and carried out in such a way as to ensure that the independence and objectivity of Internal Audit remain safeguarded.

### **B.6. Actuarial function – a description of how the actuarial function is implemented**

The Actuarial function is led by the Company's Chief Risk Actuary ("CRA"), (who is also the Approved Actuary) reports to the CEO. The Actuarial function is accountable for actuarial methodologies and calibrations. It also considers the appropriateness of the capital modelling activities.

The Actuarial function produces an annual report to the Board providing information necessary for the Board to form their own opinion on the adequacy of technical provisions and capital requirements, and on underwriting and reinsurance arrangements.

The Actuarial function has the authority to review all areas of the Company and has full, free and unrestricted access to all activities, records, property and personnel necessary to complete its work. The independence of the Actuarial function is derived through its organisational separation from other functional areas. The CRA ensures that those persons employed by the Actuarial function in a defined actuarial role are subject to the fit and proper policy requirements to ensure they have the requisite skills and knowledge to complete their responsibilities.

### **B.7. Outsourcing**

#### **B.7.1. Description of the outsourcing policy and information on any key or important functions that have been outsourced**

The Convex Re culture is one that challenges the status quo and incorporates innovation, flexible working and collaboration in our day-to-day working. Working with our outsourced business partners, we believe that we can provide the best support to our underwriters, with nimble, efficient systems and processes to help them make the best decisions and provide value-added service excellence to our clients and brokers.

Convex Re has considered the impact of outsourcing and have put in place:

- an outsourcing oversight framework including an outsourcing policy;
- effective processes to identify, manage, monitor and report risks;
- methods for assessing the standard of performance of the service provider;
- appropriate escalation measures if the service provider may not be carrying out the functions effectively and in compliance with applicable laws and regulatory requirements;
- the necessary expertise to supervise the outsourced functions effectively; and
- the right to terminate the arrangement without detriment to the continuity and quality of its provision of services to clients.

Convex Re has also ensured that the service provider must:

- have the ability, capacity, and any authorisation required by law to perform the outsourced functions, services or activities.
- disclose any material impact on its ability to carry out the outsourced functions effectively.
- protect any confidential information relating to the Convex Re and its clients.
- establish, implement and maintain a contingency plan for disaster recovery and periodic testing of backup facilities having regard to the outsourced function, service or activity.
- Obtain prior approval from Convex Re for the use of sub-delegates and warrant that the primary contract terms and conditions extend to the sub-contract with such sub-delegation.

Convex Re recognises that the responsibility and accountability of all outsourcing functions remains with the management who will ensure that due diligence, expertise and skill is exercised when entering into, managing or terminating any outsourcing arrangement. The Group Chief Operating Officer, Adrian Spieler currently reports to the Board on the performance of services by the major service providers.

Where necessary, the outsourcing agreements will be reviewed annually and where material, changes are brought to the Board for consideration and approval. The governance structure for Convex's major service provider has several oversight and management layers, thereby ensuring the right audience and authority is engaged for discussion and agreement, whilst maintaining overall Board responsibility and accountability.

Convex Re has outsourced the provision of products/services in the following categories:

- Claims Operations
- Facilities & Workspace Management
- Finance Operations
- HR Operations
- IT Desktop and Application Support
- Underwriting Operations

The Convex Re outsourcing oversight framework will manage the risk that outsourcing does not result in the undue increase of operational risk, materially impair the quality of system of governance of the Company, impair the ability of supervisory authorities to monitor compliance of Convex Re nor undermine continuous and satisfactory service to policyholders.

#### **B.7.2. Description of material intra-group outsourcing**

Convex Group Limited's subsidiary, Convex Services UK Limited, through an intergroup service level agreement provides for staffing and servicing as required by Convex Group of companies. Staff provisions include but are not limited to underwriting, actuarial, claims and support staff. Services provided include but are not limited to managerial, legal, compliance, finance, IT infrastructure and support.

### **B.7.3. Any other material information**

A COVID-19 Planning Working Group has been formed to implement and manage emergency plans to mitigate the impact of COVID-19 pandemic on CRL's operational procedures. The plans include, but are not limited to:

- Creation of plans for essential operational changes (e.g. employee reassignment, approval changes) if significant or key employee absence is a threat.
- Review and assurance that our IT infrastructure is able to support an increase in remote work and manage additional volumes of teleconference collaboration.
- Assessment of the risk level to key outsourcing partners such as WNS, as well as other suppliers / partners on whom we depend, and obtaining confirmation that they have robust business continuity plans ("BCP") and are able to deploy them. as needed.
- Monitoring the wellbeing of staff to ensure they cope well with the unfamiliar context of social distancing and self-isolation. This includes, and is not limited to, the launch of the Isolation Wellbeing Questionnaire and updated hints and tips to support successful working from home.

When devising the plans, 3 elements of potential impact on CRL have been considered

1. London and Bermuda offices closed
2. Significant illness / inability to work amongst staff
3. India pandemic affecting Pune operations of WNS

For each element, the business risks that arise have been identified and mitigation actions defined and put in place to ensure that CRL is able to operate effectively in each case. The first element came into force following the guidance issued by the Bermuda and UK Governments to shelter in place and at time of writing Management considers that the company is continuing to operate effectively.

The third element has also recently been implemented, with WNS home working capability at 100% at time of writing. Productive capacity estimates are shared daily with the CRL team to ensure WNS remains operational and effective.

Additional contingency measures are also in advanced development to enable onshoring of activities to London, should there be a significant deterioration in India or capacity levels drop significantly.

## **C. Risk Profile**

### **C.1. Material risks that the insurer is exposed to, including how these risks are measured and any material changes that have occurred during the reporting period**

The Company's main risk categories are underwriting, market, credit, liquidity, operational, and strategic risk. Material risk categories are addressed individually below .

#### **C.1.1. Underwriting risk**

##### **C.1.1.1. Risk description**

Convex Re focuses on large commercial clients and complex risk types, supported by the Company's differentiated operating model and underwriting experience and capabilities. Convex Re has developed its strategy and business plan being mindful of the on-going market conditions and the underwriting and reserving assumptions reflect current market realities.

Underwriting risk covers three risks:

- Premium risk: premiums may be lower/higher than expected in the business plan as a result of poor pricing and external market events impacting pricing.
- Claims risk: higher non-catastrophe (attritional/large losses) claims than expected may occur due to higher claims inflation, a risk unforeseen at the time of pricing and/or contract inception and also fraud.
- Catastrophe risk: higher natural and/or manmade catastrophe claims than expected in the business plan could occur given the nature of catastrophe perils which are low frequency and high severity events.

*Measures used to assess risk and concentration*

- In-house exposure management tools
- External / third-party exposure management tools
- Regular expected loss modelling output
- Solvency capital calculations

*Material changes over the reporting period*

The most material change over the reporting period is that Convex Re commenced underwriting, which initiated underwriting risk, and caused the business to develop the above controls to identify, analyse, mitigate, monitor and report on insurance risks. This will continue to grow as Convex Re develops.

**C.1.2. Market risk**

C.1.2.1. Risk description

Market risk impacts to the balance sheet arise from various factors, including:

- Rising interest rates can reduce the market value of fixed income securities. However, there is a natural hedge provided by the liabilities, as interest rate increases reduce their market value, thus absorbing part of the impact. Hence, the net position, managed in line with the Minimum Risk Benchmark, is sensitive to interest rate movements
- A decline in the market value of fixed income or other risk assets driven by credit spread widening or a reduction in equity and / or property markets could adversely impact the available surplus
- A change in foreign exchange rates is expected to have limited impact for Convex, as the asset portfolio is held in the respective currency which matches the liabilities and surplus capital. Residual currency risk may exist from non-technical exposures such as expenses, where large proportion is GBP denominated. These positions are typically hedged.

***Measures used to assess risk***

Measures used to assess market risk in the business include the impact of stress tests, compared against the enterprise-wide risk tolerance limit, currently set a 1-in-200 one year event, as well as regulatory and rating agency capital metrics employed to measure risk by sub-risk and on aggregate.

### ***Risk concentration***

Concentration to market risk factors is monitored by the quantitative stress tests, including stress tests for:

- Interest Rate Risk (assessed by parallel and non-parallel movements of the yield curve)
- Credit Spread Risk (assessed by rating, duration and type of asset)
- Equity Risk, including private equity and other illiquid assets
- Foreign Exchange Risk
- Real Estate Risk
- Hedge Funds

### ***Material changes over the reporting period***

As at year end 2019, the insurance liabilities are limited in size. As the insurance book grows in line with the business plan, inflation risk will be introduced from the insurance liabilities, especially relevant for the long-tailed part of the business.

### **COVID-19**

The economic shock triggered by the COVID-19 pandemic has triggered a financial crisis, with companies preparing for a cash crunch as economic activity slows down. Although there are a number of scenarios relate to the path to recovery, there is the risk that it might have significant long-run economic effects.

As at 30 March 2020, the impact of market movements to the aggregate investment portfolio year to date has been minimal. We note however that there is significant scope for spreads to widen further, combined with rating downgrades and potentially increased defaults. The Investment Team is closely monitoring the financial market conditions and are reviewing the investment portfolio at issuer level for any particular positions which are deemed particularly susceptible.

### **C.1.3. Credit risk**

#### **C.1.3.1 Risk description**

Credit risk is defined as the risk of loss or adverse financial impact due to default by counterparties to which Convex Re is exposed.

Credit risk arises either from our asset portfolio, where a default of a counterparty would incur a financial loss, or through our insurance operations that involve transacting with counterparties such as brokers and reinsurance companies.

Our credit risks arise principally through the following exposures:

- Fixed income securities, that include investments in sovereign and corporate bonds, and collateralised securities.
- Reinsurance assets, where credit risk arises in relation to the reinsurance asset held.
- Other assets, including bank deposits and receivables

### ***Measures used to assess risk***

Credit risk is measured in terms of exposure to default, probability of default and loss given default, and is included in the capital model.

Credit ratings are used as indicators to assess credit risk, measure capital and take investment decisions. Convex Re is using external credit ratings as well as market adjusted ratings which adjust rating according to spread levels.

***Material changes over the reporting period***

The investment portfolio inceptioned in early May 2019, following receipt of funds from the capital providers on April 29th, which were deployed temporarily in short-term money market funds. These were assigned to each of the managers, who began the process of investing the proceeds. Funds were deployed into US Treasuries within the first week, with these holdings subsequently diversified into corporate credit and structured securities, in line with portfolio guidelines. The portfolios were ramped to a fully invested position in the following months, with all invested assets denominated in USD. Portfolio exposures remained relatively stable in 2019, with around 30% in sovereign exposure, 44% in investment grade corporate credit and the balance in mainly AAA rated structured securities.

**COVID-19**

As a result of the economic shock resulting from the COVID-19 pandemic, CRL expects an increase in downgrades in its fixed income portfolio. However, although default risk expected to be higher than the historical average, it is not expected increase materially due to the high-quality nature of the existing portfolio. CRL's fixed income portfolio is mainly comprised of high rated issuers, with an average credit rating of AA- and some exposure to BBB. In March 2020, actions were taken to de-risk the asset portfolio, including decreasing interest rate sensitivity by decreasing the aggregate asset duration, and selling some BBB exposures to corporate issuers expected to underperform.

**C.1.4. Liquidity risk**

**C.1.4.1. Risk description**

Liquidity risk is defined as the risk that the Company or any of its entities are unable to settle their financial obligations when they fall due. Liquidity risk is inherent to the business model of insurance companies given the delay between receiving an asset in the form of premium income and when liabilities fall due. As liquidity risk is contingent upon the local law under which the investment assets are regulated as well as the particular characteristics of the business driving the liquidity requirements, it is essential that liquidity risk is measured both at risk-bearing legal entity level as well as on a Company-wide basis.

***Measures used to assess risk***

The measure employed to assess liquidity risk is Excess Liquidity, defined as Available Liquidity less Required Liquidity and should remain positive for over the projected period defined within the Liquidity risk framework for both the normalised and stressed scenarios.

***Material changes over the reporting period***

In December 2019, \$401,100 of capital was transferred to Convex Re Limited in anticipation of the capital required to support the 2020 new business. This transfer further increased the available liquidity. There was no material change in required liquidity during 2019, as the volume of business written was low.

### **C.1.5. Operational risk**

#### **C.1.5.1. Risk description**

Operational risk is defined as an assessment of the uncertainty of likelihood and/or impact that Convex Re could incur future unplanned losses in respect of people, process or system failures, and external events during normal operation of its business.

In order to facilitate the identification and management of operational risk, Convex Re breaks down operational risk into the following sub-categories:

#### ***People***

This risk includes the uncertainty in relation to:

- shortfalls in skills, training and competency of employees and contractors;
- shortfalls in recruiting, retaining and ensuring appropriate headcounts are in place across the business and in each of its operating entities;
- deliberate or unintentional actions, including fraud by employees, contractors or third parties which lead to operational disruptions or detriments.

#### ***Process and Systems***

This risk includes the uncertainty of the occurrence of errors and omissions arising within any of the operational functions within Convex Re such as: Underwriting (Re)Insurance, Ceded Reinsurance, Portfolio Optimisation, Claims, Exposure Management, Reserving, Finance, Investment, Human Resources, IT

#### ***Services, Facilities Management, Legal and Convex's outsourced arrangements.***

This risk also includes all uncertainties related to ensuring the continued availability and effective functioning of Convex Group information technology infrastructure and encompasses information security, the network, software, hardware, communications, and internal and external data interfaces.

#### ***Data***

This risk includes all uncertainties related to maintaining the quality of data used within Convex's daily operations and encompasses: External data, internal data input, data loss and data corruption.

#### ***Project & Change Management***

This risk includes the uncertainty of the occurrence of issues and incidents that could delay successful and timely delivery of projects and change initiatives in accordance with agreed plans.

#### ***Financial Misstatement***

This risk focuses upon the uncertainty of the possibility unintentional or deliberate misstatement of financial results or financial regulatory reporting.

#### ***Business Interruption***

This risk focuses on the uncertainty that external and internal events could occur at any time in the future that cause normal business operations to be halted or disrupted.

### ***Outsourcing & Third-Party Service Provider***

This risk includes the uncertainty of unintentional or deliberate failures of service providers to deliver services in accordance with pre-agreed service standard contracts or engaging with service providers with no service standards in place.

#### ***Measures used to assess risk***

Operational risk is assessed via the risk framework, with each risk being assigned an inherent probability and impact, reflecting the level of risk in the absence of functional controls. Risks are then given a residual probability and impact to reflect the level of risk with the current controls in place. Risks are also given a rating on a RAYG basis, which indicates how comfortable the business is with the level of risk.

#### ***Material changes over the reporting period***

Operational risk has grown throughout 2019, as the operational element of the company has grown substantially. The key developments in operational risk have been:

- Headcount has increased from single to triple digits
- Major outsourcing deal signed and put into operation
- Systems and infrastructure development to allow for underwriting

### **COVID-19**

The potential operational risk associated with COVID-19 is potentially significant. There is the potential for employees to be exposed to the virus, and despite a relatively low mortality rate, with many people catching the virus there is the possibility of multiple employees becoming ill or severely ill, which will affect CRL negatively. To mitigate this risk, CRL has strictly followed the Bermuda and UK government advice and its personnel have been asked to work from home and are conducting business via their company laptops and phones remotely.

In addition, CRL has worked closely with its main outsourcer, WNS, and WNS employees have been equipped to work from home to ensure continuity in CRL's operations. This was brought into effect following the Indian government announcement of a lockdown on 23 March 2020.

To date the implications of COVID-19 on our operations has been minimal thanks to CRL's agile technology approach, operating with cloud-based systems and providing portable devices to all staff. This has facilitated the rolling-out of the Business Continuity Plan by the Coronavirus Crisis Team, and the work of the COVID-19 Planning Working Group. A number of initiatives have been taken to ensure the wellbeing of our staff and to mitigate the impacts of social-distancing and isolation. Wellbeing of CRL staff in this unfamiliar and difficult context remains a priority.

### **C.1.6. Other material risks**

#### **C.1.6.1. Description of other material risks**

#### ***Strategic Risk***

There is a degree of strategic risk inherent in the plans of Convex. The aim of the company is to become a scale player in the P&C market, and the timeframe for completing this goal is, market conditions permitting, relatively quickly. A lot, therefore, relies on the strategy of the business and the understanding of the insurance market environment in the UK, the reinsurance market in Bermuda, and other locations where risks will be located.

### **Regulatory and Legal Risk**

There is a risk that Convex Group companies may fail to comply with regulations and laws within jurisdictions in which it operates. This risk is managed primarily by the Compliance function and the Legal function, which report to the Chief Compliance Officer and General Counsel respectively.

#### **Measures used to assess risk**

None of these additional risks are measured quantitatively at present, although during 2020 a full review of key risk indicators (KRIs) and risk appetite will investigate whether or not there should be some form of specific reporting on these risks, especially the conduct aspects of Regulatory Risk.

#### **Material changes over the reporting period**

As with other risks, the material changes were the ones associated with the growth of the company and setting up an operational insurer of scale in a short time.

### **C.2. How risks are mitigated including the methods used and the process to monitor the effectiveness of these methods**

#### **C.2.1. Underwriting risk mitigation**

Underwriting risk is mitigated via the use of the following controls:

- Adequate pricing reflecting the level of risk
- Exposure selection and management
- A comprehensive process of external reinsurance and portfolio optimisation
- Strong underwriting guidelines and procedures
- Rigorous claims management
- Underwriting guidelines
- Underwriting authorities
- Peer reviews
- Normal Maximum Lines for all classes of business;
- Pre-bind and post-bind peer review
- Premium income monitoring

#### **C.2.2. Market risk mitigation**

Market risk for Convex Re is kept at a limited level, owing to the prudent investment strategy and diversified asset portfolio, which has limited exposure to higher volatility classes such as equities or hedge funds.

Market risk is measured as a 1 in 200 year stress over a one-year time horizon, taking a total balance sheet approach. Market risk can be taken in the investment portfolio, measures in reference to a liability benchmark and assessed against an aggregate risk limit which is set by the Company's board. This limit is currently defined as 10% of the Company's total capital.

Additional market risk mitigation may be taken as appropriate and contingent upon the market environment.

#### **C.2.3. Credit risk mitigation**

Credit default risk is mitigated by monitoring a set of limits that control the risk of loss from a potential failure of an individual issuer or issue. These limits aim at managing the default risk of a given issuer, depending on its rating of all bonds issued by the issuer and held by Convex Re (corporate, Government agency and sub-sovereign) and are defined as a percentage of the AMRL, with higher risks set at a lower level.

Compliance with the limits is ensured through defined governance processes. The Financial Risk Management and the Investment function handles monitors on a monthly basis the exposure against the limits, with any issuer exposure breaches reported to the relevant committee for remediation on, in exceptional circumstances, a waiver.

Further, reinsurance credit risk is managed via a reinsurance approval process, which takes into account the credit rating of the reinsurer and the size of the exposure, and also by holding collateral posted by non-rated counterparties.

#### C.2.4. Liquidity risk mitigation

Convex Re manages liquidity risk in accordance with a liquidity risk framework, that measures excess liquidity over a specified time horizon and in stressed scenarios and puts a limit that ensures excess liquidity is positive under all horizons and scenarios considered.

#### C.2.5. Operational risk mitigation

A wide programme of controls exists to mitigate against operational risk. These controls are rated according to their effectiveness and are stored within the RiskConnect system. Controls are reviewed periodically and analysed to ensure that the risk is being mitigated as expected.

#### C.2.6. Other material risks mitigation

##### **Strategic Risk**

Strategic risk is mitigated in part by the expertise of a wide array of industry veterans within the company, who continually review the strategy being enacted, whilst being aware of current market developments. In this phase of business growth, it is essential to remain agile and able to react positively to latest developments.

Additionally, the business planning process is robust, setting out the plan against a variety of different market backdrops, and thereby indicating a range of differing outcomes on a multi-year basis.

##### **Group Risk**

Group risk is mitigated largely by ensuring that all parts of the group are aware of the strategy and priorities of the others, and from maintaining multiple functions and teams at a group level. This allows CRL to work in lockstep with the other companies in Convex Group.

##### **Regulatory and Legal Risk**

The Compliance and Legal teams have worked hard in 2019 to ensure that a suitable control framework was established around the key areas of regulatory and legal risk, including licensing, sanctions, wordings and conduct risk.

### **C.3. Material risks concentration**

#### C.3.1. Market risk concentration

Concentration to market risk factors is monitored by the quantitative stress tests, including stress tests for:

- Interest Rate Risk (separated by primary components such as parallel and steepening/flattening movements)
- Credit Spread Risk (separated by rating, duration and type of asset)
- Equity Risk, including private equity and other illiquid assets
- Foreign Exchange Risk
- Real Estate Risk
- Hedge Funds

In addition, exposure to each market sub-risk is limited to a risk limit equal to 2/3 of the total market risk limit.

Concentrations to issuers and single investments are limited in the concentration risk framework, discussed in the credit risk section.

#### C.3.2. Credit risk concentration

Concentration risk is monitored by a set of limits that control the risk of loss from a potential failure of an individual issuer or issue. These limits aim at managing the default risk of a given issuer, depending on its rating of all bonds issued by the issuer and held by Convex Re (corporate, Government agency and sub-sovereign) and are defined as a percentage of the AMRL, with higher risks set at a lower level.

Compliance with the limits is ensured through defined governance processes. The Financial Risk Management and the Investment function monitors on a monthly basis the exposure against the limits, with any issuer exposure breaches reported to the relevant committee for remediation or, in exceptional circumstances, a waiver.

At December 31, 2019, the fixed income portfolio is well-diversified, and all exposures remained within limits.

#### C.3.3. Liquidity risk concentration

There are no liquidity risk concentrations identified as at year end 2019. Liquidity risk concentrations will be monitored going forwards to ensure any risk concentrations are identified.

#### C.3.4. Operational risk concentration

Other than the analysis of risk incident data, there are no formal procedures relating to the measurement of operational risk concentration at present within the Convex Re Risk Framework.

Risk incident data is analysed for trends or concentrations with regards to root causes, departments, risk owners and other such categories. It is expected that further analysis may be carried out as the risk framework is embedded further within the business.

### **C.4. How assets are invested in accordance with the prudent person principle as stated in paragraph 5.1.2 of the Code**

Convex Re manages its investment portfolio in line with the Prudent Person Principle, ensuring that risks in the current portfolio and in new investment proposals can be identified, measured, monitored, managed and controlled within the financial market risk framework. Concentration risk limits are in place to ensure the portfolio is appropriately diversified and the overall level of risk is limited by an aggregate market risk limit.

Convex Re ensures the availability of assets to pay in a timely manner claims and other obligations by having in place a liquidity risk system that measures excess liquidity in stressed market conditions.

### **C.5. Stress testing and sensitivity analysis to assess material risks, including the methods and assumptions used, and the outcomes**

Stress testing and sensitivity analysis is an important part of the business planning process, and of the testing performed by the Risk team to ensure that Convex Re remains prepared for potential deviations from expectations. This includes performing reverse stress testing and scenario analysis.

Key pieces of work in 2019 were the alternative scenarios prepared for the business plan, which put the main plan through four different market scenarios. In addition, there were further stress and sensitivity tests in both directions, including a positive 'outperform' analysis conducted at Group level.

### **C.6. Any other material information**

There is no other material information relating to the risk profile of the business.

## **D. Solvency Valuation**

### **D.1. The valuation bases, assumptions and methods used to derive the value of each asset class**

The following methods and assumptions were used in estimating the fair value of each class of financial instrument recorded in the Consolidated Balance Sheets.

The carrying values of cash and cash equivalents (including restricted cash), investment income due and accrued, funds withheld, balances receivable on the sale of investments and reinsurance balances receivable approximated their fair values at December 31, 2019, due to their respective short maturities.

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

The accounts and premiums receivable balance represents premiums owed from (re)insurers, less related acquisition costs. Outstanding premiums are valued at fair value, being the amount recoverable, and due to the short-term nature of the receivable no adjustments to valuation, estimates or judgments are required.

The recognition and valuation basis is consistent with the accounting valuation under U.S. GAAP. However, the balance has been adjusted within the Company's Economic Balance Sheet to exclude the amount not yet due on the valuation date.

#### ***Derivative instruments***

The Company may enter into derivative instruments in the form of industry loss warranties and foreign currency forward exchange derivatives. These derivative instruments are used to manage exposures to catastrophe losses and currency fluctuations. All the Company's outstanding derivative financial instruments are recognized in the Consolidated Balance Sheet at their fair values. Changes in the fair values of derivative instruments are reported in earnings.

#### ***Deferred tax assets***

Deferred tax assets and liabilities are recorded in accordance with ASC Topic 740 "Income Taxes". Consistent with ASC 740, the Company records deferred income taxes which reflect operating losses and tax credits carried forward and the tax effect of the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases.

The Company and its Bermuda domiciled subsidiary is not subject to any income, withholding or capital gains taxes under current Bermuda law. The Company has operating subsidiaries in the U.K. which are subject to relevant taxes in that jurisdiction.

The Company recognizes the tax benefits of uncertain tax positions only where the position is more likely than not to be sustained upon examination by tax authorities based upon the technical merits of the position. Based on the more-likely-than-not recognition threshold, we must presume that the tax position will be subject to examination by a taxing authority with full knowledge of all relevant information. If the recognition threshold is met, then the tax position is measured at the largest amount of benefit that is more than 50% likely of being realized upon ultimate settlement. The Company classifies all interest and penalties related to uncertain tax positions in income tax expenses.

### ***Fixed maturity investments***

In general, valuation of the Company's fixed maturity investment portfolio is provided by pricing services, such as index providers and pricing vendors, as well as broker quotations. The pricing vendors provide valuations for a high volume of liquid securities that are actively traded. For securities that do not trade on an exchange, the pricing services generally utilize market data and other observable inputs in matrix pricing models to determine month end prices. Prices are generally verified using third party data. Index providers generally utilize centralized trade reporting networks, available market makers and statistical techniques.

In general, broker-dealers value securities through their trading desks based on observable inputs. The methodologies include mapping securities based on trade data, bids or offers, observed spreads, and performance on newly issued securities. Broker dealers also determine valuations by observing secondary trading of similar securities. Prices obtained from broker quotations are considered non-binding, however, they are based on observable inputs and by observing secondary trading of similar securities obtained from active, non-distressed markets.

The techniques generally used to determine the fair value of the Company's fixed maturity investments are detailed below by asset class.

#### *U.S. government and government agency*

U.S. government and government agency securities consist primarily of debt securities issued by the U.S. Treasury and mortgage pass-through agencies such as the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation and the Government National Mortgage Association. Fixed maturity investments included in U.S. government and government agency securities are primarily priced by pricing services. When evaluating these securities, the pricing services gather information from market sources and integrate other observations from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The fair value of each security is individually computed using analytical models which incorporate option adjusted spreads and other daily interest rate data.

#### *Agency residential mortgage-backed securities*

The Company's agency residential mortgage-backed investments are primarily priced by pricing services using a mortgage pool specific model which utilizes daily inputs from the active to be announced market, which is very liquid, as well as the U.S. treasury market. The model also utilizes additional information, such as the weighted average maturity, weighted average coupon and other available pool level data which is provided by the sponsoring agency. Valuations are also corroborated with daily active market quotes.

### Non-agency residential mortgage-backed securities

The Company's non-agency mortgage-backed investments include non-agency prime residential mortgage-backed fixed maturity investments. The Company has no fixed maturity investments classified as sub-prime held in its non-agency residential mortgage-backed securities. Securities held in these sectors are primarily priced by pricing services using an option adjusted spread model or other relevant models, which principally utilize inputs including benchmark yields, available trade information or broker quotes, and issuer spreads. The pricing services also review collateral prepayment speeds, loss severity and delinquencies among other collateral performance indicators for the securities valuation, when applicable.

### U.S. corporate

U.S. corporate debt securities consist primarily of investment-grade debt of a wide variety of U.S. corporate issuers and industries. The Company's corporate fixed maturity investments are primarily priced by pricing services. When evaluating these securities, the pricing services gather information from market sources regarding the issuer of the security and obtain credit data, as well as other observations, from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The pricing services also consider the specific terms and conditions of the securities, including any specific features which may influence risk. In certain instances, securities are individually evaluated using a spread which is added to the U.S. treasury curve or a security specific swap curve as appropriate.

### Non-U.S. corporate

Non-U.S. corporate debt securities consist primarily of investment-grade debt of a wide variety of non-U.S. corporate issuers and industries. The Company's non-U.S. corporate fixed maturity investments are primarily priced by pricing services. When evaluating these securities, the pricing services gather

information from market sources regarding the issuer of the security and obtain credit data, as well as other observations, from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The pricing services also consider the specific terms and conditions of the securities, including any specific features which may influence risk.

### Asset-backed securities

Asset backed securities include mostly investment-grade debt securities backed by pools of loans with a variety of underlying collateral, including automobile loan receivables, student loans, credit card receivables, and collateralized loan obligations originated by a variety of financial institutions. Securities held in these sectors are primarily priced by pricing services. The pricing services apply dealer quotes and other available trade information such as bids and offers, prepayment speeds which may be adjusted for the underlying collateral or current price data, the U.S. treasury curve and swap curve as well as cash settlement. The pricing services determine the expected cash flows for each security held in this sector using historical prepayment and default projections for the underlying collateral and current market data. In addition, a spread is applied to the relevant benchmark and used to discount the cash flows noted above to determine the fair value of the securities held in this sector.

### Commercial mortgage-backed securities

Commercial mortgage backed securities are investment-grade debt primarily priced by pricing services. The pricing services apply dealer quotes and other available trade information such as bids and offers, prepayment speeds which may be adjusted for the underlying collateral or current price data, the U.S. treasury curve and swap curve as well as cash settlement. The pricing services determine the expected cash flows for each security held in this sector using historical prepayment and default projections for the underlying collateral and current market data. In addition, a spread is applied to the relevant benchmark and used to discount the cash flows noted above to determine the fair value of the securities held in this sector.

### Short term investments

Short-term investments consist primarily of highly liquid securities, all with maturities of less than one year from the date of purchase. The fair value of the portfolio is generally determined using amortized cost which approximates fair value.

### **D.2. The valuation bases, assumptions and methods used to derive the value of technical provisions and the amount of the best estimate. The amount of the risk margin as well as the level of uncertainty to determine the value of the technical provisions should be included**

We have referred to guidance provided by the BMA to calculate technical provisions. In certain cases, we have referred to technical provision guidance from Lloyd's as that is the framework used for Solvency II purposes. We have utilized the technical provision template provided by the BMA (on its website) as part of our process.

We rely on the following data for technical provision calculation associated with our operating companies:

- Claims provision data provided by the Company's operating companies: These are provided separately by operating company and are based on their underlying U.S. GAAP reserve process for Q4 2019. The operating companies also provide expected reserve cashflows and other adjustments for the claims provision. For intercompany balances, this data comes directly from their Solvency II process. Other adjustments made to the claims provision include:
  - Removal of prudency margins;
  - Adjustments for cost of investment income and bad debt;
  - Inclusion of expected cashflows for future reinstatement premiums ("RIP") and other premium receivables related to claims that have already occurred; and
  - Discounting of cash flows
- Premium provision data provided by the operating companies: These are provided separately by operating company and are based on expected cashflows related to unearned premium and bound but not incepted contracts. Similar to the claims provision, expected cashflows and other adjustments are included. For intercompany balances, this data comes directly from their Solvency II process.
- The risk margin increases the technical provisions from the best estimate to theoretical level needed to transfer obligations to another risk bearing entity. We use the technical provision template provided by the BMA to calculate the risk margin.

- Discount rates: We use risk-free discount rates provided by the BMA. The BMA provides separate discount rates by currency.
- The operating companies use a common underwriting system and they map their data to the BMA classes of business by reference to the class business codes in the underwriting system.

The technical provisions are made up of the following elements:

	<u>December 31, 2019</u>
Best estimate premium provisions	\$ 26,961
Best estimate loss and loss provision	5,275
Risk margin	<u>8,462</u>
<b>Total general business insurance technical provisions</b>	<b>\$ <u>40,698</u></b>

### **D.3. Description of recoverables from reinsurance contracts, including special purpose insurers and other risk transfer mechanisms**

The Company enters into reinsurance and retrocession agreements in order to mitigate its accumulation of loss, reduce its liability on individual risks, enable it to underwrite policies with higher limits and increase its aggregate capacity. The Company primarily purchases reinsurance on either an excess of loss or proportional basis and also purchases industry loss warranties. The ceding of the (re)insurance risk does not legally discharge the Company from its primary liability for the full amount of the policies, and the Company is therefore required to pay the loss and bear collection risk relating to the possibility that the reinsurer or retrocessionaire fails to meet its obligations under the reinsurance or retrocession agreement.

Reinsurance recoverables are calculated as the probability-weighted average of discounted future cash flows relating to reinsurance contracts, adjusted for the expected losses due to counterparty default. Although established separately, reinsurance recoverables are valued on the same basis and using the same methodology and assumptions used to derive Technical Provisions - Best Estimate Loss and Loss Expense Provisions, as described in Section D.2, subject to the following:

- Internal expenses are only allowed if they are recoverable under the reinsurance agreement;
- Where the timing of recoveries diverges from that for payments a separate projection is used;
- Allowance for risk of default depends on the credit rating and exposure to the reinsurance counterparty; and
- Reinsurance assets take into account reinsurance commissions.

Paid losses recoverable and loss reserves recoverable balances include amounts owed to the Company in respect of paid and unpaid ceded losses and loss expenses, respectively. The balances are presented net of a provision for non-recoverability. In establishing our reinsurance recoverable balances, significant judgment is exercised by management in determining the amount of unpaid losses and loss expenses to be ceded as well as our ability to cede losses and loss expenses under our reinsurance contracts.

The Company's ceded unpaid losses and loss expenses consists of two elements, those for reported losses and those for Incurred But Not Reported ("IBNR"). Ceded amounts for IBNR are developed as part of our loss reserving process. Consequently, the estimation of ceded unpaid losses and loss expenses is subject to similar risks and uncertainties in the estimation of gross IBNR.

#### D.4. The valuation bases, assumptions and methods used to derive the value of other liabilities

The carrying values of accounts payable and accrued expenses as well as other liabilities approximated their fair values at December 31, 2019, due to their respective short maturities.

#### D.5. Any other material information

There is no other material information regarding the valuation of assets and liabilities.

### E. Capital Management

#### E.1. Eligible capital

##### E.1.1. Description of the capital management policy and process to determine capital needs for business planning, how capital is managed and any material changes during the reporting period

The primary objective of capital management is to manage the balance between return and risk, whilst maintaining economic capital in accordance with risk appetite. CRL's capital and risk management objectives are closely interlinked, and support the dividend policy, whilst also recognising the critical importance of protecting policyholder and other stakeholder interests. In managing its capital, CRL seeks to, on a consistent basis:

- Maintain sufficient, but not excessive, financial strength in accordance with risk appetite, to satisfy the requirements of regulators and other stakeholders;
- Retain financial flexibility by maintaining strong liquidity; and
- Allocate capital efficiently to remain within risk appetite and drive value adding growth.

CRL uses a number of sensitivity tests to understand the volatility of earnings, the volatility of its capital requirements, and to manage its capital efficiently. Sensitivities to economic and operating experience are regularly produced on CRL's key financial performance metrics to inform decision making and planning processes over a five-year planning horizon, and as part of the framework for identifying and quantifying the risks to which CRL is exposed.

These requirements include, but are not limited to the following:

##### Regulatory requirements

Minimum capital and/or solvency standards exist for the Company and its subsidiaries in the jurisdictions in which it operates. These jurisdictions and capital requirements/models include:

1. Bermuda - BMA - BSCR model; and
2. U.K. – Solvency II

##### E.1.2. Description of the eligible capital categorized by tiers in accordance with the Eligible Capital Rule

As at December 31, 2019, Eligible Capital for the Company was categorized as follows:

	December 31, 2019
Tier 1 Available Capital	\$ 668,861
Tier 2 Available Capital	-
Tier 3 Available Capital	-
<b>Total Eligible Capital</b>	<b>\$ 668,861</b>

All of the Eligible Capital for the Company is Tier 1, the highest quality capital, consisting of capital stock, contributed surplus and statutory surplus.

**E.1.3. Description of the eligible capital categorized by Tiers, in accordance with the Eligible Capital Rules used to meet the Enhanced Capital Requirement (ECR) and the Minimum Margin of Solvency defined in accordance with section (1)(1) of the Act**

As at December 31, 2019, Eligible Capital for the Company as applied to its Minimum Margin of Solvency (“MSM”) and ECR was categorized as follows:

	<b>Year ended December 31, 2019</b>	
	<b>Applied to MSM</b>	<b>Applied to ECR</b>
Tier 1 Available Capital	\$ 668,861	\$ 668,861
Tier 2 Available Capital	-	-
Tier 3 Available Capital	-	-
<b>Total Eligible Capital</b>	<b>\$ 668,861</b>	<b>\$ 668,861</b>

**E.1.4. Confirmation that the eligible capital is subject to transitional arrangements as required under the Eligible Capital Rules**

Not Applicable.

**E.1.5. Identification of any factors affecting encumbrances affecting the availability and transferability of capital to meet the Eligible Capital Rules**

As at December 31, 2019, the Company had cash and cash equivalents, restricted cash, short-term investments and fixed maturity investments that were pledged during the normal course of business, of which certain assets were held in trust. Pledged assets are generally for the benefit of the Company’s cedants and policyholders and to facilitate the accreditation of the Company by certain regulators. These assets are released to the Company upon the payment of the obligations or the expiration of the risk period.

**E.1.6. Identification of ancillary capital instruments that have been approved by the Authority**

Not Applicable.

**E.1.7. Identification of differences in shareholder’s equity as stated in the financial statements versus available statutory capital and surplus**

Other than the impact of statutory based technical provision valuation techniques, significant differences between GAAP shareholders’ equity and available statutory capital and surplus include a reduction in available statutory capital for the removal of prepaid expenses.

**E.2. Regulatory capital requirements**

**E.2.1. Identification of the amount of the ECR and Minimum Margin of Solvency at the end of the reporting period**

As at December 31, 2019, the regulatory capital requirements for the Company were assessed as follows:

	Year Ended December 31, 2019
Transition ECR	\$ 114,555
ECR	129,005
Minimum Margin of Solvency	100,000

**E.2.2. Identification of any non-compliance with the Minimum Margin of Solvency and the ECR**

As at December 31, 2019, the Company was compliant with the MSM and ECR requirement.

**E.2.3. Description of the amount and circumstances surrounding the non-compliance, the remedial measures taken and their effectiveness**

Not applicable.

**E.2.4. Where the non-compliance has not been resolved, a description of the amount of the non-compliance at the end of the reporting period**

Not applicable.

**E.3. Approved internal capital model used to derive the ECR**

**E.3.1. A description of the purpose and scope of the business and risk areas where the internal model is used**

Not applicable.

**E.3.2. Where a partial internal model is used, a description of how it is integrated with the BSCR Model.**

Not applicable.

**E.3.3. A description of methods used in the internal model to calculate the ECR**

Not applicable.

**E.3.4. A description of aggregation methodologies and diversification effects**

Not applicable.

**E.3.5. A description of the main differences in the methods and assumptions used for the risk areas in the internal model versus the BSCR Model**

Not applicable.

**E.3.6. A description of the nature and suitability of the data used in the internal model**

Not applicable.

### **E.3.7. Any other material information**

#### **Coronavirus 2019 (“COVID-19”)**

The Company is continuing to monitor COVID-19. This pandemic has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to businesses globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilise economic conditions.

The Company has enacted its business continuity plans and is closely monitoring its potential exposures to COVID-19. The outbreak has the potential to affect negatively the risk of credit default for some issuers of the Company’s debt securities, as well as the change in market prices for those securities, however the overall portfolio is expected to retain its liquidity and high-quality characteristics. The Company also expects to see some impact on claims activity arising from COVID-19, although it has minimal exposure to event cancellation and contingency risk which are lines of business expected to be impacted from broader industry perspective.

The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. As a result, it is not possible to estimate reliably the duration and severity of these developments, and the impact on the financial results and condition of the Company in future periods. However, the Company expects that they will not have a material effect on its business, nor its ability to meet its solvency and liquidity ratios. Further, the Company has taken steps to mitigate operational risks, for example, by having employees work remotely.

### **F. Significant event**

#### **F.1. A description of the significant event**

On February 12, 2020, CIL entered into an uncommitted bi-lateral Letter of Credit ("LOC") facility with Citibank Europe Plc (the “CIL LOC facility”). The CIL LOC facility will be used to secure obligations CIL to its policyholders.

On April 10, 2020, CRL entered into an uncommitted bi-lateral LOC facility with Citibank Europe Plc (the “CRL LOC facility”). The CRL LOC facility will be used to secure obligations of CRL to its policyholders.

#### **F.2. Approximate date(s) or proposed timing of the significant event**

February 12, 2020 and April 10, 2020.

#### **F.3. Confirmation of how the significant event has impacted or will impact, any information provided in the most recent financial condition report filed with the Authority**

Not Applicable.

#### **F.4. Any other material information**

Not Applicable.