



# XL Bermuda Ltd

# An AXA Group Company

# Financial Condition Report ("FCR") 31 December 2018

forming part of the annual regulatory reporting package submitted to the Bermuda Monetary Authority ("BMA") by 30 Apr 2019

### **Declaration Statement**

To the best of our knowledge and belief, the financial condition report fairly represents the financial condition of XL Bermuda Ltd in all material respects.

Jonathan Gale

Chief Executive, Reinsurance Bermuda

30 April 2019

Simon Argent

Head of Credit Risk Management

(appointed as Chief Risk Officer subject to approval of Bermuda Department of Immigration)

30 April 2019

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### A. Business and Performance

This section provides particulars regarding the organisational structure, insurance business activities and financial performance.

#### A.1. Name of insurer

XL Bermuda Ltd ("the Company")

### A.2. Supervisors

	Insurance Supervisor	Group Supervisor
Name:	Bermuda Monetary Authority, BMA House, 43 Victoria Street, Hamilton HM 12 Bermuda	Autorité de contrôle prudentiel et de résolution 4 Place de Budapest CS 92459 75436 Paris Cedex <b>09</b>
Jurisdiction:	Bermuda	France
Email Address:	insuranceinfo@bma.bm	Bibli@acpr.banque-france.fr
Phone Number:	441-295-5278	+ (33) 01 49 95 40 00

Note: The Bermuda Monetary Authority withdrew as Group Supervisor effective on 11 December, 2018.

### A.3. Approved auditor

Organisation:	PricewaterhouseCoopers Ltd. Washington House, 4th Floor, 16 Church Street, Hamilton, HM11 Bermuda
Name:	Damian Cooper
Jurisdiction:	Bermuda
Email Address:	damian.cooper@pwc.com
Phone Number:	441-299-7685

### A.4. Ownership details

Owner Name	Ownership Percentage		
EXEL Holdings Limited	100.00%		

### A.5. Group structure

See Appendix 01 - AXA XL Structure Chart 2018 Q4

# A.6. Insurance business written by business segment and by geographical region

The following tables summarize the Company's gross premiums written and net premiums written by line of business for the years ended December 31,2018 and 2017:

#### **2018 GROSS PREMIUMS WRITTEN**

(U.S. dollars in thousands)

	Insurance	Reinsurance	Corporate and Other (Note 1)	Total
P&C Operations:				
Professional	\$ 2,135,196	\$ 325,042		\$ 2,460,238
Casualty	3,488,228	597,769		4,085,997
Property catastrophe	_	1,063,772		1,063,772
Property	2,826,038	1,416,764		4,242,802
Specialty	2,601,230	195,491		2,796,721
Other (Note 2)	(1,740)	1,403,164		1,401,424
Total P&C operations	11,048,952	5,002,002		16,050,954
Corporate and Other:				
Run-Off Life Operations - Annuity			111,334	111,334
Run-Off Life Operations - Other Life			105,655	105,655
Total Corporate and Other			216,989	216,989
Total	\$ 11,048,952	\$ 5,002,002	\$ 216,989	\$ 16,267,943

#### **2017 GROSS PREMIUMS WRITTEN**

(U.S. dollars in thousands)

	Insurance	F	Reinsurance	Corporate and Other (Note 1)	Total
P&C Operations:					
Professional	\$ 1,935,550	\$	292,128		\$ 2,227,678
Casualty	3,333,239		623,935		3,957,174
Property catastrophe	_		1,031,740		1,031,740
Property	2,352,714		1,304,341		3,657,055
Specialty	2,446,642		207,002		2,653,644
Other (Note 2)	2,318		1,222,964		1,225,282
Total P&C operations	10,070,463		4,682,110		14,752,573
Corporate and Other:					
Run-Off Life Operations - Annuity				107,230	107,230
Run-Off Life Operations - Other Life				127,048	127,048
Total Corporate and Other				234,278	234,278
Total	\$ 10,070,463	\$	4,682,110	\$ 234,278	\$ 14,986,851

#### **2018 NET PREMIUMS WRITTEN**

(U.S. dollars in thousands)

	Insurance	Reinsurance	Corporate and Other (Note 1)	Total
P&C Operations:				
Professional	\$ 1,372,799 \$	307,410	\$	1,680,209
Casualty	1,908,657	561,817		2,470,474
Property catastrophe	_	695,132		695,132
Property	1,728,011	1,109,057		2,837,068
Specialty	1,971,383	165,072		2,136,455
Other (Note 2)	(24,856)	1,285,099		1,260,243
Total P&C operations	6,955,994	4,123,587		11,079,581
Corporate and Other:				
Run-Off Life Operations - Annuity			_	_
$\hbox{\it Run-Off Life Operations - Other Life}$			11,363	11,363
<b>Total Corporate and Other</b>			11,363	11,363
Total	\$ 6,955,994 \$	4,123,587	\$ 11,363 \$	11,090,944

#### **2017 NET PREMIUMS WRITTEN**

(U.S. dollars in thousands)				
	Insurance	Reinsurance	Corporate and Other (Note 1)	Total
P&C Operations:				
Professional	\$ 1,297,741	\$ 276,669		\$ 1,574,410
Casualty	2,027,101	580,974		2,608,075
Property catastrophe	_	608,262		608,262
Property	1,560,957	1,166,405		2,727,362
Specialty	1,816,860	180,422		1,997,282
Other (Note 2)	1,889	1,151,144		1,153,033
Total P&C operations	6,704,548	3,963,876		10,668,424
Corporate and Other:				
Run-Off Life Operations - Annuity			_	\$ <del>-</del>
Run-Off Life Operations - Other Life			12,334	\$ 12,334
Total Corporate and Other			12,334	12,334
Total	\$ 6,704,548	\$ 3,963,876	\$ 12,334	\$ 10,680,758

#### Notes:

 $<sup>{\</sup>bf 1.}\, Corporate \, and \, Other \, includes \, the \, Company's \, run-off \, Life \, operations.$ 

<sup>2.</sup> Other within the Insurance segment includes: excess and surplus, surety, structured indemnity and certain other discontinued lines. Other within the Reinsurance segment includes: whole account contracts, structured indemnity and other lines.

The following table shows an analysis of the Company's net premiums written by geographical location of the subsidiary where the premium is written for the years ended December 31, 2018 and 2017:

(U.S. dollars in t	housands)	2018	2017
P&C Operati	ons:		
	Bermuda	\$ 1,848,502	\$ 1,708,516
	United States	3,507,453	3,402,417
	Europe	4,925,744	4,805,988
	Other	 797,882	 751,503
	Total P&C Operations	\$ 11,079,581	\$ 10,668,424
Corporate and Other:			
	Bermuda	10,934	11,801
	Europe	 429	 533
	Total Corporate and Other	\$ 11,363	\$ 12,334

# A.7. Performance of investments and material income and expenses for the reporting period

#### A.7.1. Performance of investments for the reporting period

The following table shows the fair market value of the fixed maturity portfolio (both quoted and unquoted) and the performance (i.e. returns calculated using mark to market valuation methodology) of those investments for the years ended December 31, 2018 and 2017:

	Market Value	Performance	Market Value	Performance
(U.S. dollars in thousands)	2018	Year ended Dec 31 2018	2017	Year ended Dec 31 2017
		%		%
(1) U.S. Government				
(a) U.S. Government Federal	2,865,827	2.76%	4,243,193	0.93%
(b) U.S. Government Agency - mortgage-backed securities	5,249,764	3.49%	4,548,437	2.86%
(c) U.S. Government Agency - other	108,552	2.96%	710,179	1.56%
(2) Non-U.S. Government	5,172,223	2.42%	6,385,342	2.48%
(3) States, Municipalities, and Political Subdivision	1,391,574	3.72%	2,064,671	3.66%
(4) Corporate Securities	=	-	-	-
(a) U.S. Government-backed Corporate	-	-	-	-
(b) Non-U.S. Government-backed Corporate	-	-	-	-
(c) FDIC Guaranteed Corporate	=	-	-	-
(d) Other Corporate	13,743,887	3.19%	12,542,641	3.61%
(5) Asset-backed Securities	1,640,220	3.24%	1,712,346	5.23%
(6) Mortgage-backed Securities	=	-	-	-
(a) Residential Subprime	14,737	4.10%	17,622	13.51%
(b) Residential Non-subprime	58,084	4.65%	80,881	15.36%
(c) Commercial	1,449,881	3.51%	1,198,771	4.13%
(7) Mutual Funds	-	-	-	-
(8) Bank Loans	-	-	-	-
Catastrophe Bonds and Insurance-Linked (9) Securities	30,717	6.50%	32,799	4.85%
TOTAL PORTFOLIO	\$ 31,725,466		\$ 33,536,882	

#### A.7.2. Material income and expenses for the reporting period

The Company's main revenue is premiums and its major expenses arise from claims losses. For the years ended December 31 2018 and 2017, the Company realized a P&C combined ratio of 110.5 % and 108.3%, which includes natural catastrophe pre-tax losses net of reinsurance and reinstatement premiums ("Nat Cats") of \$1,359.6 million and \$2,014.8 million or 12.8 and 19.6 loss ratio points, respectively.

The Company also realized unfavourable prior year development ("PYD") on losses of \$114.5 million and favourable of \$147.8 million during the years ended December 31 2018 and 2017, respectively. The combined ratio excluding the impact of the Nat Cats and PYD was 96.6% and 90.2% for the years ended December 31, 2018 and 2017, respectively.

(U.S. dollars in thousands)		2018	2017
Expense Type			
Net losses and loss expenses incurred - P&C operations		8,328,863	8,001,920
Claims and policy benefits - run-off Life operations		54,857	39,189
Acquisition costs		1,850,488	1,788,140
Operating expenses		1,846,015	1,689,570
Impairment of Goodwill		189,550	
Other		37,172	75,504
	\$	12,306,945 \$	11,594,323

#### A.8. Other material information

On September 12, 2018, XL Group Ltd completed its previously announced merger with Camelot Holdings Ltd. ("Merger Sub"), a wholly owned subsidiary of AXA SA ("AXA"). Pursuant to the Agreement and Plan of Merger, dated as of March 5, 2018, by and among XL Group Ltd, Merger Sub and AXA (the "Merger Agreement"), and the statutory merger agreement required in accordance with Section 105 of the Bermuda Companies Act 1981, as amended (the "Companies Act"), by and among XL Group Ltd, Merger Sub and AXA, dated as of September 12, 2018, Merger Sub merged with and into XL Group Ltd in accordance with the Companies Act (the "Merger"), with XL Group Ltd continuing as the surviving corporation and as a wholly-owned subsidiary of AXA.

Following the Merger, the Bermuda Monetary Authority withdrew as the Group Supervisor of XL Group Ltd and its consolidated subsidiaries, including the Company, and the Company ceased to be the designated insurer in respect of the XL Group.

For the year ended December 31, 2017, the Company applied its approved Internal Capital Model for calculating its enhanced capital requirements ("ECR") in substitution of the Bermuda Solvency Capital Requirement ("BSCR") standard formula. However for the year ended December 31, 2018, the Company has calculated its ECR using the BSCR standard formula following the withdrawal of the internal model.

From September 12, 2018 through December 31, 2018 (and continuing into 2019), following the completion of the Merger, XL Group Ltd and its consolidated subsidiaries, including the Company, has been undertaking activities in connection with the integration of XL Group Ltd and its consolidated subsidiaries, including the Company, into the AXA Group, which activities have included changes to senior executives of the AXA XL Division of the AXA Group. ("AXA XL")

For the year ended December 31, 2018, there is no other material information regarding business and performance required to be disclosed for purposes of this Financial Condition Report.

### **B.** Governance Structure

This section provides particulars of corporate governance, risk management and solvency self-assessment frameworks.

#### **B.1.** Board and Senior Executive

# **B.1.1** Structure of the Board and senior executive, roles, responsibilities and segregation of responsibilities

#### **Directors**

The Board of Directors of the Company (the "Board") oversees the effective management of the Company's business and affairs and is responsible for the maintenance of an effective corporate governance framework. The Board is elected annually and as at December 31,2018, consisted of the following ten executive directors each of whom is a senior executive of the Company or AXA XL.

Directors
Mark Berry
Charles Cooper
Jonathan Gale
Mary Hayward
Derrick Irby
Matthew Irvine
Fielding Norton
C. Stanley Lee
Patrick Tannock
Mark Twite

#### **Senior Executives**

The Company's senior executive assists the Board with its oversight responsibilities by its reporting to the Board on the Company's business activities. The senior executives also make recommendations to the Board regarding, and are responsible for, the execution of the Company's strategic plans and objectives. The senior executives are responsible for the respective functions which they head and for ensuring the necessary resources, systems and controls required for the effective execution of the roles and responsibilities of those functions.

Senior executives
Senior executives
Patrick Tannock - Chief Executive, Insurance
Jonathan Gale - Chief Executive, Reinsurance
C. Stanley Lee - Head of Finance, Bermuda Insurance
Claudette Hodgson - Head of Finance, Bermuda Reinsurance
Kim Wilkerson - Head of Insurance Claims
Stephen Smith - Head of Reinsurance Claims
*Simon Argent - Head of Credit Risk Management
Leila Madeiros - Head of Compliance & Regulatory Affairs-Bermuda
Christopher Brough - Assistant General Counsel Corporate and Alternative Capital , Bermuda
Lisa Robinson - HR Business Partner, Bermuda, Bermuda Reinsurance & Global Reinsurance Operations

\*Simon Argent has been appointed as Chief Risk Officer of the Company effective April 26, 2019, subject to receiving authorisation from the Bermuda Department of Immigration.

#### **B.1.2 Executive/Employee Compensation**

#### **Director Compensation**

Except for the independent non-executive director appointed effective April 26, 2019, the directors are not separately compensated for their Board roles.

#### **Executive Compensation**

The Company has a Remuneration Policy in place, the purpose of which is to outline how the Company ensures that the setting of remuneration is appropriate and transparent, and promotes sound and effective risk management within approved risk tolerance limits.

The balance of fixed and variable compensation is consistent with competitive market practice in the insurance industry, while permitting the Company to operate fully flexible variable compensation policies. Variable pay for colleagues in independent control functions is not aligned with the performance of the businesses they oversee, and is designed to avoid conflicts of interest while appropriately balancing risk and reward.

An overview of the arrangements that are in place are as follows:

- Fixed Remuneration The Company considers multiple factors including an individual's role and responsibilities, performance, experience, expertise and peer market compensation information in setting target levels of base compensation.
- Variable Remuneration Individual bonus awards are determined based on performance reviews of
  individual and overall performance and are fully discretionary, allowing for full flexibility to award no
  variable remuneration if warranted. Staff have a bonus target amount expressed as a percentage of
  base pay.
- Long-Term Incentive Plan Long-term incentive awards are reserved for those who perform at a high level, recognize the recipient's anticipated future contributions, and take relative and absolute performance, individual potential and unique skills into consideration. Grants of long-term incentives are based on sustained individual performance and criticality of skills. For the Company's most senior leaders, shares awarded under the long-term incentive program are subject to holding and minimum ownership requirements.

The Company's remuneration program is designed to ensure strong alignment between executive pay and Company and individual performance by including both short-term and long-term incentives that motivate executives to achieve our near-term goals and longer-term strategic objectives. The design of these programs is guided by the following principles:

- Consider multiple factors in setting target levels of compensation, including an executive's role and responsibilities, performance, experience, expertise and competitor compensation information
- Allocate total compensation among annual base salary, annual cash incentive and long-term incentive awards so that it is heavily weighted towards performance-based pay
- Enable the attraction and retention of high caliber executive talent who will develop and successfully implement our business strategy
- Include qualitative components and strong governance practices that mitigate risk and drive appropriate behaviors

#### B.1.3. Pension or early retirement schemes for members, board and senior employees

The Company's remuneration program does not include any supplementary pension or early retirement schemes for its non-Executive Directors or its senior executives.

### **B.1.4.** Shareholder controllers, persons who exercise significant influence, the board or senior executive material transactions

On September 12, 2018, XL Group Ltd (the "XL Group") completed its previously announced merger with Camelot Holdings Ltd. ("Merger Sub"), a wholly owned subsidiary of AXA SA ("AXA"). Pursuant to the Agreement and Plan of Merger, dated as of March 5, 2018, by and among XL Group, Merger Sub and AXA (the "Merger Agreement"), and the statutory merger agreement required in accordance with Section 105 of the Bermuda Companies Act 1981, as amended (the "Companies Act"), by and among XL Group, Merger Sub and AXA, dated as of September 12, 2018, Merger Sub merged with and into XL Group in accordance with the Companies Act (the "Merger"), with XL Group continuing as the surviving corporation and as a wholly-owned subsidiary of AXA.

Pursuant to the Merger Agreement, at the effective time of the Merger (the "Effective Time"), each issued and outstanding common share, par value \$0.01 per common share, of XL Group (each, an "XL Group Share") (other than any XL Group Shares that are owned (i) by XL Group as treasury shares, (ii) by wholly owned subsidiaries of XL Group or (iii) by AXA, Merger Sub or by wholly owned subsidiaries of AXA (with certain exceptions)), including each outstanding restricted XL Group Share (unless otherwise agreed between AXA and the holder of the award), were automatically cancelled and converted into the right to receive \$57.60 in cash, without interest and subject to any applicable tax withholdings (the "Merger Consideration"), funded with cash on hand from AXA.

At the Effective Time, unless otherwise agreed between AXA and the holder of an equity award, each outstanding performance unit was deemed to have achieved the target level of performance and each outstanding restricted share unit, restricted cash unit and performance unit award, each in respect of XL Group Shares, vested in full and was cancelled and converted into the right to receive the Merger Consideration, without interest. At the Effective Time, unless otherwise agreed between AXA and the holder of an equity award, each outstanding option to purchase a XL Group Share (an "XL Group Stock Option"), whether vested or unvested, was cancelled and converted into the right to receive a lump-sum amount in cash, without interest, equal to the excess, if any, of (i) the Merger Consideration, over (ii) the per-share exercise price of such XL Group Stock Option. Payments with respect to the foregoing equity awards will be made by XL Group, as the surviving corporation of the Merger, in accordance with the Merger Agreement.

Other than the Merger and dividends paid to the Company's shareholder during 2018, the Company is not aware of any other material transactions required to be disclosed for purposes of this financial condition report.

### **B.2.** Fitness and Propriety Requirements

#### B.2.1. Fit and proper process in assessing the board and senior executive

AXA XL recognises that the legal entities within AXA XL that engage in (re)insurance business, such as the Company, benefit from the fit and proper processes that are in place at the XL Group level. However, these entities also have a responsibility to ensure that they have adequate risk management processes in place and are therefore expected to implement fit and proper processes that meet the standards set out in this Fit and Proper Policy in a proportionate manner and in accordance with applicable law or regulation.

#### **Board of Directors: Fit and Proper Assessment**

The process for assessing the skills and characteristics for new board candidates, and for the Board as a whole on an annual basis, will include consideration of the following criteria:

- Personal qualities and characteristics, including business judgement, integrity, high standards of ethical conduct and distinction in their chosen fields of endeavour;
- Diversity of viewpoints, skills, experience, background, orientations and other demographics in the context of the needs of the Board; and
- Such other attributes and external factors deemed appropriate.

#### **Executive: Fit and Proper Assessment**

The fit and proper assessment, of a person shall include:

• an assessment of that person's professional and formal qualification, knowledge and relevant experience within the insurance sector, other financial sectors or other business and shall take into account the respective duties allocated to that person and, where relevant, the insurance, financial, accounting, actuarial and management skills of the person

 an assessment of that person's honesty and financial soundness based on evidence regarding their character, personal behaviour and business conduct including any criminal, financial and supervisory aspects relevant for the purposes of the assessment.

Additionally, the Company maintains a standard recruitment process to assist in the assessment of whether candidates for executive positions are fit and proper. The recruitment process includes (i) ensuring that job specifications adequately reflect the position being recruited and appropriately identifies the necessary skills and qualifications required for the position, (ii) contacting local recruitment agencies/executive search firms and establishing broad and informal panels of agencies for particular areas of expertise to ensure that the most appropriate matching can take place, and (iii) undertaking, on an outsourced basis, a series of checks in relation to the candidate after the offer has been communicated to them and the satisfactory completion of detailed relevant background checks.

#### B.2.2. Board and senior executives' professional qualifications, skills, and expertise

#### Board of Directors: \*\*

- Patrick Tannock: Mr. Tannock is Chief Executive, Bermuda Insurance of the Company, a part of AXA XL's Managing Director team and has over 30 years of experience in the international insurance and reinsurance industry. Prior to his current position he served as EVP of ACE Bermuda, as well as CUO and Director of the CODA and also held executive brokerage positions with Marsh & McLennan prior to this. Mr. Tannock holds a Bachelor of Science in Business Administration with a double major in Insurance and Finance from the University of Hartford.
- Jonathan Gale: Mr. Gale is Chief Executive, Bermuda Reinsurance for Group. When the XL Group
  acquired the Catlin Group in July 2015, Mr. Gale was installed as Chief Executive, Reinsurance London
  and Joint Active Underwriter of Syndicate 2003, the largest Syndicate at Lloyd's. During his career he
  worked in the US broker market and spent almost five years in the Bermuda market running Catlin's
  nascent Bermudian underwriting business from 2003 to 2008. The majority of his career has been in
  the Lloyd's market having started in the London and Lloyd's market in 1987 specialising in US medical
  malpractice and in particular reinsurance of PIAA companies and specialist Risk Retention Groups.
- C. Stanley Lee: Mr. Lee is the Head of Finance, Insurance Bermuda of the Company and has over 25 years of experience in the (Re)insurance industries working in senior financial roles for Odyssey Re and AXAXL. Prior to this he had over 11 years at PricewaterhouseCoopers Bermuda, which included audits on international insurance companies. Mr. Lee holds a Bachelor of Commerce (Accounting) from Mount Allison University and is a certified member of the Chartered Professional Accountants of Bermuda.
- Mark Twite: Mr. Twite is currently AXA XL Ltd's Head of Reinsurance Finance and has 20 years of experience working in the (Re)Insurance industry. Immediately prior to his current role Mark was CFO, Bermuda Reinsurance and has held progressively senior Finance roles during his 15 years with AXA XL. Prior to joining AXA XL, Mark was the Financial Controller of Liberty Syndicates (the Lloyd's of London operation of the Liberty Mutual Group). Mark is a fellow of the Institute of Chartered accountants in England and Wales and qualified from Deloitte & Touche in 1998 while working in their London Insurance practice. Mark holds a B.S. in Economics from the London school of Economics (LSE).
- Charles Cooper: Mr. Cooper is the Chief Executive of AXA XL's worldwide Reinsurance Operations and
  is a member of the AXA XL Leadership Team. Mr. Cooper has 18 years of experience in the reinsurance
  industry. He is also part of AXA XL's Managing Director leadership team. During his employment with
  AXA XL (from 2000 to 2005 and 2010 to present), Mr. Cooper has held progressively senior underwriting
  roles. Previously, he was Executive Vice President and Head of North American Property Catastrophe
  Reinsurance Underwriting at Validus Reinsurance Ltd.
- Derrick Irby: Mr. Irby is currently AXA XL Ltd.'s Head of P&C Finance and Group Planning and a part of AXA XL's Managing Director team. He has over 19 years of experience in the (re)insurance industry including 15 years with AXA XL. Prior to his current role he was Chief Financial Officer of AXA XL's Reinsurance Segment. Derrick has also held a number of other senior Finance, Underwriting and Investment roles within AXA XL. Before joining AXA XL, Derrick provided audit and assurance services to insurance companies at PricewaterhouseCoopers in Philadelphia and Bermuda. Derrick is a CPA licensed in the State of Pennsylvania and is an Associate in Reinsurance (ARe).
- Mary Hayward: Effective January 1, 2019, Mary Hayward was appointed as the Chief Investment Officer of AXA XL. Prior to this, Ms. Hayward was Head of Fixed Income Implementation team for XL Group Investments Ltd responsible for investment strategy implementation and the day to day management, surveillance and performance of the internal and external investment managers managing the fixed income asset holdings of AXA XL. Ms. Hayward is also a part of AXA XL's Managing Director team. Prior to joining AXA XL in 2001 she was a Portfolio Manager overseeing GBP Fixed Income assets at Shell Trust (Bermuda) Ltd; from 1997 to 2001, a Private Banking Portfolio Manager

overseeing High Net Worth Clients at the Bank of Bermuda Ltd from 1990 to 1996 and Associated Bank, NA from 1983-1989. Ms. Hayward holds a Bachelor of Business Administration (Finance) from the University of Wisconsin and a Chartered Financial Analyst.

- Fielding Norton\*: Mr. Norton joined AXA XL in 2010 as Deputy Chief Enterprise Risk Officer and is a part of AXA XL's Managing Director team. Prior to joining AXA XL, he served as Chief Risk Officer at Bermuda-based Ironshore Inc. where he led all aspects of enterprise risk management for the group from its beginning in 2007. In 2006, Mr. Norton was Chief Risk Officer of Commercial Insurance at Swiss Re's Kansas office. Before that he held progressively senior roles at Employers Reinsurance Corp (GE Insurance) in Kansas City, Missouri and Overland Park, Kansas. From January 2018 until September 12, 2018, Mr. Norton served as the XL Group Chief Enterprise Risk Officer ("CERO").
- Matthew Irvine: Mr. Irvine has been at AXA XL for the last 18 years in progressively senior roles and is currently the CUO of Professional lines for the Company. Prior to this he was an underwriter at the SVB Syndicates Agency for 3 years providing UK & US E&O, D&O and EPL business. Mr. Irvine holds a Bachelor of Science degree from Kingston Polytechnic and is an Associate of the Chartered Insurance Institute
- Mark Berry: Mr. Berry is Senior Vice President, Underwriter for the Specialty Division of the Company's Bermuda reinsurance operations and is a part of AXA XL's Managing Director team. Mr. Berry joined AXA XL in 1992 and has held senior underwriting roles with AXA XL in Bermuda and London. Before joining AXA XL, he worked at Stockholm Re (Bermuda) Ltd as Non-Marine Deputy Underwriter. Mark is a former Board member of the International Underwriting Association (IUA), London, the London Market Group (LMG), and the Non Bureau Working Group in London.

\*\*Each of Patrick Tannock, Jonathan Gale, C. Stanley Lee, Mark Twite, Charles Cooper, Derrick Irby, Mary Hayward, Matthew Irvine and Mark Berry were replaced as Directors of the Company effective April 26, 2019. On April 26, 2019 the following persons were appointed as the Directors of the Company:

#### **Directors**

Gregory Hendrick Doina Palici Chehab Antimo Perretta William Pollett Stephen Robb

- Gregory Hendrick: Gregory S. Hendirck was appointed as Chief Executive Officer of AXA XL effective on September 12, 2018. Prior to this, Mr. Hendrick served as the President and Chief Operating Officer of XL Group Ltd from February 28, 2018 until September 12, 2018. Mr. Hendrick served as President of P&C Operations from January 1, 2017 until February 29, 2018. Mr. Hendrick served as Executive Vice President and Chief Executive of Reinsurance Operations from May 2015 to January 2017. From January 2012 to May 2015, Mr. Hendrick served as Executive Vice President and Chief Executive of Insurance Operations. From October 2010 to January 2012, Mr. Hendrick served as Executive Vice President, Strategic Growth. From 2004 to October 2010, Mr. Hendrick served as President and Chief Underwriting Officer of XL Re Ltd. Previously, he served as head of U.S. Property Treaty underwriting at XL Re Ltd and Vice President responsible for U.S. Property Underwriting for XL Mid Ocean Reinsurance Ltd. Prior to joining XL, Mr. Hendrick was Assistant Vice President of Treaty Underwriting for the Winterthur Reinsurance Corporation of America.
- Doina Palici-Chehab: Mrs. Doina Palici-Chehab is a graduate of the University of Bucharest (Romania) (Magister Artium) and of the Deutsche Versicherungsakademie of Munich (Germany) (Degree in insurance management (Versicherungsbetriebswirt (DVA)). From 1980 to 1983, she was a teacher for foreign languages in Romania. From 1983 to 1990, she was subject Matter Expert in AGF (now Allianz) in Cologne (Germany). In 1990, she joined the AXA Group as Reinsurance Director of AXA Germany (Germany). In 2000, she became Head of Group Reinsurance of AXA Global P&C in Paris (France). From 2010 to March 2013, she was Chief Executive Officer of AXA Business Services in Bangalore (India). Since, 2011 she has held various other executive positions within the AXA Group. From 2013 until 2017 she served as Chief Executive Officer of Red Switch Pte Ltd. (formerly known as AXA Insurance Singapore Pte Ltd.). From July 2016 until July 2017, Mrs. Doina Palici-Chehab was Chief Executive Officer of AXA Insurance Pte Ltd. (Singapore) (formerly known as AXA Life Insurance Singapore Pte Ltd.). From July 2017 until March 2018, she served as interim Chief Executive Officer of AXA Asia. In 2018, she became Executive Chairman of AXA Corporate Solutions and AXA ART Versicherung AG.

<sup>\*</sup>Fielding (Fid) Norton resigned from the Board effective March 29th 2019.

Since April 2012, Mrs. Doina Palici-Chehab has been the employee shareholder representative to the AXA Board of Directors. Mrs. Doina Palici-Chehab is also a director of XL Group Ltd.

- Mr. Antimo Perretta is a federally certified insurance specialist, expert in pensions, and graduate of the Executive MBA program of University of Zurich. He has more than thirty years of experience in the insurance industry. He joined AXA Winterthur in 2007 as Head of Group Life and was, from 2008 to 2013, Head of Distribution. From 2014 to December 2017, Mr. Antimo Perretta was Chief Executive Officer of AXA Winterthur (Suisse). As of December 1, 2017, Mr. Antimo Perretta is appointed Chief Executive Officer Europe (excluding France) and joined the Management Committee of the Group. Mr. Perretta is the Chairman of the Board of Directors of AXA Assicurazioni S.p.A. (Italy) and is a director of AXA MPS Assicurazioni Danni S.p.A. (Italy).
- William Pollett: Wiliam Pollett currently serves as a non-executive director of White Rock Bermuda, a segregated accounts company wholly-owned by AON and is Treasurer of Council Partners Endowment Trust, a registered charity. He is also currently serving as the Interim Chief Financial Officer of Oceanview Insurance Ltd, a newly formed Life Reinsurance Company in Bermuda. Until August 2015 William was Chief Executive Officer of Blue Capital. Under his leadership, the company raised nearly one billion dollars of capital in various private and public investment vehicles, investing primarily in catastrophe reinsurance products, including leading the initial public offering in 2012 of Blue Capital Global Reinsurance Holdings Ltd on the London Stock Exchange and Blue Capital Reinsurance Holdings Ltd in 2013 on the New York Stock Exchange. William concurrently acted as Chief Executive Officer and a Director of BCRH, President, Chief Executive Officer of Blue Water Re, a licensed reinsurance company, and Blue Capital Management Ltd., a registered investment advisor, as well as Chief Corporate Development and Strategy Officer and Treasurer of Montpelier Reinsurance Holdings Ltd. (NYSE: MRH). William resigned from all positions at Blue Capital and Montpelier following its acquisition by Endurance Specialty Holdings Ltd.. William was Chief Financial Officer of SELLAS, a Bermuda domiciled life sciences company, from September 2016 to March 2018. Prior to joining Montpelier in 2006, Bill was with the ACE Group (now Chubb) for five years, initially as Chief Financial Officer of ACE Tempest Re and then as Senior Vice President of ACÉ Limited. Prior to the ACE Group, Mr. Pollett worked for the OIL Group of Companies for seven years, latterly as Treasurer and, prior to that, was an auditor with Coopers & Lybrand in London and Bermuda for five years. He holds a Bachelor of Commerce (Honours) degree from Edinburgh University, and is a Chartered Accountant and a Chartered Financial Analyst.
- Stephen Robb: Stephen Robb was appointed Executive Vice President, Chief Financial Officer of XL Group Ltd in May 2017. He previously served as Senior Vice President, Group Controller from November 2010 to May 2017, and has served as Chief Accounting Officer since April 2015. Prior to serving as Controller, Mr. Robb held various progressively senior leadership positions since joining the Company in 2004. These included responsibility for the direction of the Company's corporate finance and policy function, global treasury functions, budgeting and planning, global regulation, financial close, reporting and control and other key finance functions. Before joining the Company, he served as Senior Manager, Insurance Industry Group Leader in the insurance practice of PricewaterhouseCoopers.

#### **Senior Executives:**

See above for Patrick Tannock, Jonathan Gale and C. Stanley Lee.

- Claudette Hodgson: Claudette Hodgson is currently Head of Finance Bermuda Reinsurance and has 15 years of experience working in the (Re) Insurance industry. Prior to joining AXAL XL, she was Financial Controller for Catlin Insurance Company Ltd. Prior to joining Catlin Insurance Company Ltd, Claudette worked at ACE Bermuda. Ms. Hodgson is a Certified Public Accountant and qualified from PricewaterhouseCoopers in 2003. She holds a Bachelor of Commerce from Dalhousie University and is a member of the Institute of Chartered Accountants Bermuda.
- Kim Wilkerson: Ms. Wilkerson is Head of Insurance Claims, Bermuda and has more than 30 years of
  experience in the insurance industry, including 15 years in the brokerage area. In addition to holding
  the Chartered Property & Casualty Underwriters (CPCU) designation, Kim is admitted as a Barrister &
  Attorney in England & Wales and Bermuda, and is an Associate of the Chartered Institute of Arbitrators.
  Kim has worked in both Bermuda and London where she provided legal services for Lloyd's syndicates.
- Stephen Smith: Mr. Smith is Head of Reinsurance Claims, Bermuda and has in excess of 30 years experience working in the (Re)insurance industry, of which the last 23 have been with AXA XL. He joined AXA XL in January 1994 and has held progressively senior roles with the Company. Prior to joining AXA XL, Mr. Smith was the Claims Manager for Johnson & Higgins (now Marsh IAS Management Services) where he, along with a small team, managed the claims activities for in excess of 100 captive

companies. For two years prior to departing J&H, Stephen also managed the claims run-off of five NY Insurance Exchange syndicates.

- Lisa Robinson, Human Resources Business Partner, Bermuda, Bermuda Reinsurance & Global Reinsurance Operations: Prior to assuming her role at AXA XL she held the position of Head of Human Resources for Catlin Insurance Company Ltd. and the HR Business Partner for Global Human Resources across the Catlin Group. Ms. Robinson has over 15 years of Human Resources experience, with over 10 years in an executive role. She holds a Professional in Human Resources (PHR) designation from the HR Certification Institute, a Human Resources Studies Certificate from Cornell University and is a Certified Human Resources Professional (SHRM-CP) with the Society for Human Resource Management. Ms. Robinson is also a Certified Herrmann Brain Dominance Instrument Practitioner.
- Leila Madeiros: Ms. Madeiros is Head of Compliance and Regulatory Affairs-Bermuda. She joined AXA XL in April, 2018. She has more than 30 years of experience in the (re)insurance industry. Prior to joining AXA XL, Ms. Madeiros was the Senior Vice President, Deputy Director and Corporate Secretary of the Association of Bermuda Insurers and Reinsurers (ABIR). She also served on the staff of the Bermuda Monetary Authority (BMA) as the Deputy Director of Policy, Research and Communications directing the formulation and dissemination of appropriate policies, strategies and information for the BMA. Madeiros also served in various capacities as a Bermuda insurance regulator with the Registrar of Companies Department (prior to 2002, the agency charged with insurance supervision). Ms. Madeiros developed her insurance expertise working at Heddington Insurance Limited in Hamilton and London before becoming an insurance regulator.
- Christopher Brough: Mr. Brough is the Assistant General Counsel, Corporate and Alternative Capital, in Bermuda. Prior to joining AXA XL, he was legal counsel for the Catlin Group's Bermuda operations. Prior to joining the Catlin Group in 2014, Mr. Brough spent eight years in the corporate practice at Appleby (Bermuda) Limited specializing in corporate finance, funds, investments and Bermuda law corporate governance. He holds a B.A. in psychology from Vanderbilt University, a Graduate Diploma in Law from Northumbria University and is a member of the Bermuda Bar.
- Simon Argent (appointed effective April 26, 2019 subject to approval by the Bermuda Department of Immigration): Simon Argent, Head of Credit Risk Management (appointed as Chief Risk Officer, subject to approval by the Bermuda Department of Immigration) for AXA XL. He joined XL in 2004 and has more than 27 years of insurance/reinsurance industry experience. Before joining XL, Simon spent 12 years in senior risk management, underwriting and account executive positions with Kingsway Financial Services and General Reinsurance. Prior to this Simon held underwriting positions with Progressive Casualty Insurance and Safeco Insurance. Simon holds an MBA from the Schulich School of Business in Toronto and professional designations from the Insurance Institutes of Canada and America.

### **B.3.** Risk Management and Solvency Self-Assessment

# **B.3.1.** Risk management process and procedures to effectively identify, measure, manage and report on risk exposures

The Company faces strategic, financial and operational risks related to, among others: underwriting activities, financial reporting, changing macroeconomic conditions, investment, reserving, changes in laws or regulations, information systems, business interruption and fraud. An enterprise view of risk is required to identify and manage the consequences of these common risks and risk drivers on our profitability, capital strength and liquidity which is managed by the Risk Management ("RM") function who implement the Risk Management Framework ("RMF").

The Company RMF which is reviewed and approved by the Board, at least annually. The RMF would be reviewed more regularly if the Company was subject to a major change in regulatory requirements, strategy or organisational structure. The aim of the RMF is to:

- Support business objectives and strategy;
- Provide management information to facilitate the identification and understanding of material risks including related mitigants;
- Contribute to the Company's overall internal control framework by helping to manage the inherent complexity within the business;

- Improve the Group's RM rating and credit rating which is applicable to the Company;
- Support regulatory risk management requirements.

The Board meets regularly and oversees the implementation and embedding of the RMF and monitoring of Company performance against risk appetite. The Board also has responsibility for capital monitoring. The Board ensures that material and emerging risks are identified and reported and that appropriate arrangements are in place to manage and mitigate those risks effectively. The Company's stress testing framework and outputs are reviewed by the Board and support understanding of the risk profile.

#### Risk Management Strategy

The risk management strategy is overseen by the Board and supports the delivery of the overall business strategy. To support the Board, the RM function oversees more detailed risk management activity and the Board approved risk appetites.

The risk management strategy is to ensure that risk is considered alongside reward in setting the Company's strategic and business objectives. The strategy is articulated in the RMF and risk policies and is achieved by incorporating risk processes, information and decisions in the day to day running of the business.

The Company's strategy involves taking on risk in order to generate return. Risks are selected and controlled or traded off through the risk strategy that focuses on:

- Retaining risk within an approved risk appetite that is consistent with our strategic objectives, with appropriate levels of capital with excess held by the Company;
- A diversified portfolio of underwriting and financial markets risks;
- Managing excessive aggregation risk via a limit framework;
- Exercising consistency and transparency of risk management and control across the Company;
- Risk mitigation on key underwriting and financial market risks to protect capital from the impact of extreme events; and
- Risk reporting to the Board and other stakeholders (e.g. regulators).

#### Risk Appetite Framework (RAF)

The RAF is a key dimension to the risk management strategy and is used to provide governance for setting new monitoring requirements as well as reviewing and updating existing risk appetite statements, tolerances and limits so that these are aligned with business and risk management strategies. The RAF guides the Company's strategies relating to, among other things, capital preservation, earnings volatility, capital at risk, operational loss, liquidity standards, claims paying rating and capital structure. The framework also addresses tolerance to risks from material individual events (e.g. natural or man-made catastrophes such as terrorism), our investment portfolio and realistic disaster scenarios ("RDS") that cross multiple lines of business (and risks related to some or all of the above that may occur concurrently).

The Board approved risk appetites and risk tolerances were reviewed during the 2018 business planning process and it was determined that all existing statements and tolerances were appropriate to allow the Company to execute the 2018 business plan. In light of the AXA acquisition in September 2018 it was decided that the legacy XL Group Risk Appetite Framework would remain in place through year-end 2018 until such time that a Divisional framework could be implemented.

"Risk appetites," as referred to above, are broad statements used to guide our risk and reward preferences over time, all consistent with, among other factors, business prudence, market opportunities, the underwriting pricing cycle and investment climate.

The risk strategy and risk appetite frameworks are supported by the following:

- Risk Governance sets out a clear and cost effective organisational structure for risk management, including clear roles and responsibilities.
- **Risk Policies** document the Company's approach to the management of each category of risk to which the Company is exposed.

- Risk definition and categorisation provides a common taxonomy and language for risk to allow for categorisation of all risks in a way which facilitates links between the business and risk management processes.
- **Risk cycle and processes** are the approach taken to top down, bottom up and process led risk identification, quantification and management and control.
- Risk Management Information and Reporting, including Commercial Insurer Solvency Self-Assessment ("CISSA")
- CISSA Production ensuring timely and accurate information is reviewed in line with the governance structure.
- Skills, Resources and Risk Culture. Organisational Learning. Change Management Governance All enable a mature risk culture throughout the Company.

#### Risk Reporting

A risk dashboard is presented on a regular basis to the Board. The dashboard measures the status against risk appetite statements and the associated monitoring triggers and limits using the latest output from the business and the Bermuda Solvency Capital Requirement ("BSCR"). The dashboard includes information related to the monitoring against all of the Company's material risk categories. Highlights from the dashboard including performance against appetite and limits are reported to the Board.

#### B.3.2. Risk management and solvency self-assessment systems implementation

The CISSA process includes all of the material risks, processes and procedures employed to identify, assess, monitor, manage, and report the short and long term risks the Company faces or may face and to determine the own funds necessary to ensure that the Company's overall solvency needs are met at all times.

The Regulatory Capital Requirement is derived using the Bermuda Solvency Capital Requirement (BSCR) standard formula. The results are presented to the Board to provide richer insights on risk exposures, and to inform and drive risk and capital based decision making.

The processes for the CISSA and production of the CISSA Report are tailored to fit into the Company's organisational structures in a proportionate manner with techniques to assess the overall solvency needs and taking into consideration the nature, scale and complexity of the risks inherent to the business.

The risk management cycle is set for key aspects of the risk management process that are deemed to be part of the CISSA process and that will support the production of the Company's CISSA Report. The CISSA process includes procedures that enable the Company to monitor its compliance with its risk appetites, risk limits, economic capital and also regulatory capital requirements whilst taking into account potential future changes in the risk profile and considering stressed situations.

### B.3.3. Relationship between the solvency self- assessment, solvency needs, and capital and risk management

The Company's RMF is designed to be comprehensive and to provide a sound basis for the set of risk appetites, and the capacity to identify, manage and report on key risks facing the Company on a timely basis. From this, we can see that the Company's risk profile is consistent with its Board approved limit and risk appetite framework.

The Company uses the BSCR to calculate the required CISSA capital to support its business plans on the basis of risks facing the business.

#### **B.3.4.** Solvency self-assessment approval process

An overview of the minimum roles and responsibilities required for the CISSA process and the CISSA Report are set out below.

#### **BOARD**

With respect to the responsibilities relating to RM, the Board:

- Oversees RM activities, including the risk management framework employed by management. With
  respect to the overall risk management framework, the Company's Board (i) reviews the
  methodology for establishing our overall risk capacity; (ii) reviews the policies for the establishment
  of risk limit frameworks, and adherence to such limits; and (iii) reviews and approves Company risk
  limits.
- Oversees our compliance with any significant enterprise risk limits, authorities and policies. The Board evaluates what actions to take with respect to such limits, authorities and policies, and approves any exceptions thereto from time to time as necessary.
- Reviews our overall risk profile and monitors key risks to the Company.
- Monitors our risk management performance and obtains reasonable assurance from management that our risk management policies are effective and are being adhered to.

The review of our overall risk appetites and the evaluation of the risk impact of any material strategic decision being contemplated, including consideration of whether such strategic decision is within the risk profile established by us, is conducted by the Board. "Risk appetites," as referred to above, are broad statements used to guide our risk and reward preferences over time, all consistent with, among other factors, business prudence, market opportunities, the underwriting pricing cycle and investment climate. Risk appetites are regularly monitored and can change over time in light of the above.

The Board shall, as appropriate, be briefed on the outcomes of key elements of the CISSA process and shall:

- Review and challenge outputs of CISSA process
- Review and challenge the overall annual CISSA report

#### **CISSA PROCESS OWNERS**

- The CISSA is made up of a number of different processes and each of these processes has an owner. These process owners are responsible for providing the information to support the undertaking of the CISSA.
- Key CISSA process owners are detailed below:

CISSA Process	Owner
Risk Budget (and related stress tests)	Bermuda Chief Risk Officer
Standard Formula Calculations	Head of Finance, Bermuda Insurance
Own Funds Calculations	Head of Finance, Bermuda Insurance
Technical Provisions Calculations (where appropriate)	Head of Insurance Reserving/Group Financial Reporting
Actuarial Function Report	Head of Insurance Reserving/Group Financial Reporting
Annual Risk Assessment (Risk Register)	Risk Management function
Business Planning	Head of Finance, Bermuda Insurance
Emerging Risks Process	Risk Management function

#### **B.4. Internal Controls**

#### **B.4.1.** Internal control system

 $AXA\,XL's\,Framework\,for\,Internal\,Controls\,("FIC")\,function\,is\,committed\,to\,promoting\,a\,robust\,internal\,financial\,control\,framework\,for\,the\,AXA\,XL\,Audit\,Committee\,("Audit\,Committee"),\,executive\,management\,and\,external\,stakeholders\,to\,rely\,on\,for\,financial\,and\,regulatory\,reporting\,purposes.$ 

FIC's core strategic objectives include:

- Conducting an effective and efficient assessment of the design and operating effectiveness of internal controls over financial reporting;
- Identifying areas in which the inherent risk of financial misstatement is high so that management can address these risks before they manifest themselves in an actual misstatement;
- Providing the Audit Committee and executive management with the information they need to make the assertions and certifications required; and
- Adding value by helping management promote a robust control environment.

The FIC function performs an annual assessment of the control framework which includes: risk identification, risk assessment and planning, documenting business processes, evaluation and validation of key risks and controls, and issue management.

#### **B.4.2.** Compliance function

The Compliance function is responsible for advising the entity's management and board on compliance with applicable laws, regulations and administrative provisions adopted in accordance with the Insurance Act 1978 and other local laws and regulations, and on the impact of changes in the legal and regulatory environment applicable to the Company's operations. The function provides expertise, advice and support to various departments of the Company to assess situations and compliance matters, analyze compliance risk and contribute to design solutions to mitigate those risks to which the Company is exposed.

The Head of Compliance reports to AXA XL's Chief Compliance Officer of North America who reports to AXA XL's General Counsel.

The compliance function manages a wide range of compliance related matters including (i) regular reporting on significant compliance and regulatory matters to senior management and to regulators, (ii) financial crime matters (which include anti-corruption, anti-bribery, anti-money laundering programs as well as international sanctions/embargo compliance), (iii) data privacy, (iv) employee Compliance & Ethics Guide, (v) the monitoring of compliance and regulatory risks.

The compliance function undertakes an annual Compliance Risk Assessment to identify the most significant compliance risks to which the business is exposed. Based on this assessment, an Annual Compliance Plan is developed at the end of each year for the following year.

The compliance activities within the Company are articulated around a number of Group Standards and Policies which set the minimum requirements expected to be covered by the Company. The AXA XL Code of Conduct (the Code) contains standards and policies on significant risks affecting the compliance activities as well as the high-level control and monitoring principles to which the Company must adhere. Both the standards and policies contained in the Code (e.g. Compliance Governance, Anti-Money Laundering, Sanctions, Anti-Bribery, etc.) are mandatory. In addition, the compliance function has adapted the AXA XL requirements and developed local policies to align with the relevant laws and regulations in the jurisdiction in which the Company operates and conducts business. These local policies are reviewed on a regular basis with recommendations being made for adoption to the Company's Board.

On a regular basis, the compliance function reports directly to the Audit Committee, on significant compliance matters. These include major regulatory changes that have compliance implications, results of the Compliance Risk Assessment, the Annual Compliance Plan, outstanding Compliance Support and Development Program (CSDP) remediation plans and any other significant issues that require escalation.

Subsequent to December 31, 2018, in 2019, the Company began implementation of the AXA Group Standards and AXA Compliance & Ethics Code.

#### **B.5 Internal Audit Function**

The objectives of the Internal Audit function are to provide assurance that AXA XL's network of risk management, internal control, and governance processes, as designed and represented by management, is adequate and functioning in a manner to ensure:

- Risks are appropriately identified and managed.
- Internal accounting and operating controls are adequate and operating effectively.
- Financial, managerial, operating and technology systems information is appropriate, accurate, reliable, and timely.

- Compliance with Company policies, standards, procedures, code of conduct and applicable country laws and regulations.
- Resources are acquired economically, used efficiently, and adequately protected.
- Programs, plans, and objectives are achieved.
- Quality and continuous improvement are fostered in the AXA XL's control processes.
- Significant legislative or regulatory issues are recognized and addressed properly.
- Achievement of the Company's strategic objectives.

#### B.5.1 Internal Audit independence, professional conduct and ethics

To provide for the independence of the Internal Audit Department, the AXA XL Chief Audit Executive reports to the Audit Committee and to AXA's Global Head of Audit.

Activities performed by Internal Audit do not relieve management of their assigned responsibilities. Internal Audit has no authority over, or responsibility for, activities audited. Internal Audit will avoid activities that are not audit functions and that may be perceived to impair audit objectivity.

The Internal Audit Department complies with the International Standards for the Professional Practice of Internal Auditing of The Institute of Internal Auditors ("IIA"). The Standards apply to individual internal auditors and internal audit activities.

All internal auditors are accountable for conforming to the Standards related to individual objectivity, proficiency and due professional care.

The IIA has also established a Code of Ethics which covers basic principles of the internal auditing practice.

Internal Audit has a responsibility to conduct itself so that its good faith and integrity are not open to question.

#### **B.5.2 Internal Audit work plan**

To most effectively execute the Internal Audit Department's mission, the audit plan is risk-based and is focused on the key business risks relevant to the Company.

The Annual Risk Assessment process is coordinated with PricewaterhouseCoopers (external auditors) and Framework of Internal Controls to review the corporate-wide integrated audit universe of business functions, risks, processes and controls, as well as with other assurance functions within the Integrated Internal Control Framework, including Compliance - monitoring and testing of key compliance risks; and first line Underwriting and Claims assurance activities (e.g. Independent Underwriting Review (IUR), Claims Quality Assurance (QA), Delegated Underwriting Governance (DUG), and Claims Delegated Authority Governance (CDAG)).

Risk assessment includes discussions with management and all designated functions and processes within the audit universe are risk assessed based on changing business conditions, the evolving operating environment and associated risks, among other risk criteria. Each auditable entity receives an overall risk rating as well as ratings for each of the four components of COSO's RM Framework (Strategic, Operations, Reporting and Compliance), and used to produce a risk based annual audit plan. During each year, the audit universe is subject to ongoing risk assessment to identify significant changes to the universe and risk ratings, which can result in changes to the annual audit plan. The Company's annual audit plan, along with any key changes to it, are reported to the Company's Audit Committee for approval.

All audits are performed and documented in accordance with the IIA Standards.

#### **B.5.3 Internal Audit Process**

The internal audit engagement process is set out below:

- <u>Engagement Planning</u>: The objectives of this phase are to refine the scope of the internal audit activities for the engagement; identify which business processes, systems and controls will be evaluated; determine which techniques will be used; manage expectations; and coordinate with other assurance providers and external auditors.
- Risk and Control Evaluation: The objective of this phase to understand the business process, the key
  controls and the primary risks associated with the business process.

- <u>Fieldwork and Testing</u>: The auditor will determine whether the controls supporting the audit objectives are adequately designed and effective through the gathering of audit evidence.
- Reporting: This phase provides a well-supported opinion on the controls in place, provide value added recommendations and identify opportunities to improve the internal control environment.
- <u>Follow-up and Closure</u>: The objective of this phase is to monitor the outstanding audit recommendations and agreed-upon audit issue resolutions to ensure their timely implementation.

#### **B.6.** Actuarial function

The Company's Actuarial Function is provided at the AXA XL level. AXA XL's Actuarial Function (the "Actuarial Function") assists the Board with its oversight responsibilities.

#### **B.6.1. Regulatory Compliance**

The Actuarial Function operates in accordance with applicable Bermuda regulation.

#### **B.6.2. Roles and Structure**

AXA XL's Loss Reserve Specialist and the Actuarial Function which advises the Board are established internally, as opposed to being outsourced to third-party service providers, and is embedded in the AXA XL's corporate governance framework. AXA XL is committed to maintaining an effective Actuarial Function to ensure that the business is conducted in an appropriate and reasonable manner within the Group.

The Actuarial Function is split into two core functions: Actuarial Reserving/ Financial Reporting (AFR) which is responsible for loss reserving and reporting and Pricing and Analytics which is responsible for pricing.

The responsibilities of the Actuarial Function are shared by a number of key individuals who are supported by their respective teams. These teams are of sufficient size, and consist of suitably qualified and experienced people that meet the Group's minimum fitness and proper employment criteria. The teams are structured with varying lines of defense to facilitate effective peer review and independent challenge.

#### B.6.3. Reports of the Actuarial Function to the Board and Regulators

The Actuarial Function provides expert actuarial advice to the Board through formal reports and presentations.

#### **B.6.4.** Actuarial Function Responsibilities

The Actuarial Function is involved in many of the key processes across the business and provides technical expertise and assurance over the methods used. The key processes are:

- Calculating the gross and net technical provisions;
- Ensuring the appropriateness of the methodologies and underlying models used as well as the
  assumptions made in the calculation of technical provisions and explaining any material effect of
  change of data, methodologies or assumptions between valuation dates on the amount of
  technical provisions;
- Informing the Board on the reliability and adequacy of the calculation of technical provisions; overseeing the calculation of technical provisions;
- Assisting in the execution of the risk management framework and ensuring effective governance framework around the review and validation of loss reserves (including technical provisions), policyholder obligations and potential exposures, which includes:
  - Regular contact by reserving actuaries with underwriting and claims teams;
  - ii. Review of technical provision results by an escalating series of reviews from reserving actuaries to the global AXA-XL chief actuary;
  - iii. Review of technical provisions to provide sufficient independence from management;
  - iv. Independent external analysis of the reserving requirements;

- Ensuring that the actuarial methods and techniques are compliant with all the appropriate regulatory requirements where applicable;
- Assisting with the underwriting process, including those surrounding pricing and design of underwriting contracts and risk transfer mechanisms where applicable and appropriate;
- Helping to maintain a competent, effective and efficient approach to pricing; and
- Comparing best estimates against experience, i.e. performing analysis comparing the estimated policyholder obligations against actual policyholder obligations paid.

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

B.7.1. Outsourcing policy and key functions that have been outsourced

The Company's approach to outsourcing applies to all AXA XL material outsourcing arrangements. There are specific materiality thresholds for critical or important activities such as the following:

- Arrangements with an individual vendor covering business services to the value of \$1m annually or more;
- Specific delegated underwriting arrangements notified to GOSC by the delegated underwriting governance ("DUG") group based upon agreed criteria and the Risk Based Approach ("RBA") Guidelines;
- Specific delegated claims handling arrangements identified by the Claims Delegated Arrangement Team, normally where outstanding claims reserves under management exceeds \$10m and high risk Claims DA's as defined by CDAG Risk Assessment;
- · Specific Investment Management arrangements over \$1m as identified by XL Investments; and
- Other ad hoc outsourcing arrangements that GOSC may consider as being material to AXA XL for financial, operational or reputational reasons.

This applies to all material outsourcing to third parties carried out by AXA XL and its subsidiaries and is designed to establish a framework for the oversight and management of outsourcing risk for AXA XL at a group level, as well as the oversight of specific outsourcing arrangements. The Outsourcing Process for all Material Outsourcing Arrangements consists of the steps below:

**Due Diligence** - A thorough review of the service provider is to be performed using the services of Global Technology ("GT"), Legal, Compliance, Finance, Business Continuity Management, Information Security & Risk Management and may consider external experts when appropriate.

**Contracting and Negotiations** - All material outsourcing agreements must be undertaken using a written, legally binding agreement approved by Legal in accordance with agreed minimum standards.

**Regulatory Notification** - Business Owners will ensure that there is communication with the Legal and/or Compliance Departments during the approval process in sufficient time to enable any required prior notification to be provided to the relevant regulatory supervisory body should this be required.

**Performance Monitoring** - Whenever AXA XL undertakes a material outsourcing arrangement, procedures to monitor the service provider's performance and risk must be put in place. Accountability for managing the outsourcing arrangement should be assigned to a designated business owner, wherever applicable.

**Exit Phase** - Termination of material outsourcing agreements may only occur on the direction of the business owner. Ensure all necessary exit strategies and business continuity plans are in place, relevant information exchanges is returned or destroyed, service provider access is ceased; and in the case of early termination, if any claims or penalties against the service provider arise.

#### **B.7.2.** Material intra-Group outsourcing

Services and resources are provided to entities within the Group by other Group companies, primarily through service companies. Formal service level agreements exist for services provided by these companies to other entities within the Group.

Outside of the intra-Group service provision framework outlined above, additional agreements may be in place for further specific functions provided by an XL Group company and another entity within the Group. For example, XL Group Investments Ltd ("XLGIL") provides investment management services to other entities within the XL Group. These can be summarised as follows:

- Advising on investment strategy;
- · Appointing investment managers;
- Providing investment reporting; and
- Setting benchmarks.

#### B.8. Other material information

For the year ended December 31, 2018, there is no other material information regarding Governance Structure required to be disclosed for purposes of this Financial Condition Report.

Effective September 12, 2018, XL Group Ltd completed its previously announced merger with Camelot Holdings Ltd., a wholly owned subsidiary of AXA SA.

Completion of the transaction introduces new risks relating to integration of the two companies. Some of these are expected, others depend on the plan for integration (for example, commonality of systems will influence the complexity of system integration or data migration).

A steering committee of senior colleagues representing both companies has been established to provide governance and oversee integration, which involves a number of workstreams to ensure both integration and ongoing operational activities are effectively managed and maintained.

The XL Group's ability in managing integration activities was strongly demonstrated in the Catlin integration, many of the controls applied in that exercise will be available for application in this one. Together with the experience AXA bring, we expect that integration risks will be substantially mitigated.

### C. Risk Profile

### C.1. Material risks the insurer is exposed to during the period

#### C.1.1. Underwriting risk

Underwriting risk (Insurance risk) is defined using the following categories:

Component	Definition
Underwriting risk	Underwriting risk derives from insurance and reinsurance policies written for the current period and also from unearned exposure from prior periods. The risk is that the corresponding premium will be insufficient to cover future claims and other costs or more generally that the underwriting profitability from this tranche of business will be less than expected; Underwriting risk includes man-made catastrophe events and natural catastrophe events.
Reserve risk	Reserve risk relates to policy liabilities (corresponding to business written in prior periods where the exposure has already been earned at the opening balance sheet date) being insufficient to cover the cost of claims and associated expenses until the time horizon for the solvency assessment. Additional risks are that the timing or amount of actual claims pay outs do not align with the timing or amounts of the estimated claims pay outs and that there are changes in the valuation of the market value margin (risk margin) during the time horizon for solvency assessment

Underwriting and loss experience is reviewed regularly for, among other things, loss trends, emerging exposures, changes in the regulatory or legal environment as well as the efficacy of policy terms and conditions. Underwriting risk is also identified through:

- Business planning Analysis is undertaken of the underwriting portfolio, exposures, loss
  experience and changes to the external environment (including market cycle, economic
  environment) to identify any changes to the insurance risk profile for the forthcoming period of the
  budget / business plan;
- Underwriting processes (including guidelines and escalation authorities) Each individual
  contract written is assessed, by the underwriting process (which is subject to granular underwriting
  guidelines and escalation authorities) for the nature and level of insurance risk that it brings to the
  business including consideration of the exposure by nature of the limit, the risks insured, the
  location of the risks and other underwriting criteria;
- **Reserving and claims process** On an ongoing basis, claims trends are monitored and analysed for any indications of change in the nature of the underlying insurance risk;
- RM risk assessment process Through the risk assessment processes, the Company quantifies existing risks and also identifies new risks; and
- Development of realistic disaster scenarios ("RDS") and other scenarios.

#### C.1.2. Market risk

Market risk represents the potential for loss due to adverse changes in the fair value of financial and other instruments. The Company is principally exposed to the following market risks:

Component	Definition
Interest rate and spread risk	Financial loss or volatility of profits due to the combined sensitivity of the economic value of the investment portfolio and (re)insurance liability cash flows and debt securities issued to changes in the level or volatility of benchmark interest rates and spreads.
Market risk concentrations	Financial loss or volatility of profits due to the increased sensitivity of the market value of the investment portfolio to other risks specifically due to concentrations of investments such as in specific geographical region, industry or company.
Foreign exchange risk	Financial loss due to volatility in the value of the Company's assets following changes in currency exchange rates.
Equity price risk	Financial loss or volatility of profits due to the sensitivity of the value of the investment portfolio to changes in the level or in the volatility of market prices of equities.

The Company identifies market risk through the following processes:

Process	Definition
Business planning	As part of the annual planning process, a review is undertaken of the nature of assets required to support the business plan and the expected liabilities.
Investment decisions and asset allocations	The Group Investment Portfolio Guidelines, Authorities and Monitoring Framework, which applies to the Company, sets ranges for tactical deviation from the benchmark and is reviewed annually.
Risk assessment and processes	The risk assessment process assists in identifying if there are any changes to market risks already identified in the previous assessment.

Market risk is also explored through underwriting and the Emerging Risk process which has Company representation. The Emerging Risk Task Force, comprised of senior leadership from across the organisation, actively monitors a wide array of emerging risks to provide the Company's underwriters, as well as clients, with pertinent information regarding new and existing trends. This involves the ongoing review of strategic and risk management processes, identifying potential opportunities in the market and providing thought leadership around emerging risk issues to optimise underwriting and strategic decisions.

#### C.1.3. Credit risk

Credit risk is defined as the risk of loss due to an unexpected default, or deterioration in the credit standing of the counterparties and debtors or uncertainty of an obligator's continued ability to make timely payments in accordance with the contractual terms of the instrument.

Credit risk through the risk framework is categorised by the following:

Component	Description	
Reinsurance counterparty Risk	Risk of losses due to the default of a reinsurer or a deterioration of its credit worthiness.	
Investment counterparty Risk	Counterparty default risk is the risk of possible losses due to the unexpected default, or deterioration in the credit standing of investment counterparties.	
Premium counterparty Risk	Premium counterparty default risk is the risk of possible losses due to unexpected default, or deterioration in the credit standing of the premium debtors in relation to insurance contracts written.	
Underwriting counterparty Risk	Exposure to credit risk through certain credit sensitive underwriting activities which include, but are not limited to, Surety, Professional Lines, Environmental and Political Risk and Trade Credit.	

The Company identifies credit risk through the following processes:

Process	Description
Business planning	Analysis is undertaken of the credit risk exposures, loss experience and changes to the external environment (including market cycle and economic environment) to identify any changes to the credit risk profile for the forthcoming period of the business plan.
Underwriting	Each individual contract written is assessed, by underwriting process (which is subject to granular underwriting guidelines and escalation authorities) for the nature and level of credit risk that it brings to the business including consideration of the exposure by nature of the limit, the risks insured, the location of the risks and other underwriting criteria.
Risk assessment and processes	Through the risk assessment processes, the Company quantifies existing risks and also identifies new risks.
Emerging risks	The Company operates an emerging risks identification process. This assessment identifies key external factor changes that may give rise to credit risk issues. The process also evaluates potential opportunities that might arise from these emerging risks.

#### C.1.4. Liquidity risk

Liquidity risk is defined as the inability to meet cash and collateral posting obligations when they come due. Liquidity risk arises from three principal areas: operating, financing and investing cash flows. The RMF addresses how the Company manages liquidity both under a normal and a stressed environment.

The Company identifies liquidity risk through the following processes:

Process	Description
Stress testing	Stressing known and forecasted liquidity positions, downgrade triggers, collateral demands and cash flows by legal entity to cover a 1:100 worldwide aggregate Nat Cat loss over a twelve month horizon.
Treasury	Treasury has responsibility to identify and monitor concentration risk of cash at banks, along with funding requirements.
Risk assessment and processes	Through the risk assessment processes, the Company quantifies existing risks and also identifies new risks.

#### C.1.5. Operational risk

The Company defines operational risk as the risk of loss, resulting from inadequate or failed internal controls and / or processes, or from people and systems, or from external events. In line with business objectives, the Company does not take on operational risk with a view to achieving enhanced return. Rather, it accepts operational risk as a consequence of writing (re)insurance business and having operations to support the writing of that business. The current uncertainty around transition periods and the form of the final Brexit agreement (if any) adds operational risk linked to the business challenges of managing through the change.

Operational risk is identified through the following processes:

Process	Description
Annual risk assessment	A risk register is maintained of the material risks faced by the Company. On an annual basis an assessment is performed on the risks on the risk register.
Consultation regarding new regulations	When the regulatory authorities announce potential changes to the regulatory environment (such as new rules and regulations) the Legal and Compliance team is responsible for reviewing the proposed changes and for highlighting any increase in regulatory risk that might arise.
-	When new financial reporting regulations are announced, the CFO is responsible for reviewing the proposed changes and for highlighting any increase in regulatory risk that might arise.
Business planning	Any changes to the operational risk environment that arise as a result of the business planning (such as entry into new territories) must be identified and accounted for during the planning process.
Ongoing operations	Function heads and Risk Owners are responsible for identifying any new (or changed) risks during the normal course of business, and notifying the Policy Owners so any required changes to the risk register can be implemented.
Emerging risks	The Company operates an emerging risks identification process which captures emerging risks. This assessment identifies key external factor changes that may give rise to operational risk issues.
Internal loss data	The Company collects data relating to operational risk losses and near misses on a quarterly basis. The data collected is used, among other things, to track incidents, identify key risk indicators and to validate and challenge operational risk quantification.
External loss data	The Company purchases historical loss data from an external provider. Large events from this database are used to identify new emerging risks.

#### C.1.6. Other material risks

The Company also considers the following risks as part of its Risk Management Framework:

- Strategic risk The risk of the current and prospective impact on earnings or capital arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes.
- Group risk Risk arising as a result of belonging to the AXA Group including areas such as capital support, reinsurance arrangements and reputational issues affecting the Group that could indirectly affect the business.
- Asset Liability Matching ("ALM") risk arises directly from a mismatch between assets and liabilities
  due to changes in rates and spreads, equity and other non fixed income markets/asset classes and
  credit risks, liquidity, foreign exchange and also from events affecting both asset and liability values.

Controls in relation to these risks are documented in the applicable risk policies where relevant.

#### C.2. Risk mitigation in the organisation

The Company, through its subsidiaries, is a global insurance and reinsurance company providing property, casualty and specialty products to industrial, commercial and professional firms, insurance companies and other enterprises on a worldwide basis.

#### **Underwriting Risk**

#### **Reinsurance Purchase**

The Company participates in AXA XL managed outwards 3rd party reinsurance risk transfer programme to support the Company's underwriting strategy within risk appetite and to ensure efficient use of capital. Business ceded varies by location and line of business based on a number of factors, including market conditions. The goals of the outwards reinsurance risk transfer programme include reducing exposure on individual risks, protecting against catastrophic risks, maintaining acceptable capital ratios and enabling the writing of additional business. The overall goal of the programme is to reduce volatility and enhance overall capital efficiency.

The Company's reinsurance strategy is considered as part of the annual business planning process. The impact of that strategy is monitored quarterly by management.

#### **Actuarial Function**

To mitigate the risk of large changes of reserves from one period to the next which are not due to external but to internal factors such as human errors, the reserving process performed by the Actuarial Function is highly structured and strictly defined and controlled and includes several layers of oversight.

#### **Rating Adequacy**

Underwriters are supported by dedicated teams of claims personnel and pricing actuaries. Premiums are set and adjusted based, in large part, on the industry group in which the insured is placed and the perceived risk of the insured relative to the other risks in that group. The rating methodology used for individual insureds seeks to set premiums in accordance with claims potential. Underwriting guidelines and policy forms differ by product offering as well as by legal jurisdiction.

#### **Underwriting Authorities and Guidelines**

All underwriters are assigned individual underwriting authorities with the objective of preserving the capital base and controlling earnings volatility. Authorities within the business units are delegated through the underwriting management structure and the annual review of underwriting limits is part of the business planning process. Authorities are also set in line with agreed risk appetites and risk tolerances for material individual events, RDS that cross multiple lines of business and from risks related to some or all of the above that may occur concurrently.

The Company underwrites and prices most risks individually following a review of the exposure and in accordance with its underwriting guidelines. The Company seeks to serve our clients while controlling our exposure both on a portfolio basis and on individual insurance contracts through terms and conditions, policy limits and sub-limits, attachment points and reinsurance arrangements on certain types of risks.

#### **New Product Process**

The Innovation Product Acceleration Strategy ("iPAS"), an AXA XL procedure, is designed to track and manage product innovation and obtain approval of new products by the appropriate committees and leadership. All new products are also approved by the Company.

#### Market Risk

#### Strategic Asset Allocation

The Strategic Asset Allocation (SAA) process establishes a benchmark that is constructed to maximise enterprise value, subject to various considerations and constraints. It is subject to the risk tolerances recommended by management and is approved at least annually by the Company's Board.

#### Authorities Framework

As part of the implementation of the Company's SAA Benchmark, a comprehensive framework of investment decision authorities is employed. The objective of the Authorities Framework is to ensure that

the risk profile of the investment portfolio is consistent with the Company's risk tolerance as reflected in the SAA Benchmark. The Authorities Framework controls active or tactical deviations from the SAA Benchmark. As the magnitude of these deviations increases or the resulting impact on the risk profile of the investment portfolio reaches certain predetermined thresholds, additional levels of authority and approval are required.

The Statement of Investment Policy, Authorities and Guidelines and Group Investment Portfolio Guidelines, Authorities and Monitoring Framework comprise a market risk authority and guidelines structure that addresses all the key market risk factors and is commensurate with the volume and complexity of activity undertaken by AXA XL.

#### Service Level Agreements

Service level agreements are in place between XLGIL and the Company. These include guidance on type of investments and the average weighted credit ratings of the portfolio that can be made on behalf of the Company. Adherence to policies and guidelines is monitored and signed off on a regular basis and subject to monitoring and reporting to the Company's Board as described below.

#### Currency risk mitigation

The Company's currency exposure is dominated by Sterling and US Dollar. The Company seeks to mitigate the risk by matching the estimated foreign currency denominated liabilities with assets denominated in the same currency. Asset liability management analysis is run regularly to adjust surplus and shortfall currencies, ensuring that the entity exposures are broadly matched. The table below outlines the Company's year end exposure by currency:

Foreign currency exposures represent all net assets and liabilities held in currencies other than U.S. dollars that generate foreign exchange volatility.

(Foreign currency in millions)	December 31, 2018	December 31, 2017
Canadian dollar	205.7	365.3
Australian dollar	(40.1)	185.8
Singaporean dollar	27.4	123.6
British pound	(144.7)	115.9
Euro	417.3	(54.9)

Day-to-day management of the investment portfolio is conducted through a combination of in-house portfolio management teams and external asset managers in accordance with detailed investment guidelines and risk tolerances that are closely monitored by Group Investments. This hybrid implementation approach provides access to external asset managers with specialised skills across a broad range of investment products, as well as the flexibility to actively manage the overall structure of the portfolio in line with the Company's specific business needs. Interaction between the internal and external managers provides additional insight to take advantage of opportunities as they present themselves.

The delegation of investment authority to Group Investments is supplemented by robust compliance monitoring with defined escalation and notification procedures. This framework is designed to identify investment risks in absolute and relative terms and to consistently and objectively measure, assess, manage and report such risks on an ongoing basis. The framework is cascaded down to the Company, and approved by the Board. Any breaches in limits of the authority framework are highlighted in the risk dashboard presented to the Board.

#### **Credit Risk**

Credit risk is managed through:

Credit risk framework - Credit risk arising from credit sensitive underwriting activities is managed via the
underwriting limit framework. Credit risk is managed within the investment portfolio through the
Authorities Framework and established investment credit policies, which address the quality of obligors
and counterparties, industry limits, and diversification requirements. Exposure to market credit spreads
primarily relates to market price and cash flow variability associated with changes in credit spreads.

- Underwriting authorities and limits See C1 Underwriting Risk.
- **Investment portfolio** Credit risk is managed in the investment portfolio, including fixed income, alternative and short-term investments, through the credit research performed by both investment management service providers and the in house portfolio management team.
- Reinsurance Security Department The Company manages its credit risk in its external reinsurance
  relationships by transacting with reinsurers that it considers financially sound, and if necessary, collateral
  in the form of funds, trust accounts and/or irrevocable letters of credit may be held. The following table
  outlines the Company's top external reinsurance credit exposures as at 31 December 2018.

Name of Reinsurer	Reinsurer Financial Strength Rating	% of Total
Munich Reinsurance Co.	AA-/Stable	12.0%
Lloyd's Syndicates	A+/Negative	7.9%
Arch Reinsurance Company	A+/Stable	5.6%
Endurance Assurance Corporation	A+/Stable	4.3%
Transatlantic Reinsurance Company	A+/Stable	4.2%
AXIS Reinsurance Company	A+/Stable	4.0%
Everest Reinsurance (Bermuda) Ltd.	A+/Stable	3.8%
Swiss Reinsurance Co.	AA-/Stable	3.8%
Hannover Rueck SE	AA-/Stable	3.5%
Renaissance Reinsurance U.S. Inc.	A+/Negative	3.4%

The following table sets forth the ratings profile of the reinsurers that support the unpaid loss and loss expense recoverable and reinsurance balances receivable, net of collateral, at December 31, 2018:

Reinsurer Financial Strength Rating	% of Total	
AAA	0.1%	
AA	31.2%	
Α	64.2%	
BBB	0.3%	
BB and below	—%	
Not Rated	—%	
D	0.6%	
Captives	3.6%	
Total	100.0%	

• **Premium payment and brokers** - The Company underwrites a significant amount of its (re)insurance business through brokers and credit and premium risk exists should any of these brokers be unable to pay premium due. A list of approved broking houses is maintained.

#### **Liquidity Risk**

One of the principal objectives of liquidity risk management is to ensure that there is readily available access to funds with which to settle large or multiple unforeseen claims. It is generally expected that positive cash flow from operations (underwriting activities and investment income) will be sufficient to cover cash outflows under most future loss scenarios.

Cash requirements include all possible claims on cash from policyholders, shareholders and operations. Some of these cash outflows are scheduled while others are known with much less certainty. The goal is to ensure sufficient liquidity in the asset portfolio, together with secured external cash sources, to provide for timely

payment of potential cash demands under both normal business conditions and under extreme conditions resulting from unforeseen events over a 12 month horizon.

Liquidity risk is managed through:

- Investment portfolio liquidity The annual SAA process determines the structure of the benchmark that maximises the value of the Company subject to risk tolerance and other constraints. The key output of the SAA process is an investment portfolio benchmark, which takes into account management's risk tolerance, liability cash flows, business plan, peer analysis and regulatory considerations.
- Asset-Liability Management (ALM) Treasury conducts detailed ALM analysis to match the average duration of its liabilities with appropriate assets.
- Special funding clauses The major source of liquidity risk within underwriting contracts is the provision
  of rating triggers, which are common practice. These triggers typically necessitate the cancellation of the
  policy and the return of the cedant's unearned premium in the event of being downgraded below a certain
  rating level, which has the potential to be a material liquidity event when aggregated. There are controls in
  place to ensure that there is appropriate authorisation for the inclusion of a downgrade clause in a contract.

The Treasury department serves as the focal point for liquidity monitoring, drawing on the expertise of other internal functions, as well as managing cash held at bank accounts covering day-to-day cash requirements, typically referred to as operating cash. Operating cash balances, together with cash managed within the investments portfolio, comprise the primary sources of liquidity with the Company.

The state of our liquidity is routinely reported to the Board and monitored as part of the RAF.

#### **Operational Risk**

The Company's risk register details the controls in place that mitigate specific risks. The nature of the controls and the strength of control exercised are based upon the:

- Potential severity of the risk;
- Frequency of the risk occurring;
- · Cost of implementing controls relative to the significance of the risk; and
- Appetite and tolerance for the risk.

#### Purchase of insurance

It is recognised that while the Company may buy insurance with the aim of reducing the monetary impact of certain operational risk events (e.g. physical damage), non-monetary impacts may remain (including impact on the Company's reputation). This is considered in the risk assessment process and risk register.

The risks are monitored and managed through the risk framework and the operational loss event reporting process.

Based on the above factors considered in scenario and stress testing, all operational risks are deemed to be well managed and within risk appetite, as reported via the Risk Dashboard to the Board.

#### C.3. Material risk concentrations

The following narrative describes the process by which the 2018 limits were set. These limits were carried over into 2019 until such time as Divisional limits were approved.

Material concentrations can occur within risk categories and across risk categories. Our limit framework is intended to address both. The limit framework and expected exposures are reviewed during the annual risk budgeting process and tested through our stress testing framework and also through use of the non approved internal model.

In relation to event risk management, we establish net underwriting limits for individual large events as follows:

1. We impose limits for each natural catastrophe peril region at a 1% tail value at risk ("TVaR") probability. This statistic indicates the average amount of net loss expected to be incurred if a loss above the 1% exceedance probability level has occurred.

- 2. For each event type other than natural catastrophes, we impose limits at a 1% exceedance probability. If we were to deploy the full limit, for any given event type, there would be a 1% probability that an event would occur during the next year that would result in a net underwriting loss in excess of the limit.
- 3. We also impose limits for certain other event types at a 0.4% exceedance probability as described in further detail below. If we were to deploy the full limit, for any such given event type, there would be a 0.4% probability that an event would occur during the next year that would result in a net underwriting loss in excess of the limit.

For planning purposes and to calibrate 2018 risk tolerances, we set our underwriting limits as a percentage of September 30, 2017 adjusted tangible capital ("Adjusted Tangible Capital" or "ATC"). Adjusted Tangible Capital is defined as Total Shareholders' Equity plus (i) Goodwill and Other Intangible Assets, less (ii) Accumulated Other Comprehensive Income ("AOCI") (excluding certain net balances associated with Life Funds Withheld Assets), plus (iii) an adjustment for a **portion** of the following year's expected earnings net of expected annual dividends. These limits may be recalibrated, from time to time, to reflect material changes in Total Shareholders' Equity that may occur, at the discretion of management and as overseen by the Board.

Tiered risk tolerances are set for natural catastrophes, terrorism, other realistic disaster scenarios, credit risk, country risk, longevity risk and mortality risk. In setting our risk tolerances, we consider such factors as:

- · Anticipated risk adjusted returns;
- Strategic risk preferences;
- · Relativity to peers;
- Shareholder expectations;
- Robustness of exposure assessment methodology; and
- Projected enterprise loss potential.

Per event 1% TVaR underwriting limits for North Atlantic Windstorm are set at a level not to exceed approximately 25% of ATC. Per event 1% TVaR underwriting limits for North American Earthquake are set at a level not to exceed approximately 20% of ATC. Per event 1% TVaR underwriting limits for all other natural catastrophe peril regions are set below the per event 1% TVaR limits described above.

The largest per event 1% exceedance probability underwriting limit for terrorism and other realistic disaster scenarios is set at a level not to exceed approximately 13.5% of ATC; limits at the per event 1% exceedance probability for the remaining terrorism and realistic disaster scenarios are set below this level.

The largest per event 1% exceedance probability underwriting limit for country risk is set at a level not to exceed approximately 9.5% of ATC.

The largest per event 1% exceedance probability underwriting limit for mortality risk is set at a level not to exceed approximately 6.1% of ATC.

The largest per event 1% exceedance probability underwriting limit for longevity risk is set at a level not to exceed approximately 1.5% of ATC.

The largest per event 0.4% exceedance probability underwriting limit for certain terrorism events is set at a level not to exceed approximately 18% of ATC; limits at the per event 0.4% exceedance probability for the remaining terrorism event scenarios are set below this level.

The largest per event 0.4% exceedance probability underwriting limit for mortality risk is set at a level not to exceed approximately 8.1% of ATC.

The largest per event 0.4% exceedance probability underwriting limit for longevity risk is set at a level not to exceed approximately 2.0% of ATC.

In all instances, the above referenced underwriting limits reflect pre-tax losses net of reinsurance and include inwards and outwards reinstatement premiums related to the specific events being measured. The limits do not contemplate underwriting profits expected to be generated in the absence of catastrophic loss activity.

In setting underwriting limits, we also consider such factors as:

- Correlation of underwriting risk with other risks (e.g., asset/investment risk, operational risk, etc.);
- · Model risk and robustness of data:
- Geographical concentrations;
- Exposures at lower return periods;
- Expected payback period associated with losses;
- Projected share of industry loss; and
- Annual aggregate losses for natural catastrophes at various return periods, including a 1% exceedance probability and a 1% TVaR level on both a peril region basis and a portfolio basis.

Loss exposure estimates for all event risks are derived from a combination of commercially available and internally developed models together with the judgment of management, as overseen by the Board. Actual incurred losses may vary materially from our estimates. Factors that can cause a deviation between estimated and actual incurred losses may include:

- · Inaccurate assumptions of event frequency and severity;
- Inaccurate or incomplete data;
- Changing climate conditions that may add to the unpredictability of frequency and severity of
  natural catastrophes in certain parts of the world and create additional uncertainty as to future
  trends and exposures;
- Future possible increases in property values and the effects of inflation that may increase the severity of catastrophic events to levels above the modeled levels;
- Natural catastrophe models that incorporate and are critically dependent on meteorological, seismological and other earth science assumptions and related statistical relationships that may not be representative of prevailing conditions and risks, and may therefore misstate how particular events actually materialize, causing a material deviation between forecasted and actual damages associated with such events; and
- A change in the legislative, regulatory and judicial climate.

For the above and other reasons, the incidence, timing and severity of catastrophes and other event types are inherently unpredictable and it is difficult to estimate the amount of loss any given occurrence will generate. As a consequence, there is material uncertainty around our ability to measure exposures associated with individual events and combinations of events. This uncertainty can cause actual exposures and losses to deviate from those amounts estimated, which in turn can create a material adverse effect on our financial condition and results of operations and may result in substantial liquidation of investments, possibly at a loss, and outflows of cash as losses are paid. For this reason, we carry capital in addition to that required by the specific limits described above even if it is in excess of rating agency and regulatory required capital.

# C.4. Investment in assets in accordance with the prudent person principles of the Code of Conduct

In line with business objectives, market risk is accepted by the Company and managed with the objective of optimising total return on investments subject to agreed risk constraints and other considerations. Our investments are managed and monitored by XL Group Investments Ltd ("XLGIL") and governed through an investment agreement and guidelines. The RM department oversee adherence to these guidelines.

XLGIL is guided by the "prudent person" principle as specified in paragraph 5.1.2 of the BMA Insurance Code of Conduct, in that the Company only invests in assets and instruments where the risks of which can properly be identified, measured, monitored, managed and controlled. Exposures to counterparty concentrations are managed through defined limits and ratings.

#### C.5. Stress testing and sensitivity analysis to assess material risks

#### **Underwriting Risk**

There is an embedded stress testing framework that is used to understand possible impacts of major risks, including underwriting and reserving risks. These impacts include the earnings, underwriting, investments, liquidity and capital implications of low frequency, high severity events. For underwriting risks the main stress tests approaches used cover natural catastrophe peril exposure results production and RDS production as outlined below.

Test type	Reason performed
Nat Cat reporting	To monitor Nat Cat exposures against risk appetite
RDS reporting	To monitor non-Nat Cat exposures against risk appetite and to assist in the setting of overall risk limits

Natural catastrophe exposure results and RDS exposure results are used to monitor exposure to the defined scenarios and monitor compliance with underwriting risk tolerances and limits. RDS are produced a minimum of twice per year to understand the Company's exposure to defined non-Nat Cat scenarios, which have been designed by experts and cover both short and long tail lines of business and cross class event exposures. The Board is informed of results of stress tests performed via risk dashboards and the CISSA report throughout the year where discussions and challenge include whether the results fall within relevant approved risk tolerances and limits.

We examine a range of extreme events intended to stress our capital position. Considering the 1 in 100 underwriting risk for natural catastrophes, our largest natural catastrophe exposure for the Company relates to a North Atlantic Windstorm. The 1 in 100 exposure is estimated on a per event net occurrence exceedance probability (OEP) basis which is calculated using Risk Management Solutions ("RMS") catastrophe modelling software. The 1 in 100 exposure on a net occurrence exceedance probability (OEP) basis for North Atlantic Windstorm at January 1, 2019 is \$1,117m. Following the loss implied by this event, the Company's Bermuda based solvency ratio (BSCR) remains above 120%.

Following an event derived from the net exposure of the largest RDS scenario for the Company which is estimated using January 1, 2019 inforce exposures, the Company's Bermuda based solvency ratio (BSCR) remains above 120%.

Based on the above factors considered in stress testing the underwriting limits, all underwriting risks at December 31, 2018 are within risk appetite as reported via the risk dashboard and report to the Board.

#### Market Risk

An embedded stress testing framework is used to understand possible impacts of major risks, including market risks. The following stress and scenario tests are used to identify risk exposures:

- Interest rate and spread sensitivities: by re-valuing current portfolio holdings assuming various changes in the level and term structure of interest rates and the level of credit spreads;
- Historical stress tests identified by RM and the Group Investments covering economic, financial and political events and the potential impact to the investment portfolio;
- RDS aggregations; and
- · Ad hoc review of enterprise risk scenarios.

As part of the Stress Testing process, we have developed scenarios based on the results and outcomes that manifested themselves in large historical market events. Should losses be incurred in a magnitude implied by the largest of these simulated historical events at December 31, 2018, the Company's Bermuda based solvency ratio (BSCR) remains in excess of 120%.

The Board are informed of results of stress tests performed throughout the year including whether the results fall within relevant approved risk tolerances and limits set out in the investment guidelines. Based on the above factors considered in scenario and stress testing, all market risks at December 31, 2018 are deemed to be within risk appetites, as reported via the Risk Dashboard and CISSA report to the Board.

#### Credit Risk

There is an embedded stress testing framework that is used to understand possible impacts of major risks, including credit risks. Stress tests and scenario analysis are undertaken to monitor exposure to the defined scenarios that allows monitoring of exposure to credit risks. These scenarios help to understand potential losses to ensure that the Company is prepared to withstand projected losses from these events, including ensuring that there is adequate capital, and liquidity to manage through the event and maintain the Company as a going concern. Based on the factors considered in scenario and stress testing, all credit risks are deemed to be well managed.

The Company's Bermuda based solvency ratio (BSCR) remains above 120% after considering the loss potential implied by the exposure to this scenario at December 31, 2018.

#### Liquidity Risk

There is an embedded stress testing framework that is used to understand possible impacts of major risks, including liquidity risks. A stressed liquidity analysis report is prepared on a quarterly basis by Treasury, which includes the Company's own view of the stressed sources and uses of liquidity.

Further, as of December 31, 2018, our Bermuda based solvency ratio (BSCR) remains above 120% after the stress testing framework is applied.

#### Operational Risk

To support the identification and quantification of operational risks within the business the Company has a stress and scenario testing framework.

The stress testing includes multiple operational risk scenarios which are evaluated over multiple return periods for each scenario.

The operational scenarios are developed from the top risks assessed during the annual risk assessment process on both a gross and net assessment basis. The scenarios have multiple uses including:

- To monitor against tolerances;
- To better understand economic and reputational impact of the identified top operational risk exposures.

#### C.6. Other material information

Effective September 12, 2018, XL Group Ltd completed its previously announced merger with Camelot Holdings Ltd., a wholly owned subsidiary of AXA SA.

Completion of the transaction introduces new risks relating to integration of the two companies. Some of these are expected, others depend on the plan for integration (for example, commonality of systems will influence the complexity of system integration or data migration).

A steering committee of senior colleagues representing both companies has been established to provide governance and oversee integration, which involves a number of workstreams to ensure both integration and ongoing operational activities are effectively managed and maintained.

The XL Group's ability in managing integration activities was strongly demonstrated in the Catlin integration, many of the controls applied in that exercise will be available for application in this one. Together with the experience AXA bring, we expect that integration risks will be substantially mitigated.

### **D. Solvency Valuation**

This section provides particulars of the valuation bases, methods and assumptions on the inputs used to determine solvency.

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

Cash and cash equivalents include money-market funds and fixed interest deposits placed with a maturity of under 90 days when purchased. This also includes restricted cash. Cash and cash equivalents are included in

the Economic Balance Sheet ("EBS") at fair value in line with US GAAP with both changes in fair value and realized gains/losses netted off Statutory Economic Capital and Surplus.

**Quoted Investments** are recorded at fair value in line with US GAAP with both changes in fair value and realized gains/losses netted off Statutory Economic Capital and Surplus.

**Unquoted investments** are recorded at fair value in line with US GAAP with both changes in fair value and realized gains/losses netted off Statutory Economic Capital and Surplus. In cases where the GAAP principles do not require fair value, the Company values the unquoted investment using the EBS valuation hierarchy.

The key reason for the difference between EBS and US GAAP for investments is due to certain investments in the US GAAP balance sheet are held at amortized cost. Under EBS all of these investments are required to be held at fair value.

The majority of our investments are fixed income securities, the valuation of which is classified as Level 2 (quoted prices for similar assets) as they are not considered to be traded in an active market. With an active market financial instruments should be traded multiple times per day. This cannot be asserted for our fixed income securities as they do not necessarily trade every day. A small amount of investments are measured at Level 3 (Mark to model).

The fair values for investments are generally sourced from third parties. The fair values of fixed income securities are based upon quoted market values where available, "evaluated bid" prices provided by third party pricing services ("pricing services") where quoted market values are not available, or by reference to broker or underwriter bid indications where pricing services do not provide coverage for a particular security.

To the extent the Company believes current trading conditions represent distressed transactions, the Company may elect to utilize internally generated models. The pricing services use market approaches to valuations using primarily Level 2 inputs in the vast majority of valuations, or some form of discounted cash flow analysis, to obtain investment values for a small percentage of fixed income securities for which they provide a price. Pricing services indicate that they will only produce an estimate of fair value if there is objectively verifiable information available to produce a valuation.

Standard inputs to the valuations provided by the pricing services listed in approximate order of priority for use when available include: reported trades, benchmark yields, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data. The pricing services may prioritize inputs differently on any given day for any security, and not all inputs listed are available for use in the evaluation process on any given day for each security evaluation; however, the pricing services also monitor market indicators, customer feedback through a price challenge process and industry and economic events. Information of this nature is a trigger to acquire further corroborating market data. When these inputs are not available, they identify "buckets" of similar securities (allocated by asset class types, sectors, sub-sectors, contractual cash flows/structure, and credit rating characteristics) and apply some form of matrix or other modelled pricing to determine an appropriate security value which represents their best estimate as to what a buyer in the marketplace would pay for a security in a current sale.

While the Company receives values for the majority of the investment securities it holds from pricing services, it is ultimately management's responsibility to determine whether the values received and recorded in the financial statements are representative of appropriate fair value measurements. It is common industry practice to utilize pricing services as a source for determining the fair values of investments where the pricing services are able to obtain sufficient market corroborating information to allow them to produce a valuation at a reporting date. In addition, in the majority of cases, although a value may be obtained from a particular pricing service for a security or class of similar securities, these values are corroborated against values provided by other pricing services.

Broker/dealer quotations are used to value fixed maturities where prices are unavailable from pricing services due to factors specific to the security such as limited liquidity, lack of current transactions, or trades only taking place in privately negotiated transactions. These are considered Level 3 valuations, as significant inputs utilized by brokers may be difficult to corroborate with observable market data, or sufficient information regarding the specific inputs utilized by the broker was not available to support a Level 2 classification. See below for further discussions on Level 3 valuations.

Short-term investments include investments due to mature within one year from the date of purchase and are valued using the same external factors and in the same manner as fixed income securities. Equity securities include investments in open end mutual funds and shares of publicly traded alternative funds. The fair value of equity securities is based upon quoted market values (Level 1), or monthly net asset value statements provided by the investment managers upon which subscriptions and redemptions can be executed (Level 2).

**Investments in and Advances to Affiliates**. The Company consolidates holdings in affiliates where it is deemed to have control under its US GAAP principles.

Investments in related affiliates where the Company does not hold a majority equity interest but has the ability to exercise significant influence over operating and financial matters are valued with the equity method and to arrive at an EBS valuation, deductions including goodwill and other intangible assets are made. Holdings where the Company has neither control nor significant influence are treated as quoted / unquoted investments as described above.

Advances to affiliates are recorded at fair value in line with US GAAP. Amounts receivable or payable on account of policies of insurance or reinsurance with affiliates are not included in this line. Such amounts are included in accounts and premiums receivables line and reinsurance payable respectively. Funds held by ceding reinsurers which are affiliates and funds held under reinsurance contracts with affiliates are also not included.

In the EBS the goodwill and intangible asset element of the participation valuation is eliminated, in accordance with the reasons given above. Each period end the performance of all affiliate investments are reviewed and our share of the company's change in equity is recorded each period based the financial information received directly from the affiliate. We also receive their audited financial statements when available. This valuation adjustment was \$131.0m at December 31, 2018.

When financial statements of the affiliate are not available on a timely basis to record the Company's share of income or loss for the same reporting periods as the Company, the most recently available financial statements are used. This lag in reporting is applied consistently. The Company generally records its alternative and private investment fund affiliates on a one-month and three-month lag, respectively, and its operating affiliates on a three-month lag. Significant influence is generally deemed to exist where the Company has an investment of 20% or more in the common stock of a corporation or an investment of 3% or more in closed end funds, limited partnerships, LLCs or similar investment vehicles. Significant influence is considered for other strategic investments on a case-by-case basis. Investments in participations are not subject to fair value measurement guidance as they are not considered to be fair value measured investments under GAAP or EBS. However, impairments associated with investments in affiliates that are deemed to be other-than-temporary are calculated in accordance with fair value measurement guidance and appropriate disclosures included within the financial statements during the period the losses are recorded.

**Real Estate** includes land and properties owned, and occupied by the Company and is recorded at cost less any accumulated depreciation and impairment loss under US GAAP. This is deemed to be materially equivalent to fair value and is used as a proxy for fair value under EBS.

**Investment Income Due and Accrued** is recorded at fair value in line with US GAAP. Balances due in more than one year have not been discounted as this is not considered to be material.

**Accounts and premium receivable** are recorded at fair value in line with US GAAP. Premiums due but not yet received are included on this line while premiums not yet due are be included as part of premium provisions. Balances due in more than one year have not been discounted as this is not considered to be material.

**Reinsurance balances receivable** are recorded at fair value in line with US GAAP. Losses and loss expenses recoverable are included on line 17of the Company's EBS. Balances due in more than one year have not been discounted as this is not considered to be material.

Funds held by ceding reinsurers (whether affiliate or not) are recorded at fair value in line with US GAAP.

**Deferred acquisition costs ("DAC")** are costs relating to the acquisition of new business for insurance contracts. Under US GAAP these costs are deferred to the extent that they are expected to be recovered out of future margins in revenues on these contracts. DAC are implicitly included in the premium provisions valuation and not reflected as an asset in the EBS.

**Sundry Assets** Any asset not accounted for in lines 1 to 12 and 14 of the Company's EBS is included here if it has a readily realizable value. Any other assets, prepaid and deferred expenses, goodwill and similar intangible assets shall be non- admitted assets.

Derivative instruments are recorded at fair value in line with US GAAP with both changes in fair value and realized gains/losses netted off Statutory Economic Capital and Surplus. The difference between GAAP and EBS relates to a Life contract that is classed as a derivative under US GAAP, but included within Life technical provisions ("TPs") under Solvency II and for BMA filings. There is an equal and opposite adjustment to derivative liabilities and therefore the net impact on Own Funds is nil.

Derivative contracts can be exchange-traded or over-the-counter ("OTC"). Exchange-traded derivatives (futures and options) typically fall within Level 1 of the fair value hierarchy depending on whether they are deemed to be actively traded or not. OTC derivatives are valued using market transactions and other market evidence whenever possible, including market-based inputs to models, model calibration to market clearing transactions, broker or dealer quotations or alternative pricing sources where an understanding of the inputs utilized in arriving at the valuations is obtained. Where models are used, the selection of a particular model to value an OTC derivative depends upon the contractual terms and specific risks inherent in the instrument as

well as the availability of pricing information in the market. The Company generally uses similar models to value similar instruments. Valuation models require a variety of inputs, including contractual terms, market prices, yield curves, credit curves, measures of volatility, prepayment rates and correlations of such inputs. For OTC derivatives that trade in liquid markets, such as generic forwards, interest rate swaps and options, model inputs can generally be verified and model selection does not involve significant management judgment. Such instruments comprise the majority of derivatives held by the Company and are typically classified within Level 2 of the fair value hierarchy.

Certain OTC derivatives trade in less liquid markets with limited pricing information, or required model inputs which are not directly market corroborated, which causes the determination of fair value for these derivatives to be inherently more subjective. Accordingly, such derivatives are classified within Level 3 of the fair value hierarchy. The valuations of less standard or liquid OTC derivatives are typically based on Level 1 and/or Level 2 inputs that can be observed in the market, as well as unobservable Level 3 inputs. Level 1 and Level 2 inputs are regularly updated to reflect observable market changes.

Level 3 inputs are only changed when corroborated by evidence such as similar market transactions, pricing services and/or broker or dealer quotations. The Company conducts its non-hedging derivatives activities in three main areas: investment related derivatives, credit derivatives and other non-investment related derivatives.

The Company uses derivative instruments, primarily interest rate swaps, to manage the interest rate exposure associated with certain assets and liabilities. These derivatives are recorded at fair value. On the date the derivative contract is entered into, the Company may designate the derivative as: a hedge of the fair value of a recognized asset or liability ("fair value" hedge); a hedge of the variability in cash flows of a forecasted transaction or of amounts to be received or paid related to a recognized asset or liability ("cash flow" hedge); or a hedge of a net investment in a foreign operation; or the Company may not designate any hedging relationship for a derivative contract.

All other assets categorized under sundry assets are recorded at fair value in line with US GAAP.

**Deferred tax assets and liabilities** are recognized in relation to all assets and liabilities that are recognized for solvency or tax purposes in conformity with US GAAP principles adopted by the insurer. Notwithstanding above, the Company values deferred taxes, other than deferred tax assets arising from the carry-forward of unused tax credits and the carry-forward of unused tax losses, on the basis of the difference between the values ascribed to assets and liabilities recognized and valued in accordance with the requirements of the Economic Balance Sheet and the values ascribed to assets and liabilities as recognized and valued for tax purposes.

A positive value is only ascribed to deferred tax assets where it is probable that future taxable profit will be available against which the deferred tax asset can be utilized, taking into account any legal or regulatory requirements on the time limits relating to the carry-forward of unused tax losses or the carry-forward of unused tax credits.

**Intangible assets** Intangible assets are assets other than financial assets that lack physical substance. Goodwill is valued at nil in the EBS. The Company's indefinite lived intangible assets consist primarily of acquired insurance and reinsurance licenses. These do not meet the definition of intangible assets under EBS and therefore eliminated. Other intangible assets are carried at their fair value where all of the following conditions are met:

- they can be sold separately
- the expected future economic benefits will flow to the company
- the value of the assets can be reliably measured.
- there is evidence of exchange transactions for the same or similar assets indicating that they are saleable in the market place.

The Lloyd's capacity asset of \$480m at December 31 2018, meets all of the above criteria and as such is recognized on the EBS.

# D.2. Valuation bases, assumptions and methods used to derive the value of technical provisions

### **D.2.1 Valuation Bases, Assumptions and Methods to Derive the Value of Technical Provisions**

Technical Provisions are valued based on best estimate cash flows, adjusted to reflect the time value of money using risk-free discount rate term structures with appropriate illiquidity adjustments. In addition, there is a risk margin to reflect the uncertainty inherent in the underlying cash flows which is calculated using the cost of capital approach and risk-free discount rate term structures. The discount rate term structures are prescribed by the Bermuda Monetary Authority for each reporting period.

The best estimate for the claims provision is calculated by using Generally Accepted Accounting Principles (GAAP) reserves as the starting point and then performing a series of adjustments:

- Unwinding of discounting permissible under GAAP (e.g. Periodic Payment Orders and Workers' Compensation);
- Incorporation of expected reinsurance counterparty defaults (bad debt);
- Incorporation or the identification of events not in data (ENID) as appropriate;
- · Other adjustments related to the consideration of investment and operating expenses, etc.; and
- Discounting credit.

The best estimate for the premium provision is calculated by using the gross unearned premium reserve on a GAAP basis, and then performing a series of adjustments:

- Gross and ceded premiums on already obliged but yet to incept business;
- Applying expected future gross loss ratios;
- · Reinsurance recoveries (less bad debt);
- Future Losses Occurring During ("LOD") reinsurance cost covering existing incepted policies;
- Incorporation or the identification of events not in data (ENID) as appropriate;
- Future premiums (payables and receivables);
- · Other adjustments related to the consideration of investment and operating expenses, etc.;
- · Adjustments for lapses as appropriate;
- Discounting credit.

In the valuation of the non-life (re)insurance obligations within the technical provisions, the Group has used the BMA prescribed risk-free discount rate curves by currency. For the life insurance obligations, the Group has used the BMA "standard approach" to illiquidity premium adjustment to the risk-free discount rate curve, also by currency.

At December 31, 2018 and 2017, the total net Technical Provisions amounted to \$24.9 billion and \$25.2 billion, respectively, comprising the following (reported in USD thousand units):

As at December 31, 2018:

(U.S. dollars in thousands)	Non-Life	Life	Total
Claims Provision	22,661,562	233,423	22,894,985
Premium Provision	276,689	0	276,689
Risk Margin	1,751,105	5,355	1,756,460
Total Technical Provisions	24,689,356	238,778	24,928,134

(U.S. dollars in thousands)	Non-Life	Life Total	
Claims Provision	22,365,880	234,690	22,600,570
Premium Provision	900,037	0	900,037
Risk Margin	1,725,407	5,886	1,731,293
Total Technical Provisions	24,991,324	240,576	25,231,900

#### D.2.2 Uncertainty/limitations Associated with the Value of the Technical Provisions

There is an inherent uncertainty in the estimates as there is in any estimate of claim reserves. We expect that actual future losses will not develop exactly as projected and may potentially vary significantly from our projections as actuarial indications are subject to uncertainty from various sources, including but not limited to changes in claim reporting patterns, claim settlement patterns, judicial decisions, legislation, and general economic conditions. This uncertainty stems from several factors including lack of historical data, uncertainty with regard to claim costs, coverage interpretations and the judicial, statutory and regulatory provisions under which the claims may be ultimately resolved. Further, our projections make no provisions for extraordinary future emergence of new classes of losses or types of losses not sufficiently represented in the historical data or that are not yet quantifiable.

### D.3. Description of recoverables from reinsurance contracts

The reinsurance recoverables for the claims provisions are sourced directly from the GAAP submissions.

Recoverables from reinsurance contracts are based on principles similar to the gross best estimate and include reinstatement premiums required to be paid to the reinsurer, and expenses in relation to the management and administration of reinsurance claims.

The balance is adjusted for counterparty credit rating based on rating agency and default statistics.

For Life business, reinsurance recoverables are calculated using the same principles as those used to calculate the gross reserves.

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

**Insurance and reinsurance balances payable** are measured at amortized cost under US GAAP and are not discounted. There is no difference under the EBS as undiscounted amortized cost is deemed a reasonable proxy for fair value, given the short term nature of these liabilities. Reinsurance payables have been transferred to technical provisions under EBS and therefore there is no impact on capital for this adjustment (apart from an immaterial amount due to the discounting of reinsurance premium payables within technical provisions).

**Deposit Liabilities** Contracts entered into by the Company that are not deemed to transfer significant underwriting and/or timing risk are accounted for as deposits, whereby liabilities are initially recorded at an amount equal to the assets received. Deposit liabilities are measured at fair value less an adjustment for own credit risk. The Company determined the estimated fair value of the deposit liabilities by assuming a discount rate equal to the appropriate U.S. Treasury rate plus 50.0 basis points.

The Company uses a portfolio rate of return of equivalent duration to the liabilities in determining risk transfer. An initial accretion rate is established based on actuarial estimates whereby the deposit liability is increased to the estimated amount payable over the term of the contract. The deposit accretion rate is the rate of return required to fund expected future payment obligations (this is equivalent to the "best estimate" of future cash flows), which are determined actuarially based upon the nature of the underlying indemnifiable losses. Accretion of the liability is recorded as interest expense. The Company periodically reassesses the estimated ultimate liability. Any changes to this liability are reflected as adjustments to interest expense to reflect the cumulative effect of the period the contract has been in force, and by an adjustment to the future accretion rate of the liability over the remaining estimated contract term.

**Pension benefit obligations** Under both US GAAP and EBS the pension benefit obligations are measured as the excess of the projected benefit obligation over the plan assets. This is considered a reasonable proxy for fair value, particularly given the immateriality of the liability (just 0.1% of total EBS liabilities).

**Derivative liabilities** are measured at fair value under both US GAAP and EBS. The difference between GAAP and EBS relates to a Life contract that is classed as a derivative under US GAAP, but included within Life TPs under EBS. There is an equal and opposite adjustment to derivative assets and therefore the net impact on capital is nil.

**Payables (trade, not insurance)** are held are held at amortized cost under both US GAAP and EBS given that this is deemed a reasonable proxy for fair value given the short term nature of this liability.

**Contingent liabilities** are recognised as liabilities in the EBS and valued based on the expected present value of future cash-flows required to settle the contingent liability over the lifetime of that contingent liability, using the basic risk-free interest rate.

Where the present value of the contingent liability cannot be determined because the timing of likely scenarios cannot be reliably estimated, the amount of the liability should be recorded at its undiscounted value. In coming up with the expected values we take into account both a profit element and risk premium required by market participants. For cases in which the contingent liability has asymmetrical outcomes, the valuation of the contingent liability accounts for a range of possible outcomes. This may be accomplished through option pricing models or models that consider multiple outcomes.

**Contractual Liabilities Other Than Technical Provisions** All contractual liabilities are recognised on the EBS. Contractual liabilities are valued consistent with GAAP. In cases where the GAAP principles do not require fair value, we value the contractual liabilities using the EBS valuation hierarchy.

Where the Authority has issued a direction under sections 6C or 56 of the Insurance Act to effectively allow an Insurer to treat a contractual liability as capital in its Statutory Financial Returns, rather than as a liability as GAAP would dictate, then a similar treatment may be adopted for the EBS.

**Current tax liabilities or assets** are measured at the amount expected to be paid to or recovered from the taxation authorities, using the tax rates that have been enacted or substantively enacted by the end of the reporting period.

**Funds Held Under Reinsurance ("RI") Contracts** Funds withheld liability net of RI recoveries related to the retrocession of the majority of the Group's Life business. Further information on this arrangement is found in the Future Policy Benefit Reserves note in the Company's US GAAP financial statements for the year ended December 31, 2018. The reason for the valuation difference is that the RI recovery related to the retrocession contract is higher under EBS compared to US GAAP (and therefore the net funds withheld liability is lower under EBS).

#### D.5. Other material information

For the year ended December 31, 2018, there is no other material information regarding solvency valuation required to be disclosed for purposes of this Financial Condition Report.

### E. Capital Management

This section provides particulars regarding an assessment of capital needs and regulatory capital requirements.

### E.1. Eligible Capital

# **E.1.1.** Capital management policy and process for capital needs, how capital is managed and material changes during the period

The Company has an overarching Capital Management process to ensure an appropriate level and form of capital. Thereby, the Company's capital position is benchmarked against its projected risk exposures to ensure that it is adequate to support planned business operations as well as certain stressed loss events. The form of the capital is designed to provide a balance between security, flexibility and liquidity.

Inaddition, the Company ensures that it meets the appropriate levels/standards as defined under the Insurance Act using the economic balance sheet framework to derive the Company's statutory economic capital and surplus, its enhanced capital requirement and its target capital levels as defined therein. There are appropriate levels of oversight from the Board, Risk and Compliance, Finance and Group Treasury to ensure appropriate capital levels are managed and maintained.

#### E.1.2. Eligible capital categorised by tiers in accordance with the Eligible Capital Rules

(U.S. dollars in thousands)	
Tier 1	9,387,628
Tier 2	265,305
Tier 3	-
Total	9,652,933

The Tier 1 capital comprises fully paid common shares and the contributed surplus or share premium thereon. The Tier 2 capital is the difference between encumbered assets for policyholder obligations and policyholder obligations deducted from Tier 1.

# E.1.3. Eligible capital categorised by tiers in accordance with the Eligible Capital Rules used to meet the Enhanced Capital Requirement (ECR) and the Minimum Margin of Solvency (MSM) requirements of the Insurance Act

(U.S. dollars in thousands)	Limits	MSM	ECR	Minimum Margin of Solvency	Enhanced Capital Requirement
Tier 1	Min	80%	60%	9,387,628	9,387,628
Tier 2	Max	25%	66.67%	265,305	265,305
Tier 3	Max		17.65%	-	-
Total				9,652,933	9,652,933

#### E.1.4. Confirmation of eligible capital that is subject to transitional arrangements

None

# **E.1.5.** Identification of any factors affecting encumbrances affecting the availability and transferability of capital to meet the ECR

The capital needed to meet the ECR is available and transferable.

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

None

# **E.1.7.** Identification of differences in shareholders' equity as stated in the financial statements versus the available statutory capital and surplus

The starting point to determine available statutory capital and surplus is to prepare the Company balance sheet on an Economic Balance Sheet ("EBS") basis. The EBS balance sheet is derived from the US GAAP balance sheet by making adjustments to reflect the EBS basis of assets and liabilities. This EBS then provides the available capital and surplus which is then categorized into the three ECR tiers. There are restrictions on the amount of Tier 2 and Tier 3 capital which can be used to meet the ECR, as well as the minimum solvency margin ("MSM").

The differences between net assets of the Company in the financial statements and the solvency valuation of the excess of the assets over liabilities is set out below. The adjustments are documented in Section D covering valuation of assets and liabilities.

US GAAP Consolidated Total Shareholders' Equity	\$11,635,711
Less: Goodwill & Intangible assets	(1,381,411)
Less: Adjustments for Technical provision and Risk Margin under EBS rules	1,611,601
Less: Adjustment for DAC	(1,129,242)
Less: Other net adjustments	(1,083,726)
Statutory Consolidated Total Shareholder's Equity	\$9,652,933

### **E.2. Regulatory Capital Requirements**

#### E.2.1. ECR and MSM at the end of the reporting period

The Company's Minimum Margin of Solvency and Enhanced Capital Requirements as at December 31, 2018 are as follows:

	Amount	Ratio
Minimum Margin of Solvency	1,837,154	525%
Enhanced Capital Requirement	6,107,299	158%

#### E.2.2. Identification of any non-compliance with the MSM and the ECR

The Company has met both the MSM and ECR requirements during the year.

# **E.2.3.** A description of the amount and circumstances surrounding the non-compliance, the remedial measures and their effectiveness

Not Applicable

# **E.2.4.** Where the non-compliance is not resolved, a description of the amount of the non-compliance

Not applicable

### E.3. Approved Internal Capital Model

Not applicable

# **E.3.1.** 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 the integration with the BSCR Model

Not applicable

#### E.3.3. Description of methods used in the internal model to calculate the ECR

Not applicable

#### E.3.4. Description of aggregation methodologies and diversification effects

Not applicable

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

# **E.4.** Description of the nature and suitability of the data used in the internal model

Not applicable

#### E.5. Other material information

For the year ended December 31, 2018, there is no other material information regarding capital management required to be disclosed for purposes of this Financial Condition Report.

### F. Subsequent Events

For the year ended December 31, 2018, there is no other material information regarding Governance Structure required to be disclosed for purposes of this Financial Condition Report.

Effective September 12, 2018, XL Group Ltd completed its previously announced merger with Camelot Holdings Ltd., a wholly owned subsidiary of AXA SA.

Completion of the transaction introduces new risks relating to integration of the two companies. Some of these are expected, others depend on the plan for integration (for example, commonality of systems will influence the complexity of system integration or data migration).

A steering committee of senior colleagues representing both companies has been established to provide governance and oversee integration, which involves a number of workstreams to ensure both integration and ongoing operational activities are effectively managed and maintained.

The XL Group's ability in managing integration activities was strongly demonstrated in the Catlin integration, many of the controls applied in that exercise will be available for application in this one. Together with the experience AXA bring, we expect that integration risks will be substantially mitigated.

Appendix 01: AXA XL Structure Chart 2018 Q4

**Appendix 02:** XL Bermuda Ltd US GAAP Consolidated Audited Financial Statements 31 December 2018