

# XL Bermuda Ltd Financial Condition Report ("FCR")

31 December 2017

forming part of the annual regulatory reporting package submitted to the Bermuda Monetary Authority ("BMA") by 31 May 2018

## **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.

Patrick Tannock

Chief Executive Officer

24 May 2018

Fielding Norton

Chief Risk Officer

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24 May 2018

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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

## A.2. Supervisors

	Insurance Supervisor	Group Supervisor
Name:	Bermuda Monetary Authority, BMA House, 43 Victoria Street, Hamilton HM 12 Bermuda	Bermuda Monetary Authority, BMA House, 43 Victoria Street, Hamilton HM 12 Bermuda
Jurisdiction:	Bermuda	Bermuda
Email Address:	insuranceinfo@bma.bm	insuranceinfo@bma.bm
Phone Number:	441-295-5278	441-295-5278

# A.3. Approved auditor

Organisation:	PricewaterhouseCoopers 4th Floor, 16 Church Street, Hamilton, HM11 Bermuda
Name:	Damian Cooper
Jurisdiction:	Bermuda
Email Address:	damian.cooper@bm.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 – XL Group Ltd Structure Chart 2017 Q4

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

The following tables summarize the Company's gross premium written and net premiums written by line of business for the years ended December 31, 2017 and 2016:

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

(U.S. dollars in thousands)

	Insurance	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 Corporate and Other:	10,070,463	4,682,110		14,752,573
Run-Off Life Operations - Annuity			107,230	107,230
Run-Off Life Operations - Other Life			127,048	127,048
<b>Total Corporate and Other</b>			234,278	234,278
Total	\$ 10,070,463 \$	4,682,110	\$ 234,278 \$	14,986,851

#### **2016 GROSS PREMIUMS WRITTEN**

(U.S. dollars in thousands)

	Insurance	Reinsurance	Corporate and Other (Note 1)	Total
P&C Operations:				
Professional	\$ 1,947,818 \$	138,830	\$	2,086,648
Casualty	2,911,430	718,080		3,629,510
Property catastrophe	_	989,083		989,083
Property	2,424,846	1,132,779		3,557,625
Specialty	2,356,173	210,531		2,566,704
Other (Note 2)	 10,236	785,803		796,039
Total P&C operations Corporate and Other:	 9,650,503	3,975,106		13,625,609
Run-Off Life Operations - Annuity			119,990	119,990
Run-Off Life Operations - Other Life			145,325	145,325
<b>Total Corporate and Other</b>			265,315	265,315
Total	\$ 9,650,503 \$	3,975,106 \$	265,315 \$	13,890,924

#### 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 Corporate and Other: Run-Off Life Operations - Annuity	6,704,548	3,963,876		10,668,424
Run-Off Life Operations - Other Life			12,334	12,334
<b>Total Corporate and Other</b>			12,334	12,334
Total	\$ 6,704,548 \$	3,963,876	\$ 12,334 \$	10,680,758

#### 2016 NET PREMIUMS WRITTEN

(U.S. dollars in thousands)

(U.S. aouars in inousanas)	Insurance		Reinsurance	Corporate and Other (Note 1)	Total
P&C Operations:					
Professional	\$ 1,352,001	\$\$	137,287		\$ 1,489,288
Casualty	1,891,422		678,133		2,569,555
Property catastrophe	_		756,837		756,837
Property	1,671,812		995,090		2,666,902
Specialty	1,793,148		188,350		1,981,498
Other (Note 2)	 7,586		758,970		766,556
Total P&C operations Corporate and Other: Run-Off Life Operations - Annuity	6,715,969		3,514,667	_	10,230,636
Run-Off Life Operations - Other Life				12,047	12,047
<b>Total Corporate and Other</b>				12,047	12,047
Total	\$ 6,715,969	\$\$	3,514,667	\$ 12,047	\$ 10,242,683

#### Notes:

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

<sup>2.</sup> Other within the Insurance segment includes: surety, structured indemnity and certain other discontinued lines. Other within the Reinsurance segment includes: whole account contracts, credit and surety, accident and health 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, 2017 and 2016:

(U.S. dollars in thousands)		2017	2016
<b>P&amp;C Operations:</b>			
	Bermuda	\$ 1,708,516	\$ 1,267,613
	United States	3,402,417	3,575,969
	Europe	4,805,988	4,778,299
	Other	751,503	608,755
	<b>Total P&amp;C Operations</b>	\$10,668,424	\$10,230,636
Corporate and Other:			
	Bermuda	\$ 11,801	\$12,194
	Europe	533	(147)
	<b>Total Corporate and Other</b>	\$ 12,334	\$ 12,047

# 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, 2017 and 2016:

		Market Value	Performa	nce	Market Value	Performa	nce
	(U.S. dollars in thousands)	2017	Year ended Dec 31, 2017		2016	Year ended Dec 31, 2016	
(1)	U.S. Government		%			%	
(1)		¢ 4 242 102	0.02	0/	# 2 00 C 7 C1	0.21	0/
	(a) U.S. Government Federal	\$ 4,243,193	0.93	%	\$ 2,896,761	0.31	%
	(b) U.S. Government Agency - mortgage-backed securities	4,548,437	2.86	%	3,948,142	1.51	%
	(c) U.S. Government Agency - other	710,179	1.56	%	926,305	0.27	%
(2)	Non-U.S. Government	6,385,342	2.48	%	6,212,596	0.66	%
(3)	States, Municipalities, and Political Subdivision	2,064,671	3.66	%	2,478,589	2.82	%
(4)	Corporate Securities						
	(a) U.S. Government-backed Corporate	-	-		-	-	
	(b) Non-U.S. Government-backed Corporate	-	-		-	-	
	(c) FDIC Guaranteed Corporate	-	-		-	-	
	(d) Other Corporate	12,542,641	3.61	%	12,552,693	1.63	%
(5)	Asset-backed Securities	1,712,346	5.23	%	1,795,611	0.56	%
(6)	Mortgage-backed Securities						
	(a) Residential Subprime	17,622	13.51	%	180,506	3.43	%
	(b) Residential Non-subprime	80,881	15.36	%	115,627	3.43	%
	(c) Commercial	1,198,771	4.13	%	764,063	1.4	%
(7)	Mutual Funds	-	-		-	-	
(8)	Bank Loans	-	-		-	-	
(9)	Catastrophe Bonds and Insurance-Linked Securities	32,799	-		-	-	
(10)	Others (NICO Promissory Notes - 5.24% and Lloyd's Overseas Deposits - 2.07%)	_	-	%	645,037	2.1	%
	TOTAL PORTFOLIO	\$ 33,536,882		_	\$ 32,515,930		

#### 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, 2017 and 2016, the Company realized a P&C combined ratio of 108.3% and 94.2%, which includes natural catastrophe pre-tax losses net of reinsurance and reinstatement premiums ("Nat Cats") of \$2,014.8 million and \$636.3 million or 19.6 and 6.6 loss ratio points, respectively.

The Company also realized favourable prior year development ("PYD") on losses of \$147.8 million and \$301.5 million during the years ended December 31, 2017 and 2016, respectively. The combined ratio excluding the impact of the Nat Cats and PYD was 90.2% and 90.7% for the years ended December 31, 2017 and 2016, respectively.

(U.S. dollars in thousands)	2017	2016
Expense Type		
Net losses and loss expenses incurred - P&C operations	\$ 8,001,920	\$ 6,072,835
Claims and policy benefits - run-off Life operations	39,189	28,244
Acquisition costs	1,788,140	1,620,671
Operating expenses	1,689,570	1,961,366
Other	75,504	53,887
	\$ 11.594.323	\$ 9.737.003

#### A.8. Other material information

XL Group Ltd., the parent of the Company, has entered into a definitive agreement and plan of merger with AXA SA dated March 5, 2018, under which AXA would acquire 100% of XL's common shares. Please see Section C.6 for additional details of this proposed merger agreement

For the year ended December 31, 2017, 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

#### i. 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, 2017, consisted of the following nine executive directors each of whom is a senior executive of either the Company or XL Group Ltd ("XL", "XL Group", or "Group").

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

<sup>\*</sup>Note: Jonathan Gale was appointed as a director of the Company on January 10, 2017.

#### **Senior Executives**

The Company's senior executives assist 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		
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		
Christopher Brough - Assistant General Counsel Corporate and Alternative Capital, Bermuda		
Lisa Robinson - HR Business Partner, Bermuda, Bermuda Reinsurance & Global Reinsurance Operations		

\*Note: As of January 1, 2017 Charles Cooper ceased to be Chief Executive, Reinsurance and was appointed Chief Executive, (worldwide) Reinsurance and Jonathan Gale was appointed Chief Executive, (Bermuda) Reinsurance.

#### **B.1.2.** Remuneration policy

#### **Director Compensation**

The directors are not separately compensated for their Board roles.

#### **Executive Compensation**

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:

- Ensure alignment with shareholder interests and reward executives for enhancing long-term shareholder value
- 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

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, and is designed to avoid conflicts of interest while appropriately balancing risk and reward. Remuneration for Company executives is comprised generally of three components:

- **Fixed Remuneration** We consider 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 Annual Incentive Annual incentive awards motivate executives to achieve specified performance goals that are established and approved by the Management Development Compensation Committee ("MDCC") of the XL Group Board (or the Board in the case of the Company's CEO) at the beginning of each year and that are aligned with the Company's strategy and operating plan as approved by the Board. Enterprise and business segment performance goals are measured quantitatively and represent 70% of the individual's target annual incentive opportunity. Individual qualitative goals represent 30% of the individual's target annual incentive opportunity. In reviewing executives' performance against the qualitative and quantitative goals, the MDCC applies informed discretion, which includes review of a number of relative and absolute performance criteria, to determine if an upward or downward adjustment to an individual executive's payout is warranted. This measurable, but nonformulaic assessment helps to ensure individual executive payouts reflect relative performance and performance against other measures that may not be reflected through the quantitative and qualitative performance goals.
- 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 our most senior leaders, shares in XL Group awarded under our long-term incentive program are subject to mandatory holding periods

and minimum ownership requirements. Individual awards under the Company's long-term incentive plans are also capped.

XL Group believes that it is important to review its incentive programs to ensure that the programs are operating as intended, have appropriate oversight, and motivate desired colleague behaviors. At the request of the MDCC management annually evaluates our significant incentive compensation programs to determine whether they are designed and operate in a prudent manner. Management's evaluation process is a rigorous subset of the Company's overall enterprise risk management process overseen by our Board. This includes reviews by the Operational Risk and Anti-Fraud Sub-Committees of the Group's management Enterprise Risk Committee. In addition, significant compensation programs remain subject to our internal control over financial reporting and our underwriting, claims and actuarial guidelines and processes. The accuracy and timing of incentive arrangement payouts also are monitored and reviewed by internal and external audit functions.

Management's annual evaluation considers whether the programs reviewed:

- Encompass a formal, consistent design and approval process from administrative, oversight, structural and design perspectives
- Provide for accurate and timely payout and ongoing monitoring and oversight
- To the extent a program utilizes them, that performance metrics are consistent with our risk profile and motivate appropriate risk-taking behaviors

For 2017, the MDCC reviewed management's evaluation and determined that the inherent risks of the programs are appropriately mitigated in several ways:

- Programs generally have multiple performance measures and/or vesting provisions that require executives to take into account both short and long-term interests
- · Share ownership guidelines require executives to hold equity grants for specified periods of time
- Both equity and cash-based incentive awards are subject to claw back
- MDCC discretion in determining the amounts of annual or other incentive payments or awards mitigates the risk that a formulaic calculation based on pre-established performance metrics could result in payouts that are not aligned with the creation of shareholder value and our overall financial performance

#### 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

Other than dividends paid to the Company's shareholder during 2017, 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

XL Group recognises that the legal entities within XL Group that engage in (re)insurance business, such as XLB, 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 XL Group'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 Corporate Officers & Directors Assurance ("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 Chief Financial Officer, Insurance of the Company and has over 17 years of experience in the (Re)insurance industries working in senior financial roles for Odyssey Re and XL. Prior to this he had over 11 years at PricewaterhouseCoopers Bermuda, which included audits of 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 XL Group Ltd's Head of Reinsurance Finance and has 19 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 9 years with Group. Prior to joining 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: As of 1 January 2017, Mr. Cooper became Chief Executive of XL's worldwide Reinsurance Operations and joined the Group's Leadership Team and has 17 years of experience in the reinsurance industry. He is also part of XL Group's Managing Director leadership team. During his employment with 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 XL Group Ltd.'s Head of P&C Finance and Group Planning and a part of XL Group's Managing Director team. He has over 18 years of experience in the (re)insurance industry including 14 years with XL. Prior to his current role he was Chief Financial Officer of XL Group's Reinsurance Segment. Derrick has also held a number of other senior Finance, Underwriting and Investment roles within XL. Before joining 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: Ms. Hayward is 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 XL. Ms. Hayward is also a part of XL Group's Managing Director team. Prior to joining 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 XL in 2010 as Deputy Chief Enterprise Risk Officer and is a part of XL's Managing Director team. Prior to joining 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. In January 2018, Mr. Norton became the Group Chief Enterprise Risk Officer ("CERO").
- Matthew Irvine: Mr. Irvine has been at XL for the last 17 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 XL Group's Managing Director team. Mr. Berry joined XL in 1992 and has held senior underwriting roles with XL in Bermuda and London. Before joining 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.

#### **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 14 years of experience working in the (Re) Insurance industry. Prior to joining 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 XL. He joined XL in January 1994 and has held progressively senior roles with the Company. Prior to joining 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 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.

#### **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

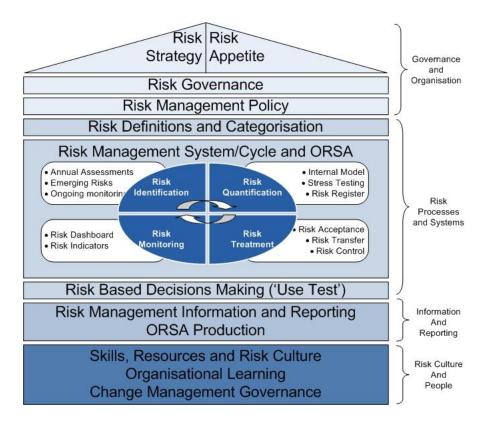
The Company faces strategic, financial and operational risks related to, among others: underwriting activities, financial reporting, changing macroeconomic conditions, investment, reserving, changes in laws or regulations, information systems, business interruption and fraud. An enterprise view of risk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

The Company adopts the XL Group Ltd.'s (the "Group") 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 ERM 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.

XL Group's RMF is comprised of the following 'Key Components' shown in the diagram below:



Please note that the term ORSA is used to describe the CISSA above

#### 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 ERM 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 Company adopts the Group's 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.

"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 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 Company benefits from the Group's overall ERM framework which includes a Group ORSA assessment process. The Group ORSA incorporates outputs from the Group Internal Capital Model "ICM") and is produced in accordance with the Group's ORSA Policy. As such, in addition to this standalone assessment, the Company's business and operations are also incorporated into the overall Group ORSA process and assessment which considers the risk, capital and solvency position of the Group as a whole.

It is the Group's capital management strategy that economic capital for legal entities is held as close to regulatory capital as possible but at the same time allowing the business to operate effectively. This ensures that adequate surplus capital is held at the Group level for the potential benefit of all legal entities of the Group.

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

The Group Risk Management Framework 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 Group on a timely basis. From this, we can see that the Group's risk profile is consistent with its Board approved limit and risk appetite framework.

The Company uses the Group internal capital model ("ICM") to calculate the required CISSA capital to support its business plans on the basis of risks facing the business. The ICM covers all material risks that can be quantified using recognized actuarial techniques. Risks not included in the ICM are discussed in the ORSA and subject to alternative risk management techniques, including stress tests.

In Q4 2016 a new integrated XL Group ICM was completed which included a full re-parameterization of all risk categories and dependencies, documentation, and oversight by experts and internal governance bodies. It was used during the 2017 budget process, to measure expected compliance with the 2017 proposed RAF and was used to calculate the 2017 ORSA capital. During 2017 the Bermuda Monetary Authority (BMA) granted approval for XL Group and XLB to use the ICM to calculate the Enhanced Capital Requirement (ECR) for the financial year ended December 31, 2017 onwards.

The CISSA process is designed to keep the Company Board continually apprised as to the Company's capital positioning in economic, rating agency and regulatory terms.

#### **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 ERM, the Board:

- Oversees ERM 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

The Board is made aware of the Group ORSA report and the Company's CISSA outcomes as appropriate.

#### 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:

ORSA Process	Owner
Risk Budget (and related stress tests)	Group Chief Enterprise 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)	ERM function
Business Planning	Head of Finance, Bermuda Insurance
Emerging Risks Process	Head of Non Natural Perils Risk Management

It should be noted that the CISSA process owners leverage Group processes and expertise in performance of their duties.

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

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

The Group's Framework for Internal Controls ('FIC') function is committed to promoting a robust internal financial control framework for the 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

XL Bermuda Ltd adheres to the XL Group compliance policy. What follows is therefore a description of the XL Group's overall approach to compliance.

The Chief Compliance Officer ("CCO") of XL Group is responsible for the formulation and implementation of an effective compliance program for the XL Group of companies.

In order to ensure the independence of the CCO, the CCO reports directly to the XL Group Audit Committee on a periodic basis on matters relating to the Company's compliance with applicable law and regulation and the Company's own general standards of legal, ethical and compliant conduct for its employees.

Certain of the Company's subsidiaries are subject to insurance and/or reinsurance regulation and supervision in the jurisdictions where they are domiciled and licensed to conduct business and each regulated entity has a designated compliance officer with reporting lines ultimately to the CCO.

The XL Group's Enterprise Risk Committee, under delegated authority from the Audit Committee, is responsible for approval of the XL Group's Compliance Policy and Program (the "Compliance Policy") a copy of which is available on XL Group's public website.

The purpose of the Compliance Policy is to (a) protect XL Group Ltd companies from financial or reputational harm that could arise from noncompliant or unethical conduct; (b) assist to prevent, detect and remediate compliance failures or risks; and (c) seek to ensure that XL Group Ltd companies are in compliance with all applicable laws and regulations.

The CCO is responsible for overall implementation and evaluation of the Compliance Policy and reports, at least annually, on its effectiveness to the Audit Committee.

XL Group Ltd maintains a Code of Conduct (the "Code of Conduct") that explains general standards of legal, ethical and compliant conduct. Material updates to or changes to the Code must be approved by the Board of Directors of XL Group Ltd. The Code of Conduct is available on XL Group's public website.

The CCO is responsible for leading an annual Group level assessment of compliance risks presented by the Company's business, operations and other activities.

The Audit Committee advises the XL Group Board, at least annually with respect to the Company's policies and procedures regarding compliance with applicable laws and regulations and with the Code of Conduct. The Audit Committee also reviews at least annually, with the CCO, compliance with the Code of Conduct, as well as the implementation and effectiveness and the administration, training, monitoring and auditing of the Compliance Policy. The Audit Committee also will discuss with the CCO, the Group General Counsel and the independent auditor, as appropriate, any correspondence with regulators or governmental agencies and any employee complaints or published reports which raise material issues regarding the Company's financial statements or accounting policies, or material compliance weaknesses or violations.

Copies of the Compliance Policy and the Code of Conduct are available on XL Group's public website at <a href="http://xlgroup.com/xl-investor-relations/corporate-governance">http://xlgroup.com/xl-investor-relations/corporate-governance</a>

#### **B.5.** Internal audit function

The objectives of the Internal Audit function are to provide assurance that the XL Group'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 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

XL Bermuda Ltd follows the XL Group internal audit process.

The internal audit process is set out below:

- <u>Engagement Planning</u>: The objectives of this phase are to refine the scope of the internal audit plan; identify which business processes, systems and controls will be evaluated; determine which techniques will be used; manage expectations; and coordinate with FIC, external auditors, and IT Audit.
- <u>Risk and Control Evaluation</u>: 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.5.2** Internal audit work plan

The Internal Audit Department complies with the International Standards (the "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.6.** Actuarial function

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

#### **Regulatory Compliance**

The Actuarial Function operates in accordance with applicable Bermuda regulation.

#### **Roles and Structure**

The Company'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 Group's corporate governance framework. The Group 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 which is responsible for loss reserving and reporting and Pricing and Analytics which is responsible for pricing and underwriting.

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.

#### 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.

#### **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:

- Estimating 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;
- Assessing the sufficiency and quality of the data used in the calculation of technical provisions and where relevant providing recommendations on internal procedures to improve data quality;
- 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:
  - i. 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 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;
- Assisting with the underwriting process, including those surrounding pricing and design of underwriting contracts and risk transfer mechanisms;
- Helping to maintain a competent, effective and efficient approach to pricing;
- Comparing best estimates against experience, i.e. performing analysis comparing the estimated policyholder obligations against actual policyholder obligations paid;

Additional responsibilities relating to capital modelling:

- The Actuarial Function has an additional responsibility in contributing to the effective implementation of the risk management system, in particular with respect to providing inputs and offering insights related to the risk modelling underlying the calculation of the capital requirements within the ICM;
- The Actuarial Function is responsible for specifying which risks within their domain of expertise are covered by the ICM. The Actuarial Function also offers insights into the nature of dependencies between these risks.

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

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

The Company's approach to outsourcing applies to all XL Group 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 a certain annual value;
- Specific delegated underwriting arrangements based upon agreed criteria and the Risk Based Approach ("RBA") Guidelines
- Specific delegated claims handling arrangements identified by the Claims Delegated Arrangement team based upon certain outstanding claims reserves or the Group's Outsourcing Sub Committee ("GOSC");
- Specific Investment Management arrangements as identified by XL Investments Ltd, which is a subsidiary of the Company; and
- Other ad hoc outsourcing arrangements that GOSC may consider as being material to XL Group for financial, operational or reputational reasons.

This applies to all material outsourcing to third parties carried out by XL Group and its subsidiaries and is designed to establish a framework for the oversight and management of outsourcing risk at 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 IT, Legal, Compliance, Finance, Business Continuity Management, Risk Management and external experts when appropriate

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

**Regulatory Notification** - Ensure any prior notification required to relevant regulatory supervisory body is made;

**Performance Monitoring** - Ensure procedures to monitor the service provider's performance and risk are put in place; and

**Exit Phase** - 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 authority 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. 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, 2017, there is no other material information regarding Governance Structure required to be disclosed for purposes of this Financial Condition Report.

## C. Risk Profile

The Company has an agreed approach to the definition and categorisation of risks:



## 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.	
Lapse risk	Lapse risk is the risk of loss, or of adverse change in the value of insurance future profits, resulting from changes in the level or volatility of the rates of policy lapses, terminations, renewals and surrenders. This includes policies where an assumption has been made about renewal that may not be warranted based on past experience either in terms of actual treaties or underlying policies issued and renewable.	

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;
- **ERM 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	Financial loss or volatility of profits due to the combined sensitivity of the economic value of the investment portfolio to changes in the level or volatility of risk-free (or other benchmark) interest rates.	
Equity - Investment Portfolio	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.	
Real Estate - Investment Portfolio	Financial loss or volatility of profits due to the sensitivity of the investment portfolio to changes in the level or in the volatility of market prices of real estate.	
Spread - Investment Portfolio	Financial loss or volatility of profits due to the sensitivity of the market values of the investment portfolio to changes in the level or in the volatility of credit spreads.	
Foreign Exchange rate risk	Volatility in the Company's Shareholders' Equity due to changes the value of the Company's non-USD net assets when translated back to the Company's USD reporting currency.	
Concentration	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.	
Commodity Impact on Investment Portfolio	Financial loss or volatility of profits due to the sensitivity of the market value of the investment portfolio to changes in the level or in the volatility of market prices to commodities.	
Inflation impact on investment portfolio	Financial loss or volatility of profits due to the sensitivity of the market values of the investment portfolio to changes in the level or in the volatility of inflation rates.	
Aggregate: Market risk	The responsibility for the management of the over-arching Company exposure to the above risk.	

The Company identifies market risk through the following processes:

Process	Definition	
<b>Business planning</b>	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 XL Group Investment Portfolio Guidelines, Authorities and Mon Framework, which applies to the Company, sets ranges for tactical deviation the benchmark and is reviewed annually.		
ERM 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.	

#### 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:

Process	Definition	
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 ur default, or deterioration in the credit standing of the premium debtors in insurance contracts written		
Underwriting counterparty Risk	Exposure to credit risk through certain credit sensitive underwriting activities which include, but are not limited to, Surety, Worker's Compensation, Environmental and Political Risk and Trade Credit	

#### 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.	
Treasury has responsibility to identify and monitor concentration risk of cash at banks with funding requirements.		
<b>ERM Risk assessment and</b> Through the risk assessment processes, the Company quantifies existing risk 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.

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 in 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 teams are 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.	
<b>Business planning</b>	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 a Group-wide 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. In addition the data is used in the parameterisation of the ICM.	

#### 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 XL 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 Group Risk Register and applicable risk policies.

Also see Item 1A (Risk Factors) in XL Group Ltd.'s 2017 Form 10-K.

### 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 Group operates an outwards third party reinsurance risk transfer program to support the 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 program 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 program is to reduce volatility and enhance overall capital efficiency.

The Group'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 error, the reserving process performed by the Actuarial Function is highly structured and strictly defined and controlled and includes several layers of oversight as described above.

#### Rating adequacy

Underwriters are supported by dedicated teams of claims 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, the investment portfolio, RDS that cross multiple lines of business and from risks related to some or all of the above that may occur concurrently. The Company, through its subsidiaries, underwrites and prices most risks individually following a review of the exposure and in accordance with its underwriting guidelines. The Company seeks to meet our clients' needs 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, a Group 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 appropriate legal entity.

#### **Market Risk**

#### **Strategic Asset Allocation**

The Strategic Asset Allocation ("SAA") process establishes a benchmark, subject to various considerations and constraints. It is subject to the risk tolerances recommended by management, and is approved at least annually by the Group Risk & Finance Committee ("RFC").

#### **Authorities Framework**

As part of the implementation of our 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 Group'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.

#### **Currency risk mitigation**

The Company is primarily exposed to currency risk in respect of liabilities under policies of insurance denominated in currencies other than U.S. Dollars. 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 current exposure by currency:

The following table provides more information on our net exposures to these principal foreign currencies at December 31, 2017 and 2016:

(Foreign currency in millions)	<b>December 31, 2017</b>	December 31, 2016
Canadian dollar	365.3	136.0
Australian dollar	185.8	68.6
Singaporean dollar	123.6	140.1
British pound	115.9	105.3
Euro	(54.9)	137.7

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. 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 Group's specific business needs. Interaction between the internal and external managers provides additional insight to take advantage of opportunities as they present themselves.

The Investment Group employs a prudent and risk-conscious investment approach and operates within a comprehensive Authorities Framework which defines limits within which the underlying investment portfolios must be managed. This 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.

Investment risk management is achieved through the regular review of market and credit risk analytics that incorporate distribution-based risk measures such as value-at-risk, scenario and stress testing and portfolio sensitivities to a broad range of risk factors such as interest rates, credit spreads, equities, foreign exchange risk, hedge funds, etc. The investment risk management process forms an integral part of the Group's ERM framework to ensure a fully integrated view of market, credit, liquidity and concentration risks.

The Group's policy is to operate the fixed income portfolio with a minimum weighted average credit rating of Aa3/AA-. The aggregate credit rating is determined based on the weighted average rating of securities, where the average credit rating, where available, from Standard & Poor's ("S&P"), Moody's Investors Service ("Moody's") and Fitch Ratings ("Fitch") is allocated to each security. The weighted average credit rating of the aggregate fixed income portfolio was AA as of December 31, 2017 and December 31, 2016. U.S. agencies paper and Agency Residential Mortgage Backed Securities ("RMBS"), whether with implicit or explicit government support, reflect the credit quality rating of the U.S. government for the purpose of these calculations.

Risk appetite and compliance with investment guidelines and authorities are captured through risk reporting to the Board and monitored as part of the RAF.

#### **Credit Risk**

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 Underwriting Risk (above).
- 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 Group 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.

At December 31, 2017 and 2016, approximately 95.6% and 95.4%, respectively, of the total outstanding unpaid loss and loss expense recoverable and reinsurance balances receivable, net of collateral held, was due from reinsurers with a financial strength rating of "A" or better. The following is an analysis of the total recoverable and reinsurance balances receivable, net of collateral held, at December 31, 2017, by reinsurers owing 3% or more of such total:

Name of Reinsurer	Reinsurer Financial Strength Rating	% of Total
Munich Reinsurance Co.	AA-/Stable	10.5%
Lloyd's Syndicates	A+/Negative	7.4%
Arch Reinsurance Company	A+/Negative	7.3 %
Transatlantic Reinsurance Company	A+/Stable	5.1 %
AXIS Reinsurance Co.	A+/Negative	5.0%
Endurance Assurance Corporation	A/Positive	4.3 %
Hannover Rueck SE	AA-/Stable	3.5 %
National Indemnity Company	AA+/Negative	3.1 %
Swiss Reinsurance Co.	AA-/Stable	3.1 %
Everest Reinsurance (Bermuda) Ltd	A+/Stable	3.0%

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, 2017:

Reinsurer Financial Strength Rating	% of Total
AAA	—%
AA	37.0%
A	58.6%
BBB	0.5 %
BB and below	0.7%
Captives	3.1 %
Not Rated	0.1%
Total	100.0%

• Premium payment and brokers: The Group, though its subsidiaries, 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 fulfill their contractual obligations with respect to payment balances. Premium credit risk is controlled by premium cancellation provisions for certain lines of business which allow underwriting

businesses to cancel policies for non-payment of premium. A list of approved broking houses is maintained.

ERM consolidates credit exposure reports from corporate functions and underwriting businesses on a regular basis for aggregating, monitoring and reporting to the Board.

#### **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 needs 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) The Company 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 (e.g. preventative or detective; manually operated or automatic) 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 at December 31, 2017 are deemed to be within risk appetite, as reported via the Risk Dashboard and ORSA report to the Board. All operational risk controls are documented in the Group Risk Register and in a number of underlying policies that address operational risk such as the Code of Conduct, Business Continuity and IT Security policies.

#### C.3. Material risk concentrations

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 ICM.

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 Group Shareholders' Equity plus (i) outstanding subordinated notes due 2025, 2045 and 2047, less (ii) Goodwill and Other Intangible Assets, less (iii) Accumulated Other Comprehensive Income ("AOCI") (excluding certain net balances associated with Life Funds Withheld Assets), plus (iv) an adjustment for a portion of the following year's expected earnings net of expected annual dividends and expected buybacks of Group Common Shares. These limits may be recalibrated, from time to time, to reflect material changes in Total Group 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. For a further discussion on risk appetite management see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations-Other Key Focuses of Management" in the 2017 Form 10-K.

# 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 ERM 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**

The Company has adopted the Group's insurance risk limit framework for its consolidated balance sheet exposures. On a quarterly basis catastrophe exposures are measured and monitored and reported to the Board. RDS are also produced twice a year and monitored and reported to the Board. In relation to event risk management, net underwriting risk tolerances are established for the individual largest events in the risk profile. These are captured through risk reporting to the Board and monitored as part of the RAF.

There is an embedded stress testing framework that is used to understand possible impacts of major risks, including underwriting 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 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 ORSA 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, 2018 is \$864m. 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, 2018 inforce exposures (measured at a 1 in 100 level of confidence on a per event net occurrence exceedance probability (OEP) basis), 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, 2017 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 and Black Swan scenarios identified by ERM 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, 2017, the Company's Bermuda based solvency ratio (BSCR) remains in excess of 120%.

The Board is 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, 2017 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.

The credit risk framework establishes a credit clash limit at a level at a certain percentage of the Group's Adjusted Tangible Capital (ATC) in order to manage the direct and indirect credit exposures arising from underwriting and non-underwriting activities that could potentially be impacted in various degrees by a systemic credit event (e.g. our investment portfolio, credit sensitive underwriting activities, unsecured exposures arising from reinsurance recoverable counterparties, brokers and other obligor counterparties). 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, 2017.

#### 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.

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

Further, as of December 31, 2017, our Bermuda based solvency ratio (BSCR) remains above 120% after an assumed 1% OEP ALM loss Event.

#### Operational Risk

To support the identification and quantification of operational risks within the business and to help parameterise the ICM, 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.

#### C.6. Other material information

Please refer to the Risk Factors included in XL Group Ltd's 2017 Form 10-K for a discussion of items that could have a significant or material effect on our business.

XL Group Ltd ("XL") has entered into a definitive agreement and plan of merger (the "Merger Agreement") with AXA SA ("AXA") dated March 5, 2018, under which AXA would acquire 100% of XL's common shares in exchange for cash proceeds of \$57.60 per common share or approximately \$15.3 billion in the aggregate (the "AXA Transaction"). The Merger Agreement provides that, subject to the satisfaction or waiver of certain conditions set forth therein, XL will merge with an existing AXA subsidiary in accordance with the Companies Act 1981 of Bermuda (the "Merger"), with XL surviving the Merger as a wholly owned subsidiary of AXA. All preferred shares issued by subsidiaries of XL will remain issued and outstanding upon completion of the Merger.

The Merger is expected to close during the second half of 2018, subject to approval by the XL shareholders and other customary closing conditions, including the receipt of required regulatory approvals. The Merger Agreement, among other stipulations, permits: (i) XL to pay out regular quarterly cash dividends not to exceed \$0.22 per XL common share per quarter, (ii) subsidiaries of XL to pay period cash dividends on preferred shares not to exceed amounts contemplated by the applicable bye-laws or resolutions approving such preferred shares, and (iii) subsidiaries of XL to pay dividends to XL or any subsidiary of XL.

### **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 \$91.2m at December 31, 2017.

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 are 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 the 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** 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 \$660m 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, 2017 and 2016, the total net Technical Provisions amounted to \$25.2 billion and \$23.5 billion, respectively, comprising the following (reported in USD thousand units):

As at December 31, 2017:

(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

(U.S. dollars in thousands)	Non-Life	Life	Total
Claims Provision	\$ 20,285,007	\$ 222,455	\$ 20,507,462
Premium Provision	1,106,323	0	1,106,323
Risk Margin	1,882,871	6,221	1,889,092
Total Technical Provisions	\$ 23,274,201	\$ 228,676	\$ 23,502,877

#### 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 on pages 10 and 176 of XL Group Ltd's Form 10-K for the year ended December 31, 2017. 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, 2017, 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

XL Group Ltd has an overarching Capital Management process to ensure an appropriate level and form of capital. Thereby, XL Group'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.

In addition, the Company ensures that it meets the appropriate levels/standards as define under the Insurance Act 1978, as amended, using its ICM 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	10,695,326
Tier 2	738,528
Tier 3	-
Total	11,433,854

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		Enhanced Capital Requirement
Tier 1	Min	80%	60%	10,695,326	10,695,326
Tier 2	Max	25%	66.67%	738,528	738,528
Tier 3	Max		17.65%	-	-
Total				11,433,854	11,433,854

#### 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 shareholder's 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 are set out below. The adjustments are documented in Section D covering valuation of assets and liabilities.

US GAAP Consolidated Total Shareholder's Equity	\$13,838,017
Less: Goodwill & Intangible assets	(1,429,438)
Less: Adjustments for Technical provision and Risk Margin under EBS rules	712,841
Less: Adjustment for DAC	(1,548,790)
Less: Other net adjustments	(138,776)
Statutory Consolidated Total Shareholder's Equity	\$11,433,854

### **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, 2017 are as follows:

	Amount	Ratio
Minimum Margin of Solvency	1,750,209	653%
Enhanced Capital Requirement	6,135,512	186%

#### 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

On September 12, 2017, the BMA approved the use of a full ICM to calculate the Group's and its wholly owned subsidiary, XL Bermuda Ltd's respective enhanced capital requirements ("ECR") in substitution of the Bermuda Solvency Capital Requirement ("BSCR") standard formula.

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

The purpose of the ICM is to assess the solvency of the Company and its legal entities according to the regulatory framework in which they operate, to assess the solvency of the Company according to our own internal view of risk, and to provide information to management to support decision making. The ICM provides management information at a suitable level of detail covering all lines of business and all relevant risk areas. The main uses of the model to produce management information are:

- Communication of risk: The ICM is used to inform and communicate the key drivers of risk to the Company at a range of return periods. This includes the ability of the ICM to rank the relative importance of the Company's risks and those of its legal entities.
- Risk appetites: The ICM is used to monitor the modelled risk profile of the Company and its legal entities against Board approved risk appetite statements.
- Reinsurance purchase: The ICM is used in the assessment of actual and proposed placements of reinsurance, the assessment of the efficacy of reinsurance with respect to capital and overall enterprise volatility, the estimation of ceded loss ratios and other contract metrics, and the allocation of ceded premium and losses across lines of business.
- Performance measurement: The ICM is used in the assessment of target profit requirements for the lines of business of the Company, and so supports actuarial pricing.

Strategic planning: The ICMICM is used to inform the ongoing strategy of the Company and assess the capital implications of certain strategic proposals as they arise.

### E.3.2. Where a partial internal model is used, a description of the integration with the BSCR Model

The Company sets its regulatory capital using its ICM for all risk categories and their aggregation. A partial ICM is not used.

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

The ICM divides risk into five principal risk categories. These are underwriting risk, reserve risk, credit risk, market risk and operational risk. We provide a brief description of the methods used in the ICM for each of these risk categories below:

- Underwriting Risk: This risk category reflects the risk of the inherent uncertainties in the frequency and severity of insurance liabilities that the Company incurs by underwriting new business. The ICM simulates deviations in premiums, commissions, losses and expenses from the business plan. The modelling of losses is the most material of these business plan elements. There are three main parts to the modelling of gross losses for underwriting risk. These are (i) attritional and large loss modelling; (ii) natural catastrophe modelling; and (iii) man-made catastrophe modelling. The modelling of the volatility of attritional and large losses is derived primarily from the volatility of historic loss experience suitably adjusted to be representative of our current underwriting portfolio. Attritional losses are modelled together whereas large losses are modelled separately through frequency-severity models for each line of business. The natural catastrophe losses are modelled separately by major peril-regions primarily using third party models. These models quantify losses to the Company for many different potential natural catastrophe events based on the exposure to loss in the current portfolio of risks. The man-made catastrophe losses are modelled using a frequency-severity model. Our outwards reinsurance program is applied directly to gross losses produced in our modelling to calculate the net losses.
- Reserve Risk: This risk category reflects the risk of the inherent uncertainties in the frequency and severity of insurance liabilities that the Company is exposed to through the on-going management of earned reserves. The parameterisation of reserve risk is mainly performed using bootstrapping techniques which consider the historic volatility of reserves and project that volatility forward to the ultimate settlement cost of the current earned reserves. Some smaller lines of business are benchmarked on larger ones where there is sufficient historic loss information to perform the modelling. Large reserving events such as the emergence of a significant amount of related latent claims are modelled separately using a frequency-severity modelling approach. Large incurred losses which may have a different risk profile to other reserves such as significant earned natural catastrophe events are also modelled separately. We retain a small amount of runoff life risk which is modelled as part of reserve risk taking into account volatility associated with mortality and longevity assumptions in the best estimate reserves.
- Credit Risk: This risk category reflects the risk of losses arising from the inability of a counterparty to fulfill its financial obligations, including performing them in a timely manner. Credit risk for outstanding positions with reinsurers, intermediaries and financial institutions are modelled by considering the likelihood of default for each significant counterparty over time until no exposure remains. The likelihood of default varies according to each counterparty's credit rating. In our modelling, when underwriting or reserving experience is poor, the recoverable amounts due from our reinsurers increase meaning there is greater exposure to default and it is also more likely that many reinsurers will be downgraded or default at the same time.
- Market Risk: This risk category reflects the risk of losses resulting from adverse financial market movements such as values of investments, interest rates or exchange rates. We use a third party model to project the state of the macroeconomic environment in future years (interest rates, inflation, exchange rates, spreads and other variables) and apply that future state to assess the change in the value of the

investment portfolio over a one year period. The projected macroeconomic environment is also used to assess volatility in the discount benefit for liabilities and volatility due to changes in exchange rates.

Operational Risk: This risk category reflects the financial loss resulting from inadequate or failed internal
processes, people and systems, or from external events. Operational risk is quantified through a frequencyseverity model. We use internally derived scenarios to calibrate the volatility of the severity of loss events.

The ICM considers potential economic profits and losses incurred over the next 12 month period. The modelling descriptions provided above for underwriting risk, reserve risk, credit risk and operational risk set out our approach for quantifying the volatility in the ultimate financial impact of these risks once all liabilities are settled. We apply factors to reduce the volatility of the ultimate cost of losses to the volatility of the estimated ultimate cost of losses in 12 months' time to meet this specification.

These five principal risk categories are aggregated using the approach set out in E.3.4.

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

The ICM uses several different aggregation approaches across the main risk categories to take into account the nature of the interaction between the risks. These include driver based approaches such as the common impact of extreme inflation across multiple risk categories, the application of correlations between different lines of business and the application of dependencies that are particularly strong in the extremes for certain related risks (for example underwriting losses caused by macroeconomic stress or large terrorism events coinciding with losses on our investment portfolio; poor underwriting or reserving loss experience coinciding with a greater likelihood that several reinsurer default simultaneously; or poor P&C insurance experience revealing significant operational issues causing financial losses). Our aggregation methodologies allow us to capture important interactions between related risks while allowing for diversification effects where appropriate.

### 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

The core structure of the ICM differs from the BSCR in that the former is a simulation model and the latter is a factor based model. That aside, the BSCR divides risk into five principal risk categories. These are P&C insurance risk, life insurance risk, credit risk, market risk and operational risk. This is a slightly different division of risk categories to that used in the ICM as set out in E.3.3. We provide a brief description of the main differences in methods and assumptions between the ICM and the BSCR organized by the BSCR division of risk categories below:

- P&C Insurance Risk
  - Underwriting Risk (excluding Natural Catastrophes): The BSCR calculation applies charge
    factors to a net premium volume measure at a BMA line of business level and applies a
    diversification credit between the resulting capital charges for the BMA lines of business. This
    leads to the following main differences:
    - The specific characteristics of our inwards business are not allowed for in the BSCR calculation beyond the different charge factors by BMA line of business
    - The specific characteristics of our outwards reinsurance are not allowed for in the BSCR whereas we model outwards reinsurance explicitly in the ICM
    - Certain man-made catastrophe events are modelled explicitly within the ICM.
  - Natural Catastrophes: Both the ICM and the BSCR calculations rely on gross output from our third party models netted down for our outwards reinsurance program. Other than differences in the categorisation of certain items, the two approaches are largely in line.
  - Reserve Risk: The BSCR calculation uses charge factors applied to the claims provision amounts by BMA line of business and then applies a concentration adjustment to aggregate over the BMA lines of business to total reserve risk. The ICM calculation uses a more detailed analysis typically

based on our historic loss experience to produce capital amounts by our own modelling lines of business which are suitable for the nature and size of reserves.

- Life Insurance Risk: We retain a small amount of runoff life risk on our balance sheet. The BSCR
  calculation uses charge factors on reserves and premiums. In the ICM we perform a more detailed
  calculation taking into account volatility associated with mortality and longevity assumptions in the best
  estimate reserves.
- Credit Risk: Credit risk in the BSCR considers the reinsurance recoverable on earned reserves on the
  opening balance sheet plus the recoverable due under large catastrophe losses. The part of credit risk
  associated with large catastrophe losses is recorded as part of catastrophe risk in the BSCR calculation.
  Credit risk in the ICM considers the recoverable due on earned reserves on the opening balance sheet
  following significant reserve deteriorations, the recoverable due from underwriting risk modelling
  (including natural catastrophes) following poor loss experience, the premiums receivable on the opening
  balance sheet and the balances held with financial institutions on the opening balance sheet.
- Market Risk: The BSCR uses a series of charge factors against different asset classes to quantify market risk and charge factors against the opening balance sheet surplus of assets over liabilities to calculate currency risk. The ICM calculates the impact that projections of future macroeconomic conditions have on our investment portfolio, our discounting of liabilities and surplus of assets and liabilities by currency. This takes into account the particular characteristics of our investments and economic balance sheet. The approaches taken to quantify risk in the BSCR and the ICM are therefore quite different. As well as the greater modelling precision in the ICM another noteworthy difference is that the ICM recognises the increased impact that interest rate and exchange rate movements can have in stressed scenarios where liabilities have deteriorated from their opening positions whereas the BSCR applies charge factors to the opening balance sheet positions only.
- Operational Risk: Operational risk for the BSCR is calculated as a percentage of the pre-operational risk
  diversified total capital charge. It is treated as a capital add-on with no diversification credit allowed with
  other risks. The ICM uses a frequency-severity based approach which is based on internally derived
  operational risk scenarios and allows for diversification with other risk types.

Aggregation: The aggregation methodologies are very different between the models. The BMA model aggregates the main risk categories using the square root of the sum of the squares of the capital charges with an allowance for credit risk to be more strongly correlated with reserve risk. The ICM uses several different aggregation approaches across the main risk categories to take into account the nature of the interaction between the risks. These include driver based approaches such as the common impact of extreme inflation across multiple risk categories, the application of correlations between different lines of business across risk categories and the application of dependencies that are particular strong in the extremes for certain related risks (for example underwriting losses caused by macroeconomic stress or large terrorism events coinciding with losses on our investment portfolio; poor underwriting or reserving loss experience coinciding with a greater likelihood that several reinsurers default simultaneously; or poor underwriting or reserving loss experience revealing significant operational issues causing financial losses).

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

The ICM uses data to assess our exposure to different risks and to quantify the potential impact to our P&L that those risks represent. Below is a brief description of how data is used for each of our five principal risk categories.

- Underwriting Risk: We use our historic loss information to quantify attritional and large loss volatility by modelling line of business. Where appropriate we make adjustments to the historic loss information to ensure that it is representative of the risk profile of our current underwriting portfolio and so suitable to use. We use policy data such as retentions, shares and limits in our exposure based analysis to quantify natural catastrophe and man-made catastrophe loss volatility.
- Reserve Risk: We use our historic loss information to quantify volatility associated with our earned reserves by modelling line of business. Where appropriate we make adjustments to the historic loss information to ensure that it is representative of the risk profile of our booked reserves and so suitable to use.
- Credit Risk: We use outstanding reinsurer, intermediary and financial institution balances as the exposure to
  risk. Information from external rating agencies is used to assess the risk presented by each counterparty for
  these balances. This external information is used widely across the insurance industry and allows us to
  better quantify and differentiate between the risks of different counterparties. We consider it to be suitable
  for use to quantify credit risk.
- Market Risk: We use a third party model to quantify market risk. This model uses historic experience of macroeconomic variables such as interest rates, spreads, inflation and exchange rates to calibrate future projections of these macroeconomic variables for use in the model. We use a suitable timeframe of this historic data to ensure that it is representative of potential future macroeconomic conditions. We use data about our investment portfolio (such as maturity dates, coupon payments and other investment characteristics) and combine this with the projected macroeconomic conditions to quantify the risk presented by our investment portfolio.

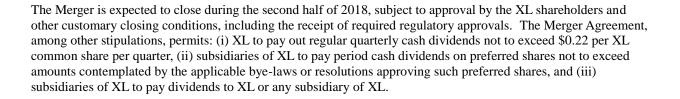
Operational Risk: We use externally produced datasets of industry-wide operational losses to aid the quantification of our own potential for operational risk losses. We filter these external datasets to ensure that they are representative of our risk profile and so suitable for use to quantify the risk.

#### **E.5.** Other material information

For the year ended December 31, 2017, there is no other material information regarding capital management required to be disclosed for purposes of this Financial Condition Report.

### F. Subsequent Events

XL Group Ltd ("XL") has entered into a definitive agreement and plan of merger (the "Merger Agreement") with AXA SA ("AXA") dated March 5, 2018, under which AXA would acquire 100% of XL's common shares in exchange for cash proceeds of \$57.60 per common share or approximately \$15.3 billion in the aggregate (the "AXA Transaction"). The Merger Agreement provides that, subject to the satisfaction or waiver of certain conditions set forth therein, XL will merge with an existing AXA subsidiary in accordance with the Companies Act 1981 of Bermuda (the "Merger"), with XL surviving the Merger as a wholly owned subsidiary of AXA. All preferred shares issued by subsidiaries of XL will remain issued and outstanding upon completion of the Merger.



### **Appendix 1: XL Group Ltd Structure Chart 2017 Q4**

https://www.sec.gov/Archives/edgar/data/875159/000087515918000015/xlgroup-12312017xex 21.htm

### Appendix 02: XL Group Ltd Form 10-K 31 December 2017

https://investor.xlgroup.com/sec-filings/sec-filing/10-k/0000875159-18-000015 (the Original Form 10-K)

https://investor.xlgroup.com/node/23021/html (the Form 10-K/A)