

# Financial Condition Report 2018

MS Amlin AG

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## 1. Cautionary Statements

This Report may include statements with respect to future events, trends, plans, expectation or objectives relating to MS Amlin AG's future business, financial condition, results of operations, performance and strategy. Forward looking statements are not statements of historical fact and may contain the terms, "may", "will", "should", "continue", "aims", "estimates", "projects", "believes", "intends", "expects", "plans", "seeks" or "anticipates" or words which have a similar meaning. No undue reliance should be placed on such statements because, by their nature, they are subject to unknown risks and uncertainties and can be affected by other factors that could cause actual results and plans of MS Amlin AG to differ materially from those expressed or implied in the forward looking statements (or from past results). Factors such as, but not limited to (i) general economic conditions and competitive factors, particularly in key markets, in each case on a local, regional, national and/or global basis (ii) the risk of a global economic downturn (iii) performance of financial markets (iv) levels of interest rates and currency exchange rates (v) the frequency, severity and development of insured claims events (vi) policy renewal and lapse rates (vii) changes in laws and regulations and in the policies of regulators (viii) increases in loss expenses may all have a direct bearing on the results of operations of MS Amlin AG and on whether any targets may be achieved. Many of these factors may be more likely to occur or be more pronounced as a result of catastrophic events. MS Amlin AG does not undertake or assume any obligation to update or revise any of these forward looking statements, whether to reflect any new information, future events or circumstances or otherwise, except as required by applicable laws and regulations.

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## 2. Executive Summary

This annual Financial Condition Report (“FCR”) for the year ended 31 December 2018 has been prepared for MS Amlin AG (“MS AAG” or “the Company”).

MS Amlin AG is a wholly owned subsidiary of MS Amlin plc. On 1 February 2016 Amlin plc and its subsidiaries (together the “Group”) was acquired by Mitsui Sumitomo Insurance Company Limited (“MSI”) and its ultimate parent became MS&AD Insurance Group Holdings, Inc. (“MS&AD”).

On 31 December 2016 as part of a reorganisation within MS&AD, MS Amlin plc sold 100% of its interest in the issued share capital and voting rights of MS Frontier Reinsurance Limited (“MSF”) to the Company, in exchange for one share in the Company immediately before a legal merger was effected between MSF and the Company. The merged entity continues to operate under the legal name MS Amlin AG.

### Basis of preparation

This Financial Condition Report has been prepared in line with the requirements as set out in the Swiss Financial Market Supervisory Authority (“FINMA”) Circular 2016/2 “Disclosure – insurers”. The circular expands on Articles 111a and 203a of the Insurance Supervision Ordinance (ISO; SR 961,011) on the FCRs of supervised insurance companies, groups and conglomerates. This report is to meet the regulatory reporting requirements of MS Amlin AG, and for no other purpose and should not be relied upon for any other such purpose.

Financial information included in this report is based on MS Amlin AG’s 2019 Swiss Solvency Test’s (“SST”) Market Consistent Balance Sheet (for Balance Sheet financial information) and the 2018 Swiss CO Annual Report (“Swiss CO”), (for Profit or Loss information); both have been prepared in accordance with their relevant regulatory or accounting standards. Unless stated otherwise, this report represents the position of MS Amlin AG as at 31 December 2018 only and will not necessarily reflect all changes in MS Amlin AG’s operations since that date. All quantitative information in this report is disclosed in USD, MS Amlin AG’s functional currency, unless otherwise specified.

### Business and Performance

The Company is incorporated in Switzerland and is headquartered in Zurich with branches in Hamilton, Bermuda and Labuan, Malaysia. The Company is supervised by FINMA, with the Bermuda branch also registered under the authority of the Bermuda Monetary Authority (“BMA”), and the Malaysia branch under the authority of the Labuan Financial Services Authority (“LFSA”).

The operation in Switzerland was set up to write European non-life reinsurance from Zurich. It offers comprehensive reinsurance solutions over all non-life classes and products.

Through the Bermuda branch, the Company carries out reinsurance business, focussed on Catastrophe, Property, Casualty and Specialty accounts.

In addition, other entities within the MS Amlin Group have placed a number of intercompany reinsurance contracts with the Company. These intercompany reinsurance contracts are:

- a number of proportional treaty and excess of loss contracts covering cessions of various classes of business; and
- a whole account quota share with Syndicate 2001 (“the Syndicate”), a Lloyd’s Syndicate managed by MS Amlin Underwriting Limited, which covers a specific cession from all classes except P&C UK 2018 business written by the Syndicate, including Marine, Non-marine and Aviation on a global basis.

The operation in Labuan stopped writing business in early 2018 and has been put into run-off. Historically it carried out reinsurance business geographically located in East and South East Asia.

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## System of Governance

The Company operates a two-tier board governance structure with the Supervisory Board made up of directors who are not actively engaged in the day-to-day management of the Company, of which at least one third are independent of the Company. The Supervisory Board appoints a Chairman from its members.

The Executive Board is the Company's managing body and consists of the Chief Executive Officer (Chairman) and other senior officers and managers of the Company. These appointments are at the discretion of the Supervisory Board.

The Supervisory Board also appoints Board Committees for specific purposes from among its members. Currently these committees comprise:

- the Audit Committee;
- the Risk and Solvency Committee; and
- the Nomination Committee.

The Company has a "Fit & Proper Standard" which sets out how the organisation ensures that senior management and other key function holders are fit and proper in accordance with both internal and external regulatory requirements. This Fit & Proper Standard is set at the Group level and is adopted by the Company as an MS Amlin Group subsidiary.

Risk management objectives seek to bring business strategy, capital management, and enterprise risk management together to optimise the relationship between these elements to achieve the best long-term sustainable outcome for shareholders, insured parties, employees and other stakeholders. As part of the Risk Management Framework, risk tolerances are monitored and reported on a quarterly basis to the Company's Risk & Solvency Committee and Boards.

As part of its risk management system MS Amlin AG conducts, at least annually, an Own Risk and Solvency Assessment ("ORSA") taking into account its risk profile, business strategy and related capital requirements. The ORSA is fully embedded into the overall Risk Management Framework and is aligned to capital strategy and business planning related processes.

The Company operates a system of internal controls. These internal controls contribute to meeting various objectives, including operational effectiveness, reliable financial reporting, compliance with laws and regulations and management of reputational and strategic risk.

The Internal Audit function is a centralised MS Amlin Group function servicing MS Amlin AG. Its independence and objectivity are guaranteed through direct reporting lines to the MS Amlin AG Audit Committee and Supervisory Board. The Supervisory Board has delegated its responsibility for overseeing the internal audit activity to its Audit Committee. The Internal Audit function's programme of work is based on an annual audit plan compiled by the Chief Internal Auditor and presented to the MS Amlin AG Audit Committee for approval annually.

The Company has a dedicated Compliance function as part of its management structure. The role of the Compliance function is to provide assurance to the Boards that the Company complies with all regulatory requirements, associated laws, and relevant MS Amlin policies. The Compliance function reports to the MS Amlin AG Risk & Solvency Committee regarding progress against the Compliance annual plan, regulatory returns, integrity risks, and monitoring activities.

MS Amlin AG has a local actuarial team supported by the Group actuarial function in some areas. The core actuarial function focuses on providing capital modelling and reserving services. The pricing actuaries report directly to the underwriting function and there is close co-operation between the pricing actuaries and the core team in the areas of business planning, reserving and setting of technical pricing standards.

## Risk Management

MS Amlin AG's vision and core values provide the strategic focus for the risk management system to deliver "effective risk management which optimises return for the risks we take" with the objective to deliver long-term value. This is achieved by actively seeking and accepting risk while managing that risk within acceptable bounds.

A Risk Management Framework has been developed and documented which provides:

- A strong, risk-based organisation, supported by an appropriate risk management system;
- A robust governance framework supporting its organisational structure;
- Clear roles and responsibilities and effective escalation processes;
- Effective monitoring; and
- Clear and effective communication and reporting lines.

## Valuation for Solvency purposes

The MS Amlin AG SST 2019 Capital Ratio described in detail later in this report is 178%, which compares favourably with the minimum FINMA SST solvency requirement of 100%. The SST One-year risk capital is USD 966.1m, the risk margin is USD 115.9m, the Target capital is USD 1,082.0m and the SST Risk Bearing Capital is USD 1,833.1m. Please note that the SST 2019 was filed with FINMA on April 2019, simultaneously to this document.

As described throughout this document, the MS Amlin AG SST Target Capital continues to be dominated by the risk of natural catastrophe losses. This is to be expected and in-line with the Company's business model, with property catastrophe business remaining the largest single business class.

The relevant measure of available own funds is the Risk Bearing Capital ("RBC") calculated on the SST market consistent balance sheet. MS Amlin AG has net assets under Swiss CO of USD 1,635.8m compared to USD 1,833.1m net assets based on SST market consistent balance sheet.

The adjustments made to move from Swiss CO balance sheet to SST market consistent balance sheet are set out below:

In USD	SST 2018	SST 2019
Excess of assets over liabilities - Swiss CO annual report (*)	1,465,766,384	1,635,839,870
Investment fair value adjustments	165,679,000	80,227,863
Deferred acquisition cost	202,398,912	0
Technical provision adjustments	78,111,303	93,162,240
Other adjustments (**)	26,401,925	23,903,858
<b>Excess of assets over liabilities- SST market-consistent balance sheet</b>	<b>1,938,357,524</b>	<b>1,833,133,831</b>
Approved Dividend	0	0
Intangible Assets	(1,001,359)	(42,516)
<b>SST Risk Bearing Capital after dividend</b>	<b>1,937,356,165</b>	<b>1,833,091,315</b>

(\*) Based on MS Amlin AG's Swiss CO financial statements for 2017 and 2018

(\*\*) Other adjustments are on foreign currency translation. For details please refer to Swiss CO annual report (Appendix 3)

## 3. Business Activities

### 3.1 Information about the insurance company's business activities and Group Status

MS Amlin AG is a Swiss-domiciled, global specialty reinsurer operating in local and international reinsurance markets and underwriting many classes of business through one capitalised underwriting platform.

MS Amlin AG is part of the MS Amlin Group of companies and was renamed following the acquisition of Amlin plc by the Mitsui Sumitomo Insurance Company Limited ("MSI"), a wholly owned subsidiary of MS&AD Insurance Group Holdings, Inc. ("MS&AD"). Both MSI and MS&AD are registered in Japan.

Amlin Bermuda was created as a separately capitalised reinsurance vehicle in 2005, domiciled in Bermuda. In 2010, the corporate seat of this company was redomiciled to Switzerland and became Amlin AG. The existing Bermuda operations continued as a separate underwriting centre but as a branch of Amlin AG. Amlin AG was renamed as MS Amlin AG during 2016.

It merged with MS Frontier Reinsurance Limited ("MSF"), the principal reinsurance vehicle of MSI, on 31 December 2016. MSF was established in 1997 and primarily wrote property catastrophe business in North America, Europe and Australasia.

MS Amlin AG now consists of three platforms: MS Amlin Zurich in Switzerland, where the company headquarters are located, and its two branches; MS Amlin Bermuda based in Hamilton, Bermuda and MS Amlin Labuan based in Malaysia. The Labuan branch was put into run-off in April 2018. MS Amlin AG also writes intragroup reinsurance treaties with other entities within the MS Amlin Group. Further information on the business written by each area of MS Amlin AG is included in Section 3.2.

As of the balance sheet date, MS Amlin AG provided a loan of USD 230.5m to MS Amlin plc. This was repaid in full on March 28, 2019.

### 3.2 Strategy, objectives and key business segments

MS Amlin AG manages its underwriting operations and strategic direction through the Reinsurance Strategic Business Unit (RI SBU). MS Amlin AG and the RI SBU business unit are supported by centralised group functions that seek to optimise operations and provide a consistent level of service and oversight to the Reinsurance platform.

The RI SBU strategy is driven by client intimacy and profitable growth and reflects the underwriting strategy of MS Amlin AG. MS Amlin AG ensures that the strategic plans adopted by the Reinsurance SBU and centralised group functions are consistent with its overall strategy.

#### *Distribution*

We have mapped the distribution dynamics of all major markets and are in the process of implementing the optimum distribution strategy. A priority initiative is to continue to analyse the benefits of new distribution strategies while also focusing on initiatives to increase the efficiency of the internal operations around our distribution model.

#### *Products*

We have made good progress expanding our credit and surety, motor, mortgage risk and casualty classes which helps diversify our portfolio beyond our core property products. We aim to continue monitoring the demands of global reinsurance products to ensure our infrastructure can support the required product offerings.

During 2019, we are looking to actively pursue new strategies that are within the risk appetite of the business and that improve profitability. There is a particular focus on Cyber business following a recent partnership with Envelop, an MGA that specialises in cyber reinsurance and uses new technology (such as AI and machine learning) to underpin its risk selection and pricing.

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Expected benefits of product development include greater diversification beyond traditional short-tail focus, top-line growth with the requisite expertise to protect profitability and deepening relationships with clients and brokers.

#### *Capital and capacity*

We continue to develop our understanding of capital and capacity needs by region and product and to evaluate options, which include use of our own capital or third party capital, for example Leadenhall Capital Partners (LCP), joint ventures, reciprocal quota shares, portfolio swaps, side-cars or hedge funds.

Expected benefits include increased relevance to clients and brokers through the ability to offer more meaningful capacity.

#### *Service and client intimacy*

We aim to deliver best in class service and differentiating client intimacy, including focus on:

- Promotion of client intimacy culture and skills, with emphasis on client needs, innovation and consistency;
- Client segmentation to ensure clients receive the services they require;
- Strengthening existing client relationships; and
- Improving client service.

Expected benefits include a broader and deeper relationship with our clients, improved signings and increased leadership.

#### *Underwriting excellence*

Underwriting excellence continues to sit at the very core of our business. We aim to continue developing our tools for both pricing and accumulation monitoring, including the following priority initiatives:

- First class technical pricing tools;
- Continued development of our Pricing and Portfolio Management tool;
- Enhancing the internal view of risk with better alignment between model results and underwriting decisions; and
- Enhancing MI and monitoring of KPIs.

Expected benefits include greater transparency and reduced modelling risk when pricing, increased understanding and likelihood of meeting profitability targets, increased confidence in decision making and increased competitiveness.

#### *Efficiency and technology*

The aims of this priority are to:

- Minimise our own costs of doing business through process effectiveness, innovation and technological developments;
- Differentiate ourselves as a partner through ease of use for our clients and brokers;
- Support our drive for best in class service. This involves ensuring we develop an efficient and scalable infrastructure; and
- Invest in technologies to improve operational efficiencies.

Expected benefits include enhanced client and broker intimacy and improvement of our own expense ratio.

These strategic priorities are further enforced through our vision and aspirations and our new purpose statement: 'Securing your world's potential'.



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## Business Segments

The key business segments of MS Amlin AG are described below:

- MS Amlin Bermuda (“AB”): Established in 2005, AB writes a portfolio of reinsurance business on a third party basis. A large proportion of the business written emanates from London broker markets. Traditionally, the focus of this business has been property catastrophe excess of loss reinsurance, but there are also substantial exposures to proportional reinsurance, risk excess of loss, casualty and specialty lines, covering both North American and International risks.
- MS Amlin Zurich (“AZ”): AZ is focused on business that provides diversification when compared to AB’s book, particularly with regard to natural catastrophe exposures. Accordingly, AZ targets EMEA (Europe, Middle East and Africa) clients for all classes of business.
- MS Amlin Labuan: This business was established in 2013 to carry out reinsurance business principally located in East and South East Asia. The business was placed into run-off in early 2018.
- Intragroup reinsurance contracts provided to other entities within the MS Amlin Group.

### 3.3 External auditors

The external auditors are KPMG AG, Switzerland. The company address is:

KPMG AG  
Badenerstrasse 170  
CH-8004 Zurich  
Switzerland

### 3.4 Significant unusual events

There are no significant unusual events to note.

## 4. Performance

In the following sections we have summarised information about MS Amlin AG's income statement, including underwriting and financial performance. Please note that the income statement as disclosed in Appendix 1, and in the following sections, is based on MS Amlin AG's Swiss Code of Obligation (Swiss CO) annual report for the year ended 31 December 2018.

During 2018 MS Amlin AG Supervisory Board have approved the elimination of the IFRS accounts and changing certain accounting policies for the Swiss CO accounts. The changes included (i) investments valuation and (ii) acquisition cost capitalisation. Prior to this MS Amlin AG's Swiss CO investment valuation basis was the lower of cost or market value for each security. The new accounting policies recognize the majority of investments at fair value and acquisition costs are deferred over the period in which the related revenues are earned.

Please note that the Swiss CO Annual Report is re-mapped to the FCR format, which follows the Aufsichtsverordnung (AVO)-FINMA. Please also note that in the prior year the FCR income statement was based on MS Amlin AG's IFRS annual report. For comparison purposes we have remapped the 31 December 2017 income statement as per the Swiss CO annual report to the FCR mappings.

The format used for the income statement is the FCR Standard Template translated into English and is disclosed in Appendix 1. The values are shown in CHF, which is the same MS Amlin AG's Swiss CO annual report currency.

### 4.1 Underwriting performance

During 2018 gross written premiums fell from CHF 1,324.0m to CHF 1,272.3m due to continued soft market conditions and disciplined underwriting.

The majority of gross written premiums in 2018 related to Property (53%), Motor (18%) and Casualty (12%). The reductions in gross written premium also led to decreases in net earned premium, mainly in Motor and Property classes.

Claims have been impacted by 2018 catastrophe losses including Hurricanes Florence and Michael, Typhoons Jebi and Trami, as well as the two Californian Wildfires. The catastrophe exposure impacted aggregate contracts in Bermuda and through the quota share of specific classes of MS Amlin Underwriting Limited Syndicate 2001. Claims were also impacted by a frequency of large losses in both Zurich and Bermuda. Prior period movements were overall immaterial.

The table below shows the main components of MS Amlin AG's technical result. For further details please refer to Appendix 1 which includes the income statement split by relevant class of business.

In CHF	2017 (*)	2018
Gross premium written	1,323,962,426	1,272,256,240
Net premiums written	1,194,772,366	1,139,710,571
Net premiums earned	1,199,592,022	1,161,278,131
Other insurance income	314,961	529,818
<b>Total technical income</b>	<b>1,199,906,983</b>	<b>1,161,807,949</b>
Net claims and claim expenses incurred	(1,168,542,175)	(962,940,647)
Net acquisition costs and administrative expenses	(364,146,787)	(115,782,323)
Other technical expenses own business	(2,306)	(1,149)
<b>Total technical result</b>	<b>(332,784,286)</b>	<b>83,083,830</b>
Claims ratio	97%	83%
Expense ratio	30%	10%
<b>Combined ratio</b>	<b>128%</b>	<b>93%</b>

(\*) Based on MS Amlin AG's Swiss CO income statement for the year ended 31 December 2017

## 4.2 Financial Performance

The impact of the accounting policy changes are reflected in full in the MS Amlin AG's Swiss CO results for the year ended 31 December 2018. The net investment return of CHF 115.3m increased by 14.3%. This was driven by the change in accounting policy to recognise allowable investments at fair value (market value) compared to cost in 2017. Market values were however impacted by the challenging market conditions in which the majority of assets produced very low or negative returns as market volatility increased.

The table below shows the main components of MS Amlin AG's net investment return by asset class. For further details, please refer to Appendix 1.

Acquisition costs of CHF 47.0m were expensed in the year, compared with CHF 256.3m in the prior year.

Administrative expenses also fell from CHF 107.8m to CHF 69.3m predominantly due to materially lower service charges received from Group and overall lower staff costs.

Please note that the numbers shown in the table reflect the investment income by asset category, as presented in the MS Amlin AG Swiss CO annual report (please see Appendix 3).

In CHF	2017 (*)	2018
<b>Income</b>		
<u>Investment income:</u>		
- Fixed-interest securities	4,936,445	5,693,625
- Loans	-	7,470,388
- Shares	7,875,199	6,124,045
- Other investments	16,972,724	32,451,544
	<b>29,784,368</b>	<b>51,739,602</b>
<u>Net unrealized gains:</u>		
- Fixed-interest securities	48,784	3,633,729
- Loans	-	-
- Shares	9,767,394	-
- Other investments	10,345,783	21,608,471
	<b>20,161,961</b>	<b>25,242,200</b>
<u>Net realized gain:</u>		
- Fixed-interest securities	262,721	725,785
- Loans	-	-
- Shares	69,795,773	126,811,964
- Other investments	84,555,008	13,877,528
	<b>154,613,503</b>	<b>141,415,277</b>
<b>Total net income</b>	<b>204,559,831</b>	<b>218,397,079</b>
<b>Expenses</b>		
<u>Investment expense:</u>		
- Fixed-interest securities	(7,829)	(529,630)
- Loans	-	-
- Shares	(1,736,521)	(2,414,348)
- Other investments	(2,055,355)	(1,985,779)
	<b>(3,799,705)</b>	<b>(4,929,757)</b>
<u>Net unrealized losses:</u>		
- Fixed-interest securities	(2,072,979)	(357,363)
- Loans	-	-
- Shares	(10,266,351)	-
- Other investments	(31,510,980)	(20,621,118)
	<b>(43,850,310)</b>	<b>(20,978,481)</b>
<u>Net realized loss:</u>		
- Fixed-interest securities	(1,093,747)	(1,719,731)
- Loans	-	-
- Shares	(11,364,737)	(73,803,497)
- Other investments	(43,632,055)	(1,702,573)
	<b>(56,090,539)</b>	<b>(77,225,801)</b>
<b>Total net expense</b>	<b>(103,740,554)</b>	<b>(103,134,039)</b>
<b>Net investment return</b>	<b>100,819,277</b>	<b>115,263,039</b>

(\*) Based on MS Amlin AG's Swiss CO income statement for the year ended 31 December 2017

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### **4.3 Profits & Losses recognized directly in Equity**

There are no profits & losses recognized directly in equity. Such profits & losses recognized directly in equity for IFRS reporting purposes, (e.g. defined benefit pension fund, deferred tax and foreign exchange) are not relevant under Swiss CO. These items are shown directly in the income statement for Swiss CO reporting purposes. For further details regarding foreign currency translation, please see MS Amlin AG Swiss CO annual report (Appendix 3).

### **4.4 Other material income and expenses**

Other financial expenses amounting to CHF 19.6m remained stable compared to prior year (CHF 19.7m). Other income amounted to CHF 4.8m during 2018. Please note that the decrease in other income compared to prior year mainly relates to the decrease in foreign exchange gains.

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## 5. Corporate Governance and Risk Management

### 5.1 Overview of Corporate Governance

#### 5.1.1 Corporate Governance Framework

MS Amlin AG's governance framework is based on the following underlying principles:

- accountability;
- transparency;
- integrity; and
- focus on the sustainable success of the Company over the long term.

MS Amlin AG's operating structure follows a strategic business unit model, whereby MS Amlin AG is fully aligned to the Reinsurance SBU.

Consolidated, group-wide functions support both MS Amlin AG and the RI SBU. The principles underpinning the organisational structure are to:

- facilitate client intimacy to enable profitable growth;
- enable greater efficiency and minimal duplication of effort; and
- ensure strong management control and oversight and more consistent application of service and oversight processes.

The governance framework in MS Amlin AG ensures:

- sufficient review and challenge of decision making processes;
- the responsibilities and interests of all stakeholders are appropriately considered; and
- appropriate reporting, of both frequency and content, to enable the Executive and Supervisory Boards to exercise adequate oversight over the business activities.

#### 5.1.2 System of Corporate Governance in MS Amlin AG

The Company operates a two tier board governance structure with the Supervisory Board made up of Non-Executive directors who are not actively engaged in the management of the Company, of which one third are independent of the Company.

The Executive Board is the Company's managing body and consists of the Chief Executive Officer and other senior officers and managers of the Company. These appointments are at the discretion of the Supervisory Board.

The Supervisory Board also appoints Board Committees for specific purposes from among its members. Currently these committees comprise:

- the Risk and Solvency Committee;
- the Audit Committee; and
- the Nomination Committee.

The Supervisory Board and Executive Board are responsible for the governance of MS Amlin AG. The responsibilities of these boards include:

- setting strategic aims;
- providing the leadership and oversight to implement strategy;
- supervising the management of the business; and
- reporting to the shareholder on their stewardship.

The following is in place for MS Amlin AG:

- matters reserved for the Supervisory Board's decision ensure it has sufficient oversight and control over certain business decisions and activities;
- roles and terms of reference of the committees of the Supervisory Board, namely the Risk and Solvency, Audit and Nomination Committees;
- Board and Committee agendas, and related reporting, comprising of both standing quarterly requirements and items to be covered over the course of a year; and
- a minimum frequency of Board and Committee meetings; usually monthly for the Executive Board, quarterly for the Supervisory Board, the Risk and Solvency Committee and the Audit Committee and annually for the Nomination Committee.

### 5.1.3 Board membership

The Supervisory Board of Directors as at 31 December 2018 was composed of the following non-executive members:

Name	Board Position
Martin Albers	Chairman
Stefan Materne	Director
Martin Burke	Director
Robin Adam	Director
James Few	Director

James Few joined the Supervisory Board during 2018.

The Executive Board of Directors as at 31 December 2018 was composed of the following members:

Name	Chief and Senior Executive Position
Chris Beazley	Chief Executive Officer
Kate McDonald	Chief Financial Officer
Catherine Farnworth	Chief Risk Officer
Jerome Domenichini	Chief Underwriting Officer, MS Amlin Zurich
Piero da Camino Soligo	Head of Compliance - Reinsurance

There were several changes throughout the year:

- Chris Beazley replaced Gregoire Mauchamp as the Chief Executive Officer;
- Jerome Domenichini was appointed to the Executive Board as Chief Underwriting Officer in Zurich; and
- Robert Wyatt departed as Chief Executive Officer of MS Amlin Bermuda.

Since year-end, there have been further changes:

- Chris Hayward was appointed to the Executive Board as Chief Underwriting Officer for Bermuda; and
- Piero da Camino Soligo departed the Executive Board and the Head of Compliance role.

## 5.2 Overview of Risk Management

The main objectives of MS Amlin AG's combined assurance initiatives are to:

- Deliver a joined up approach to risk identification, assessment, mitigation and reporting;
- Increase efficiency and effectiveness by preventing gaps, overlaps and duplication in assurance activity; and
- Promote risk management and its assurance as an integrated process across all business areas and locations.

### 5.2.1 Risk Management Strategy

MS Amlin AG's vision and core values provide the strategic focus for the risk management system to deliver "effective risk management which optimises return for the risks we take" with the objective to deliver long-term value. This is achieved by actively seeking and accepting risk while managing that risk within acceptable bounds.

### 5.2.2 Risk Management Framework

MS Amlin AG has developed a Risk Management Policy committed to establishing and maintaining a sustainable enterprise risk management process as an integral part of its business model supporting business planning, capital management and decision making in the business. The Policy is intended to provide transparency, and define ownership, and responsibilities throughout the risk management process as well as create a risk aware culture across the organization.

To supplement and fulfil the needs of the Policy, a Risk Management Framework has been developed and documented which provides:

- A strong, risk based organisation, supported by an appropriate risk management system;
- A robust governance framework supporting its organisational structure;
- Clear roles and responsibilities and effective escalation processes;
- Effective monitoring; and
- Clear and effective communication and reporting lines.

MS Amlin AG's Risk Management Framework consists of a suite of standards, governance processes and procedures that ensure a strong risk management function. It is built into the core operating model of the business and forms part of the overall approach to internal control. It provides the infrastructure within risk governance and also sets out the processes required to sustain risk management across the business.

### 5.2.3 Risk Management Methods and Processes

#### Risk Governance

The operation of effective risk management requires the active involvement of all employees and the responsibility for each risk has been clearly allocated within the Company.

MS Amlin AG operates risk management through a 'three lines of defence' model.

- **First line** – all employees are expected to be risk aware and exercise controls over their activities so that levels of risk are understood and managed appropriately;
- **Second line** - MS Amlin AG's Risk function is responsible for the design and coordination of the risk framework architecture, working together with the Compliance function for additional support;
- **Third line** - MS Amlin's Internal Audit function is independent and has direct reporting to the MS Amlin AG Audit Committee. The function has responsibility for the review of the effectiveness of controls.

The Boards and the Risk and Solvency Committee receive reports from the Risk function that escalate risk areas of concern.

## Risk Appetite and Tolerances

A key objective of the Risk Management Framework is to establish risk appetites for all key areas of risk identified. This appetite is implemented through a set of tolerances or limits which are approved by the Risk & Solvency Committee and the Supervisory Board. Management is accountable for managing levels of risk within the allocated tolerances. The status of profile versus tolerance is reported quarterly to the Risk & Solvency Committee.

## Risk Categorisation

MS Amlin AG groups its risks into six key categories as specified below. Accordingly, the Risk Management Framework has been designed to take account of these risk categories and seeks to ensure ownership and accountability.

Each of these categories of risk are owned by members of the Executive Board with appropriate expertise and authority over the risks being managed on a day-to-day basis. Further details on the roles, responsibilities, accountabilities, and key mitigation actions of each risk category are documented in six category-based risk standards that are reviewed and approved by the Risk & Solvency Committee on a regular basis.

Risk category Owner	High Level Overview	Scope
<b>Insurance Risk</b> (Chief Underwriting Officers, Zurich and Bermuda)	Risk from the inherent uncertainties in the occurrence, amount and timing of insurance liabilities and premiums. This includes reserving risk from claims arising on business written in prior years.	<ul style="list-style-type: none"> <li>• Business plan</li> <li>• Pricing</li> <li>• Underwriting performance including catastrophes</li> <li>• Product Oversight</li> <li>• Reserving</li> <li>• Claims</li> </ul>
<b>Market Risk</b> (Chief Financial Officer)	Risk from fluctuations in values of, or income from, assets, interest rates and investment returns.	<ul style="list-style-type: none"> <li>• Investment market volatility</li> <li>• Counterparty risk</li> <li>• Concentration risk</li> <li>• Currency fluctuation</li> </ul>
<b>Credit Risk</b> (Chief Financial Officer)	Risk of counterparties failing to perform their obligations in a timely manner or at all.	<ul style="list-style-type: none"> <li>• Retrocessionaires</li> <li>• Brokers</li> <li>• Cedants</li> <li>• Banks and Investment counterparties</li> </ul>
<b>Liquidity Risk</b> (Chief Financial Officer)	Risk of insufficient financial resources being available to meet liabilities as they fall due.	<ul style="list-style-type: none"> <li>• All assets</li> </ul>
<b>Operational Risk</b> (Chief Executive Officer)	Risk from inadequate or failed internal processes, people and systems, or from external events.	<ul style="list-style-type: none"> <li>• Systems and Technology</li> <li>• Processes</li> <li>• People</li> <li>• Legal &amp; Regulatory</li> </ul>
<b>Strategic Risk &amp; Group Risk</b> (Chief Executive Officer)	<p>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.</p> <p>Risks that may arise as a result of Group structure.</p>	<ul style="list-style-type: none"> <li>• Strategic</li> <li>• Group</li> <li>• Political &amp; Economic</li> <li>• Conduct</li> <li>• Capital Management</li> <li>• Merger &amp; Acquisition</li> </ul>

Three risk categories (Insurance, Credit and Market Risk) are managed using capital against the residual risk and are included within the Internal Model for the SST.

Liquidity Risk and Operational Risk are measured through stress and scenario testing and have tolerances set against them, although explicit risk charges are not included within the SST Target Capital.



Strategic & Group risks such as reputational and political risks are on the whole not directly considered within the capital model but managed rather through the use of management actions, contingency plans, policies, processes and robust preventative and detective business process controls.

### **Linkage to Capital Management**

MS Amlin AG has an Internal Model which has been built to reflect the risk variables which could impact the performance of the Company. The MS Amlin AG Supervisory Board has confirmed that the Internal Model is the appropriate method for the calculation of solvency capital under the requirements of the Swiss Solvency Test. The Internal Model has been approved by the supervisory regulator, FINMA, for use when calculating the SST for risk charges including Insurance Risk, Reinsurance Credit Risk and Dependencies. The Internal Model is a core component of the risk management system and is used for a range of business decisions including setting and assessing risk tolerances, business planning, strategic decision making and purchase of outwards reinsurance, and is a key input into the technical pricing framework.

### **Alignment to Business Strategy**

MS Amlin AG's risk management objectives seek to bring business strategy, capital management, and enterprise risk management together to achieve long-term sustainable outcomes for all stakeholders.

This approach allows the business to maximise its return on risk where there is opportunity to, subject to limitations over acceptable risk taking. This is done through the adoption of risk appetites and tolerances that link closely to the return objectives set by the Board.

## **5.2.4 Internal Control System implemented in the Company**

The Risk Assurance team was initially established to strengthen oversight of the control framework and to help meet the Japanese Financial Services Agency requirements and standards for Internal Control over Financial Reporting, commonly termed "J-SOX". MS Amlin AG became in-scope for these requirements following the takeover by MSI.

The internal control framework and JSOX compliance programme are supported by the following:

- A Risk & Control software platform that provides dashboards to all users;
- A suite of documented key controls with an established self-certification process;
- A control attestation quality assurance programme to ensure results are validated; and
- Transparent and meaningful management and committee reporting.

The Risk Assurance team and the wider Risk Management function report directly into the MS Amlin AG Executive Board, MS Amlin AG Risk & Solvency Committee and MS Amlin AG Audit Committee. Actions to remedy ineffective controls are agreed with management and are tracked and reported to these committees on a quarterly basis. This governance arrangement allows access to key stakeholders to ensure that, where necessary, appropriate oversight and remediation take place.

In 2018, effort was focussed on refining key internal controls, following a detailed plan to challenge the appropriateness of the key risks, their drivers and the key controls that mitigate them. This approach identified potential improvements to the key control library. This programme of work involved all three lines of defence and for most risks the project concluded by the end of 2018, while a few remain in focus for 2019.

## **5.2.5 Compliance and Internal Audit Functions**

### **Compliance function**

The Company has a dedicated Compliance function as part of its management structure. During Q1 2019 the Compliance function has been integrated within the Risk function, reporting to the CRO, to support a goal of clearer accountability, efficiency and reduced complexity around risk management, compliance and governance activities across the business. The role of the Compliance function is to provide assurance to the Executive and Supervisory Boards that the Company complies with all regulatory requirements, associated laws, and relevant internal policies. The Compliance function reports to the MS Amlin AG Risk & Solvency Committee regarding progress against the Compliance annual plan, regulatory returns, integrity risks and monitoring activities.

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## Internal Audit function

The Internal Audit function is a centralised group function servicing MS Amlin AG. Its independence and objectivity are guaranteed through direct reporting lines to the MS Amlin AG Audit Committee and Supervisory Board. The Supervisory Board has delegated its responsibility for overseeing the internal audit activity to its Audit Committee. The Internal Audit function's programme of work is based on an annual audit plan compiled by the Chief Internal Auditor and presented to the MS Amlin AG Audit Committee for approval annually.

### 5.2.6 Changes in risk management during the period

During 2018 there were no material changes to the Risk Management Framework, including the risk assessment and reporting processes that had been established and embedded in prior years. The most material changes were administrative and related to team structure, including the integration of the Risk Assurance team into the wider Risk function and the related improvement in efficiencies and communication around the control framework. In early 2019 an additional material change has been the integration of the Compliance function (discussed in Section 5.2.5).

During 2018 the detailed reviews of key risks, drivers and controls in place have resulted in changes in how we define certain risks and which key controls are in place to manage them, in particular related to Underwriting Risks and certain Operational Risks, and this process will continue across the remaining key risks during 2019.

Further improvements of the framework have been seen throughout the year, such as redefining the risk appetite statement to make it more granular and refinements of the tolerance schedule. In addition, further risk assurance work was performed around the business planning process and a framework has been developed to provide more challenge to strategic decision making.

## 6. Risk Profile

MS Amlin AG is exposed to six main categories of risk: Insurance, Credit, Market, Liquidity, Operational and Strategic risk. Three risk categories (Insurance, Credit and Market Risk) are managed using capital against the residual risk and are included within the Internal Model. The associated risk charges are included within the risk sections below.

The MS Amlin AG Risk function works closely with business functions and senior management to identify, assess and monitor risk profiles throughout the year. This section summarises the key risk profile movements throughout the year, the current key risk concerns and outlines the mitigating actions being taken by management in response to these risks.

### 6.1 Quantitative & Qualitative Information about Risk Profile

#### 6.1.1 Insurance Risk

MS Amlin AG separates Insurance Risk into the following two key sub-risks:

- **Premium Risk:** Relates to the risk of inadequate pricing, inappropriate terms and conditions, and unexpected level and/or frequency of losses; and
- **Reserving Risk:** The risk of inadequate reserving.

##### Premium Risk

###### *Risk Definition and Appetite*

Premium Risk relates to unexpected losses on the active portfolio that can be caused by inadequate pricing, inappropriate terms and conditions, unexpected claims frequency, or catastrophe losses from large natural or non-elemental events such as earthquake, hurricane or terrorism threats.

MS Amlin AG has a risk-seeking attitude to Premium Risk and accepts that there will be claims arising from all areas of its Insurance Risk profile. The appetite for risk is governed by the amount of business that meets our pricing requirements but also by the capacity determined by available capital base and outwards reinsurance arrangements.

MS Amlin AG aims to achieve a diversified balance of exposures across lines of business and territories.

- **Catastrophe** - MS Amlin AG has an extensive portfolio of property reinsurance business that has significant concentration exposure to natural perils as well as non-elemental perils such as industrial accidents.
- **Attritional** - MS Amlin AG is exposed to attritional losses caused by inadequate pricing and/or unexpected claims frequency as well as systemic change in the nature of claims. The development of external competition for business impacts this risk. As the downward trend in the pricing cycle leads to lower margins, the risk increases, although underwriters are expected to take action if pricing is unacceptable. The nature of this risk can also develop due to underlying exposure changes such as the development of cyber risk exposure within the business underwritten.

###### *Risk Concentration and Changes over the year*

The scale of risk concentration is identified through the use of market standard methodologies:

- **Stochastic Modelling** – MS Amlin AG utilises exposure data to feed its underwriting and internal model that aggregates the risk concentration, taking account of inherent exposure and the benefit of the associated mitigation strategies. Modelling takes place on a single Occurrence Exceedance Probability basis as well as at an Aggregated Exceedance Probability basis.
- **Realistic Disaster Scenarios (“RDS”)** - Specific event scenarios are monitored and controlled accordingly. RDS’s are run for MS Amlin AG each quarter. The RDSs cover both modelled and non-

modelled classes as well as natural and man-made perils, also taking account of single occurrence and multi occurrence events.

- **Line Guide Monitoring** – Large loss concentration is identified through line size monitoring across classes.

Premium Risk concentration is derived from:

- Natural perils such as windstorm or earthquake;
- Large losses from man-made events such as terrorism, cyber or industrial accidents; and
- Correlated Liability coverage, such as professional liability coverage for medical practice.

Within natural perils, the most material concentrations are made up of natural catastrophe exposures as follows:

- US Windstorm - particularly North East, Gulf of Mexico, and Florida;
- US Earthquake - particularly California; and
- Concentrations to European, Australasian and Japanese perils.

As at 1 January 2019, MS Amlin AG quantified its Premium Risk as USD 661.9m on a stand-alone SST basis.

Catastrophe Risk is the main source of Premium Risk for MS AAG. Overall, the catastrophe exposure positions were fairly consistent throughout the year, contrary to the large movements seen throughout 2017 as a result of the integration of the MS Frontier portfolio, causing large peaks before exposures were reduced in the latter half of 2017. 2018's exposures show more stability and are more reflective of the final integrated portfolio going forward, further reduced to respond to market conditions. Some reduction in exposures was experienced following the mid-year renewals in the US as the lack of rate increases following the events of 2017 led to the non-renewal of poorly rated business.

#### *Assessment, Monitoring & Mitigation Techniques*

The business looks to mitigate exposure through the application of strategies, processes and controls. The key mitigation techniques are:

- **Strategy and business planning** - As part of business planning, strategy is developed into plans for the coming year. This allows the business to develop plans that incorporate the best return on capital versus risk concentration and allows for the planning of diversification within the portfolio;
- **Tolerance setting and monitoring** - The setting of tolerances is closely linked to strategy and business planning. Stochastic Modelling and RDSs are utilised to set and monitor exposure to catastrophe perils against tolerance for both single and annual aggregate loss using proprietary catastrophe model output and netted down for reinsurance in the Internal Model. Results are reported to the Risk and Solvency Committee for consideration in decision making on a quarterly basis;
- **Technical pricing** - Takes account of hazards so that premiums are adequate and exposures are contained within tolerances;
- **Outwards reinsurance** - The main instrument for risk mitigation of Insurance Risk is the use of outwards reinsurance. Reinsurance treaties are purchased for the RI SBU which includes MS Amlin AG; and
- **Policies, procedures and standards** - Underwriting policies and standards assure consistency and control across underwriting activities.

## Reserving Risk

### *Risk Definition and Appetite*

Reserving Risk relates to the possible inadequacy of claims provisions. Specifically, it relates to the uncertainty around whether reserves are adequately accounted for, taking account of fluctuations in claim settlements.

MS Amlin AG adopts a neutral approach to Reserving Risk (accepting risk with caution as a by-product of pursuing desired risk), which is an unavoidable consequence of underwriting a portfolio of business where claims may develop after the policy period has elapsed. Our appetite is governed by a policy that ensures that reserves are carried above the actuarial best estimate of future outcomes. Classes with a higher level of uncertainty of potential development will naturally carry a higher level of reserve provision.

### *Risk Concentration and Changes over the year*

Reserving Risk concentrations are the accumulation of assumed claims and the uncertainty associated with the ultimate size of the claims given the extended duration it can take for some claims to mature. Liability classes are considered as the primary drivers of reserve risk.

MS Amlin AG operates an actuarial led reserving process to estimate the reserves on a Best Estimate basis. Reserving Risk exposures and concentrations are identified through the use of the Internal Model. Volatility in forecast reserve requirements are monitored on a quarterly basis.

Naturally, there is uncertainty associated with the calculation of the reserves with the key sources of the uncertainty relating to ultimate claims on an underwriting year basis. MS Amlin AG's Internal Model produces a full distribution of possible reserving outcomes with the intention of capturing the uncertainty in the reserves. Expert judgement is applied during parameterisation to ensure that the final results from the Internal Model appropriately reflect MS Amlin AG's risk profile.

As at 1 January 2019, MS Amlin AG quantified its Reserving Risk as USD 425.8m on a stand-alone SST basis.

Reserve Risk has remained relatively stable over the year. The reserves from the 2017 events have developed, reducing the uncertainty, whereas the reserves for the 2018 events entered the portfolio with more volatility around them.

### *Assessment, Monitoring & Mitigation Techniques*

The key mitigation strategies, processes and controls are as follows:

- **Actuarial reserving process** - MS Amlin AG operates a consistent, actuarially driven process each quarter to assess the appropriateness of reserves held, taking account of the characteristics and risks of each class of business. The best estimates are subject to challenge and review by management;
- **Reinsurance programme** - responds to large loss developments from prior years.
- **Tolerance setting and monitoring** - requires a minimum probability of carried reserves being in excess of liabilities. This is tracked as a key actuarial metric that is monitored quarterly to assess that appropriate levels of reserves are carried, taking account of the characteristics and risks of each class of business; and
- **Claims Policy and process** - consistent claims processes and accurate case reserve setting aim to ensure that adequate provision is established for advised claims.

## 6.1.2 Market Risk

### *Risk Definition and Appetite*

MS Amlin AG seeks to optimise its investment income whilst focusing on ensuring it maintains sufficient capital to meet solvency requirements and maintain sufficient liquid funds to meet liabilities when they fall due. Exposure to Market Risk is therefore limited to the extent that investment strategies are balanced by these primary objectives.

MS Amlin AG considers the following risks as two of the key drivers of market risk:

- **Investment Market Volatility:** This is the risk of loss resulting from fluctuations or volatility of market assets and financial instrument valuations, either directly or indirectly. MS Amlin AG has a risk-seeking attitude to Market Volatility Risk, constrained by a desire to limit the potential downside risk to the value of carried assets to within a maximum Value at Risk tolerance.
- **Currency fluctuation:** This relates to the impact on the value of the balance sheet or on earnings arising from the movement in the value of USD against key non-functional currencies. MS Amlin AG has a risk-neutral attitude towards Currency Risk, which is an unavoidable consequence of holding balance sheet assets, premiums and liabilities in currencies other than USD. This risk is managed by matching asset and liability currencies where possible.

#### *Risk Concentration and Changes over the year*

Concentration in Market Risk can result from holding disproportionate levels of assets in particular:

- financial securities or asset classes;
- foreign currencies;
- banks or fund managers; or
- political domiciles.

MS Amlin AG recognises its exposure to all of these and has established mitigation strategies against such concentration exposure as described in the following sub sections.

As at 1 January 2019, MS Amlin AG quantified its Market Risk as USD 269.1m on a stand-alone SST basis.

There has been an increase in Market Risk and a reduction in the Expected Investment Result over the last year, driven by a change in Foreign Exchange Risk due to an increase in short-maturity foreign bond exposure, and an increase in the risk-free rate.

#### *Assessment, Monitoring & Mitigation Techniques*

This section presents mitigation techniques specifically implemented for investment market volatility risk. Monitoring results are reported to the MS Amlin AG Risk & Solvency Committee on a quarterly basis.

- **Investment policy and strategic asset allocation** - aims to maximise long-term investment returns in relation to an agreed risk budget.
- **Asset Duration Management** - Interest Rate Risk is managed relative to liabilities through the strategic asset allocation.
- **Tactical asset allocation** - responds to expectations for short-term market prospects or volatility.
- **A diversified portfolio** - limits exposure to any one security or asset class.
- **Tolerance, limit setting and performance monitoring** - Stochastic Value at Risk Monitoring is utilised by the investment team through the modelling and monitoring of investment risk against agreed tolerance.
- **Sub-advisor monitoring** - sub-advisors are appointed to carry out stock selection within the asset class they specialise in. Each sub-advisor has discretion to manage the funds within their Investment Guidelines. These are designed to ensure that their investments comply with agreed Investment Guidelines. Performance and compliance with mandates are monitored by the investment team.
- **Hedging** - MS Amlin Investment Management actively manages Interest Rate Risk exposure and the level of equity exposure.

### **6.1.3 Credit Risk**

MS Amlin AG separates Credit Risk into the following three key sub-risks:

- **Reinsurance Counterparty Risk:** The risk of loss if a reinsurance counterparty fails to fulfil its underwritten obligations;
- **Broker Credit Risk:** The risk of loss if an insurance intermediary fails to follow MS Amlin AG's settlement instructions; and

- **Investment Counterparty Credit Risk:** The risk of loss resulting from fluctuations in the credit standing of issuers of securities, counterparties and any debtors to which MS Amlin AG is exposed.

## Reinsurance Counterparty Risk

### *Risk Definition and Appetite*

Reinsurance purchase exposes the business to losses on recoveries, from either an inability or unwillingness to pay on the part of reinsurers. There is the risk of loss if a reinsurance counterparty fails to fulfil its underwritten obligations or fails to perform them in a timely fashion.

MS Amlin AG has a risk-seeking appetite with a desire to maintain Reinsurance Counterparty Credit Risk relatively consistent with current exposures, which emanates from use of reinsurance to protect the company against severe catastrophic events and other scenarios.

### *Risk Concentration and Changes over the year*

Concentration risk is mitigated by controlling exposure to each reinsurer through the reinsurer accreditation process and application of exposure limits for each reinsurer, based on MS Amlin's internal credit rating process.

As at 1 January 2019 MS Amlin AG quantified its Credit Risk (Reinsurance and Broker Credit Risk combined, excluding Investment Credit Risk) as USD 74.6m on a stand-alone SST basis. There were no material movements relating to Reinsurer Credit Risk.

### *Assessment, Monitoring & Mitigation Techniques*

The key mitigation strategies, processes and controls are as follows:

- **Selection management** - The reinsurance security team conducts accreditation selection and rating of all reinsurers.
- **Reinsurer review process** - Takes account of publicly available information such as rating agency input and financial statements.
- **Aggregate Exposure planning and monitoring** - There are limits of exposure to be placed with any one reinsurer.
- **Collateralisation** – Reinsurance credit risk is reduced through the purchase of some collateralised reinsurance.
- **Claims management** - MS Amlin AG's Claims Management procedures ensure that every claim is reviewed to identify any potential recoveries and assess whether these can be pursued effectively.

## Broker Credit Risk

### *Risk Definition and Appetite*

MS Amlin AG conducts business through brokers and directly with cedants meaning it is exposed to credit risk in respect of the following balances: inwards gross premium, outwards claims payments, outwards reinsurance premiums, and retro recoverables. There is the risk of loss if an insurance intermediary fails to follow MS Amlin AG's settlement instructions either at all, or in a timely fashion.

MS Amlin AG has a risk averse approach to Broker Credit Risk (the Company has no desire to accept this risk on the basis it should be wholly manageable).

### *Risk Concentration and Changes over the year*

Brokers need to both collect premiums and settle claims as part of their service. Risk concentration can occur as a result of accumulation of MS Amlin AG owned assets within insurance intermediaries, such as brokers, who may default or fail to settle transactions when instructed. We set limits according to broker financial strength to control exposure to each counterparty.

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As at 1 January 2019 MS Amlin AG quantified its Credit Risk (Reinsurance and Broker Risk combined, excluding Investment Credit Risk) as USD 74.6m on a stand-alone SST basis. There were no material movements relating to Broker Credit Risk.

#### *Assessment, Monitoring & Mitigation Techniques*

The key mitigation strategies, processes and controls are as follows:

- **On-boarding** - Local broker committees are responsible for broker accreditation and on-boarding.
- **Broker review process** - Takes account of the latest available full year financials, comparison with MS Amlin recommended standards, recent developments, and background information.
- **Policies, procedures and standards** - Policies and standards are in place to explain the process of on-boarding, broker review, debt control, and claims management.
- **Tolerance, limit setting and performance monitoring** - The business seeks to manage and monitor exposures to brokers by a number of risk tolerances across the risk category.
- **Debt control** - Broker debt credit control is carried out to limit outstanding balances owed by counterparties.

### **Investment Counterparty Credit Risk**

#### *Risk Definition and Appetite*

MS Amlin AG is exposed to Counterparty Credit Risk through investing in financial instruments such as bonds. MS Amlin AG defines Investment Counterparty Credit Risk as the risk of loss, or of adverse change in the financial situation, resulting from fluctuations in the credit standing of issuers of securities, counterparties and any debtors to which MS Amlin AG is exposed. There is a risk of loss to MS Amlin AG if its investment counterparties are unable to or are unwilling to meet their financial obligations or if they cease to operate as a business. Investment Credit Risk could therefore have an impact upon MS Amlin AG's ability to meet its liabilities as they fall due and upon the investment return.

MS Amlin AG has a risk-seeking appetite to maintain Investment Counterparty Credit Risk relatively consistent with current exposures as part of Market Risk but limits investment counterparty exposure through concentration limits. This risk is included within Market Risk.

### **6.1.4 Operational Risk**

#### *Risk Definition and Appetite*

MS Amlin AG operates a diverse business across several offices and jurisdictions and is expected to comply with legal, regulatory and best-practice standards. Operational Risk spans many risks including the potential failure of critical business processes, people or systems resulting in an interruption to normal operations. The failure of management to address performance issues may impact the level of, or potential for, Operational Risk. Natural or man-made disasters could impact MS Amlin AG's operating platforms in one or more locations. Cyber Risk is also an increasing source of risk.

MS Amlin AG has a risk averse attitude to Operational Risk and seeks to avoid any operational failures which may hinder the operational capability of MS Amlin AG, or result in financial loss, or any regulatory sanction for inadequate compliance.

#### *Risk Concentration and Changes over the year*

As a result of the broad scope of Operational Risk, MS Amlin AG has divided its concentrations into five subcategories:

- People Risks
- Process Risks
- Systems and Technology Risks
- Legal and Regulatory Risk
- Group Structure Related Risks



Risks are identified and assessed using a deterministic risk assessment process that requires engagement with the business periodically to assess current risks and issues, project risks, emerging risks and control adequacy. Deep dive assessments and other such assurance activities also seek to evaluate risks from a thematic perspective.

The key drivers of Operational Risk through scenario testing and operational risk modelling have been identified as follows:

Rank	MS Amlin AG Drivers of Operational Risk	1:200 Net Loss (\$m)
1	Legal risk	18.9
2	Expense risk	11.9
3	Other credit risk	11.0
4	Underwriting operations risk	8.0
5	Systems and technology risk	5.8
6	Regulatory risk	4.0
7	Outwards RI risk	2.9
8	Financial crime risk	2.7
9	Process risk	2.6
10	Remuneration risk	2.2

- **Legal Risk** is prevalent, owing to the potential impact of large loss disputes or increasing potential for class action cases.
- **Expense Risk** - This is a material risk as poor expenses planning, allocation and ability to monitor effectively can cause material fluctuations to operating costs and deviations from business plan.
- **Other credit Risk** - The business is at risk if a counterparty (excluding brokers and reinsurers) goes into financial difficulties and is not able to pay the premiums owed to us.
- **Underwriting Operations Risk** – There may be a material impact to underwriting profits as a result of an operational error in underwriting processes or systems.
- **Systems and Technology Risk** is recognised as an exposure requiring significant investment and remediation in the future to address vulnerabilities. System downtime could have a material effect on MS Amlin AG’s ability to conduct business and produce profits.
- **Regulatory Risk** – This considers the risk of a failure to meet regulatory obligations that could result in reputational damage, trading or licensing restrictions, or financial penalties levied upon the company.
- **Outwards RI Risk** – Assumes reinsurance does not respond to anticipated recoveries (due to operational error, not exhaustion).
- **Financial Crime** refers to the potential for fraudulent events that could impact the Company.
- **Process Risk** – MS Amlin AG is exposed to loss inherent in centralised business processes associated with the undertaking of insurance business.
- **Remuneration Risk** – MS Amlin AG is exposed to remuneration risk through the compensation and rewards schemes it operates. There is a risk that people adjust their behaviour in response to the perceived level of risk and personal reward available for a given business decision.

There were no material changes to the Operational Risk framework in the last year.

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## Assessment, Monitoring & Mitigation Techniques

The key mitigation strategies, processes and controls are as follows:

- **Risk Management Framework** - The implementation of a framework for the identification, assessment and control of operational risks ensures that these risks are understood and managed by the business.
- **Policies, Procedures & Standards** – The Operational Risk Standard ensures all significant operational risks are identified, assessed, managed, monitored and reported to relevant stakeholders.
- **Policy Framework** - A policy framework is in place to apply control over people matters, key business processes, business continuity, data quality, information security, outsourcing, procurement and other key risk areas.
- **Internal Control Framework** – A framework measures the operation of key controls in day-to-day operations and evaluates the effectiveness of managing Operational Risk.
- **Risk Events & Near Miss Capture** – The Company monitors risk events in order to raise awareness, identify areas for improvement and drive remedial response.
- **Assurance Monitoring** - An established assurance plan including Compliance, Risk and Internal Audit plan, seeks to identify both general and regulatory vulnerabilities.
- **Scenario Analyses** - are used to determine the level of regulatory and economic capital required to support the level of operational risk charge within the business.
- **Insurance** - is acquired to recover from financial losses where appropriate.

### 6.1.5 Other Material Risks

#### Strategic Risk

##### *Risk Definition and Appetite*

Strategic Risks are defined as risks to current and prospective earnings or capital arising from adverse business decisions, improper implementation of decisions or lack of responsiveness to industry changes. This includes risks associated with the appropriateness of business strategy in the face of the current and future commercial, political, legislative, and economic environment.

MS Amlin AG has a risk-seeking attitude to maintain consistent levels of Strategic Risk as it actively pursues ways of developing the business. The Company also faces a number of external factors which may impact demand for or supply of products. These risks are analysed and actions agreed to adapt the strategic approach to cater for them.

##### *Risk Concentration and Changes over the year*

MS Amlin AG sees Strategic Risk concentration derived from:

- **Group Risk** - MS Amlin AG is a subsidiary of MS Amlin plc and also the wider MS&AD group. There is a risk that losses in other parts of the MS&AD group of companies may impact the ability of MS Amlin AG to execute its strategy.
- **Strategy Setting** - The development of strategic objectives is carried out by MS Amlin AG senior executives in conjunction with the RI SBU and these are then approved by MS Amlin AG's Supervisory Board. The strategy is fundamental to the development of MS Amlin AG's market share, brand, reputation, underwriting aims and the fulfilment of the expectations of its shareholder and other interested parties.
- **Political and Economic Factors** - MS Amlin AG is exposed to political uncertainty and resulting instability that could affect the delivery of MS Amlin AG's strategy or the provision of its products and services. This could crystallise as a result of political decisions, events or conditions.

##### *Assessment, Monitoring & Mitigation Techniques*

The key mitigation and monitoring consist of:

- **Strategy Alignment** - MS Amlin AG's strategic objectives and decisions take account of the expectations of the ultimate parent company, MS&AD. There is communication of MS Amlin AG's

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business plans and strategic requirements to MS Amlin plc, including capital needs, regulatory requirements and risks.

- **Culture** - MS Amlin AG's culture and strategic objectives take account of client needs and expectations.
- **Strategy Commitment** - There is resource commitment to support the duration of the executed strategy. Strategies have flexible re-directive decision points in their plan.
- **Market Monitoring** - Horizon scanning often takes place, decisions take account of current market environment and are made in a structured, governed manner by subject matter experts.
- **Governed Decision Making** - Capital requirements are fully assessed taking account of all requirements and risk acceptance is undertaken within a controlled manner.
- **Capital Management** - Aggregate risk exposure is continually monitored against available capital, and responses would be made if solvency ratios began to deteriorate. Contingency and resilience plans are developed to manage adverse capital events.

## 6.2 Material risk exposures

### 6.2.1 Exposure to Material Off Balance Sheet positions

MS Amlin AG doesn't have any exposure to material off balance sheet positions.

## 7. Valuation

### 7.1 Market Consistent Asset Valuation for solvency purposes

#### 7.1.1 Value of assets broken down by asset class (as per breakdown in quantitative templates)

The market-consistent balance sheet as disclosed in the FCR Standard Template (Appendix 1) is based on MS Amlin AG's SST balance sheet. For assets and liabilities in the SST balance sheet, we applied the same account mapping structure as in Swiss CO. The SST balance sheet is then re-mapped to the FCR format with current year figures. For comparison purposes, we also re-mapped prior year figures within Appendix 1 with no impact on the total figures.

Please note that SST 2019 is filed with FINMA on 30 April 2019 simultaneously to this document.

The market consistent value of investments of MS Amlin AG amounts to USD 3,321.6m as of 31 December 2018. Investments mainly consist of other investments (USD 2,668.8m), fixed-income securities (USD 399.4m), equities (USD 11.2m) as well as the loan to MS Amlin plc (USD 231.9m including accrued interest). In line with FCR Standard Template (Appendix 1), receivables from derivative financial instruments (USD 10.4m) are included as part of overall investments.

The market consistent value of other assets of MS Amlin AG amounts to USD 1,192.1m as of 31 December 2018. They mainly consist of receivables from insurance business, cash and cash equivalents and other receivables.

#### 7.1.2 Description of basis and methods used for valuation

The starting point for the FCR balance sheet is the SST which captures the market consistent value of assets. SST figures are re-mapped to the FCR Standard Template (Appendix 1).

The market consistent SST valuation method on investments is based on IFRS fair values. The financial data used in preparing the FCR balance sheet originates from the MS Amlin financial reporting system and is as of 31 December 2018.

#### 7.1.3 Discrepancies between asset valuation for solvency and annual report

As mentioned in section 4.1 during 2018 MS Amlin AG's Supervisory Board approved the elimination of the IFRS accounts. We therefore summarized valuation discrepancies between MS Amlin AG's FCR (i.e. SST) and annual report (i.e. Swiss CO) as follows:

- Investment fair value adjustments: During the year the Supervisory Board of MS Amlin AG approved the change in accounting policy for Swiss CO annual report to recognize investments at fair value. A small portion of the portfolio continues to be recognized at the "lower of cost or market value", being property funds and government bonds. For FCR reporting purposes these investment types are adjusted to fair values. These adjustments are based on market values and reconcile to the IFRS. The valuation adjustments are calculated on a security by security basis.
- Reinsurance share of insurance provisions: This is re-mapped under liabilities in the FCR Standard Template whereas it is classified as an asset in Swiss CO annual report. For FCR reporting purposes the reinsurance share of insurance provisions amounts to USD 318.6m as of 31 December 2018.

## 7.2 Market Consistent Valuation of Provisions for Insurance Obligations for Solvency

### 7.2.1 Gross & Net Value of the provisions for insurance obligations

For FCR reporting purposes the best estimate of provisions for insurance liabilities (gross) amount to USD 2,745.5m which includes loss reserves (USD 2,087.4m), unearned premium reserves (UPR) (USD 860.9m) and deferred acquisition cost (DAC) asset (USD -202.8m) as of 31 December 2018. The reinsurers' share of best estimate of provisions for insurance liabilities amount to USD 318.3m consisting of loss reserves (USD 315.2m) and UPR (USD 3.1m).

### 7.2.2 Description of basis, methods and key assumptions used in the valuation for insurance obligations

MS Amlin AG's (gross and net) reserves are discounted in order to reflect discounted best estimate values required in a market consistent view. The discounting adjustment is calculated using various actuarial assumptions including those on payment patterns, and also using the FINMA yield curves.

### 7.2.3 Discrepancies between valuation for solvency and annual report for insurance obligations

We summarized valuation discrepancies between MS Amlin AG's FCR (i.e. SST) and annual report (i.e. Swiss CO) as follows:

- Reserve Discounting Adjustment: Under Swiss CO loss reserves are on an undiscounted basis, whereas market consistent view is on a discounted best estimate basis. We therefore apply a discounting adjustment on loss reserves (including inward business as well as ceded reserves) based on actuarial assumptions. The net discounting effect is USD 82.8m.
- Retro recoveries: As part of market consistent view a ceded reserve (USD 10.4m) is included in order to reflect recoveries expected under an Adverse Development Cover (ADC). This ADC ceded reserve is discounted together with overall ceded reserves.

The net impact of the technical provision adjustments (i.e. discounting and retro recoveries) amounts to USD 93.2m.

## 7.3 Information on the Risk Margin

### 7.3.1 Value of the risk margin and of the other effects on target capital

The Risk Margin (also known as the Market Value Margin) is calculated in order to reach a market-consistent valuation for the insurance liabilities (reserves). Specifically it is the difference between the discounted best-estimate reserve value and the market-consistent value; it is deducted from the Risk Bearing Capital in determining surplus capital.

### 7.3.2 Description of basis, methods and key assumptions used in the valuation.

The Risk Margin is modelled as being equal to the cost of regulatory capital an entity would be required to hold to account for the risk of running off the business. Regarding the model elements included in the regulatory capital for the calculation of Risk Margin we exclude the following:

1. Market Risk: Market Risk is assumed to be a risk which can be hedged and is therefore excluded. The hedging can be done through a portfolio of highly rated government bonds. MS Amlin AG liabilities are mainly in currencies for which government bonds are widely available (mostly USD) and the payment pattern is relatively short which simplifies matching issues.

2. Credit Risk (investment): is reduced to zero, due to the assumption of holding highly rated government bonds.
3. SST required scenarios: except for the “under-reserving” scenario, the SST required scenarios are related either to new claims or to financial market events which do not apply to a matched portfolio of government bonds. Therefore they are excluded. The reserving scenario is appropriate for consideration. This is a 10% increase in reserves at a 0.5% annual probability.

The following elements are included in regulatory capital for the calculation of Risk Margin:

1. Reserve Risk
2. **Reinsurance Credit Risk relating to the held reserves**

The cost of capital is assumed to be 6% as prescribed by FINMA for the purpose.

Based on the above assumptions we calculate a Risk Margin of USD 115.9m. Accordingly the SST Target Capital is USD 1,082.0m and the SST Capital Ratio is 178%. For further details please refer to Appendix 1.

## **7.4 Market consistent valuation of other liabilities (for solvency purposes)**

### **7.4.1 Value of provisions for other liabilities**

Out of the total USD 2,680.5m liabilities, USD 2,427.2m are technical provisions (net of reinsurance share) including UPR and DAC. The remainder of USD 253.2m includes liabilities from insurance business (USD 225.0m), other liabilities (USD 12.2m), non-technical provisions (USD 12.1m) and liabilities from derivative financial instruments (USD 3.9m).

### **7.4.2 Description of basis, methods and key assumptions used in the valuation of other liabilities**

MS Amlin AG's other liabilities in a market consistent view are valued in line with Swiss CO.

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## 8. Capital Management

### 8.1 Goals, strategy and time horizon for capital planning

With respect to its capital philosophy, MS Amlin AG seeks to maintain sufficient capital to comfortably meet its regulatory capital requirements, to maintain a strong credit rating, to ensure cedants are sufficiently protected and to fulfil its on-going business objectives. In line with its capital philosophy, the Boards regularly monitor the capital position.

The Company calculates its regulatory capital requirement using its Internal Model on the Swiss Solvency Test basis. MS Amlin AG utilises its internal model to calculate the capital requirements, utilising data from the business and the forecast business plan that has been approved by the MS Amlin AG Supervisory Board. MS Amlin AG Target Capital is measured using the Swiss Solvency Test risk-based capital methodology.

#### Swiss Solvency Test Capital Requirement

This is a regulatory mandatory capital requirement measure that is based on the calculation of capital requirements to operate on a one-year basis. It is calculated to cover the risks that could materialise based on the execution of the one-year business plan that runs from 1 January to 31 December of the same calendar year.

Through the annual business planning cycle and forward looking plans, MS Amlin AG considers capital management to ensure any business growth is supported by retained profit or through raising of additional capital.

Under the requirements of SST, MS Amlin AG operates a framework to ensure that capital needs are assessed. MS Amlin AG's Internal Model has been approved by FINMA for use when calculating the SST for risk charges including Insurance Risk, Reinsurance Credit Risk and Dependencies.

In all circumstances, capital needs are assessed through MS Amlin's Internal Model. The Internal Model forecasts a wide range of potential financial outcomes for each area of the business, which are used to calculate capital requirements and other risk adjusted metrics.

#### Dividend Policy

In principle, MS Amlin AG's excess capital would be available to be paid to MS Amlin plc as dividends. The timing, manner and amount will be decided considering MS Amlin plc's future five year strategy for the businesses, subject to regulatory considerations.

#### Available Funds to meet Capital Requirement

The relevant measure of available own funds is the Risk Bearing Capital ("RBC") calculated on the SST market consistent balance sheet.

MS Amlin AG has net assets under Swiss CO of USD 1,635.8m as compared to USD 1,833.1m net assets based on SST market consistent balance sheet. The adjustments made to adjust from Swiss CO balance sheet to SST market consistent balance sheet are set out below:

In USD	SST 2018	SST 2019
Excess of assets over liabilities - Swiss CO annual report (*)	1,465,766,384	1,635,839,870
Investment fair value adjustments	165,679,000	80,227,863
Deferred acquisition cost	202,398,912	0
Technical provision adjustments	78,111,303	93,162,240
Other adjustments (**)	26,401,925	23,903,858
<b>Excess of assets over liabilities- SST market-consistent balance sheet</b>	<b>1,938,357,524</b>	<b>1,833,133,831</b>
Approved Dividend	0	0
Intangible Assets	(1,001,359)	(42,516)
<b>SST Risk Bearing Capital after dividend</b>	<b>1,937,356,165</b>	<b>1,833,091,315</b>

(\*) Based on MS Amlin AG's Swiss CO financial statements for 2017 and 2018

(\*\*) Other adjustments are on foreign currency translation. For details please refer to Swiss CO annual report (Appendix 3)

Please note that movements in investment fair value adjustments and deferred acquisition costs mainly relate to the accounting policy change for statutory accounts as mentioned in Section 4.

For further details regarding the significant discrepancies please refer to Section 7 "Valuation".

### Capital Composition

MS Amlin AG must ensure that it continuously maintains Risk Bearing Capital of a suitable quality and permanence to meet the admissibility requirements of the Swiss Solvency Test.

### Contingency Plans

As part of the MS&AD Group, MS Amlin AG benefits from being able to draw on a substantial capital base from a secure and supportive parent. The specific response to any capital shortfall will depend on the circumstances giving rise to it.

In an event of an extreme threat to MS Amlin AG's capital adequacy, MS Amlin AG would have two choices: to either reduce its capital needs by altering areas of its business plans; or seek to raise capital from its parent to support the current plan to the end of the operating year and onwards. A solution could involve a contribution of one or both of these options. Any proposals to change the business plan or raise additional capital would require approval by MS Amlin AG Supervisory Board as well as by the MS Amlin plc Board and the shareholder MSI.

The timescales and associated limitations of raising capital are dependent on the context of the event that may invoke the necessity of executing the contingency plan.

## 8.2 Structure, level and quality of the equity capital reported in the annual report

For details regarding structure, level and quality of the equity capital please refer to MS Amlin AG's Swiss CO annual report.



## 9. Solvency

### 9.1 Information about the Internal Model

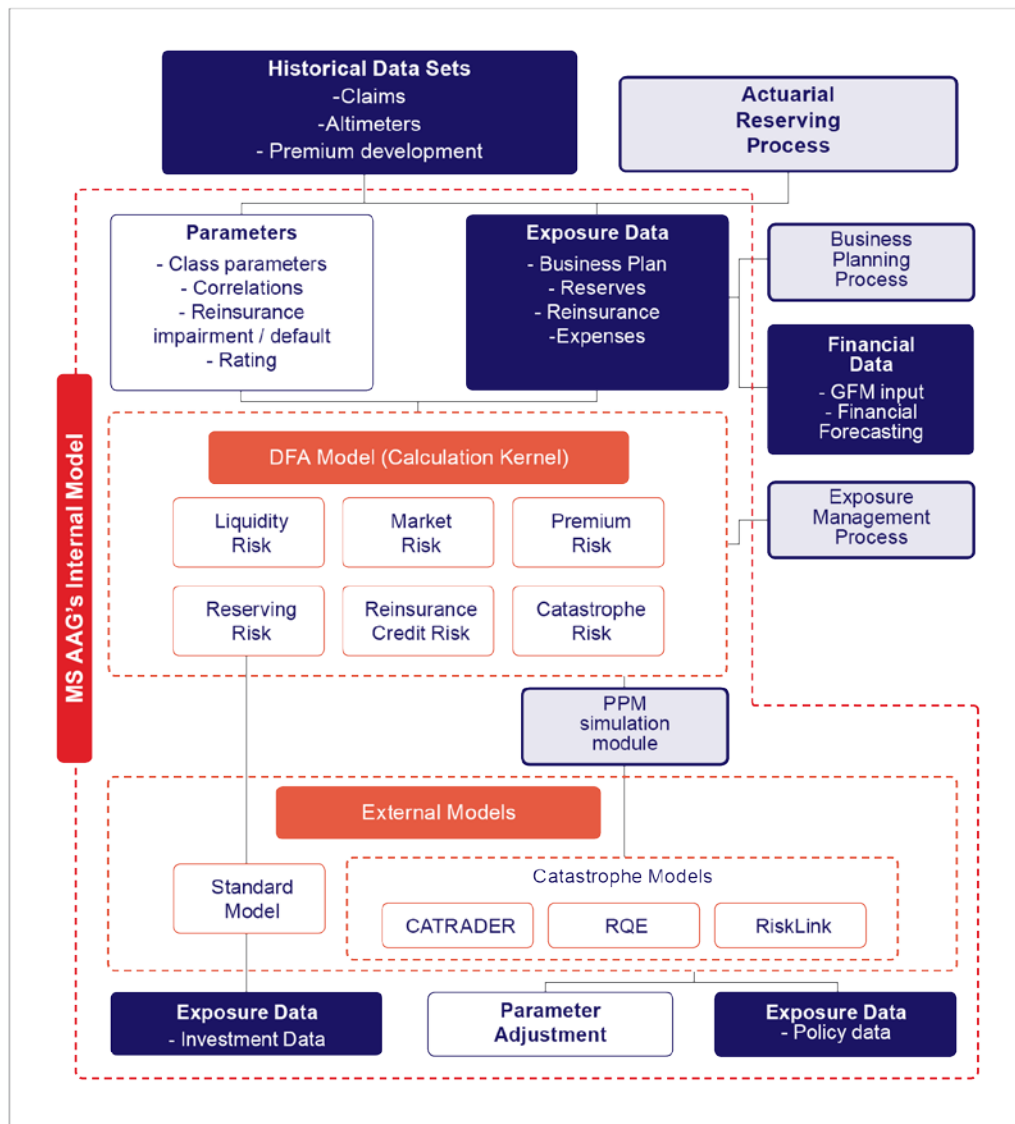
#### 9.1.1 Choice and justification of choice of the Internal Model

For the SST, MS Amlin AG uses a partial internal model:

- Premium Risk, Reserve Risk and Reinsurance Credit Risk are modelled using MS Amlin’s Internal Model (which is described below).
- For Market Risk and Investment Credit Risk, the standard models of FINMA are used, with approved model adjustments as required.

The Internal Model is an integral part of MS Amlin AG’s Risk Management Framework and is also used to support the wider management of the business. The main reasons for using FINMA’s standard models for SST Market Risk and Investment Credit Risk, instead of internal models, is that these risks are relatively less material for MS Amlin AG compared to Insurance Risk, and we believe that FINMA’s standard models provide a sufficient reflection of these risks for MS Amlin AG.

The scope and structure of MS Amlin AG’s Internal Model is shown in the diagram below.



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## 9.1.2 Description of the Internal Model's salient features

MS Amlin AG's policy framework surrounding the Internal Model includes:

### **Governance**

The MS Amlin AG Internal Model is governed by MS Amlin AG's Internal Model Policy and the supporting Internal Model Standards. Governance responsibilities are set out in the Internal Model Governance Standard. These are reviewed and approved annually by the MS Amlin AG Boards.

The MS Amlin AG Risk & Solvency Committee receives a quarterly report on the Solvency position for the Company. This outlines modelling activities over the last quarter including rationale for movements in the capital, reasons behind model changes and validation work performed.

### **Changes to the Internal Model**

Changes to the Internal Model are approved in accordance with the Internal Model Change Standard. Changes are classified as major, minor or operational in accordance with the Internal Model Change Standard. All model changes are documented.

Model changes are reported to the MS Amlin AG Risk & Solvency Committee on a quarterly basis. All Internal Model methodology changes and parameter changes are incrementally tracked. The accumulated model changes for MS Amlin AG over the current quarter and the year to date are specifically tracked.

### **Data Quality**

Data and data processes used within the Internal Model adhere to the Internal Model Data Quality Standard. Data feeding the Internal Model is recognised as needing to be 'accurate, complete, and appropriate'.

Data quality controls are included within the Internal Control Framework and attested to on a quarterly cycle. Where controls are identified as requiring remediation as a result of their design or operation improvement plans are agreed and actioned.

### **Validation**

The Internal Model is validated to enable Boards, management and supervisory authorities to conclude that the Internal Model is appropriate for the calculation of regulatory capital and appropriate for use within the Risk Management Framework and decision making process of the Company.

Validation is carried out by both the team responsible for the design and operation of the Internal Model (dependent validation) as well as by independent validators. Independent validation is carried out in accordance with the Internal Model Validation Standard.

### **Documentation**

The Internal Model documentation is recognised as needing to be complete, accurate, relevant and up to date with enough content and clarity to allow an independent, knowledgeable third party to understand the model. An important use for the documentation is to mitigate key personnel risk. Therefore, documentation is written and reviewed at an appropriate level so that an individual can gain adequate knowledge of the structure, methodology and functionality of MS Amlin AG's Internal Model. The minimum requirements for Internal Model documentation are set out in the Internal Model Documentation Standard.

### **Expert Judgement**

There may be instances when the valuation of assets and liabilities cannot be determined solely by the empirical analysis of data, but must be determined instead by the application of expert judgement. The Internal Model Expert Judgement Standard provides clear guidelines for the use of expert judgement as part of MS Amlin AG's Internal Model.

## Use

The Internal Model Use Standard provides a governance and compliance framework to manage the use of MS Amlin AG's Internal Model, ensuring that it is widely used, and playing an important role in the management of the business.

### 9.1.3 Internal Model approval by FINMA

MS Amlin AG's Internal Model has been approved by FINMA for use when calculating the SST for risk charges including Insurance Risk, Reinsurance Credit Risk and Dependencies.

## 9.2 Information about Target Capital (with explanatory notes)

### 9.2.1 Breakdown of target capital into its key components

The table below shows the overall result of the SST quantitative model, combining all the components discussed in previous sections. The SST Target Capital is USD 1,082.0m and the SST Capital Ratio is 178%. Please note that SST 2019 was filed with FINMA on April 2019 simultaneously to this document.

Item	2019 (mUSD)*	2018 (mUSD)*	Difference (mUSD)*
<b>Insurance Risk (standalone)</b>	858.1	875.1	-17.1
Reserving Risk (standalone)	425.8	441.9	-16.1
Premium Risk (standalone)	661.9	743.3	-81.4
RI Credit & ILS Risk (standalone)	74.6	60.4	14.2
<b>Market Risk (standalone)</b>	269.1	249.0	20.1
Diversification	-203.7	-228.5	24.8
Credit Risk Investments	97.5	129.9	-32.4
Expected Insurance Result	-39.2	-65.0	25.9
Expected Investment Result (above risk free)	-23.4	-80.4	57.0
Impact of scenarios	7.9	2.2	5.7
<b>One-year risk capital</b>	<b>966.1</b>	<b>882.2</b>	<b>83.9</b>
Risk Margin	115.9	120.1	-4.2
<b>SST Target Capital</b>	<b>1,082.0</b>	<b>1,002.3</b>	<b>79.8</b>
<b>SST Risk Bearing Capital</b>	<b>1,833.1</b>	<b>1,937.4</b>	<b>-104.3</b>
<b>SST Capital Ratio (Risk Bearing Capital - Risk Margin) / One-year risk capital</b>	<b>178%</b>	<b>206%</b>	<b>-28%</b>

\*All values derived from distributions are 1% TVaRs. All distributions are relative to expected results, except for the Scenarios distribution.

### 9.2.2 Breakdown of market risk and insurance risk into their key components

#### Market risk

Market Risk represents the risk to the MS Amlin AG Balance Sheet from financial market volatility, for example from changes in currency exchange rates, yield curves, credit spreads, property values and equity market volatility. The basis of the MS Amlin AG Market Risk calculation is the SST Standard Market Risk model, which has been updated by FINMA for the 2019 submission.

The results of the Market Risk Model are presented below. The overall Market Risk charge is USD 269.1m.

Expected shortfall* (USDm)			
	2019	2018	Change
All risk factors	269.1	249.0	20.1
All interest rates	109.7	107.1	2.6
Interest rates CHF	0.5	0.3	0.2
Interest rates EUR	33.3	51.7	-18.4
Interest rates USD	57.2	31.3	25.9
Interest rates GBP	38.2	35.4	2.8
Interest rates JPY	3.8	NA	NA
Spreads	34.0	68.8	-34.8
Other	1.1	NA	NA
Foreign exchange	99.5	51.5	48.0
Equities	49.0	76.8	-27.8
Real Estate	92.1	76.9	15.2

Comparing the market risk result for the SST 2019 with the SST 2018, there has been an increase in the risk in monetary terms from USD 249.0m to USD 269.1m.

The biggest change can be seen in foreign exchange risk, largely driven by an increase in short-maturity foreign bond exposure, which drives the fx forward/future exposures.

Real Estate Risk increased mainly due to increased volatility; FINMA approved a company specific adjustment which gave a higher volatility than FINMA's Standard Model.

For equities, the risk has reduced compared to last year due to the hedging of equity exposure by use of equity futures.

#### Insurance risk

Insurance Risk for MS Amlin AG is dominated by Premium Risk, with Reserve Risk having a much less material impact. The components of Insurance Risk are shown in the table in section 9.2.1 and discussed in section 6.1.1.

### 9.2.3 Comparison with corresponding information from previous reporting period

In this section we compare the results from this submission to those submitted for the SST 2018.

We note the following overall changes:

- The SST Capital Ratio has decreased to 178% compared to 206% for 2018
- One-year risk capital has increased from USD 882.2m to USD 966.1m
- Risk Bearing Capital has decreased from USD 1,937.4m to USD 1,833.1m

The main drivers of movements underlying the target capital can be summarised as follows:

- Diversification: The level of diversification has reduced as there is now a correlation between Insurance Risk and Market Risk included within the Standard Model.
- Expected Investment Result: the drivers of the decrease compared to last year are coming from the Investment Return, where the increase in the risk-free rate from 0.8% to 1.6% has reduced the level of returns in excess of this point. In addition, assets are now categorised according to the new SST Standard Market Risk Model from FINMA which has led to changes in the returns for some asset classes.

- Expected Insurance Return: There has been a reduction in insurance return compared to 2018 due to a change in business mix leading to slightly higher loss ratios and also an increased cost of retro.
- Premium Risk: the main driver of this reduction in risk charge is the non-renewal of some catastrophe business through the exercising of underwriting discipline.
- Market Risk: There has been an increase in the risk charge in monetary terms from USD 249m to USD 269m driven by an increase in foreign exchange risk due an increase in short-maturity foreign bond exposure.
- RI Credit & ILS Risk: the main driver of the increase is a relative increase in the amount of retrocessional protection purchased through traditional reinsurers, as opposed to through collateralised funds.

## 9.3 Information about Risk-Bearing Capital

### 9.3.1 Breakdown of the risk bearing capital into its key components

Market consistent value in the FCR template of total assets amount to USD 4,512.2m and total liabilities amount to USD 2,678.7m as of 31 December 2018 resulting in a difference between market-consistent assets and market-consistent liabilities of USD 1,833.1m. For further details please refer to Appendix 1.

The comparison of the Risk Bearing Capital between 2018 and 2019 is shown in Appendix I. The capital has been relatively stable throughout the year, although there were impacts from the catastrophic events of 2018, including the North America Hurricanes and Californian wildfires.

### 9.3.2 The insurance company's comments on its reported solvency

The MS Amlin AG SST 2019 Capital Ratio described in this report is 178%, which compares favourably with the minimum FINMA SST solvency requirement of 100%. The SST One-year risk capital is USD 966.1m, the risk margin is USD 115.9m and the SST Risk Bearing Capital is USD 1,833.1m.

Since last year, the SST One-year risk capital has increased by USD 83.9m compared to a decrease of USD 104.3m in Risk Bearing Capital.

### 9.3.3 Comparison with information provided to FINMA and assurance of subjection to regulatory audit

Please note that in the above, we denote by "One-year risk capital" the denominator of the SST ratio as per 2018 methodology prescribed by FINMA, i.e. excluding the Market Value Margin.

## **10. Appendices**

### **10.1 Appendix 1**

Erfolg Solo NL

Marktnahe Bilanz Solo

Solva Solo

### **10.2 Appendix 2**

MS & AD Insurance Group Holdings, Inc.'s Group structure

### **10.3 Appendix 3**

The Swiss CO Annual Report including the External Auditor's summary report



MS Amlin AG  
Kirchenweg 5  
8008 Zurich  
Switzerland

[msamlin.com](http://msamlin.com)





## Financial situation report: quantitative template "Market-consistent Balance Sheet Solo"

Currency: USD

 Amounts stated in  
millions

		31.12.2017	Adjustments previous period	31.12.2018	
<b>Market-consistent value of investments</b>	Real estate	-	-	-	
	Shareholdings	-	-	-	
	Fixed-income securities	366.6	-	399.4	
	Loans	230.5	-	231.9	
	Mortgages	-	-	-	
	Equities	437.2	-	11.2	
	Other investments	2,237.5	-	2,668.8	
	Collective investment schemes	2,237.5	-	2,668.8	
	Alternative investments	-	-	-	
	Other investments	-	-	-	
	Total investments	3,271.8	-	3,311.2	
Financial investments from unit-linked life insurance	-	-	-		
Receivables from derivative financial instruments	4.3	-	10.4		
Cash and cash equivalents	326.2	-	259.6		
<b>Market-consistent value of other assets</b>	Receivables from insurance business	1,022.2	-	879.9	
	Other receivables	22.0	-	49.2	
	Other assets	5.6	-	3.5	
	Total other assets	1,376.0	-	1,192.1	
<b>Total market-consistent value of assets</b>	<b>4,652.1</b>		<b>4,513.6</b>		
<b>Best estimate liabilities (BEL)</b>	Best estimate of provisions for insurance liabilities	-	2,692.7	-	2,745.5
	Direct insurance: life insurance business (excluding ALV)	-	-	-	-
	Direct insurance: non-life insurance business	-	-	-	-
	Direct insurance: health insurance business	-	-	-	-
	Direct insurance: unit-linked life insurance business	-	-	-	-
	Direct insurance: other business	-	-	-	-
	Outward reinsurance: life insurance business (excluding ALV)	-	-	-	-
	Outward reinsurance: non-life insurance business	-	2,692.7	-	2,745.5
	Outward reinsurance: health insurance business	-	-	-	-
	Outward reinsurance: unit-linked life insurance business	-	-	-	-
	Outward reinsurance: other business	-	-	-	-
	Reinsurers' share of best estimate of provisions for insurance liabilities	247.4	-	318.3	
	Direct insurance: life insurance business (excluding ALV)	-	-	-	
	Direct insurance: non-life insurance business	-	-	-	
	Direct insurance: health insurance business	-	-	-	
	Direct insurance: unit-linked life insurance business	-	-	-	
	Direct insurance: other business	-	-	-	
Outward reinsurance: life insurance business (excluding ALV)	-	-	-		
Outward reinsurance: non-life insurance business	247.4	-	318.3		
Outward reinsurance: health insurance business	-	-	-		
Outward reinsurance: unit-linked life insurance business	-	-	-		
Outward reinsurance: other business	-	-	-		
<b>Market-consistent value of other liabilities</b>	Non-technical provisions	-	14.6	-	12.1
	Interest-bearing liabilities:	-	-	-	-
	Liabilities from derivative financial instruments	-	5.2	-	3.9
	Deposits retained on ceded reinsurance	-	0.7	-	-
	Liabilities from insurance business	-	237.0	-	225.0
	Other liabilities	-	10.9	-	12.2
<b>Total BEL plus market-consistent value of other liabilities:</b>	<b>-</b>	<b>2,713.7</b>		<b>-</b>	<b>2,680.5</b>
<b>Market-consistent value of assets minus total from BEL plus market-consistent value of other liabilities</b>		<b>1,938.4</b>		<b>1,833.1</b>	

Financial situation report: quantitative template  
"Solvency Solo"

Currency: USD

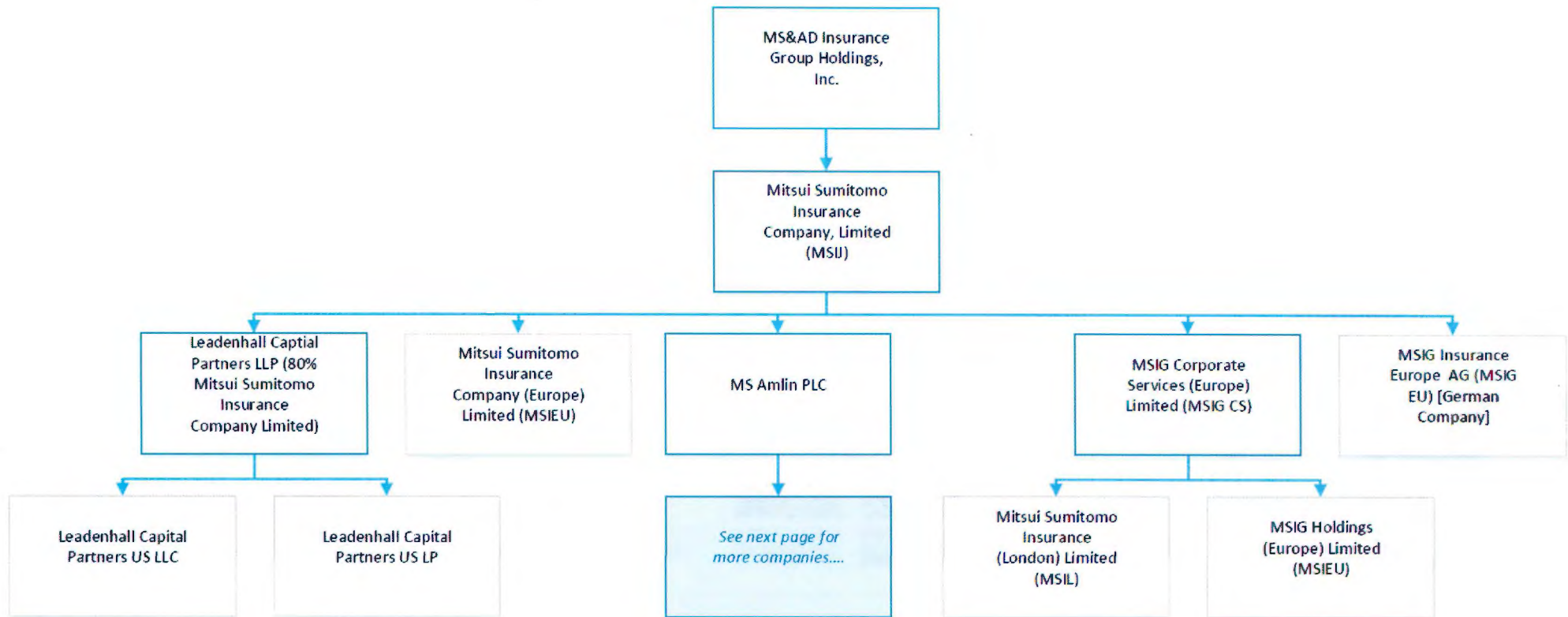
Amounts stated in  
millions

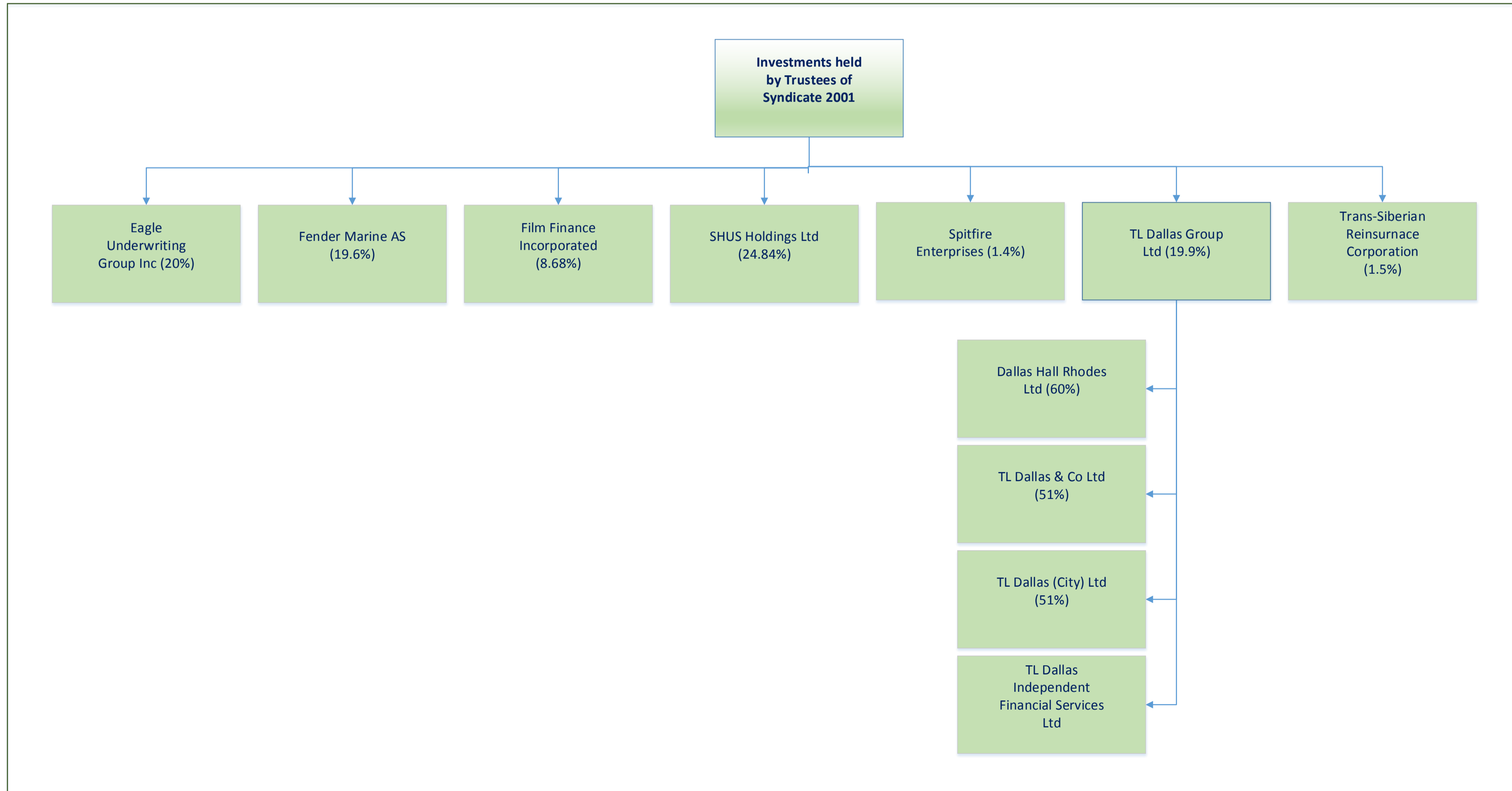
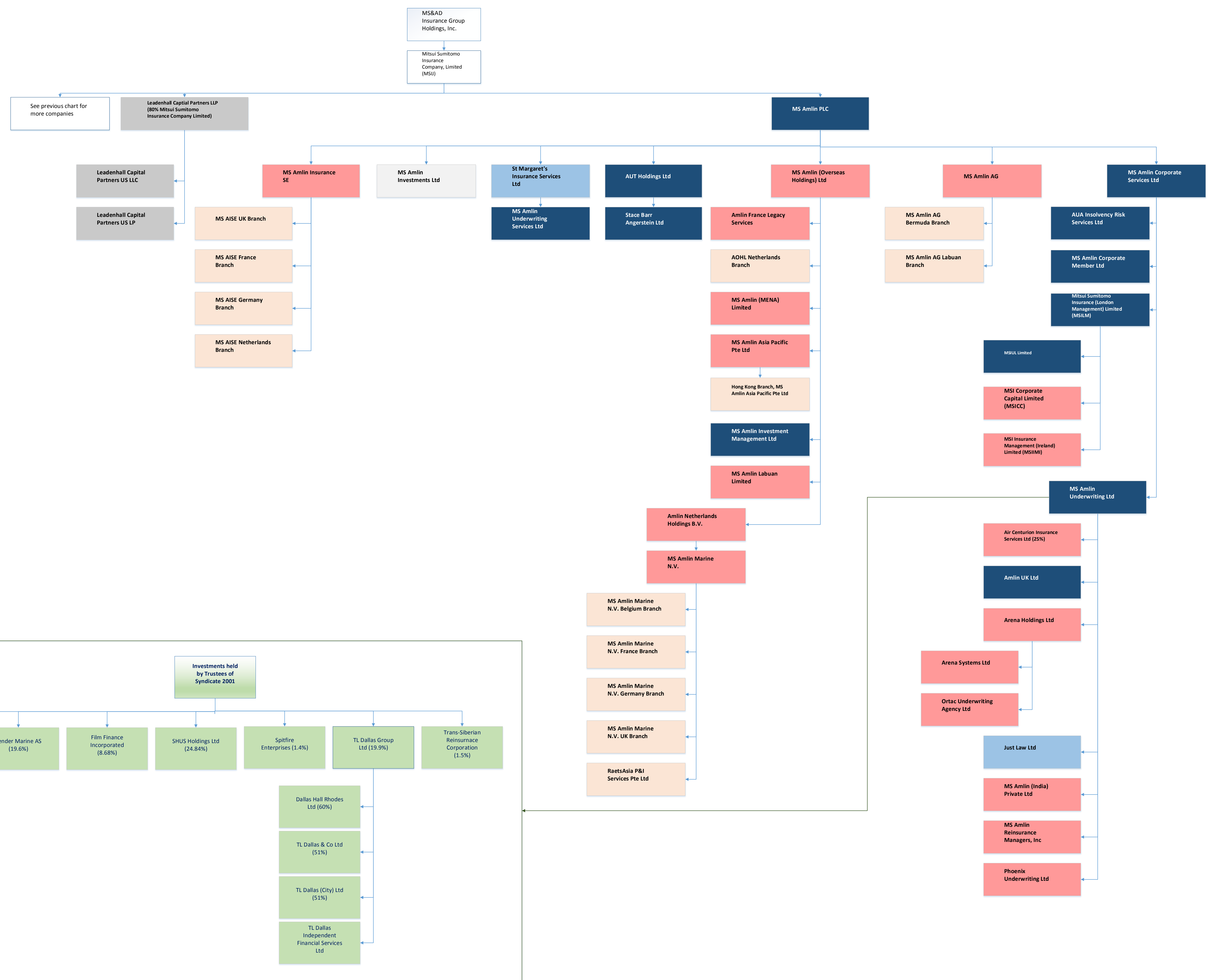
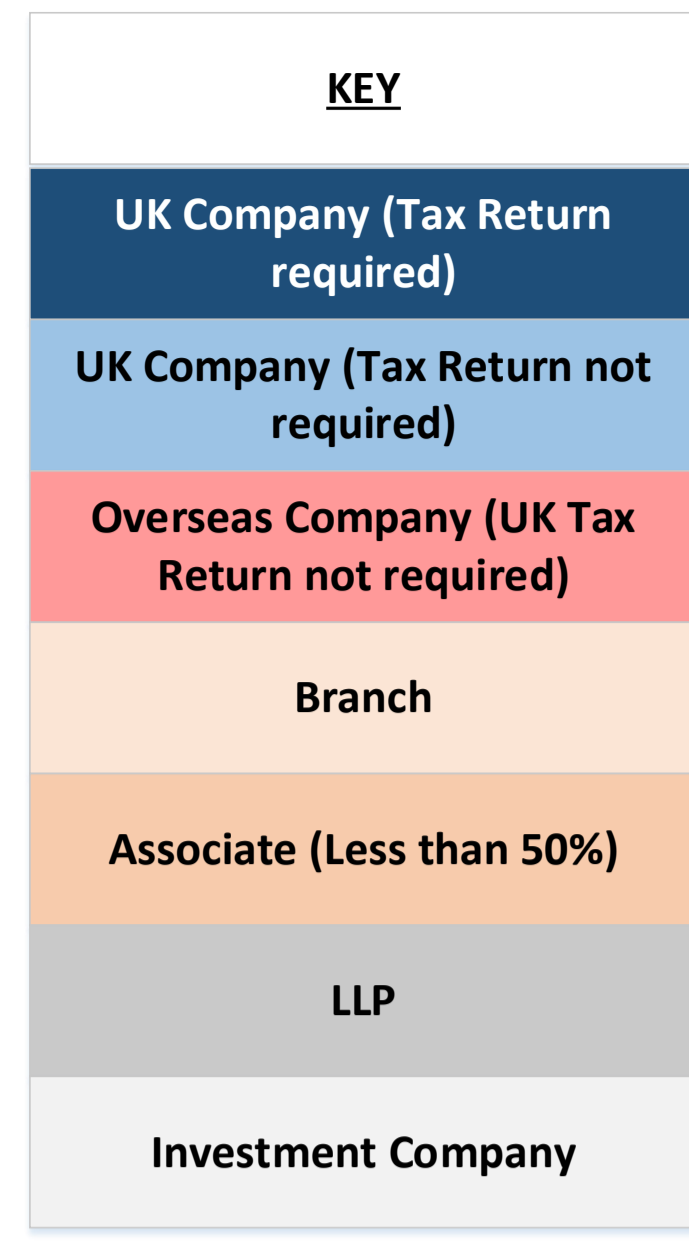
		31.12.2017	Adjustments previous period	31.12.2018
		in USD millions	in USD millions	in USD millions
<b>Derivation of RBC</b>	Market-consistent value of assets minus total from best estimate liabilities plus market- consistent value of other liabilities	1,938.4		1,833.1
	Deductions	-1.0		0.0
	<b>Core capital</b>	1,937.4		1,833.1
	Supplementary capital	0.0		0.0
	<b>RBC</b>	1,937.4		1,833.1

		31.12.2017	Adjustments previous period	31.12.2018
		in USD millions	in USD millions	in USD millions
<b>Derivation of target capital</b>	Underwriting risk	825.0		858.1
	Market risk	249.0		269.1
	Diversification effects	-238.8		-203.7
	Credit risk	190.3		97.5
	Risk margin and other effects on target capital	-23.2		61.2
	<b>Target capital</b>	1,002.3		1,082.0

		31.12.2017	Adjustments previous period	31.12.2018
		in %	in %	in %
<b>SST ratio</b>		206%		178%

# Extract from MS&AD Structure Chart







**Annual Report  
MS Amlin AG  
2018**

**Kirchenweg 5  
8008 Zürich  
Switzerland**

## Management Report

MS Amlin AG (the Company) is a wholly owned subsidiary of MS Amlin plc (the Parent) whose parent is Mitsui Sumitomo Insurance Company (MSI) Limited, a wholly owned subsidiary of MS&AD Insurance Group Holding, Inc. (MS&AD). The Zurich operations of the Company writes reinsurance for predominantly small and mid-sized insurance companies across all non-life classes and products. The Bermuda branch writes a geographical spread of catastrophe, property, casualty, financial lines and speciality business. The Labuan operations, which were put into run off in March 2018, wrote principally excess of loss and proportional business.

### Business Development and Financial Condition

During 2018 gross written premiums fell from CHF 1,324.0m to CHF 1,272.3m due to continued soft market conditions and disciplined underwriting.

The majority of gross written premiums in 2018 related to Property (53%), Motor (18%) and Casualty (12%). The reductions in gross written premium also led to decreases in net earned premium, mainly in Motor and Property classes.

Claims have been impacted by 2018 catastrophe losses including Hurricanes Florence and Michael, Typhoons Jebi and Trami, as well as the two Californian Wildfires. The catastrophe exposure also impacted aggregate contracts in Bermuda and through the quota share of specific classes of MS Amlin Underwriting Limited Syndicate 2001 ("Amber Re"). Claims were also impacted by a frequency of large losses in both Zurich and Bermuda. Prior period movements were overall immaterial.

Administrative expenses have decreased in 2018 by CHF 38 million. The main drivers were materially lower service charges received from Group and overall lower staff costs due to cost saving initiatives in 2018.

In the current year the deferral of acquisition costs has led to reduced expenses compared to the prior year and net income from investments has increased with an accounting policy change to apply market values for the majority of investments. This latter change however was offset by the market downturn, especially in the last month of the financial year.

The overall result was a profit for the Company for the year 2018 of CHF 177 million.

The balance sheet net asset position strengthened due to the change in accounting policy to apply market values for most investments and also to defer acquisition costs incurred on insurance contracts over the period in which the related revenues are earned. We note that the company did not pay dividends in 2018.

### Number of full-time positions on an annual average

The Company employed a worldwide staff at an average of 125 full time equivalents (2017: 143).

### Extraordinary events

During 2018 MS Amlin AG's Supervisory Board approved the elimination of the IFRS accounts and changing certain accounting policies for the statutory accounts. The changes included (i) investments valuation and (ii) acquisition cost capitalization. Prior to this MS Amlin AG's Swiss CO investment valuation basis represented the lower of cost or market value for each security and acquisition costs were expensed directly in the income statement. The new accounting policies recognize the majority of investments at fair value and acquisition costs are deferred over the period in which the related revenues are earned.

### Future prospects and vision

The Company's vision is to be a leading brand in global reinsurance.

#### Short-term view

2018 saw another year of heightened catastrophe activity leading to significant insurance losses within the industry. Whilst we anticipate a resultant change to the rating environment, not least in response to the continued development of the catastrophe models, the levels of capital within the industry are likely to result in subdued rate movements when compared to history. With support from our financially strong parent, this allows us to take a structured view in the market and the challenging conditions that the industry is facing.

#### Medium and Long-term view

We believe that our clients value continuity over the longer term. Benefitting from being a part of one of the world's leading insurance groups, we are able to provide significant security. We pursue a strategy of enhanced client intimacy, working in partnership with our clients to understand their needs and developing innovative solutions to meet them.

Evaluating risk and quantifying the exposure is fundamental to our business philosophy. We combine our world class underwriting expertise across a broad spectrum of products with tools to enhance our view of risk and to ensure we maintain a rigorous focus on technical underwriting. We understand that the risks our clients face are challenging and ever evolving. We are committed to assisting our clients in the management of these risks. Our recent partnership with Envelop (a cyber specialist MGA) demonstrates this commitment. Developing new products to meet emerging risks will continue to be a focus for the business.

We anticipate that the convergence of so-called 'alternative capital' with traditional capital will continue over the coming years. We view this as an opportunity and utilise multiple sources of capital (including our partnership with Leadenhall Capital Partners) to provide flexibility and alternative solutions to our clients.

The outlook is unquestionably challenging with a combination of growing catastrophe exposure, new risks, an excess supply of capital and the evolving impacts of data and technology. Against this backdrop we feel MS Amlin AG is well positioned to respond to these challenges and to meet our clients' future needs.

## **Risk Assessment**

### *Risk Management Strategy*

MS Amlin AG's vision and core values provide the strategic focus for the risk management system to deliver "effective risk management which optimises return for the risks we take" with the objective to deliver long-term value. This is achieved by actively seeking and accepting risk while managing that risk within acceptable bounds.

### *Risk Management Framework*

MS Amlin AG has developed a Risk Management Policy committed to establishing and maintaining a sustainable enterprise risk management process as an integral part of its business model supporting business planning, capital management and decision making in the business. The Policy is intended to provide transparency, and define ownership, and responsibilities throughout the risk management process as well as create a risk aware culture across the organization.

To supplement and fulfil the needs of the Policy, a Risk Management Framework has been developed and documented which provides:

- A strong, risk based organisation, supported by an appropriate risk management system;
- A robust governance framework supporting its organisational structure;
- Clear roles and responsibilities and effective escalation processes;
- Effective monitoring; and
- Clear and effective communication and reporting lines.

MS Amlin AG's Risk Management Framework consists of a suite of standards, governance processes and procedures that ensure a strong risk management function. It is built into the core operating model of the business and forms part of the overall approach to internal control. It provides the infrastructure within risk governance and also sets out the processes required to sustain risk management across the business.

### *Risk Management Methods and Processes*

#### **Risk Governance**

The operation of effective risk management requires the active involvement of all employees and the responsibility for each risk has been clearly allocated within the Company.

MS Amlin AG operates risk management through a 'three lines of defence' model.

- First line – all employees are expected to be risk aware and exercise controls over their activities so that levels of risk are understood and managed appropriately;
- Second line - MS Amlin AG's Risk function is responsible for the design and coordination of the risk framework architecture, working together with the Compliance function for additional support;
- Third line - MS Amlin's Internal Audit function is independent and has direct reporting to the MS Amlin AG Audit Committee. The function has responsibility for the review of the effectiveness of controls.

The Boards and the Risk and Solvency Committee receive reports from the Risk function that escalate risk areas of concern.

#### **Risk Appetite and Tolerances**

A key objective of the Risk Management Framework is to establish risk appetites for all key areas of risk identified. This appetite is implemented through a set of tolerances or limits which are approved by the Risk & Solvency Committee and the Supervisory Board. Management is accountable for managing levels of risk within the allocated tolerances. The status of profile versus tolerance is reported quarterly to the Risk & Solvency Committee.

#### **Risk Categorisation**

MS Amlin AG groups its risks into six key categories as specified below. Accordingly, the Risk Management Framework has been designed to take account of these risk categories and seeks to ensure ownership and accountability.

Each of these categories of risk is owned by an Executive Board member with appropriate expertise and authority over the risks being managed on a day to day basis. Further details on the roles, responsibilities, accountabilities, and key mitigation actions of each risk category are documented in six category-based risk standards that are reviewed and approved by the Risk & Solvency Committee each year.

Risk category Owner	High Level Overview	Scope
Insurance Risk (Chief Underwriting Officers, Zurich and Bermuda)	Risk from the inherent uncertainties in the occurrence, amount and timing of insurance liabilities and premiums. This includes reserving risk or claims arising on business written in prior years.	<ul style="list-style-type: none"> <li>• Business plan</li> <li>• Pricing risk</li> <li>• Underwriting performance including catastrophes</li> <li>• Product Oversight</li> <li>• Reserving</li> <li>• Claims</li> </ul>
Market Risk (Chief Financial Officer)	Risk from fluctuations in values of, or income from, assets, interest rates and investment returns.	<ul style="list-style-type: none"> <li>• Investment market volatility</li> <li>• Counterparty risk</li> <li>• Concentration risk</li> <li>• Currency fluctuation</li> </ul>
Credit Risk (Chief Financial Officer)	Risk of counterparties failing to perform their obligations in a timely manner or at all.	<ul style="list-style-type: none"> <li>• Retrocessionaires</li> <li>• Brokers</li> <li>• Cedents</li> <li>• Banks and Investment counterparties</li> </ul>
Liquidity Risk (Chief Financial Officer)	Risk of insufficient financial resources being available to meet liabilities as they fall due.	<ul style="list-style-type: none"> <li>• All assets</li> </ul>
Operational Risk (Chief Executive Officer)	Risk from inadequate or failed internal processes, people and systems, or from external events.	<ul style="list-style-type: none"> <li>• Systems and Technology</li> <li>• Processes</li> <li>• People</li> <li>• Legal &amp; Regulatory</li> </ul>
Strategic Risk & Group Risk (Chief Executive Officer)	<p>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.</p> <p>Risks that may arise as a result of Group structure.</p>	<ul style="list-style-type: none"> <li>• Group</li> <li>• Strategic</li> <li>• Political &amp; economic</li> <li>• Conduct</li> <li>• Capital Management</li> <li>• Merger &amp; Acquisition</li> </ul>

Three risk categories (Insurance, Market and Credit Risk) are managed using capital against the residual risk and are included within the Internal Model for the SST.

Liquidity Risk and Operational Risk are measured through stress and scenario testing and have tolerances set against them, although explicit risk charges are not included within the SST Target Capital.

Strategic and Group risks such as reputational and political risks are on the whole not directly considered within the capital model but managed rather through the use of management actions, contingency plans, policies, processes and robust preventative and detective business process controls.

#### Linkage to Capital Management

MS Amlin AG has an Internal Model which has been built to reflect the economic risk variables, which could impact the performance of the Company. The MS Amlin AG Supervisory Board has confirmed that the Internal Model is the appropriate method for the calculation of solvency capital under the requirements of the Swiss Solvency Test and the Internal Model has been approved by the supervisory regulator, FINMA, for use when calculating the SST for risk charges including Insurance Risk, Reinsurance Credit Risk and Dependencies. The Internal Model is a core component of the risk management system and is used for a range of business decisions including setting and assessing risk tolerances, business planning, strategic decision making and purchase of outwards reinsurance, and is a key input into the technical pricing framework.

Capital is a key consideration in setting business plans and strategies. The economic capital assessment provides the basis of risk adjusted performance for business plans.

#### Alignment to Business Strategy

MS Amlin AG's risk management objectives seek to bring business strategy, capital management, and enterprise risk management together to achieve long-term sustainable outcomes for all stakeholders.

This approach allows the business to maximise its return on risk where there is opportunity to, subject to limitations over acceptable risk taking. This is done through the adoption of risk appetites and tolerances that link closely to the return objectives set by the Supervisory Board.



MS Amlin AG, Zurich

Report of the Statutory Auditor  
on the Financial Statements  
to the General Meeting of Shareholders

Financial Statements 2018

KPMG AG  
*Zurich, 25 April 2019*  
Ref. BSI, MAC



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Report of the Statutory Auditor to the General Meeting of Shareholders of

**MS Amlin AG, Zurich**

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## **Report of the Statutory Auditor on the Financial Statements**

As statutory auditor, we have audited the accompanying financial statements of MS Amlin AG, which comprise the income statement, balance sheet, cash flow statement and notes for the year ended 31 December 2018.

### ***Board of Directors' Responsibility***

The board of directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and the company's articles of incorporation. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

### ***Auditor's Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



### **Opinion**

In our opinion, the financial statements for the year ended 31 December 2018 comply with Swiss law and the company's articles of incorporation.

### **Report on Other Legal Requirements**

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the board of directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG AG

Bill Schiller  
*Licensed Audit Expert  
Auditor in Charge*

Mathew Ackland  
*Licensed Audit Expert*

Zurich, 25 April 2019

### *Enclosures:*

- Financial statements (income statement, balance sheet, cash flow statement and notes)
- Proposed appropriation of distributable earnings

## Income statement

CHF	Note	2018	2017
Gross premium written		1'272'256'240	1'323'962'426
Premiums ceded to reinsurers		(132'545'669)	(129'190'060)
<b>Net premiums written</b>		<b>1'139'710'571</b>	<b>1'194'772'366</b>
Change in unearned premium reserves - gross		21'632'698	5'201'422
Change in reinsurers' share of unearned premium reserves		(65'138)	(381'766)
<b>Net premiums earned</b>		<b>1'161'278'131</b>	<b>1'199'592'022</b>
Other insurance income		529'818	314'961
<b>Total technical income</b>		<b>1'161'807'949</b>	<b>1'199'906'983</b>
Gross claims and claim expenses paid		(917'037'468)	(784'291'580)
Reinsurers' share of claims and claim expenses		120'132'549	47'075'847
Change in technical provisions - gross	6	(237'265'120)	(655'263'213)
Change in reinsurers' share of technical provisions	6	71'229'392	223'936'770
<b>Net claims and claim expenses incurred</b>		<b>(962'940'647)</b>	<b>(1'168'542'176)</b>
Acquisition costs - gross		(46'978'493)	(256'263'798)
Administrative expenses - gross		(69'345'794)	(107'769'189)
Acquisition costs and administrative expenses - gross		(116'324'287)	(364'032'987)
Reinsurers' share of acquisition costs		541'964	(113'800)
<b>Net acquisition costs and administrative expenses</b>		<b>(115'782'323)</b>	<b>(364'146'787)</b>
Other technical expenses own business		(1'149)	(2'306)
<b>Total technical expenses</b>		<b>(1'078'724'119)</b>	<b>(1'532'691'269)</b>
Income from investments	11	218'397'079	204'559'831
Expenses from investments	12	(103'134'040)	(103'740'555)
<b>Net income from investments</b>		<b>115'263'039</b>	<b>100'819'276</b>
Other financial income		-	2'141'639
Other financial expenses		(19'627'518)	(19'703'083)
<b>Operating income</b>		<b>178'719'351</b>	<b>(249'526'454)</b>
Other income		4'795'600	22'200'419
Other expenses		(5'781'332)	(824'720)
<b>Profit before direct taxes</b>		<b>177'733'619</b>	<b>(228'150'755)</b>
Direct taxes		(405'396)	(370'087)
<b>PROFIT / (LOSS)</b>		<b>177'328'223</b>	<b>(228'520'842)</b>

## Balance sheet

### Assets

CHF	Note	31/12/2018	31/12/2017
Investments		3'171'637'467	3'031'900'449
Fixed-interest securities		391'861'589	356'936'743
Loans		227'597'957	224'595'592
Shares		9'606'201	343'679'483
Other investments	2	2'542'571'720	2'106'688'631
Receivables from derivative financial instruments		10'185'649	-
Deposits on reinsurance business		86'568'083	126'353'860
Cash and cash equivalents		254'796'362	317'869'567
Reinsurers' share of technical provisions	5	317'989'575	247'792'672
Property and equipment		3'364'718	4'435'456
Deferred acquisition costs		199'027'134	-
Intangible assets		41'736	975'889
Reinsurance receivables	3 / 8	777'149'633	869'849'208
Other receivables	8	29'969'132	16'527'521
Prepaid expenses and accrued income		18'319'653	6'031'996
<b>TOTAL ASSETS</b>		<b>4'869'049'142</b>	<b>4'621'736'618</b>

### Liabilities and equity

CHF	Note	31/12/2018	31/12/2017
Technical provisions	5	2'991'139'958	2'904'278'491
Non-technical provisions		35'373'677	39'988'623
Liabilities from derivative financial instruments		3'877'159	5'096'896
Liabilities from deposits retained on ceded business		-	691'364
Reinsurance payables	4 / 9	220'880'769	230'923'833
Other liabilities	9	11'966'378	12'274'433
<b>TOTAL LIABILITIES</b>		<b>3'263'237'941</b>	<b>3'193'253'640</b>
Share capital		10'000'001	10'000'001
Legal capital reserves		1'467'556'476	1'467'556'476
Reserves from capital contributions	22	1'467'556'476	1'467'556'476
Legal retained earnings		5'000'000	5'000'000
Voluntary retained earnings		123'254'724	(54'073'499)
Merger reserve		174'447'343	174'447'343
Profit brought forward		(228'520'842)	-
Profit/(Loss)		177'328'223	(228'520'842)
<b>Total equity</b>	7	<b>1'605'811'201</b>	<b>1'428'482'978</b>
<b>TOTAL LIABILITIES AND EQUITY</b>		<b>4'869'049'142</b>	<b>4'621'736'618</b>

## Cash Flow Statement

in CHF

**2018**

Profit for the year	177'328'223
Net (purchases)/sales of property, plant and equipment and intangible assets (including depreciation)	2'004'891
Net (purchases)/sales of investments (including realised gains/losses)	(139'737'018)
Net (purchases)/sales of derivatives (including realised gains/losses)	(11'405'388)
Decrease/(increase) in deposits on reinsurance business	39'094'407
(Increase)/decrease in reinsurance contract assets	(70'196'903)
(Increase)/decrease in deferred acquisition cost	(199'027'134)
(Increase)/decrease in insurance receivables	92'699'575
(Increase)/decrease other receivables and other payables	(13'749'668)
Increase/(decrease) in outstanding claims	113'171'180
Increase/(decrease) in unearned premium	(26'309'712)
Increase/(decrease) in creditors arising from insurance operations	(10'043'056)
Increase/(decrease) in non-technical provision	(4'614'946)
(Increase)/decrease prepaid expenses and accrued income	(18'478'728)
<b>Cash flow from operating activities</b>	<b>(69'264'277)</b>
<b>Cash flow from investing activities</b>	<b>-</b>
Interest received on loan	6'191'072
<b>Cash flow from financing activities</b>	<b>6'191'072</b>
<b>Cash flow for the financial year</b>	<b>(63'073'205)</b>
<b>Cash on 1 January</b>	<b>317'869'567</b>
<b>Cash on 31 December</b>	<b>254'796'362</b>
<b>Change in cash</b>	<b>(63'073'205)</b>

## **Notes to the Financial Statements**

### **1. General**

MS Amlin AG (the Company) is a wholly owned subsidiary of MS Amlin plc (the Parent) whose parent is Mitsui Sumitomo Insurance Company (MSI) Limited, a wholly owned subsidiary of MS&AD Insurance Group Holding, Inc. (MS&AD).

#### **Basis of presentation**

These financial statements were prepared according to the principles of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations) and AVO-FINMA.

#### **Change in Accounting Policy**

During 2018 MS Amlin AG's Board of Directors approved the elimination of the IFRS accounts and changing certain accounting policies for the statutory accounts. The changes included (i) investments valuation and (ii) acquisition cost capitalization.

Prior to this MS Amlin AG's Swiss CO investment valuation basis was the lower of cost or market value for each security. The accounting policy change reflects fair value (market value) for the majority of investments. This is in line with the revision of the Swiss CO Accounting Standards with an effective date of 01.01.2015 allowing the flexibility to record financial assets at Market Value.

Acquisition costs were expensed directly as incurred. In line with the accounting policy change acquisition costs are deferred in Swiss CO financials and a 'Deferred Acquisition Costs' asset is booked in the balance sheet.

The impact of these changes is fully reflected in the financial year 2018.

#### **Use of estimates in the preparation of annual accounts**

The preparation of the annual accounts requires management to make significant estimates and assumptions that affect the reported amounts of assets, liabilities, income and expenses as well as the related disclosures. Actual results could differ significantly from these estimates.

#### **Foreign currency translation**

At year-end, assets and liabilities denominated in foreign currencies are translated into Swiss francs at the exchange rate on the balance sheet date whereas revenues and expenses are translated at the average exchange rate for the period under report. Shareholders' equity is translated at historical rates.

FX gains arising from the revaluation of the opening balance sheet as well as from the adjustments from application of year-end or average rates are deferred and booked under provision for currency fluctuation. FX losses are directly recognised in the income statement.

Realised FX effects arising from foreign exchange transactions are recognised in the income statement.

The translation from functional currencies (US Dollar and Euro) to presentational currency of CHF gave rise to a FX translation gain of CHF 7.5 million (2017: loss of CHF 68.2 million). The translation to the functional currencies led to a FX loss of CHF 9.7 million (2017: loss of CHF 6.3 million). The combined unrealised FX loss of CHF 2.2 million decreased the provision for currency fluctuation (Balance Sheet: "Non-technical provisions") leading to a balance of CHF 23.4 million (2017: CHF 25.6 million).

The realized FX gain of CHF 4.9 million for the financial year is included in "Other income" (2017: realized FX gain CHF 21.9 million).

#### **Cash Flow Statement**

Regarding the 2017 comparative figures, MS Amlin AG refrains from preparing comparatives for the 2017 financial year, as the Company has published consolidated financial statements in accordance with IFRS for the year ended 31 December 2017 which are publicly available.

## **Notes to the Financial Statements**

### **Valuation Principles**

#### **Investments**

Investments (except for bonds) are carried at market value if an observable market price is available. If the market price is not available (category Participations in pooled investment funds - Property), investments are accounted for at cost less necessary impairments. Subsequent recoveries of previously recorded impairments may be recognised up to the cost value.

Bond investments are valued at amortized cost less necessary impairments, if any.

Derivative instruments are valued at market value. Gains and losses are shown as part of Income and Expenses from investments.

#### **Deposits on reinsurance business**

Deposits are held at nominal value.

#### **Cash and cash equivalents**

Cash and cash equivalents include cash at bank and short-term deposits. Such current assets are held at nominal value, after deduction of known credit risks.

#### **Reinsurers' share of technical provisions**

Reinsurers' share of technical provisions represent the retroceded part of the technical provisions. The same accounting principles apply as for the technical provisions.

#### **Property and equipment**

Property and equipment are stated at historical cost less accumulated depreciation and provision for impairment where appropriate.

#### **Intangible assets**

Intangible assets, consisting of capitalised development costs for software for internal use, are measured at cost less straight-line amortisation over the estimated useful life of software which is not exceeding 20 years.

#### **Reinsurance receivables**

Reinsurance receivables are carried at nominal value, after deduction of known credit risks if applicable.

The position mainly consists of receivables from insurance companies and brokers.

#### **Other receivables**

Other receivables are recognised at the nominal value. The set up of bad debt reserves or write offs will be recorded on a cedent basis.

#### **Technical provisions**

The technical provisions are based on the cedent information (case reserves) and the reserves for already incurred but not yet reported claims (IBNR). Additionally, the technical provisions include the written but not yet earned part of the premiums (Unearned premium reserve).

#### **Reinsurance payables**

Reinsurance balances payable are held at redemption value.

#### **Acquisition costs**

Acquisition costs comprise brokerage incurred on insurance contracts written during the financial year. They are charged on the same basis as the earned proportions of the premium they relate to. Deferred acquisition costs are amortised over the period in which the related revenues are earned. Deferred acquisition costs are reviewed at the end of each reporting period and are impaired where they are no longer considered to be recoverable.

#### **Direct taxes**

Direct taxes relate to income and capital taxes.



## Notes to the Financial Statements

### 2. Other investments

<b>CHF</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Participations in pooled investment funds - Property	289'935'049	291'307'763
Participations in pooled investment funds - Equity	414'070'692	-
Participations in pooled investment funds - Bonds	1'503'031'254	1'598'294'627
Participations in pooled investment funds - Money Market	117'757'309	116'182'954
Short-term investments in pooled investment funds	217'777'416	100'903'287
<b>Total</b>	<b>2'542'571'720</b>	<b>2'106'688'631</b>

### 3. Reinsurance receivables

<b>CHF</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Receivables from agents and brokers	548'411'752	548'472'262
Receivables from insurance companies	228'737'882	321'376'946
<b>Total</b>	<b>777'149'633</b>	<b>869'849'208</b>

### 4. Reinsurance payables

<b>CHF</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Liabilities to agents and brokers	67'721'509	51'907'784
Liabilities to insurance companies	153'159'260	179'016'049
<b>Total</b>	<b>220'880'769</b>	<b>230'923'833</b>

## Notes to the Financial Statements

### 5. Technical provisions

CHF	Technical provisions (gross)		Reinsurers' share **		Technical provisions (net)	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017	31.12.2018	31.12.2017
Unearned premium reserve	845'092'120	871'401'832	3'080'720	3'187'937	842'011'400	868'213'895
Loss reserves *	2'146'047'838	2'032'876'659	314'908'855	244'604'735	1'831'138'983	1'788'271'924
<b>Total Technical provisions</b>	<b>2'991'139'958</b>	<b>2'904'278'491</b>	<b>317'989'575</b>	<b>247'792'672</b>	<b>2'673'150'383</b>	<b>2'656'485'819</b>

\* Unallocated Loss Adjustment Expenses (ULAE) are part of the loss reserves

\*\* The Reinsurers' share is included in assets.

### 6. Change in technical provisions

CHF	2018	2017
Change in technical provisions - Outstanding claims	141'722'654	278'792'200
Change in technical provisions - IBNR	95'542'466	376'471'013
<b>Change in technical provisions - gross</b>	<b>237'265'120</b>	<b>655'263'213</b>
Change in reinsurers' share of technical provisions - Outstanding claim:	(4'491'194)	(44'294'270)
Change in reinsurers' share of technical provisions - IBNR	(66'738'198)	(179'642'500)
<b>Change in reinsurers' share of technical provisions</b>	<b>(71'229'392)</b>	<b>(223'936'770)</b>

### 7. Statement of changes in equity

CHF	Share capital	Legal capital reserves	Legal retained earnings	Voluntary retained earnings	Total equity
<b>As of 31 Dec 2016</b>	<b>10'000'001</b>	<b>1'467'556'476</b>	<b>5'000'000</b>	<b>738'889'523</b>	<b>2'221'446'000</b>
Loss for the period				(228'520'842)	(228'520'842)
Dividend payments				(564'442'180)	(564'442'180)
<b>As of 31 Dec 2017</b>	<b>10'000'001</b>	<b>1'467'556'476</b>	<b>5'000'000</b>	<b>(54'073'499)</b>	<b>1'428'482'978</b>
Profit for the period				177'328'223	177'328'223
Dividend payments				-	-
<b>As of 31 Dec 2018</b>	<b>10'000'001</b>	<b>1'467'556'476</b>	<b>5'000'000</b>	<b>123'254'724</b>	<b>1'605'811'201</b>

Under current Swiss tax legislation, the amount of legal reserves from capital contributions, which has been confirmed by the Swiss Federal Tax Administration, can be paid out as dividends exempt from Swiss withholding tax.

## Notes to the Financial Statements

### 8. Receivables from third parties and affiliated companies

CHF			31.12.2018
	Third party	Affiliated companies	Total
Receivables from reinsurance business	566'869'468	210'280'165	777'149'633
Other receivables	10'756'163	19'212'969	29'969'132
<b>Total</b>	<b>577'625'630</b>	<b>229'493'134</b>	<b>807'118'765</b>

CHF			31.12.2017
	Third party	Affiliated companies	Total
Receivables from reinsurance business	561'248'015	308'601'193	869'849'208
Other receivables	16'284'817	242'704	16'527'521
<b>Total</b>	<b>577'532'832</b>	<b>308'843'897</b>	<b>886'376'729</b>

### 9. Payables to third parties and affiliated companies

CHF			31.12.2018
	Third party	Affiliated companies	Total
Payables from reinsurance business	68'043'965	152'836'804	220'880'769
Other liabilities	6'866'796	5'099'582	11'966'378
<b>Total</b>	<b>74'910'761</b>	<b>157'936'387</b>	<b>232'847'147</b>

CHF			31.12.2017
	Third party	Affiliated companies	Total
Payables from reinsurance business	51'174'723	179'749'110	230'923'833
Other liabilities	3'156'015	9'118'418	12'274'433
<b>Total</b>	<b>54'309'598</b>	<b>188'867'528</b>	<b>243'177'126</b>

## Notes to the Financial Statements

### 10. Audit fees

CHF	31.12.2018	31.12.2017
Audit services	595'377	708'809
Other services	-	-
<b>Total</b>	<b>595'377</b>	<b>708'809</b>

### 11. Income from investments

CHF	Income		Net unrealized gains		Net realized gains		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Fixed-interest securities	5'693'625	4'936'445	3'633'729	48'784	725'785	262'721	10'053'139	5'247'950
Loans	7'470'388	-	-	-	-	-	7'470'388	-
Shares	6'124'045	7'875'199	-	9'767'394	126'811'964	69'795'773	132'936'009	87'438'366
Other investments	32'451'544	16'972'724	21'608'471	10'345'783	13'877'528	84'555'008	67'937'543	111'873'515
<b>Total</b>	<b>51'739'602</b>	<b>29'784'368</b>	<b>25'242'200</b>	<b>20'161'961</b>	<b>141'415'277</b>	<b>154'613'502</b>	<b>218'397'079</b>	<b>204'559'831</b>

Due to the change in accounting policy, the category 'Net unrealized gains' for 2018 shows any unrealized gains resulting from market movements as well as impairment regains for investments where market values were not applicable in 2017. Swiss CO does not require the restatement of the prior year. As such 2017 only shows regains where market values were below costs (prior accounting approach of lower of cost or market).

### 12. Expenses from investments

CHF	Expenses		Net unrealized losses		Net realized losses		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Fixed-interest securities	529'630	7'829	357'363	2'072'979	1'719'731	1'093'747	2'606'724	3'174'555
Loans	-	-	-	-	-	-	-	-
Shares	2'414'348	1'736'521	-	10'266'351	73'803'497	11'364'737	76'217'845	23'367'609
Other investments	1'985'780	2'055'355	20'621'118	31'510'980	1'702'573	43'632'056	24'309'471	77'198'391
<b>Total</b>	<b>4'929'758</b>	<b>3'799'705</b>	<b>20'978'481</b>	<b>43'850'310</b>	<b>77'225'801</b>	<b>56'090'540</b>	<b>103'134'040</b>	<b>103'740'555</b>

Due to the Change in Accounting Policy, the category 'Net unrealized losses' shows any unrealized losses from market movements. For 2017, the category refers to impairments (lower of cost or market value).

## Notes to the Financial Statements

### 13. Personnel expenses

Personnel expenses for fiscal year 2018 amount to CHF 33.3 million (2017: CHF 46.7 million) and are included in the line item administrative expenses.

### 14. Contingent liabilities

The Company has no contingent liabilities at 31 December 2018 (31 December 2017: CHF nil). There were no capital commitments or authorised but uncontracted commitments at the end of the financial year.

### 15. Depreciation of real estate and equipment and amortization of intangible assets

CHF	31.12.2018	31.12.2017
Property and equipment	1'314'120	1'260'979
Intangible assets	1'147	13'308
<b>Total</b>	<b>1'315'267</b>	<b>1'274'287</b>

### 16. Restricted assets

At 31 December 2018, the Company holds restricted funds in the form of letter of credit (LOC) collaterals, initial margin calls on derivative financial instruments, and collateral received from reinsurance counterparties.

#### Letter of Credit ("LOC") facilities

MS Amlin AG has three LOC facilities of CHF 441.7 million (2017: CHF 438.6 million), CHF 206.1 million (2017: CHF 82.8 million) and CHF 49.5 million (2017: CHF 52.0 million). The US\$450.0 million facility is secured by a registered charge over a portfolio of assets managed by Fiera Capital with BNP Paribas as custodian. The US\$210.0 million facility is secured by time deposits held at Barclays Bank. The NZ\$75.0 million LOC is secured by time deposits held at National Australia Bank. As at 31 December 2018, CHF 456.5 million of LOC were issued (2017: CHF 360.9 million). The total value of restricted assets as at 31 December 2018 was CHF 593.7 million (2017: CHF 434.4 million).

#### Derivative margins and collateral

Derivative instruments traded by the Company for hedging purposes give rise to collateral being placed with, or received from, external counterparties. At 31 December 2018 included in other receivables is CHF 6.5 million (2017: CHF 12.8 million) margins and collateral pledged in relation to listed future margins.

#### Funds withheld as premium/claim deposits

At 31 December 2018, the Company had placed funds totalling net to CHF 20.9 million (2017: CHF 27.7 million) as premium deposits and CHF 65.4 million (2017: CHF 99.4 million) as claim deposits. These funds are held by external brokers or cedents. In addition a further CHF 117.3 million (2017: CHF 99.1 million) has been placed into pledge accounts to collateralise against losses due to reinsurance cedents.

## Notes to the Financial Statements

### 17. Residual amount of lease obligations

The maturity profile of lease obligations that do not expire in or cannot be canceled within 12 months is presented below:

Operating lease commitments

CHF	31.12.2018	31.12.2017
Later than 1 year and no later than 5 years	4'033'869	7'854'010
Later than 5 years	-	-
<b>Total operating lease commitments</b>	<b>4'033'869</b>	<b>7'854'010</b>

### 18. Liabilities to pension schemes

There is no pension fund liability at December 31, 2018 (2017: nil).

### 19. Full-time equivalents

The annual average number of full-time equivalents for the reporting year, as well as for the previous year, did not exceed 250.

### 20. Significant events after the balance sheet date

There are no significant events after the balance sheet date.

## **Notes to the Financial Statements**

### **21. Related party loan**

On 29 November 2017, the Company advanced USD 230.0 million to the Parent as a one year, fixed term loan. The loan facility was extended in November 2018. Interest is payable at 0.8% above the USD London Interbank Offered Rate. At 31 December 2018, CHF 227.6 million loan and interest remained outstanding. The loan was repaid in full on 28 March 2019.

### **22. Shareholders' equity (reserves from capital contributions)**

On 31 December 2018, CHF 1,467.6 million are shown as "reserves from capital contributions" (31 December 2017: CHF 1,467.6 million). The total reserves from capital contributions include CHF 140.0 million of "capital reserves" as agreed with FINMA during the application process.

### **23. Hidden reserves**

In 2018, the company did not release nor does it hold any hidden reserves.

**Proposal for the appropriation of distributable earnings**

<b>CHF</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Profit carried forward	(54'073'499)	174'447'343
Profit	177'328'223	(228'520'842)
Merger reserve	-	-
<b>Distributable earnings</b>	<b>123'254'724</b>	<b>(54'073'499)</b>

**Proposal of the Board of Directors:**

Distributable earnings	123'254'724	-
Dividend payments	-	-
<b>Amount carried forward</b>	<b>123'254'724</b>	<b>(54'073'499)</b>