Tokio Millennium Re AG

Zurich

Report of the statutory auditor to the General Meeting on the consolidated financial statements 2017

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Report of the statutory auditor

to the General Meeting of Tokio Millennium Re AG, Zurich

Report of the statutory auditor on the consolidated financial statements

As statutory auditor, we have audited the accompanying consolidated financial statements of Tokio Millennium Re AG, which comprise the balance sheet, statement of comprehensive income, cash flow statement, statement of changes in equity and notes, for the year ended 31 December 2017.

Board of Directors' responsibility

The Board of Directors is responsible for the preparation of the consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) and the requirements of Swiss law. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of consolidated 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 consolidated financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards as well as the International Standards on Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated 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 consolidated 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 accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated 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 consolidated financial statements, which comprise the balance sheet, statement of comprehensive income, cash flow statement, statement of changes in equity and notes for the year ended 31 December 2017 give a true and fair view in accordance with the International Financial Reporting Standards (IFRS) and comply with Swiss law.

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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 consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Philip Kirkpatrick

Audit expert
Auditor in charge

Lee Bellamy

Zurich, 27 February 2018

Enclosure:

- Consolidated financial statements (balance sheet, statement of comprehensive income, cash flow statement, statement of changes in equity and notes)

TOKIO MILLENNIUM RE AG

Consolidated Financial Statements
(With Independent Auditors' Report Thereon)

Years Ended 31 December 2017 and 2016

Contents

TOKIO MILLENNIUM RE AG

Consolidated Balance Sheet

31 December 2017 and 2016
(Expressed in thousands of United States Dollars)

	Note	2017	2016
Assets			
Cash and cash equivalents	5	$ 229,380	$ 313,775
Funds withheld	6	107,563	71,768
Investments	7, 8	2,583,273	2,256,285
Accrued interest receivable	11	17,100	14,151
Premiums receivable	11	970,853	856,770
Derivative balances receivable	11	35,661	–
Deposit assets	11, 12	348,444	393,823
Prepaid reinsurance premiums		87,270	58,184
Fair value of derivative assets	8	69,729	3,960
Outstanding losses recoverable from reinsurers	11, 17	230,177	64,975
Deferred acquisition expenses	13	333,556	359,834
Unearned profit commission		2,275	2,764
Current tax asset		1,110	1,082
Deferred tax asset	14	7,017	2,183
Property and equipment	15	8,385	9,573
Intangible assets	16	8,767	9,162
Other assets	11	19,283	15,032
Total assets		$ 5,059,843	$ 4,433,321
Liabilities			
Outstanding losses and loss expenses	17, 18	$ 1,786,723	$ 1,114,659
Liability for collateral held on behalf of counterparties	10, 18	159,721	185,536
Reinsurance balances payable	18	140,212	92,379
Derivative balances payable	18	73,028	783
Deposit liabilities	12, 18	348,444	393,823
Payable for investments purchased	18	5,235	7,947
Unearned premiums	17	1,261,200	1,237,051
Fair value of derivative liabilities	8, 18	37,687	4,008
Deferred commission income	13	13,187	6,065
Accounts payable and accrued expenses	18	32,724	35,966
Retirement benefit obligation	20	4,347	4,497
Deferred fee income		5,216	3,659
Current tax liability		1,539	1,062
Deferred tax liability	14	–	129
Note payable	18, 19	–	25,000
Total liabilities		3,869,263	3,112,564
Shareholder's equity			
Share capital	21	250,000	250,000
Contributed surplus	21	400,000	400,000
Retained earnings		556,194	715,127
Accumulated other comprehensive loss		(15,614)	(44,370)
Total shareholder's equity		1,190,580	1,320,757
Total liabilities and shareholder's equity		$ 5,059,843	$ 4,433,321

See accompanying notes to consolidated financial statements

The consolidated financial statements were approved by the Board of Directors and authorised for issue on 27 February 2018. They were signed on its behalf
by:________________________ Director ________________________ Director

TOKIO MILLENNIUM RE AG

Consolidated Statement of Comprehensive Income

Years Ended 31 December 2017 and 2016
(Expressed in thousands of United States Dollars)

	Note	2017	2016
Revenue			
Reinsurance premiums assumed	4	$ 1,606,499	$ 1,552,640
Change in unearned premiums		17,743	(199,359)
Reinsurance premiums earned – assumed		1,624,242	1,353,281
Reinsurance premiums ceded	22	304,916	234,724
Change in prepaid reinsurance		(28,007)	(20,562)
Reinsurance premiums earned – ceded		276,909	214,162
Net premiums earned		1,347,333	1,139,119
Other underwriting income		7,324	3,835
Total operating income		1,354,657	1,142,954
Net investment income	7	68,812	60,872
Total revenue		1,423,469	1,203,826
Expenses			
Loss and loss expenses incurred		1,484,382	697,037
Losses recoverable from reinsurers		(379,974)	(30,497)
Net loss and loss expenses incurred	17	1,104,408	666,540
Acquisition expenses	23	348,292	314,337
Profit commission		4,856	6,860
Net derivative expense (income)	9	4,279	(2,238)
Other underwriting expenses		371	1,386
General and administrative expenses	24	110,120	108,616
Net foreign exchange losses (gains)		12,892	(15,117)
Total expenses		1,585,218	1,080,384
(Loss) profit before tax		(161,749)	123,442
Tax benefit (expense)	14	2,816	(2,770)
(Loss) profit after tax		$ (158,933)	$ 120,672

Consolidated Statement of Comprehensive Income (continued)

Years Ended 31 December 2017 and 2016
(Expressed in thousands of United States Dollars)

	2017	2016
Other comprehensive (loss) income		
Items that are or may be reclassified to profit or loss		
Net change in unrealised gains on investments	$ 21,087	$ 3,219
Net change in tax reserve for unrealised gains on investments	32	231
Change in foreign currency translation adjustment	7,473	(2,082)
	28,592	1,368
Item that will not be reclassified to profit or loss		
Change in retirement benefit obligation	164	(1,283)
Other comprehensive income, net of tax	28,756	85
Total comprehensive (loss) income	$ (130,177)	$ 120,757

See accompanying notes to consolidated financial statements

TOKIO MILLENNIUM RE AG

Consolidated Statement of Changes in Shareholder's Equity

Years Ended 31 December 2017 and 2016
(Expressed in thousands of United States Dollars)

	Share capital	**Contributed surplus**	**Retained earnings**	Unrealised gain (loss) on investments	Tax reserve on unrealised investment gains	Foreign currency translation reserve	Retirement benefit obligation	**Accumulated other comprehensive loss**	**Total**
Balance 1 January 2016	$ 250,000	$ 400,000	$ 600,349	$ (15,735)	$ (231)	$ (25,870)	$ (2,619)	$ (44,455)	$ 1,205,894
Profit	–	–	120,672	–	–	–	–	–	120,672
Other comprehensive income (loss)	–	–	–	3,219	231	(2,082)	(1,283)	85	85
Dividends	–	–	(5,894)	–	–	–	–	–	(5,894)
Balance 31 December 2016	$ 250,000	$ 400,000	$ 715,127	$ (12,516)	$ –	$ (27,952)	$ (3,902)	$ (44,370)	$ 1,320,757
Loss	–	–	(158,933)	–	–	–	–	–	(158,933)
Other comprehensive income	–	–	–	21,087	32	7,473	164	28,756	28,756
Dividends	–	–	–	–	–	–	–	–	–
Balance 31 December 2017	$ 250,000	$ 400,000	$ 556,194	$ 8,571	$ 32	$ (20,479)	$ (3,738)	$ (15,614)	$ 1,190,580

See accompanying notes to consolidated financial statements

TOKIO MILLENNIUM RE AG

Consolidated Statement of Cash Flows

Years Ended 31 December 2017 and 2016
(Expressed in thousands of United States Dollars)

	Note	2017	2016
Cash flows from operating activities			
(Loss) profit before tax		$ (161,749)	$ 123,442
Adjustments for:			
Depreciation of property and equipment	15	2,836	2,707
Amortisation of intangible assets	16	5,379	4,978
Amortisation of investments		2,603	4,224
Interest income		(80,441)	(64,507)
Net realised gains on sale of investments	7	(2,225)	(4,732)
Net impairment and other investment losses		1,326	1,246
Net change in unrealised gains on other securities	7	(317)	(1,176)
Other non-cash movements		(3,983)	(5,611)
Change in:			
Funds withheld		(35,795)	7,228
Premiums receivable		(114,083)	(140,371)
Derivative balances receivable		(35,661)	–
Deposit assets	12	45,379	(97,646)
Prepaid reinsurance premiums		(29,086)	(20,508)
Fair value of derivative assets		(65,769)	813
Outstanding losses recoverable from reinsurers		(165,202)	(12,245)
Deferred acquisition expenses		26,278	(31,896)
Unearned profit commission		489	3,307
Other assets		(4,251)	5,591
Outstanding losses and loss expenses		672,064	256,959
Liability for collateral held on behalf of counterparties		(40,096)	(43,581)
Reinsurance balances payable		47,833	3,272
Derivative balances payable		72,245	783
Deposit liabilities	12	(45,379)	97,646
Unearned premiums		24,149	153,704
Fair value of derivative liabilities		33,679	(299)
Deferred commission income		7,122	2,554
Accounts payable and accrued expenses		(2,882)	679
Deferred fee income		1,557	866
Cash provided by operating activities		156,020	247,427
Income taxes paid		(1,872)	(1,168)
Net cash provided by operating activities		$ 154,148	$ 246,259

Consolidated Statement of Cash Flows (continued)

Years Ended 31 December 2017 and 2016
(Expressed in thousands of United States Dollars)

	2017	2016
Cash flows from investing activities		
Interest received	$ 77,492	$ 62,391
Purchase of investments	(1,111,859)	(977,855)
Proceeds on sales and maturities of investments	824,427	711,357
Purchase of property and equipment	(1,648)	(441)
Purchase of intangible assets	(4,984)	(5,711)
Net cash used in investing activities	(216,572)	(210,259)
Cash flows from financing activities		
Interest paid	(360)	(1,278)
Dividends paid	–	(5,894)
Settlement of note payable	(25,000)	–
Net cash used in financing activities	(25,360)	(7,172)
Net (decrease) increase in cash and cash equivalents	(87,784)	28,828
Foreign exchange gains on cash and cash equivalents	3,389	5,910
Cash and cash equivalents at beginning of year	313,775	279,037
Cash and cash equivalents at end of year	$ 229,380	$ 313,775

See accompanying notes to consolidated financial statements

1. **General**

Tokio Millennium Re AG (the "Company" or "TMR"), formerly known as Tokio Millennium Re Ltd., is a Swiss-based reinsurance company and is licensed and regulated by the Swiss Financial Market Supervisory Authority ("FINMA"). TMR's registered office is located at Beethovenstrasse 33, 8002 Zurich, Switzerland. The Company is a wholly-owned subsidiary of Tokio Marine and Nichido Fire Insurance Co., Ltd. The ultimate parent company is Tokio Marine Holdings, Inc., a company incorporated in Japan.

The Company was formed in Bermuda on 15 March 2000 and redomesticated to Switzerland on 15 October 2013. TMR has become subject to Swiss law without liquidation and re-establishment.

The Company participates in various excess of loss property catastrophe, workers' compensation catastrophe, crop/hail and terrorism reinsurance contracts. Catastrophe reinsurance covers unpredictable events such as hurricanes, windstorms, hailstorms, earthquakes, fires, freezes, floods and other man-made or natural disasters. The Company also offers non-catastrophe property and casualty covers on both proportional and per risk excess of loss treaties, with an emphasis on the higher frequency/lower severity category of exposures. Casualty lines of business include motor, general liability, excess casualty, auto liability, employer's liability, professional liability, workers' compensation, directors and officers, errors and omissions and medical malpractice. In addition, TMR assumes credit insurance contracts.

The Company also provides non-traditional customised reinsurance and financial solutions for its clients' world-wide property and casualty exposures on both a treaty and facultative basis.

A branch in the United Kingdom ("TMRUK") was formed on 17 September 2014. TMR received authorisation from the Prudential Regulation Authority ("PRA") to operate as a branch in the United Kingdom on 8 April 2015. TMRUK commenced writing business on 1 July 2015 which included the new and renewal business formerly written by TMR's affiliate, Tokio Millennium Re (UK) Ltd.

The Company formed a branch in the United States ("TMRUS") and was issued a license by the New York State Department of Financial Services on 2 June 2014. TMRUS was established to further expand TMR's non-catastrophe portfolio and focuses on non-catastrophe product lines.

TMR Management, Inc. ("TMRM"), a wholly-owned subsidiary of the Company, was incorporated in the State of Connecticut, United States of America on 18 December 2013, with an initial share capital of $1,000 (authorised and issued shares of 1,000 at $1 per share). TMRM, pursuant to a management agreement with TMR, acts as a manager for TMRUS.

On 15 October 2013, the Company formed a branch in Bermuda and is licensed as a Class 3B reinsurer under the Insurance Act, 1978 of Bermuda and related regulations to write all classes of property and casualty business. The Company's branch in Switzerland, originally formed on 31 August 2010, was discontinued as part of the redomestication of the Company effective 15 October 2013.

Tokio Millennium Agency Ltd. ("TMA"), a wholly-owned subsidiary of the Company, was incorporated in Bermuda on 28 May 2003, with an initial share capital of $12,000. Its primary activity was to facilitate risk swap agreements between Tokio Marine and Nichido Fire Insurance Co., Ltd. and other insurance companies for which it received agency fees. In 2012, TMA was renamed Tokio Solution Management Ltd. ("TSM"). The Bermuda Monetary Authority ("BMA") issued a license to TSM to conduct business as an insurance management company on 24 August 2012.

TSM manages and facilitates transactions through Shima Reinsurance Ltd. ("Shima Re") or other third party vehicles. In addition, TSM facilitates clients' fronting and leveraging agreements and also provides professional claims and loss reserving services.

1. **General** (continued)

The Company's wholly owned subsidiary, Shima Re, a Class 3 segregated accounts company, was incorporated under the laws of Bermuda on 30 July 2012 and registered under the Segregated Companies Act of 2000. With TSM as its manager, Shima Re provides its clients with a platform to transform either fronted or direct reinsurance transactions.

The Company formed a branch in Australia on 22 October 2010. The Australian Prudential Regulation Authority ("APRA") issued a license to the Company's Australian branch to conduct business as a general insurer on 1 March 2011.

2. **Basis of preparation**

(a) ***Statement of compliance***

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

When IFRS is silent, as it is in respect of the measurement of certain insurance products, the IFRS framework (IFRS 4, *Insurance Contracts*) allows reference to another comprehensive body of accounting principles. Accordingly, to the extent that IFRS 4 does not specify the recognition or measurement of insurance contracts, transactions reported in these consolidated financial statements have been prepared in accordance with another comprehensive body of accounting principles for insurance contracts, namely U.S. GAAP.

(b) ***Basis of measurement***

The consolidated financial statements are presented in U.S. dollars, which is the Company's reporting currency. They are compiled on a going concern basis. The consolidated financial statements have been prepared on the historical cost basis. See Note 3 for exceptions to this.

(c) ***Use of estimates and judgments***

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected.

The most significant estimate made by management is in relation to outstanding losses and loss expenses. Estimates in relation to losses and loss expenses are discussed in Note 3(b) – Insurance contracts. Also refer to Note 17 – Insurance liabilities.

3. **Summary of significant accounting policies**

(a) ***Basis of consolidation***

The financial statements consolidate the accounts of the Company, its branches and its wholly owned subsidiaries. A subsidiary is an entity that is controlled by TMR. TMR controls an entity when it is exposed to or has the rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of the subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases. The financial statements of the subsidiaries are prepared for the same reporting year as the parent company, using consistent accounting policies. All significant intercompany transactions and balances are eliminated on consolidation.

3. **Summary of significant accounting policies** (continued)

(b) ***Insurance contracts***

Classification
Contracts that transfer significant insurance risk are considered insurance contracts, while contracts without significant insurance risk are classified as investment contracts.

Reinsurance premiums assumed and acquisition costs
Reinsurance premiums assumed are recorded on the accruals basis and are included in income over the period of exposure to risk with the unearned portion deferred in the consolidated balance sheet. Premiums assumed are stated before the deductions of brokerage, commissions and taxes.

For excess of loss contracts, the ultimate premium is estimated at contract inception. Subsequent premium adjustments, if any, are recorded in the period in which they are determined. For proportional treaties, the amount of premium is normally estimated at inception by management based on information provided by the ceding company. The Company accounts for such premium using initial estimates, which are reviewed regularly with respect to the actual premium reported by the ceding company. Changes in estimates are recognised in the period in which they are determined.

For certain property catastrophe contracts, the Company earns reinstatement premiums upon the occurrence of a loss under the reinsurance contract. Reinstatement premiums are calculated in accordance with the contract terms based upon the ultimate loss estimate associated with each contract.

Premiums for retroactive exposures in reinsurance contracts are earned at inception of the contract, as all of the underlying loss events covered by these exposures occurred in the past. Any underwriting profit at inception related to retroactive exposures in a reinsurance contract is deferred and recognised over the estimated future payout of the outstanding losses and loss expenses. Any underwriting loss at inception related to retroactive exposures in a reinsurance contract is recognised immediately.

Premiums receivable from brokers, insureds and cedants are recognised when due and recorded net of commissions, brokerage, premium taxes and other levies on premiums, unless the contract specifies otherwise. These balances are reviewed for impairment, with any impairment loss recognised as an expense in the period in which it is determined.

Acquisition expenses, mainly commissions and brokerage, related to unearned premiums are deferred and amortised to income over the periods in which the premiums are earned. The method followed in determining the deferred acquisition expenses limits the amount of the deferral to its realisable value, by giving consideration to losses and expenses expected to be incurred as premiums are earned.

Where applicable, no claims bonuses and profit commissions are accrued based on claims experience.

Reinsurance premiums ceded
Reinsurance premiums ceded comprise the cost of reinsurance contracts entered into. Premiums ceded are accounted for in the period in which the contract is bound and are similarly earned over the period of exposure to risk, with the unearned portion being deferred in the consolidated balance sheet as prepaid reinsurance premiums.

Premiums payable to agents and brokers are recognised when due.

3. **Summary of significant accounting policies** (continued)

(b) ***Insurance contracts*** *(continued)*

Outstanding losses and loss expenses

Losses and loss expenses paid are recorded when advised by the ceding insurance companies. Outstanding losses comprise estimates of the amount of reported losses and loss expenses received from the ceding insurance companies plus a provision for losses incurred but not reported ("IBNR"). The IBNR provision is estimated by management based on reports from industry sources, including initial estimates of aggregate industry losses, individual loss estimates received from ceding companies and brokers, output from commercially available catastrophe loss models and actuarial analysis using historical data available to the Company on the business assumed together with industry data.

Given the inherent nature of major catastrophic events, considerable uncertainty underlies the assumptions and associated estimated reserve for losses and loss expenses. These estimates are reviewed regularly and, as experience develops and new information becomes known, the reserves are adjusted as necessary. Such adjustments, if any, are reflected in income in the period in which they are determined.

Due to the inherent uncertainty in estimating the liability for losses and loss expenses, there can be no assurance that the ultimate liability will not be settled for a significantly greater or lesser amount than that recorded.

Based on the current assumptions used, management believes that the Company's recorded amount is a reasonable estimate of the ultimate cost of losses incurred to the consolidated balance sheet date. Reserves for non-catastrophe property and casualty covers are based on individual claims, case reserve and other reserve estimates reported by insureds and ceding companies as well as the Company's actuarial estimates of ultimate losses. Inherent in the estimates of ultimate losses are expected trends in claim severity and frequency and other factors which could vary significantly as claims are settled. The Company does not have the benefit of a significant amount of its own historical experience with non-catastrophe lines of business. Accordingly, the setting and reserving for incurred losses in these lines of business could be subject to greater variability.

Ultimate losses may vary materially from the amounts provided in the consolidated financial statements. These estimates are reviewed regularly and, as experience develops and new information becomes known, the reserves are adjusted as necessary. Such adjustments, if any, are reflected in the consolidated statement of comprehensive income in the period in which they become known and are accounted for as changes in estimates.

Amounts recoverable from reinsurers are estimated in a manner consistent with the underlying liabilities. Reinsurance recoverable on dual trigger reinsurance contracts require the Company to estimate its ultimate losses applicable to these contracts as well as estimate the ultimate amount of industry losses that will be reported by the applicable statistical reporting agency, as per contract terms.

Liability adequacy tests

At each balance sheet date, the Company performs a liability adequacy test using current best estimates of future cash outflows generated by its reinsurance contracts. If, as a result of these tests, the carrying amount of the Company's reinsurance liabilities is found to be inadequate, the deficiency is charged to income for the period, initially by writing off deferred acquisition costs and subsequently by establishing a provision.

3. **Summary of significant accounting policies** (continued)

*(c) **Financial Instruments***

Cash and cash equivalents
The Company considers all cash at bank and on hand, short-term deposits and other short-term highly liquid investments that are subject to insignificant risk of changes in fair value as cash and cash equivalents. Cash equivalents are financial investments with less than three months to maturity at the date of acquisition.

Cash and cash equivalents are carried in the consolidated balance sheet at amortised cost. Carrying amounts approximate fair value due to the short-term nature and high liquidity of the instruments.

Funds withheld
Funds withheld are contractual receivables due to reinsurers from their clients; they are valued at original cost (nominal amount) at the date of acquisition. In addition, also included in funds withheld are amounts arising from the application of the deposit method of accounting. Appropriate allowance is made for credit risks.

Investments
The Company's investments comprise of short-term investments and investments in fixed interest, equity and other securities and catastrophe bonds. The classification is determined at the time of initial purchase. Purchases and sales of investments are recognised at fair value on the trade date. Transaction costs are treated in accordance with the investment classification.

The cost of investments is adjusted for amortisation of premiums and discounts. Realised gains and losses on investments are recognised in net investment income using the specific identification method (as securities are purchased by lot). Interest income on investments is accrued to the consolidated balance sheet date.

Investments are derecognised when the Company has transferred substantially all of the risks and rewards of ownership. On derecognition of an available for sale investment, previously recorded unrealised gains and losses are removed from accumulated other comprehensive income in shareholder's equity and included in current period income.

The Company, together with its investment managers, reviews investments on an individual security basis for evidence of impairment. This is performed on a quarterly basis as part of the financial close process. Impairment losses are recognised when there is objective evidence that the Company will be unable to collect all amounts due according to contractual terms of the individual security.

An available for sale debt security is impaired if there is objective evidence that a loss event has occurred after initial recognition of the security and up to the relevant consolidated balance sheet date, and that loss event has negatively affected the estimated future cash flows, i.e., amounts due according to the contractual terms of the security are not considered collectible. Impairment losses on available for sale debt securities are recognised by reclassifying the losses from accumulated other comprehensive income to the consolidated statement of comprehensive income. The amount reclassified is the difference between the amortised cost and the current fair value, less any impairment loss previously recognised in profit or loss. If the fair value of an impaired available for sale debt security subsequently increases and the increase can be related objectively to an event occurring after the impairment loss was recognised, then the impairment loss is reversed through profit or loss; otherwise it is reversed through other comprehensive income.

3. **Summary of significant accounting policies** (continued)

(c) ***Financial Instruments** (continued)*

Investments (continued)

An available for sale equity security is considered to be impaired if there is objective evidence that the cost may not be recovered. Objective evidence that the cost may not be recovered, in addition to qualitative impairment criteria, includes a significant or prolonged decline in the fair value below cost. If an available for sale equity security is impaired, any further declines in the fair value at subsequent reporting dates are recognised as impairments. Therefore, at each reporting period, for an equity security that was determined to be impaired, additional impairments are recognised for the difference between the fair value and the original cost basis, less any previously recognised impairment. Reversals of impairments of available for sale equity securities are not recorded through the income statement but recycled out of other comprehensive income when sold.

The identification of impairment is an inherently uncertain process involving various assumptions and factors, including the financial condition of the counterparty, expected future cash flows, observable market prices, etc. Estimates and assumptions are based on management's judgment and other information available prior to the issuance of the consolidated financial statements. Significantly different results can occur as circumstances change and additional information becomes known.

The Company's investments are managed following prudent standards of diversification. Specific provisions limit the allowable holdings of a single issue and issuers.

Short-term investments

Short-term investments represent bank deposits and investments in money market funds with an original term of greater than 90 days but less than one year. The carrying value reported in the consolidated balance sheet for these short-term investments approximates their fair value due to the short-term nature of the investments.

Fixed interest securities – available for sale

This consists of debt securities which are classified as available for sale and are carried at fair value, with any unrealised gains and losses (difference between amortised cost and fair value), with the exception of currency valuation differences, included in accumulated other comprehensive income as a separate component of equity. The amortisation and currency valuation differences are included in profit or loss.

The fair value of fixed interest securities is based on prices provided by internationally recognised independent pricing services. The independent pricing sources obtain actual transaction prices for securities that have quoted prices in active markets. For securities that are not actively traded, the pricing services typically uses "matrix pricing" which uses observable inputs including reported trades, benchmark yields, broker/dealer quotes, interest rate spreads, prepayment spreads and other such inputs from market sources to determine a reasonable fair value.

Investments in catastrophe bonds – available for sale

The Company's investments in catastrophe bonds are classified as available for sale and are carried at fair value, with any unrealised gains and losses (difference between amortised cost and fair value), with the exception of currency valuation differences, included in accumulated other comprehensive income as a separate component of equity. The amortisation and currency valuation differences are included in profit or loss.

Equity securities – available for sale

The Company's equity securities are classified as available for sale and are carried at fair value, with any unrealised gains and losses (including currency valuation differences), included in accumulated other comprehensive income as a separate component of equity.

3. **Summary of significant accounting policies** (continued)

(c) ***Financial Instruments*** *(continued)*

Investments (continued)

Other securities – fair value through profit and loss
Other securities consist of investments in investment funds organised as limited partnerships, investments in funds organised as limited liability companies and investment in an absolute return fund. These are designated at fair value through profit or loss from the date of acquisition.

Derivative financial instruments
From time to time, the Company enters into catastrophe swap derivatives, under which certain catastrophe reinsurance exposures are ceded to or assumed from the swap counterparty. The Company does this to facilitate institutional investors who seek to diversify their portfolios by adding non-correlated reinsurance risks to their portfolio. The Company transforms such risks by selling reinsurance and buying derivatives from the institutional investors, or vice versa. The Company earns a fee for its role in facilitating such transactions. Since there is no right of offset, all transactions are presented on a gross basis in the consolidated financial statements. Although the derivatives provide an economic hedge against the assumed or ceded reinsurance contract, the Company designates its derivatives as non-hedging derivative instruments based upon criteria established by IAS 39, *Financial Instruments: Recognition and Measurement*. Catastrophe swaps are recorded at fair value with changes in fair values recorded in the consolidated statement of comprehensive income. Fair value is estimated by management primarily based on the unexpired period of risk, an evaluation of the probability of loss and other unobservable inputs. The Company's catastrophe swap derivatives are initially priced at fair value in a non-stressed market and amortisation reflects the change in fair value in the absence of any loss events. The inputs for catastrophe swap derivatives are purely based on management's evaluation and are unobservable.

Receivables
The Company's receivables have fixed or determinable payments and are carried at cost less any provision for impairment in value. Refer to Note 3(b) – Insurance contracts for discussion on receivables arising from reinsurance contracts.

Impairment of financial assets
Objective factors that are considered when determining whether a financial asset or group of financial assets may be impaired include, but are not limited to, the following:

- negative rating agency announcements in respect of investment issuers, reinsurers and debtors;
- significant reported financial difficulties of investment issuers, reinsurers and debtors;
- actual breaches of credit terms such as persistent late payments or actual default;
- the disintegration of the active market(s) in which a particular asset is traded or deployed; and
- adverse economic or regulatory conditions that may restrict future cash flows and asset recoverability.

(d) ***Deposit assets and liabilities***

Certain contracts do not transfer sufficient insurance risk and are accounted for using the deposit method of accounting. Management exercises judgment in determining whether contracts contain sufficient risk to be accounted for as reinsurance contracts. Under the deposit method of accounting, the deposit asset or liability is initially measured based on the consideration paid or received. In subsequent periods, the deposit asset or liability is adjusted by calculating the effective yield on the deposit to reflect actual receipts or payments to date and future expected receipts or payments.

The Company earns fee income for the provision of these contracts. Fee income is based upon the terms of the contracts, with the unearned portion deferred in the consolidated balance sheet, as deferred fee income. The revenue and expense recorded for such contracts are included in other underwriting income.

3. **Summary of significant accounting policies** (continued)

(e) ***Property and equipment***

Property and equipment are stated at cost less accumulated depreciation calculated on a straight-line basis over the estimated useful lives of the assets. The specific depreciable rates of the significant asset classes are as follows:

Computer equipment	3 years
Fixtures and fittings	5 years
Leasehold improvements	Over the term of the underlying lease
Motor vehicles	5 years
Office equipment	4 years

(f) ***Intangible assets***

Intangible assets are stated at cost less amortisation calculated on a straight-line basis over the estimated useful lives of the assets. The Company's intangible assets comprise of computer software with a specific amortisation rate of 3 years.

(g) ***Impairment of non-financial assets***

Assets that are subject to amortisation are tested for impairment when there is an indication of a possible impairment at the reporting date.

Objective factors that are considered when determining whether a non-financial asset (such as an intangible asset or item of property and equipment) or group of non-financial assets may be impaired include, but are not limited to, the following:

- adverse economic, regulatory or environmental conditions that may restrict future cash flows and asset usage and/or recoverability; and
- the likelihood of accelerated obsolescence arising from the development of new technologies and products; and the disintegration of the active market(s) to which the asset is related.

An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purpose of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units).

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, to the extent that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods. A reversal of an impairment loss is recognised as income immediately.

(h) ***Bad debt provision***

The Company reviews receivables on a quarterly basis and a bad debt provision is recorded only to the extent that repayment is unlikely or no longer expected in full amount. In addition, the Company considers known and emerging credit events to determine if other provisions are necessary.

3. **Summary of significant accounting policies** (continued)

(i) Translation of foreign currencies

The consolidated financial statements of the Company are presented in U.S. dollars.

Foreign currency transactions are recorded in the functional currency for each entity using the exchange rates prevailing at the dates of the transactions, or at the average rate for the period when this is a reasonable approximation. Monetary assets and liabilities denominated in foreign currencies are translated at period end exchange rates. The resulting exchange differences on translation are recorded in profit or loss. Non-monetary assets and liabilities carried at historical cost denominated in a foreign currency are translated at historic rates. Non-monetary assets and liabilities carried at fair value denominated in a foreign currency are translated at the exchange rate at the date the estimated fair value was determined, with resulting exchange differences recorded in accumulated other comprehensive income in shareholder's equity.

The functional currency of the Bermuda and U.S. branches is the U.S. dollar. The functional currencies of the Company's Swiss, Australian and U.K. operations are the Euro, Australian dollar and Pound Sterling, respectively. In translating the financial results of those entities whose functional currency is other than the U.S. dollar reporting currency, assets and liabilities are converted into U.S. dollars using the rates of exchange in effect at the balance sheet dates, and revenues and expenses are converted using the average foreign exchange rates for the period. The effect of translation adjustments are reported in the consolidated balance sheet and consolidated statement of changes in shareholder's equity as a foreign currency translation adjustment, a separate component of accumulated other comprehensive income.

(j) Leases

All leases are classified as operating leases and are not recognised in the consolidated balance sheet. Rentals payable under operating leases are charged to income on a straight-line basis over the lease term.

(k) Long term incentive compensation plan

In 2008, the Board approved a compensation program for employees. In the first quarter of 2016, the Compensation and Nominations Committee of the Board approved an amendment to the compensation program which changed the metric used to calculate the value of awards. Under the amended long term incentive compensation plan, the value of awards is based on the difference between the actual profit and target profit over the performance period. The accounting for the compensation program is in accordance with IAS 19, *Employee Benefits.*

3. **Summary of significant accounting policies** (continued)

(l) ***Taxation***

The Swiss operation and the Australia, U.S. and U.K. branches of the Company operate in jurisdictions where they are subject to taxation. Income taxes have been provided for in accordance with the provisions of IAS 12, *Income Taxes*. Current and deferred income taxes are charged or credited to profit or loss. Deferred income taxes are provided for all temporary differences between the bases of assets and liabilities used in the consolidated balance sheet and those used in the various jurisdictional tax returns. Deferred tax assets are recognised for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

The Company recognises a tax benefit relating to uncertain tax positions only where the position is probable to be sustained assuming examination by tax authorities. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

(m) ***Retirement benefit obligation***

Defined contribution plans
TMR has defined contribution plans where the Company pays fixed contributions into a separate entity from which post-employment and other benefits are paid. The Company has no legal or constructive obligation to pay further contributions if the plan does not hold sufficient assets to pay employees the benefits relating to employee service in the current and prior periods. Payments to the defined contribution plans are recognised as an expense when employees have rendered services entitling them to the contributions. This is generally in the year of contribution. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payments is available.

Defined benefit plan
The Company also has a defined benefit post-retirement plan in relation to the Swiss operation. The net retirement benefit obligation in relation to this plan is based on, among other things, assumptions of the discount rate, estimated return on plan assets, and salary increases. The cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the end of each reporting period. Actuarial gains and losses are recognised in other comprehensive income. Past service costs are recognised immediately in the period of a plan amendment. The Company recognises the overfunded or underfunded status of the defined benefit post-retirement plan as an asset or liability in its consolidated balance sheet and recognises changes in the funded status in the year in which the changes occur through other comprehensive income. Any asset resulting from this calculation is limited to the sum of any cumulative unrecognised net losses and the present value of any economic benefits available in the form of refunds or reductions in future contributions to the plan.

3. **Summary of significant accounting policies** (continued)

Accounting standards and amendments issued but not yet adopted

Accounting standards issued and amendments to published standards that are not yet effective up to the date of issuance of the Company's consolidated financial statements are listed below. The Company intends to adopt these standards when they become effective.

IFRS 17, *Insurance contracts*

In May 2017, the IASB finished its long-standing project to develop an accounting standard on insurance contracts and published IFRS 17. IFRS 17 replaces IFRS 4 which currently permits a wide variety of practices in accounting for insurance contracts. IFRS 17 will fundamentally change the accounting by all entities that issue insurance contracts, reinsurance contracts and investment contracts with discretionary participation features.

IFRS 17 is effective for annual periods beginning on or after 1 January 2021, with earlier application permitted if IFRS 15, *Revenue from Contracts with Customers*, and IFRS 9, *Financial Instruments*, are also applied. TMR will adopt the standard on its effective date. The standard requires entities to retrospectively apply IFRS 17 unless impracticable. At transition date, TMR will need to: (a) identify, recognise and measure each group of insurance contracts as if IFRS 17 had always applied; (b) derecognise any existing balances that would not exist had IFRS 17 always applied; and (c) recognise any resulting net difference in equity.

The adoption of IFRS 17 will bring forth significant changes regarding the Company's measurement and disclosure of reinsurance contracts both in terms of liability measurement and profit recognition. TMR has completed a preliminary impact analysis in 2017. In 2018, a wider project will be formally established involving all concerned functions within the Company.

IFRS 9, *Financial instruments*

IFRS 9, published in July 2014, replaces the existing guidance in IAS 39, *Financial Instruments: Recognition and Measurement*. IFRS 9 includes revised guidance on the classification and measurement of financial assets and liabilities, including a new expected credit loss model for calculating impairment of financial assets, and the new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39.

IFRS 9 is effective for annual reporting periods beginning on or after 1 January 2018, with early adoption permitted. In 2016, the IASB issued an amendment to IFRS 4 which permits insurers to apply IAS 39 rather than IFRS 9, for annual periods beginning before 1 January 2021, provided certain preconditions are met. These preconditions, relating to insurance being the dominant activity of a reporting entity, are fulfilled by TMR and it is planned to carry out this option. In this context, interdependencies with IFRS 17, *Insurance contracts*, have to be considered to come to a final conclusion on the combined impact of both accounting standards.

The adoption of IFRS 9 will have an effect on the classification and measurement and impairment model applied to the Company's financial instruments. The new standard also introduces expanded disclosure requirements and changes in presentation. These are expected to change the nature and extent of the Company's disclosures about its financial instruments particularly in the year of the adoption. TMR is in the process of analysing the impact of this Standard on its consolidated financial statements.

3. **Summary of significant accounting policies** (continued)

Accounting standards and amendments issued but not yet adopted *(continued)*

Amendments to IFRS 4, *Insurance contracts*, regarding the implementation of IFRS 9, *Financial instruments*

These amendments, published in September 2016, introduce two approaches: an overlay approach and a deferral approach. The amended standard will:

- give all companies that issue insurance contracts the option to recognise in other comprehensive income, rather than profit or loss, the volatility that could arise when IFRS 9 is applied before the new insurance contracts standard is issued; and
- give companies whose activities are predominantly connected with insurance an optional temporary exemption from applying IFRS 9 until the year 2021. The entities that defer the application of IFRS 9 will continue to apply the existing financial instruments standard – IAS 39, *Financial Instruments: Recognition and Measurement*.

Both the temporary exemption and the overlay approach allow entities to avoid temporary volatility in profit or loss that might result from adopting IFRS 9 before the forthcoming new insurance contracts standard. Furthermore, by using the temporary exemption, an entity does not have to implement two sets of major accounting changes within a short period of time, and it can take into account the effects of the new insurance standard when first applying the classification measurement requirements of IFRS 9.

The amendments are effective for annual periods beginning on or after 1 January 2018. As mentioned above, the Company has opted to defer the application of IFRS 9 until annual periods beginning on or after 1 January 2021 (the "deferral approach") in order to align with the IFRS 17 implementation.

Amendment to IFRS 9, *Financial instruments,* on prepayment features with negative compensation

This amendment, published in October 2017, confirms that when a financial liability measured at amortised cost is modified without this resulting in de-recognition, a gain or loss should be recognised immediately in profit or loss. The gain or loss is calculated as the difference between the original contractual cash flows and the modified cash flows discounted at the original effective interest rate. This means that the difference cannot be spread over the remaining life of the instrument which may be a change in practice from IAS 39, *Financial Instruments: Recognition and Measurement*.

The amendment is effective for annual periods beginning on or after 1 January 2019, that is, one year later than the effective date of IFRS 9. As mentioned above, the Company has opted to defer the application of IFRS 9 until annual periods beginning on or after 1 January 2021 (the "deferral approach") in order to align with the IFRS 17 implementation.

IFRS 15, *Revenue from contracts with customers*

IFRS 15, published in May 2014, is a converged standard from the IASB and FASB on revenue recognition and replaces IAS 18, *Revenue*. The standard will improve the financial reporting of revenue and improve comparability of the top line in financial statements globally. The underlying principle is that an entity will recognise revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services, based on the satisfaction of performance objectives.

Revenue from contracts accounted for under IFRS 4, *Insurance contracts*, and from financial instruments accounted for under IAS 39, *Financial Instruments: Recognition and Measurement,* are outside the scope of IFRS 15.

The standard is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted. TMR will adopt the standard on its effective date and it is not expected to have a material impact on the Company's consolidated financial statements.

3. **Summary of significant accounting policies** (continued)

Accounting standards and amendments issued but not yet adopted *(continued)*

IFRS 16, *Leases*

On 13 January 2016, the IASB published IFRS 16, *Leases*, which replaces the current guidance in IAS 17, *Leases*. It will result in almost all leases being recognised on the balance sheet. Under IAS 17, lessees were required to make a distinction between a finance lease (on balance sheet) and an operating lease (off balance sheet). IFRS 16 now requires lessees to recognise a lease liability reflecting future lease payments and a "right-of-use asset" for virtually all lease contracts. The IASB included an optional exemption for certain short-term leases and leases of low-value assets; however, this exemption can only be applied by lessees. Under IFRS 16, a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for a consideration.

IFRS 16 is effective for annual reporting periods beginning on or after 1 January 2019. Earlier application is permitted, but only in conjunction with IFRS 15, *Revenue from Contracts with Customers.* The Company is in the process of analysing the impact of this Standard on its consolidated financial statements.

Amendments to IFRS 2, *Share based payments*, on clarifying how to account for certain types of share-based payment transactions

This amendment published in June 2016 clarifies the measurement basis for cash-settled, share-based payments and the accounting for modifications that change an award from cash-settled to equity-settled. It also introduces an exception to the principles in IFRS 2 that will require an award to be treated as if it was wholly equity-settled, where an employer is obliged to withhold an amount for the employee's tax obligation associated with a share-based payment and to pay that amount to the tax authority. These amendments are effective for annual periods beginning on or after 1 January 2018 and are not expected to have an impact on the Company's results.

Annual improvements to IFRSs 2014 – 2016 cycle

In December 2016, the IASB published its annual amendments to IFRSs and the related bases for conclusions and guidance. The IASB uses the annual improvements process to make necessary, but non-urgent, amendments to IFRSs that will not be included as part of a major project. These amendments affect two standards, namely:

- IFRS 1, *First-time Adoption of IFRS*, regarding the deletion of short-term exemptions for first-time adopters regarding: IFRS 7, *Financial Instruments: Disclosures;* IAS 19, *Employee Benefits;* and IFRS 10, *Consolidated Financial Statements,* effective 1 January 2018; and
- IAS 28, *Investments in Associate and Joint Ventures*, regarding measuring an associate or joint venture at fair value, effective 1 January 2018.

These amendments will have no impact on the Company's consolidated financial statements.

4. **Risk Disclosures**

The Company, through its Enterprise Risk Management ("ERM") function, Risk Management Working Group ("RMWG") and Risk Management Committee ("RMC"), seeks to identify all material risks inherent in its business including emerging risks; to understand the manifestations of each risk; and to assess, control, mitigate and manage these risks appropriately.

The objectives of TMR's risk management process are to ensure that:

- all material risks are proactively identified;
- the potential to cause losses or generate profits is understood and assessed;
- appropriate action is taken to manage the assumption of each risk based on that assessment and the Company's stated risk appetite;
- appropriate controls are in place to mitigate risks;
- an appropriate level of capital is held to cover financial and non-financial risks from all sources; and
- following a severe catastrophic event(s), appropriate capital action can be executed to remain solvent and meet its obligations under reinsurance contracts.

The oversight of the Company's risk management program is provided by the Board of Directors and senior management who are assisted by the RMC.

In the course of the Company's risk identification, assessment, control, monitoring and reporting process, it has identified and categorised all of its risks into the following categories:

- underwriting risk including premium risk, catastrophe risk and reserve risk;
- market risk including interest rate risk, foreign exchange risk, revaluation risk, equity price risk and credit spread risk;
- credit risk;
- liquidity risk;
- operational risk; and
- strategic risk.

A. ***Underwriting Risk***

Underwriting risk consists of premium risk, catastrophe risk and reserve risk.

Underwriting risk may be due to either the acceptance of risks that do not comply with the Company's underwriting guidelines and corporate strategy, or the acceptance of risks that result in losses and expenses greater than it had anticipated at the time of underwriting.

As a reinsurance company, TMR is in the business of taking underwriting risk and therefore has a high appetite for underwriting risk. TMR's risk limits are defined in its Risk Appetite and Risk Tolerance/Limit Policy for underwriting risk and reserve risk combined.

The Company has underwriting guidelines in place that clearly define the territorial scope, risks to be written, business to be avoided, acceptance limits, maximum policy period, maximum net retention, outward reinsurance, security requirement (for retrocessionaires) and underwriting authority.

As a part of the risk control strategy and governance at TMR, all contracts must be reviewed and approved by an Underwriting Committee before they can be bound.

The Company employs experienced catastrophe analysts and modellers, as well as experienced and credentialed actuaries, to perform pricing analyses to ensure that each risk is adequately priced.

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

*A. **Underwriting Risk** (continued)*

Premium Risk

Premium risk is the risk that the premium to be earned over the period of exposure to risk from the in-force, new or renewal reinsurance contracts is insufficient to cover the claim costs, claim adjustment expenses as well as the acquisition expenses to be incurred by those contracts over the same period.

The Company has purchased retrocessions in the past several years to enhance the diversity of the portfolio, improve capital efficiency, manage the net retention and protect the capital of TMR. The Company will continue to utilise this important risk management tool when the pricing and risk mitigation impact justifies doing so.

Details of annual premiums assumed by geographic area of risk insured are provided below:

	2017		2016	
	Reinsurance premiums assumed	Percentage of total	Reinsurance premiums assumed	Percentage of total
Geographic area of risk insured				
North America	$ 1,093,226	68.1 %	$ 987,367	63.6 %
Europe	249,746	15.5 %	285,653	18.4 %
Worldwide	200,940	12.5 %	186,429	12.0 %
Australasia	34,872	2.2 %	56,175	3.6 %
Asia	24,738	1.5 %	35,523	2.3 %
Other	2,977	0.2 %	1,493	0.1 %
Total	$ 1,606,499	100.0 %	$ 1,552,640	100.0 %

Details of annual premiums assumed by line of business are provided below:

	2017		2016	
	Reinsurance premiums assumed	Percentage of total	Reinsurance premiums assumed	Percentage of total
Line of business				
Property catastrophe	$ 389,750	24.2 %	$ 342,251	22.0 %
Property	232,385	14.5 %	246,973	15.9 %
Casualty	673,168	41.9 %	709,866	45.7 %
Specialty	118,375	7.4 %	127,434	8.2 %
Multi-line	192,821	12.0 %	126,116	8.2 %
Total	$ 1,606,499	100.0 %	$ 1,552,640	100.0 %

Catastrophe Risk

Catastrophe risk is the risk that the premium to be earned over the next twelve-month period from the catastrophe exposed reinsurance contracts (in-force, new or renewal) is insufficient to cover potential claim costs, claim adjustment expenses as well as the acquisition expenses associated with those contracts that may originate from extreme or exceptional catastrophic events over the same period, such as hurricanes, earthquakes, windstorms, landslides and terrorist attacks.

4. **Risk Disclosures** (continued)

A. ***Underwriting Risk*** *(continued)*

Catastrophe Risk *(continued)*

Catastrophe risk is classified as a separate and distinct class of underwriting risk mainly due to its low-frequency and high-severity characteristics, its potential to affect numerous contracts simultaneously and inflict significant erosion of TMR's capital.

A core element of TMR's book of business continues to be property catastrophe reinsurance. Therefore, TMR has a high appetite for catastrophe risk as long as this business is adequately priced. The Company writes reinsurance risks for periods of mainly one year so that the contracts can be assessed for pricing and terms and adjusted to reflect any changes in market conditions.

The Company has made a series of strategic moves to diversify, spread and dilute its catastrophe exposures as well as optimise its underwriting portfolio through geographical diversification and by writing casualty and specialty lines and lower layers of business.

Catastrophe risk is the dominant contributor and driver of TMR's total risk. TMR's catastrophe exposures are managed by limiting the amount of exposure in any one geographic area.

Retrocession is purchased to enhance the diversity of TMR's portfolio, maintain the net retention and even out peak exposures and more effectively manage the volatility of TMR's book of business.

Reserve Risk

Reserve risk is the risk that the best (point) estimate of unpaid loss and loss adjustment expense reserves are inadequate to cover all future payments for the full settlement of claims from all prior accident years (on or prior to the valuation date).

Reserve risk is distinct from premium risk and is related to exposures that have already been earned and claims that have already been incurred but have not yet been reported ("IBNR") or fully settled.

TMR has focused on short-tailed property lines of business in the past but now has increased its appetite for longer-tailed casualty and specialty lines of business. The proportion of medium and long-tailed lines of business underwritten by the Company continues to create a shift towards a greater proportion of reserving risk in the risk profile. TMR's risk limits are not defined separately for catastrophe risk, non-catastrophe premium risk and reserve risk, but are defined for insurance risk as a whole.

To manage reserving risk, TMR's actuarial team use a range of recognised actuarial techniques to project gross premiums written, monitor claims development patterns and stress test ultimate insurance liability balances. An independent actuary also performs a half-yearly review for the Company.

A full analysis of loss and loss adjustment expense reserves is performed on a quarterly basis. The reserve analyses are reviewed by and discussed with underwriters, actuaries, claims, finance and senior management prior to submission to the Reserve Committee. The Reserve Committee is appointed by the Executive Committee to review the sufficiency of the estimated loss reserves and to appraise the adequacy and effectiveness of the loss reserving practices of TMR. The Reserve Committee is comprised of the Chief Executive Officer ("CEO"), Chief Risk Officer ("CRO"), Chief Operating Officer ("COO"), and Chief Financial Officer ("CFO").

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

*A. **Underwriting Risk** (continued)*

Reserve Risk *(continued)*

The table below illustrates the development of the estimates of ultimate cumulative claims for the Company after the end of the accident year, illustrating how amounts estimated have changed from the initial estimates made.

Estimate of gross ultimate liability

		2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
At end of accident year	$	43,975	191,957	515,356	324,587	306,172	431,405	559,407	757,851	1,460,884	
One year later		46,829	206,494	529,491	318,895	306,962	428,287	547,292	810,380		
Two years later		45,644	213,431	504,483	317,360	296,375	415,797	552,533			
Three years later		45,104	222,238	523,370	308,435	286,511	416,688				
Four years later		48,962	231,680	517,826	304,045	289,770					
Five year later		46,231	223,342	515,669	301,445						
Six years later		46,105	224,789	516,812							
Seven years later		45,925	225,378								
Eight years later		44,076									
Ultimate liability 2009 – 2017		44,076	225,378	516,812	301,445	289,770	416,688	552,533	810,380	1,460,884	4,617,966
Ultimate liability pre – 2009											441,720
											5,059,686
Paid – 2009 – 2017		(43,853)	(190,561)	(493,816)	(262,691)	(234,052)	(325,255)	(374,007)	(428,413)	(479,143)	(2,831,791)
Paid – pre – 2009											(441,172)
											(3,272,963)
Gross liability at 31 December 2017	$										1,786,723

Estimate of net ultimate liability

		2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
At end of accident year	$	31,810	170,263	377,402	254,757	305,924	386,508	552,426	728,211	1,089,634	
One year later		38,565	169,950	389,664	251,442	306,438	383,075	539,716	766,254		
Two years later		38,249	167,065	369,326	246,004	297,565	379,977	545,404			
Three years later		38,064	181,156	389,245	242,263	287,695	380,562				
Four years later		42,028	190,598	383,064	238,001	289,224					
Five year later		39,312	183,547	380,907	237,004						
Six years later		39,314	184,994	382,784							
Seven years later		39,315	185,583								
Eight years later		39,094									
Ultimate liability 2009 – 2017		39,094	185,583	382,784	237,004	289,224	380,562	545,404	766,254	1,089,634	3,915,543
Ultimate liability pre – 2009											389,302
											4,304,845
Paid – 2009 – 2017		(38,914)	(147,797)	(362,743)	(200,505)	(233,596)	(324,291)	(367,416)	(420,916)	(263,233)	(2,359,411)
Paid – pre – 2009											(388,888)
											(2,748,299)
Net liability at 31 December 2017	$										1,556,546

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

Reserve Risk *(continued)*

A summary of changes in outstanding losses and loss expenses for 2017 and 2016, including outstanding losses recoverable from reinsurers, is presented in Note 17 – Insurance liabilities.

The reserves established can be more or less than adequate to meet individual claims arising. The level of uncertainty varies significantly from class to class but can arise from inadequate case reserves for known large losses and catastrophes or from inadequate provision for IBNR. The Company believes that the loss reserves established are adequate, however a 1% improvement/deterioration in the total estimated gross losses would have an impact on profit before tax of $17.9 million gain/loss (2016 - $11.1 million). There was no change to the Company's reserving methodology during the year.

B. ***Market Risk***

Market risk refers to the risk of financial loss due to a change in the value of the financial assets in TMR's investment portfolio or a change of market risk factors that affect the value of such assets. TMR has identified interest rate risk, foreign exchange risk, revaluation risk, equity price risk and credit spread risk as its main sources of market risk.

Interest Rate Risk

Interest rate risk is a function of general economic and financial market factors (such as the level, trend and volatility of interest rates) as well as the characteristics of the individual fixed interest securities held in TMR's investment portfolio. TMR cannot control the former but it can control the latter.

Investment guidelines are established to manage this risk. These guidelines set parameters within which the external investment manager must operate. The guidelines are set by the Investment Committee. The Investment Guidelines specify the limitations on the maximum percentage of assets that can be invested in a single issuer or in a single asset class. There are also specific limitations on the maximum maturity for various classes of fixed interest securities and the minimum requirements of credit ratings. The Company reviews the composition, duration and asset allocation of its investment portfolio on a regular basis in order to respond to changes in interest rates and other market conditions. The Company also mitigates interest rate risk on the investment portfolio by establishing and monitoring duration ranges in its investment guidelines.

The investment mix of the fixed interest portfolios is as follows:

At 31 December 2017	Fair value	Percentage of portfolio
U.S. treasuries	$ 114,354	5.0%
Non-U.S. government	115,222	5.1%
Corporate	1,078,328	47.4%
Agency residential mortgage-backed	212,687	9.3%
Commercial mortgage-backed	58,676	2.6%
Asset-backed	84,637	3.7%
Collateralised debt obligations	251,555	11.1%
Municipals	360,285	15.8%
Total fixed interest securities	$ 2,275,744	100.0%

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

*B. **Market Risk** (continued)*

Interest Rate Risk *(continued)*

At 31 December 2016		Fair value	Percentage of portfolio
U.S. treasuries	$	143,364	7.1%
Non-U.S. government		87,857	4.3%
Corporate		930,336	46.1%
Agency residential mortgage-backed		286,598	14.2%
Commercial mortgage-backed		52,377	2.6%
Asset-backed		133,787	6.6%
Collateralised debt obligations		169,156	8.4%
Municipals		215,023	10.7%
Total fixed interest securities	$	2,018,498	100.0%

The sensitivity of the Company's fixed interest investment portfolio to interest rate movements is detailed below, assuming linear movements in interest rates:

Immediate shift in yield (basis points)		2017	%		2016	%
100	$	(71,748)	(3.2)	$	(61,548)	(3.0)
75		(53,883)	(2.4)		(47,034)	(2.3)
50		(35,953)	(1.6)		(30,807)	(1.5)
25		(17,971)	(0.8)		(15,737)	(0.8)
(25)		17,924	0.8		15,509	0.8
(50)		35,551	1.6		29,997	1.5
(75)		52,485	2.3		44,694	2.2
(100)		68,785	3.0		56,443	2.8

The above shows the possible impact to unrealised gain (loss) on investments, a component of accumulated other comprehensive income.

The durations of the managed portfolios are as follows:

	2017	2016
Fixed interest securities	3.3	3.1

Foreign Exchange Risk

The Company operates internationally and its exposures to foreign exchange risk arise primarily with respect to the U.S. dollar, Australian dollar, Euro, Pound Sterling and New Zealand dollar. The presentation currency of the Company is the U.S. dollar in which the Company reports its consolidated financial results. The effect of this on foreign exchange risk is that TMR is exposed to fluctuations in exchange rates for non-U.S. dollar denominated transactions and net assets.

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

Foreign Exchange Risk *(continued)*

The Company hedges non-U.S. dollar liabilities with non-U.S. dollar assets to mitigate against this risk. The Company's assets and liabilities, categorised at their translated carrying amounts as at 31 December 2017, are as follows:

Assets	USD	AUD	EUR	NZD	GBP	Other	Total
Cash and cash equivalents	$ 22,734	$ 16,533	$ 73,632	$ 45,470	$ 36,425	$ 34,586	$ 229,380
Funds withheld	85,688	–	16,684	–	–	5,191	107,563
Investments	2,143,932	147,015	117,034	2,842	172,450	–	2,583,273
Accrued interest receivable	13,560	1,470	830	–	1,240	–	17,100
Premiums receivable	712,625	27,957	52,672	8,988	125,544	43,067	970,853
Derivative balances receivable	35,661	–	–	–	–	–	35,661
Deposit assets	–	–	223,305	–	125,139	–	348,444
Prepaid reinsurance premiums	81,120	4,012	–	137	903	1,098	87,270
Fair value of derivative assets	66,700	–	–	–	–	3,029	69,729
Outstanding losses recoverable from reinsurers	213,609	6,976	2,479	5,983	211	919	230,177
Deferred acquisition expenses	270,879	11,779	10,794	5,420	27,014	7,670	333,556
Unearned profit commission	792	1	98	–	390	994	2,275
Current tax asset	900	–	–	–	210	–	1,110
Deferred tax asset	32	207	–	–	6,735	43	7,017
Property and equipment	6,337	68	1,729	–	251	–	8,385
Intangible assets	8,559	–	208	–	–	–	8,767
Other assets	7,425	36	9,494	–	1,042	1,286	19,283
Total assets at 31 December 2017	$ 3,670,553	$ 216,054	$ 508,959	$ 68,840	$ 497,554	$ 97,883	$ 5,059,843

Liabilities	USD	AUD	EUR	NZD	GBP	Other	Total
Outstanding losses and loss expenses	$ 1,276,718	$ 32,158	$ 124,883	$ 54,368	$ 239,155	$ 59,441	$ 1,786,723
Liability for collateral held on behalf of counterparties	42,075	17	117,418	–	–	211	159,721
Reinsurance balances payable	115,748	14,072	2,784	145	5,681	1,782	140,212
Derivative balances payable	70,550	–	–	–	–	2,478	73,028
Deposit liabilities	–	–	223,305	–	125,139	–	348,444
Payable for investments purchased	5,235	–	–	–	–	–	5,235
Unearned premiums	969,927	69,588	38,857	14,118	136,149	32,561	1,261,200
Fair value of derivative liabilities	35,093	–	–	–	–	2,594	37,687
Deferred commission income	12,480	377	35	24	124	147	13,187
Accounts payable and accrued expenses	25,576	3,224	4	–	1,974	1,946	32,724
Retirement benefit obligation	–	–	–	–	–	4,347	4,347
Deferred fee income	3,099	–	–	–	1,092	1,025	5,216
Current tax liability	–	1,539	–	–	–	–	1,539
Deferred tax liability	–	–	–	–	–	–	–
Note payable	–	–	–	–	–	–	–
Total liabilities at 31 December 2017	$ 2,556,501	$ 120,975	$ 507,286	$ 68,655	$ 509,314	$ 106,532	$ 3,869,263

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

Foreign Exchange Risk *(continued)*

The Company's assets and liabilities, categorised at their translated carrying amounts as at 31 December 2016, are as follows:

Assets	USD	AUD	EUR	NZD	GBP	Other	Total
Cash and cash equivalents	$ 133,990	$ 17,766	$ 62,688	$ 58,597	$ 17,129	$ 23,605	$ 313,775
Funds withheld	49,064	–	19,479	–	–	3,225	71,768
Investments	1,896,153	125,994	168,086	–	66,052	–	2,256,285
Accrued interest receivable	10,684	1,227	1,659	–	581	–	14,151
Premiums receivable	646,141	27,834	48,578	12,180	89,613	32,424	856,770
Deposit assets	–	–	239,564	–	154,259	–	393,823
Prepaid reinsurance premiums	53,817	2,095	–	81	1,036	1,155	58,184
Fair value of derivative assets	2,638	–	–	–	–	1,322	3,960
Outstanding losses recoverable from reinsurers	52,934	2,948	2,733	5,368	92	900	64,975
Deferred acquisition expenses	296,544	12,449	10,664	6,650	25,636	7,891	359,834
Unearned profit commission	2,172	3	42	–	510	37	2,764
Current tax asset	890	–	–	–	192	–	1,082
Deferred tax asset	208	–	–	–	1,130	845	2,183
Property and equipment	7,565	80	1,900	–	28	–	9,573
Intangible assets	8,871	–	286	–	5	–	9,162
Other assets	6,202	36	8,300	–	4	490	15,032
Total assets at 31 December 2016	$ 3,167,873	$ 190,432	$ 563,979	$ 82,876	$ 356,267	$ 71,894	$ 4,433,321

Liabilities	USD	AUD	EUR	NZD	GBP	Other	Total
Outstanding losses and loss expenses	$ 809,097	$ 23,954	$ 87,226	$ 65,063	$ 81,198	$ 48,121	$ 1,114,659
Liability for collateral held on behalf of counterparties	3,699	15	181,283	–	–	539	185,536
Reinsurance balances payable	76,471	9,177	471	125	3,451	2,684	92,379
Derivative balances payable	783	–	–	–	–	–	783
Deposit liabilities	–	–	239,564	–	154,259	–	393,823
Payable for investments purchased	7,947	–	–	–	–	–	7,947
Unearned premiums	960,004	66,810	44,033	16,873	120,524	28,807	1,237,051
Fair value of derivative liabilities	2,649	–	–	–	–	1,359	4,008
Deferred commission income	5,457	262	–	12	232	102	6,065
Accounts payable and accrued expenses	29,145	2,829	4	–	1,870	2,118	35,966
Retirement benefit obligation	–	–	–	–	–	4,497	4,497
Deferred fee income	1,607	–	–	–	1,773	279	3,659
Current tax liability	–	1,062	–	–	–	–	1,062
Deferred tax liability	–	129	–	–	–	–	129
Note payable	25,000	–	–	–	–	–	25,000
Total liabilities at 31 December 2016	$ 1,921,859	$ 104,238	$ 552,581	$ 82,073	$ 363,307	$ 88,506	$ 3,112,564

4. **Risk Disclosures** (continued)

Foreign Exchange Risk *(continued)*

As at 31 December 2017, the Company used closing rates of exchange for major currencies of: USD 1: AUD 1.28; USD 1: EUR 0.83; USD 1: NZD 1.41 and USD 1: GBP 0.74.

As at 31 December 2016, the Company used closing rates of exchange for major currencies of: USD 1: AUD 1.39; USD 1: EUR 0.95; USD 1: NZD 1.44 and USD 1: GBP 0.81.

The impact on net income of a proportional foreign exchange movement of 10 per cent up and 10 per cent down against the U.S. dollar at the year end closing rates, applied on foreign currency net assets, would be an increase or decrease of $7.7 million (2016: $7.5 million). This analysis assumes that all other variables, in particular interest rates, remain constant and that the underlying valuation of assets and liabilities in their base currency is unchanged.

Revaluation risk

The Company is subject to revaluation risk as a result of the translation into the Company's U.S. dollar reporting currency of the consolidated balance sheet of the Company's Swiss, Australian and United Kingdom operations, whose functional currencies are the Euro, Australian dollar and Pound Sterling, respectively.

Equity price risk

TMR is exposed to equity price risk through its holdings of equity investments. The Company holds equity investments to diversify its investment portfolio and take advantage of expected long-term returns. Investment limits as set out in TMR's investment principles are used to manage and monitor these exposures. Equity investments are limited to a relatively small proportion of TMR's overall investment portfolio and the equity holdings involved are diversified over a number of companies.

Risks from changes in equity prices are normally associated with decreasing share prices and increasing equity price volatilities. As stock markets might also increase, opportunities may arise from equity investments.

As of 31 December 2017, TMR's equity investments amounting to a fair value of $27.3 million (2016 - $40.3 million), would have lost $2.7 million (2016 - $4.0 million) in value assuming equity markets declined by 10%. A 10% upward movement is estimated to have an equal but opposite effect. This is the possible impact to unrealised gain/ loss on investments, a component of accumulated other comprehensive income.

Credit spread risk

Our investment strategy acknowledges the risk of declining market values for our fixed interest securities due to the widening of credit spreads. Investment limits per portfolio as set out in TMR's investment principles are used to manage and monitor this risk. The advantage of being able to invest in long duration securities gives the Company the opportunity to invest in securities yielding spreads over the risk-free return and earning this additional yield component.

C. ***Credit Risk***

Credit risk is the risk of potential financial loss due to unexpected default, or deterioration in the credit ratings, of the debtors or counterparties of TMR.

Asset credit risk may arise from the unexpected default, or deterioration in the credit ratings, of the debtors or issuers of the financial instruments that TMR holds in its investment portfolio, which may cause them to lose value.

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

C. ***Credit Risk*** *(continued)*

Credit risk on premiums receivable from cedants is managed by conducting business with reputable broking organisations, with whom the Company has established relationships, and by rigorous cash collection procedures. The Company also has a broker approval process in place.

The table below presents an analysis of the Company's major exposures to counterparty credit risk, based on Standard & Poor's (S&P) or equivalent rating.

	2017						
	Cash and cash equivalents	Funds withheld	Investments (1)	Premiums receivable	Deposit assets	Losses recoverable	Derivative assets (2)
AAA	$ –	$ –	$ 418,632	$ –	$ –	$ –	$ –
AA+,AA,AA-	164,827	67,688	842,139	194,354	–	–	–
A+,A,A-	64,553	26,413	574,768	387,414	–	38,237	–
BBB+,BBB,BBB-	–	1,517	463,585	5,859	–	–	–
Other/Unknown (3)	–	11,945	284,149	383,226	348,444	191,940	105,390
Total	$ 229,380	$ 107,563	$ 2,583,273	$ 970,853	$ 348,444	$ 230,177	$ 105,390

	2016						
	Cash and cash equivalents	Funds withheld	Investments (1)	Premiums receivable	Deposit assets	Losses recoverable	Derivative assets (2)
AAA	$ –	$ –	$ 288,624	$ –	$ –	$ –	$ –
AA+,AA,AA-	191,557	17,196	804,935	165,951	–	–	–
A+,A,A-	122,218	48,112	443,478	325,349	–	32,683	–
BBB+,BBB,BBB-	–	2,367	457,447	19,405	–	–	–
Other/Unknown (3)	–	4,093	261,801	346,065	393,823	32,292	3,960
Total	$ 313,775	$ 71,768	$ 2,256,285	$ 856,770	$ 393,823	$ 64,975	$ 3,960

(1) Investments comprise of short-term investments, fixed interest securities, catastrophe bonds, equity securities and other securities
(2) Derivative assets comprise of derivative balances receivable and fair value of derivative assets
(3) Losses recoverable, deposit assets and derivative assets classified as "Other/Unknown" are collateralised

The following table shows premiums receivable that are past due but not impaired:

	2017	2016
Less than 90 days past due	$ 17,487	$ 7,363
Between 91 and 180 days past due	554	107
Over 180 days past due	678	494
Total	$ 18,719	$ 7,964

TMR has a medium credit risk appetite and elects to take limited credit risk. TMR's investment portfolio is appropriately diversified to limit the amounts of credit exposure with respect to particular rating categories and any one issuer. The Investment Committee has established comprehensive guidelines for the Company's investment managers regarding the type, duration and quality of investments acceptable to TMR. The performance of investment managers is regularly reviewed to confirm adherence to these guidelines.

4. **Risk Disclosures** (continued)

*C. **Credit Risk** (continued)*

TMR is also exposed to various counterparty credit risks in the course of conducting its underwriting activities. For example, the Company may have a significant amount of premiums receivables held by its brokers, clients or retrocessionaires.

The Company may have posted funds or collateral with clients or other parties as required by the reinsurance contracts. It may have cash deposits in a number of banking institutions. A retrocessionaire may fail to meet its obligations under the retrocession contracts.

This type of credit risk is called counterparty credit risk, which is modelled as a set of frequency-severity distributions resulting from the scenario analyses conducted and maintained by the Enterprise Risk Management unit using TMR's risk register.

To control and mitigate counterparty credit risk, the rules of the Company's Risk Appetite and Risk Limit policy concerning counterparty credit risk apply. Most of the retrocessions are either collateralised or placed with highly-rated reinsurers. TMR transacts most of its reinsurance business through major and reputable brokers and spreads its cash deposits across a number of reputable commercial banks.

In addition, a retrocession arrangement may be made with a retrocessionaire who does not meet the criteria in the Risk Appetite and Risk Limit Policy, if collateral with an equivalent or better rating than the minimum A rating is obtained for an amount at least equal to 100% of the retroceded limit.

At 31 December 2017, the Company's credit risk exposure in relation to losses recoverable from unrated counterparties to reinsurance ceded agreements is $191.9 million (2016 - $32.3 million), which is collateralised by letters of credit and assets held in trusts by the reinsurance counterparty for the benefit of the Company.

At 31 December 2017, the Company's exposure to credit risk of the counterparties to catastrophe swap agreements is $105.4 million (2016 - $4.0 million), which is collateralised by letters of credit and assets held in trusts by the reinsurance counterparty for the benefit of the Company.

*D. **Liquidity Risk***

Liquidity risk is the risk that the Company is unable to meet its contractual obligations in a timely manner due to the inability of its investment assets to be sold without causing a significant movement in the market price and with minimum loss of value.

TMR aims to keep liquidity risk as low as possible so that the Company will be able to meet its contractual obligations in a timely manner, even under stressed scenarios such as following a major catastrophic event. The Company maintains sufficient liquid assets, or assets that can be converted into cash at short notice and without any significant capital loss, to meet expected cash flow requirements. These liquid assets are regularly monitored using cash flow forecasting to ensure that surplus funds are invested to achieve a higher rate of return. The Company also monitors market changes and outlooks and reallocates assets as deemed necessary.

Liquidity risk can be an outcome or consequence of the Company's exposures to catastrophe risk and market risk. However, for the purpose of monitoring risk limits, liquidity risk is included in and shares the risk limit with the market risk category.

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

*D. **Liquidity Risk** (continued)*

The maturity dates of the Company's fixed interest portfolio are as follows:

	2017	2016
Less than one year	$ 255,228	$ 204,702
Between one and two years	202,752	264,958
Between two and three years	171,139	192,322
Between three and four years	259,781	153,803
Between four and five years	234,418	210,526
Over five years	184,586	135,246
Agency residential mortgage-backed	212,687	286,598
Commercial mortgage-backed	58,676	52,377
Asset-backed securities	84,637	133,787
Collateralised debt obligations	251,555	169,156
Municipals	360,285	215,023
Total fixed interest securities	$ 2,275,744	$ 2,018,498

The maturity profile of the financial liabilities of the Company is as follows:

	Years until liability becomes due				
As at 31 December 2017	Less than one	One to three	Three to five	Over five	Total
Outstanding losses and loss expenses	$ 531,318	$ 599,689	$ 293,535	$ 362,181	$ 1,786,723
Liability for collateral held on behalf of counterparties	25,488	27,624	11,851	94,758	159,721
Reinsurance balances payable	136,025	4,187	–	–	140,212
Derivative balances payable	30,375	38,546	4,107	–	73,028
Deposit liabilities	37,572	47,540	20,061	243,271	348,444
Payable for investments purchased	5,235	–	–	–	5,235
Fair value of derivative liabilities	13,765	19,778	4,144	–	37,687
Accounts payable and accrued expenses	25,231	5,973	1,160	360	32,724
Total	$ 805,009	$ 743,337	$ 334,858	$ 700,570	$ 2,583,774

(Expressed in thousands of United States Dollars)

4. **Risk Disclosures** (continued)

D. ***Liquidity Risk*** *(continued)*

As at 31 December 2016	Less than one	One to three	Three to five	Over five	Total
	Years until liability becomes due				
Outstanding losses and loss expenses	$ 300,018	$ 361,779	$ 183,249	$ 269,613	$ 1,114,659
Liability for collateral held on behalf of counterparties	39,887	37,776	32,813	75,060	185,536
Reinsurance balances payable	92,139	240	–	–	92,379
Derivative balances payable	783	–	–	–	783
Deposit liabilities	75,977	77,637	60,700	179,509	393,823
Payable for investments purchased	7,947	–	–	–	7,947
Fair value of derivative liabilities	4,008	–	–	–	4,008
Accounts payable and accrued expenses	28,284	5,619	1,488	575	35,966
Note payable	25,000	–	–	–	25,000
Total	$ 574,043	$ 483,051	$ 278,250	$ 524,757	$ 1,860,101

While the estimation of the ultimate liability for outstanding losses and loss expenses is complex and incorporates a significant amount of judgment, the timing of payment of outstanding losses and loss expenses is also uncertain and cannot be predicted as simply as for other financial liabilities. Actuarial and statistical techniques, past experience and management's judgment have been used to determine a likely settlement pattern.

E. ***Operational Risk***

Operational risk refers to the risk of financial or other loss, or potential damage to the Company's reputation resulting from inadequate or failed internal processes, people and systems or from external events.

The following are some of the examples of operational risks facing the Company:

- legal and compliance risk;
- information technology risk (including cyber risk);
- loss of key officers or employees;
- system failure and business disruption;
- execution errors;
- employment practice liability; and
- internal and external fraud.

Through the scenario analysis process, TMR has also made efforts to identify and assess the financial impact of various operational risks. These risks are managed through internal control and monitoring tools such as the risk register.

TMR has a low appetite for operational risk. Unlike underwriting and investment risks, operational risk has no upside and only downside and therefore should be avoided if feasible and cost-effective.

Operational risk is difficult to quantify but can be controlled through appropriate corporate governance and internal control measures. The Company has developed a number of policies and procedures aimed to control or mitigate the negative impact that may potentially result from operational risk events.

4. **Risk Disclosures** (continued)

F. ***Strategic Risk***

Strategic risk is the risk to earnings or capital arising from adverse business decisions or improper implementation of those decisions or inability to act in response to business opportunities or to adapt to changes in its operating environment.

The following are examples of strategic risks facing the Company:

- industry overcapacity that results in prolonged soft market conditions;
- flawed response plans to market price cycles, including maintaining premium volume and market share during market declines and improper performance incentives for underwriters and others;
- planning processes (e.g., plan loss ratio setting, target premium volume) that are not fully integrated with internal financial indicators and external benchmarks or are based on forecasts that are inherently optimistic;
- expansion into new lines or territories with inadequate underwriting expertise, pricing systems, price monitoring capabilities, understanding of regulatory requirements, claims handling staff; and
- failure of large information technology and infrastructure projects to achieve the specified goals.

Strategic risks can be split into two components, one being the risk emanating from making business decisions (active) such as the last two risks in the list above, and the other emanating from a lack of response to industry challenges (passive) such as the first three risks in the list above.

Strategic risk is especially important for TMR because it has optimised the risk profile of its business by growing those lines of business which help to diversify its concentration in catastrophe exposures. Although there is inherent risk in such strategic expansion into new lines and geographical areas, there are also many benefits. In setting TMR's appetite for this risk, both the risk and the benefits are taken into consideration.

TMR identifies and assesses various strategic risks within its risk register and performs scenario analyses to evaluate the potential financial impact that may arise from such risks.

New business will be evaluated periodically to determine whether or not it has met the strategic goals of the Company.

Capital Model

The Company attempts to identify and appropriately define all material risks internal and external to the Company, understand the manifestations of each risk, and ensure that risks are managed, controlled or mitigated. To the extent that a risk is not fully mitigated, the Company will measure the financial impact of the risk and include it in its capital adequacy assessment and measurement framework. The internal capital model covers all of the material risks identified above, including regulatory obligations.

Each of the material risks is measured and modelled by TMR's internal or third-party vendor models. The results are aggregated into a probability distribution of the Company's profit or loss (via Monte Carlo simulation) in order to provide a holistic view of all risks facing the Company. In the risk aggregation process, both risk correlation and diversification effects are taken into account. From the probability distribution, the Company's overall capital requirements using various risk measures and under various capital standards can be determined.

(Expressed in thousands of United States Dollars)

5. **Cash and cash equivalents**

Cash and cash equivalents represent cash at bank of $229.4 million at 31 December 2017 (2016 - $313.8 million).

6. **Funds withheld**

Funds withheld at 31 December 2017 totalling $107.6 million (2016 - $71.8 million) represents funds furnished by the Company to its cedants and are largely held in trusts by trustees. The funds do not trigger any cash flows and cannot be realised by cedants without the Company's consent. In the event of default on such a deposit, the Company's reinsurance commitment would be reduced to the same extent.

7. **Investments**

Investments comprise of the following:

		2017		2016
Short-term investments	$	252,574	$	177,979
Fixed interest securities, available for sale		2,275,744		2,018,498
Investment in catastrophe bonds, available for sale		–		3,154
Equity securities, available for sale		27,300		40,343
Other securities, at fair value through profit and loss		27,655		16,311
	$	2,583,273	$	2,256,285

(a) ***Short-term investments***

The Company's short-term investments represent bank deposits and investments in money market funds with an original term of greater than 90 days but less than one year. At 31 December, short-term investments comprised of the following:

		2017		2016
Money market funds	$	185,576	$	117,377
Fixed deposits		66,998		60,602
	$	252,574	$	177,979

(Expressed in thousands of United States Dollars)

7. **Investments** (continued)

(b) ***Fixed interest securities, available for sale***

(i) The amortised cost, fair value and unrealised gains and losses of investments in available for sale fixed interest securities are as follows:

At 31 December 2017	Amortised cost	Unrealised gains	Unrealised losses	Fair value
U.S. treasuries	$ 116,501	$ 69	$ (2,216)	$ 114,354
Non-U.S. government	115,300	448	(526)	115,222
Corporate	1,075,702	5,542	(2,916)	1,078,328
Agency residential mortgage-backed	216,691	314	(4,318)	212,687
Commercial mortgage-backed	58,742	1,961	(2,027)	58,676
Asset-backed	85,008	11	(382)	84,637
Collateralised debt obligations	247,636	3,927	(8)	251,555
Municipals	352,646	8,825	(1,186)	360,285
Total	$ 2,268,226	$ 21,097	$ (13,579)	$ 2,275,744

At 31 December 2016	Amortised cost	Unrealised gains	Unrealised losses	Fair value
U.S. treasuries	$ 145,815	$ 508	$ (2,959)	$ 143,364
Non-U.S. government	87,119	1,004	(266)	87,857
Corporate	930,685	3,608	(3,957)	930,336
Agency residential mortgage-backed	292,213	634	(6,249)	286,598
Commercial mortgage-backed	56,299	214	(4,136)	52,377
Asset-backed	133,968	196	(377)	133,787
Collateralised debt obligations	167,915	2,210	(969)	169,156
Municipals	217,054	1,585	(3,616)	215,023
Total	$ 2,031,068	$ 9,959	$ (22,529)	$ 2,018,498

Of the $2,275.7 million available for sale fixed interest securities as at 31 December 2017 (2016 - $2,018.5 million), $91.8 million (2016 - $134.9 million) relates to securities held by the Company for the purpose of funding future claim payments in relation to a loss portfolio transfer agreement ("LPTA"). As at 31 December 2017, the securities related to the LPTA consist of non-U.S. government securities of $30.7 million (2016 - $44.6 million), corporate securities of $61.1 million (2016 - $88.8 million) and asset-backed securities of $nil (2016 - $1.5 million). The net unrealised gain on the LPTA securities of $0.6 million at the end of the year 2017 (2016 - $1.3 million) has been offset against the corresponding liability for collateral held on behalf of counterparties. The LPTA is referred to in Note 12 – Deposit Contracts.

In the normal course of business, available for sale fixed interest securities and cash and cash equivalents with fair value of $152.1 million as at 31 December 2017 (2016 - $128.8 million), were deposited in trust for the benefit of ceding companies and credit institutions.

(Expressed in thousands of United States Dollars)

7. **Investments** (continued)

(b) ***Fixed interest securities, available for sale*** *(continued)*

(ii) The amortised cost and estimated fair value of available for sale fixed interest securities by contractual maturity are shown below. Actual maturities may differ from contractual maturities because borrowers may have the right to repay obligations with or without prepayment penalties.

At 31 December 2017	Amortised cost	Fair value
Within one year	$ 255,195	$ 255,228
From one to five years	869,325	868,090
From five to ten years	182,983	184,586
Subtotal	1,307,503	1,307,904
Agency residential mortgage-backed	216,691	212,687
Commercial mortgage-backed	58,742	58,676
Asset-backed	85,008	84,637
Collateralised debt obligations	247,636	251,555
Municipals	352,646	360,285
Total	$ 2,268,226	$ 2,275,744

At 31 December 2016	Amortised cost	Fair value
Within one year	$ 204,574	$ 204,702
From one to five years	822,902	821,608
From five to ten years	136,143	135,247
Subtotal	1,163,619	1,161,557
Agency residential mortgage-backed	292,213	286,598
Commercial mortgage-backed	56,299	52,377
Asset-backed	133,968	133,787
Collateralised debt obligations	167,915	169,156
Municipals	217,054	215,023
Total	$ 2,031,068	$ 2,018,498

(Expressed in thousands of United States Dollars)

7. **Investments** (continued)

(b) ***Fixed interest securities, available for sale*** *(continued)*

(iii) The Company's available for sale fixed interest securities carry a weighted average credit rating of A (2016 - - A) as assigned by Standard & Poor's (S&P).

The rating profile of the Company's available for sale fixed interest securities, based on S&P or equivalent rating, is shown in the table below.

	2017	2016
AAA	$ 319,563	$ 257,180
AA+,AA,AA-	710,796	703,106
A+,A,A-	540,518	416,784
BBB+,BBB,BBB-	463,585	439,435
Below investment grade	42,932	35,580
Not rated	198,350	166,413
	$ 2,275,744	$ 2,018,498

(c) ***Investments in catastrophe bonds, available for sale***

The Company had one catastrophe bond investment as of 31 December 2016 which matured in 2017. The catastrophe bond had a credit rating of BB- as assigned by S&P.

At 31 December 2016	Cost	Unrealised gains	Unrealised losses	Fair value
Catastrophe bonds	$ 3,156	$ –	$ (2)	$ 3,154

(Expressed in thousands of United States Dollars)

7. **Investments** (continued)

(d) Equity securities, available for sale

The acquisition cost, fair value and unrealised gains and losses of investments in available for sale equity securities are as follows:

At 31 December 2017	Acquisition cost	Unrealised gains	Unrealised losses	Fair value
Common stock	$ 8,512	$ 701	$ (31)	$ 9,182
Mutual funds	10,000	481	–	10,481
Real estate investment trusts	7,101	613	(77)	7,637
Total	$ 25,613	$ 1,795	$ (108)	$ 27,300

At 31 December 2016	Acquisition cost	Unrealised gains	Unrealised losses	Fair value
Common stock	$ 19,806	$ 1,296	$ (268)	$ 20,834
Mutual funds	10,000	375	–	10,375
Real estate investment trusts	9,204	–	(70)	9,134
Total	$ 39,010	$ 1,671	$ (338)	$ 40,343

(e) Other securities, at fair value through profit and loss

The acquisition cost, fair value and unrealised gains and losses of investments in other securities at fair value through profit and loss are as follows:

At 31 December 2017	Acquisition cost	Unrealised gains	Unrealised losses	Fair value
Investments in:				
Limited partnerships	$ 12,634	$ 1,367	$ (294)	$ 13,707
Limited liability companies	1,689	170	–	1,859
Absolute return fund	12,005	84	–	12,089
Total	$ 26,328	$ 1,621	$ (294)	$ 27,655

At 31 December 2016	Acquisition cost	Unrealised gains	Unrealised losses	Fair value
Investments in:				
Limited partnerships	$ 13,212	$ 925	$ (103)	$ 14,034
Limited liability companies	2,089	188	–	2,277
Total	$ 15,301	$ 1,113	$ (103)	$ 16,311

(Expressed in thousands of United States Dollars)

7. **Investments** (continued)

(f) Components of investment income

The components of net investment income for the years ended 31 December 2017 and 2016 were as follows:

31 December 2017	Interest and dividends	Net realised gains	Net change in unrealised gains	Impairment losses	Net investment income
Cash and cash equivalents	$ 1,034	$ –	$ –	$ –	$ 1,034
Funds withheld	1,469	–	–	–	1,469
Short-term investments	2,311	–	–	–	2,311
Fixed interest securities – AFS	68,578	205	–	(583)	68,200
Catastrophe bonds	5	–	–	–	5
Equity securities – AFS	2,109	1,298	–	(743)	2,664
Other securities – FVTPL	–	722	317	–	1,039
Sub-total	$ 75,506	$ 2,225	$ 317	$ (1,326)	$ 76,722
Investment management fees					(7,910)
Net investment income					$ 68,812

31 December 2016	Interest and dividends	Net realised gains (losses)	Net change in unrealised gains (losses)	Impairment losses	Net investment income
Cash and cash equivalents	$ 1,128	$ –	$ –	$ –	$ 1,128
Funds withheld	3,032	–	–	–	3,032
Short-term investments	3,496	–	–	–	3,496
Fixed interest securities – AFS	50,878	3,904	–	(32)	54,750
Catastrophe bonds	5	–	–	–	5
Equity securities – AFS	3,106	558	–	(1,214)	2,450
Other securities – FVTPL	–	270	1,176	–	1,446
Sub-total	$ 61,645	$ 4,732	$ 1,176	$ (1,246)	$ 66,307
Investment management fees					(5,435)
Net investment income					$ 60,872

8. **Fair value measurements**

Fair value measurements are established in accordance with the framework provided by IFRS 13, *Financial Instruments: Disclosures*. IFRS 13 establishes a fair value hierarchy with the highest priority given to quoted prices in active markets and the lowest priority given to unobservable inputs.

The following are the levels within the fair value hierarchy:

- Level 1 - Valuations based on quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these instruments does not entail a significant degree of judgment.

- Level 2 - Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets and inputs other than quoted prices that are observable for the asset or liability, such as interest rates and yield curves that are observable at commonly quoted intervals, broker quotes and certain pricing indices.

- Level 3 - Valuations based on inputs that are unobservable and significant to the overall fair value measurement. These measurements include circumstances where there is little, if any, market activity for the asset or liability. In these cases, significant management assumptions can be used to establish management's best estimate of the assumptions used by other market participants in determining the fair value of the asset or liability.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the level in the fair value hierarchy within which the fair value measurement in its entirety falls has been determined based on the lowest level input that is significant to the fair value measurement of the asset or liability. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and the Company considers factors specific to the asset or liability.

(Expressed in thousands of United States Dollars)

8. **Fair value measurements** (continued)

Below is a summary of the assets and liabilities that are measured at fair value on a recurring basis:

At 31 December 2017	Total	Quoted prices in active markets for identical assets (Level 1)	Other observable inputs (Level 2)	Unobservable inputs (Level 3)
Financial assets				
Investments				
Short-term investments	$ 252,574	$ 252,574	$ –	$ –
Fixed interest securities				
U.S. treasuries	114,354	114,354	–	–
Non-U.S. government	115,222	–	115,222	–
Corporate	1,078,328	–	904,995	173,333
Agency residential mortgage-backed	212,687	–	212,687	–
Commercial mortgage-backed	58,676	–	58,676	–
Asset-backed	84,637	–	84,637	–
Collateralised debt obligations	251,555	–	239,805	11,750
Municipals	360,285	–	358,350	1,935
Equity securities	27,300	16,819	–	10,481
Other securities	27,655	–	12,089	15,566
Sub-total	2,583,273	383,747	1,986,461	213,065
Derivative assets	69,729	–	–	69,729
Total	2,653,002	383,747	1,986,461	282,794
Financial liabilities				
Derivative liabilities	(37,687)	–	–	(37,687)
Total	$ 2,615,315	$ 383,747	$ 1,986,461	$ 245,107

(Expressed in thousands of United States Dollars)

8. **Fair value measurements** (continued)

At 31 December 2016	Total	Quoted prices in active markets for identical assets (Level 1)	Other observable inputs (Level 2)	Unobservable inputs (Level 3)
Financial assets				
Investments				
Short-term investments	$ 177,979	$ 177,979	$ –	$ –
Fixed interest securities				
U.S. treasuries	143,364	143,364	–	–
Non-U.S. government	87,857	–	87,857	–
Corporate	930,336	–	770,538	159,798
Agency residential mortgage-backed	286,598	–	286,598	–
Commercial mortgage-backed	52,377	–	50,180	2,197
Asset-backed	133,787	–	133,787	–
Collateralised debt obligations	169,156	–	169,156	–
Municipals	215,023	–	213,060	1,963
Investments in catastrophe bonds	3,154	–	3,154	–
Equity securities	40,343	29,968	–	10,375
Other securities	16,311	–	–	16,311
Sub-total	2,256,285	351,311	1,714,330	190,644
Derivative assets	3,960	–	–	3,960
Total	2,260,245	351,311	1,714,330	194,604
Financial liabilities				
Derivative liabilities	(4,008)	–	–	(4,008)
Total	$ 2,256,237	$ 351,311	$ 1,714,330	$ 190,596

There were no transfers made between Levels 1, 2 and 3 of the fair value hierarchy in 2017.

The Company elected to classify certain non-U.S. government securities within Level 2 in 2016, which were previously within Level 1. While these securities may qualify for Level 1 classification based on ordinary transactions in identical instruments, it has been assumed, as a practical expedient, that such instruments would predominantly be valued based on a mix of observable inputs.

Short-term investments

Short-term investments, which comprise securities due to mature within one year of the date of purchase, that are traded in active markets are classified within Level 1 as fair values are based on quoted market prices.

Fixed interest securities

Fixed interest securities are priced using pricing services, such as index providers and pricing vendors. The pricing vendors provide pricing for a high volume of liquid securities that are actively traded. For securities that do not trade on an exchange, the pricing services generally utilise market data and other observable inputs in pricing models to determine prices. Prices are generally verified using third party data. The techniques generally used to determine the fair value of our fixed interest securities are detailed below by asset class.

8. **Fair value measurements** (continued)

U.S. treasuries
These securities are primarily priced by pricing vendors. When pricing these securities, the vendor may utilise daily data from many real-time market sources, including active trades. As such, the Company considers its U.S. treasury fixed interest securities as Level 1.

Non-U.S. government
Fixed interest securities included in non-U.S. government are primarily priced by pricing vendors. When evaluating these securities, the vendor may gather information from market sources and integrate other observations from markets and sector news. Evaluations are updated by obtaining broker-dealer quotes and other market information including actual trades, when available. For securities in which trade volume is relatively high, the vendor may utilise data from active trades, as such, these are included as Level 1. For securities in which trade volume is low, the pricing vendor may also utilise data from more frequently traded securities with similar attributes. These are considered observable inputs therefore, the fair value of such securities are classified as Level 2.

Corporate
Corporate securities primarily include fixed rate corporate bonds and floating rate notes. The Company's corporate fixed interest securities are primarily priced by pricing vendors. When evaluating these securities, the vendor may gather information from market sources regarding the issuer of the security, obtain credit data, as well as other observations from markets and sector news. Evaluations are updated by obtaining broker-dealer quotes and other market information including actual trades, when available. The pricing vendor may also consider the specific terms and conditions of the securities, including any specific features which may influence risk. These are considered observable inputs therefore, the fair value of such securities are classified as Level 2.

The Company's corporate securities also include private placements and mortgage loans, for which there is limited observable input on which to measure fair value, which are classified as Level 3. The fair value of these private placements is estimated to be equal to its amortised cost.

Residential ("RMBS") and commercial mortgage-backed ("CMBS") securities
The vendor uses various valuation techniques and pricing models to measure the fair value of its investments in RMBS and CMBS, including option-adjusted spread models, volatility-driven multi-dimensional single cash flow stream models and matrix correlation to comparable securities. RMBS include U.S. agency securities and collateralised mortgage obligations. Inputs utilised in connection with the valuation techniques include monthly payment and performance information, including prepayments, default severity, delinquencies, market indices and the amounts of the tranches in the particular structure which are senior or subordinate, as applicable, to the tranche represented by the Company's investment. Valuations may also be corroborated by daily active market quotes. As of 31 December 2017, 100% (2016 - 99%) of the Company's investment in mortgage-backed securities are valued using observable inputs and therefore are categorised as Level 2 of the fair value hierarchy. Mortgage-backed securities categorised as Level 3 of the fair value hierarchy in 2016 were valued using non-binding broker quotes which relied on unobservable inputs.

Asset-backed
The underlying collateral for the Company's asset-backed fixed interest securities primarily consists of automobile and credit card loans. Securities held in this sector are primarily priced by pricing vendors and are considered as Level 2 by the Company as inputs are observable. The pricing vendor may apply dealer quotes and other available trade information such as bid and offers, prepayment spreads which may be adjusted for the underlying collateral or current price data, the U.S. treasury curve, swap curve and TBA values as well as cash settlement.

8. **Fair value measurements** (continued)

Collateralised debt obligations
Collateralised debt obligations consist of collateralised loans. The pricing vendor's valuation techniques utilise non-binding broker quotes as the key input for a majority of the portfolio. As such inputs are generally unobservable, these collateralised debt obligations are categorised as Level 3 of the fair value hierarchy. For the remaining securities, valuation is determined utilising observable inputs including monthly payment information, prepayment data, default severity and delinquencies. These securities are categorised as Level 2 of the fair value hierarchy.

Municipals
These include bonds or notes issued by U.S. municipalities. Inputs utilised include recently executed transactions and other market data, spreads, benchmark curves including treasury and other benchmarks, trustee reports, material event notices, new issue data, and issuer financial statements. These inputs are generally observable and as such, these securities are categorised as Level 2 of the fair value hierarchy. The remaining securities are valued using non-binding broker quotes which rely on unobservable inputs and thus these securities are categorised as Level 3 of the fair value hierarchy.

Investments in catastrophe bonds

Investments in catastrophe bonds were recorded at fair value based on quoted market prices, or when such prices were not available, by reference to published broker or underwriter bid and offer indications. As such, the Company considered its investments in catastrophe bonds as Level 2 in 2016.

Equity securities

This is comprised of common stock, mutual funds and real estate investment trusts. Equities are generally included as Level 1 in the fair value hierarchy as prices are obtained from market exchanges in active markets. Investments in mutual funds, where the fair value of the fund is estimated to be the net asset value reported by the fund administrator at the balance sheet date, are classified as Level 3.

Other securities

Other securities consist of investments in investment funds organised as limited partnerships, investment in funds organised as limited liability companies, real estate investments held by limited liability companies and an investment in absolute return fund.

For private equity investments, since quoted market prices are not available, the transaction price is used as the best estimate of fair value at inception. When evidence is believed to support a change to the carrying value from the transaction price, adjustments are made to reflect expected exit values. Ongoing valuation reviews are based on assessments of each underlying investment and the inputs utilised in these reviews include, among other things, the evaluation of financing and sale transactions with third parties, expected cashflows, material events and market-based information. These investments are categorised as Level 3 of the fair value hierarchy.

For investments in funds organised as limited liability companies, the funds' financial statements constitute the key valuation input. The value calculated using the equity method of accounting with respect to the investment in this limited liability company was reflective of the fair market value of such investments, and therefore such investments are categorised as Level 3 of the fair value hierarchy.

For the investment in absolute return fund, the fund's exposure in general is related to fixed income securities and fixed income related securities issued by, or giving exposure to, governments, government agencies, companies and supranationals. The fund publishes a daily price on the most common financial information providers. As such, the Company considers its investment in absolute return fund as Level 2 of the fair value hierarchy.

(Expressed in thousands of United States Dollars)

8. **Fair value measurements** (continued)

Fair value of derivative assets and liabilities

Included in Level 3 are the Company's catastrophe swap derivatives. Catastrophe swap derivatives are stated at fair value as estimated by management primarily based on the unexpired period of risk, an evaluation of the probability of loss and other unobservable inputs. The Company's catastrophe swap derivatives are initially priced at fair value in a non-stressed market and amortisation reflects the change in fair value in the absence of any loss events. The fair value of derivative contracts is sensitive to loss triggering events. In the event of a loss, the Company would adjust the fair value of the derivative to account for a recovery or liability in accordance with the contract terms and the estimate of exposure under the contract. The inputs for catastrophe swap derivatives are based on management's evaluation and are unobservable.

The following tables provide reconciliations for Level 3 assets measured at fair value on a recurring basis for the years ended 31 December 2017 and 2016:

At 31 December 2017	2016	Net gains (losses) included in earnings	Net unrealised gains (losses) included in other comprehensive income	Purchases	Sales	Transfers out of Level 3	2017
Financial assets							
Corporate	$ 159,798	$ 1,009	$ –	$ 40,258	$ (27,732)	$ –	$ 173,333
Commercial mortgage-backed	2,197	385	(214)	–	(2,368)	–	–
Collateralised debt obligations	–	–	–	11,750	–	–	11,750
Municipals	1,963	–	(28)	–	–	–	1,935
Equity securities	10,375	–	106	–	–	–	10,481
Other securities	16,311	955	–	1,093	(2,793)	–	15,566
Derivative assets	3,960	(23,751)	–	89,520	–	–	69,729
Sub-total	194,604	(21,402)	(136)	142,621	(32,893)	–	282,794
Financial liabilities							
Derivative liabilities	(4,008)	19,472	–	–	(53,151)	–	(37,687)
Total	$ 190,596	$ (1,930)	$ (136)	$ 142,621	$ (86,044)	$ –	$ 245,107

(Expressed in thousands of United States Dollars)

8. **Fair value measurements** (continued)

At 31 December 2016	2015	Net gains (losses) included in earnings	Net unrealised gains (losses) included in other comprehensive income	Purchases	Sales	Transfers out of Level 3	2016
Financial assets							
Corporate	$ 35,003	$ 586	$ –	$ 159,552	$ (35,343)	$ –	$ 159,798
Commercial mortgage-backed	10,831	311	351	1,895	(11,191)	–	2,197
Collateralised debt obligations	37,845	154	1,046	–	–	(39,045)	–
Municipals	–	–	(37)	2,000	–	–	1,963
Equity securities	9,266	–	1,109	–	–	–	10,375
Other securities	13,314	1,241	–	2,593	(837)	–	16,311
Derivative assets	4,773	(29,844)	–	29,031	–	–	3,960
Sub-total	111,032	(27,552)	2,469	195,071	(47,371)	(39,045)	194,604
Financial liabilities							
Derivative liabilities	(4,307)	32,082	–	–	(31,783)	–	(4,008)
Total	$ 106,725	$ 4,530	$ 2,469	$ 195,071	$ (79,154)	$ (39,045)	$ 190,596

The Company transferred certain collateral debt obligations from Level 3 into Level 2 in 2016, as the valuation is now determined utilising observable inputs for these securities.

Net gains (losses) on investments and on derivative assets and liabilities are included in net investment income and net derivative income, respectively, in the consolidated statement of comprehensive income.

Investments included in Level 3

As at 31 December 2017, investments included in Level 3 amounted to $213.1 million (2016 - $190.6 million).

If models are used to measure financial assets and liabilities included in level 3 under which the adoption of alternative inputs lead to a material change in fair value, IFRS 13 requires disclosure of the effects of these alternative assumptions.

Equity securities and other securities classified as Level 3 are mainly priced based on the (adjusted) net asset value method. The key unobservable input is net asset value which is provided by the respective fund manager. Since the Company has limited insight into the specific inputs used by the fund managers in estimating fair value, the effects of using alternative inputs within the meaning of IFRS 13 cannot be reasonably established.

Mortgage loans and private placements are valued at amortised cost, which reasonably approximate fair value for these securities. The key unobservable input for fair value measurement would be a risk adjusted interest rate benchmark (market interest rate for the same tenor and the respective credit risk). The application of alternative inputs and assumptions has no material effect on the consolidated financial statements.

Commercial mortgage backed securities and collateralised debt obligations classified as Level 3 are mainly priced based on the income approach by brokers and traders. The primary unobservable input used in the discounted cash flow method is a risk adjusted interest rate benchmark. A significant yield increase of this benchmark in isolation could result in a decreased fair value, while a significant yield decrease could result in an increased fair value.

8. **Fair value measurements** (continued)

Investments included in Level 3 (continued)

However, a simplified 10% stress of this main non-market observable input has no material impact to the fair value as at 31 December 2017 and 2016.

Derivative assets and liabilities included in Level 3

As at 31 December 2017, derivative assets comprise unearned derivative expense of $69.7 million (2016 - $4.0 million).

As at 31 December 2017, derivative liabilities comprise unearned derivative income of $37.7 million (2016 - $4.0 million).

The following methods and assumptions are used by the Company in estimating fair value disclosures for other financial instruments:

Cash and cash equivalents, Short-term investments and Liability for collateral held on behalf of counterparties

The carrying amounts reported in the consolidated balance sheet for these instruments approximate their fair values.

Other assets and liabilities

The fair value of funds withheld, accrued interest receivable, premiums receivable, derivative balances receivable, deposit assets, other assets, reinsurance balances payable, derivative balances payable, deposit liabilities, payable for investments purchased, accounts payable and accrued expenses and note payable approximates their carrying value due to their short-term nature in general. The estimates of fair values are subjective in nature and are not necessarily indicative of the amounts that the Company would actually realise in a current market exchange. However, any differences would not be expected to be material. Certain instruments such as prepaid reinsurance premiums, outstanding losses recoverable from reinsurers, deferred acquisition expenses, unearned profit commission, property and equipment, intangible assets, other assets, outstanding losses and loss expenses, unearned premiums, deferred commission income and deferred fee income are excluded from fair value disclosure.

Thus, the total fair value amounts cannot be aggregated to determine the underlying economic value of the Company.

9. **Net derivative expense or income**

Net derivative expense consists of catastrophe swap derivative premiums expensed of $4.3 million (2016 - $2.2 million net derivative income).

As discussed in Note 4 under 'Credit Risk', the Company's maximum exposure to unrated counterparties is fully collateralised.

10. **Collateral held on behalf of counterparties**

Collateral received in the form of cash, which is not legally segregated from the Company, is recognised as an asset in the consolidated balance sheet with a corresponding liability for the repayment. In addition, amounts arising from the application of the deposit method of accounting to ceded retrocession or reinsurance contracts are included.

(Expressed in thousands of United States Dollars)

11. **Reinsurance and other assets**

	2017	2016
Premiums receivable	$ 970,853	$ 856,770
Derivative balances receivable	35,661	–
Deposit assets	348,444	393,823
Accrued interest receivable	17,100	14,151
Outstanding losses recoverable from reinsurers	230,177	64,975
Other assets	19,283	15,032
	$ 1,621,518	$ 1,344,751

The current and non-current portions are expected to be as follows:

	2017	2016
Current portion	$ 1,017,636	$ 852,256
Non-current portion	603,882	492,495
	$ 1,621,518	$ 1,344,751

The Company assesses its reinsurance receivables for impairment on a quarterly basis by reviewing counterparty payment history. The carrying amounts disclosed above reasonably approximate the fair value at the reporting date.

12. **Deposit contracts**

Effective 1 July 2014, Tokio Millennium Re AG – Bermuda branch ("TMRB") entered into a loss portfolio transfer agreement ("first LPTA"). TMRB accepted, on a fully collateralised basis, the liability of a loss portfolio with an aggregate limit capped at EUR 366.0 million. Through a quota share retrocession agreement, TMRB retroceded 100% of its liability to another party. TMRB is compensated through a ceding commission as a percentage of the initial aggregate limit, which is earned from the first LPTA effective date to expected contract termination date. The collateral for the first LPTA consists of short term investments and available for sale fixed interest securities which are included in the Company's consolidated balance sheet. These are referred to in Note 7 – Investments.

Effective 30 June 2016, TMRB entered into three loss portfolio transfer agreements ("second LPTA"). TMRB accepted, on a fully collateralised basis, the liability of a loss portfolio with an aggregate limit capped at GBP 202.8 million. Through three retrocession agreements, TMRB retroceded 100% of its liability to another party. TMRB is compensated through a ceding commission as a percentage of the initial aggregate limit, which is earned from the second LPTA effective date to expected contract termination date. The collateral assets for the second LPTA are held in trusts by the counterparty for the benefit of the Company. For consolidation purposes, it was determined that the Company does not have sufficient control over the assets held in the trust accounts, therefore these assets are not included in the consolidated balance sheet. The trust accounts had a total cash balance of $117.2 million as of 31 December 2017 (2016 - $248.0 million).

(Expressed in thousands of United States Dollars)

13. Deferred acquisition expenses and deferred commission income

The reconciliation of opening and closing deferred acquisition expenses incurred and ceded is as follows:

	2017				2016			
	Gross	Ceded	Other	Net	Gross	Ceded	Other	Net
At 1 January	$ 359,834	$ (6,065)	$ (4,229)	$ 349,540	$ 327,938	$ (3,511)	$ (1,199)	$ 323,228
Expense deferred	342,967	(38,440)	(98)	304,429	385,099	(31,892)	(4,084)	349,123
Amortisation	(379,501)	31,209	–	(348,292)	(340,995)	25,604	1,054	(314,337)
Other	10,256	109	–	10,365	(12,208)	3,734	–	(8,474)
At 31 December	$ 333,556	$ (13,187)	$ (4,327)	$ 316,042	$ 359,834	$ (6,065)	$ (4,229)	$ 349,540

The current and non-current portions are expected to be as follows:

	2017	2016
Current portion	$ 232,055	$ 236,970
Non-current portion	83,987	112,570
	$ 316,042	$ 349,540

14. Taxation

The Swiss operation is subject to Swiss cantonal and federal taxes of 21.15% (2016: 21.15%). The Company has branches that operate in Australia, United States and United Kingdom which are subject to income taxes at statutory rates of 30% (2016: 30%), 35% (2016: 35%) and 19% (2016: 20%), respectively.

The Company has subsidiaries and a branch in Bermuda which are not subject to income or capital gains tax under the current Bermuda law. In the event there is a change in current law such that income or capital gains are imposed, the Company would be exempt from such tax until March 2035 pursuant to the Bermuda Exempted Undertakings Tax Protection Act of 1966.

Reductions in the United Kingdom's corporate tax rate from 20% to 19% (effective from 1 April 2017) and 17% (effective from 1 April 2020) were substantively enacted in 2015 and 2016, respectively.

The United States federal tax reform was enacted in December 2017 and as such, the federal corporate income tax rate was reduced from the existing rate of 35% to 21% with effect from 1 January 2018.

(Expressed in thousands of United States Dollars)

14. **Taxation** (continued)

Income tax

The Swiss standard rate of tax is 21.15% (2016: 21.15%), whereas the tax benefit for the year ended 31 December 2017 as a percentage of loss before tax is 1.74% (2016: 2.24% tax charge as a percentage of profit before tax). The reasons for this difference are explained below:

		2017		2016
(Loss) profit before tax	$	(161,749)	$	123,442
Tax calculated at the standard corporation tax rate applicable in Switzerland: 21.15% (2016: 21.15%)		(34,210)		26,108
Non-taxable loss (income)		2,425		(24,743)
Tax rate differences on foreign branches		(15,101)		652
Deferred tax adjustment in respect of prior years		372		686
Tax rate change adjustment		17,770		108
Tax losses for which no deferred tax asset is recognised		26,112		–
Utilisation of tax losses previously unrecognized for deferred tax		–		(892)
Other		(184)		851
Total tax (benefit) expense	$	(2,816)	$	2,770

The following table presents the major components of the income tax expense:

		2017		2016
Corporation tax charge for the year	$	2,162	$	2,513
Adjustments in respect of prior year corporation tax		(352)		(70)
Deferred tax credit for the year		(5,647)		(637)
Adjustments in respect of prior year deferred tax		207		856
Tax rate change adjustment		814		108
Total tax (benefit) expense	$	(2,816)	$	2,770

Deferred tax

		2017		2016
Deferred tax asset	$	7,017	$	2,183
Deferred tax liability		–		(129)
Total net deferred tax asset	$	7,017	$	2,054

(Expressed in thousands of United States Dollars)

14. **Taxation** (continued)

Deferred tax (continued)

The Company's deferred tax asset results from an operating loss carry forward and IFRS versus tax basis accounting differences. The deferred tax asset of $7.0 million as at 31 December 2017 (2016: $2.2 million) has been recognised as the Company expects the business to produce taxable profits in future periods against which the tax losses can be offset. A deferred tax asset of $0.7 million was written down to nil in 2016 for tax benefits which management determined will not be realised against future taxable profits.

TMR's US branch did not recognise any deferred tax asset from its net operating loss carry forward as at 31 December 2017 due to the uncertainty regarding its recoverability.

In accordance with IAS 12, *Income Taxes*, to avoid the need for detailed scheduling of the timing of the reversal of each temporary difference, TMR has offset its deferred tax asset against its deferred tax liability, as they relate to the same taxable entities and relate to income taxes levied by the same taxation authorities.

Net deferred tax assets analysed by balance sheet headings and after appropriate netting are as follows:

As at 31 December	2016	Income statement (charge)/credit	Transfer from equity	Foreign currency translation	2017
Outstanding losses and loss expense	$ 4,981	$ (5,004)	$ –	$ 23	$ –
Unearned premiums	37,773	(37,773)	–	–	–
Deferred acquisition expenses	884	71	–	77	1,032
Accounts payable and accrued expenses	1,796	(1,428)	–	12	380
Operating losses	29,044	(19,894)	–	891	10,041
Retirement benefit obligation	75	64	–	15	154
Other	1,547	(828)	–	(91)	628
Total deferred tax assets	$ 76,100	$ (64,792)	$ –	$ 927	$ 12,235
Investment assets	$ (262)	$ 232	$ 32	$ (16)	$ (14)
Premiums receivable	(367)	175	–	(41)	(233)
Outstanding losses and loss expense	(4,948)	533	–	(585)	(5,000)
Deferred acquisition expenses	(68,359)	68,359	–	–	–
Other	(110)	119	–	20	29
Total deferred tax liabilities	$ (74,046)	$ 69,418	$ 32	$ (622)	$ (5,218)
Net deferred tax assets	$ 2,054	$ 4,626	$ 32	$ 305	$ 7,017

(Expressed in thousands of United States Dollars)

15. Property and equipment

Property and equipment at 31 December 2017 comprise:

	Computer equipment	Fixtures and fittings	Leasehold improvements	Motor vehicles	Office equipment	Total
Cost						
At 1 January 2017	$ 10,664	$ 3,589	$ 13,133	$ 127	$ 20	$ 27,533
Additions	836	193	588	33	2	1,652
Disposals	(2,478)	–	–	(76)	(17)	(2,571)
At 31 December 2017	$ 9,022	$ 3,782	$ 13,721	$ 84	$ 5	$ 26,614
Accumulated depreciation						
At 1 January 2017	$ 9,586	$ 2,598	$ 5,646	$ 112	$ 18	$ 17,960
Charge for the year	1,011	367	1,447	10	1	2,836
Disposals	(2,475)	–	–	(75)	(17)	(2,567)
At 31 December 2017	$ 8,122	$ 2,965	$ 7,093	$ 47	$ 2	$ 18,229
Net book value						
At 31 December 2017	$ 900	$ 817	$ 6,628	$ 37	$ 3	$ 8,385
At 1 January 2017	$ 1,078	$ 991	$ 7,487	$ 15	$ 2	$ 9,573

Property and equipment at 31 December 2016 comprise:

	Computer equipment	Fixtures and fittings	Leasehold improvements	Motor vehicles	Office equipment	Total
Cost						
At 1 January 2016	$ 10,246	$ 3,572	$ 13,208	$ 127	$ 20	$ 27,173
Additions	418	17	86	–	–	521
Disposals	–	–	(161)	–	–	(161)
At 31 December 2016	$ 10,664	$ 3,589	$ 13,133	$ 127	$ 20	$ 27,533
Accumulated depreciation						
At 1 January 2016	$ 8,354	$ 2,263	$ 4,596	$ 103	$ 17	$ 15,333
Charge for the year	1,232	335	1,130	9	1	2,707
Disposals	–	–	(80)	–	–	(80)
At 31 December 2016	$ 9,586	$ 2,598	$ 5,646	$ 112	$ 18	$ 17,960
Net book value						
At 31 December 2016	$ 1,078	$ 991	$ 7,487	$ 15	$ 2	$ 9,573
At 1 January 2016	$ 1,892	$ 1,309	$ 8,612	$ 24	$ 3	$ 11,840

(Expressed in thousands of United States Dollars)

16. **Intangible assets**

Intangible assets at 31 December 2017 comprise:

		Computer software
Cost		
At 1 January 2017	$	39,669
Additions		5,003
Disposals		(21)
At 31 December 2017	$	44,651
Accumulated amortisation		
At 1 January 2017	$	30,507
Charge for the year		5,379
Disposals		(2)
At 31 December 2017	$	35,884
Net book value		
At 31 December 2017	$	8,767
At 1 January 2017	$	9,162

Intangible assets at 31 December 2016 comprise:

		Computer software
Cost		
At 1 January 2016	$	33,958
Additions		5,711
Disposals		–
At 31 December 2016	$	39,669
Accumulated amortisation		
At 1 January 2016		25,529
Charge for the year		4,978
Disposals		–
At 31 December 2016	$	30,507
Net book value		
At 31 December 2016	$	9162
At 1 January 2016	$	8,429

(Expressed in thousands of United States Dollars)

17. **Insurance liabilities**

(a) Outstanding losses and loss expenses and losses recoverable from reinsurers

The summary of changes in outstanding losses and loss expenses is as follows:

	Outstanding losses and loss expenses	Outstanding losses recoverable from reinsurers	Net
As at 31 December 2015	$ 857,700	$ (52,730)	$ 804,970
Incurred losses related to:			
Current year	741,684	(29,640)	712,044
Prior years	(44,647)	(857)	(45,504)
Adverse development cover	–	9,592	9,592
Loss portfolio transfer	7,583	–	7,583
Net effect of foreign currency exchange rate changes	(3,539)	202	(3,337)
Total incurred	701,081	(20,703)	680,378
Paid losses related to:			
Current year	202,362	(8,288)	194,074
Prior years	241,760	(170)	241,590
Total paid	444,122	(8,458)	435,664
As at 31 December 2016	$ 1,114,659	$ (64,975)	$ 1,049,684
Incurred losses related to:			
Current year	1,419,319	(371,250)	1,048,069
Prior years	65,063	(8,724)	56,339
Adverse development cover	–	(2,274)	(2,274)
Loss portfolio transfer	(1,698)	–	(1,698)
Net effect of foreign currency exchange rate changes	36,559	(949)	35,610
Total incurred	1,519,243	(383,197)	1,136,046
Paid losses related to:			
Current year	479,143	(215,910)	263,233
Prior years	368,036	(2,085)	365,951
Total paid	847,179	(217,995)	629,184
As at 31 December 2017	$ 1,786,723	$ (230,177)	$ 1,556,546

The current and non-current portions of the outstanding losses and loss expenses are expected to be as follows:

2017	Outstanding losses and loss expenses	Outstanding losses recoverable from reinsurers	Net
Current	$ 531,318	$ (100,200)	$ 431,118
Non-current	1,255,405	(129,977)	1,125,428
	$ 1,786,723	$ (230,177)	$ 1,556,546

2016	Outstanding losses and loss expenses	Outstanding losses recoverable from reinsurers	Net
Current	$ 300,018	$ (19,831)	$ 280,187
Non-current	814,641	(45,144)	769,497
	$ 1,114,659	$ (64,975)	$ 1,049,684

(Expressed in thousands of United States Dollars)

17. **Insurance liabilities** (continued)

(a) ***Outstanding losses and loss expenses and losses recoverable from reinsurers*** *(continued)*

During 2017, the Company incurred net losses of $1,104.4 million (2016 - $666.5 million), which mostly relate to attritional losses on proportional and non-catastrophe excess of loss property and casualty contracts. In addition, $76.6 million was related to net losses from hurricanes Harvey, Irma and Maria which occurred in the third quarter of 2017 and $34.5 million on California wildfire losses in the last quarter of 2017. There were also losses of $43.1 million recorded on aggregate treaties.

The Company experienced net adverse development of $56.3 million (2016 – $45.5 million favourable) attributable to prior years, which mostly relate to development on attritional losses on proportional and non-catastrophe excess of loss property and casualty contracts.

During 2016, the Company incurred net losses of $666.5 million, which also mostly relate to attritional losses on proportional and non-catastrophe excess of loss property and casualty contracts. Furthermore, $19.3 million related to losses from Hurricane Matthew in October 2016 and $6.3 million on a hailstorm event in the Netherlands in June 2016.

For certain catastrophic events, there is considerable uncertainty underlying the assumptions and associated estimated reserves for losses and loss adjustment expenses. Reserves are reviewed regularly and, as experience develops and new information becomes known, the reserves are adjusted as necessary. Such adjustments could require a material change in the amount estimated. The uncertainty surrounding reserves for property catastrophe exposures arises from problems such as policy coverage issues, multiple events affecting one geographic area and the impact on claims adjusting by ceding companies. These issues can cause significant delays to the timing of notification of changes to loss estimates reported by ceding companies. Estimates for events are based on a review of contracts affected by the events, information received from both clients and brokers, industry insured loss estimates, output from both industry and proprietary models and management judgment. It has also been assumed that underlying policy terms and conditions are upheld during the loss adjustment process. There remains the potential for legal and regulatory issues arising regarding the scope of coverage. Consequently, the ultimate net impact of losses from these events on the Company's net income might differ substantially from the estimates. Such adjustments, if necessary, are reflected in results of operations in the period in which they become known.

(b) ***Unearned premiums***

The current and non-current portions of the unearned premiums are expected to be as follows:

	2017	2016
Current portion	$ 927,332	$ 852,499
Non-current portion	333,868	384,552
	$ 1,261,200	$ 1,237,051

(Expressed in thousands of United States Dollars)

18. Reinsurance and other liabilities

		2017		2016
Outstanding losses and loss expenses	$	1,786,723	$	1,114,659
Liability for collateral held on behalf of counterparties		159,721		185,536
Reinsurance balances payable		140,212		92,379
Derivative balances payable		73,028		783
Deposit liabilities		348,444		393,823
Payable for investments purchased		5,235		7,947
Fair value of derivative liabilities		37,687		4,008
Accounts payable and accrued expenses		32,724		35,966
Note payable		–		25,000
	$	2,583,774	$	1,860,101

The current and non-current portions are expected to be as follows:

		2017		2016
Current portion	$	805,009	$	574,043
Non-current portion		1,778,765		1,286,058
	$	2,583,774	$	1,860,101

19. Note payable

The company issued a private catastrophe bond (“Omamori”) using a segregated account of Shima Re which provides TMR with a source of fully-collateralised second event retrocessional reinsurance protection against United States earthquakes and named storms. The Omamori catastrophe bond is a three-year deal which incepted on 17 January 2014. The transaction was facilitated by TSM as insurance manager of Shima Re. In accordance with IFRS 10, *Consolidated Financial Statements*, as TMR has control over the Omamori segregated account, it has been consolidated with the Company’s financial statements. As a result of this transaction, a note payable of $25.0 million as of 31 December 2016 was recorded in the consolidated balance sheet. It paid a 5% annual coupon rate to noteholders and as such, the related interest expense and payable were recorded in the consolidated financial statements. This matured and was settled in 2017.

20. Retirement benefit obligation

(a) Defined benefit scheme

The Company’s Swiss operation offers a defined benefit pension plan to its employees. The plan offers mandatory benefits as prescribed by the Law on Occupational Benefits in Switzerland as well as voluntary benefits. These mandatory benefits comprise guarantees regarding the level of interest paid annually on accrued pension savings, as well how the rates on these accrued savings are converted into a pension payment at the time of retirement. The Company and the members contribute a defined percentage of salary to the pension arrangement. Credit accumulation is granted on these contributions. At retirement, the accumulated contributions are converted into a pension. The liability shown relates solely to active members and disability pensioners since the responsibility for meeting old-age pensions in payment is irrevocably transferred to an insurance company. Independent actuarial reviews of the ongoing benefit obligations were undertaken at 31 December 2017.

(Expressed in thousands of United States Dollars)

20. **Retirement benefit obligation** (continued)

*(a) **Defined benefit scheme** (continued)*

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	2017 % pa	2016 % pa
Discount rate	0.70	0.70
Expected rate of salary increase	1.00	2.60
Interest credit rate	1.00	1.00
Demographic assumptions	BVG2015GT	BVG2015GT

The table below shows the impact on the defined benefit obligation that a change in certain key assumptions would have:

Assumption change	*Defined benefit obligation $*
(Increase)/decrease in discount rate by 0.25%	(17,958)/19,589
(Decrease)/increase in salary by 0.25%	(18,611)/18,912

Amounts recognised in the consolidated statement of comprehensive income in respect of the defined benefit scheme are as follows:

		2017		2016
Current service cost	$	1,165	$	1,355
Interest cost		131		149
Interest on plan assets		(98)		(125)
Past service cost		–		(584)
Administration costs		31		32
	$	1,229	$	827

The amount included in the consolidated balance sheet arising from the Company's obligations with respect to its defined benefit scheme is as follows:

		2017		2016
Present value of defined benefit obligations	$	18,736	$	17,460
Fair value of plan assets		(14,389)		(12,963)
Retirement benefit obligation	$	4,347	$	4,497

Movements in the present value of the defined benefit obligation during the year are as follows:

		2017		2016
As at 1 January	$	17,460	$	16,759
Current service cost		1,165		1,355
Interest cost		131		149
Contributions from plan participants		384		386
Actuarial (gain) loss		(919)		1,341
Net transfers		(310)		(1,385)
Past service cost		–		(587)
Foreign currency translation adjustment		825		(558)
As at 31 December	$	18,736	$	17,460

(Expressed in thousands of United States Dollars)

20. **Retirement benefit obligations** (continued)

(a) ***Defined benefit scheme*** *(continued)*

There were no actuarial gains or losses from changes in demographic assumptions. The actuarial gain in 2017 and actuarial loss in 2016 were primarily driven by the change in financial assumptions.

The average duration of the defined benefit obligations was 17.4 years in 2017 (2016 – 19.1 years).

Movements in the fair value of plan assets during the year are as follows:

	2017	2016
Opening fair value of plan assets	$ 12,963	$ 13,475
Interest income on plan assets	98	125
Actuarial gain	(211)	(89)
Contributions from plan participants	384	386
Employer contributions	878	893
Net transfers	(310)	(1,385)
Administration costs	(31)	(32)
Foreign currency translation adjustment	618	(410)
Closing fair value of plan assets	$ 14,389	$ 12,963

The analysis of the plan assets and the expected rate of return by asset class are not provided for the defined benefit scheme as the investment decisions are at the discretion of third parties to whom the Company has ceded investment risk under the insurance policies taken out to meet its obligations.

The Company expects to make a contribution of $0.9 million (2016 - $0.8 million) to the defined benefit scheme during the next financial year.

(b) ***Defined contribution plans***

The Company operates defined contribution plans in its branches in Bermuda, Australia and United Kingdom. The total contributions for the year ended 31 December 2017 amounted to $2.0 million (2016 - $1.9 million).

The Company also maintains a defined contribution plan for employees of its US branch in accordance with Section 401(k) of the Internal Revenue Code. The total contribution for the year ended 31 December 2017 amounted to $0.2 million (2016 - $0.2 million).

21. **Share capital**

	2017	2016
Authorised, issued and fully paid, shares of CHF 0.91 ($1) par value each	$ 250,000	$ 250,000
Contributed surplus	$ 400,000	$ 400,000

Fully paid issued shares, which have a par value of CHF 0.91 ($1) each, carry one vote per share and carry a right to dividends.

Contributed surplus represents cash contributed by the shareholder in excess of the issued share capital.

(Expressed in thousands of United States Dollars)

22. Ceded reinsurance

The Company uses retrocessional agreements to reduce its exposure to risk of loss on reinsurance assumed. These agreements generally provide for recovery of a portion of losses and loss expenses from retrocessionaires. The Company remains liable to its cedants to the extent that the retrocessionaires do not meet their obligations under these agreements. Failure of reinsurers to honour their obligations could result in losses to the Company. The Company defines rated reinsurers as companies with a minimum S&P rating of A+ or A.M. Best rating of A and net assets of more than $500.0 million. The Company evaluates the financial condition of its rated reinsurers and monitors concentration of credit risk, on an ongoing basis, arising from similar geographic regions, activities, or economic characteristics of the reinsurers in order to minimise its exposure to significant losses from rated reinsurer insolvencies. Provisions are made for amounts considered potentially uncollectible.

The Company generally requires non-rated reinsurers to fully collateralise their reinsurance obligations. As further discussed in Note 4 under 'Credit Risk', the Company's maximum exposure to unrated reinsurers is fully collateralised.

In addition to purchasing retrocessional cover, the Company also uses derivative instruments to cover certain assumed reinsurance risks. Refer to Note 2 – Basis of preparation and Note 8 – Fair value measurements.

23. Acquisition expenses

	2017	2016
Acquisition expenses	$ 304,527	$ 353,206
Change in deferred acquisition expenses	43,765	(38,869)
	$ 348,292	$ 314,337

24. General and administrative expenses

General and administrative expenses consist of the following:

	2017	2016
Employee benefit expenses	$ 58,667	$ 58,595
Depreciation of property and equipment	2,836	2,707
Amortisation of intangible assets	5,379	4,978
Operating lease charges	3,416	3,462
Other expenses	39,822	38,874
Total	$ 110,120	$ 108,616

(Expressed in thousands of United States Dollars)

25. **Employee benefit expenses**

	2017	2016
Wages and salaries	$ 36,889	$ 35,149
Long-term incentive compensation plan	2,742	2,355
Retirement benefit obligation costs - defined benefit scheme	1,229	827
Retirement benefit obligation costs - defined contribution scheme	2,247	2,121
Bonus and other benefits	15,560	18,143
	$ 58,667	$ 58,595

26. **Commitments**

(a) The Company leases office space under operating leases which expire at various dates. The Company renews and enters into new leases in the ordinary course of business as required. Total rent expense with respect to these operating leases for the year ended 31 December 2017 was $3.4 million (2016 - $3.5 million).

Future minimum lease payments under the leases are expected to be as follows:

Year	
2018	$ 2,939
2019	2,957
2020	2,278
2021	1,474
2022	68
Later	–
Total	$ 9,716

(b) The above lease agreements also include a maintenance commitment. Maintenance expense for the current year amounts to $0.6 million (2016 - $0.6 million) which has been included in general and administrative expenses.

(c) Some lease agreements for office space provide an option to extend the lease beyond the expiration date.

(d) Effective 6 August 2010, the Company entered into a Revolving Letter of Credit Facility Agreement (“Barclays Facility”) with Barclays Bank PLC (“Barclays Bank”). The Barclays Facility provided commitments from Barclays Bank in an aggregate amount of $100.0 million and provided for the issuance and renewal of letters of credit which are used to support the Company’s reinsurance obligations.

The Barclays Facility was amended effective 12 September 2014. Under the terms of the amended agreement the $100.0 million commitment remained unchanged and the commitment termination date was extended to 12 September 2017. Under the terms of the amended agreement, letters of credit can now be issued in alternative currencies other than U.S. Dollars. However, another amendment was made effective 23 June 2016, which excludes the Australian Dollar currency from the alternative currencies.

26. **Commitments** (continued)

(d) (continued)

Under the Barclays Facility, the Company was required to pledge cash or eligible securities with collateral value (as determined as therein provided) that equals or exceeds 100% of the aggregate amount of its outstanding letters of credit.

At 31 December 2017, Barclays Bank had issued letters of credit of $0.7 million (2016 - $0.7 million) in favour of ceding companies under the Barclays Facility. The Company pledged as security $14.1 million (2016 - $16.7 million) of fixed interest securities and $3.1 million (2016 - $nil) of cash to collateralise the letters of credit. The Barclays Facility expired on 12 September 2017 and it was not renewed.

Effective 14 May 2012, the Company entered into a Revolving Letter of Credit Facility Agreement ("Mizuho Facility") with Mizuho Corporate Bank Ltd. ("Mizuho Bank"). The Mizuho Facility provided commitments from Mizuho Bank in an aggregate amount of $300.0 million and provided for the issuance and renewal of letters of credit which are used to support the Company's reinsurance obligations. The Mizuho Facility was amended effective 21 January 2015 (the "Amended Mizuho Facility Agreement"). Under the Amended Mizuho Facility Agreement, the Mizuho Facility was increased to $600.0 million and letters of credit can be issued in Australian Dollars. The termination date was amended effective 16 January 2016 and extended to 16 January 2017. A further amendment effective 16 January 2017 extended the commitment termination date to 16 January 2019. The Mizuho Facility contains representations, warranties and covenants customary for facilities of this type.

At 31 December 2017, Mizuho Bank has issued letters of credit of $513.0 million (2016 - $555.3 million) in favour of ceding companies.

Effective 27 October 2017, the Company entered into a Committed Revolving Standby Letter of Credit Agreement ("Mitsubishi Facility") with Bank of Tokyo-Mitsubishi UFJ – Düsseldorf Branch ("Mitsubishi Bank"). The Mitsubishi Facility provided commitments from Mitsubishi Bank in an aggregate amount of $300.0 million and provided for the issuance and renewal of letters of credit which are used to support the Company's reinsurance obligations.

At 31 December 2017, Mitsubishi Bank has issued letters of credit of $250.3 million in favour of ceding companies.

(Expressed in thousands of United States Dollars)

27. **Related party disclosures**

Transactions with affiliates

The following transactions were conducted with related parties during the year and are based on arm's length arrangements:

(a) The Company assumed several reinsurance agreements from related parties under common control. The reinsurance premiums assumed under these agreements totalled $38.1 million (2016 - $40.1 million) with associated acquisition expenses of $3.0 million (2016 - $3.1 million) and net loss and loss expenses incurred of $20.3 million (2016 - $7.9 million). As at 31 December 2017, the consolidated balance sheet includes $21.5 million (2016 - $17.8 million), $20.9 million (2016 - $18.0 million) and $2.2 million (2016 - $2.1 million) of premiums receivable, unearned premium and deferred acquisition expenses, respectively.

In addition, the Company assumed a catastrophe swap derivative contract from a related party under common control during the year. The derivative premiums assumed under the agreement totalled $6.4 million (2016 - $l.5 million).

(b) Effective 1 July 2015, Tokio Millennium Re AG – U.K. branch ("TMRUK") entered into a loss portfolio transfer agreement ("LPTA") with Tokio Marine Global Re Asia Ltd. ("TMG Re Asia") for a consideration of $43.8 million. Reserves (outstanding losses and loss expenses and unearned premiums) were transferred and recorded in TMRUK's balance sheet. The LPTA has been accounted for under insurance accounting.

As at 31 December 2017, the consolidated balance sheet includes $29.7 million, $21.7 million, $1.9 million and $1.2 million of cash, outstanding losses and loss expenses, deferred fee income and accounts payable, respectively, in relation to this LPTA. The amortisation of deferred fee income is based on the expected claims payout pattern and settlement period.

As at 31 December 2016, the consolidated balance sheet includes $32.9 million, $0.3 million, $27.8 million, $1.6 million and $1.5 million of cash, premiums receivable, outstanding losses and loss expenses, deferred fee income and accounts payable, respectively, in relation to this LPTA.

(c) Effective 1 July 2015, the Company established an investment management agreement with a related party under common control. The Company incurred investment management fees of $3.9 million for the year ended 31 December 2017 (2016 - $3.2 million). The consolidated balance sheet includes $1.0 million of accounts payable and accrued expenses as at 31 December 2017 (2016 - $0.8 million).

Key management personnel compensation

The aggregate remuneration of Directors and key management was as follows:

	2017	2016
Wages and salaries	$ 2,438	$ 2,612
Long term incentive compensation plan	441	925
Retirement benefit obligation costs	291	302
Bonus and other benefits	1,144	1,653
	$ 4,314	$ 5,492

28. Statutory requirements

TMR is regulated by the Swiss Financial Market Supervisory Authority ("FINMA"), the Bermuda Monetary Authority ("BMA"), the Australian Prudential Regulation Authority ("APRA"), the New York State Department of Financial Services ("NYDFS"), the Prudential Regulation Authority ("PRA") and the Financial Conduct Authority ("FCA").

The minimum required statutory capital and surplus is the amount of statutory capital and surplus necessary to satisfy regulatory requirements based on the Company's current operations.

(a) Switzerland

The Company (since redomestication) and the Swiss operation are regulated by FINMA pursuant to the Insurance Supervision Act. The Company's accounts are prepared in accordance with the Swiss Code of Obligations, the Insurance Supervision Act and the Insurance Supervision Ordinance.

TMR is obligated to maintain a minimum level of capital based on the Swiss Code of Obligations and Insurance Supervision Act. In addition, the Company is required to perform a minimum solvency margin calculation based on the Swiss Solvency Test ("SST") regulations as stipulated by the Insurance Supervision Act and the Insurance Supervision Ordinance. The SST is based on an economic view and required capital is derived from a combination of internal and standard models. The amount of dividends that TMR is permitted to distribute is restricted to freely distributable reserves which consist of retained earnings and the current year profit. The solvency and capital requirements must still be met following any distribution.

The Company calculated an SST ratio of 250% for SST 2017. The minimum ratio for the SST is set at 100%. TMR is expected to exceed the minimum ratios for the year ended 31 December 2017.

(b) Bermuda

Tokio Millennium Re AG – Bermuda branch ("TMRB") is regulated by the BMA and is registered under The Insurance Act 1978 (Bermuda), Amendments thereto and Related Regulations (the "Insurance Act") as a Class 3B insurer. The Insurance Act requires companies to prepare and file a statutory financial return on an annual basis. The Insurance Act also requires companies to maintain minimum levels of statutory capital and surplus. TMRB applied for and has been granted an exemption to these requirements for the years ended 31 December 2017 and 2016.

The Insurance Act and related Rules require the filing of a capital and solvency return. TMRB applied for and has been granted a modification to this requirement for the years ended 31 December 2017 and 2016.

TMRB is not required to hold localised assets.

28. **Statutory requirements** (continued)

(c) ***Australia***

Tokio Millennium Re AG – Australia branch ("TMRA") is regulated by APRA and is authorised to carry on insurance business under subsection 12(2) of the Insurance Act 1973. TMRA's regulatory reporting is prepared in accordance with the Australian Accounting Standards and APRA Prudential Standards. TMRA have complied with the APRA requirements in both 2017 and 2016.

APRA Prudential Standards require the maintenance of net assets in Australia in excess of a calculated Prescribed Capital Amount ("PCA"). The net assets in Australia as at 31 December 2017 were $99.0 million (2016 - $82.8 million) and resulted in a surplus of $60.7 million (2016 - $42.9 million) above the PCA of $38.3 million (2016 - $39.9 million) estimated under the new Prudential Standards.

TMRA has an Internal Capital Adequacy Assessment Process ("ICAAP") to ensure compliance with regulatory capital requirements. In accordance with the ICAAP, TMRA monitors its capital adequacy in order to ensure compliance with the relevant capital targets.

(d) ***United States***

Tokio Millennium Re AG – US branch ("TMRUS") is regulated by the NYDFS and is licensed to carry on insurance business under section 1113(a) of the New York Insurance Law. TMRUS is also licensed and/or accredited as a reinsurer in all 50 states. TMRUS is required to file a set of financial statements prepared in accordance with statutory accounting practices prescribed or permitted by the U.S. insurance regulators. Statutory net income and statutory surplus, as reported to the insurance regulatory authorities, differ in certain respect from the amounts prepared in accordance with IFRS and the main differences relate to the treatment of deferred acquisition expenses, deferred income, unrealised appreciation or decline in value of investments and non-admitted assets and deferred income taxes.

Minimum required statutory capital and surplus is based on the greater of the Risk Based Capital (RBC) level that would trigger regulatory action or minimum requirements per state insurance regulation. At both 31 December 2017 and 2016, TMRUS exceeded the minimum required statutory capital and surplus requirement and also exceeded the RBC minimum required level. TMRUS is required to maintain a minimum combined statutory surplus of $130.1 million (2016 - $109.7 million). As of 31 December 2017, the statutory surplus was $231.2 million (2016 - $194.7 million).

TMRUS as a U.S. Branch does not pay ordinary dividends and would need approval from the NYDFS for any return of capital to TMR. As of 31 December 2017, TMRUS did not return any capital to TMR. Any return of capital in subsequent periods would need to be approved by the NYDFS based on the financial condition of TMRUS.

28. **Statutory requirements** (continued)

(e) ***United Kingdom***

Tokio Millennium Re AG – UK branch ("TMRUK") is authorised by the PRA, and regulated by both the PRA and FCA. At 31 December 2017 and 2016, TMRUK was subject to the Solvency II regime. TMRUK applied for and has been granted a modification of the rules for the years ended 31 December 2017 and 2016.

TMRUK is not required to hold localised assets.

29. **Subsequent events**

The Company has completed its subsequent events evaluation for the period subsequent to the consolidated balance sheet date of 31 December 2017 through 27 February 2018, the date the consolidated financial statements were authorised for issue. There were no subsequent events that would warrant an adjustment to the consolidated financial statements.