
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 20-F/A
(Amendment No. 1)**

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 001-14536

PartnerRe Ltd.

(Exact name of registrant as specified in its charter)

Bermuda

(Jurisdiction of incorporation or organization)

90 Pitts Bay Road, Pembroke, Bermuda

(Address of principal executive offices)

Mario Bonaccorso

Executive Vice President and Chief Financial Officer

90 Pitts Bay Road, Pembroke, HM 08, Bermuda Telephone: +1 441-292-0888, Email: mario.bonaccorso@partnerre.com

(Name, Telephone, E-mail and/or Facsimile Number and Address of Company Contact Person)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
5.875% Series F Non-Cumulative Preferred Shares, \$1.00 par value	New York Stock Exchange
6.50% Series G Cumulative Preferred Shares, \$1.00 par value	New York Stock Exchange
7.25% Series H Cumulative Preferred Shares, \$1.00 par value	New York Stock Exchange
5.875% Series I Non-Cumulative Preferred Shares, \$1.00 par value	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:
100,000,000 common shares and 255,492 Class B common shares

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐

Accelerated filer ☐

Non-accelerated filer ☒

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☒

International Financial Reporting Standards as issued by the International Accounting Standards Board ☐

Other ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act.) Yes ☐ No ☒

EXPLANATORY NOTE

This Amendment No. 1 on Form 20-F/A to PartnerRe Ltd.'s Annual Report on Form 20-F for the year ended December 31, 2017 (Form 20-F), originally filed with the Securities and Exchange Commission on March 13, 2018, is being filed to revise the table that presents tabular disclosure of contractual obligations in Item 5.F of the Form 20-F. The revised table corrects formatting of certain data previously presented in that table related to preferred shares from \$thousands to \$millions.

In accordance with the rules of the Securities and Exchange Commission, this Amendment No. 1 sets forth the complete text of Item 5 as amended to correct that table.

Except as described above, no changes have been made to the Form 20-F, including the Company's consolidated financial statements. This Amendment No. 1 does not reflect subsequent events occurring after March 13, 2018, the original filing date of the Form 20-F, or modify or update in any way disclosures made in the Form 20-F.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussions should be read in conjunction with our consolidated financial statements for the years ended December 31, 2017, 2016 and 2015 in Item 18 of this report.

The financial results below are presented in U.S. dollars as the reporting currency. The financial information presented below is based on, or has been derived from the U.S. GAAP Consolidated Financial Statements presented in Item 18 of this report.

This discussion includes forward-looking statements, which, although based on assumptions that we consider reasonable, are subject to risks and uncertainties which could cause actual events or conditions to differ materially from those expressed or implied by the forward-looking statements. See G. Safe Harbor section below and Risk Factors in Item 3 of this report for a discussion of risks and uncertainties.

Executive Overview

The Company is a leading global reinsurer, with a broadly diversified and balanced portfolio of traditional reinsurance risks and capital markets risks. The Company has three segments: P&C, Specialty, Life and Health (see Results by Segment below).

The Company is in the business of assessing and assuming risk for an appropriate return. The Company creates value through its ability to understand, evaluate, diversify and distribute risk. The Company's strategy is founded on a capital-based risk appetite and the selected risks that management believes will allow the Company to meet its goals for appropriate profitability and risk management within that appetite. Management believes that this construct allows the Company to balance the cedant's need for confidence of claims payment with shareholder needs for an appropriate return on their capital.

The Company's long-term objective is to manage a portfolio of diversified risks that will create shareholder value. The Company's profitability in any particular period can be significantly affected by large catastrophic or other large losses and the impact of changes in interest rates on the fair value of investments (see Key Factors Affecting Year-over-Year Comparability below). Accordingly, the Company's performance during any particular period is not necessarily indicative of its performance over the longer-term reinsurance cycle.

Industry Environment, Strategic Initiatives and Capital Management

In spite of the challenging and limited growth environment experienced in the reinsurance industry for a number of years, the need for reinsurance is not diminishing. To the contrary, the reinsurance environment is becoming more and more complex, as the traditional forms of risk are increasingly exposed to globalization and urbanization and new forms of risks develop (such as cyber, geopolitical and supply chain). Factors such as a high protection gap in the Non-life and Life and Health reinsurance and emerging markets, as well as primary insurers needs to reduce volatility in earnings, further increase the need for reinsurance. While the alternative capital market has been growing, it cannot replace traditional reinsurers whose balance sheets can absorb risks more efficiently, especially in medium and long tail lines of business.

The Company believes that overall, reinsurance will broadly remain a cyclical market, albeit of less amplitude, primarily as a result of excess capital, and that the cycles will become more specific and local, with less global amplitude. The Company's strategy is to focus on reinsurance of business written by our cedants, and not compete with our clients through directly writing or assuming insurance risks.

Among the Company's strategic priorities are growing the non-life footprint with selected clients and brokers, using retrocession to enhance balance sheet and relevance, and growing the Life and Health book in targeted product segments and geographies. The Company is focused on striking the right balance between top down and bottom up risk selection by broadening scope and client penetration for well-understood, efficient risk classes and keeping a selective approach for less predictable risk patterns.

During 2017, the Company continued to execute its growth strategy in the Life and Health segment by completing the acquisition of Aurigen expanding its life reinsurance footprint in Canada and the U.S. In addition, as a result of the reorganization of the Company's support units and initiated other cost-saving initiatives following the closing of the acquisition by Exor N.V., the Company has achieved operational cost savings.

See Risk Factors in Item 3 of this report for a description of risks that may affect our business.

The following discussion provides an overview of business operations, trends and the outlook for 2018 with respect to each of the Company's Non-life, Life and Health and Investment operations.

Non-life reinsurance operations, trends and 2018 outlook

The Company generates its non-life reinsurance revenue from premiums. Premium rates and overall terms and conditions vary depending on market conditions. Pricing cycles are driven by supply of capital in the industry and demand for reinsurance and insurance and other risk transfer products. The reinsurance business is also influenced by several other factors, including variations in interest rates and financial markets, changes in legal, regulatory and judicial environments, loss trends, inflation and general economic conditions.

In an increasingly competitive market environment, and considering increased regulatory and rating agency expectations, the Company continues to focus on its risk management strategy, financial strength, underwriting selection process and global presence. The Company removes the volatility associated with those risks from the client, and then manages those risks and the risk-related volatility. Through its broad product and geographic diversification, the Company is able to achieve portfolio diversification of risks, and its execution capabilities and global presence enables the Company to respond quickly to market needs.

A key challenge facing the Company is successfully managing risk through all phases of the reinsurance cycle. The Company believes that its long-term strategy of closely monitoring and being selective in the business that it writes, and maintaining the diversification and balance of its portfolio, will optimize returns over the reinsurance cycle. Individual businesses and markets have their own unique characteristics and are at different stages of the reinsurance pricing cycle at any given point in time. Management believes the Company has an appropriate portfolio diversification by product, geography, type of business, length of tail and distribution channel. Further, management believes that this diversification, in addition to the financial strength of the Company and its strong global franchise, will help to mitigate cyclical declines in underwriting profitability.

The Non-life reinsurance market has historically been highly cyclical in nature as evidenced by hard and soft markets. For many years, with the exception of lines and markets impacted by specific catastrophic or large loss events, the Company has been experiencing a soft market with general decreases in pricing and profitability. Following recent large catastrophe losses during the third and fourth quarters of 2017, the catastrophe exposed business has experienced price increases. However, the availability of capital is reducing the amplitude of cycles compared to the past.

The Company writes a large majority of its business on a treaty basis and the majority of the non-life treaty business renews on January 1. The remainder of this business renews at other times during the year. In addition to treaty business, the Company writes direct and facultative business which renews throughout the year.

The outlooks for 2017 for each of the P&C and Specialty segments are summarized as follows:

2018 P&C Segment Outlook

During the January 1, 2018 renewals, the Company observed improving pricing, with a double-digit rate increase in North America property catastrophe rates along with improving profit margins in other P&C segments globally. The expected premium volume from the Company's January 1, 2018 renewals, at constant foreign exchange rates, increased compared to the prior year renewal. As a result of the persisting competition and excess capacity in the industry, it is not possible to forecast if improving pricing conditions will continue in the future.

2018 Specialty Segment Outlook

During the January 1, 2018 renewals, the Company generally observed improved pricing in most lines of business within the Specialty segment. The expected premium volume from the Company's January 1, 2018 renewal, at constant foreign exchange rates, increased compared to the prior year renewal. As a result of the persisting competition and excess capacity in the industry, it is not possible to forecast if improving pricing conditions will continue in the future.

Life and Health reinsurance operations, trends and 2018 outlook

The Company's Life and Health segment derives revenues primarily from premiums. Within the Life and Health segment, the Company writes mortality, longevity, and accident and health products. Management believes the Life and Health business provides the Company with diversification benefits and balance to its portfolio as they are generally not correlated to the Company's Non-life business.

The profitability of the life and accident and health business mainly depends on the volume and amount of death claims incurred, medical claims and expenses, and the ability to adequately price the risk the Company assumes. The majority of the life premium arises from long-term in-force contracts. The life reinsurance policies are often in force for the remaining lifetime of the underlying individuals insured, with premiums earned typically over a period of 10 to 30 years. The volume of the business may be reduced each year by lapses, voluntary surrenders, death of insureds and recaptures by ceding companies. While death claims are reasonably estimated over a period of many years, claims become less predictable over shorter periods and can fluctuate significantly from period to period. Similarly, while the volume of medical claims can be predicted to a certain extent, the amount of

claims and expenses depends on various factors, primarily healthcare inflation rates, driven by a shift towards the older population, reliance on expensive medical equipment and technology, and changes in demand for healthcare services over time.

Compared to the Non-life markets, the Life and Health reinsurance markets are more concentrated, with fewer market participants.

2018 Life and Health Outlook

The January 1, 2018 renewal for Life business is not relevant, as it only impacts the short-term mortality in-force premium, which is a relatively limited portion of the Life portfolio. Management expects moderate continued growth in the Company's Life portfolio in 2018 assuming constant foreign exchange rates, mainly due to growth in Canada following the Aurigen acquisition. Pricing conditions are not expected to materially differ from 2017. The renewal of the Company's Health business was relatively stable compared to the prior year as a result of non-renewal of certain business being offset by rate increases.

Investment operations, trends and 2018 outlook

The Company generates revenue from its high quality investment portfolio through net investment income, including interest on fixed maturities, interest in earnings of equity method investments, and realized and unrealized gains on investments.

For the Company's investment risks, which include public, private market and real estate investments, diversification of risk is critical to achieving the risk and return objectives of the Company.

The Company allocates its invested assets into two categories: liability funds and capital funds. The Company's investment policy distinguishes between liquid, high quality (investment grade) assets that support the Company's liabilities, and the more diversified, higher risk asset classes that are allowed within the Company's capital funds (see B. Liquidity and Capital Resources below for a discussion of liability and capital funds).

While there will be periods where such investments may earn less than the risk-free rate of return, or potentially produce negative results, the Company believes the rewards for assuming these risks in a disciplined and measured way will produce a positive excess return to the Company over time. Additionally, since a portion of our investment risks are not fully correlated with the Company's reinsurance risks, this increases the overall diversification of the Company's total risk portfolio.

The Company follows prudent investment guidelines through a strategy that seeks to maximize returns while managing investment risk in line with the Company's overall objectives of earnings stability and long-term book value growth. A key challenge for the Company is achieving the right balance in changing market conditions. The Company regularly reviews the allocation of investments to asset classes within its investment portfolio and its funds held—directly managed account and allocates investments to those asset classes the Company anticipates will outperform in the future, subject to limits and guidelines. Similarly, the Company reduces its exposure to asset classes where returns are deemed unattractive. The Company may also lengthen or shorten the duration of its fixed maturity portfolio in anticipation of changes in interest rates, or increase or decrease the amount of credit risk it assumes, depending on credit spreads and anticipated economic conditions.

In 2017, the Company's investment portfolio benefited by a market environment characterized by relatively low volatility, and positive performance of most asset classes, particularly at the higher end of the risk spectrum. In particular, the Company benefited from positive performances in public and private equity, as well as in real estate. Compression of credit spreads resulted in gains in the investment-grade corporate bond portfolio, more than offsetting the losses generated by the moderate increase in U.S. risk-free rates.

Assuming constant foreign exchange rates and absence of negative cash flows related to catastrophic or large loss events, management expects net investment income in 2018 to be comparable to 2017.

A. Operating Results

Following the acquisition of the Company's common shares by Exor N.V. (subsequently renamed EXOR Nederland N.V.) in March 2016, all of the Company's publicly traded common shares and all treasury shares were canceled. At December 31, 2017 and 2016, EXOR Nederland N.V. holds 100% of the 100 million Class A shares of \$0.00000001 par value each for a total share capital of \$1.00. Accordingly, per share data is not considered meaningful and is no longer presented by the Company.

Key Factors Affecting Year-over-Year Comparability

The key factors affecting the year-over-year comparability of the Company's results for the years ended December 31, 2017, 2016 and 2015 include large catastrophic and large loss events, volatility in capital markets and non-recurring other expenses. These factors may continue to affect our results of operations and financial condition in the future.

Large Catastrophic and Large Loss Events

As the Company's reinsurance operations are exposed to low-frequency and high-severity risk events, some of which are seasonal, results for certain periods may include unusually low loss experience, while results for other periods may include modest or significant loss experience driven by catastrophic losses. The Company considers losses greater than \$35 million, net of retrocession and reinstatement premiums, to be large catastrophic or large loss events.

The combined impact of the large catastrophic and large losses on the Company's operating results for the years ended December 31, 2017, 2016 and 2015 was as follows (in millions of U.S. dollars):

	2017			2016			2015		
	P&C segment	Specialty segment	Total Non-life ⁽¹⁾	P&C segment	Specialty segment	Total Non-life ⁽²⁾	P&C segment	Specialty segment	Total Non-life ⁽³⁾
Large catastrophic and large losses	\$ 508	\$ 61	\$ 569	\$ 110	\$ 46	\$ 156	\$ 37	\$ 22	\$ 59
Impact on combined ratio			15.4%			4.0%			1.5%

- (1) Large catastrophic and large losses for 2017 are net of retrocession and reinstatement premiums and were comprised of \$449 million related to the 2017 Hurricanes and \$120 million related to the California Wildfires.
- (2) Large catastrophic and large losses for 2016 are net of retrocession and reinstatement premiums and were comprised of \$69 million related to the Canadian Wildfires, \$45 million related to Hurricane Matthew and \$42 million related to the Ghana energy loss.
- (3) Large losses of \$59 million for 2015 are net of retrocession and represent losses related to the Tianjin Explosion.

The combined ratio is presented and defined in Note 20 to the Consolidated Financial Statements in Item 18 of this report.

Volatility in Capital Markets

Operating results for the years ended December 31, 2017, 2016 and 2015 were significantly impacted by the volatility in the capital markets with the Company reporting net realized and unrealized gains (losses) on investments in net income as follows (in millions of U.S. dollars):

Year ended December 31,	Total
2017	\$ 232
2016	\$ 26
2015	\$ (297)

In 2017, corporate bond spreads narrowed, equity markets increased and U.S. risk-free rates increased, resulting in a net realized and unrealized gain on investments recorded in net income.

In 2016, U.S. risk-free interest rates increased at the end of the year and credit spreads narrowed compared to December 31, 2015, resulting in a modest net realized and unrealized gain on investments recorded in net income.

In 2015, U.S. risk-free interest rates increased, credit spreads widened and worldwide equity markets deteriorated. The result of these movements was a net realized and unrealized loss on investments recorded in net income.

Other Expenses

The results for the years ended December 31, 2017, 2016 and 2015 were significantly impacted by certain expenses that are reasonably expected to not recur, included within Other expenses, as follows (in millions of U.S. dollars):

Year ended December 31,	Total
2017	\$ 33
2016	\$ 128
2015	\$ 411

See Review of Net Income below and Note 21 to the Consolidated Financial Statements in Item 18 for further details of the non-recurring expenses noted above.

Foreign Exchange Movements

The Company's reporting currency is the U.S. dollar. The Company's significant subsidiaries and branches have one of the following functional currencies: U.S. dollar, Euro or Canadian dollar. As a significant portion of the Company's operations is transacted in foreign currencies, fluctuations in foreign exchange rates may affect year-over-year comparisons. To the extent that fluctuations in foreign exchange rates affect comparisons, their impact has been quantified, when possible, and discussed throughout this annual report. See Note 2(m) to the Consolidated Financial Statements in Item 18 of this report for a discussion of translation of foreign currencies.

The foreign exchange fluctuations for the principal currencies in which the Company transacts business were as follows:

- the U.S. dollar ending exchange rate weakened against most currencies at December 31, 2017 compared to December 31, 2016;
- the U.S. dollar average exchange rate for the year weakened against most major currencies with the exception of GBP and the Japanese yen which strengthened, in 2017 compared to 2016; and
- the U.S. dollar average exchange rate for the year was stronger against most currencies, except the Japanese yen, in 2016 compared to 2015.

The above fluctuations impacted individual line items of the Company's Consolidated Statement of Operations, however, the overall net impact is not significant due to the matching of assets and liabilities by currency and due to the hedging of material foreign exchange exposures. See also section B. Liquidity and Capital Resources—Currency below for a discussion of the impact of foreign exchange movements on the Consolidated Balance Sheets.

Review of Net Income

The components of net income for the years ended December 31, 2017, 2016 and 2015 are presented in the Company's Consolidated Statements of Operations, and the breakdown by segment in Note 20 to the Consolidated Financial Statements in Item 18 of this report.

Management analyzes the Company's net income in three parts: underwriting result, investment result and other components of net income or loss not allocated to the Company's Non-life and Life and Health segments (included in Corporate and Other component). These components for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars):

	2017	2016	2015
Underwriting result	(88)	252	619
Investment result	720	414	159
Corporate and Other	\$ (368)	\$ (219)	\$ (671)
Net income	\$ 264	\$ 447	\$ 107

The components of net income, and changes for the years presented above, are described below.

Underwriting Result

Underwriting result consists of net premiums earned and other income less losses and loss expenses, acquisition costs and other expenses. Underwriting result is a primary measure of underlying profitability for the Company's core reinsurance operations, separate from the investment results, and is used to manage and evaluate the Company's Non-life segments (P&C and Specialty) and Life and Health segment. The Company believes that in order to enhance the understanding of its profitability, it is useful for our shareholders and other users of this report to evaluate the components of net income or loss separately and in the aggregate. Underwriting result should not be considered a substitute for net income or loss and does not reflect the overall profitability of the business, which is also impacted by investment results and other items.

The Non-life and Life and Health underwriting results for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars):

	2017	2016	2015
Non-life	\$ 24	\$ 249	\$ 584
Life and Health	(112)	3	35
Total underwriting result	(88)	252	619

The Non-life and Life and Health underwriting results for the years ended December 31, 2017, 2016 and 2015 were comprised as follows (in millions of U.S. dollars):

	2017			2016			2015		
	Total Non-life	Life and Health	Total	Total Non-life	Life and Health	Total	Total Non-life	Life and Health	Total
Technical result	\$ 129	\$ (65)	\$ 64	\$ 476	\$ 59	\$ 535	\$ 803	\$ 92	\$ 895
Other (loss) income ⁽¹⁾	(1)	14	13	2	10	12	—	6	6
Other expenses ⁽¹⁾	(104)	(61)	(165)	(229)	(66)	(295)	(219)	(63)	(282)
Underwriting result	\$ 24	\$ (112)	\$ (88)	\$ 249	\$ 3	\$ 252	\$ 584	\$ 35	\$ 619

(1) Other income or loss and other expenses above represent expenses allocated to the segments and include direct expenses and certain other expenses that vary with the volume of business. The indirect fixed costs are not allocated to segments and are presented in Corporate and Other below.

Non-life segments

The Non-life underwriting result and combined ratio for 2017 primarily reflected large catastrophic losses related to the 2017 Hurricanes and California Wildfires. The Non-life combined ratio benefited from net favorable prior year development of \$448 million (12.2 points on the combined ratio) with both the P&C and Specialty segments experiencing net favorable development.

The Non-life underwriting result and combined ratio for 2016 primarily reflected losses from the Canadian wildfires, hurricane Matthew and an energy loss. The Non-life combined ratio benefited from net favorable prior year development of \$677 million (17.6 points on the combined ratio) for 2016, with both the P&C and Specialty segments experiencing net favorable development.

The Non-life underwriting result and combined ratio in 2015 reflected increasingly competitive pricing and conditions, resulting in higher downward prior year premium adjustments and large losses related to the Tianjin Explosion. The net favorable prior year development of \$831 million (20.5 points on the combined ratio) was driven by both Non-life segments.

Life and Health segment

The underwriting loss in the Life and Health segment in 2017 was primarily due to losses in Health, partially offset by gains in Life.

The underwriting gain in 2016 and 2015 was due to positive contribution from both Life and Health business, driven by favorable prior year development.

See Results by Segment below for further details and Note 8(a) to the Consolidated Financial Statements in Item 18 of this report for a further discussion of the reserve development related to prior accident years.

Investment Result

Investment result consists of net investment income, net realized and unrealized investment gains or losses and interest in earnings or losses of equity method investments. Net investment income includes interest, dividends and amortization of premiums and discounts on fixed maturities and short-term investments, rental income on investments in real estate as well as investment income on funds held and funds held—directly managed, and is net of investment expenses, generated by the Company's investment activities, and withholding taxes. Net realized and unrealized investment gains or losses include sales of the Company's fixed income, equity and other invested assets and investments underlying the funds held—directly managed account and changes in net unrealized gains or losses. Interest in earnings or losses of equity method investments represents the Company's aggregate share of earnings or losses related to several private placement investments and limited partnership interests.

The components of the investment result for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars):

	2017	2016	2015
Net investment income	402	411	450
Net realized and unrealized investment gains (losses)	232	26	(297)
Interest in earnings (losses) of equity method investments	86	(23)	6
Total investment result	720	414	159

Net Investment Income

Net investment income by asset source for the years ended December 31, 2017, 2016 and 2015 was as follows (in millions of U.S. dollars):

	2017	2016	2015
Fixed maturities, short-term investments and cash and cash equivalents	\$ 388	\$ 398	\$ 426
Equities	—	4	31
Funds held and other	29	34	27
Funds held—directly managed	8	10	12
Investment expenses	(23)	(35)	(46)
Net investment income	\$ 402	\$ 411	\$ 450

2017 compared to 2016

Net investment income decreased in 2017 compared to 2016 due to the partial sale of the principal finance portfolio in the fourth quarter of 2016, which was partially offset by the inclusion of Aurigen's portfolio, increases in reinvestment rates in the U.S. and Canada, a higher allocation to investment grade corporate bonds and lower investment expenses during the year.

2016 compared to 2015

Net investment income decreased in 2016 compared to 2015 due to lower income from fixed income securities, the strengthening of the U.S. dollar against most major currencies (which resulted in a 2% decrease in net investment income) and a decrease from equities, primarily due to a change in investment portfolio composition. These decreases were partially offset by lower investment expenses.

Net Realized and Unrealized Investment Gains (Losses)

The Company's portfolio managers have a total return investment objective, achieved through a combination of optimizing current investment income and pursuing capital appreciation. To meet this objective, it is often desirable to buy and sell securities to take advantage of changing market conditions and to reposition the investment portfolios. Accordingly, recognition of realized gains and losses is considered by the Company to be a normal consequence of its ongoing investment management activities. In addition, the Company recognized changes in fair value for substantially all of its investments as changes in unrealized investment gains or losses in its Consolidated Statements of Operations. Realized and unrealized investment gains and losses are generally a function of multiple factors, with the most significant being prevailing interest rates, credit spreads and equity market conditions.

The components of net realized and unrealized investment gains (losses) for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars):

	2017	2016	2015
Net realized investment gains	22	103	172
Change in net unrealized investment gains or losses	210	(77)	(469)
Net realized and unrealized investment gains (losses)	\$ 232	\$ 26	\$ (297)

The net realized and unrealized investment gains of \$232 million in 2017 were primarily due to narrowing of corporate bond spreads and increases in equity markets, partially offset by increases in U.S. risk-free interest rates. Net realized investment gains were primarily driven by gains on fixed maturities and short-term investments and net unrealized gains were primarily driven by fixed maturities and short-term investments, equities and other invested assets.

The net realized and unrealized investment gains of \$26 million in 2016 were primarily due to narrowing of credit spreads, partially offset by increases in U.S. risk-free interest rates at the end of the year. Net realized investment gains in 2016 were primarily driven by gains on fixed maturities and short-term investments and net unrealized losses were primarily driven by fixed maturities and short-term investments.

The net realized and unrealized investment losses of \$297 million in 2015 were primarily due to increases in U.S. risk-free interest rates, the widening of credit spreads, decreases in worldwide equity markets and realized losses on treasury note futures. Net realized investment gains in 2015 were primarily driven by gains on equities and net unrealized losses were primarily driven by equities and fixed maturities and short-term investments.

See also Note 3 to the Consolidated Financial Statements in Item 18 for further details.

Interest in Earnings (Losses) of Equity Method Investments

The interest in earnings in equity method investments of \$86 million in 2017 was primarily due to a significant gain related to Almacantar, a privately held real estate investment and development group.

The losses of \$23 million in 2016 and gains of \$6 million in 2015 were due to the Company's aggregate share of earnings or losses related to several private placement investments and limited partnerships.

Corporate and Other

The following are components of net income (in millions of U.S. dollars) that the Company does not allocate to segments, in line with the way the Company manages its business, as described above.

	2017	2016	2015
Other income not allocated to the segments ⁽¹⁾	2	3	3
Other expenses not allocated to the segments	(183)	(177)	(509)
Interest expense	(42)	(49)	(49)
Loss on redemption of debt	(2)	(22)	—
Amortization of intangible assets	(25)	(26)	(27)
Net foreign exchange (losses) gains	(108)	78	(9)
Income tax expense	(10)	(26)	(80)
Corporate and Other	<u>\$ (368)</u>	<u>\$ (219)</u>	<u>\$ (671)</u>

(1) Other income includes income on insurance-linked securities. Other income for 2017 also includes a bargain purchase gain on the Aurigen acquisition of less than \$1 million. Other income for 2016 and 2015 also includes principal finance transactions within the investment portfolio.

Other Expenses

The Company allocates direct expenses and certain other expenses that vary with the volume of business to its operating segments. These expenses are included in underwriting result above and are presented in Results by Segment below. The indirect fixed costs are not allocated to segments and are presented in Corporate and Other.

The Company's total other expenses, included in the underwriting result and in Corporate and other, for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars, except ratios):

	2017	2016	2015
Other expenses, as reported	<u>\$ 348</u>	<u>\$ 472</u>	<u>\$ 791</u>
Other transaction and severance related costs	(33)	(128)	(411)
Other expenses, as adjusted for various transaction and severance related costs	<u>\$ 315</u>	<u>\$ 344</u>	<u>\$ 380</u>
Other expenses, as adjusted, as a % of total net premiums earned	6.3%	6.9%	7.2%

2017 compared to 2016

Other expenses, as reported, decreased by \$124 million, or 26%, in 2017 compared to 2016 primarily due to the efficiency actions undertaken following the closing of the acquisition by Exor N.V. and lower reorganization and transaction costs, partially offset by the inclusion of Aurigen expenses. In 2017, other expenses include \$33 million of transaction costs primarily related to the reorganization costs and the acquisition of Aurigen (see Note 21 to the Consolidated Financial Statements in Item 18 of this report for further details).

2016 compared to 2015

Other expenses, as reported, decreased by \$319 million, or 40%, in 2016 compared to 2015 primarily due to a termination fee and reimbursement of expenses of \$315 million to Axis Capital Holdings Limited (Axis) for terminating an amalgamation agreement previously entered into in January 2015. The Company also expensed \$71 million of other transaction and reorganization related costs in addition to \$25 million pursuant to an earn-out agreement with former shareholders of Presidio.

In addition, other transaction and severance related costs were \$57 million higher in 2016 compared to 2015, primarily as a result of the closing of the acquisition by Exor N.V. in March 2016 and costs related to the reorganization of the Company's operations (see Note 21 to the Consolidated Financial Statements in Item 18 of this report for further details).

Interest Expense

Interest expense in 2017 decreased compared to 2016 and 2015 due to the optimization of the Company's capital structure through the issuance of a 750 million Euro-denominated bond in September 2016 and the redemption of certain high coupon senior notes and preferred shares during the fourth quarter of 2016 (see below and Note 10 to Consolidated Financial Statements in Item 18 of this report for further details).

Loss on Redemption of Debt

The loss on redemption of debt in 2017 and 2016 relates to debt settled by Aurigen in 2017 and redemption of the \$250 million 2008 senior notes in 2016, representing a make whole provision related to future interest foregone as a result of the early

retirement (see Note 10 to the Consolidated Financial Statements in Item 18 for further details of the Company's redemption of senior notes).

Amortization of Intangible Assets

Amortization of intangible assets relates to intangible assets acquired upon acquisition of Paris Re in 2009, Presidio in 2012 and Aurigen in 2017. See Note 7 to the Consolidated Financial Statements in Item 18 for further details of the Company's intangible assets and amortization.

Net Foreign Exchange Losses (Gains)

The Company hedges a significant portion of its currency risk exposure as discussed in Quantitative and Qualitative Disclosures about Market Risk in Item 11 of this report.

The net foreign exchange losses in 2017 resulted primarily from the impact of the weakening of the U.S. dollar on certain unhedged non-U.S. denominated liabilities and the cost of hedging activities.

The net foreign exchange gains in 2016 resulted primarily from the impact of the strengthening of the U.S. dollar on certain unhedged non-U.S. denominated liabilities, partially offset by the cost of hedging activities.

The net foreign exchange losses in 2015 resulted primarily from the impact of the strengthening of the U.S. dollar on certain unhedged non-U.S. denominated investment portfolios, partially offset by gains related to the timing of hedging activities and the difference in forward points embedded in the Company's hedges.

Income Taxes

The effective income tax rate, which the Company calculates as income tax expense or benefit divided by net income or loss before taxes, may fluctuate significantly from period to period depending on the geographic distribution of pre-tax net income or loss in any given period between different jurisdictions. The geographic distribution of pre-tax net income or loss can vary significantly between periods due to, but not limited to, the following factors: the business mix of net premiums earned, the geographic location, quantum and nature of net losses and loss expenses and life policy benefits incurred, the quantum and geographic location of other expenses, net investment income, net realized and changes in unrealized investment gains and losses and the quantum of specific adjustments to determine the income tax basis in each of the Company's operating jurisdictions. In addition, a significant portion of the Company's gross and net premiums are written and earned in Bermuda, a non-taxable jurisdiction, including the majority of the Company's catastrophe business, which can result in significant volatility in the Company's pre-tax net income or loss from period to period.

The Company's income tax expense and effective income tax rate for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars):

	2017	2016	2015
Income tax expense	\$ 10	\$ 26	\$ 80
Effective income tax rate	3.8%	5.5%	42.6%

Income tax expense and the effective income tax rate during 2017, 2016 and 2015 were primarily driven by the geographic distribution of the Company's pre-tax net income between its various jurisdictions.

The recent enactment of the Tax Cuts and Jobs Act in the U.S. resulted in a charge of \$5 million in the fourth quarter of 2017.

In 2016, the income tax expense included a tax benefit of \$29 million recorded following the favorable outcome of certain tax litigation and favorable adjustments related to certain tax-exempt bonds.

In 2015, the Company's non-taxable jurisdictions recorded a pre-tax net loss with no associated tax benefit, driven primarily by the termination fee and reimbursement of expenses paid to Axis of \$315 million.

Results by Segment

The Company monitors the performance of its operations in three segments: P&C, Specialty and Life and Health. See the description of the Company's segments, including a discussion of how the Company measures its segment results, in Note 20 to the Consolidated Financial Statements included in Item 18 of this report.

P&C Segment

The components of the technical result, which is calculated as net premiums earned less losses and loss expenses and acquisition costs, and the corresponding ratios, which are calculated as a percentage of net premiums earned, for the P&C segment for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars, except ratios):

	2017	2016	2015
Gross premiums written	\$ 2,255	\$ 2,269	\$ 2,371
Net premiums written	\$ 1,996	\$ 2,061	\$ 2,236
Net premiums earned	\$ 1,963	\$ 2,086	\$ 2,240
Losses and loss expenses ⁽¹⁾	(1,620)	(1,248)	(1,129)
Acquisition costs	(495)	(556)	(570)
Technical result	\$ (152)	\$ 282	\$ 541
Other income	—	3	—
Other expenses	(71)	(141)	(137)
Underwriting result	\$ (223)	\$ 144	\$ 404
Loss ratio	82.6%	59.8%	50.4%
Acquisition ratio	25.2	26.7	25.4
Technical ratio	107.8%	86.5%	75.8%
Other expense ratio	3.6	6.7	6.2
Combined ratio	111.4%	93.2%	82.0%

(1) See Liquidity and Capital Resources—Non-life and Life and Health Reserves—Non-life reserves below and Note 8 to the Consolidated Financial Statements in Item 18 of this report for an analysis of losses and loss expenses.

Premiums

The P&C segment represented 39%, 42% and 43% of total net premiums written in 2017, 2016 and 2015, respectively. Business reported in this segment is, to a significant extent, originally denominated in foreign currencies and is reported in U.S. dollars. The U.S. dollar can fluctuate significantly against other currencies and this should be considered when making year to year comparisons.

2017 compared to 2016

The decrease in gross premiums written resulted primarily from cancellations and renewal changes in all lines, which were partially offset by new business written and a higher level of gross reinstatement premiums related to the large catastrophic losses. Net premiums written and earned decreased due to the same factors driving the decrease in gross premiums written, in addition to higher premiums ceded in the catastrophe portfolio.

2016 compared to 2015

The decrease in gross premiums written resulted primarily from foreign exchange movements and cancellations and non-renewals due to continued pressure on pricing and increased retentions by clients, which were partially offset by new business written. Net premiums written and earned decreased due to the same factors driving the decrease in gross premiums written, in addition to higher premiums ceded in the catastrophe portfolio.

Technical and underwriting result and related ratios

2017 compared to 2016

The decrease in the technical result (and the corresponding increase in the technical ratio) in 2017 compared to 2016 was primarily driven by a higher level of large catastrophic losses related to the 2017 Hurricanes and the California Wildfires compared to large catastrophic losses related to the Canadian Wildfires and Hurricane Matthew during 2016, and a lower level of favorable prior year loss development. The increase in the underwriting loss (and a corresponding increase in the combined ratio) was driven by the decrease in the technical result, partially offset by a decrease in other expenses allocated to the P&C segment as a result of the efficiency actions undertaken following the closing of the acquisition by Exor N.V.

2016 compared to 2015

The decrease in the technical result and the underwriting results (and the corresponding increase in the technical and combined ratios) in 2016 compared to 2015 was primarily attributable to a higher level of mid-sized loss activity, large catastrophic losses related to the Canadian Wildfires and Hurricane Matthew during 2016 compared to the Tianjin Explosion in 2015 and a lower level of favorable prior year loss development.

Specialty Segment

The components of the technical result, which is calculated as net premiums earned less losses and loss expenses and acquisition costs, and the corresponding ratios, which are calculated as a percentage of net premiums earned, for the Specialty segment for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars, except ratios):

	2017	2016	2015
Gross premiums written	\$ 1,934	\$ 1,920	\$ 1,906
Net premiums written	\$ 1,780	\$ 1,776	\$ 1,786
Net premiums earned	\$ 1,725	\$ 1,767	\$ 1,820
Losses and loss expenses ⁽¹⁾	(955)	(1,073)	(1,064)
Acquisition costs	(489)	(500)	(494)
Technical result	\$ 281	\$ 194	\$ 262
Other (loss) income	(1)	(1)	—
Other expenses	(33)	(88)	(82)
Underwriting result	\$ 247	\$ 105	\$ 180
Loss ratio	55.4%	60.8%	58.5%
Acquisition ratio	28.4	28.3	27.1
Technical ratio	83.8%	89.1%	85.6%
Other expense ratio	1.9	4.9	4.5
Combined ratio	85.7%	94.0%	90.1%

(1) See Liquidity and Capital Resources—Non-life and Life and Health Reserves—Non-life reserves in Item 5 and Note 8 to the Consolidated Financial Statements in Item 18 of this report for an analysis of losses and loss expenses.

Premiums

The Specialty segment represented 35%, 36% and 34% of total net premiums written in 2017, 2016 and 2015, respectively. Business reported in this segment is, to a significant extent, originally denominated in foreign currencies and is reported in U.S. dollars.

2017 compared to 2016

The increase in gross premiums written was driven primarily by new business written and renewal changes. These increases were largely offset by cancellations and the impact of foreign exchange. Net premiums written increased due to the same factors driving the increase in gross premiums written, partially offset by higher premiums ceded in 2017 under new and existing contracts.

2016 compared to 2015

The increase in gross premiums written was driven primarily by the impact of foreign exchange, new business written and a lower level of downward prior year premium adjustments in 2016 compared to 2015. These increases were partially offset by cancellations, reduced participations and changes in underlying cedant premium. Net premiums written and earned decreased largely due to higher premiums ceded in 2016.

Technical and underwriting result and related ratios

2017 compared to 2016

The increase in the technical result (and the corresponding decrease in the technical ratio) in 2017 compared to 2016 was primarily attributable to lower mid-sized and attritional losses in the current accident year, partially offset by large catastrophic losses related to the 2017 Hurricanes and the California Wildfires, and lower prior year loss development in 2017. The increase in the underwriting result (and a corresponding decrease in the combined ratio) was driven by the increase in the technical result, partially offset by a decrease in other expenses allocated to the Specialty segment as a result of the efficiency actions undertaken following the closing of the acquisition by Exor N.V.

2016 compared to 2015

The decrease in the technical and underwriting results (and the corresponding increase in the technical and combined ratios) in 2016 compared to 2015 was primarily attributable to a lower level of favorable prior year loss development, large catastrophic losses related to Hurricane Matthew and the Ghana energy loss in 2016 and a marginal increase in the acquisition cost ratio, mainly related to profit commission adjustments in agriculture reflecting favorable experience, partially offset by a lower level of mid-sized loss activity during 2016 compared to 2015.

Life and Health Segment

The Company provides reinsurance coverage to primary life insurers and pension funds to protect against individual and group mortality and disability risks. Mortality business is written primarily on a proportional basis through treaty agreements and is subdivided into death and disability covers (with various riders), term assurance and critical illness (TCI) and guaranteed minimum death benefit (GMDB). The Company also writes certain treaties on a non-proportional basis.

The Company provides reinsurance coverage to employer sponsored pension schemes and primary life insurers who issue annuity contracts offering long-term retirement benefits to consumers, who, in turn, seek protection against outliving their financial resources. Longevity business is written on a long-term, proportional basis. The Company's longevity portfolio is subdivided into standard and non-standard annuities. The non-standard annuities are annuities sold to consumers with aggravated health conditions and are usually medically underwritten on an individual basis. The main risk the Company is exposed to by writing longevity business is an increase in the future life span of the insured compared to the expected life span.

The Company provides reinsurance coverage to primary life insurers with respect to individual and group health risks, including specialty accident and health business such as Health Maintenance Organizations (HMO) reinsurance, medical reinsurance and provider and employer excess of loss programs.

The components of the allocated underwriting result for the Life and Health segment for the years ended December 31, 2017, 2016 and 2015 were as follows (in millions of U.S. dollars):

	2017	2016	2015
Gross premiums written	\$ 1,399	\$ 1,168	\$ 1,271
Net premiums written	\$ 1,344	\$ 1,117	\$ 1,208
Net premiums earned	\$ 1,337	\$ 1,117	\$ 1,209
Losses and loss expenses ⁽¹⁾	(1,266)	(927)	(964)
Acquisition costs	(136)	(131)	(153)
Technical result	\$ (65)	\$ 59	\$ 92
Other income ⁽²⁾	14	10	6
Other expenses	(61)	(66)	(63)
Underwriting result	\$ (112)	\$ 3	\$ 35
Net investment income	60	58	59
Allocated underwriting result	\$ (52)	\$ 61	\$ 94

(1) See Liquidity and Capital Resources—Non-life and Life and Health Reserves—Life and Health Reserves in Item 5 and Note 8 to the Consolidated Financial Statements in Item 18 of this report for an analysis of losses and loss expenses.

(2) Other income represents fee income on deposit accounted contracts and longevity swaps.

Premiums

The Life and Health segment represented 26%, 23% and 23% of total net premiums written in 2017, 2016 and 2015, respectively. Business reported in this segment is, to a significant extent, originally denominated in foreign currencies and is reported in U.S. dollars.

2017 compared to 2016

The increases in gross and net premiums written and net premiums earned were driven by the inclusion of Aurigen premiums and growth in the health line of business.

2016 compared to 2015

The decreases in gross and net premiums written and net premiums earned were driven by reductions in the longevity line due to the increased participation on a significant longevity swap in 2015, downward prior year premium adjustments and cancellations in the mortality business, in addition to marginal decreases in the health business due to continued competitive pressures. The impact of changes in foreign exchange rates also contributed to these decreases.

Allocated underwriting result

2017 compared to 2016

The allocated underwriting result decreased primarily due to losses in the health lines of business which were partially offset by gains from the Life business. The loss in the Health business resulted from an increase in frequency of large claims activity in underwriting years 2015 to 2017, primarily in Affordable Care Act related programs.

2016 compared to 2015

The allocated underwriting result decreased primarily due to a lower technical result in the health line of business.

B. Liquidity and Capital Resources

The following discussion of liquidity and capital resources principally focuses on the Company's Consolidated Balance Sheets and Consolidated Statements of Cash Flows. See Risk Factors in Item 3 for additional information concerning risks related to our business, strategy and operations.

Capital Adequacy

A key challenge for management is to maintain an appropriate level of capital. Management's first priority is to hold sufficient capital to meet all of the Company's obligations to cedants, meet regulatory requirements and support its position as one of the stronger reinsurers in the industry. Management closely monitors its capital needs and capital level throughout the reinsurance cycle and in times of volatility and turmoil in global capital markets actively takes steps to increase or decrease the Company's capital in order to achieve an appropriate balance of financial strength and shareholder returns. Capital management is achieved by either deploying capital to fund attractive business opportunities, or in times of excess capital and times when business opportunities are not so attractive, returning capital to its common shareholder by way of dividends.

Shareholders' Equity and Capital Resources Management

As part of its long-term strategy, the Company will seek to grow capital resources to support its operations throughout the reinsurance cycle, maintain strong ratings from the major rating agencies and maintain the ability to pay claims as they arise. The Company may also seek to restructure its capital through the repayment or purchase of debt obligations or preferred shares, or increase or restructure its capital through the issuance of debt or preferred shares, when opportunities arise.

The total debt liabilities and preferred and common shareholders' equity of the Company at December 31, 2017 and 2016 was as follows (in millions of U.S. dollars):

	December 31, 2017		December 31, 2016	
Senior notes	\$	1,385	17%	\$ 1,274 16%
Capital efficient notes		63	1	63 1
Preferred shareholders' equity, aggregate liquidation value		704	9	704 9
Common shareholder's equity		6,041	73	5,984 74
Total	\$	8,193	100%	\$ 8,025 100%

Shareholders' equity, comprised of preferred and common shareholders' equity in the table above, was \$6.7 billion at December 31, 2017, a 1% increase compared to December 31, 2016. The major factors contributing to this increase were as follows:

- comprehensive income of \$248 million, which was primarily related to net income in 2017; partially offset by
- common and preferred dividend payments of \$191 million in 2016.

See also Notes 10, 11, 12 and 13 to the Consolidated Financial Statements in Item 18 of this report for a further discussion related to the Company's indebtedness and shareholders' equity, and Operating Results above for a discussion of the Company's net income for the year ended December 31, 2017.

Liquidity and Cash Flows

Liquidity is a measure of the Company's ability to access sufficient cash flows to meet the short-term and long-term cash requirements of its business operations.

The Company aims to be a reliable and financially secure partner to its cedants. This means that the Company must maintain sufficient liquidity at all times so that it can support its cedants by settling claims quickly. The Company generates cash flows primarily from its underwriting and investment operations. Management believes that a profitable, well-run reinsurance organization will generate sufficient cash from premium receipts to pay claims, acquisition costs and other expenses in most years. To the extent that underwriting cash flows are not sufficient to cover operating cash outflows in any year, the Company may utilize cash flows generated from investments and may ultimately liquidate assets from its investment portfolio. Management ensures that its liquidity requirements are supported by maintaining a high quality, well balanced and liquid investment grade investment portfolio, and by matching within certain risk tolerance limits the duration and currency of its investments and the investments underlying the funds held—directly managed account with that of its net reinsurance liabilities. In 2018, the Company expects to continue to generate positive operating cash flows, absent catastrophic events, and absent negative developments on large catastrophe events incurred in 2017.

Management believes that its significant cash flows from operations and high quality liquid investment portfolio will provide sufficient liquidity for the foreseeable future to meet its present requirements. At December 31, 2017 and 2016, cash and cash equivalents were \$1.8 billion.

The Company's Consolidated Statements of Cash Flows are included in the Consolidated Financial Statements in Item 18 of this report. Explanations of the cash flows presented in the Consolidated Statements of Cash Flows are as follows:

Net cash provided by operating activities of \$243 million in 2017 decreased from \$445 million in 2016 primarily due to higher losses paid in 2017. The positive cash flow in 2017 was primarily driven by investment income and included \$148 million of paid losses related to the 2017 Hurricanes and California Wildfires, offset by other net cash operating outflows.

Net cash provided by investing activities was \$99 million in 2017 compared to net cash used in investing activities of \$34 million in 2016. The net cash provided by investing activities in 2017 reflects cash proceeds on sale of investments used to fund financing activities noted below, partially offset by cash used to fund the Aurigen acquisition and to invest in public equity funds. The net cash used in investing activities in 2016 was primarily driven by purchases of short-term investments and an equity method investment in Almacantar for \$539 million, partially offset by cash provided by sales and redemptions of securities.

Net cash used in financing activities was \$387 million in 2017 compared to \$153 million in 2016. Net cash used in financing activities in 2017 was primarily related to the redemption of debt by Aurigen and dividend payments on common and preferred shares. Net cash used in financing activities in 2016 was primarily related to the dividend payments on common and preferred shares, the redemptions of preferred shares and senior notes, and the payment of a one-time special cash dividend and settlement of certain share-based awards related to the acquisition by Exor N.V. These cash outflows were partially offset by cash inflows from the issuance of Euro-denominated senior notes.

The Company's ability to pay common and preferred shareholder dividends, interest payments on debt, and corporate expenses is dependent mainly on cash dividends from PartnerRe Bermuda, PartnerRe Europe, PartnerRe U.S. and PartnerRe Asia (collectively, the reinsurance subsidiaries), which are the Company's most significant subsidiaries. The payment of such dividends by the reinsurance subsidiaries to the Company is limited under Bermuda, Irish and Singapore laws and certain statutes of various U.S. states in which PartnerRe U.S. is licensed to transact business. The restrictions are generally based on net income and/or certain levels of policyholders' earned surplus as determined in accordance with the relevant statutory accounting practices.

The reinsurance subsidiaries' dividend restrictions at December 31, 2017 are described in Note 13 to the Consolidated Financial Statements in Item 18 of this report. In accordance with the terms of the merger agreement between the Company and Exor N.V., subsequent to the preferred share exchange in May 2016, the Company's payment of dividends on common shares

declared with respect to any fiscal quarter is restricted to an amount not exceeding 67% of net income per fiscal quarter until December 31, 2020.

The reinsurance subsidiaries of the Company depend upon cash inflows from the collection of premiums as well as investment income and proceeds from the sales and maturities of investments to meet their obligations. Cash outflows are in the form of claims payments, purchase of investments, other expenses, income tax payments, intercompany payments as well as dividend payments to the respective parent company. See Note 10 to the Consolidated Financial Statements in Item 18 of this report and F. Tabular Disclosures of Contractual Obligations below for further details.

Historically, the Company, including through its the operating subsidiaries, has generated sufficient cash flows to meet its obligations. Because of the inherent volatility of the business written by the Company, the seasonality in the timing of payments by cedants, the irregular timing of loss payments, the impact of a change in interest rates and credit spreads on the investment income as well as seasonality in coupon payment dates for fixed income securities, cash flows from operating activities may vary significantly between periods. The Company expects cash flows from operating activities to continue to be sufficient to cover claims payments, absent catastrophic or other large loss activity. In the event that paid losses accelerate beyond the ability to fund such payments from operating cash flows, the Company would use its cash and cash equivalents balances available, liquidate a portion of its high quality and liquid investment portfolio or access certain uncommitted credit facilities. As discussed in the Investments section below, the Company's investments and cash and cash equivalents (excluding the funds held—directly managed account) totaled \$16.5 billion at December 31, 2017, of which \$14.1 billion were cash and cash equivalents and government issued or investment grade fixed income securities.

Financial strength ratings and senior unsecured debt ratings represent the opinions of rating agencies on the Company's capacity to meet its obligations. In the event of a significant downgrade in ratings, the Company's ability to write business and to access the capital markets could be impacted. Some of the Company's reinsurance treaties contain special funding and termination clauses that would be triggered in the event the Company or one of its subsidiaries is downgraded by one of the major rating agencies to levels specified in the treaties, or the Company's capital is significantly reduced. If such an event were to occur, the Company would be required, in certain instances, to post collateral in the form of letters of credit and/or trust accounts against existing outstanding losses, if any, related to the treaty. In a limited number of instances, the subject treaties could be canceled retroactively or commuted by the cedant.

The Company's current financial strength ratings and outlooks are as follows:

Standard & Poor's	A+
Moody's ⁽¹⁾	A1
A.M. Best	A
Fitch	A+

(1) Applies to Partner Reinsurance Company Ltd. and Partner Reinsurance Company of the U.S.

Credit Agreements

In the normal course of its operations, the Company enters into agreements with financial institutions to obtain unsecured and secured letter of credit facilities. These facilities are used for the issuance of letters of credit, which must be fully secured with cash, government bonds and/or investment grade bonds. The agreements include default covenants, which could require the Company to fully secure the outstanding letters of credit to the extent that the facility is not already fully secured and disallow the issuance of any new letters of credit. See Note 18 to the Consolidated Financial Statements in Item 18 of this report for further details.

Investments

Investment philosophy

The Company employs a prudent investment philosophy. It maintains a high quality, well-balanced and liquid portfolio having a total return investment objective, achieved through a combination of optimizing current investment income and pursuing capital appreciation. The Company's total invested assets of \$16,982 and \$16,887 million at December 31, 2017 and 2016, respectively, are comprised of total investments, cash and cash equivalents, the investment portfolio underlying the funds held—directly managed account (which excludes other asset and liabilities underlying the funds held—directly managed account), and accrued interest. From a risk management perspective, the Company allocates its invested assets into two categories: liability funds and capital funds.

Liability funds (including funds held—directly managed) represent invested assets supporting the net reinsurance liabilities, and are invested primarily in investment-grade fixed maturity securities and cash and cash equivalents. The preservation of liquidity and protection of capital are the primary investment objectives for these assets. The portfolio managers are required to adhere to investment guidelines as to minimum ratings and issuer and sector concentration limitations. Liability funds are invested in a way that generally matches them to the corresponding liabilities (referred to as asset-liability matching) in terms of both duration and major currency composition to provide the Company with a natural hedge against changes in interest and foreign exchange rates. In addition, the Company utilizes certain derivatives to further protect against changes in interest and foreign exchange rates. Liability funds represented approximately 54% of the total invested assets at December 31, 2017 and 2016.

Capital funds represent shareholder capital of the Company and are invested in a diversified portfolio with the objective of maximizing investment return, subject to prudent risk constraints. Capital funds contain most of the asset classes typically viewed as offering a higher risk and higher return profile, subject to risk assumption and portfolio diversification guidelines which include issuer and sector concentration limitations. Capital funds may be invested in investment grade and below investment grade fixed maturity securities, publicly listed and private equities, bond and loan investments, real estate investments, structured credit and certain other specialty asset classes. Capital funds represented approximately 46% of the total invested assets at December 31, 2017 and 2016.

The Company's investment strategy allows for the use of derivative instruments, subject to strict limitations. The Company may utilize various derivative instruments, such as treasury note and equity futures contracts, credit default swaps, foreign currency option contracts, foreign exchange forward contracts, total return and interest rate swaps, insurance-linked securities and to-be-announced mortgage-backed securities (TBAs) for the purpose of managing and hedging currency risk, market exposure and portfolio duration, hedging certain investments, mitigating the risk associated with underwriting operations, or enhancing investment performance that would be allowed under the Company's investment policy if implemented in other ways. The use of financial leverage, whether achieved through derivatives or margin borrowing, requires approval from the Board.

At December 31, 2017, the Company had no financial leverage achieved through derivatives and no margin borrowing has been approved by the Board.

The components and carrying values of the Company's total investments, and the percentages of total investments, at December 31, 2017 and 2016 were as follows (in millions of U.S. dollars):

	December 31, 2017		December 31, 2016	
Fixed maturities	\$	12,655	86%	\$ 13,432 92%
Short-term investments		4	—	22 —
Equities		639	4	39 —
Investments in real estate		83	1	— —
Other invested assets		1,385	9	1,076 8
Total investments ⁽¹⁾	\$	14,766	100%	\$ 14,569 100%

(1) In addition to the total investments shown in the above table, the Company held cash and cash equivalents of \$1.8 billion at December 31, 2017 and 2016.

The majority of the Company's investments are carried at fair value with changes in fair value included in net realized and unrealized investment gains or losses in the Consolidated Statements of Operations. The fair value of the Company's fixed maturities and short-term investments at December 31, 2017 compared to 2016 primarily reflected higher U.S. risk-free interest rates, the strengthening of the U.S. dollar against most major currencies and the impact of portfolio allocation decisions, which were partially offset by narrowing credit spreads and the acquisition of Aurigen. In 2017, the Company increased its overall allocation to equities, while the increase in other invested assets reflects new investments in certain third-party managed high yield privately issued corporate loans and mark-to-market gains on third-party funds. In prior years, the Company's Board authorized the entry into direct real estate investments. In line with this authorization, the Company completed the acquisition of certain real estate investment properties during the fourth quarter of 2017. The investments in real estate are carried at cost.

The Company's investment portfolio generated a net total accounting return of 4.2% in 2017 compared to 2.4% in 2016. The total accounting return in 2017 reflected overall mark-to-market gains driven by equities and compression in corporate bonds spreads, notwithstanding increases in U.S. and European risk-free interest rates. The total accounting return in 2016 reflected overall mark-to-market gains, notwithstanding increases in U.S. and European risk-free interest rates.

The cost, fair value and credit ratings of the Company's fixed maturities and short-term investments carried at fair value at December 31, 2017 were as follows (in millions of U.S. dollars):

December 31, 2017	Cost ⁽¹⁾	Fair Value	Credit Rating ⁽²⁾				Below investment grade/Unrated
			AAA	AA	A	BBB	
Fixed maturities							
U.S. government	\$ 2,194	\$ 2,184	\$ —	\$ 2,184	\$ —	\$ —	\$ —
U.S. government sponsored enterprises	22	22	—	22	—	—	—
U.S. states, territories and municipalities	648	690	150	410	1	—	129
Non-U.S. sovereign government, supranational and government related	1,696	1,751	655	763	333	—	—
Corporate	6,034	6,129	43	365	2,269	3,310	142
Asset-backed securities	47	51	8	—	—	—	43
Residential mortgage-backed securities	1,835	1,823	43	1,780	—	—	—
Other mortgage-backed securities	5	5	1	4	—	—	—
Fixed maturities	12,481	12,655	900	5,528	2,603	3,310	314
Short-term investments	4	4	1	2	1	—	—
Total fixed maturities and short-term investments	12,485	12,659	\$ 901	\$ 5,530	\$ 2,604	\$ 3,310	\$ 314
% of Total fixed maturities and short-term investments			7%	44%	21%	26%	2%

(1) Cost is amortized cost for fixed maturities and short-term investments.

(2) All references to credit rating reflect Standard & Poor's (or estimated equivalent). Investment grade reflects a rating of BBB- or above.

At December 31, 2017, the Company did not hold any investments in securities issued by peripheral European Union (EU) sovereign governments (Portugal, Italy, Ireland, Greece and Spain).

At December 31, 2017, approximately 89% of the Company's fixed maturity and short-term investments, which includes fixed income type mutual funds, were publicly traded and approximately 98% were rated investment grade (BBB- or higher) by Standard & Poor's (or estimated equivalent). The average credit quality, the year-end yield to maturity and the expected average duration of the Company's fixed maturities and short-term investments (which includes fixed income type mutual funds) at December 31, 2017 and 2016 were as follows:

	December 31, 2017	December 31, 2016
Average credit quality	A	A
Year-end yield to maturity	2.8 %	2.7 %
Expected average duration	4.7 years	4.9 years

The average credit quality of fixed maturities and short-term investments at December 31, 2017 remained unchanged compared to December 31, 2016.

The average yield to maturity on fixed maturities and short-term investments increased modestly by 0.1% primarily due to increases in U.S. and European risk-free interest rates for most of the year.

The expected average duration of fixed maturities and short-term investments of 4.7 years at December 31, 2017 and 4.9 years at December 31, 2016 is in line with our expected duration of reinsurance liabilities of approximately 4.8 years. Duration is adjusted through the utilization of interest rate futures and other instruments.

Maturity Distribution

The distribution of fixed maturities and short-term investments at December 31, 2017 by contractual maturity date was as follows (in millions of U.S. dollars):

December 31, 2017	Cost	Fair Value
One year or less	\$ 283	\$ 280
More than one year through five years	4,252	4,259
More than five years through ten years	4,100	4,126
More than ten years	1,963	2,115
Subtotal	10,598	10,780
Mortgage/asset-backed securities	1,887	1,879
Total	\$ 12,485	\$ 12,659

Actual maturities may differ from contractual maturities because certain borrowers have the right to call or prepay certain obligations with or without call or prepayment penalties.

Corporate bonds included in Fixed maturities

Corporate bonds are comprised of obligations of U.S. and foreign corporations. The fair values of corporate bonds issued by U.S. and foreign corporations by economic sector at December 31, 2017 were as follows (in millions of U.S. dollars):

December 31, 2017	U.S.	Foreign	Fair Value	Percentage to Total Fair Value of Corporate Bonds
Sector				
Consumer noncyclical	\$ 1,121	\$ 218	\$ 1,339	22%
Finance	762	261	1,023	17
Industrials	566	100	666	11
Energy	428	128	556	9
Consumer cyclical	498	19	517	8
Communications	401	33	434	7
Insurance	402	26	428	7
Utilities	237	106	343	6
Real estate investment trusts	282	13	295	5
Technology	246	—	246	4
Basic materials	109	71	180	3
Catastrophe bonds	2	66	68	1
Longevity and mortality bonds	25	—	25	—
Government guaranteed corporate debt	—	9	9	—
Total	\$ 5,079	\$ 1,050	\$ 6,129	100%
% of Total	83%	17%	100%	

At December 31, 2017, other than the U.S., no country accounted for more than 10% of the Company's corporate bonds. At December 31, 2017, the ten largest issuers accounted for 18% of the corporate bonds held by the Company (7% of total investments and cash) and no single issuer accounted for more than 4% of total corporate bonds (2% of total investments and cash).

Within the finance sector, 100% of corporate bonds were rated investment grade and 54% were rated A- or better at December 31, 2017.

Asset-backed and Residential Mortgage-backed Securities included in Fixed maturities

Asset-backed securities and residential mortgage-backed securities by U.S. and non-U.S. originations and the related fair value and credit ratings at December 31, 2017 were as follows (in millions of U.S. dollars):

	Credit Rating ⁽¹⁾						
December 31, 2017	GNMA ⁽²⁾	GSEs ⁽³⁾	AAA	AA	Below investment grade / Unrated	Fair Value	
Asset-backed securities							
U.S.	\$ —	\$ —	\$ 1	\$ —	\$ —	\$ 1	
Non-U.S.	—	—	7	—	43	50	
Asset-backed securities	\$ —	\$ —	\$ 8	\$ —	\$ 43	\$ 51	
Residential mortgage-backed securities							
U.S.	\$ 516	\$ 1,264	\$ 7	\$ —	\$ —	\$ 1,787	
Non-U.S.	—	\$ —	36	—	—	36	
Residential mortgage-backed securities	\$ 516	\$ 1,264	\$ 43	\$ —	\$ —	\$ 1,823	
Commercial mortgage-backed securities							
U.S.	—	\$ —	1	4	—	5	
Commercial mortgage-backed securities	\$ —	\$ —	\$ 1	\$ 4	\$ —	\$ 5	
Total	\$ 516	\$ 1,264	\$ 52	\$ 4	\$ 43	\$ 1,879	
% of Total	27%	68%	3%	—%	2%	100%	

(1) All references to credit rating reflect Standard & Poor's (or estimated equivalent).

(2) GNMA represents the Government National Mortgage Association. The GNMA, or Ginnie Mae as it is commonly known, is a wholly-owned U.S. government corporation within the Department of Housing and Urban Development which guarantees mortgage loans of qualifying first-time home buyers and low-income borrowers.

(3) GSEs, or government sponsored enterprises, includes securities that carry the implicit backing of the U.S. government and securities issued by U.S. government agencies.

Residential mortgage-backed securities include U.S. residential mortgage-backed securities, which generally have a low risk of default. The issuers of these securities are U.S. government agencies or GSEs, which set standards on the mortgages before accepting them into the program. Although these U.S. government backed securities do not carry a formal rating, they are generally considered to have a credit quality equivalent to or greater than AA+ corporate issues. They are considered prime mortgages and the major risk is uncertainty of the timing of prepayments.

Short-term Investments

Short-term investments of \$4 million consisted of U.S. and non-U.S. government obligations and U.S. corporate bonds. At December 31, 2017, 79% of short-term investments were rated AA or higher by Standard & Poor's (or estimated equivalent).

Equities

During 2017, the Company increased its investment in equities, as noted above. The increase in equities at December 31, 2017 compared to December 31, 2016 was primarily due to a \$500 million investment in two Exor managed public equity funds (see Note 19 to the Consolidated Financial Statements in Item 18 for further details).

Investments in Real Estate

Investments in real estate comprise certain direct investments valued at cost (see also Notes 2(f) and 19 to the Consolidated Financial Statements in Item 18 of this report for further details).

Other Invested Assets

Other invested assets are comprised of investments that are accounted for using the equity method of accounting, cost method of accounting or fair value accounting. At December 31, 2017, other invested assets primarily include an investment in Almacantar of \$538 million accounted for under the equity method, a portfolio of third-party managed privately issued corporate loans carried at fair value of \$205 million, investments with a fair value of \$444 million (mainly third party private equity funds) and notes and loan receivables and notes securitizations of \$112 million (mainly part of our Principal Finance portfolio). In addition, other invested assets include certain derivatives. See Notes 5 and 6 to the Consolidated Financial Statements in Item 18 of this report for further details.

Funds Held—Directly Managed Account

Following Paris Re's acquisition of substantially all of the reinsurance operations of Colisée Re in 2006, Paris Re and its subsidiaries entered into various agreements, including Quota Share Retro Agreement and Run-Off Services and Management agreement (collectively, the 2006 Acquisition Agreements) to assume business written by Colisée Re from January 1, 2006 to September 30, 2007 as well as the in-force business at December 31, 2005. The agreements provided that the premium related to the transferred business was retained by Colisée Re and credited to a funds held account. The assets underlying the funds held—directly managed account are maintained by Colisée Re in a segregated investment portfolio and managed by the Company. Substantially all of the investments in the segregated investment portfolio underlying the funds held—directly managed account are fixed maturity investments carried at fair value. The fair value of the investment portfolio underlying the funds held—directly managed account decreased from \$354 million at December 31, 2016 to \$300 million at December 31, 2017 primarily related to a commutation of a portion of the Reserve Agreement with Colisée Re, the run-off of the underlying loss reserves associated with this account and the impact of the weakening of the U.S. dollar against most major currencies. See also note 8(a) for discussion of the related reserve agreement.

The average credit quality, the year-end yield to maturity and the expected average duration of the fixed maturities underlying the funds held—directly managed account at December 31, 2017 and 2016 were as follows:

	December 31, 2017	December 31, 2016
Average credit quality	AA	AA
Year-end yield to maturity	1.4 %	1.1 %
Expected average duration	3.2 years	3.5 years

The average credit quality remained unchanged while the year-end yield to maturity was higher by 0.3% for the fixed maturities underlying the funds held—directly managed account at December 31, 2017 compared to December 31, 2016 as a result of a general increase in risk-free rates and the liquidation of lower yielding portfolios.

The expected average duration of fixed maturities remained relatively unchanged from December 31, 2016 to December 31, 2017.

See Non-life and Life and Health Reserves below and Notes 5 and 8 to the Consolidated Financial Statements in Item 18 of this report for further details on the funds held—directly managed account and related guaranteed reserves.

The credit risk of Colisée Re in the event of its insolvency or its failure to honor the value of the funds held balances for any other reason is discussed in Quantitative and Qualitative Disclosures about Market Risk—Counterparty Credit Risk in Item 11 of this report.

Funds Held by Reinsured Companies (Cedants)

The Company writes certain business on a funds held basis. Under funds held contractual arrangements, the cedant retains the net funds that would have otherwise been remitted to the Company and credits the net fund balance with investment income. The Company does not legally own or directly control the investments underlying its funds held assets and only has recourse to the cedant for the receivable balances and no claim to the underlying securities that support the balances. Decisions as to purchases and sales of assets underlying the funds held balances are made by the cedant; in some circumstances, investment guidelines regarding the minimum credit quality of the underlying assets may be agreed upon between the cedant and the Company as part of the reinsurance agreement, or the Company may participate in an investment oversight committee regarding the investment of the net funds, but investment decisions are not otherwise influenced by the Company.

At December 31, 2017 and 2016, the Company recorded \$801 million and \$685 million, respectively, of funds held assets, excluding the funds held—directly managed account discussed above. The majority of the funds held balance relate to contracts that earned investment income based upon a predetermined interest rate, either fixed contractually at the inception of the contract or based upon a recognized market index (e.g., LIBOR). Under these contractual arrangements, there are no specific assets linked to the funds held assets, and the Company is only exposed to the credit risk of the cedant.

Non-life and Life and Health Reserves

See Notes 2(b) and 8 to the Consolidated Financial Statements in Item 18 of this report for further details for the Company's loss reserves, including disclosures required by the SEC Industry Guide 4: Disclosures concerning unpaid claims and claim adjustment expenses of property-casualty insurance underwriters.

Non-life Reserves

Loss reserves represent estimates of amounts an insurer or reinsurer ultimately expects to pay in the future on claims incurred at a given time, based on facts and circumstances known at the time that the loss reserves are established. It is possible that the total future payments may exceed, or be less than, such estimates. The estimates are not precise in that, among other things, they are based on predictions of future developments and estimates of future trends in claim severity, frequency and other variable factors such as inflation. During the loss settlement period, it often becomes necessary to refine and adjust the estimates of liability on a claim either upward or downward. Despite such adjustments, the ultimate future liability may exceed or be less than the revised estimates.

As part of the reserving process, insurers and reinsurers review historical data and anticipate the impact of various factors such as legislative enactments and judicial decisions that may affect potential losses from casualty claims, changes in social and political attitudes that may increase exposure to losses, mortality and morbidity trends and trends in general economic conditions. This process assumes that past experience, adjusted for the effects of current developments, is an appropriate basis for anticipating future events.

The Company's gross reserves by segment and the total ceded and net non-life reserves at December 31, 2017 and 2016 were as follows (in millions of U.S. dollars):

	December 31, 2017	December 31, 2016
P&C segment	\$ 6,942	\$ 6,187
Specialty segment	2,769	2,798
Gross non-life reserves	9,711	8,985
Ceded non-life reserves	(689)	(267)
Net non-life reserves	\$ 9,022	\$ 8,718

Net non-life reserves increased from December 31, 2016 to December 31, 2017 primarily due to the occurrence of major catastrophic events in 2017 and the impact of foreign exchange, partially offset by net favorable loss emergence on prior accident years and loss payments. The changes in these reserves and the reconciliation of the gross and net total non-life reserves for the years ended December 31, 2017, 2016 and 2015 are presented and discussed further in Note 8(a) to the Consolidated Financial Statements in Item 18 of this report.

The net favorable prior year loss development on prior accident years was \$448 million for the year ended December 31, 2017, primarily resulting from favorable loss emergence across most lines of business within the P&C and Specialty segments. See Note 8(a) to the Consolidated Financial Statements in Item 18 for further details related to the 2017 net favorable loss development by segment and for comparisons to 2016 and 2015.

See also Note 8(a) to the Consolidated Financial Statements in Item 18 of this report for details of the net incurred and paid losses and loss expenses development by accident year, the total of incurred but not reported liabilities plus expected development on reported claims, and the net liability as at December 31, 2017 for total Non-life and each of the P&C and Specialty segments.

The gross reserves reported by cedants (case reserves), those estimated by the Company (ACRs and IBNR) and the total gross, ceded and net loss reserves recorded at December 31, 2017 by reserving line for the Company's Non-life operations were as follows (in millions of U.S. dollars):

Reserving lines	Case reserves	ACRs	IBNR reserves	Total gross loss reserves recorded	Ceded loss reserves	Net non-life reserves recorded
P&C	\$ 3,025	\$ 156	\$ 3,761	\$ 6,942	\$ (495)	\$ 6,447
Specialty	1,152	20	1,596	2,769	(194)	2,575
Total Non-life reserves	\$ 4,177	\$ 176	\$ 5,357	\$ 9,711	\$ (689)	\$ 9,022

The net non-life loss reserves represent the Company's best estimate of future losses and loss expense amounts based on the information available at December 31, 2017. Loss reserves rely upon estimates involving actuarial and statistical projections at a given time that reflect the Company's expectations of the costs of the ultimate settlement and administration of claims. Estimates of ultimate liabilities are contingent on many future events and the eventual outcome of these events may be different from the assumptions underlying the reserve estimates. In the event that the business environment and social trends diverge from historical trends, the Company may have to adjust its loss reserves to amounts falling significantly outside its current estimate. These estimates are regularly reviewed and the ultimate liability may be in excess of, or less than, the amounts provided, for which any adjustments will be reflected in the period in which the need for an adjustment is determined.

The Company's best estimates are point estimates within a reasonable range of actuarial liability estimates. These ranges are developed using stochastic simulations and techniques and provide an indication as to the degree of variability of the loss reserves. The Company interprets the ranges produced by these techniques as confidence intervals around the point estimates for each Non-life sub-segment. However, due to the inherent volatility in the business written by the Company, there can be no assurance that the final settlement of the loss reserves will fall within these ranges.

The point estimates related to net loss reserves recorded by the Company and the range of actuarial estimates at December 31, 2017 for P&C and Specialty segments were as follows (in millions of U.S. dollars):

	Recorded Point Estimate	High	Low
P&C	\$ 6,447	\$ 6,803	\$ 5,305
Specialty	\$ 2,575	\$ 2,866	\$ 2,084

It is not appropriate to add together the ranges of each segment in an effort to determine a high and low range around the Company's total carried loss reserves.

Of the Company's \$9,022 million of net loss reserves related to the P&C and Specialty business at December 31, 2017, net loss reserves for accident years 2005 and prior of \$426 million are guaranteed by Colisée Re, pursuant to the Reserve Agreement. The Company is not subject to any loss reserve variability associated with the guaranteed reserves. See below for a discussion of the Reserve Agreement.

Included in the business that is considered to have a long reporting tail is the Company's exposure to asbestos and environmental claims. See Note 8 to the Consolidated Financial Statements in Item 18 of this report for further details.

Non-life Reserving Methodology

Because a significant amount of time can elapse between the assumption of risk, occurrence of a loss event, the reporting of the event to an insurance company (the primary company or the cedant), the subsequent reporting to the reinsurance company (the reinsurer) and the ultimate payment of the claim on the loss event by the reinsurer, the Company's non-life reserves (loss reserves) are based largely upon estimates.

The Company categorizes loss reserves into three types of reserves: reported outstanding loss reserves (case reserves), additional case reserves (ACRs) and amounts for losses incurred but not yet reported to the Company (IBNR). The Company updates its estimates for each of the aforementioned categories on a quarterly basis using information received from its cedants.

Case reserves represent unpaid losses reported by the Company's cedants and recorded by the Company.

ACRs are established for particular circumstances where, on the basis of individual loss reports, the Company estimates that the particular loss or collection of losses covered by a treaty may be greater than those advised by the cedant.

IBNR reserves represent a provision for claims that have been incurred but not yet reported to the Company, as well as future loss development on losses already reported, in excess of the case reserves and ACRs. Unlike case reserves and ACRs, IBNR reserves are often calculated at an aggregated level and cannot usually be directly identified as reserves for a particular loss or treaty.

The Company also estimates the future unallocated loss adjustment expenses (ULAE) associated with the loss reserves and these form part of the Company's loss adjustment expense reserves.

The amount of time that elapses before a claim is reported to the cedant and then subsequently reported to the reinsurer is commonly referred to in the industry as the reporting tail. Lines of business for which claims are reported quickly are commonly referred to as short-tail lines; and lines of business for which a longer period of time elapses before claims are reported to the reinsurer are commonly referred to as long-tail lines. In general, for reinsurance, the time lags are longer than for primary business due to the delay that occurs between the cedant becoming aware of a loss and reporting the information to its reinsurer(s). The delay varies by reinsurance market (country of cedant), type of treaty, whether losses are first paid by the cedant and the size of the loss. The delay could vary from a few weeks to a year or sometimes longer. For all lines, the Company's objective is to estimate ultimate losses and loss expenses. Total loss reserves are then calculated by subtracting losses paid. Similarly, IBNR reserves are calculated by subtraction of case reserves and ACRs from total loss reserves.

The Company analyzes its ultimate losses and loss expenses after consideration of the loss experience of various reserving cells. The Company assigns treaties to reserving cells and allocates losses from the treaty to the reserving cell. The reserving cells are selected in order to ensure that the underlying treaties have homogeneous loss development characteristics (e.g., reporting tail) but are large enough to make estimation of trends credible. The selection of reserving cells is reviewed annually and changes over time as the business of the Company evolves. For each reserving cell, the Company tabulates losses in reserving triangles that show the total reported or paid claims at each financial year end by underwriting year cohort. An underwriting year is the year during which the reinsurance treaty was entered into as opposed to the year in which the loss occurred (accident year), or the calendar year for which financial results are reported. For each reserving cell, the Company's estimates of loss reserves are reached after a review of the results of several commonly accepted actuarial projection methodologies. In selecting its best estimate, the Company considers the appropriateness of each methodology to the individual circumstances of the reserving cell and underwriting year for which the projection is made. The methodologies that the Company employs include, but may not be limited to, paid and reported Chain Ladder methods, Expected Loss Ratio method, paid and reported Bornhuetter-Ferguson (B-F) methods, and paid and reported Benktander methods. In addition, the Company uses other methodologies to estimate liabilities for specific types of claims. For example, reserves established for the catastrophe line are primarily a function of the presence or absence of catastrophic events during the year, and the complexity and uncertainty associated with estimating unpaid losses from these large disclosed events. Internal and vendor catastrophe models are typically used in the estimation of loss and loss expenses at the early stages of catastrophe losses before loss information is reported to the reinsurer. In addition, reserves are also established in consideration of mid-sized and attritional loss events that occur during a year. In the case of asbestos and environmental claims, the Company has established reserves for future losses and allocated loss expenses based on the results of periodic actuarial studies, which consider the underlying exposures of the Company's cedants.

The reserve methodologies employed by the Company are dependent on data that the Company collects. This data consists primarily of loss amounts and loss payments reported by the Company's cedants, and premiums written and earned reported by cedants or estimated by the Company. The actuarial methods used by the Company to project loss reserves that it will pay in the future do not generally include methodologies that are dependent on claim counts reported, claim counts settled or claim counts open as, due to the nature of the Company's business, this information is not routinely provided by cedants for every treaty.

For a description of the reserving methods commonly employed by the Company see Note 8 to the Consolidated Financial Statements in Item 18 of this report. Each of these methods have certain advantages and disadvantages which the Company takes into consideration when determining which methods to use and method weights.

The main strengths of the Chain Ladder (CL) Development method are that it is reactive to loss emergence (payments) and that it makes full use of historical experience on claim emergence (payments). For homogeneous low volatility lines, under stable economic conditions, the method can often produce good estimates of ultimate liabilities and reserves. However, the method has weaknesses when the underlying assumption of stable patterns is not true. This may be the consequence of changes in the mix of business, changes in claim inflation trends, changes in claim reporting practices or the presence of large claims, among other things. Furthermore, the method tends to produce volatile estimates of ultimate liabilities in situations where there is volatility in reported (paid) patterns. In particular, when the expected percentage reported (paid) is low, small deviations between actual and expected claims can lead to very volatile estimates of ultimate liabilities and reserves. Consequently, this method is often unsuitable for projections at early development stages of an

underwriting year. Finally, the method fails to incorporate any information regarding market conditions, pricing, etc., which could improve the estimate of liabilities and reserves. It therefore tends not to perform very well in situations where there are rapidly changing market conditions.

The Expected Loss Ratio method is insensitive to actual reported or paid losses therefore it is usually inappropriate at later stages of development, but can often be useful at the early stages of development when very few losses have been reported or paid, and the principal sources of information available to the Company consist of information obtained during pricing and qualitative information supplied by the cedant.

The Bornhuetter-Ferguson (B-F) methods (Reported or Paid) tend to provide less volatile indications at early stages of development and reflect changes in the external environment, however, this method can be slow to react to emerging loss development (payment). In particular, to the extent that the *a priori* loss ratios prove to be inaccurate (and are not revised), the B-F methods will produce loss estimates that take longer to converge with the final settlement value of loss liabilities.

Benktander (B-K) Methods (Reported or Paid), which can be viewed as a blend between the CL Development and the B-F methods, still exhibits the same advantages and disadvantages as the B-F method, but the mechanics of the calculation imply that it is more reactive to loss emergence (payment) than the B-F method.

The reserving methods used by the Company are dependent on a number of key parameter assumptions. The principal parameter assumptions underlying the methods used by the Company are:

- the loss development factors used to form an expectation of the evolution of reported and paid claims for several years following the inception of the underwriting year. These are often derived by examining the Company's data after due consideration of the underlying factors listed below. In some cases, where the Company lacks sufficient volume to have statistical credibility, external benchmarks are used to supplement the Company's data;
- the tail factors used to reflect development of paid and reported losses after several years have elapsed since the inception of the underwriting year;
- the *a priori* loss ratios used as inputs in the B-F methods; and
- the selected loss ratios used as inputs in the Expected Loss Ratio method.

As an example of the sensitivity of the Company's reserves to reserving parameter assumptions by reserving line, the effect on the Company's reserves of higher/lower *a priori* loss ratio selections, higher/lower loss development factors and higher/lower tail factors based on amounts recorded at December 31, 2017 was as follows (in millions of U.S. dollars):

Reserving lines selected assumptions	P&C	Specialty
A Priori Loss Ratio +5%	227	101
Loss Development Factors (up to 10 years) 6 months longer	475	280
Tail Loss Development Factors higher by 5% ⁽¹⁾	389	167
A Priori Loss Ratio -5%	(243)	(112)
Loss Development Factors (up to 10 years) 6 months faster	(227)	(116)
Tail Loss Development Factors lower by 5% ⁽¹⁾	(348)	(138)

(1) Tail factors are defined as aggregate development factors after 10 years from the inception of an underwriting year.

The Company believes that the illustrated sensitivities to the reserving parameter assumptions are indicative of the potential variability inherent in the estimation process of those parameters. Some reserving lines show little sensitivity to *a priori* loss ratio, loss development factor or tail factor as the Company may use reserving methods such as the Expected Loss Ratio method in several of its reserving cells within those lines. It is not appropriate to sum the total impact for a specific factor or the total impact for a specific reserving line as the lines of business are not perfectly correlated.

The validity of all parameter assumptions used in the reserving process is reaffirmed on a quarterly basis. Reaffirmation of the parameter assumptions means that the actuaries determine that the parameter assumptions continue to form a sound basis for projection of future liabilities. Parameter assumptions used in projecting future liabilities are themselves estimates based on historical information. As new information becomes available (e.g., additional losses reported), the Company's actuaries determine whether a revised estimate of the parameter assumptions that reflects all available information is consistent with the previous parameter assumptions employed. In general, to the extent that the

revised estimate of the parameter assumptions are within a close range of the original assumptions, the Company determines that the parameter assumptions employed continue to form an appropriate basis for projections and continue to use the original assumptions in its models. In this case, any differences could be attributed to the imprecise nature of the parameter estimation process. However, to the extent that the deviations between the two sets of estimates are not within a close range of the original assumptions, the Company reacts by adopting the revised assumptions as a basis for its reserve models. Notwithstanding the above, even where the Company has experienced no material deviations from its original assumptions during any quarter, the Company will generally revise the reserving parameter assumptions at least once a year to reflect all accumulated available information.

In addition to examining the data, the selection of the parameter assumptions is dependent on several underlying factors. The Company's actuaries review these underlying factors and determine the extent to which these are likely to be stable over the time frame during which losses are projected, and the extent to which these factors are consistent with the Company's data. If these factors are determined to be stable and consistent with the data, the estimation of the reserving parameter assumptions are mainly carried out using actuarial and statistical techniques applied to the Company's data. To the extent that the actuaries determine that they cannot continue to rely on the stability of these factors, the statistical estimates of parameter assumptions are modified to reflect the direction of the change. The main underlying factors upon which the estimates of reserving parameters are predicated are:

- the cedant's business practices will proceed as in the past with no material changes either in submission of accounts or cash flows;
- any internal delays in processing accounts received by the cedant are not materially different from that experienced historically, and hence the implicit reserving allowance made in loss reserves through the methods continues to be appropriate;
- case reserve reporting practices, particularly the methodologies used to establish and report case reserves, are unchanged from historical practices;
- the Company's internal claim practices, particularly the level and extent of use of ACRs, are unchanged;
- historical levels of claim inflation can be projected into the future and will have no material effect on either the acceleration or deceleration of claim reporting and payment patterns;
- the selection of reserving cells results in homogeneous and credible future expectations for all business in the cell and any changes in underlying treaty terms are either reflected in cell selection or explicitly allowed in the selection of trends;
- in cases where benchmarks are used, they are derived from the experience of similar business; and
- the Company can form a credible initial expectation of the ultimate loss ratio of recent underwriting years through a review of pricing information, supplemented by qualitative information on market events.

The Company's best estimate of total loss reserves is typically in excess of the midpoint of the actuarial ultimate liability estimate. The Company believes that there is potentially significant risk in estimating loss reserves for long-tail lines of business and for immature underwriting years that may not be adequately captured through traditional actuarial projection methodologies as these methodologies usually rely heavily on projections of prior year trends into the future. In selecting its best estimate of future liabilities, the Company considers both the results of actuarial point estimates of loss reserves as well as the potential variability of these estimates as captured by a reasonable range of actuarial liability estimates. The selected best estimates of reserves are always within the reasonable range of estimates indicated by the Company's actuaries. In determining the appropriate best estimate, the Company reviews (i) the position of overall reserves within the actuarial reserve range, (ii) the result of bottom up analysis by underwriting year reflecting the impact of parameter uncertainty in actuarial calculations, and (iii) specific qualitative information that may have an effect on future claims but which may not have been adequately reflected in actuarial estimates, such as potential for outstanding litigation, claims practices of cedants, etc.

During 2017, 2016 and 2015, the Company reviewed its estimate for prior year losses for the P&C and Specialty segments and, in light of developing data, adjusted its ultimate loss ratios for prior accident years. The net prior year favorable loss development for each segment for the years ended December 31, 2017, 2016 and 2015 is presented in Note 8 to the Consolidated Financial Statements in Item 18 of this report.

Actual losses paid and reported compared with the Company's expectations, and the changes of the Company's reserving parameter assumptions in response to the emerging development during the year ended December 31, 2017 were as follows:

- *P&C and Specialty*: Aggregate losses reported in 2017 for both P&C and Specialty segments were better than Company's expectations as losses for most underwriting years continue to emerge below expectations. The better than expected loss emergence within the P&C segment was mainly driven by the casualty business. The better than expected loss emergence within the Specialty segment was predominantly driven by credit & surety, energy onshore and agriculture exposures. The Company reflected this experience by reducing the selected loss ratios for these lines of business.

Reserve Agreement and Funds Held—Directly Managed Account

The non-life reserves at December 31, 2017 and 2016 include reserves guaranteed by Colisée Re (formerly known as AXA RE, a subsidiary of AXA SA (AXA)), acquired in the Paris Re acquisition.

Following Paris Re's acquisition of substantially all of the reinsurance operations of Colisée Re in 2006, Paris Re and its subsidiaries entered into the 2006 Acquisition Agreements to assume business written by Colisée Re from January 1, 2006 to September 30, 2007 as well as the in-force business at December 31, 2005.

Pursuant to the Reserve Agreement, the benefits and risks of Colisée Re's reinsurance agreements were ceded to Paris Re France, which is now PartnerRe Europe, but AXA and Colisée Re remain both the legal counterparties for all such reinsurance contracts and the legal holders of the assets relating to such reserves. The Reserve Agreement provides that AXA and Colisée Re shall guarantee reserves in respect of Paris Re France and subsidiaries. The agreements also provided that the premium related to the transferred business was retained by Colisée Re and credited to a funds held account. Paris Re France would receive any surplus, and be responsible for any deficits remaining with respect to the funds held—directly managed account, after all liabilities have been discharged and payments pursuant to the Reserve Agreement have been settled. In addition, realized and unrealized investment gains and losses and net investment income related to the investment portfolio underlying the funds held—directly managed account inure to the benefit of Paris Re France. The assets underlying the funds held—directly managed account are maintained by Colisée Re in a segregated investment portfolio and managed by the Company and are discussed above.

On October 1, 2010, PartnerRe Europe and Paris Re France effected a cross border merger whereby all the assets and liabilities of Paris Re France were transferred to PartnerRe Europe, including the agreements between Paris Re France and Colisée Re.

At December 31, 2017 and 2016, the Company's net liability for non-life reserves includes \$426 million and \$496 million, respectively, of guaranteed reserves and the decrease during the year was primarily due to commutation of a portion of the Reserve Agreement with Colisée Re, the run--off of the underlying loss reserves associated with these reserves and the impact of the weakening of the U.S. dollar against most major currencies.

See Notes 5 and 8(a) to the Consolidated Financial Statements in Item 18 of this report for further details of the funds held—directly managed account and related guaranteed reserves.

Life and Health Reserves

Life and Health reserves relate to the Company's Life and Health segment, which predominantly includes:

- mortality business, covering death and disability risks (with various riders) primarily written in Continental Europe, TCI primarily written in the U.K. and Ireland, and GMDB business primarily written in Continental Europe. Following the acquisition of Aurigen, the Company also writes mortality business originating in Canada;
- reinsurance of longevity, subdivided into standard and non-standard annuities primarily written in the U.K.; and
- specialty accident and health business, including Health Maintenance Organizations (HMO) reinsurance, medical reinsurance and provider and employer excess of loss programs primarily written in the U.S.

The Company categorizes life reserves into three types of reserves: case reserves, IBNR and reserves for future policy benefits. Case reserves represent unpaid losses reported by the Company's cedants and recorded by the Company. IBNR reserves represent a provision for claims that have been incurred but not yet reported to the Company, as well as future loss development on losses already reported, in excess of the case reserves. Reserves for future policy benefits relate to future events occurring on policies in force over an extended period of time. Reserves for future policy benefits represent an estimate of the amount which, together with estimated future premiums and investment income, will be sufficient to pay claims and future benefits, expenses and costs on in-force policies, as such claims and expenses are incurred.

Reserves for future policy benefits are calculated as the present value of future expected claims, benefits and costs to be paid, reduced by the present value of future expected premiums. Such liabilities are established based on methods and underlying assumptions in accordance with U.S. GAAP and applicable actuarial standards. Principal assumptions used in the establishment of reserves for future policy benefits have been determined based upon information reported by ceding companies, supplemented by the Company's actuarial estimates of mortality, critical illness, persistency and future investment income, with appropriate provision to reflect uncertainty. Case reserves, IBNR reserves and reserves for future policy benefits are generally calculated at the treaty level. The Company updates its estimates for each of the aforementioned categories on a periodic basis using information received from its cedants.

The Company's gross and net reserves for the Life and Health segment at December 31, 2017 and 2016 were as follows (in millions of U.S. dollars):

	December 31, 2017	December 31, 2016
Case reserves	\$ 342	281
IBNR reserves	1,042	798
Reserves for future policy benefits	1,107	905
Total gross Life and Health reserves	2,491	1,984
Ceded reserves	(41)	(31)
Net Life and Health reserves	2,450	1,953

The increase in the Life and Health reserves in 2017 was primarily due to the Aurigen acquisition, increase in expected claims for health business, an increase in policy benefit reserves related to new mortality and longevity business written and the impact of foreign exchange as value of the U.S. dollar strengthened against most currencies from December 31, 2016 to December 31, 2017. The net incurred losses for the Company's life reserves will generally exceed net paid losses in any one given year due to the long-term nature of the liabilities and the growth in the book of business.

Life and Health Reserving Methodology

The Company's reserving methodologies are as follows:

- *Mortality:* The reserves for the short-term mortality business consist of case reserves and IBNR, calculated at the treaty level based upon cedant information. The Company's reserving methodology includes a review of actual experience against expected experience and the use of the ELR method described above.

The reserves for the long-term traditional mortality and term critical illness (TCI) reinsurance are established based upon management's best estimate of claims and policy benefits and includes a provision for adverse deviation. Management's best estimate relies upon actuarial indications of future claims and policy benefits. The provision for adverse deviation contemplates reasonable deviations from the best estimate assumptions for the key risk elements relevant to the product being evaluated, including mortality, disability, critical illness, expenses, and discount rates. The Company's actuaries annually verify the current reserving assumptions in consideration of evolving experience and the actuarial indications for assumptions relating to future policy benefits, including mortality, disability, critical illness, persistency and future investment income. The reserves for the GMDB reinsurance business are established similar to provisions for universal life contracts. Key actuarial assumptions for this business are mortality, lapses, interest rates, expected returns on cash and bonds and stock market performance. For the latter parameter, a stochastic option pricing approach is used and the benefits used in calculating the liabilities are based on the average benefits payable over a range of scenarios. The assumptions of investment performance and volatility are consistent with expected future experience of the respective underlying funds available for policyholder investment options. Recorded reserves for GMDB reflect management's best estimate based upon actuarial indications.

- *Longevity:* Reserves for the annuity portfolio of reinsurance contracts within the longevity book are established. Some of these contracts subject the Company to risks arising from policyholder mortality over a period that extends beyond the periods in which premiums are collected. The Reserves for future policy benefits follow the reserving methodology discussed above for long-term traditional mortality.

For standard annuities, the main risk is a higher than expected increase in future life span in the medium to long term. Non-standard annuities are annuities sold to people with aggravated health conditions and are usually

medically underwritten on an individual basis and the main risk is the inadequate assessment of the future life span of the insured.

- *Accident and Health:* The unpaid loss and loss expense reserves for accident and health business are initially calculated using the ELR method. Subsequently, the Company's reserving methodology utilizes actual reported loss experience and the B-F method to calculate IBNR.

As an example of the sensitivity of the Company's reserves for life and health contracts to reserving parameter assumptions by reserving line, the effect of different assumption selections based on the gross reserves recorded at December 31, 2017 was as follows (in millions of U.S. dollars):

Reserving lines	Factors	Change	Impact on total net Life and Health reserves	
Longevity				
Standard and non-standard annuities	Mortality improvements per annum	1%	\$	401
Mortality				
Long-term and TCI	Mortality	10%	\$	470
GMDB	Stock market performance	-10%	\$	2

It is not appropriate to sum the total impact for a specific reserving line or the total impact for a specific factor because the reinsurance portfolios are not perfectly correlated.

Refer to Note 8 to the Consolidated Financial Statements in Item 18 of this report for disclosures on life and health reserves.

Reinsurance Recoverable on Paid and Unpaid Losses

The Company has exposure to credit risk related to reinsurance recoverable on paid and unpaid losses. See Note 9 to the Consolidated Financial Statements in Item 18 and Quantitative and Qualitative Disclosures about Market Risk—Counterparty Credit Risk in Item 11 of this report for a discussion of the Company's risk related to reinsurance recoverable on paid and unpaid losses and the Company's process to evaluate the financial condition of its reinsurers.

At December 31, 2017 and 2016, the Company recorded \$829 million and \$332 million, respectively, of reinsurance recoverable on paid and unpaid losses in its Consolidated Balance Sheets, of which \$730 million and \$298 million, respectively, represents reinsurance recoverable on total non-life and life and health reserves. The increase in the reinsurance recoverable during 2017 was primarily due to the large catastrophic losses incurred.

At December 31, 2017, the distribution of the Company's reinsurance recoverable on total non-life and life and health reserves categorized by the reinsurer's Standard & Poor's rating was as follows:

Rating Category	% of total reinsurance recoverable on paid and unpaid losses
AA- or better	7%
A- to A+	30
Less than A-	—
Unrated	63
Total	100%

At December 31, 2017, 37% of the Company's reinsurance recoverable on total non-life and life and health reserves were due from reinsurers with A- or better rating from Standard & Poor's, compared to 59% at December 31, 2016. The remaining amounts included in Unrated above are all collateralized.

Currency

The Company's reporting currency is the U.S. dollar. The Company has exposure to foreign currency risk due to both its ownership of its Irish, French and Canadian subsidiaries and branches, whose functional currencies are the Euro and the Canadian dollar, and to underwriting reinsurance exposures, collecting premiums and paying claims and other expenses in currencies other than the U.S. dollar and holding certain net assets in such currencies.

At December 31, 2017, the value of the U.S. dollar strengthened against most major currencies compared to December 31, 2016, which resulted in a decrease in the U.S. dollar value of the assets and liabilities denominated in non-U.S. dollar currencies. See Operating Results above for a discussion of the impact of foreign exchange and net foreign exchange gains and losses during the years ended December 31, 2017, 2016 and 2015.

The currency translation adjustment account is a component of accumulated other comprehensive income or loss in shareholders' equity. This account decreased by \$15 million during the year ended December 31, 2017 compared to an increase of \$12 million and a decrease of \$46 million during the years ended December 31, 2016 and 2015, respectively, due to the translation of the financial statements of the Company's subsidiaries and branches, whose functional currencies are the Canadian dollar and the Euro, into U.S. dollars.

The reconciliation of the currency translation adjustment for the years ended December 31, 2017, 2016 and 2015 was as follows (in millions of U.S. dollars):

	2017	2016	2015
Currency translation adjustment at beginning of year	\$ (42)	\$ (54)	\$ (8)
Change in foreign currency translation adjustment included in accumulated other comprehensive loss, inclusive of the impact of designated net investment hedge	(15)	12	(46)
Currency translation adjustment at end of year	\$ (57)	\$ (42)	\$ (54)

The Company's gross and net exposure in its Consolidated Balance Sheet at December 31, 2017 to foreign currency as well as the associated foreign currency derivatives the Company has entered into to manage this exposure is presented in Quantitative and Qualitative Disclosures about Market Risk in Item 11 of this report.

See Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Risk in Item 11 for a discussion of the Company's risk related to changes in foreign currency movements, and Note 2(m) to the Consolidated Financial Statements in Item 18 of this report for a discussion of currencies to which the Company is exposed.

Effects of Inflation

The effects of inflation are considered implicitly in pricing and estimating non-life reserves. The actual effects of inflation on the results of operations of the Company cannot be accurately known until claims are ultimately settled.

Critical Accounting Policies and Estimates

The Company's Consolidated Financial Statements have been prepared in accordance with U.S. GAAP. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The following are the Company's accounting estimates that management believes are the most critical to its operations and require the most difficult, subjective and complex judgment. If actual events differ significantly from the underlying assumptions and estimates used by management, there could be material adjustments to prior estimates that could potentially adversely affect the Company's results of operations, financial condition and liquidity. These critical accounting policies and estimates should be read in conjunction with Note 2 to the Consolidated Financial Statements in Item 18 of this report.

Non-life and Life and Health Reserves

The Company's Non-life and Life and Health reserves are significant accounting estimates. These estimates are continually reviewed with any adjustments reflected in the periods in which they are determined, which may affect the Company's results in future periods. See Liquidity and Capital Resources—Reserves above and Notes 2(b) and 8 to the Consolidated Financial Statements in Item 18 of this report for further details.

Premium Estimates and Recoverability of Deferred Acquisition Costs

The Company provides proportional and non-proportional reinsurance coverage to cedants (insurance companies). In most cases, cedants seek protection for business that they have not yet written at the time they enter into reinsurance agreements and thus have to estimate the volume of premiums they will cede to the Company. Reporting delays are inherent in the reinsurance industry and vary in length by reinsurance market (country of cedant) and type of treaty. As delays can vary from a few weeks to a year or sometimes longer, the Company produces accounting estimates to report premiums and acquisition costs until it receives the cedants' actual premium reported data.

Under proportional treaties, which represented 72% of the Company's total gross premiums written for the year ended December 31, 2017, the Company shares proportionally in both the premiums and losses of the cedant and pays the cedant a

commission to cover the cedant's acquisition costs. Under this type of treaty, the Company's ultimate premiums written and earned and acquisition costs are not known at the inception of the treaty. As such, reported premiums written and earned and acquisition costs on proportional treaties are generally based upon reports received from cedants and brokers, supplemented by the Company's own estimates of premiums written and acquisition costs for which ceding company reports have not been received. Premium and acquisition cost estimates are determined at the individual treaty level. The determination of premium estimates requires a review of the Company's experience with cedants, familiarity with each market, an understanding of the characteristics of each line of business and management's assessment of the impact of various other factors on the volume of business written and ceded to the Company. Premium and acquisition cost estimates are updated as new information is received from the cedants and differences between such estimates and actual amounts are recorded in the period in which estimates are changed or the actual amounts are determined.

Under non-proportional treaties, which represented the remaining 28% of the Company's total gross premiums written for the year ended December 31, 2017, the Company is typically exposed to loss events in excess of a predetermined dollar amount or loss ratio and receives a fixed or minimum premium, which is subject to upward adjustment depending on the premium volume written by the cedant. In addition, many of the non-proportional treaties include reinstatement premium provisions. Reinstatement premiums are recognized as written and earned at the time a loss event occurs, where coverage limits for the remaining life of the contract are reinstated under pre-defined contract terms. The accrual of reinstatement premiums is based on management's estimate of losses and loss expenses associated with the loss event.

The magnitude and impact of changes in premium estimates differs for proportional and non-proportional treaties. Although proportional treaties may be subject to larger changes in premium estimates compared to non-proportional treaties, as the Company generally receives cedant statements in arrears and must estimate all premiums for periods ranging from one month to more than one year (depending on the frequency of cedant statements), the pre-tax impact is mitigated by changes in the cedant's related reported acquisition costs and losses. The impact of the change in estimate on premiums earned and net income varies depending on when the change becomes known during the risk period and the underlying profitability of the treaty. Non-proportional treaties generally include a fixed minimum premium and an adjustment premium. While the fixed minimum premiums require no estimation, adjustment premiums are estimated and could be subject to changes in estimates.

The amounts recorded within net premiums earned that related to changes in prior year premium estimates reported by cedants for P&C and Specialty segments for the year ended December 31, 2017 were as follows (in millions of U.S. dollars:

	Net premiums earned
P&C	\$ (20)
Specialty	17
Total	\$ (3)

These changes in prior year premium estimates impacting net premiums written and earned, and after the corresponding adjustments to acquisition costs and losses and loss expenses, did not have a material impact on the Company's consolidated net income.

The recoverability of deferred acquisition costs is dependent upon the future profitability of the related business and the testing of recoverability to assess valuation is performed periodically together with a reserve adequacy test based on the latest best estimate assumptions by line of business.

See Notes 2(c), 2(d), 9(b) and 20 to the Consolidated Financial Statements in Item 18 of this report and Operating Results—Results by Segment in Item 5 of this report for accounting policies or further details regarding premiums and recoverability of deferred acquisition costs.

Recoverability of Deferred Tax Assets

Under U.S. GAAP, a deferred tax asset or liability is to be recognized for the estimated future tax effects attributable to temporary differences and carryforwards. U.S. GAAP also establishes procedures to assess whether a valuation allowance should be established for deferred tax assets. All available evidence, both positive and negative, is considered to determine whether, based on the weight of that evidence, a valuation allowance is needed for some portion or all of a deferred tax asset. Management must use its judgment in considering the relative impact of positive and negative evidence.

The Company has projected future taxable income in the tax jurisdictions in which the deferred tax assets arise based on management's projections of premium and investment income, capital gains and losses, and technical and expense ratios. Based on these projections and an analysis of the ability to utilize loss and foreign tax credits carryforwards at the taxable entity level, management evaluates the need for a valuation allowance.

The Company has estimated the future tax effects attributed to temporary differences and has a deferred tax asset at December 31, 2017 of \$95 million, after a valuation allowance of \$186 million. The most significant component of the deferred tax asset (after valuation allowance) relates to loss reserve discounting for tax purposes.

In accordance with U.S. GAAP, the Company has assumed that the future reversal of deferred tax liabilities will result in an increase in taxes payable in future years. Underlying this assumption is an expectation that the Company will continue to be subject to taxation in the various tax jurisdictions and that the Company will continue to generate taxable revenues in excess of deductions.

See Notes 2(l) and 14 to the Consolidated Financial Statements in Item 18 of this report for further details.

Valuation of Investments Measured Using Significant Unobservable Inputs

As more fully described in Note 3 to the Consolidated Financial Statements in Item 18 of this report, the Company measures the fair value of its financial instruments according to a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value by maximizing the use of observable inputs and minimizing the use of unobservable inputs by requiring that the most observable inputs be used when available. Unobservable inputs are inputs that reflect the Company's assumptions about what market participants would use in pricing the asset or liability based on the best information available in the circumstances. Level 3 financial instruments have the least use of observable market inputs used to determine fair value. As at December 31, 2017 the Company classified \$1,400 million of investments and funds held—directly managed as Level 3 as a result of significant unobservable inputs used to determine fair value. See Note 3 to the Consolidated Financial Statements in Item 18 of this report for a breakdown of these investments by fair value level as well as more detail on the valuation techniques, methods and assumptions that were used by the Company to estimate the fair value of its fixed maturities, short-term investments, equities, other invested assets (including derivatives) and the funds held—directly managed account. See Notes 2(n) and 6 to the Consolidated Financial Statements in Item 18 of this report for more discussion of the Company's use of derivative financial instruments.

See also Quantitative and Qualitative disclosures About Market Risk in Item 11 of this report for a further discussion of interest rate and credit spread risk and a sensitivity analysis of interest rate and credit spread variances on the valuation of the Company's investments and funds withheld directly managed.

Valuation of Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of the net assets acquired in business combinations entered into prior to 2017 (PartnerRe SA, Winterthur Re, Paris Re and Presidio). The Company assesses the appropriateness of its valuation of goodwill on at least an annual basis or more frequently if events or changes in circumstances indicate that the carrying amount may not be recoverable. If, as a result of the assessment, the Company determines that the value of its goodwill is impaired, goodwill will be written down in the period in which the determination is made. In making an assessment of the value of its goodwill, the Company uses both market based and non-market based valuations. The fair value of the reporting units is determined based on the price-to-earnings multiples, book value multiples, and present value of estimated cash flows methods. Significant changes in the data underlying these assumptions could result in an assessment of impairment of the Company's goodwill asset. In addition, if the current economic environment and/or the Company's financial performance were to deteriorate significantly, this could lead to an impairment of goodwill, the write-off of which would be recorded against net income in the period such deterioration occurred.

Based upon the Company's assessment, there was no impairment of the Company's goodwill asset of \$456 million at December 31, 2017.

Intangible assets represent the fair value adjustments related to unpaid losses and loss expenses and the fair values of renewal rights, customer relationships and U.S. licenses arising from the acquisitions referred to above in addition to life value of business acquired (life VOBA) and insurance licenses acquired related to the Aurigen acquisition. Definite-lived intangible assets are amortized over their useful lives while indefinite-lived intangible assets are not subject to amortization. The carrying values of intangible assets are reviewed for indicators of impairment on at least an annual basis, or more frequently if events or changes in circumstances indicate that impairment may exist. Impairment is recognized if the carrying values of the intangible assets are not recoverable from their undiscounted cash flows and are measured as the difference between the carrying value and the fair value. Based upon the Company's assessment, there was no impairment of its intangible assets of \$160 million at December 31, 2017.

See Notes 2(j), 2(k) and 7 to the Consolidated Financial Statements in Item 18 of this report for further details.

New Accounting Pronouncements

See Note 2(r) to the Consolidated Financial Statements included in Item 18 of this report.

C. Research and Development, Patents and Licenses, etc.

Not applicable.

D. Trend Information

For a discussion of known trends, uncertainties and other events that are reasonably likely to have a material impact on the Company, see Operating Results in Item 5, Liquidity and Capital Resources in Item 5 and Tabular Disclosure of Contractual Obligations in Item 5 of this report.

E. Off-balance sheet arrangements

As more fully described in Note 10 to the Consolidated Financial Statements in Item 18 of this report, the Company has fully and unconditionally guaranteed the obligations related to debt issued to third parties by its finance subsidiaries as follows:

- senior notes with an aggregate principal amount of €750 million issued by PartnerRe Ireland Finance DAC
- senior notes with an aggregate principal of \$500 million issued by PartnerRe Finance B LLC
- Junior Subordinated Capital Efficient Notes (CENTs) with a remaining aggregate principal amount of \$63 million issued by PartnerRe Finance II Inc.

F. Tabular Disclosure of Contractual Obligations

In the normal course of its business, the Company is a party to a variety of contractual obligations as summarized below. These contractual obligations are considered by the Company when assessing its liquidity requirements and the Company is confident in its ability to meet all of its obligations. Contractual obligations at December 31, 2017 were as follows (in millions):

	Total	< 1 year	1-3 years	3-5 years	> 5 years
Contractual obligations:					
Operating leases	\$ 94.8	\$ 17.2	\$ 20.5	\$ 18.2	\$ 38.9
Other operating agreements	\$ 22.6	\$ 13.8	\$ 8.0	\$ 0.8	\$ —
Other invested assets ⁽¹⁾	\$ 315.0	\$ 109.0	\$ 155.0	\$ 51.0	\$ —
Non-life reserves ⁽²⁾	\$ 9,710.5	\$ 3,013.1	\$ 2,812.2	\$ 1,325.3	\$ 2,559.9
Life and health reserves ⁽³⁾	\$ 3,324.6	\$ 747.5	\$ 496.9	\$ 271.0	\$ 1,809.2
Deposit liabilities	\$ 10.9	\$ 5.4	\$ 2.0	\$ 0.9	\$ 2.6
Senior notes and Preferred Shares:					
2010 senior notes—principal ⁽⁴⁾	\$ 500.0	\$ —	\$ 500.0	\$ —	\$ —
2010 senior notes—interest	\$ 68.8	\$ 27.5	\$ 41.3	\$ —	\$ —
2016 senior notes—principal ⁽⁵⁾	€ 750.0	€ —	€ —	€ —	€ 750.0
2016 senior notes—interest	€ 47.0	€ 9.4	€ 18.8	€ 18.8	€9.4 per annum
Capital efficient notes—principal ⁽⁶⁾	\$ 63.4	\$ —	\$ —	\$ —	\$ 63.4
Capital efficient notes—interest	n/a	— ⁽⁷⁾	— ⁽⁷⁾	— ⁽⁷⁾	— ⁽⁷⁾
Series F non-cumulative preferred shares—principal ⁽⁷⁾	\$ 67.0	\$ —	\$ —	\$ —	\$ 67.0
Series F non-cumulative preferred shares—dividends	n/a	3.9	7.8	7.8	\$3.9 per annum
Series G cumulative preferred shares—principal ⁽⁸⁾	\$ 160.4	\$ —	\$ —	\$ 160.4	\$ —
Series G cumulative preferred shares—dividends	n/a	\$ 10.4	\$ 20.8	\$ 3.5	\$10.4 per annum
Series H cumulative preferred shares—principal ⁽⁸⁾	\$ 293.8	\$ —	\$ —	\$ 293.8	\$ —
Series H cumulative preferred shares—dividends	n/a	\$ 21.3	\$ 42.6	\$ 7.1	\$21.3 per annum
Series I non-cumulative preferred shares—principal ⁽⁷⁾	\$ 183.0	\$ —	\$ —	\$ —	\$ 183.0
Series I non-cumulative preferred shares—dividends	n/a	\$ 10.8	\$ 21.6	\$ 21.6	\$10.8 per annum

n/a: Not applicable

- (1) The amounts above for other invested assets represent the Company's expected timing of funding capital commitments related to its strategic investments.
- (2) The Company's non-life reserves represent management's best estimate of the cost to settle the ultimate liabilities based on information available at December 31, 2017, and are not fixed amounts payable pursuant to contractual commitments. The timing and amounts of actual loss payments related to these reserves might vary significantly from the Company's current

estimate of the expected timing and amounts of loss payments based on many factors, including large individual losses as well as general market conditions.

- (3) Life and health reserves at December 31, 2017 of \$2,490 million are computed on a discounted basis, whereas the expected payments by period in the table above are the estimated payments at a future time and do not reflect a discount of the amount payable.*
- (4) PartnerRe Finance B LLC, the issuer of the 2010 senior notes, does not meet consolidation requirements under U.S. GAAP. Accordingly, the Company shows the debt to PartnerRe Finance B LLC of \$500 million in its Consolidated Balance Sheet at December 31, 2017 and 2016. The 2010 senior notes of an aggregate principal outstanding of \$500 million mature on June 1, 2020. Interest on the senior notes is payable semi-annually and cannot be deferred.*
- (5) PartnerRe Ireland Finance DAC, the issuer of the 2016 senior notes, meets the consolidation requirements under U.S. GAAP. Accordingly, the Company shows the debt to third parties of €750 million in its Consolidated Balance Sheet at December 31, 2017. The 1.250% senior notes with aggregate principal outstanding of €750 million mature on September 15, 2026. Interest on the senior notes is payable annually commencing on September 15, 2017.*
- (6) PartnerRe Finance II Inc., the issuer of the CENts, does not meet consolidation requirements under U.S. GAAP. Accordingly, the Company shows the debt to PartnerRe Finance II Inc. of \$71 million in its Consolidated Balance Sheet at December 31, 2017. The aggregate principal amount of the CENts of \$63 million, representing PartnerRe Finance II Inc.'s debt to third parties, is included in the table above. The CENts will mature on December 1, 2066 and may be redeemed at the option of the issuer, in whole or in part, since December 1, 2016 upon occurrence of specific rating agency or tax events. Interest on the CENts is payable quarterly until maturity at an annual rate of 3-month LIBOR plus a margin equal to 2.325%. As a result of the variable interest rate, the table above does not show the interest payable.*
- (7) The Company's 5.875% Series F and I preferred shares are non-cumulative, perpetual and have no mandatory redemption requirement, but may be redeemed at the Company's option at any time or in part from time to time on or after March 1, 2018 and May 1, 2021, respectively.*
- (8) The Company's 6.50% Series G and 7.25% Series H preferred shares are cumulative, perpetual and have no mandatory redemption requirement, but may be redeemed at the Company's option at any time or in part from time to time on or after May 1, 2021. Should the current interest rate environment persist, it is reasonable to expect that the Company would redeem these preferred shares in 2021.*

The Contractual Obligations and Commitments table above does not include an estimate of the period of cash settlement of its tax liabilities with the respective taxing authorities given the Company cannot make a reasonably reliable estimate of the timing of cash settlements.

See Notes 10 and 11 to the Consolidated Financial Statements in Item 18 of this report for further details related to debt and preferred shares.

Due to the limited nature of the information presented above, it should not be considered indicative of the Company's liquidity or capital needs. See Liquidity section above.

The Company has committed to a 10 year structured letter of credit facility issued by a high credit quality international bank, which has a final maturity of December 29, 2020. At December 31, 2017, the Company's participation in the facility was \$67 million. At December 31, 2017, the letter of credit facility has not been drawn down and can only be drawn down in the event of certain specific scenarios, which the Company considers remote. Unless canceled by the bank, the credit facility automatically extends for one year, each year until maturity.

G. Safe Harbor

PartnerRe Ltd. has made statements in this annual report on Form 20-F that are forward-looking statements. In some cases, you can identify these statements by forward-looking words such as "may," "might," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," or "continue," the negative of these terms and other comparable terminology. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including those factors described in Risk Factors in Item 3 of this report.

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. We are under no duty to update any of these forward-looking statements after the date of this annual report on Form 20-F to conform our prior statements to actual results or revised expectations.

H. Non-GAAP Financial Measures

The Company has not presented or discussed any non-GAAP financial measures in this report as an addition to or substitute for measures of financial performance prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP).