



AXIS Capital Holdings Limited 2018 Loss Development Triangles

June 19, 2019

AXIS Capital Holdings Limited 2018 Loss Development Triangles

Loss Development Triangle Cautionary Language

This report is for informational purposes only and is as of December 31, 2018. We are under no obligation and do not expect to update or revise this report, whether as a result of new information, future events or otherwise, even when such new data has been reflected in the Company's filings with the U.S. Securities and Exchange Commission (the "SEC") or other disclosures. Although the loss development patterns disclosed in this report are an important factor in the process used to estimate loss reserve requirements, they are not the only factors we consider in establishing reserves. The inclusion of Compagnie Belge d'Assurances Aviation NV/SA and Novae Group Plc data respectively, for the 2017 and 2018 accident years only, within the loss development triangles will also lead to potential distortion of the loss development patterns that may be derived from these. The process for establishing reserves is subject to considerable variability and requires the use of informed estimates and judgments. Important details, such as specific loss development expectations for particular contracts, years or events, cannot be developed solely by analyzing the information provided in this report. In addition to analyzing loss development information, we incorporate additional information into the reserving process, such as pricing and market conditions. Readers must keep these and other qualifications more fully described in this report in mind when reviewing this information. This report should be read in conjunction with other documents filed by AXIS Capital Holdings Limited ("AXIS" or the "Company") with the SEC, including our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q.

Safe Harbor for Forward-Looking Statements

This report contains forward-looking statements within the meaning of section 27A of the Securities Act of 1933 and section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical facts included in this document, including statements regarding our estimates, beliefs, expectations, intentions, strategies or projections are forward-looking statements. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements in the United States federal securities laws. In some cases, these statements can be identified by the use of forward-looking words such as "may," "should," "could," "anticipate," "estimate," "expect," "plan," "believe," "predict," "potential," "intend" or similar expressions. These forward-looking statements are not historical facts, and are based upon current expectations, estimates and projections, and various assumptions, many of which, by their nature, are inherently uncertain and beyond management's control.

Forward-looking statements contained in this report may include, but are not limited to, information regarding our estimates of losses related to catastrophes and other large losses, measurements of potential losses in the fair market value of our investment portfolio and derivative contracts, our expectations regarding the performance of our business, our financial results, our liquidity and capital resources, the outcome of our strategic initiatives, our expectations regarding estimated synergies and the success of the integration of acquired entities, our expectations regarding the estimated benefits and synergies related to the Company's transformation program, our expectations regarding pricing and other market conditions, our growth prospects, and valuations of the potential impact of movements in interest rates, equity securities' prices, credit spreads and foreign currency rates.

Forward-looking statements only reflect our expectations and are not guarantees of performance. These statements involve risks, uncertainties and assumptions. Accordingly, there are or will be important factors that could cause actual events or results to differ materially from those indicated in such statements. We believe that these factors, include but are not limited to, the following:

- the cyclical nature of the insurance and reinsurance business leading to periods with excess underwriting capacity and unfavorable premium rates;
- the occurrence and magnitude of natural and man-made disasters;

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- the impact of global climate change on our business, including the possibility that we do not adequately assess or reserve for the increased frequency and severity of natural catastrophes;
- losses from war, terrorism and political unrest or other unanticipated losses;
- actual claims exceeding our loss reserves;
- general economic, capital and credit market conditions;
- the failure of any of the loss limitation methods we employ;
- the effects of emerging claims, coverage and regulatory issues, including uncertainty related to coverage definitions, limits, terms and conditions;
- our inability to purchase reinsurance or collect amounts due to us;
- the breach by third parties in our program business of their obligations to us;
- difficulties with technology and/or data security;
- the failure of our policyholders and intermediaries to pay premiums;
- the failure of our cedants to adequately evaluate risks;
- inability to obtain additional capital on favorable terms, or at all;
- the loss of one or more key executives;
- a decline in our ratings with rating agencies;
- the loss of business provided to us by our major brokers and credit risk due to our reliance on brokers;
- changes in accounting policies or practices;
- the use of industry catastrophe models and changes to these models;
- changes in governmental regulations and potential government intervention in our industry;
- failure to comply with certain laws and regulations relating to sanctions and foreign corrupt practices;
- increased competition;
- changes in the political environment of certain countries in which we operate or underwrite business including the United Kingdom's expected withdrawal from the European Union;
- fluctuations in interest rates, credit spreads, equity prices and/or currency values;
- the failure to successfully integrate acquired businesses or realize the expected synergies resulting from such acquisitions;
- the failure to realize the expected benefits or synergies relating to the Company's transformation initiative;
- changes in tax laws; and
- the other factors including but not limited to those described under Item 1A, '*Risk Factors*' and Item 7, '*Management's Discussion and Analysis of Financial Condition and Results of Operations*' in our most recent Annual Report on Form 10-K filed with the SEC, as those factors may be updated from time to time in our periodic and other filings with the SEC, which are accessible on the SEC's website at www.sec.gov.

We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

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I. PURPOSE AND SCOPE

This is our eleventh publication of loss development triangles, providing updated information for our Insurance and Reinsurance segments as of December 31, 2018. The information presented in this document will update your understanding of the loss development characteristics of our business and provide further insight into the general pattern of loss payment and loss reporting for each of our loss reserving classes.

Although we believe the data presented in this document will aid the understanding of critical loss development characteristics of our business, you should be aware that loss payment and loss reporting patterns are not the only considerations in establishing loss reserves. We caution that an attempt to evaluate our loss reserves using solely the data presented here could be misleading. The accident year data presented in this document represents a high level summary of the data we use for our own loss reserve evaluations. Important details, such as specific loss development expectations for particular contracts, years, or events cannot be developed by solely analyzing information at this level. Furthermore, in addition to analyzing loss development information, we incorporate additional information, such as pricing and market conditions, in our loss reserve analysis. Section VII provides a high level description of our reserving processes.

We strongly recommend that you refer to the data discussion in Section II before attempting to use the data for further analysis.

We also caution strongly against mechanical application of standard actuarial methodologies to project ultimate losses and loss reserves using triangles presented in this report. Mechanical application of reserving methods will fail to take into account several important factors including the following:

- i. Premium volume for several reserving classes has increased notably since our inception. As older years refer to a substantially smaller volume of premiums and claims, inferences drawn from patterns relating to those years may lack actuarial credibility. Therefore mechanical application of such techniques would not be appropriate.
- ii. Pricing conditions change over the years. The extrapolation of loss ratios from prior periods to current conditions would not be appropriate.
- iii. Several reserving classes are affected by the presence of large losses, including catastrophes. Loss development for years with a sizeable component of large losses may differ significantly from those years unaffected by large losses. Refer to Section II(v) for further discussion.
- iv. The composition of the portfolio has changed over time for several reserving classes. In some cases, these changes have been material. Trends derived from a summary of loss development data cannot capture all of these changes. Sections V(i) and VI(i) provide a high level summary of key changes in the underlying business composition in each of the reserving classes.

Without incorporating this and other critical information, inferences derived from a direct extrapolation of loss development triangles in this report have the potential to produce inappropriate results.

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II. DESCRIPTION OF DATA PRESENTED

AXIS was formed in late 2001. Therefore, all underwriting data is for periods from 2002 onwards. For some lines of business, less historical data is available as those lines were added more recently.

i) General

This document provides accident year summary exhibits, on a gross, ceded and net basis, as of December 31, 2018. These summaries include written and earned premiums, paid losses, case reserves, case incurred losses, incurred but not reported losses ("IBNR") and ultimate losses, and ultimate loss ratios on a gross, ceded and net basis. This document also provides net loss development triangles including paid loss data, case incurred loss data, IBNR and ultimate loss data. Loss adjustment expenses (both allocated and unallocated) are included in each loss amount. Data is presented in thousands of U.S. dollars. Amounts may not reconcile due to rounding differences.

We do not discount our unpaid losses and loss expense reserves. Intercompany reinsurance transactions have not been reflected in the triangles.

Refer to Section III(i) for a reconciliation of the loss reserves in the triangles to those presented in our consolidated financial statements at December 31, 2018.

ii) Acquisitions

On April 1, 2017, we acquired Compagnie Belge d'Assurances Aviation NV/SA ("Aviabel"), a Belgian insurer whose main lines of business include general aviation, airlines, products and manufacturers, airports and treaty insurance.

On October 2, 2017, we acquired Novae Group plc ("Novae"), a diversified property and casualty (re)insurance business operating through Syndicate 2007 at Lloyd's.

The 2017 and 2018 accident years for both of these acquisitions have been reflected in the triangles for the first time this year. At year-end 2017, the corresponding data for Aviabel and Novae was excluded from the triangles and only included in a summary reconciliation table. Note that, for the 2017 accident year, losses and premiums relating to the legacy Novae entity have only been included in the triangles and summary tables for exposures earning following the acquisition date.

iii) Accident Year Basis

Our loss development triangles and summary exhibits are presented on an accident year basis for both our Insurance and Reinsurance segments. We primarily rely on accident year information for our Insurance segment (excluding Lloyd's reserve classes) reserve analysis. In our Reinsurance segment and Lloyd's reserve classes, we generally utilize underwriting year information for our reserve analysis and subsequently allocate paid losses and reserves to respective accident years for reporting purposes. Beginning with our 2013 loss development triangles, we show incremental development data only for the latest ten accident years, more generally consistent with the presentation format followed by the U.S. statutory Schedule P for longer tailed lines of business. For earlier ("prior") calendar years and accident years, some triangle exhibits display aggregate amounts for those periods on a combined basis rather than on an individual year basis.

The multi-year nature of the Credit and Political Risk business within our Insurance segment inherently distorts results when a single accident year is reviewed in isolation. The premium we receive on these contracts is generally earned evenly over the contract term, thus spanning multiple accident years. In contrast, losses incurred on these contracts, which can be characterized as low in frequency and high in severity, are reflected in a single accident year (the year during which loss event occurred). When a loss exhausts our exposure on a Credit and Political Risk contract, we accelerate the recognition of any remaining unearned

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premium where we are entitled to it. As a result of these characteristics, comparative analyses on a single accident year basis for this business are less meaningful than those for our other reserving classes. The results of our Credit and Political Risk business are more appropriately and meaningfully analyzed on an inception to date basis.

The main difficulty in presenting accident year triangles for the Reinsurance segment relates to the allocation of loss information on proportional treaties to the appropriate accident years. As an example, many proportional treaty reinsurance contracts are submitted using quarterly bordereau reporting by underwriting year, with a supplemental listing of large losses. The large losses can be accurately allocated to the corresponding accident years. However, the remaining losses can generally only be allocated to accident years based on estimated premium earning and loss reporting patterns. We note that similar difficulties in allocating losses to accident years are also encountered on Insurance MGA business where losses are also generally reported using bordereau statements. To the extent management's assumptions and allocation procedures differ from the actual loss development patterns, the actual loss development may differ materially from the loss development presented in this report.

During 2014, we refined the methodology for allocating losses from Reinsurance proportional treaties to accident year resulting in some reallocations of paid and case losses, mostly on the older accident years of the Property and Other and the Motor Proportional classes. We note that these reallocations of losses between accident years, while relatively limited in size and only impacting the fourth to last diagonal of the triangles, may still distort the use of standard loss development approaches to analyzing the triangle data.

Refer to the Glossary in Section VIII for definitions of Accident and Underwriting year.

iv) Selection of Reserving Classes

Triangles are provided in consolidated reserving classes, six for our Insurance segment, and five for our Reinsurance segment, as follows:

Insurance Segment

- Property and Other
- Marine
- Aviation
- Credit and Political Risk
- Professional Lines
- Liability

Reinsurance Segment

- Property and Other
- Credit and Surety
- Professional Lines
- Motor (subdivided between proportional and non-proportional treaty business)
- Liability

The underlying business within a given class generally shares similar loss development characteristics. We analyze loss development trends based on data for each of our many internal reserving classes. Our internal reserving classes have been consolidated into the eleven reserving classes presented herein. Within the Reinsurance Motor reserving class, we also provide supplementary triangles for Motor Non-Proportional and Motor Proportional classes. While Motor Non-Proportional treaty business represents nearly 73% of the reserves in the Motor reserving class, the growth in the Motor Proportional business since 2010 impacts the most recent years' development patterns for the Motor reserving class as a whole. Further details on the nature of the business included within each of the classes above are provided in Sections V(i) and VI(i). The user should read these sections carefully as they provide important

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information on the nature of the underlying business as well as historical changes in business mix that impact the loss reserve analysis.

v) Large Loss Events

Catastrophes

The occurrence of large insured natural catastrophe events can contribute to complex coverage issues. This tends to extend the loss development profiles for property classes in years where such events occur, relative to years characterized by comparatively benign catastrophe activity.

The triangles are unadjusted with respect to significant loss events/catastrophes, specifically:

- the Atlantic hurricanes of 2004, namely Charley, Frances, Ivan, and Jeanne;
- the Atlantic hurricanes of 2005, namely Katrina, Rita and Wilma;
- the Atlantic hurricanes of 2008, namely Ike and Gustav;
- the 2010 earthquakes in Chile and New Zealand;
- the 2011 February New Zealand earthquake, and the Japanese earthquake and tsunami;
- SuperStorm Sandy in 2012;
- Atlantic hurricanes of 2017, namely Hurricanes Harvey, Irma and Maria and the Mexican earthquakes, Californian wildfires of 2017 and aggregate treaty losses; and
- Atlantic hurricanes of 2018, namely Hurricanes Florence and Michael, Typhoons Jebi and Trami, the Californian Wildfires of 2018 and aggregate treaty losses.

While not exhaustive, we consider that these events may lead to altering of development profiles for their respective accident years.

Our projected loss reserves for catastrophe events are based on ground-up assessments of our in-force contracts and treaties providing coverage in the affected regions. These assessments take into account the latest information available from clients, brokers and loss adjusters. In addition, we also consider current industry insured loss estimates, market share analyses and catastrophe modeling analyses, when appropriate. For further information, refer to the excerpt from our 2018 Annual Report on Form 10-K in Section VII.

Separate information on these catastrophe losses is provided in Section IV(ii).

Global Financial Crisis

From 2007 through 2009, worldwide financial markets experienced unprecedented volatility and disruption. As a result of these events, the following reserving classes have been impacted:

- Professional Lines (2007 through 2009 accident years)
- Credit and Political Risk Insurance/Credit and Surety Reinsurance (primarily 2008 and 2009 accident years)

There continue to be relatively high levels of uncertainty around the ultimate outcome on the 2007 through 2009 accident years. This is mainly attributable to both the higher than average volume of reported claims on these years, as well as the higher proportion of open claims, relative to earlier accident years at the same stage of development. Given the significance of the global financial crisis, we believe that loss development patterns on these accident years may differ from other years. In light of this, we separately evaluate the latest available claims information for each reserving class impacted by the global financial crisis, in addition to considering actuarial indications.

Our reserves for the classes affected by the global financial crisis are based on a ground-up probabilistic loss analysis of our exposures, combined with a detailed analysis of known claims.

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vi) Foreign Exchange

All foreign denominated premium data is converted at the inception date of the policy. Non-U.S. denominated loss data is generally converted at the date of loss, and, in some cases, the inception date of the contract if the date of loss is indeterminable. Fluctuations in currency exchange rates could cause material shifts in loss development. Our reserves for losses and loss expenses, as disclosed in our consolidated financial statements, are revalued using the exchange rate at the Balance Sheet date and therefore revaluation of reserves represents a reconciling item to the data presented in this document (See Section III(i) for a reconciliation of total reserves as at December 31, 2018).

vii) Ceded Reinsurance

Reinsurance premiums ceded are expensed over the period for which the reinsurance coverage is provided. Where possible, reinsurance ceded is directly allocated to the specific lines of business covered. When aggregate or whole account protection (covering multiple lines of business) has been purchased, the reinsurance ceded premiums have generally been allocated to the underlying lines of business in proportion to the respective gross premiums written.

viii) Credit and Political Risk Reserving

An important and distinguishing feature of many of our Insurance segment's Credit and Political Risk policies is our contractual right, subsequent to payment of a claim to our insured, to be subrogated to, or otherwise have an interest in, the insured's rights of recovery under an insured loan or facility agreement. In these instances, we recognize a loss and a corresponding estimate of the value of the applicable recoveries and pay the claim. The estimated recoveries are recorded as an offset to the related loss provisions. The time period between the date of a claim payment and our ultimate recovery from the corresponding security can result in negative case reserves at a point in time (as was the case at December 31, 2018). While a loss payment is reflected in gross paid losses, the associated potential recovery continues to be reflected as an offset to the gross case reserve balance.

The nature of the underlying recoverable assets is specific to each transaction. Management estimates the value of these assets on a contract-by-contract basis. This valuation process is inherently subjective and involves the application of management's judgment because active markets for these assets often do not exist. Our estimates of value are based on numerous inputs, including information provided by our insureds, as well as third party sources including rating agencies, asset valuation specialists and other publicly available information.

When handling a claim under one of our Credit or Political Risk policies, we, in some instances upon becoming aware of a loss event, negotiate a final settlement of all of our policy liabilities for a fixed amount. In most circumstances, this occurs when the insured moves to realize the benefit of the collateral that underlies the insured loan or facility and presents us with a net settlement proposal that represents a full and final payment by us under the terms of the policy. In consideration for this payment, we secure a cancellation of the policy, or a release of all claims, and waive our right to pursue a recovery of these settlement payments against the security that may have been available to us under the insured loan or facility agreement. In certain circumstances, cancellation by way of net settlement or full payment can result in an adjustment of the net premium to be received and earned on the policy.

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ix) Changes Since the 2017 Year-end Publication

We have detailed below the significant changes to the presentation of the information including new class breakouts or large loss disclosures since the 2017 year-end publication.

- Loss and premium data for both the 2017 and 2018 accident years of the Aviabel and Novae acquisitions have now been included within both the triangles and summary tables.
- Note that, for the 2017 accident year, losses and premiums relating to the legacy Novae entity have only been included in the triangles and summary tables for exposures earning following the acquisition date.
- The Accident & Health business was historically presented under the Insurance Property and Other SEC class. The full history of the Reinsurance Accident & Health Reinsurance business has now been split out and presented within the Reinsurance Property and Other SEC class.

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III. RECONCILIATIONS

i) Reconciliation of Net Unpaid Losses and Loss Adjustment Expenses ("LAE")

The following table reconciles the reserves for losses and loss expenses at December 31, 2018 reported in accordance with U.S. GAAP in our consolidated financial statements to the reserves for losses and loss expenses included in these triangles (all amounts in \$000's).

Reconciliation of Net Unpaid Losses and LAE

Consolidated triangles unpaid losses and LAE	\$ 9,101,530
(Ceded)/assumed reserves related to retroactive transactions	\$ (121,568)
Foreign exchange and other	\$ (200,862)
Net reserves for losses and loss expenses per December 31, 2018 consolidated financial statements total	\$ 8,779,100

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ii) Reconciliation of Reserving Classes to Reported Lines of Business

The following tables reconcile reserving classes in this report to the lines of business categories and the expected claim tails which are included in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q.

Insurance segment						
	Reserve class and tail					
	Property and other	Marine	Aviation	Credit and political risk	Professional lines	Liability
	Short	Short	Short/Medium	Medium	Medium	Long
Reported lines of business						
Property	X					
Marine		X				
Terrorism	X					
Aviation			X			
Credit and political risk				X		
Professional lines					X	
Liability						X
Accident and health	X					
Discontinued lines - Novae	X				X	X

Reinsurance segment					
	Reserve class and tail				
	Property and other	Credit and surety	Professional lines	Motor	Liability
	Short	Medium	Medium	Long	Long
Reported lines of business					
Catastrophe		X			
Property	X				
Credit and surety		X			
Professional lines			X		
Motor				X	
Liability					X
Engineering	X				
Agriculture	X				
Marine and other	X				
Accident and health	X				
Discontinued lines - Novae	X			X	X

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iii) Observations

Based on the December 31, 2018 data presented in this report, we would note the following points:

- Inception to date net premiums written for our Insurance and Reinsurance segments is split at 45% and 55%, respectively. The overall inception to date net ultimate loss ratio is 62.2%. Our ceded ultimate loss ratio on an inception to date basis is 66.9% while the gross ultimate loss ratio is 63.2%. The net ultimate loss ratio for Insurance is 60.3% and the net ultimate loss ratio for Reinsurance is 63.8%. The most notable items impacting the ultimate loss ratio are the large loss events outlined in Section II(v), which had a more significant impact on the Reinsurance segment.
- The majority of favorable net prior year reserve development emerged from the Property and Other reserving classes in Insurance and Reinsurance. The key actuarial assumptions for our short-tail business in our early accident years were primarily developed with reference to industry benchmarks for both expected loss ratios and loss development patterns. As our own historical loss experience amassed, it gained credibility and became relevant for consideration in establishing these key actuarial assumptions. As a result, we gradually increased the weighting assigned to our own historical experience in selecting the expected loss ratios and loss development patterns utilized to establish our estimates of ultimate losses for an accident year. Due to the relatively short reporting and settlement patterns for our short-tail business, we generally place more weight upon experience-based methods and other qualitative considerations in establishing reserves for our most recent accident years. Our estimates for more mature accident years are generally based on actuarial methods that are more responsive to actual experience, such as the Loss Development Method. As our experience developed more favorably than our initial expectations, we recognized favorable prior year development. Historical reserve development may not be an appropriate indicator of future results.

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The following table shows inception to date net IBNR reserves in relation to total net reserves as of December 31, 2018 by reserving class (amounts other than percentages in thousands):

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Net IBNR as a % of Total Net Reserves

	Total Net Reserves	IBNR	IBNR as a % of Total Net Reserves
<u>Insurance</u>			
Property and Other	\$ 774,230	\$ 293,942	38.0%
Marine	315,173	207,182	65.7%
Aviation	70,709	23,280	32.9%
Credit and Political Risk	92,548	97,439	nm
Professional Lines	1,841,415	1,359,116	73.8%
Liability	657,847	538,487	81.9%
Insurance Total	\$ 3,751,922	\$ 2,519,450	67.2%
<u>Reinsurance</u>			
Property and Other	\$ 1,398,018	\$ 738,793	52.8%
Credit and Surety	339,928	207,346	61.0%
Professional Lines	1,069,872	634,716	59.3%
Motor	1,306,644	564,825	43.2%
Liability	1,235,152	865,173	70.0%
Reinsurance Total	\$ 5,349,610	\$ 3,010,854	56.3%
Consolidated Total	\$ 9,101,530	\$ 5,530,301	60.8%

nm - not meaningful

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Values in Thousands USD

IV. CONSOLIDATED LOSS TRIANGLES

Consolidated Total

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	20,370,407	18,249,281	9,148,975	264,685	9,413,660	245,030	9,658,690	52.9%
2009	3,587,295	3,540,237	1,745,159	149,445	1,894,605	102,388	1,996,992	56.4%
2010	3,750,536	3,632,177	1,840,130	168,931	2,009,061	135,451	2,144,511	59.0%
2011	4,096,153	3,973,956	2,742,156	200,633	2,942,790	204,693	3,147,483	79.2%
2012	4,139,643	4,141,036	2,025,817	279,155	2,304,972	307,372	2,612,344	63.1%
2013	4,697,041	4,459,269	1,998,187	225,911	2,224,098	400,252	2,624,350	58.9%
2014	4,711,519	4,652,344	2,086,613	348,726	2,435,338	467,665	2,903,004	62.4%
2015	4,603,730	4,567,953	1,895,614	421,496	2,317,110	661,186	2,978,296	65.2%
2016	4,970,208	4,762,394	1,792,612	504,869	2,297,482	888,103	3,185,585	66.9%
2017	5,556,537	5,616,041	2,282,659	952,908	3,235,568	1,387,817	4,623,385	82.3%
2018	6,910,045	6,882,218	943,600	1,025,533	1,969,133	2,902,717	4,871,850	70.8%
	67,393,114	64,476,906	28,501,522	4,542,292	33,043,817	7,702,674	40,746,490	63.2%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	3,760,636	3,498,054	2,386,788	27,523	2,414,311	58,570	2,472,881	70.7%
2009	770,866	748,473	290,393	17,697	308,090	28,939	337,029	45.0%
2010	602,996	684,767	326,715	35,607	362,322	32,685	395,007	57.7%
2011	676,719	658,995	332,189	32,825	365,014	40,266	405,279	61.5%
2012	802,187	725,574	365,715	61,817	427,532	72,314	499,846	68.9%
2013	768,841	752,205	324,739	47,404	372,142	87,696	459,838	61.1%
2014	804,544	781,345	361,995	47,787	409,782	66,688	476,471	61.0%
2015	929,064	881,536	360,368	84,863	445,231	155,629	600,860	68.2%
2016	1,217,234	1,056,769	267,540	92,368	359,908	257,474	617,382	58.4%
2017	1,529,290	1,467,419	543,015	227,778	770,794	405,023	1,175,817	80.1%
2018	2,251,065	2,090,683	219,401	295,396	514,797	967,087	1,481,884	70.9%
	14,113,442	13,345,820	5,778,858	971,065	6,749,923	2,172,371	8,922,294	66.9%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	16,609,771	14,751,228	6,777,818	228,251	7,006,069	179,740	7,185,809	48.7%
2009	2,816,429	2,791,764	1,454,766	131,749	1,586,515	73,448	1,659,963	59.5%
2010	3,147,540	2,947,410	1,513,414	133,324	1,646,738	102,766	1,749,504	59.4%
2011	3,419,434	3,314,961	2,409,968	167,809	2,577,776	164,427	2,742,204	82.7%
2012	3,337,456	3,415,463	1,660,102	217,338	1,877,440	235,058	2,112,498	61.9%
2013	3,928,200	3,707,065	1,673,449	178,507	1,851,956	312,556	2,164,512	58.4%
2014	3,906,975	3,870,999	1,724,617	300,939	2,025,556	400,977	2,426,533	62.7%
2015	3,674,665	3,686,417	1,535,246	336,633	1,871,879	505,558	2,377,436	64.5%
2016	3,752,974	3,705,625	1,525,072	412,501	1,937,574	630,629	2,568,203	69.3%
2017	4,027,247	4,148,622	1,724,013	734,041	2,458,054	989,513	3,447,568	83.1%
2018	4,658,980	4,791,534	724,200	730,137	1,454,337	1,935,629	3,389,966	70.7%
	53,279,671	51,131,088	22,722,665	3,571,229	26,293,894	5,530,301	31,824,196	62.2%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Consolidated Total

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	271,246	756,225	909,234	1,034,201	1,130,173	1,225,002	1,298,640	1,404,672	1,431,297	1,454,766
	2010	300,293	703,476	941,891	1,102,935	1,238,343	1,341,220	1,420,467	1,465,883	1,513,414	
	2011	509,076	1,160,413	1,587,467	1,871,141	2,042,971	2,253,248	2,362,762	2,409,968		
	2012	322,837	808,656	1,106,348	1,341,174	1,485,984	1,586,475	1,660,102			
	2013	318,006	894,752	1,235,375	1,423,003	1,566,717	1,673,449				
	2014	387,196	1,016,313	1,394,974	1,579,053	1,724,617					
	2015	343,063	911,526	1,292,853	1,535,246						
	2016	428,153	1,102,677	1,525,072							
	2017	701,079	1,724,013								
	2018	724,200									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	577,419	1,000,431	1,178,198	1,277,444	1,395,227	1,424,466	1,479,218	1,542,443	1,557,208	1,586,515
	2010	744,519	1,125,316	1,319,472	1,420,391	1,460,306	1,501,854	1,553,581	1,590,022	1,646,738	
	2011	1,513,333	2,007,406	2,224,931	2,340,123	2,421,799	2,479,164	2,539,689	2,577,776		
	2012	909,916	1,402,171	1,559,390	1,699,960	1,771,478	1,817,927	1,877,440			
	2013	845,318	1,356,934	1,560,856	1,687,195	1,771,597	1,851,956				
	2014	877,908	1,487,915	1,758,256	1,890,416	2,025,556					
	2015	851,211	1,411,100	1,696,685	1,871,879						
	2016	971,453	1,631,186	1,937,574							
	2017	1,475,133	2,458,054								
	2018	1,454,337									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	1,269,624	805,820	609,365	492,569	375,689	319,920	235,878	122,129	95,217	73,448
	2010	1,245,670	853,894	626,459	460,940	399,737	280,090	227,177	158,042	102,766	
	2011	1,419,182	897,217	682,253	527,466	429,657	328,411	238,322	164,427		
	2012	1,430,953	936,244	728,472	536,488	412,358	324,246	235,058			
	2013	1,508,312	1,021,187	729,753	522,535	408,453	312,556				
	2014	1,567,758	1,053,125	770,117	560,372	400,977					
	2015	1,568,037	984,347	692,014	505,558						
	2016	1,525,121	941,418	630,629							
	2017	2,012,593	989,513								
	2018	1,935,629									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	1,847,043	1,806,251	1,787,563	1,770,013	1,770,915	1,744,386	1,715,096	1,664,572	1,652,424	1,659,963
	2010	1,990,189	1,979,210	1,945,931	1,881,331	1,860,044	1,781,944	1,780,759	1,748,064	1,749,504	
	2011	2,932,515	2,904,622	2,907,185	2,867,589	2,851,457	2,807,575	2,778,012	2,742,204		
	2012	2,340,869	2,338,415	2,287,862	2,236,448	2,183,836	2,142,173	2,112,498			
	2013	2,353,631	2,378,120	2,290,609	2,209,730	2,180,050	2,164,512				
	2014	2,445,666	2,541,040	2,528,372	2,450,788	2,426,533					
	2015	2,419,247	2,395,446	2,388,699	2,377,436						
	2016	2,496,574	2,572,604	2,568,203							
	2017	3,487,726	3,447,568								
	2018	3,389,966									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Consolidated Total

NET BASIS

Months											
Paid Loss Ratio	12	24	36	48	60	72	84	96	108	120	
2009	9.7%	27.1%	32.6%	37.0%	40.5%	43.9%	46.5%	50.3%	51.3%	52.1%	
2010	10.2%	23.9%	32.0%	37.4%	42.0%	45.5%	48.2%	49.7%	51.3%		
2011	15.4%	35.0%	47.9%	56.4%	61.6%	68.0%	71.3%	72.7%			
2012	9.5%	23.7%	32.4%	39.3%	43.5%	46.4%	48.6%				
2013	8.6%	24.1%	33.3%	38.4%	42.3%	45.1%					
2014	10.0%	26.3%	36.0%	40.8%	44.6%						
2015	9.3%	24.7%	35.1%	41.6%							
2016	11.6%	29.8%	41.2%								
2017	16.9%	41.6%									
2018	15.1%										
Months											
Case Incurred Loss Ratio	12	24	36	48	60	72	84	96	108	120	
2009	20.7%	35.8%	42.2%	45.8%	50.0%	51.0%	53.0%	55.2%	55.8%	56.8%	
2010	25.3%	38.2%	44.8%	48.2%	49.5%	51.0%	52.7%	53.9%	55.9%		
2011	45.7%	60.6%	67.1%	70.6%	73.1%	74.8%	76.6%	77.8%			
2012	26.6%	41.1%	45.7%	49.8%	51.9%	53.2%	55.0%				
2013	22.8%	36.6%	42.1%	45.5%	47.8%	50.0%					
2014	22.7%	38.4%	45.4%	48.8%	52.3%						
2015	23.1%	38.3%	46.0%	50.8%							
2016	26.2%	44.0%	52.3%								
2017	35.6%	59.2%									
2018	30.4%										
Months											
Ultimate Loss Ratio	12	24	36	48	60	72	84	96	108	120	
2009	66.2%	64.7%	64.0%	63.4%	63.4%	62.5%	61.4%	59.6%	59.2%	59.5%	
2010	67.5%	67.2%	66.0%	63.8%	63.1%	60.5%	60.4%	59.3%	59.4%		
2011	88.5%	87.6%	87.7%	86.5%	86.0%	84.7%	83.8%	82.7%			
2012	68.5%	68.5%	67.0%	65.5%	63.9%	62.7%	61.9%				
2013	63.5%	64.2%	61.8%	59.6%	58.8%	58.4%					
2014	63.2%	65.6%	65.3%	63.3%	62.7%						
2015	65.6%	65.0%	64.8%	64.5%							
2016	67.4%	69.4%	69.3%								
2017	84.1%	83.1%									
2018	70.7%										
Months											
Loss Emergence	12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
2009	1,847,043	(40,793)	(18,688)	(17,549)	902	(26,529)	(29,291)	(50,524)	(12,148)	7,539	(187,081)
2010	1,990,189	(10,979)	(33,280)	(64,600)	(21,287)	(78,099)	(1,185)	(32,695)	1,440		(240,685)
2011	2,932,515	(27,893)	2,562	(39,596)	(16,132)	(43,881)	(29,563)	(35,808)			(190,311)
2012	2,340,869	(2,454)	(50,553)	(51,414)	(52,612)	(41,663)	(29,675)				(228,371)
2013	2,353,631	24,490	(87,511)	(80,879)	(29,680)	(15,538)					(189,118)
2014	2,445,666	95,374	(12,667)	(77,584)	(24,255)						(19,132)
2015	2,419,247	(23,801)	(6,747)	(11,263)							(41,811)
2016	2,496,574	76,030	(4,401)								71,629
2017	3,487,726	(40,158)									(40,158)
2018	3,389,966										—
											(1,065,038)
CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'	
(423,141)	(312,717)	(257,877)	(244,609)	(217,941)	(258,937)	(243,083)	(292,377)	(196,894)	(200,451)	(2,648,027)	

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2018 Loss Development Triangles
Values in Thousands USD

iii) Large Catastrophe Loss Events Table

Consolidated

ITD Summary

Gross	Paid Losses					Case Incurred Losses					Ultimate Losses				
Accident Year	Insurance		Reinsurance		All Segments	Insurance		Reinsurance		All Segments	Insurance		Reinsurance		All Segments
	Property	Other	Property	Other		Property	Other	Property	Other		Property	Other			
2004 Hurricanes	310,441	43,360	214,795	3,894	572,490	310,441	43,360	237,199	6,847	597,847	307,472	43,360	214,948	3,894	569,674
2005 Hurricanes	773,213	392,486	762,160	5,883	1,933,742	771,047	392,487	762,620	5,923	1,932,077	768,351	392,488	762,646	5,923	1,929,408
2008 Hurricanes	119,670	31,658	301,524	3,510	456,362	119,670	31,658	299,361	5,762	456,451	119,677	31,658	301,577	3,547	456,459
2010 Earthquakes	2,128	50	263,849	2,715	268,742	2,128	50	273,591	5,725	281,494	2,128	50	277,864	3,009	283,051
2011 Earthquakes	45,122	1,216	589,616	17	635,971	45,122	1,394	599,731	34	646,281	45,123	1,227	602,086	17	648,453
2012 Storm	163,918	19,264	122,544	2,928	308,654	175,709	22,883	147,688	11,907	358,187	184,727	23,457	144,736	10,709	363,629
2017 Events	216,017	4,654	377,674	2,114	600,459	309,694	6,942	551,927	2,206	870,769	346,524	21,559	599,090	6,403	973,576
2018 Events	93,338	862	98,213	730	193,143	199,827	13,820	268,657	1,763	484,067	256,090	21,664	391,975	3,016	672,745
Total	1,723,847	493,550	2,730,375	21,791	4,969,563	1,933,638	512,594	3,140,774	40,167	5,627,173	2,030,092	535,463	3,294,922	36,518	5,896,995

Ceded	Paid Losses					Case Incurred Losses					Ultimate Losses				
Accident Year	Insurance		Reinsurance		All Segments	Insurance		Reinsurance		All Segments	Insurance		Reinsurance		All Segments
	Property	Other	Property	Other		Property	Other	Property	Other		Property	Other			
2004 Hurricanes	233,386	13,151	70,740	941	318,218	233,386	13,196	70,740	941	318,263	231,926	13,151	70,740	—	315,817
2005 Hurricanes	447,359	205,133	67,250	5,883	725,625	447,359	205,134	67,250	5,883	725,626	440,580	205,135	67,250	—	712,965
2008 Hurricanes	49,104	504	—	1,295	50,903	49,104	504	—	1,295	50,903	49,121	504	—	—	49,625
2010 Earthquakes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2011 Earthquakes	11,224	—	—	—	11,224	11,224	—	—	—	11,224	11,224	—	—	—	11,224
2012 Storm	33,036	8,043	—	14	41,093	46,564	11,063	—	14	57,641	47,065	10,806	—	—	57,871
2017 Events	35,668	884	141,577	550	178,679	60,188	1,295	205,314	697	267,494	71,620	9,416	219,509	1,010	301,555
2018 Events	63,183	14	50,826	293	114,316	108,863	8,224	135,711	484	253,282	129,517	8,175	183,807	945	322,444
Total	872,960	227,729	330,393	8,976	1,440,058	956,688	239,416	479,015	9,314	1,684,433	981,053	247,187	541,306	1,955	1,771,501

Net	Paid Losses					Case Incurred Losses					Ultimate Losses				
Accident Year	Insurance		Reinsurance		All Segments	Insurance		Reinsurance		All Segments	Insurance		Reinsurance		All Segments
	Property	Other	Property	Other		Property	Other	Property	Other		Property	Other			
2004 Hurricanes	77,054	30,209	144,055	2,953	254,271	77,054	30,164	166,459	5,907	279,584	75,546	30,209	144,209	3,894	253,858
2005 Hurricanes	325,854	187,353	694,910	—	1,208,117	323,688	187,353	695,370	40	1,206,451	327,771	187,353	695,396	5,923	1,216,443
2008 Hurricanes	70,566	31,154	301,524	2,215	405,459	70,566	31,154	299,361	4,468	405,549	70,556	31,154	301,577	3,547	406,834
2010 Earthquakes	2,128	50	263,849	2,715	268,742	2,128	50	273,591	5,725	281,494	2,128	50	277,864	3,009	283,051
2011 Earthquakes	33,898	1,216	589,616	17	624,747	33,898	1,394	599,731	34	635,057	33,899	1,227	602,086	17	637,229
2012 Storm	130,882	11,221	122,544	2,914	267,561	129,145	11,820	147,688	11,893	300,546	137,663	12,651	144,736	10,709	305,759
2017 Events	180,349	3,771	236,097	1,564	421,781	249,507	5,647	346,613	1,509	603,276	274,903	12,143	379,580	5,392	672,018
2018 Events	30,154	848	47,388	438	78,828	90,965	5,596	132,946	1,279	230,786	126,573	13,490	208,167	2,071	350,301
Total	850,885	265,822	2,399,983	12,816	3,529,506	976,951	273,178	2,661,759	30,855	3,942,743	1,049,039	288,277	2,753,615	34,562	4,125,493

Note:

Specific 2004 events include: Charley, Frances, Ivan and Jeanne.

Specific 2005 events include: Katrina, Rita and Wilma.

Specific 2008 events include: Gustav and Ike.

Specific 2010 events include: New Zealand I and Chilean earthquakes.

Specific 2011 events include: New Zealand II earthquake and Japanese earthquake and tsunami.

Specific 2012 event: SuperStorm Sandy

Specific 2017 events: Harvey, Irma, Maria; Mexican Earthquakes; Californian Wildfires, Aggregate Treaty loss

Specific 2018 events: California Wildfires including Wildland Camp Fire, Carr Fire and Woolsey Fire, Hurricane Florence, Hurricane Michael, Typhoon Jebi, Typhoon Trami and Aggregate Treaty Loss

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2018 Loss Development Triangles

V. INSURANCE SEGMENT

i) Reserving Class Descriptions

The following provides background commentary on the underlying business composition in each reserving class and how this has changed over time. We note that, unlike the year-end 2017 document, the triangles now include data for the Novae and Aviabel acquisitions in the 2017 and 2018 accident years only. The A&H data has now been separated between the Property and Other grouping for the Insurance and Reinsurance Segments consistent with the restructuring of the business during 2018.

Property and Other

- The class includes coverage for perils associated with all-risk physical loss or damage, business interruption and machinery breakdown with respect to virtually all types of property. This includes commercial buildings, residential premises, construction projects and onshore energy installations. The majority of this business is U.S. catastrophe-exposed. The key perils insured include fire, hail, flood, windstorm, and earthquake. Terrorism may be a covered peril and, in some cases, may be written on a stand-alone basis.
- Our Accident & Health business is also included in this class and has contributed an increasing portion of the premium earned within this class from 2010 forward, rising to approximately 19% for 2018. The A&H Insurance business includes accidental death, travel insurance, and specialty health products for employer and affinity groups.
- Approximately 19% of the non-A&H business in 2018 relates to E&S Property and 8% relates to Energy Onshore exposures (including onshore renewable energy). However, from November 2017, Energy Onshore was placed into run-off so we expect this to decrease further in the future (we continue to write onshore renewable energy business). Stand-alone Terrorism cover has decreased steadily since 2004 and now represents approximately 4% of the non-A&H earned premium volume. Towards the end of 2016, the U.S. Property and Risk Management Property lines were also placed into run-off.
- Between 2003 and 2009, the portion of this class written through Managing General Agents/Underwriters (MGA/MGU) grew steadily, peaking around 35%. From 2010 actions were taken to diversify natural catastrophe exposure that led to certain heavily catastrophe-exposed MGAs no longer being carried and this portion fell to 5%. Since then there has been an emphasis on building relationships with a broader base of MGAs and these units now make up nearly 20% of the non-A&H earned premium volume with a corresponding increase in MGA earned premium volume. The acquisition of Novae has increased this proportion further to around 54% of earned premium volume.
- Prior to 2006, the mix between primary and excess was broadly evenly split. From 2006 to 2012, there was an increasing shift towards business written on a primary basis with the mix in more recent years being approximately three quarters primary (excluding A&H business).
- In the region of three quarters of the non A&H business covered relates to North American and Caribbean exposures, with the remainder spread worldwide.
- In broad terms, rates hardened starting in the second quarter of 2011 following a weakening cycle post the 2005 hurricanes. Rates continued to harden for property business through most of 2013 but turned flat by the fourth quarter and softened from 2014 onwards, with sharp rate reductions seen on the International Property and Energy exposures in particular, followed by U.S. direct and facultative lines. In the first half of 2017 rate reductions had already started to slow slightly and for

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parts of the book were close to flat just prior to the landfall of Harvey, Irma and Maria. Subsequently rates climbed steadily during the final months of 2017 following the catastrophe events in the second half of the year. Additional rate increases were also achieved during the 2018 calendar year.

- In general, paid and reporting patterns are relatively short-tailed although they can be volatile due to the incidence of catastrophe events, such as those noted in Section II(v).

Marine

- This class comprises insurance and reinsurance products on a worldwide basis for traditional Marine classes: Offshore Energy (including offshore renewable energy), Cargo, Liability, Recreational Marine, Fine Art, Specie, Hull and War.
- Prior to the Novae acquisition, Offshore Energy was the largest component of this class and continued to have a growing share into 2013; the share then stabilized in 2014 before beginning to fall as the rate and demand conditions deteriorated. This segment provides physical damage, business interruption, operators extra expense, and liability coverage for all aspects of offshore upstream energy from exploration and construction through the operation and distribution phases.
- Following the Novae acquisition, the largest segment is now Marine Liability, making up around 28% of the total Marine class, followed by Energy, Cargo, Hull and War, and Specie. Prior to 2006, Hull and War comprised between 20% and 25% of this class but have since dropped to less than 5% since 2009.
- Specific market events such as Hurricane Ike, Deepwater Horizon and Costa Concordia have caused rates to harden in specific classes for periods of time which vary depending on the size of the event and the class of business before the aforementioned softening from 2014 onwards. This softening continued despite 2015 being a significantly elevated year in terms of market loss activity for Energy Offshore. Rates for some Marine classes have hardened since Hurricanes Harvey, Irma, and Maria.
- The complex nature of claims arising under our Marine policies tends to result in payment and reporting patterns that are longer than those of our Property and Other class. Exposure to natural perils such as windstorm and earthquake can result in volatility.

Aviation

- This class includes all-risks coverage for physical damage to hulls of aircraft, liability to passengers, third parties, and spare parts. It also includes coverage for stand-alone hull war and 'AV52' third party war and terrorism liability.
- The Aviation book was historically predominantly focused around flag-carrying scheduled airlines but, in recent years, has become more broad-based, encompassing coverage for cargo operations, general aviation operations, airports, aviation authorities, security firms and product manufacturers. The portfolio is now more diversified as a result, particularly since the acquisition of Aviabel.
- This business is generally accepted on a direct and facultative basis, but has also been written as part of proportional or/and surplus reinsurance treaties.
- Rates have generally been declining since their peak in 2002 and in subsequent years we reduced participations accordingly in the all-risks market. This, plus the acquisition of Aviabel, has resulted in a shift in the mix of business with the current estimates being approximately 75% Aviation all-risks, 15% Aviation War, and 10% Product Liability. Rates in some areas showed some signs of hardening during 2017 but were broadly flat through 2018.

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- The claims reporting pattern for the Aviation class varies by coverage. Losses arising from war/terrorism and damage to hulls of aircraft are generally reported quickly. However, liability claims which involve passengers and third parties and generally exhibit longer reporting and paid patterns. To date, the claims we have been advised of have been mainly related to damage to hulls, hence our payment and reporting patterns have typically exhibited a relatively short tail.

Credit and Political Risk

- This class comprises Political Risk and Credit Insurance products for banks and corporations. Coverage is provided for a range of perils including sovereign default, credit default, political violence, currency inconvertibility and non-transfer, expropriation, aircraft non-repossession and contract frustration due to political events.
- Prior to 2006, this class was dominated by confiscation, expropriation, nationalization and deprivation coverages ("CEND") as well as sovereign credit coverage. Over time, the non-sovereign credit coverage increased and is now the largest part of the business. As a result of the global financial crisis, we reduced premiums written during 2009 but continued to earn premium written in prior underwriting periods. In recent years, exposure to non-payment insurance associated with project finance business has increased and now accounts for around 35% of gross earned premium.
- From 2017 onwards, this class also included Aviation Financing non-payment insurance providing protection to senior secured lenders funding the acquisition of new, or nearly new, commercial jetliners for acquiring airlines and aircraft lessors. The covered loans, in common with normal aviation financing practices, are first lien senior secured loans on the acquired aircraft typically financing 75-85% of the net purchase price and fully amortizing over 10-12 years.
- Claims in this class tend to be characterized by their severity risk as opposed to their frequency risk. Therefore, claim payment and reporting patterns are anticipated to be volatile. As discussed in Section II(v), our claims experience on the 2008 and 2009 accident years is higher than for other accident years due to the impact of the global financial crisis.
- Under the notification provisions of our non-sovereign credit insurance, we generally anticipate being advised of an insured event within a relatively short time period. For the most part, these contracts include waiting periods following the event which specify that the claim payment is due only after specified waiting periods. In some cases, resolution can be achieved during the waiting period. As discussed in Section II(viii), a feature of these contracts is that after the date we pay a claim, we are generally either subrogated to, or otherwise have an interest in, all of the insured's rights of recovery under the insured loan or facility agreement. In some situations, we may also receive a transfer or assignment of the insured's rights. This can lead to the situation where we pay a claim in the short term, but receive a recovery over a longer period of time. We anticipate that this will likely lead to claim reporting patterns that will have a medium development tail.
- In our credit insurance class, where policies typically span several years, insureds may have the ability to restructure underlying financing arrangements and frequently do so when conditions allow them to take advantage of preferential terms and/or interest rates. The declining interest rate environment in 2009 through 2013 prompted a number of such restructurings, resulting in the early termination of a number of our policies. As a result, we were no longer entitled to premiums related to the remainder of the original coverage term and recognized related reductions in written premium. This impact stabilized in 2014 where there was a positive impact of adjustments on policies written in previous years.

AXIS Capital Holdings Limited
2018 Loss Development Triangles

- During the 2017 calendar year, the IBNR was reallocated between prior accident years (particularly 2010 - 2012). This was in response to a clearer view of exposure and where specific circumstances lie.

Professional Lines

- This class of business includes Directors & Officers ("D&O") Liability, Employment Practices Liability ("EPL"), Fiduciary Liability, Crime, Errors & Omissions ("E&O"), Cyber Liability, Professional Indemnity and other financial insurance related coverages for public and private commercial enterprises, financial institutions, not-for-profit organizations and professional service providers. This business is predominantly written on a claims-made basis.
- The overall share of the total Professional Lines premium written in the U.S. declined from approximately 70% in 2009 and 2010 to the low 60% range in 2014, as business written in Australia and Europe increased. The AXIS Australia Branch was placed into run-off in 2015 with a subsequent sale and transfer of associated liabilities in 2017.
- The current business mix is approximately 22% D&O and ancillary coverages such as EPL, Fiduciary and Crime for commercial enterprises, 18% coverages for Financial Institutions 40% PI/E&O for firms, and 20% Cyber Liability. Prior to 2006 the business mix was more heavily weighted to D&O coverages in the Commercial and Financial Institutions industry sectors.
- Rates for professional lines have generally weakened from 2004 through 2011, before rising slightly starting in mid-2012. One exception to this trend was the Financial Institutions sector which saw a strengthening of rates in 2008 and 2009, resulting predominantly from loss activity emanating from the global financial crisis; rates on this business weakened in 2010 and 2011 before rising slightly from mid-2012. Since 2013 the market has flattened and is showing rate reductions in some areas, particularly on excess D&O lines. While pockets of rate increases were seen during the second half of 2017, rates have generally stayed broadly flat during 2018.
- Typically, this class of business would be anticipated to exhibit medium to long tail claim reporting and settlement patterns.

Liability

- The liability book contains predominately low to mid-level excess and umbrella commercial liability risks typically written in the excess and surplus ("E&S") lines market in the U.S. on a non-admitted basis. The core book was supplemented in 2006 by the addition of a global Excess Casualty book in Bermuda which focused on Fortune 500 type accounts with higher attachment points than the core portfolio. Beginning in 2014, we began growing our Primary Casualty exposures. The Bermuda Excess Casualty book was placed into run off in 2015. Since 2015, we've also been building new MGA liability relationships, growing this part of the Liability segment to around 25% of gross earned premium by 2018.
- From 2005 through 2010, the rating environment deteriorated year on year with the scale of rate reductions more prevalent on the primary book, which led to the winding down of exposures on the core primary book. The focus of the book has gradually shifted over this period to a heavier mix of business being written on an excess basis. From 2011 through 2013, the rating environment began improving year on year. However, since then the pace of increases has slowed noticeably in most areas, with exception of Auto Liability and primary contractors' construction which have seen rate increases accelerating from 2016 following a period of elevated market loss activity. Rate increases on our Liability classes during 2018, concentrated on our MGA and Excess Casualty books have also been seen.

AXIS Capital Holdings Limited
2018 Loss Development Triangles

- The key industry sectors for the Liability book are manufacturing, construction, transportation and trucking, and general premises and operations business.
- Excluding MGAs (which are 95% primary), nearly three quarters of the business is excess and one quarter primary in 2018. This proportion has varied over time, with 2010-2013 having a higher proportion of excess business.
- The vast majority of the premium for this class is written on an occurrence basis although there is a significant minority of claims made exposure.
- The delay between the writing of a contract, notification and subsequent settlement of a claim in respect of that contract results in claim payment and reporting patterns that are typically long tail in nature. A consequence of the claim development tail is that this line of business is particularly exposed, amongst a number of uncertainties, to the potential for unanticipated levels of claim inflation relative to that assumed when the contracts were written. Factors influencing claim inflation on this class can include, but are not limited to, underlying economic and medical inflation, judicial inflation, mass tort and changing social trends.

ii) Summary of Historical Reinsurance Protections

- The main coverages in place include excess of loss coverage for the Property, Marine and Aviation lines, per risk coverages for Property and Marine lines, and quota share coverage for the Professional (with further protection for our Cyber exposure) and Liability lines of business.
- In the early years, reinsurance purchase was generally larger with lower retentions on Property and Marine and higher quota share percentages on Professional and Liability. These gradually reduced over time until 2012-13 with increases in Property and Marine per risk retentions and decreases in Professional Lines quota share cessions. Since 2013, reinsurance purchases have generally increased again, with reductions in Property and Marine per risk retentions and increases in Professional and Liability Lines quota share.
- Historically, there has been little outwards reinsurance purchased for the Credit & Political Risks book. However, quota share reinsurance was purchased on this book for the 2016 - 2018 accident years. The U.S. Property Facilities book also has quota share reinsurance protection for the 2016-2018 years while, during 2018, quota share protections were also purchased to protect the E&S Property book.
- Premiums ceded in 2018 were around 38% of gross earned premium, compared to 37% in 2017 and 2016. The increase in premiums ceded was due primarily to an increase in ceded premiums on the Professional and Liability lines and the E&S Property quota share.

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Consolidated Total

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	12,139,383	10,760,761	5,595,959	54,076	5,650,035	121,574	5,771,609	53.6%
2009	1,775,590	1,884,061	1,103,669	50,673	1,154,342	59,057	1,213,399	64.4%
2010	1,910,017	1,869,544	852,955	75,804	928,758	74,164	1,002,923	53.6%
2011	2,005,945	2,008,731	1,118,944	77,837	1,196,781	108,035	1,304,816	65.0%
2012	2,196,680	2,157,827	1,115,435	142,905	1,258,340	197,777	1,456,117	67.5%
2013	2,373,972	2,297,557	1,048,262	114,595	1,162,857	232,694	1,395,551	60.7%
2014	2,400,542	2,398,370	1,099,809	136,517	1,236,326	305,208	1,541,534	64.3%
2015	2,368,204	2,429,753	1,034,318	194,720	1,229,038	394,994	1,624,032	66.8%
2016	2,432,475	2,397,464	864,418	192,674	1,057,092	524,182	1,581,274	66.0%
2017	2,814,919	2,829,478	1,019,725	362,003	1,381,729	854,857	2,236,585	79.0%
2018	3,797,591	3,757,436	511,518	537,577	1,049,095	1,527,725	2,576,820	68.6%
	36,215,318	34,790,982	15,365,012	1,939,381	17,304,393	4,400,267	21,704,660	62.4%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	3,648,951	3,389,771	2,248,810	27,523	2,276,333	58,562	2,334,895	68.9%
2009	750,529	726,095	290,393	17,697	308,090	28,939	337,029	46.4%
2010	583,897	665,521	326,710	35,607	362,317	32,683	394,999	59.4%
2011	655,695	637,699	332,189	32,825	365,014	40,266	405,279	63.6%
2012	787,236	710,428	365,715	61,817	427,532	72,314	499,846	70.4%
2013	745,536	735,560	320,387	47,404	367,791	87,351	455,142	61.9%
2014	755,868	739,213	311,417	47,752	359,169	102,877	462,047	62.5%
2015	823,686	788,545	341,876	83,736	425,612	154,410	580,022	73.6%
2016	912,915	863,182	222,511	79,236	301,746	232,304	534,050	61.9%
2017	1,039,094	1,013,040	269,139	108,185	377,324	377,387	754,711	74.5%
2018	1,472,847	1,394,834	130,841	165,126	295,967	693,724	989,692	71.0%
	12,176,254	11,663,888	5,159,988	706,908	5,866,895	1,880,817	7,747,712	66.4%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	8,490,432	7,370,990	3,347,149	26,553	3,373,702	63,013	3,436,714	46.6%
2009	1,025,061	1,157,966	813,276	32,976	846,253	30,117	876,370	75.7%
2010	1,326,120	1,204,023	526,245	40,197	566,442	41,481	607,923	50.5%
2011	1,350,249	1,371,032	786,756	45,012	831,767	67,770	899,537	65.6%
2012	1,409,444	1,447,399	749,720	81,088	830,808	125,463	956,271	66.1%
2013	1,628,436	1,561,997	727,875	67,191	795,066	145,343	940,409	60.2%
2014	1,644,674	1,659,157	788,392	88,765	877,157	202,330	1,079,487	65.1%
2015	1,544,518	1,641,208	692,443	110,983	803,426	240,584	1,044,010	63.6%
2016	1,519,559	1,534,282	641,907	113,438	755,346	291,878	1,047,223	68.3%
2017	1,775,825	1,816,438	750,586	253,818	1,004,405	477,470	1,481,874	81.6%
2018	2,324,744	2,362,603	380,677	372,451	753,128	834,001	1,587,129	67.2%
	24,039,062	23,127,095	10,205,026	1,232,472	11,437,500	2,519,450	13,956,947	60.3%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Consolidated Total

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	168,641	495,048	555,514	611,370	649,042	678,870	707,029	790,989	801,571	813,276
	2010	130,376	259,903	325,525	409,585	440,297	460,618	481,009	499,685	526,245	
	2011	162,600	344,280	465,888	554,006	628,223	713,829	769,967	786,756		
	2012	108,025	327,866	480,428	618,199	683,875	722,763	749,720			
	2013	129,601	371,941	505,949	589,177	670,509	727,875				
	2014	188,871	448,607	630,943	725,960	788,392					
	2015	165,855	407,544	584,404	692,443						
	2016	177,648	474,543	641,907							
	2017	323,894	750,586								
	2018	380,677									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	263,641	506,846	612,335	656,720	729,749	734,294	773,680	826,608	839,680	846,253
	2010	193,558	329,673	393,582	421,645	432,478	451,827	503,765	518,298	566,442	
	2011	388,828	542,688	649,001	676,873	731,443	788,208	810,355	831,767		
	2012	422,101	622,979	698,816	766,868	802,871	821,070	830,808			
	2013	355,736	553,800	641,725	703,711	749,316	795,066				
	2014	443,731	660,489	778,774	824,979	877,157					
	2015	404,532	602,354	729,587	803,426						
	2016	414,070	664,655	755,346							
	2017	695,991	1,004,405								
	2018	753,128									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	559,913	358,003	269,294	219,926	156,304	134,115	114,123	35,774	31,806	30,117
	2010	492,799	354,779	279,930	177,184	131,784	85,239	72,394	61,753	41,481	
	2011	596,785	402,070	294,020	225,129	170,966	121,211	94,984	67,770		
	2012	584,699	424,887	314,159	230,933	174,604	153,220	125,463			
	2013	635,539	471,602	342,381	235,215	176,210	145,343				
	2014	649,849	479,741	370,965	271,773	202,330					
	2015	679,722	456,738	327,173	240,584						
	2016	612,679	391,310	291,878							
	2017	829,893	477,470								
	2018	834,001									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	823,555	864,849	881,630	876,646	886,053	868,409	887,803	862,381	871,486	876,370
	2010	686,357	684,452	673,512	598,829	564,262	537,066	576,159	580,050	607,923	
	2011	985,614	944,758	943,021	902,002	902,409	909,418	905,340	899,537		
	2012	1,006,800	1,047,866	1,012,975	997,801	977,475	974,289	956,271			
	2013	991,274	1,025,402	984,106	938,926	925,526	940,409				
	2014	1,093,580	1,140,230	1,149,739	1,096,752	1,079,487					
	2015	1,084,255	1,059,092	1,056,760	1,044,010						
	2016	1,026,749	1,055,965	1,047,223							
	2017	1,525,885	1,481,874								
	2018	1,587,129									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Consolidated Total

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	14.6%	42.8%	48.0%	52.8%	56.1%	58.6%	61.1%	68.3%	69.2%	70.2%	
	2010	10.8%	21.6%	27.0%	34.0%	36.6%	38.3%	40.0%	41.5%	43.7%		
	2011	11.9%	25.1%	34.0%	40.4%	45.8%	52.1%	56.2%	57.4%			
	2012	7.5%	22.7%	33.2%	42.7%	47.2%	49.9%	51.8%				
	2013	8.3%	23.8%	32.4%	37.7%	42.9%	46.6%					
	2014	11.4%	27.0%	38.0%	43.8%	47.5%						
	2015	10.1%	24.8%	35.6%	42.2%							
	2016	11.6%	30.9%	41.8%								
	2017	17.8%	41.3%									
	2018	16.1%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	22.8%	43.8%	52.9%	56.7%	63.0%	63.4%	66.8%	71.4%	72.5%	73.1%	
	2010	16.1%	27.4%	32.7%	35.0%	35.9%	37.5%	41.8%	43.0%	47.0%		
	2011	28.4%	39.6%	47.3%	49.4%	53.3%	57.5%	59.1%	60.7%			
	2012	29.2%	43.0%	48.3%	53.0%	55.5%	56.7%	57.4%				
	2013	22.8%	35.5%	41.1%	45.1%	48.0%	50.9%					
	2014	26.7%	39.8%	46.9%	49.7%	52.9%						
	2015	24.6%	36.7%	44.5%	49.0%							
	2016	27.0%	43.3%	49.2%								
	2017	38.3%	55.3%									
	2018	31.9%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	71.1%	74.7%	76.1%	75.7%	76.5%	75.0%	76.7%	74.5%	75.3%	75.7%	
	2010	57.0%	56.8%	55.9%	49.7%	46.9%	44.6%	47.9%	48.2%	50.5%		
	2011	71.9%	68.9%	68.8%	65.8%	65.8%	66.3%	66.0%	65.6%			
	2012	69.6%	72.4%	70.0%	68.9%	67.5%	67.3%	66.1%				
	2013	63.5%	65.6%	63.0%	60.1%	59.3%	60.2%					
	2014	65.9%	68.7%	69.3%	66.1%	65.1%						
	2015	66.1%	64.5%	64.4%	63.6%							
	2016	66.9%	68.8%	68.3%								
	2017	84.0%	81.6%									
	2018	67.2%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	823,555	41,294	16,781	(4,983)	9,407	(17,645)	19,394	(25,422)	9,105	4,884	52,815
	2010	686,357	(1,906)	(10,940)	(74,683)	(34,567)	(27,196)	39,093	3,892	27,873		(78,434)
	2011	985,614	(40,855)	(1,737)	(41,019)	407	7,009	(4,079)	(5,803)			(86,077)
	2012	1,006,800	41,066	(34,892)	(15,174)	(20,326)	(3,186)	(18,018)				(50,530)
	2013	991,274	34,128	(41,296)	(45,180)	(13,400)	14,883					(50,865)
	2014	1,093,580	46,649	9,510	(52,987)	(17,265)						(14,093)
	2015	1,084,255	(25,163)		(12,750)							(40,245)
	2016	1,026,749	29,215	(8,742)								20,473
	2017	1,525,885	(44,010)									(44,010)
	2018	1,587,129										—
												(290,966)
												(290,966)
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		(210,830)	(118,424)	(103,036)	(122,166)	(50,824)	(63,732)	(23,483)	(55,905)	(45,809)	(93,419)	(887,628)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Property and Other

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	4,369,772	4,086,793	2,280,595	6,132	2,286,727	3,836	2,290,563	56.0%
2009	587,588	575,803	117,221	13	117,235	188	117,423	20.4%
2010	638,438	605,604	133,337	2,210	135,547	668	136,215	22.5%
2011	681,476	657,157	346,737	9,326	356,063	1,517	357,581	54.4%
2012	736,368	729,364	398,411	62,461	460,872	10,251	471,123	64.6%
2013	793,651	771,362	339,055	13,733	352,787	7,922	360,709	46.8%
2014	827,998	816,988	406,339	6,677	413,016	7,339	420,355	51.5%
2015	777,483	818,168	317,733	14,260	331,993	8,993	340,986	41.7%
2016	853,374	828,975	413,790	36,478	450,268	24,796	475,064	57.3%
2017	990,157	1,040,901	718,492	169,513	888,005	82,788	970,793	93.3%
2018	1,465,838	1,497,802	392,895	364,882	757,777	335,006	1,092,783	73.0%
	12,722,143	12,428,917	5,864,605	685,685	6,550,290	483,304	7,033,595	56.6%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,419,697	1,397,791	1,033,270	8,488	1,041,758	(607)	1,041,151	74.5%
2009	274,061	273,239	29,819	9	29,828	46	29,874	10.9%
2010	206,868	235,490	20,269	37	20,306	230	20,535	8.7%
2011	240,063	232,401	57,560	1,031	58,592	518	59,109	25.4%
2012	252,481	250,969	69,484	32,588	102,072	(274)	101,798	40.6%
2013	211,727	201,927	63,839	1,578	65,416	671	66,087	32.7%
2014	226,300	216,530	67,384	(1,121)	66,263	(360)	65,903	30.4%
2015	228,008	227,943	64,583	1,846	66,429	2,227	68,656	30.1%
2016	218,725	227,671	77,082	9,125	86,207	11,671	97,879	43.0%
2017	240,507	256,332	152,551	44,144	196,695	31,932	228,626	89.2%
2018	481,440	440,973	99,900	107,672	207,572	143,308	350,879	79.6%
	3,999,877	3,961,266	1,735,741	205,397	1,941,138	189,362	2,130,497	53.8%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	2,950,075	2,689,002	1,247,325	(2,356)	1,244,969	4,443	1,249,412	46.5%
2009	313,527	302,564	87,402	4	87,407	142	87,549	28.9%
2010	431,570	370,114	113,068	2,173	115,241	438	115,680	31.3%
2011	441,413	424,756	289,177	8,295	297,471	999	298,472	70.3%
2012	483,887	478,395	328,927	29,873	358,800	10,525	369,325	77.2%
2013	581,924	569,435	275,216	12,155	287,371	7,251	294,622	51.7%
2014	601,698	600,458	338,955	7,798	346,753	7,699	354,452	59.0%
2015	549,475	590,225	253,150	12,414	265,564	6,766	272,330	46.1%
2016	634,649	601,304	336,708	27,353	364,061	13,125	377,185	62.7%
2017	749,650	784,569	565,941	125,369	691,310	50,856	742,167	94.6%
2018	984,398	1,056,829	292,995	257,210	550,205	191,698	741,904	70.2%
	8,722,266	8,467,651	4,128,864	480,288	4,609,152	293,942	4,903,098	57.9%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Property and Other

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	38,154	68,858	78,150	82,063	83,085	84,399	86,676	87,069	87,397	87,403
	2010	49,757	88,817	97,337	108,295	112,558	112,891	112,647	112,722	113,068	
	2011	87,962	204,364	264,232	286,831	287,956	287,924	288,560	289,177		
	2012	83,137	224,928	292,332	315,761	323,457	328,819	328,927			
	2013	80,432	208,484	249,204	260,776	271,878	275,216				
	2014	144,330	278,969	326,742	334,125	338,955					
	2015	106,088	213,028	238,519	253,150						
	2016	129,820	296,541	336,708							
	2017	258,907	565,941								
	2018	292,995									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	82,836	92,472	86,878	86,811	87,732	87,113	87,560	87,453	87,598	87,407
	2010	111,130	117,020	120,180	117,297	117,240	116,797	116,718	116,508	115,241	
	2011	281,531	308,390	303,251	300,009	296,728	296,905	297,177	297,472		
	2012	317,007	392,541	374,218	370,028	365,102	359,203	358,800			
	2013	237,580	275,469	268,246	274,099	277,406	287,371				
	2014	296,513	346,694	352,852	347,166	346,753					
	2015	199,052	261,646	266,210	265,564						
	2016	269,311	374,218	364,061							
	2017	550,633	691,310								
	2018	550,205									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	44,362	17,635	13,819	6,341	3,276	1,456	1,218	912	1,048	142
	2010	73,770	40,808	29,839	6,722	1,089	824	548	258	438	
	2011	89,405	38,872	21,914	2,455	3,904	2,717	2,847	1,000		
	2012	94,172	28,311	27,487	10,490	11,128	11,026	10,524			
	2013	87,243	40,914	20,146	10,224	6,780	7,251				
	2014	87,768	35,602	18,556	7,951	7,699					
	2015	94,898	26,385	10,582	6,766						
	2016	91,470	11,630	13,125							
	2017	257,367	50,856								
	2018	191,699									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	127,198	110,107	100,697	93,152	91,008	88,569	88,768	88,365	88,646	87,549
	2010	184,900	157,828	150,019	124,019	118,329	117,620	117,265	116,766	115,680	
	2011	370,936	347,261	325,165	302,464	300,632	299,622	300,023	298,471		
	2012	411,179	420,852	401,705	380,518	376,231	370,229	369,325			
	2013	324,824	316,383	288,393	284,323	284,186	294,622				
	2014	384,281	382,296	371,408	355,117	354,452					
	2015	293,949	288,031	276,792	272,330						
	2016	360,781	385,848	377,186							
	2017	808,000	742,166								
	2018	741,904									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Property and Other

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	12.6%	22.8%	25.8%	27.1%	27.5%	27.9%	28.6%	28.8%	28.9%	28.9%	
	2010	13.4%	24.0%	26.3%	29.3%	30.4%	30.5%	30.4%	30.5%	30.5%		
	2011	20.7%	48.1%	62.2%	67.5%	67.8%	67.8%	67.9%	68.1%			
	2012	17.4%	47.0%	61.1%	66.0%	67.6%	68.7%	68.8%				
	2013	14.1%	36.6%	43.8%	45.8%	47.7%	48.3%					
	2014	24.0%	46.5%	54.4%	55.6%	56.4%						
	2015	18.0%	36.1%	40.4%	42.9%							
	2016	21.6%	49.3%	56.0%								
	2017	33.0%	72.1%									
	2018	27.7%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	27.4%	30.6%	28.7%	28.7%	29.0%	28.8%	28.9%	28.9%	29.0%	28.9%	
	2010	30.0%	31.6%	32.5%	31.7%	31.7%	31.6%	31.5%	31.5%	31.1%		
	2011	66.3%	72.6%	71.4%	70.6%	69.9%	69.9%	70.0%	70.0%			
	2012	66.3%	82.1%	78.2%	77.3%	76.3%	75.1%	75.0%				
	2013	41.7%	48.4%	47.1%	48.1%	48.7%	50.5%					
	2014	49.4%	57.7%	58.8%	57.8%	57.7%						
	2015	33.7%	44.3%	45.1%	45.0%							
	2016	44.8%	62.2%	60.5%								
	2017	70.2%	88.1%									
	2018	52.1%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	42.0%	36.4%	33.3%	30.8%	30.1%	29.3%	29.3%	29.2%	29.3%	28.9%	
	2010	50.0%	42.6%	40.5%	33.5%	32.0%	31.8%	31.7%	31.5%	31.3%		
	2011	87.3%	81.8%	76.6%	71.2%	70.8%	70.5%	70.6%	70.3%			
	2012	85.9%	88.0%	84.0%	79.5%	78.6%	77.4%	77.2%				
	2013	57.0%	55.6%	50.6%	49.9%	49.9%	51.7%					
	2014	64.0%	63.7%	61.9%	59.1%	59.0%						
	2015	49.8%	48.8%	46.9%	46.1%							
	2016	60.0%	64.2%	62.7%								
	2017	103.0%	94.6%									
	2018	70.2%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	127,198	(17,091)	(9,410)	(7,545)	(2,145)	(2,438)	199	(403)	280	(1,097)	(39,650)
	2010	184,900	(27,072)	(7,809)	(26,000)	(5,690)	(709)	(355)	(500)	(1,086)		(69,221)
	2011	370,936	(23,675)	(22,097)	(22,701)	(1,831)	(1,010)	401	(1,552)			(72,465)
	2012	411,179	9,673	(19,146)	(21,187)	(4,288)	(6,002)	(904)				(41,854)
	2013	324,824	(8,441)	(27,990)	(4,070)	(136)	10,436					(30,201)
	2014	384,281	(1,985)	(10,888)	(16,292)	(664)						(29,829)
	2015	293,949	(5,918)	(11,239)	(4,462)							(21,619)
	2016	360,781	25,067	(8,662)								16,405
	2017	808,000	(65,833)									(65,833)
	2018	741,904										—
												(354,267)
												Total Development CY 09 - 18'
	CY 2009	(65,192)	(51,737)	(57,036)	(63,919)	(47,783)	(68,327)	(52,295)	(34,784)	(324)	(74,261)	(515,658)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Marine

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,303,551	1,246,538	970,152	5,375	975,527	4,588	980,115	78.6%
2009	200,868	195,185	78,612	149	78,761	520	79,281	40.6%
2010	224,814	199,336	109,329	1,049	110,378	792	111,170	55.8%
2011	240,481	220,421	148,817	3,014	151,830	1,367	153,197	69.5%
2012	252,434	245,273	160,984	14,022	175,005	16,040	191,045	77.9%
2013	229,493	237,859	89,349	2,919	92,268	4,197	96,465	40.6%
2014	238,320	238,797	43,384	4,667	48,051	9,734	57,785	24.2%
2015	241,956	259,876	208,228	10,474	218,702	15,597	234,299	90.2%
2016	225,609	216,194	67,319	19,223	86,542	24,974	111,516	51.6%
2017	241,393	263,083	50,319	30,615	80,934	67,733	148,668	56.5%
2018	367,047	412,608	32,920	57,486	90,405	165,482	255,887	62.0%
	3,765,966	3,735,170	1,959,413	148,993	2,108,403	311,024	2,419,428	64.8%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	313,039	324,054	320,427	1,797	322,224	15	322,239	99.4%
2009	58,916	55,988	22,534	2	22,535	80	22,615	40.4%
2010	53,705	53,980	62,123	—	62,123	128	62,251	115.3%
2011	72,015	68,297	78,108	1,907	80,016	241	80,257	117.5%
2012	74,463	74,108	101,093	7,853	108,946	3,399	112,345	151.6%
2013	56,194	58,801	8,720	253	8,974	1,247	10,221	17.4%
2014	63,224	60,568	5,084	107	5,191	4,010	9,201	15.2%
2015	82,227	76,180	96,296	1,112	97,408	6,599	104,007	136.5%
2016	63,808	66,148	9,278	13,061	22,339	11,452	33,792	51.1%
2017	76,034	81,549	12,465	(412)	12,052	28,166	40,219	49.3%
2018	103,409	111,665	5,771	15,322	21,093	48,505	69,597	62.3%
	1,017,034	1,031,338	721,899	41,002	762,901	103,842	866,744	84.0%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	990,512	922,484	649,725	3,578	653,303	4,573	657,876	71.3%
2009	141,952	139,197	56,078	147	56,226	440	56,666	40.7%
2010	171,109	145,356	47,206	1,049	48,255	664	48,919	33.7%
2011	168,466	152,124	70,709	1,107	71,814	1,126	72,940	47.9%
2012	177,971	171,165	59,891	6,169	66,059	12,641	78,700	46.0%
2013	173,299	179,058	80,629	2,666	83,294	2,950	86,244	48.2%
2014	175,096	178,229	38,300	4,560	42,860	5,724	48,584	27.3%
2015	159,729	183,696	111,932	9,362	121,294	8,998	130,292	70.9%
2016	161,801	150,046	58,041	6,162	64,203	13,522	77,724	51.8%
2017	165,359	181,534	37,854	31,027	68,882	39,567	108,449	59.7%
2018	263,638	300,943	27,149	42,164	69,312	116,977	186,290	61.9%
	2,748,932	2,703,832	1,237,514	107,991	1,345,502	207,182	1,552,684	57.4%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Marine

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	20,970	34,406	44,255	47,596	49,819	50,503	53,264	53,658	54,081	56,079
	2010	18,545	29,631	34,849	44,282	47,266	48,119	49,279	47,107	47,206	
	2011	27,291	46,845	58,509	61,894	64,111	65,057	68,533	70,708		
	2012	11,611	41,236	48,098	53,440	54,456	57,226	59,890			
	2013	20,274	46,122	58,070	66,677	69,499	80,628				
	2014	6,527	15,950	28,414	29,017	38,300					
	2015	22,941	56,090	109,026	111,932						
	2016	12,976	32,527	58,041							
	2017	15,335	37,854								
	2018	27,149									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	46,689	56,131	57,089	56,654	57,024	56,182	57,083	56,953	56,962	56,226
	2010	34,928	46,912	48,871	50,300	49,503	49,849	50,960	48,572	48,256	
	2011	49,334	62,420	65,625	66,687	68,812	68,238	70,452	71,814		
	2012	50,254	63,675	64,750	66,440	66,503	66,441	66,059			
	2013	41,818	86,986	91,021	91,180	82,181	83,294				
	2014	21,374	29,306	41,356	39,349	42,860					
	2015	117,312	116,801	120,959	121,294						
	2016	45,397	59,868	64,203							
	2017	42,203	68,882								
	2018	69,313									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	39,341	23,650	18,492	13,171	5,296	3,735	1,503	695	678	440
	2010	35,612	25,927	20,158	5,424	4,182	993	(1,328)	773	664	
	2011	45,911	21,603	11,745	3,613	1,611	2,615	1,695	1,126		
	2012	43,795	23,645	8,609	9,489	10,593	13,517	12,641			
	2013	41,121	17,820	9,263	10,284	4,447	2,950				
	2014	40,058	16,792	9,133	7,506	5,724					
	2015	45,567	26,505	16,819	8,998						
	2016	42,593	20,295	13,521							
	2017	70,659	39,567								
	2018	116,977									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	86,030	79,781	75,581	69,826	62,320	59,918	58,586	57,647	57,640	56,666
	2010	70,540	72,838	69,029	55,724	53,685	50,842	49,633	49,345	48,919	
	2011	95,245	84,023	77,370	70,300	70,423	70,853	72,147	72,941		
	2012	94,049	87,320	73,359	75,928	77,096	79,958	78,700			
	2013	82,939	104,806	100,284	101,464	86,628	86,244				
	2014	61,431	46,098	50,489	46,855	48,584					
	2015	162,879	143,306	137,778	130,292						
	2016	87,990	80,163	77,724							
	2017	112,861	108,449								
	2018	186,290									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Marine

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	15.1%	24.7%	31.8%	34.2%	35.8%	36.3%	38.3%	38.5%	38.9%	40.3%	
	2010	12.8%	20.4%	24.0%	30.5%	32.5%	33.1%	33.9%	32.4%	32.5%		
	2011	17.9%	30.8%	38.5%	40.7%	42.1%	42.8%	45.1%	46.5%			
	2012	6.8%	24.1%	28.1%	31.2%	31.8%	33.4%	35.0%				
	2013	11.3%	25.8%	32.4%	37.2%	38.8%	45.0%					
	2014	3.7%	8.9%	15.9%	16.3%	21.5%						
	2015	12.5%	30.5%	59.4%	60.9%							
	2016	8.6%	21.7%	38.7%								
	2017	8.4%	20.9%									
	2018	9.0%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	33.5%	40.3%	41.0%	40.7%	41.0%	40.4%	41.0%	40.9%	40.9%	40.4%	
	2010	24.0%	32.3%	33.6%	34.6%	34.1%	34.3%	35.1%	33.4%	33.2%		
	2011	32.4%	41.0%	43.1%	43.8%	45.2%	44.9%	46.3%	47.2%			
	2012	29.4%	37.2%	37.8%	38.8%	38.9%	38.8%	38.6%				
	2013	23.4%	48.6%	50.8%	50.9%	45.9%	46.5%					
	2014	12.0%	16.4%	23.2%	22.1%	24.0%						
	2015	63.9%	63.6%	65.8%	66.0%							
	2016	30.3%	39.9%	42.8%								
	2017	23.2%	37.9%									
	2018	23.0%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	61.8%	57.3%	54.3%	50.2%	44.8%	43.0%	42.1%	41.4%	41.4%	40.7%	
	2010	48.5%	50.1%	47.5%	38.3%	36.9%	35.0%	34.1%	33.9%	33.7%		
	2011	62.6%	55.2%	50.9%	46.2%	46.3%	46.6%	47.4%	47.9%			
	2012	54.9%	51.0%	42.9%	44.4%	45.0%	46.7%	46.0%				
	2013	46.3%	58.5%	56.0%	56.7%	48.4%	48.2%					
	2014	34.5%	25.9%	28.3%	26.3%	27.3%						
	2015	88.7%	78.0%	75.0%	70.9%							
	2016	58.6%	53.4%	51.8%								
	2017	62.2%	59.7%									
	2018	61.9%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	86,030	(6,249)	(4,200)	(5,755)	(7,506)	(2,402)	(1,331)	(939)	(7)	(973)	(29,362)
	2010	70,540	2,298	(3,809)	(13,305)	(2,039)	(2,843)	(1,209)	(288)	(426)		(21,621)
	2011	95,245	(11,222)	(6,653)	(7,070)	123	430	1,294	794			(22,304)
	2012	94,049	(6,728)	(13,962)	2,569	1,168	2,862	(1,258)				(15,349)
	2013	82,939	21,867	(4,522)	1,180	(14,836)	(384)					3,305
	2014	61,431	(15,333)	4,391	(3,634)	1,729						(12,847)
	2015	162,879	(19,573)	(5,528)	(7,486)							(32,587)
	2016	87,990	(7,827)	(2,439)								(10,266)
	2017	112,861	(4,413)									(4,413)
	2018	186,290										—
												(145,444)
												(145,444)
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		(39,798)	(23,338)	(21,910)	(37,322)	(48,482)	(6,257)	(24,563)	(12,068)	(28,206)	(14,113)	(256,057)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Aviation

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,404,484	1,363,174	212,961	(8,601)	204,360	(2,110)	202,251	14.8 %
2009	76,198	67,087	14,725	142	14,867	42	14,909	22.2 %
2010	75,794	71,363	9,596	292	9,887	80	9,967	14.0 %
2011	70,792	77,401	6,825	765	7,589	216	7,805	10.1 %
2012	65,143	67,113	7,582	13	7,595	191	7,786	11.6 %
2013	43,326	55,540	14,673	845	15,518	274	15,792	28.4 %
2014	57,622	49,597	15,641	5,986	21,627	423	22,051	44.5 %
2015	54,642	56,724	24,441	6,605	31,046	1,629	32,675	57.6 %
2016	53,173	56,080	28,936	4,632	33,569	2,575	36,143	64.4 %
2017	83,906	90,770	45,088	15,226	60,314	10,102	70,416	77.6 %
2018	89,673	91,286	25,415	25,934	51,349	16,013	67,362	73.8 %
	2,074,753	2,046,135	405,883	51,839	457,721	29,435	487,157	23.8 %

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	99,769	68,502	2,591	(985)	1,606	(39)	1,567	2.3 %
2009	5,959	2,842	317	21	338	(1)	337	11.9 %
2010	(126)	4,727	847	(9)	838	—	838	17.7 %
2011	8,550	6,720	399	54	453	—	453	6.7 %
2012	7,415	6,750	—	12	13	—	13	0.2 %
2013	5,996	7,053	41	(32)	8	(1)	7	0.1 %
2014	6,668	8,405	(19)	(12)	(30)	—	(31)	(0.4)%
2015	12,241	11,066	37	2,206	2,243	469	2,711	24.5 %
2016	10,213	11,099	639	396	1,036	603	1,639	14.8 %
2017	17,858	15,663	4,221	1,275	5,496	2,000	7,497	47.9 %
2018	17,904	17,083	3,426	1,484	4,910	3,124	8,035	47.0 %
	192,447	159,910	12,499	4,410	16,911	6,155	23,066	14.4 %

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,304,715	1,294,672	210,370	(7,616)	202,754	(2,071)	200,684	15.5 %
2009	70,239	64,245	14,408	121	14,529	43	14,572	22.7 %
2010	75,920	66,636	8,749	301	9,049	80	9,129	13.7 %
2011	62,242	70,681	6,426	711	7,136	216	7,352	10.4 %
2012	57,728	60,363	7,582	1	7,582	191	7,773	12.9 %
2013	37,330	48,487	14,632	877	15,510	275	15,785	32.6 %
2014	50,954	41,192	15,660	5,998	21,657	423	22,082	53.6 %
2015	42,401	45,658	24,404	4,399	28,803	1,160	29,964	65.6 %
2016	42,960	44,981	28,297	4,236	32,533	1,972	34,504	76.7 %
2017	66,048	75,107	40,867	13,951	54,818	8,102	62,919	83.8 %
2018	71,769	74,203	21,989	24,450	46,439	12,889	59,327	80.0 %
	1,882,306	1,886,225	393,384	47,429	440,810	23,280	464,091	24.6 %

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Aviation

NET BASIS

Paid Losses	Months									
	12	24	36	48	60	72	84	96	108	120
2009	2,431	3,990	7,505	13,368	14,517	14,888	14,863	14,409	14,394	14,407
2010	1,104	4,271	6,485	7,081	7,767	7,903	8,363	8,469	8,749	
2011	673	2,901	4,617	5,160	5,725	5,989	6,216	6,426		
2012	990	2,927	4,255	6,136	7,126	7,449	7,581			
2013	4,433	7,454	9,967	11,746	13,943	14,632				
2014	4,277	8,490	12,283	14,795	15,660					
2015	8,341	16,537	21,839	24,404						
2016	10,647	20,361	28,297							
2017	21,526	40,867								
2018	21,989									

Case Incurred Losses	Months									
	12	24	36	48	60	72	84	96	108	120
2009	9,301	10,854	17,138	17,430	16,778	16,909	15,768	15,144	14,949	14,529
2010	3,157	7,234	7,975	8,175	8,273	8,546	8,751	8,636	9,049	
2011	2,609	4,707	5,816	6,137	7,006	7,027	7,148	7,136		
2012	3,292	5,512	6,967	7,660	7,581	7,661	7,582			
2013	6,691	12,257	13,854	14,552	15,319	15,510				
2014	14,433	18,949	22,005	21,253	21,658					
2015	18,257	23,887	27,745	28,804						
2016	19,482	29,429	32,533							
2017	37,245	54,817								
2018	46,439									

IBNR	Months									
	12	24	36	48	60	72	84	96	108	120
2009	8,515	4,293	2,285	1,333	804	365	356	189	76	42
2010	10,023	4,748	3,737	1,849	751	417	263	131	80	
2011	15,445	10,987	7,227	3,600	1,633	456	232	216		
2012	9,805	5,465	4,115	1,394	512	318	192			
2013	9,165	4,325	1,666	1,046	533	274				
2014	6,483	4,721	3,086	994	424					
2015	12,085	5,186	2,447	1,161						
2016	10,196	4,633	1,972							
2017	19,068	8,102								
2018	12,889									

Ultimate Losses	Months									
	12	24	36	48	60	72	84	96	108	120
2009	17,816	15,146	19,424	18,764	17,582	17,274	16,124	15,333	15,025	14,571
2010	13,180	11,983	11,712	10,024	9,024	8,963	9,014	8,767	9,129	
2011	18,053	15,694	13,043	9,737	8,639	7,482	7,381	7,352		
2012	13,097	10,977	11,082	9,054	8,093	7,979	7,774			
2013	15,856	16,582	15,521	15,598	15,852	15,784				
2014	20,917	23,670	25,091	22,247	22,081					
2015	30,342	29,073	30,192	29,964						
2016	29,678	34,062	34,505							
2017	56,313	62,919								
2018	59,328									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Aviation

NET BASIS

Months											
Paid Loss Ratio	12	24	36	48	60	72	84	96	108	120	
2009	3.8%	6.2%	11.7%	20.8%	22.6%	23.2%	23.1%	22.4%	22.4%	22.4%	
2010	1.7%	6.4%	9.7%	10.6%	11.7%	11.9%	12.6%	12.7%	13.1%		
2011	1.0%	4.1%	6.5%	7.3%	8.1%		8.5%	9.1%			
2012	1.6%	4.8%	7.0%	10.2%	11.8%	12.3%	12.6%				
2013	9.1%	15.4%	20.6%	24.2%	28.8%	30.2%					
2014	10.4%	20.6%	29.8%	35.9%	38.0%						
2015	18.3%	36.2%	47.8%	53.4%							
2016	23.7%	45.3%	62.9%								
2017	51.5%	97.9%									
2018	29.6%										

Months											
Case Incurred Loss Ratio	12	24	36	48	60	72	84	96	108	120	
2009	14.5%	16.9%	26.7%	27.1%	26.1%	26.3%	24.5%	23.6%	23.3%	22.6%	
2010	4.7%	10.9%	12.0%	12.3%	12.4%	12.8%	13.1%	13.0%	13.6%		
2011	3.7%	6.7%	8.2%	8.7%	9.9%	9.9%	10.1%	10.1%			
2012	5.5%	9.1%	11.5%	12.7%	12.6%	12.7%	12.6%				
2013	13.8%	25.3%	28.6%	30.0%	31.6%	32.0%					
2014	35.0%	46.0%	53.4%	51.6%	52.6%						
2015	40.0%	52.3%	60.8%	63.1%							
2016	43.3%	65.4%	72.3%								
2017	89.2%	131.3%									
2018	62.6%										

Months											
Ultimate Loss Ratio	12	24	36	48	60	72	84	96	108	120	
2009	27.7%	23.6%	30.2%	29.2%	27.4%	26.9%	25.1%	23.9%	23.4%	22.7%	
2010	19.8%	18.0%	17.6%	15.0%	13.5%	13.5%	13.5%	13.2%	13.7%		
2011	25.5%	22.2%	18.5%	13.8%	12.2%	10.6%	10.4%	10.4%			
2012	21.7%	18.2%	18.4%	15.0%	13.4%	13.2%	12.9%				
2013	32.7%	34.2%	32.0%	32.2%	32.7%	32.6%					
2014	50.8%	57.5%	60.9%	54.0%	53.6%						
2015	66.5%	63.7%	66.1%	65.6%							
2016	66.0%	75.7%	76.7%								
2017	134.9%	150.7%									
2018	80.0%										

Months											
Loss Emergence	12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
2009	17,816	(2,669)	4,277	(660)	(1,181)	(308)	(1,151)	(790)	(308)	(454)	(3,244)
2010	13,180	(1,198)	(271)	(1,688)	(1,000)	(60)	51	(247)	362		(4,051)
2011	18,053	(2,359)	(2,651)	(3,306)	(1,098)	(1,156)	(102)	(28)			(10,700)
2012	13,097	(2,119)	105	(2,028)	(961)	(114)	(205)				(5,322)
2013	15,856	726	(1,061)	78	254	(68)					(71)
2014	20,917	2,754	1,420	(2,843)	(166)						1,165
2015	30,342	(1,269)	1,120	(228)							(377)
2016	29,678	4,383	443								4,826
2017	56,313	6,606									6,606
2018	59,328										—
											(11,168)
											(11,168)

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
	(13,207)	(11,995)	(9,842)	(5,017)	(15,349)	(9,076)	(2,429)	(3,113)	1,265	2,938	(65,825)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance

Credit and Political Risk

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,019,999	494,567	49,215	(1,694)	47,521	220	47,740	9.7 %
2009	19,450	188,311	342,106	(3,737)	338,368	3,598	341,967	181.6 %
2010	30,669	89,773	102,821	(4,415)	98,406	1,270	99,676	111.0 %
2011	35,734	97,680	27,695	—	27,695	272	27,967	28.6 %
2012	39,405	87,102	53	—	53	157	210	0.2 %
2013	60,203	69,482	13,854	(5,520)	8,334	5,813	14,147	20.4 %
2014	45,368	64,381	57,918	10,595	68,513	1,237	69,750	108.3 %
2015	59,967	65,387	23,328	—	23,328	2,707	26,035	39.8 %
2016	49,930	62,744	24,831	—	24,831	18,105	42,936	68.4 %
2017	91,316	71,333	7,585	484	8,069	20,588	28,657	40.2 %
2018	190,433	139,043	5,838	(476)	5,362	52,672	58,034	41.7 %
	1,642,474	1,429,803	655,244	(4,763)	650,480	106,639	757,119	53.0 %

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	9,828	12,629	—	—	—	—	—	— %
2009	—	—	—	—	—	—	—	N/A
2010	—	—	—	—	—	—	—	N/A
2011	—	—	—	—	—	—	—	N/A
2012	—	—	—	—	—	—	—	N/A
2013	5,144	1,290	—	—	—	—	—	0.0 %
2014	—	1,286	—	—	—	—	—	— %
2015	6,617	1,803	—	—	—	(26)	(26)	(1.4)%
2016	20,685	4,781	—	—	—	133	133	2.8 %
2017	33,054	14,900	5,273	107	5,380	(4,446)	934	6.3 %
2018	54,357	36,217	304	21	325	13,539	13,864	38.3 %
	129,685	72,906	5,577	128	5,705	9,200	14,905	20.4 %

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,010,171	481,938	49,215	(1,694)	47,521	220	47,740	9.9 %
2009	19,450	188,311	342,106	(3,737)	338,368	3,598	341,967	181.6 %
2010	30,669	89,773	102,821	(4,415)	98,406	1,270	99,676	111.0 %
2011	35,734	97,680	27,695	—	27,695	272	27,967	28.6 %
2012	39,405	87,102	53	—	53	157	210	0.2 %
2013	55,059	68,192	13,854	(5,520)	8,334	5,813	14,147	20.7 %
2014	45,368	63,095	57,918	10,595	68,513	1,237	69,750	110.5 %
2015	53,350	63,584	23,328	—	23,328	2,733	26,061	41.0 %
2016	29,245	57,963	24,831	—	24,831	17,972	42,803	73.8 %
2017	58,262	56,433	2,312	377	2,689	25,034	27,723	49.1 %
2018	136,076	102,826	5,534	(497)	5,037	39,133	44,170	43.0 %
	1,512,789	1,356,897	649,667	(4,891)	644,775	97,439	742,214	54.7 %

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Credit and Political Risk

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	93,296	345,202	346,865	346,939	342,310	346,256	346,256	346,319	342,106	342,106
	2010	50,038	85,529	90,885	106,964	101,988	102,163	102,372	102,464	102,821	
	2011	32,821	37,264	27,695	27,695	27,695	27,695	27,695	27,695		
	2012	1	1	1	1	48	50	53			
	2013	745	2,235	3,752	5,242	11,796	13,854				
	2014	1,924	39,977	61,152	57,902	57,918					
	2015	—	23,328	23,328	23,328						
	2016	27	24,831	24,831							
	2017	399	2,312								
	2018	5,534									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	90,975	254,903	302,773	320,097	323,583	323,506	323,506	338,582	338,368	338,368
	2010	10,038	45,293	55,018	60,749	60,773	64,301	65,419	77,949	98,406	
	2011	9,836	21,355	27,695	27,695	27,695	27,695	27,695	27,695		
	2012	1	1	1	1	48	50	53			
	2013	8,280	8,280	8,306	8,306	8,306	8,334				
	2014	15,848	62,623	57,906	57,902	68,513					
	2015	5,350	23,328	23,328	23,328						
	2016	26,167	24,831	24,831							
	2017	3,914	2,689								
	2018	5,036									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	159,926	50,344	23,553	15,994	12,467	12,500	12,521	1,740	2,015	3,598
	2010	52,604	17,659	7,979	4,418	4,406	926	6,900	13,015	1,270	
	2011	48,737	27,544	20,376	20,880	20,850	17,511	6,063	272		
	2012	33,099	15,911	12,457	12,457	10,287	5	157			
	2013	18,437	17,572	1,572	1,647	6,736	5,813				
	2014	23,427	8,416	9,326	10,623	1,237					
	2015	25,373	7,157	4,279	2,733						
	2016	19,723	20,508	17,972							
	2017	26,323	25,034								
	2018	39,133									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	250,901	305,247	326,326	336,092	336,050	336,007	336,027	340,322	340,383	341,967
	2010	62,642	62,951	62,997	65,166	65,179	65,226	72,319	90,964	99,676	
	2011	58,573	48,899	48,071	48,575	48,545	45,206	33,758	27,967		
	2012	33,100	15,912	12,458	12,458	10,335	55	210			
	2013	26,717	25,852	9,878	9,953	15,042	14,147				
	2014	39,275	71,039	67,232	68,525	69,750					
	2015	30,723	30,485	27,606	26,061						
	2016	45,890	45,339	42,803							
	2017	30,237	27,724								
	2018	44,169									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Credit and Political Risk

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	49.5%	183.3%	184.2%	184.2%	181.8%	183.9%	183.9%	183.9%	181.7%	181.7%	
	2010	55.7%	95.3%	101.2%	119.1%	113.6%	113.8%	114.0%	114.1%	114.5%		
	2011	33.6%	38.1%	28.4%	28.4%	28.4%	28.4%	28.4%	28.4%			
	2012	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%				
	2013	1.1%	3.3%	5.5%	7.7%	17.3%	20.3%					
	2014	3.0%	63.4%	96.9%	91.8%	91.8%						
	2015	—%	36.7%	36.7%	36.7%							
	2016	0.0%	42.8%	42.8%								
	2017	0.7%	4.1%									
	2018	5.4%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	48.3%	135.4%	160.8%	170.0%	171.8%	171.8%	171.8%	179.8%	179.7%	179.7%	
	2010	11.2%	50.5%	61.3%	67.7%	67.7%	71.6%	72.9%	86.8%	109.6%		
	2011	10.1%	21.9%	28.4%	28.4%	28.4%	28.4%	28.4%	28.4%			
	2012	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%				
	2013	12.1%	12.1%	12.2%	12.2%	12.2%	12.2%					
	2014	25.1%	99.3%	91.8%	91.8%	108.6%						
	2015	8.4%	36.7%	36.7%	36.7%							
	2016	45.1%	42.8%	42.8%								
	2017	6.9%	4.8%									
	2018	4.9%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	133.2%	162.1%	173.3%	178.5%	178.5%	178.4%	178.4%	180.7%	180.8%	181.6%	
	2010	69.8%	70.1%	70.2%	72.6%	72.6%	72.7%	80.6%	101.3%	111.0%		
	2011	60.0%	50.1%	49.2%	49.7%	49.7%	46.3%	34.6%	28.6%			
	2012	38.0%	18.3%	14.3%	14.3%	11.9%	0.1%	0.2%				
	2013	39.2%	37.9%	14.5%	14.6%	22.1%	20.7%					
	2014	62.2%	112.6%	106.6%	108.6%	110.5%						
	2015	48.3%	47.9%	43.4%	41.0%							
	2016	79.2%	78.2%	73.8%								
	2017	53.6%	49.1%									
	2018	43.0%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	250,901	54,346	21,079	9,766	(41)	(44)	20	4,295	62	1,583	91,066
	2010	62,642	309	46	2,169	13	47	7,093	18,645	8,712		37,034
	2011	58,573	(9,674)	(828)	504	(30)	(3,339)	(11,448)	(5,791)			(30,606)
	2012	33,100	(17,188)	(3,454)	—	(2,123)	(10,280)	155				(32,890)
	2013	26,717	(865)	(15,974)	75	5,089	(895)					(12,570)
	2014	39,275	31,764	(3,806)	1,292	1,225						30,475
	2015	30,723	(238)	(2,878)	(1,546)							(4,662)
	2016	45,890	(551)	(2,537)								(3,088)
	2017	30,237	(2,514)									(2,514)
	2018	44,169										—
											72,245	
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		(35,438)	18,414	13,764	143	(13,136)	(3,740)	15,435	242	(70)	(1,606)	(5,992)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Professional Lines

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	2,624,217	2,265,458	1,313,275	44,938	1,358,213	29,419	1,387,632	61.3%
2009	671,618	632,816	390,026	50,650	440,676	25,865	466,541	73.7%
2010	712,053	677,839	276,794	59,500	336,294	40,297	376,591	55.6%
2011	764,205	735,301	454,064	54,231	508,295	63,422	571,717	77.8%
2012	836,634	799,418	437,355	58,813	496,167	108,737	604,904	75.7%
2013	900,071	865,886	398,518	78,569	477,087	156,613	633,699	73.2%
2014	862,784	871,206	357,521	64,998	422,519	205,689	628,207	72.1%
2015	850,011	851,796	256,644	99,711	356,355	233,587	589,942	69.3%
2016	845,358	837,310	247,049	94,104	341,153	269,616	610,769	72.9%
2017	929,336	905,623	114,000	99,535	213,535	433,583	647,118	71.5%
2018	1,122,120	1,071,986	39,761	65,559	105,320	594,457	699,777	65.3%
	11,118,407	10,514,639	4,285,007	770,608	5,055,614	2,161,285	7,216,897	68.6%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,069,241	925,333	563,400	17,777	581,177	9,657	590,834	63.9%
2009	274,575	251,453	166,939	16,493	183,433	9,797	193,230	76.8%
2010	190,160	233,176	115,406	23,443	138,850	13,571	152,421	65.4%
2011	206,314	199,063	125,360	22,447	147,807	16,205	164,012	82.4%
2012	276,559	235,918	131,844	16,500	148,344	30,814	179,158	75.9%
2013	259,845	279,686	125,809	28,867	154,676	50,146	204,821	73.2%
2014	246,807	241,841	107,028	21,207	128,235	51,352	179,588	74.3%
2015	283,086	255,366	73,811	33,582	107,393	68,638	176,031	68.9%
2016	358,191	326,504	90,485	36,417	126,903	101,522	228,425	70.0%
2017	393,031	377,842	39,841	38,766	78,606	181,661	260,267	68.9%
2018	497,224	485,105	16,616	32,810	49,426	268,806	318,232	65.6%
	4,055,033	3,811,287	1,556,539	288,309	1,844,850	802,169	2,647,019	69.5%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,554,976	1,340,125	749,875	27,161	777,036	19,762	796,798	59.5%
2009	397,043	381,363	223,087	34,157	257,243	16,068	273,311	71.7%
2010	521,893	444,663	161,388	36,057	197,444	26,726	224,170	50.4%
2011	557,891	536,238	328,704	31,784	360,488	47,217	407,705	76.0%
2012	560,075	563,500	305,511	42,313	347,823	77,923	425,746	75.6%
2013	640,226	586,200	272,709	49,702	322,411	106,467	428,878	73.2%
2014	615,977	629,365	250,493	43,791	294,284	154,337	448,619	71.3%
2015	566,925	596,430	182,833	66,129	248,962	164,949	413,911	69.4%
2016	487,167	510,806	156,564	57,687	214,250	168,094	382,344	74.9%
2017	536,305	527,781	74,159	60,769	134,929	251,922	386,851	73.3%
2018	624,896	586,881	23,145	32,749	55,894	325,651	381,545	65.0%
	7,063,374	6,703,352	2,728,468	482,299	3,210,764	1,359,116	4,569,878	68.2%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Professional Lines

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	11,825	36,499	63,769	92,866	125,254	138,785	159,025	202,350	215,411	223,086
	2010	9,240	34,222	63,606	86,888	106,774	120,432	131,933	137,574	161,388	
	2011	10,965	42,152	89,887	132,574	195,023	270,379	316,882	328,704		
	2012	10,591	52,975	119,856	211,958	260,764	285,332	305,511			
	2013	20,438	82,355	148,971	199,856	239,892	272,709				
	2014	29,901	84,993	150,332	216,063	250,493					
	2015	22,823	74,292	148,705	182,833						
	2016	17,570	76,358	156,564							
	2017	22,567	74,160								
	2018	23,145									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	25,274	75,316	115,706	137,336	199,497	201,191	237,238	238,712	250,492	257,243
	2010	25,421	67,259	99,890	118,665	125,119	136,623	167,876	169,324	197,444	
	2011	37,997	125,139	207,952	225,642	271,183	323,012	343,163	360,488		
	2012	46,113	148,631	226,104	282,426	318,020	339,055	347,823			
	2013	50,178	138,481	212,455	261,258	293,698	322,411				
	2014	82,976	152,368	229,715	267,992	294,283					
	2015	50,064	132,042	213,593	248,962						
	2016	38,035	137,003	214,251							
	2017	47,994	134,929								
	2018	55,894									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	250,435	210,627	171,983	149,277	98,557	77,812	45,323	19,738	16,526	16,068
	2010	246,429	212,325	176,578	121,841	88,631	55,158	48,866	34,145	26,726	
	2011	329,455	245,854	184,509	154,642	114,451	76,485	64,132	47,218		
	2012	335,432	289,452	211,794	163,884	117,287	99,406	77,923			
	2013	394,301	323,592	257,936	174,038	131,920	106,467				
	2014	393,796	335,558	271,376	201,233	154,336					
	2015	383,503	303,711	227,149	164,949						
	2016	335,952	239,454	168,094							
	2017	319,933	251,922								
	2018	325,651									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	275,709	285,943	287,690	286,613	298,054	279,004	282,561	258,450	267,018	273,311
	2010	271,850	279,584	276,469	240,506	213,750	191,782	216,743	203,469	224,170	
	2011	367,452	370,993	392,460	380,284	385,634	399,497	407,295	407,705		
	2012	381,545	438,083	437,898	446,309	435,307	438,461	425,746			
	2013	444,479	462,073	470,391	435,296	425,618	428,878				
	2014	476,772	487,927	501,091	469,225	448,620					
	2015	433,567	435,753	440,742	413,911						
	2016	373,987	376,458	382,345							
	2017	367,928	386,851								
	2018	381,545									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Professional Lines

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	3.1%	9.6%	16.7%	24.4%	32.8%	36.4%	41.7%	53.1%	56.5%	58.5%	
	2010	2.1%	7.7%	14.3%	19.5%	24.0%	27.1%	29.7%	30.9%	36.3%		
	2011	2.0%	7.9%	16.8%	24.7%	36.4%	50.4%	59.1%	61.3%			
	2012	1.9%	9.4%	21.3%	37.6%	46.3%	50.6%	54.2%				
	2013	3.5%	14.0%	25.4%	34.1%	40.9%	46.5%					
	2014	4.8%	13.5%	23.9%	34.3%	39.8%						
	2015	3.8%	12.5%	24.9%	30.7%							
	2016	3.4%	14.9%	30.7%								
	2017	4.3%	14.1%									
	2018	3.9%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	6.6%	19.7%	30.3%	36.0%	52.3%	52.8%	62.2%	62.6%	65.7%	67.5%	
	2010	5.7%	15.1%	22.5%	26.7%	28.1%	30.7%	37.8%	38.1%	44.4%		
	2011	7.1%	23.3%	38.8%	42.1%	50.6%	60.2%	64.0%	67.2%			
	2012	8.2%	26.4%	40.1%	50.1%	56.4%	60.2%	61.7%				
	2013	8.6%	23.6%	36.2%	44.6%	50.1%	55.0%					
	2014	13.2%	24.2%	36.5%	42.6%	46.8%						
	2015	8.4%	22.1%	35.8%	41.7%							
	2016	7.4%	26.8%	41.9%								
	2017	9.1%	25.6%									
	2018	9.5%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	72.3%	75.0%	75.4%	75.2%	78.2%	73.2%	74.1%	67.8%	70.0%	71.7%	
	2010	61.1%	62.9%	62.2%	54.1%	48.1%	43.1%	48.7%	45.8%	50.4%		
	2011	68.5%	69.2%	73.2%	70.9%	71.9%	74.5%	76.0%	76.0%			
	2012	67.7%	77.7%	77.7%	79.2%	77.3%	77.8%	75.6%				
	2013	75.8%	78.8%	80.2%	74.3%	72.6%	73.2%					
	2014	75.8%	77.5%	79.6%	74.6%	71.3%						
	2015	72.7%	73.1%	73.9%	69.4%							
	2016	73.2%	73.7%	74.9%								
	2017	69.7%	73.3%									
	2018	65.0%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	275,709	10,234	1,746	(1,076)	11,440	(19,050)	3,557	(24,111)	8,568	6,293	(2,399)
	2010	271,850	7,734	(3,115)	(35,963)	(26,756)	(21,968)	24,961	(13,274)	20,702		(47,679)
	2011	367,452	3,540	21,467	(12,176)	5,351	13,862	7,798	410			40,252
	2012	381,545	56,538	(185)	8,411	(11,002)	3,154	(12,715)				44,201
	2013	444,479	17,594	8,318	(35,095)	(9,678)	3,260					(15,601)
	2014	476,772	11,155	13,164	(31,867)	(20,605)						(28,153)
	2015	433,567	2,186	4,989	(26,831)							(19,656)
	2016	373,987	2,470	5,887								8,357
	2017	367,928	18,923									18,923
	2018	381,545										—
												(1,755)
												Total Development CY 09 - 18'
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	
		(73,176)	(56,991)	(48,646)	(19,458)	50,882	807	13,791	(14,005)	(26,248)	(28,913)	(201,957)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

**Insurance
Liability**

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,417,360	1,304,231	769,761	7,926	777,686	85,621	863,307	66.2%
2009	219,869	224,859	160,979	3,456	164,435	28,844	193,279	86.0%
2010	228,247	225,630	221,078	17,168	238,246	31,058	269,304	119.4%
2011	213,256	220,772	134,807	10,501	145,308	41,241	186,549	84.5%
2012	266,696	229,556	111,051	7,597	118,648	62,401	181,048	78.9%
2013	347,227	297,428	192,814	24,049	216,863	57,876	274,739	92.4%
2014	368,450	357,401	219,006	43,594	262,600	80,786	343,385	96.1%
2015	384,145	377,802	203,945	63,670	267,615	132,481	400,096	105.9%
2016	405,030	396,160	82,493	38,236	120,729	184,116	304,845	76.9%
2017	478,811	457,768	84,241	46,630	130,871	240,062	370,933	81.0%
2018	562,480	544,711	14,689	24,193	38,882	364,095	402,977	74.0%
	4,891,571	4,636,318	2,194,864	287,020	2,481,883	1,308,581	3,790,462	81.8%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	737,378	661,463	329,122	446	329,567	49,536	379,104	57.3%
2009	137,019	142,573	70,784	1,172	71,956	19,017	90,973	63.8%
2010	133,290	138,149	128,065	12,135	140,200	18,755	158,955	115.1%
2011	128,754	131,217	70,762	7,384	78,146	23,303	101,449	77.3%
2012	176,318	142,683	63,293	4,864	68,157	38,376	106,533	74.7%
2013	206,630	186,804	121,979	16,739	138,717	35,288	174,006	93.1%
2014	212,869	210,582	131,940	27,570	159,510	47,876	207,386	98.5%
2015	211,508	216,186	107,148	44,991	152,139	76,504	228,643	105.8%
2016	241,293	226,978	45,026	20,236	65,262	106,922	172,184	75.9%
2017	278,611	266,753	54,788	24,306	79,094	138,074	217,168	81.4%
2018	318,513	303,789	4,824	7,817	12,641	216,443	229,084	75.4%
	2,782,183	2,627,177	1,127,731	167,660	1,295,389	770,094	2,065,485	78.6%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	679,982	642,768	440,639	7,480	448,119	36,085	484,203	75.3%
2009	82,850	82,286	90,195	2,284	92,479	9,827	102,306	124.3%
2010	94,957	87,481	93,013	5,033	98,046	12,303	110,349	126.1%
2011	84,502	89,555	64,045	3,117	67,162	17,938	85,100	95.0%
2012	90,378	86,873	47,758	2,733	50,491	24,025	74,515	85.8%
2013	140,597	110,624	70,835	7,310	78,146	22,588	100,733	91.1%
2014	155,581	146,819	87,066	16,024	103,090	32,910	135,999	92.6%
2015	172,637	161,616	96,797	18,679	115,476	55,977	171,453	106.1%
2016	163,737	169,182	37,467	18,000	55,467	77,194	132,661	78.4%
2017	200,200	191,015	29,453	22,324	51,777	101,988	153,765	80.5%
2018	243,967	240,922	9,865	16,376	26,241	147,652	173,893	72.2%
	2,109,388	2,009,141	1,067,133	119,360	1,186,494	538,487	1,724,977	85.9%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Liability

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	1,965	6,094	14,970	28,538	34,058	44,039	46,946	87,184	88,182	90,196
	2010	1,690	17,433	32,363	56,075	63,945	69,109	76,414	91,349	93,013	
	2011	2,888	10,753	20,948	39,851	47,713	56,784	62,080	64,045		
	2012	1,695	5,799	15,886	30,903	38,023	43,886	47,758			
	2013	3,279	25,291	35,986	44,880	63,501	70,835				
	2014	1,911	20,229	52,019	74,058	87,066					
	2015	5,662	24,270	42,988	96,796						
	2016	6,607	23,925	37,467							
	2017	5,160	29,453								
	2018	9,865									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	8,566	17,169	32,750	38,391	45,136	49,392	52,535	89,764	91,311	92,479
	2010	8,884	45,955	61,648	66,460	71,571	75,712	94,040	97,309	98,046	
	2011	7,522	20,677	38,662	50,704	60,018	65,331	64,720	67,162		
	2012	5,434	12,619	26,776	40,313	45,617	48,660	50,491			
	2013	11,189	32,327	47,841	54,316	72,405	78,146				
	2014	12,587	50,549	74,940	91,318	103,090					
	2015	14,498	44,650	77,752	115,475						
	2016	15,678	39,306	55,467							
	2017	14,002	51,777								
	2018	26,241									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	57,334	51,455	39,162	33,808	35,903	38,245	53,203	12,500	11,464	9,827
	2010	74,361	53,312	41,639	36,930	32,724	26,921	17,145	13,431	12,303	
	2011	67,832	57,211	48,250	39,939	28,518	21,427	20,015	17,939		
	2012	68,397	62,103	49,697	33,219	24,797	28,947	24,025			
	2013	85,272	67,380	51,798	37,976	25,794	22,587				
	2014	98,317	78,651	59,488	43,466	32,910					
	2015	118,297	87,794	65,897	55,977						
	2016	112,745	94,790	77,194							
	2017	136,543	101,989								
	2018	147,652									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	65,900	68,624	71,912	72,200	81,039	87,637	105,738	102,264	102,775	102,306
	2010	83,245	99,268	103,286	103,390	104,295	102,633	111,184	110,740	110,349	
	2011	75,354	77,888	86,912	90,643	88,536	86,758	84,735	85,101		
	2012	73,831	74,722	76,472	73,532	70,413	77,607	74,516			
	2013	96,461	99,707	99,639	92,292	98,199	100,733				
	2014	110,905	129,200	134,428	134,784	136,000					
	2015	132,795	132,444	143,649	171,453						
	2016	128,423	134,095	132,661							
	2017	150,545	153,766								
	2018	173,893									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Insurance
Liability

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	2.4%	7.4%	18.2%	34.7%	41.4%	53.5%	57.1%	106.0%	107.2%	109.6%	
	2010	1.9%	19.9%	37.0%	64.1%	73.1%	79.0%	87.3%	104.4%	106.3%		
	2011	3.2%	12.0%	23.4%	44.5%	53.3%	63.4%	69.3%	71.5%			
	2012	2.0%	6.7%	18.3%	35.6%	43.8%	50.5%	55.0%				
	2013	3.0%	22.9%	32.5%	40.6%	57.4%	64.0%					
	2014	1.3%	13.8%	35.4%	50.4%	59.3%						
	2015	3.5%	15.0%	26.6%	59.9%							
	2016	3.9%	14.1%	22.1%								
	2017	2.7%	15.4%									
	2018	4.1%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	10.4%	20.9%	39.8%	46.7%	54.9%	60.0%	63.8%	109.1%	111.0%	112.4%	
	2010	10.2%	52.5%	70.5%	76.0%	81.8%	86.5%	107.5%	111.2%	112.1%		
	2011	8.4%	23.1%	43.2%	56.6%	67.0%	73.0%	72.3%	75.0%			
	2012	6.3%	14.5%	30.8%	46.4%	52.5%	56.0%	58.1%				
	2013	10.1%	29.2%	43.2%	49.1%	65.5%	70.6%					
	2014	8.6%	34.4%	51.0%	62.2%	70.2%						
	2015	9.0%	27.6%	48.1%	71.5%							
	2016	9.3%	23.2%	32.8%								
	2017	7.3%	27.1%									
	2018	10.9%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	80.1%	83.4%	87.4%	87.7%	98.5%	106.5%	128.5%	124.3%	124.9%	124.3%	
	2010	95.2%	113.5%	118.1%	118.2%	119.2%	117.3%	127.1%	126.6%	126.1%		
	2011	84.1%	87.0%	97.0%	101.2%	98.9%	96.9%	94.6%	95.0%			
	2012	85.0%	86.0%	88.0%	84.6%	81.1%	89.3%	85.8%				
	2013	87.2%	90.1%	90.1%	83.4%	88.8%	91.1%					
	2014	75.5%	88.0%	91.6%	91.8%	92.6%						
	2015	82.2%	82.0%	88.9%	106.1%							
	2016	75.9%	79.3%	78.4%								
	2017	78.8%	80.5%									
	2018	72.2%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	65,900	2,723	3,288	287	8,840	6,598	18,101	(3,474)	511	(469)	36,405
	2010	83,245	16,023	4,019	104	906	(1,663)	8,552	(445)	(391)		27,105
	2011	75,354	2,534	9,025	3,730	(2,106)	(1,778)	(2,022)	365			9,748
	2012	73,831	891	1,751	(2,940)	(3,119)	7,194	(3,091)				686
	2013	96,461	3,246	(68)	(7,347)	5,907	2,534					4,272
	2014	110,905	18,295	5,228	356	1,216						25,095
	2015	132,795	(350)	11,204	27,804							38,658
	2016	128,423	5,673	(1,434)								4,239
	2017	150,545	3,220									3,220
	2018	173,893										—
												149,428
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		15,981	7,224	20,634	3,406	23,043	22,861	26,578	7,823	7,773	22,535	157,858

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VI. REINSURANCE SEGMENT

i) Reserving Class Descriptions

The following provides background commentary on the underlying business composition in each reserving class and how this has changed over time.

Property and Other

- This class includes catastrophe reinsurance which provides protection for catastrophic losses in the underlying insurance written by our cedants. The underlying policies principally cover property exposures against such perils as hurricane and windstorm, earthquake, flood, tornado, hail and fire. In some instances, terrorism may be a covered peril or the only peril. Other underlying coverages, written on a multi-claimant basis, include workers' compensation and personal accident.
- The Property and Other class also includes property reinsurance written on both a proportional and a per-risk excess of loss basis and covers underlying personal lines and commercial property exposures. While our predominant exposure is to property damage, other risks, including business interruption and other non-property losses, may also be covered when arising from a covered peril. Our most significant exposure typically relates to losses from windstorms, tornadoes and earthquakes but we are also exposed to other perils such as freezes, riots, floods, industrial explosions, fires, hail and a number of other loss events.
- The U.S. property catastrophe market experienced generally hard market conditions during the period from 2002 through 2003 before beginning to weaken slightly in 2004. A relatively stable pricing environment for the 2005 renewal season was followed by significant rate increases in 2006, as a result of Hurricane Katrina and revisions to pricing models. The downward pressure on rates over the next 24 months as a result of relatively benign loss experience was again followed by a modest hardening of the markets towards the end of 2008 as a result of Hurricanes Ike and Gustav together with the global financial crisis. Pricing trends in the international property catastrophe market generally followed a similar pattern. However, the absence of significant large losses during this period meant that the pricing cycle, and in particular the market hardening in 2002 and 2006, was generally less pronounced than that observed for the U.S. market.
- The 2011 accident year was impacted by a high frequency of natural catastrophes including the earthquakes in New Zealand, the earthquake & tsunami in Japan, flooding in Thailand and a series of storms in the U.S. Midwest. The impact of these losses together with the introduction of updated catastrophe models led to some pricing improvements during the second half of 2011. Rates remained broadly flat through the remainder of 2012. The 2012 accident year was impacted by SuperStorm Sandy leading to rate increases on loss impacted treaties. From the latter half of 2013 onwards rate decreases were observed across most property lines, most significantly on Property Catastrophe treaties. Due to benign catastrophe experience and an overabundance of capacity from both traditional and alternative sources, softening market conditions persisted across global property lines through to 2017.
- From an aggregated insured loss perspective, 2017 was one of the highest catastrophe years on record, with industry insured losses well in excess of \$100B. This resulted in rate increases on lines and regions most impacted by these losses. 2018 had estimated industry insured losses of \$71B in respect of natural peril catastrophe losses. The elevated catastrophe losses in 2017 and 2018 compared with the previous four years led to some limited rate strengthening in loss impacted geographical regions.
- Other predominantly short tail reinsurance exposures also included in this class are:

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- **Engineering:** This line of business comprises non-proportional and proportional treaties that provide coverage for all types of civil construction risks and risks associated with erection, testing and commissioning of machinery and plants during the construction stage. Coverage is also provided for losses arising from operational failures of machinery, plant and equipment and electronic equipment as well as business interruption. The gross earned premiums for this line of business have increased from \$9 million in 2006 to \$69 million in 2018.
- **Agriculture:** Prior to 2013, this line of business mainly included excess of loss stop loss contracts with most exposures emanating from North America and Europe. It provided coverage for risks associated with the production of food and fiber on a global basis for primary insurance companies writing multi-peril crop insurance, crop hail, and named peril covers. The 2012 year was impacted by a severe drought which destroyed or damaged significant portions of major field crops across the U.S. Midwest. From 2013 onwards, the portfolio expanded significantly mainly through North American quota share agreements but also through some international treaties written in China and India.
- **Marine and Other:** This line of business mainly comprises marine reinsurance which includes hull, cargo and liability risks underwritten on both a proportional and non-proportional basis primarily from the U.S. The aviation reinsurance line includes airline hull and liability, manufacturers' products liability and general aviation risks and, with the acquisition of Novae in 2017, is now written through the AXIS Lloyd's platform. We note that Aviation Reinsurance ceased being written in 2006 and Marine Reinsurance was not written from 2009 through 2011. From 2012 onwards, a Marine business was again written in both North American and International markets.
- **The Accident & Health (A&H) reinsurance business** includes both International and North America exposure and comprises non-proportional and proportional as well as non-proportional stop loss/aggregate contracts. These contracts provide coverage for medical expenses (both inpatient and outpatient), prescription drug programs, accidental death carve outs on personal accident.
- In general, paid and incurred reporting patterns are relatively short-tailed and can be volatile due to the incidence of catastrophe events such as hurricanes and earthquakes, as noted in Section II (v).

Credit and Surety

- Prior to 2009, approximately 70-80% of the premium for this class of business comprised European trade credit business with the remainder relating primarily to U.S. and European surety bond business.
- Most of the trade credit business is focused on European exposures and relates mainly to commercial trade credit (i.e. insolvency) risks. Coverage for risks such as contractual disputes, currency fluctuations and entrepreneurial ventures are not included.
- The majority of the trade credit premium is derived from proportional contracts with a limited number of industry leaders. Original insureds are obliged to request limits on each and every buyer (sometimes original insureds are given a discretionary limit for small buyers). Insurers can decline, reduce or cancel limits under whole-turnover credit insurance policies at any time without prior notice. Losses are generally reported to insurers if no payments have been made following a specified payment period (generally 30 days to 3 months). This, together with often partial or full

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related recoveries, leads to a relatively short loss development profile on this class of business. For most treaties, we would generally expect to observe little loss development beyond 18 to 24 months from inception on an accident year basis in credit insurance.

- The surety business in this class is comprised of worldwide surety bond business written on both a proportional and non-proportional basis. The bond related business typically has a longer development profile relative to that of the trade credit business. During the second half of the 2013 calendar year, the 2008 and prior accident years were impacted by losses emanating from a Spanish Supreme Court decision which exposed Bond insurers to claims from Spanish Housing Associations. This resulted in increases to the estimated ultimate loss ratio on these years for the Credit and Surety consolidated class.
- In 2009, AXIS began writing surety business in Latin America. As a result, the proportion of trade credit business fell to between 50% and 60% of the total Credit and Surety class of business. The Latin American business is primarily a construction industry product written on a treaty and facultative basis.
- Since 2015, AXIS has also provided credit insurance coverage to mortgage guaranty insurers and government sponsored entities. These are aggregate excess of loss policies or structured quota shares with loss ratio caps. The written and earned premiums have grown to \$48 million in 2018.
- As discussed in Section II(v), the claims experience to date on the 2008 accident year is generally higher than the 2007 and prior years due to the impact of the global financial crisis and subsequent higher insolvency rates. More recently, global insolvencies have confirmed their upwards trend, which started in 2017 after a period of sizable declines after the financial crisis. Major increases in insolvencies were observed in China, whereas increases in Europe, the most important market for credit insurance, have been relatively modest. Despite the general increase in exposures and insolvencies, improved risk and portfolio management by cedants have led to portfolios with relatively low loss ratios. Premium rates in the primary market, however, continue to remain under pressure.

Professional Lines

- The majority of this class relates to U.S. Professional Liability business although some non-U.S. business is also included.
- This reserve class includes the professional line of business which provides cover for directors' and officers' liability, employment practices liability, medical malpractice, professional indemnity, environmental liability and miscellaneous errors and omissions insurance risks. The percentage of annual professional liability premium relating to public D&O liability business decreased in recent years from approximately 60% in 2014 to 40% in 2018.
- The professional liability treaties are written on both a non-proportional and proportional basis. However, the majority of underlying exposures in this class are excess insurance policies where public D&O exposures typically attach at higher levels than the remainder of the portfolio. The attachment point profile for the combined professional liability reinsurance line has remained relatively stable over time.
- The underlying business is predominantly written on a claims-made basis with the majority of reinsurance treaties written on a risks-attaching basis.
- Claim payment and reporting patterns on an accident year basis are typically medium to long tail in nature. However, as discussed in Section II (v), we anticipate claims frequency and loss

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development patterns on the 2007 and 2008 accident years may differ from prior years due to the impact of the global financial crisis and subsequent economic slowdown.

- Pricing on underlying primary policies for U.S. professional liability business increased significantly from 2002, peaking for most lines in 2004. The largest rate increases were found in D&O policies. Limits utilized also decreased during this period. Since 2005, D&O pricing remained competitive, reflecting a generally reduced claims environment, although the Financial Institutions sector saw a strengthening of rates in 2008 and 2009 following the global financial crisis. The overall reinsurance pricing during this period remained relatively stable despite some of the downward pressure on rates observed since 2005 in the primary market.
- The reinsurance market exhibited modest rate softening in 2010, followed by some slight positive rate movements in late 2011 and 2012. Primary rate changes remained relatively stable during 2013 and 2014 although reinsurance rate changes began to soften toward the end of 2013 and into 2014. Over the last few years, market conditions continued to pressure primary rates in most Professional Liability lines. An exception to that is Lawyers PL, where there was rate firming due to adverse loss emergence. For D&O, primary rates continued to decrease, with larger decreases experienced in the high excess layers. Recent reinsurance rate levels have stabilized and begun to harden towards the end of 2018.

Motor

- The Reinsurance Motor class is split between proportional and non-proportional treaties. Motor non-proportional represents approximately 70% of the total Motor reserves but represents approximately only 25% of the earned premium from accident year 2010 to accident year 2018. Given the much longer loss development pattern for the Motor Non-Proportional classes compared to the Proportional business, supplementary triangles for Motor Proportional and Non-Proportional have been included. A description of the business included in the Proportional and Non-Proportional classes is included below.

Motor Non-Proportional

- The motor non-proportional business consists of standard excess of loss contracts written for cedants in several European countries. The two major markets, U.K. and France, have generally accounted for the majority of motor non-proportional premium volume although, from 2010 to 2013, the premium volume from Greek treaties increased from 10% to 20% although has subsequently decreased to approximately 5% of the total Motor non-proportional premium. The attachment profiles for the U.K. and French domiciled excess of loss treaties remained relatively stable from 2004 through 2011. In 2012, a greater percentage of the U.K. non-proportional premium was written on lower attaching layers, mainly as a reaction to the increasing number of settlements being made as Periodic Payment Orders ("PPOs"). From 2012 onwards, AXIS included capitalization clauses in more than 60% of the U.K. non-proportional treaties allowing individual PPO claims to be commuted through the payment of a lump sum.
- The increase in the booked ultimate loss ratios during the 2011 calendar year was attributable to a change in assumptions regarding bodily injury settlement practices in the U.K. market. Specifically, AXIS increased its assumption regarding the number of non-proportional claims which are expected to settle in the future using PPOs as well as the cost of these claims relative to claims settled using only lump sum agreements. We do not discount our loss reserves in order to adjust for the time value of money associated with such annuity awards.
- The use of additional case reserves ("ACRs") is more prevalent for the motor reinsurance class of business than for other liability classes. This reflects a higher incidence of large bodily injury claims, the reserves on which are often highly dependent on a number of assumptions such as life

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expectancy and cost of care. In specific cases where, as a result of different underlying assumptions, we believe that the ultimate cost of a claim may be higher than the reserve indicated by the cedant, an ACR may be recorded. Incurred losses shown in the tables and triangles include ACRs. Specifically, ACRs represented approximately 7% of total reserves (including IBNR) on the Motor class of business as of December 31, 2018.

- The relatively high incidence of bodily injury claims for this class of business also makes it particularly susceptible to increased uncertainty surrounding future loss development due to issues such as continued cost of care inflation and a trend towards more claims settling as PPOs in the U.K. market. There has also been a general decrease in claim frequency over the past decade following governmental measures to better control speed limits and drunk driving. The reforms introduced by the Legal Aid, Sentencing and Punishment of Offenders Act, 2012 (“LAPSO”) are also expected to have a favorable impact on claims frequency for this class.
- The U.K. and French motor reinsurance markets saw significant rate increases on excess of loss treaties during the period from 2001 through 2007; increases after 2007 were mainly limited to upper layers. The price softening seen in the primary markets during 2004 through 2009 was followed, in the U.K. market, by significant rate increases from 2010 to 2012. The impact of the rate increases together with the introduction of capitalization clauses on the U.K. non-proportional treaties resulted in reductions in ultimate loss ratios on the more recent accident years. In the first quarter of 2017, the Ogden discount rate, which is the interest rate used to assess lump sum awards for personal injury claimants, was decreased. This led to significant increases in loss reserves in addition to further rates increases on excess of loss treaties.
- Non-proportional motor treaties are generally characterized by long paid and reported loss development patterns. Despite the trend toward a greater number of claims settlements using PPOs, we note that there has been a general trend towards quicker and more adequate reporting of losses in recent years. However, we would also note that the decrease in the Ogden Rate in 2017 may also ultimately lead to an increase in the general uncertainty surrounding both the paid and incurred development.

Motor Proportional

- This class of business consists mainly of European motor reinsurance treaties written on a proportional basis. The written premium expanded considerably since 2010 with growth in the U.K. and to a lesser extent in Greece. Before 2010, the proportional class mainly consisted of European (mostly German) quota shares.
- The Motor Proportional class generally has significantly shorter paid and reported loss development patterns compared to the Motor Non-Proportional class. The treaties generally benefit from inuring excess of loss protection attaching at £1m or €1m and so are not as exposed to PPOs to the same extent as Motor Non-Proportional treaties.

Liability

- The business covered in this class relates primarily to North American casualty business although some European business is also included.
- The North American business provides coverage to both regional and national insurers writing standard casualty business, excess and surplus casualty business and specialty casualty programs. The primary focus is umbrella business. Workers compensation and auto liability are also written, both on a monoline basis and also as part of regional multiline (both lines) and umbrella treaties (auto).

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- The majority of treaties are now written as proportional business. Proportional business generally covers excess insurance policies. The majority of treaties are written on a risks-attaching basis with the remainder written on a losses occurring basis.
- Pricing on underlying primary policies for the North American casualty book increased significantly from 2002, peaking for most lines in 2004. The largest increases were observed on commercial umbrella and excess policies. Annual rate decreases of between 5% and 10% were realized during the period from 2005 to 2010, although the period also saw declining frequency along with relatively stable severity. Despite downward pressure on insurance rates, the overall reinsurance pricing during this period remained relatively stable compared to the primary market. In late 2011 and during 2012 and subsequent years, we began to observe positive rate movements in the underlying portfolios of some cedants in this class. For the remainder of the cedants underlying rate changes have kept pace with loss trend since 2012.
- Claim payment and reporting patterns are typically long tail in nature and, therefore, also subject to increased uncertainty surrounding future loss development. In particular, claims can be subject to inflation from a number of sources including, but not limited to, economic and medical inflation, judicial inflation and changing social trends.

ii) Summary of Historical Reinsurance Protections

Prior to the 2015 accident year, the reinsurance segment had little outward reinsurance protection. In the 2015 accident year, the segment entered into retrocessional treaties covering the catastrophe business. Since 2016, an additional new retrocessional treaty was entered into with Harrington Re, which increased the premium ceded in the Liability and Professional lines together with new retrocessional treaties that increased ceded premiums in the catastrophe and property business.

In addition to the above, for the 2018 AY, a proportional treaty with a panel of reinsurers was purchased where a portion of the general liability, professional lines, trade credit, surety, north America A&H and workers compensation business is ceded. This treaty has an approximate cession of 18.5%.

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2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Consolidated Total

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	8,231,024	7,488,521	3,553,016	210,609	3,763,625	123,456	3,887,081	51.9%
2009	1,811,705	1,656,177	641,490	98,772	740,262	43,331	783,593	47.3%
2010	1,840,519	1,762,633	987,175	93,127	1,080,302	61,287	1,141,589	64.8%
2011	2,090,209	1,965,225	1,623,212	122,797	1,746,009	96,658	1,842,666	93.8%
2012	1,942,963	1,983,209	910,382	136,250	1,046,632	109,595	1,156,227	58.3%
2013	2,323,070	2,161,713	949,925	111,316	1,061,241	167,558	1,228,799	56.8%
2014	2,310,977	2,253,974	986,803	212,209	1,199,012	162,458	1,361,470	60.4%
2015	2,235,525	2,138,200	861,296	226,776	1,088,072	266,192	1,354,264	63.3%
2016	2,537,733	2,364,930	928,194	312,196	1,240,390	363,922	1,604,311	67.8%
2017	2,741,617	2,786,563	1,262,934	590,905	1,853,839	532,960	2,386,799	85.7%
2018	3,112,454	3,124,781	432,082	487,956	920,038	1,374,991	2,295,030	73.4%
	31,177,796	29,685,926	13,136,509	2,602,913	15,739,422	3,302,408	19,041,829	64.1%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	111,685	108,283	137,978	—	137,978	9	137,986	127.4%
2009	20,337	22,379	—	—	—	—	—	—%
2010	19,099	19,246	6	—	6	2	8	—%
2011	21,024	21,296	—	—	—	—	—	—%
2012	14,951	15,146	—	—	—	—	—	—%
2013	23,305	16,645	4,351	—	4,351	345	4,696	28.2%
2014	48,676	42,133	50,578	35	50,613	(36,189)	14,424	34.2%
2015	105,378	92,991	18,493	1,127	19,619	1,218	20,838	22.4%
2016	304,318	193,587	45,029	13,132	58,162	25,170	83,331	43.0%
2017	490,196	454,379	273,876	119,593	393,470	27,636	421,106	92.7%
2018	778,218	695,850	88,559	130,270	218,829	273,363	492,192	70.7%
	1,937,187	1,681,935	618,870	264,157	883,028	291,554	1,174,581	69.8%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	8,119,339	7,380,238	3,415,038	210,609	3,625,647	123,447	3,749,095	50.8%
2009	1,791,368	1,633,798	641,490	98,772	740,262	43,331	783,593	48.0%
2010	1,821,420	1,743,387	987,169	93,127	1,080,296	61,285	1,141,581	65.5%
2011	2,069,185	1,943,929	1,623,212	122,797	1,746,009	96,658	1,842,666	94.8%
2012	1,928,012	1,968,063	910,382	136,250	1,046,632	109,595	1,156,227	58.7%
2013	2,299,765	2,145,068	945,574	111,316	1,056,890	167,213	1,224,103	57.1%
2014	2,262,301	2,211,841	936,225	212,174	1,148,399	198,647	1,347,046	60.9%
2015	2,130,147	2,045,209	842,803	225,649	1,068,453	264,974	1,333,426	65.2%
2016	2,233,415	2,171,343	883,165	299,064	1,182,228	338,752	1,520,980	70.0%
2017	2,251,421	2,332,184	989,058	471,312	1,460,369	505,324	1,965,693	84.3%
2018	2,334,236	2,428,931	343,523	357,686	701,209	1,101,628	1,802,838	74.2%
	29,240,609	28,003,991	12,517,639	2,338,756	14,856,394	3,010,854	17,867,248	63.8%

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Values in Thousands USD

Reinsurance
Consolidated Total

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
2009		102,606	261,177	353,720	422,831	481,131	546,133	591,611	613,683	629,726	641,490
2010		169,917	443,573	616,367	693,350	798,046	880,602	939,457	966,198	987,169	
2011		346,476	816,133	1,121,579	1,317,135	1,414,748	1,539,419	1,592,795	1,623,212		
2012		214,812	480,790	625,919	722,976	802,109	863,711	910,382			
2013		188,405	522,811	729,426	833,827	896,208	945,574				
2014		198,326	567,706	764,031	853,093	936,225					
2015		177,208	503,982	708,449	842,803						
2016		250,505	628,135	883,165							
2017		377,185	973,427								
2018		343,523									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
2009		313,778	493,585	565,863	620,724	665,477	690,172	705,538	715,835	717,527	740,262
2010		550,961	795,643	925,890	998,746	1,027,828	1,050,027	1,049,816	1,071,724	1,080,297	
2011		1,124,505	1,464,718	1,575,930	1,663,250	1,690,357	1,690,956	1,729,334	1,746,009		
2012		487,815	779,192	860,574	933,092	968,608	996,857	1,046,632			
2013		489,583	803,134	919,131	983,484	1,022,281	1,056,890				
2014		434,177	827,426	979,481	1,065,437	1,148,399					
2015		446,679	808,745	967,098	1,068,452						
2016		557,383	966,531	1,182,228							
2017		779,142	1,453,650								
2018		701,209									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
2009		709,711	447,817	340,071	272,643	219,385	185,805	121,754	86,355	63,411	43,331
2010		752,871	499,116	346,529	283,756	267,953	194,851	154,784	96,289	61,284	
2011		822,397	495,146	388,233	302,337	258,691	207,201	143,338	96,658		
2012		846,254	511,356	414,313	305,555	237,753	171,027	109,595			
2013		872,774	549,584	387,372	287,321	232,243	167,213				
2014		917,909	573,384	399,152	288,599	198,647					
2015		888,314	527,609	364,841	264,973						
2016		912,442	550,108	338,752							
2017		1,182,700	512,044								
2018		1,101,628									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
2009		1,023,489	941,402	905,933	893,367	884,862	875,977	827,292	802,190	780,938	783,593
2010		1,303,832	1,294,759	1,272,419	1,282,502	1,295,781	1,244,878	1,204,600	1,168,013	1,141,581	
2011		1,946,902	1,959,864	1,964,164	1,965,587	1,949,047	1,898,157	1,872,672	1,842,666		
2012		1,334,069	1,290,549	1,274,887	1,238,647	1,206,361	1,167,884	1,156,227			
2013		1,362,356	1,352,719	1,306,503	1,270,804	1,254,524	1,224,103				
2014		1,352,085	1,400,810	1,378,633	1,354,036	1,347,046					
2015		1,334,993	1,336,354	1,331,939	1,333,426						
2016		1,469,825	1,516,639	1,520,980							
2017		1,961,841	1,965,693								
2018		1,802,837									

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Values in Thousands USD

Reinsurance
Consolidated Total

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	6.3%	16.0%	21.7%	25.9%	29.4%	33.4%	36.2%	37.6%	38.5%	39.3%	
	2010	9.7%	25.4%	35.4%	39.8%	45.8%	50.5%	53.9%	55.4%	56.6%		
	2011	17.8%	42.0%	57.7%	67.8%	72.8%	79.2%	81.9%	83.5%			
	2012	10.9%	24.4%	31.8%	36.7%	40.8%	43.9%	46.3%				
	2013	8.8%	24.4%	34.0%	38.9%	41.8%	44.1%					
	2014	9.0%	25.7%	34.5%	38.6%	42.3%						
	2015	8.7%	24.6%	34.6%	41.2%							
	2016	11.5%	28.9%	40.7%								
	2017	16.1%	41.7%									
	2018	14.2%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	19.2%	30.2%	34.6%	38.0%	40.7%	42.2%	43.2%	43.8%	43.9%	45.3%	
	2010	31.6%	45.6%	53.1%	57.3%	59.0%	60.2%	60.2%	61.5%	62.0%		
	2011	57.8%	75.3%	81.1%	85.6%	87.0%	87.0%	89.0%	89.8%			
	2012	24.8%	39.6%	43.7%	47.4%	49.2%	50.7%	53.2%				
	2013	22.8%	37.4%	42.8%	45.8%	47.7%	49.3%					
	2014	19.6%	37.4%	44.3%	48.2%	51.9%						
	2015	21.8%	39.5%	47.3%	52.2%							
	2016	25.7%	44.5%	54.4%								
	2017	33.2%	61.7%									
	2018	28.7%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	62.6%	57.6%	55.4%	54.7%	54.2%	53.6%	50.6%	49.1%	47.8%	48.0%	
	2010	74.8%	74.3%	73.0%	73.6%	74.3%	71.4%	69.1%	67.0%	65.5%		
	2011	100.2%	100.8%	101.0%	101.1%	100.3%	97.6%	96.3%	94.8%			
	2012	67.8%	65.6%	64.8%	62.9%	61.3%	59.3%	58.7%				
	2013	63.5%	63.1%	60.9%	59.2%	58.5%	57.1%					
	2014	61.1%	63.3%	62.3%	61.2%	60.9%						
	2015	65.3%	65.3%	65.1%	65.2%							
	2016	67.7%	69.8%	70.0%								
	2017	83.8%	83.9%									
	2018	74.1%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	1,023,489	(82,087)	(35,469)	(12,566)	(8,505)	(8,884)	(48,685)	(25,102)	(21,252)	2,655	(239,895)
	2010	1,303,832	(9,073)	(22,340)	10,083	13,279	(50,903)	(40,278)	(36,587)	(26,433)		(162,252)
	2011	1,946,902	12,962	4,300	1,423	(16,540)	(50,891)	(25,485)	(30,005)			(104,236)
	2012	1,334,069	(43,520)	(15,662)	(36,240)	(32,286)	(38,477)	(11,657)				(177,842)
	2013	1,362,356	(9,638)	(46,216)	(35,699)	(16,280)	(30,422)					(138,255)
	2014	1,352,085	48,724	(22,177)	(24,597)	(6,990)						(5,040)
	2015	1,334,993	1,362	(4,415)	1,487							(1,566)
	2016	1,469,825	46,814	4,341								51,155
	2017	1,948,938	1,614									1,614
	2018	1,792,344										—
												(776,317)
												(776,317)
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		(212,311)	(194,294)	(154,841)	(122,442)	(167,117)	(195,205)	(219,600)	(236,472)	(151,085)	(107,033)	(1,760,400)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Property and Other

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	5,069,135	4,743,216	2,377,035	9,332	2,386,367	243	2,386,610	50.3%
2009	882,080	869,218	209,717	6,733	216,450	1,864	218,314	25.1%
2010	911,408	888,260	586,629	21,406	608,036	5,908	613,944	69.1%
2011	1,040,799	974,538	1,137,150	19,913	1,157,063	11,047	1,168,109	119.9%
2012	898,063	938,495	426,670	34,033	460,703	8,875	469,579	50.0%
2013	1,163,502	1,117,350	506,000	16,329	522,329	5,942	528,271	47.3%
2014	1,102,090	1,093,339	523,446	19,499	542,944	7,658	550,602	50.4%
2015	1,036,023	976,302	424,460	41,226	465,686	15,907	481,593	49.3%
2016	1,181,677	1,128,793	561,374	78,270	639,644	41,915	681,559	60.4%
2017	1,471,763	1,433,978	975,825	321,959	1,297,785	95,220	1,393,005	97.1%
2018	1,575,525	1,587,342	274,133	303,242	577,376	634,294	1,211,670	76.3%
	16,332,065	15,750,831	8,002,439	871,942	8,874,383	828,873	9,703,256	61.6%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	66,467	63,065	137,990	—	137,990	—	137,990	218.8%
2009	6,540	8,582	—	—	—	—	—	—%
2010	7,176	7,323	—	—	—	—	—	—%
2011	8,976	9,248	—	—	—	—	—	—%
2012	3,029	3,223	—	—	—	—	—	—%
2013	20,217	13,557	4,351	—	4,351	345	4,696	34.6%
2014	44,991	38,469	50,578	35	50,613	(36,189)	14,424	37.5%
2015	101,509	89,100	18,455	1,127	19,582	1,186	20,767	23.3%
2016	171,998	150,870	36,742	7,675	44,417	10,658	55,075	36.5%
2017	293,018	303,292	245,024	93,673	338,697	(20,684)	318,013	104.9%
2018	473,043	440,884	76,091	110,207	186,298	134,764	321,063	72.8%
	1,196,964	1,127,613	569,231	212,717	781,948	90,080	872,028	77.3%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	5,002,668	4,680,151	2,239,045	9,332	2,248,377	243	2,248,620	48.0%
2009	875,540	860,636	209,717	6,733	216,450	1,864	218,314	25.4%
2010	904,232	880,937	586,629	21,406	608,036	5,908	613,944	69.7%
2011	1,031,823	965,290	1,137,150	19,913	1,157,063	11,047	1,168,109	121.0%
2012	895,034	935,272	426,670	34,033	460,703	8,875	469,579	50.2%
2013	1,143,285	1,103,793	501,649	16,329	517,978	5,597	523,575	47.4%
2014	1,057,099	1,054,870	472,868	19,464	492,331	43,847	536,178	50.8%
2015	934,514	887,202	406,005	40,099	446,104	14,721	460,826	51.9%
2016	1,009,679	977,923	524,632	70,595	595,227	31,257	626,484	64.1%
2017	1,178,745	1,130,686	730,801	228,286	959,088	115,904	1,074,992	95.1%
2018	1,102,482	1,146,458	198,042	193,035	391,078	499,530	890,607	77.7%
	15,135,101	14,623,218	7,433,208	659,225	8,092,435	738,793	8,831,228	60.4%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Property and Other

NET BASIS

	Months										
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	60,569	140,290	175,009	195,443	207,186	207,011	210,168	211,956	211,416	209,717
	2010	127,065	338,005	438,528	472,517	521,753	552,414	577,463	583,820	586,629	
	2011	290,078	663,978	892,261	1,007,709	1,040,881	1,116,949	1,133,499	1,137,150		
	2012	125,887	301,068	376,065	399,483	414,580	424,483	426,670			
	2013	110,085	336,235	457,357	489,556	500,024	501,649				
	2014	103,640	362,575	447,376	466,385	472,867					
	2015	72,174	268,885	373,315	406,005						
	2016	130,899	380,467	524,632							
	2017	254,901	715,170								
	2018	198,042									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	174,118	226,387	218,287	225,553	222,416	217,785	216,995	219,592	216,773	216,450
	2010	423,737	552,994	593,390	602,451	608,509	614,800	608,790	609,663	608,036	
	2011	967,191	1,155,441	1,173,502	1,190,652	1,178,689	1,156,482	1,157,588	1,157,063		
	2012	297,552	461,546	466,898	465,666	461,376	460,930	460,703			
	2013	293,025	474,565	520,092	517,964	519,469	517,978				
	2014	213,329	458,050	493,227	491,699	492,331					
	2015	199,481	386,977	435,411	446,104						
	2016	292,230	513,858	595,227							
	2017	488,622	952,368								
	2018	391,077									

IBNR	Months										
	12	24	36	48	60	72	84	96	108	120	
2009	187,529	76,731	47,481	27,317	23,275	6,870	1,611	830	986	1,864	
2010	219,782	87,897	18,901	23,081	21,916	9,490	7,544	4,843	5,908		
2011	272,560	97,164	78,180	19,019	14,521	11,339	8,542	11,047			
2012	269,078	74,491	53,189	23,562	11,606	7,082	8,875				
2013	304,474	107,026	30,454	12,210	4,525	5,597					
2014	337,202	118,669	57,994	46,832	43,847						
2015	283,086	85,372	31,019	14,722							
2016	329,708	126,267	31,256								
2017	577,181	122,624									
2018	499,530										

Ultimate Losses	Months										
	12	24	36	48	60	72	84	96	108	120	
2009	361,647	303,118	265,768	252,870	245,690	224,655	218,606	220,421	217,759	218,314	
2010	643,518	640,891	612,291	625,532	630,424	624,291	616,335	614,506	613,944		
2011	1,239,751	1,252,605	1,251,682	1,209,671	1,193,210	1,167,821	1,166,130	1,168,109			
2012	566,630	536,037	520,088	489,228	472,982	468,012	469,579				
2013	597,499	581,591	550,545	530,174	523,994	523,575					
2014	550,531	576,719	551,220	538,530	536,178						
2015	482,567	472,350	466,430	460,826							
2016	621,937	640,125	626,484								
2017	1,065,803	1,074,992									
2018	890,607										

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Property and Other

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	7.0%	16.3%	20.3%	22.7%	24.1%	24.1%	24.4%	24.6%	24.6%	24.4%	
	2010	14.4%	38.4%	49.8%	53.6%	59.2%	62.7%	65.6%	66.3%	66.6%		
	2011	30.1%	68.8%	92.4%	104.4%	107.8%	115.7%	117.4%	117.8%			
	2012	13.5%	32.2%	40.2%	42.7%	44.3%	45.4%	45.6%				
	2013	10.0%	30.5%	41.4%	44.4%	45.3%	45.4%					
	2014	9.8%	34.4%	42.4%	44.2%	44.8%						
	2015	8.1%	30.3%	42.1%	45.8%							
	2016	13.4%	38.9%	53.6%								
	2017	22.5%	63.3%									
	2018	17.3%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	20.2%	26.3%	25.4%	26.2%	25.8%	25.3%	25.2%	25.5%	25.2%	25.2%	
	2010	48.1%	62.8%	67.4%	68.4%	69.1%	69.8%	69.1%	69.2%	69.0%		
	2011	100.2%	119.7%	121.6%	123.3%	122.1%	119.8%	119.9%	119.9%			
	2012	31.8%	49.3%	49.9%	49.8%	49.3%	49.3%	49.3%				
	2013	26.5%	43.0%	47.1%	46.9%	47.1%	46.9%					
	2014	20.2%	43.4%	46.8%	46.6%	46.7%						
	2015	22.5%	43.6%	49.1%	50.3%							
	2016	29.9%	52.5%	60.9%								
	2017	43.2%	84.2%									
	2018	34.1%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	42.0%	35.2%	30.9%	29.4%	28.5%	26.1%	25.4%	25.6%	25.3%	25.4%	
	2010	73.0%	72.8%	69.5%	71.0%	71.6%	70.9%	70.0%	69.8%	69.7%		
	2011	128.4%	129.8%	129.7%	125.3%	123.6%	121.0%	120.8%	121.0%			
	2012	60.6%	57.3%	55.6%	52.3%	50.6%	50.0%	50.2%				
	2013	54.1%	52.7%	49.9%	48.0%	47.5%	47.4%					
	2014	52.2%	54.7%	52.3%	51.1%	50.8%						
	2015	54.4%	53.2%	52.6%	51.9%							
	2016	63.6%	65.5%	64.1%								
	2017	94.3%	95.1%									
	2018	77.7%										
		Months										Total Development AY 09-18'
Loss Emergence		12	24	36	48	60	72	84	96	108	120	
	2009	361,647	(58,530)	(37,350)	(12,898)	(7,180)	(21,035)	(6,049)	1,815	(2,663)	555	(143,335)
	2010	643,518	(2,627)	(28,600)	13,241	4,892	(6,133)	(7,956)	(1,828)	(563)		(29,574)
	2011	1,239,751	12,854	(923)	(42,011)	(16,461)	(25,389)	(1,691)	1,979			(71,642)
	2012	566,630	(30,593)	(15,949)	(30,860)	(16,246)	(4,970)	1,566				(97,052)
	2013	597,499	(15,908)	(31,046)	(20,371)	(6,180)	(419)					(73,924)
	2014	550,531	26,188	(25,499)	(12,690)	(2,352)						(14,353)
	2015	482,567	(10,217)	(5,919)	(5,605)							(21,741)
	2016	621,937	18,188	(13,641)								4,547
	2017	1,065,803	9,189									9,189
	2018	890,607										—
											(437,885)	
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		(154,755)	(93,104)	(90,834)	(79,450)	(48,284)	(122,859)	(72,788)	(97,691)	(30,055)	(9,359)	(799,179)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Credit and Surety

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	553,766	461,869	269,164	12,404	281,569	4,911	286,479	62.0%
2009	223,564	179,362	99,558	4,464	104,022	1,506	105,528	58.8%
2010	254,130	217,809	79,491	5,304	84,795	4,615	89,410	41.0%
2011	299,923	263,912	103,339	6,463	109,801	6,230	116,031	44.0%
2012	264,572	277,186	123,198	8,159	131,356	9,338	140,695	50.8%
2013	268,494	279,942	117,300	9,804	127,104	8,799	135,903	48.5%
2014	258,865	263,013	113,210	14,861	128,071	12,030	140,102	53.3%
2015	242,620	250,208	120,710	13,369	134,079	27,740	161,819	64.7%
2016	319,077	256,282	93,396	17,881	111,277	38,587	149,864	58.5%
2017	205,352	271,696	76,235	22,938	99,173	41,916	141,089	51.9%
2018	329,126	322,648	47,773	26,531	74,304	78,731	153,035	47.4%
	3,219,489	3,043,927	1,243,374	142,178	1,385,551	234,403	1,619,955	53.2%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	—	—	—	—	—	—	—	N/A
2009	—	—	—	—	—	—	—	N/A
2010	—	—	—	—	—	—	—	N/A
2011	—	—	—	—	—	—	—	N/A
2012	—	—	—	—	—	—	—	N/A
2013	—	—	—	—	—	—	—	N/A
2014	—	—	—	—	—	—	—	N/A
2015	—	—	—	—	—	—	—	N/A
2016	9,503	4,070	1,590	509	2,099	(776)	1,323	32.5%
2017	50,456	27,510	6,576	2,235	8,811	5,047	13,858	50.4%
2018	95,962	72,372	8,291	6,852	15,143	22,786	37,929	52.4%
	155,921	103,952	16,457	9,596	26,053	27,057	53,110	51.1%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	553,766	461,869	269,164	12,404	281,569	4,911	286,479	62.0%
2009	223,564	179,362	99,558	4,464	104,022	1,506	105,528	58.8%
2010	254,130	217,809	79,491	5,304	84,795	4,615	89,410	41.0%
2011	299,923	263,912	103,339	6,463	109,801	6,230	116,031	44.0%
2012	264,572	277,186	123,198	8,159	131,356	9,338	140,695	50.8%
2013	268,494	279,942	117,300	9,804	127,104	8,799	135,903	48.5%
2014	258,865	263,013	113,210	14,861	128,071	12,030	140,102	53.3%
2015	242,620	250,208	120,710	13,369	134,079	27,740	161,819	64.7%
2016	309,574	252,212	91,806	17,372	109,178	39,363	148,541	58.9%
2017	154,896	244,186	69,659	20,703	90,362	36,869	127,231	52.1%
2018	233,164	250,276	39,482	19,679	59,161	55,945	115,106	46.0%
	3,063,568	2,939,975	1,226,917	132,582	1,359,498	207,346	1,566,845	53.3%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Credit and Surety

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	34,558	84,401	88,711	91,767	95,820	98,510	98,951	99,055	99,875	99,558
	2010	29,287	56,133	71,159	71,477	74,020	75,819	77,727	78,893	79,491	
	2011	23,489	61,836	82,587	91,457	96,368	98,865	101,349	103,339		
	2012	52,822	93,415	109,942	115,959	119,631	121,574	123,198			
	2013	33,479	83,510	99,990	107,058	115,004	117,300				
	2014	36,920	67,738	95,678	105,481	113,210					
	2015	33,173	84,830	103,825	120,710						
	2016	42,253	73,035	91,806							
	2017	34,667	69,660								
	2018	39,483									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	76,783	107,337	103,287	103,763	106,163	107,438	105,682	105,144	104,793	104,022
	2010	51,128	77,515	84,820	85,101	83,926	84,276	85,200	84,851	84,795	
	2011	51,118	85,515	99,619	103,928	105,927	107,639	108,629	109,801		
	2012	90,877	126,842	128,715	129,559	131,945	131,919	131,356			
	2013	75,663	114,324	122,904	126,434	128,967	127,104				
	2014	66,908	95,367	118,862	123,745	128,071					
	2015	73,725	121,899	129,195	134,079						
	2016	67,205	91,122	109,178							
	2017	59,941	90,362								
	2018	59,161									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	83,707	30,324	17,347	16,124	13,306	4,964	3,450	3,670	2,102	1,506
	2010	82,608	39,592	25,619	21,028	18,676	9,975	7,637	5,877	4,615	
	2011	80,637	38,113	22,580	26,218	21,930	10,850	8,083	6,230		
	2012	80,777	35,494	36,651	32,490	21,008	12,378	9,338			
	2013	100,283	51,948	33,874	26,231	18,822	8,799				
	2014	79,375	54,466	38,253	29,258	12,030					
	2015	91,858	49,845	37,049	27,740						
	2016	74,659	49,689	39,363							
	2017	70,940	36,869								
	2018	55,946									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	160,490	137,661	120,635	119,887	119,470	112,402	109,133	108,813	106,894	105,528
	2010	133,736	117,106	110,439	106,129	102,602	94,251	92,837	90,729	89,410	
	2011	131,754	123,629	122,199	130,146	127,858	118,489	116,712	116,031		
	2012	171,654	162,336	165,366	162,050	152,952	144,297	140,695			
	2013	175,946	166,272	156,778	152,664	147,788	135,903				
	2014	146,283	149,833	157,114	153,003	140,102					
	2015	165,583	171,744	166,244	161,819						
	2016	141,863	140,811	148,541							
	2017	130,881	127,231								
	2018	115,106									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Credit and Surety

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	19.3%	47.1%	49.5%	51.2%	53.4%	54.9%	55.2%	55.2%	55.7%	55.5%	
	2010	13.4%	25.8%	32.7%	32.8%	34.0%	34.8%	35.7%	36.2%	36.5%		
	2011	8.9%	23.4%	31.3%	34.7%	36.5%	37.5%	38.4%	39.2%			
	2012	19.1%	33.7%	39.7%	41.8%	43.2%	43.9%	44.4%				
	2013	12.0%	29.8%	35.7%	38.2%	41.1%	41.9%					
	2014	14.0%	25.8%	36.4%	40.1%	43.0%						
	2015	13.3%	33.9%	41.5%	48.2%							
	2016	16.8%	29.0%	36.4%								
	2017	14.2%	28.5%									
	2018	15.8%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	42.8%	59.8%	57.6%	57.9%	59.2%	59.9%	58.9%	58.6%	58.4%	58.0%	
	2010	23.5%	35.6%	38.9%	39.1%	38.5%	38.7%	39.1%	39.0%	38.9%		
	2011	19.4%	32.4%	37.7%	39.4%	40.1%	40.8%	41.2%	41.6%			
	2012	32.8%	45.8%	46.4%	46.7%	47.6%	47.6%	47.4%				
	2013	27.0%	40.8%	43.9%	45.2%	46.1%	45.4%					
	2014	25.4%	36.3%	45.2%	47.0%	48.7%						
	2015	29.5%	48.7%	51.6%	53.6%							
	2016	26.6%	36.1%	43.3%								
	2017	24.5%	37.0%									
	2018	23.6%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	89.5%	76.8%	67.3%	66.8%	66.6%	62.7%	60.8%	60.7%	59.6%	58.8%	
	2010	61.4%	53.8%	50.7%	48.7%	47.1%	43.3%	42.6%	41.7%	41.0%		
	2011	49.9%	46.8%	46.3%	49.3%	48.4%	44.9%	44.2%	44.0%			
	2012	61.9%	58.6%	59.7%	58.5%	55.2%	52.1%	50.8%				
	2013	62.9%	59.4%	56.0%	54.5%	52.8%	48.5%					
	2014	55.6%	57.0%	59.7%	58.2%	53.3%						
	2015	66.2%	68.6%	66.4%	64.7%							
	2016	56.2%	55.8%	58.9%								
	2017	53.6%	52.1%									
	2018	46.0%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	160,490	(22,829)	(17,026)	(748)	(417)	(7,068)	(3,269)	(319)	(1,919)	(1,366)	(54,961)
	2010	133,736	(16,630)	(6,668)	(4,309)	(3,527)	(8,351)	(1,414)	(2,108)	(1,318)		(44,325)
	2011	131,754	(8,126)	(1,430)	7,947	(2,288)	(9,369)	(1,777)	(681)			(15,724)
	2012	171,654	(9,319)	3,031	(3,317)	(9,097)	(8,656)	(3,602)				(30,960)
	2013	175,946	(9,674)	(9,494)	(4,113)	(4,876)	(11,885)					(40,042)
	2014	146,283	3,550	7,281	(4,111)	(12,902)						(6,182)
	2015	165,583	6,161	(5,500)	(4,425)							(3,764)
	2016	141,863	(1,053)	7,730								6,677
	2017	130,881	(3,650)									(3,650)
	2018	115,106										—
												(192,931)
												Total Development CY 09 - 18'
	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018		
	17,939	(37,802)	(39,806)	(12,427)	(6,098)	713	(26,568)	(10,488)	(32,791)	(32,564)		(179,892)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Professional Lines

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,300,287	1,106,352	481,086	41,090	522,176	10,589	532,765	48.2%
2009	328,509	266,792	156,169	25,067	181,236	4,879	186,116	69.8%
2010	288,236	285,224	141,606	18,557	160,163	10,419	170,582	59.8%
2011	281,394	281,025	133,553	25,851	159,404	23,123	182,527	65.0%
2012	301,863	297,726	135,689	49,747	185,436	35,168	220,603	74.1%
2013	380,355	304,754	107,816	36,500	144,316	69,139	213,455	70.0%
2014	293,263	336,058	112,174	77,410	189,584	50,778	240,362	71.5%
2015	276,479	310,915	80,145	62,472	142,617	86,640	229,257	73.7%
2016	268,403	302,250	54,552	64,358	118,909	92,271	211,180	69.9%
2017	252,271	270,511	17,479	36,662	54,141	133,716	187,857	69.4%
2018	268,181	284,967	1,465	7,519	8,985	189,731	198,716	69.7%
	4,239,241	4,046,574	1,421,734	445,233	1,866,967	706,453	2,573,420	63.6%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	7,974	7,974	—	—	—	—	—	—%
2009	—	—	—	—	—	—	—	N/A
2010	—	—	—	—	—	—	—	N/A
2011	—	—	—	—	—	—	—	N/A
2012	—	—	—	—	—	—	—	N/A
2013	—	—	—	—	—	—	—	N/A
2014	—	—	—	—	—	—	—	N/A
2015	—	—	—	—	—	—	—	N/A
2016	49,009	12,383	1,233	1,591	2,824	5,548	8,372	67.6%
2017	51,220	43,894	2,439	5,118	7,557	22,803	30,360	69.2%
2018	68,050	64,279	1,151	3,368	4,519	43,386	47,905	74.5%
	176,253	128,530	4,823	10,077	14,900	71,737	86,637	67.4%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	1,292,313	1,098,378	481,086	41,090	522,176	10,589	532,765	48.5%
2009	328,509	266,792	156,169	25,067	181,236	4,879	186,116	69.8%
2010	288,236	285,224	141,606	18,557	160,163	10,419	170,582	59.8%
2011	281,394	281,025	133,553	25,851	159,404	23,123	182,527	65.0%
2012	301,863	297,726	135,689	49,747	185,436	35,168	220,603	74.1%
2013	380,355	304,754	107,816	36,500	144,316	69,139	213,455	70.0%
2014	293,263	336,058	112,174	77,410	189,584	50,778	240,362	71.5%
2015	276,479	310,915	80,145	62,472	142,617	86,640	229,257	73.7%
2016	219,394	289,867	53,319	62,767	116,085	86,723	202,808	70.0%
2017	201,051	226,617	15,040	31,544	46,584	110,913	157,497	69.5%
2018	200,131	220,688	314	4,151	4,466	146,345	150,811	68.3%
	4,062,988	3,918,044	1,416,911	435,156	1,852,067	634,716	2,486,783	63.5%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Professional Lines

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	1,639	9,863	34,048	65,504	86,987	112,413	132,877	143,294	149,054	156,169
	2010	1,950	12,615	32,593	53,982	79,359	110,489	127,154	134,070	141,606	
	2011	1,712	12,626	31,567	59,349	87,405	105,992	123,051	133,553		
	2012	947	10,932	30,874	55,800	88,569	110,283	135,689			
	2013	1,148	12,686	31,895	66,837	83,845	107,816				
	2014	2,160	13,639	50,252	76,547	112,174					
	2015	3,208	13,841	42,122	80,145						
	2016	1,834	20,876	53,318							
	2017	2,865	15,040								
	2018	314									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	13,291	50,096	92,531	118,729	141,367	159,272	166,776	174,428	175,010	181,236
	2010	11,722	39,351	80,821	115,330	131,449	143,937	150,391	158,913	160,163	
	2011	11,779	43,695	85,032	117,452	131,931	135,615	153,775	159,404		
	2012	7,828	35,205	69,688	112,963	131,562	141,762	185,436			
	2013	5,666	31,471	60,983	101,525	116,234	144,316				
	2014	8,172	42,310	100,305	137,340	189,584					
	2015	8,736	48,271	91,717	142,617						
	2016	11,177	56,805	116,085							
	2017	11,518	46,584								
	2018	4,466									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	205,480	168,975	131,190	107,814	75,738	57,268	34,660	22,349	12,202	4,879
	2010	208,188	180,453	139,495	107,428	91,183	60,200	44,592	25,838	10,419	
	2011	197,206	165,585	125,230	102,252	84,781	79,547	52,603	23,123		
	2012	208,226	187,717	159,371	118,805	98,359	77,563	35,168			
	2013	211,001	190,204	161,917	119,428	104,419	69,139				
	2014	218,012	184,102	125,575	88,400	50,778					
	2015	208,326	168,436	126,917	86,640						
	2016	188,018	142,713	86,722							
	2017	145,876	110,913								
	2018	146,345									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	218,771	219,071	223,721	226,543	217,105	216,540	201,436	196,777	187,213	186,116
	2010	219,911	219,804	220,316	222,759	222,633	204,137	194,983	184,751	170,582	
	2011	208,985	209,280	210,262	219,704	216,712	215,162	206,378	182,527		
	2012	216,054	222,922	229,058	231,768	229,921	219,325	220,603			
	2013	216,668	221,675	222,900	220,953	220,653	213,455				
	2014	226,184	226,412	225,880	225,740	240,362					
	2015	217,063	216,707	218,634	229,257						
	2016	199,196	199,518	202,807							
	2017	157,394	157,497								
	2018	150,811									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Professional Lines

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	0.6%	3.7%	12.8%	24.6%	32.6%	42.1%	49.8%	53.7%	55.9%	58.5%	
	2010	0.7%	4.4%	11.4%	18.9%	27.8%	38.7%	44.6%	47.0%	49.6%		
	2011	0.6%	4.5%	11.2%	21.1%	31.1%	37.7%	43.8%	47.5%			
	2012	0.3%	3.7%	10.4%	18.7%	29.7%	37.0%	45.6%				
	2013	0.4%	4.2%	10.5%	21.9%	27.5%	35.4%					
	2014	0.6%	4.1%	15.0%	22.8%	33.4%						
	2015	1.0%	4.5%	13.5%	25.8%							
	2016	0.6%	7.2%	18.4%								
	2017	1.3%	6.6%									
	2018	0.1%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	5.0%	18.8%	34.7%	44.5%	53.0%	59.7%	62.5%	65.4%	65.6%	67.9%	
	2010	4.1%	13.8%	28.3%	40.4%	46.1%	50.5%	52.7%	55.7%	56.2%		
	2011	4.2%	15.5%	30.3%	41.8%	46.9%	48.3%	54.7%	56.7%			
	2012	2.6%	11.8%	23.4%	37.9%	44.2%	47.6%	62.3%				
	2013	1.9%	10.3%	20.0%	33.3%	38.1%	47.4%					
	2014	2.4%	12.6%	29.8%	40.9%	56.4%						
	2015	2.8%	15.5%	29.5%	45.9%							
	2016	3.9%	19.6%	40.0%								
	2017	5.1%	20.6%									
	2018	2.0%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	82.0%	82.1%	83.9%	84.9%	81.4%	81.2%	75.5%	73.8%	70.2%	69.8%	
	2010	77.1%	77.1%	77.2%	78.1%	78.1%	71.6%	68.4%	64.8%	59.8%		
	2011	74.4%	74.5%	74.8%	78.2%	77.1%	76.6%	73.4%	65.0%			
	2012	72.6%	74.9%	76.9%	77.8%	77.2%	73.7%	74.1%				
	2013	71.1%	72.7%	73.1%	72.5%	72.4%	70.0%					
	2014	67.3%	67.4%	67.2%	67.2%	71.5%						
	2015	69.8%	69.7%	70.3%	73.7%							
	2016	68.7%	68.8%	70.0%								
	2017	69.5%	69.5%									
	2018	68.3%										
		Months									Total Development AY 09-18'	
Loss Emergence		12	24	36	48	60	72	84	96	108	120	
	2009	218,771	300	4,650	2,823	(9,438)	(565)	(15,104)	(4,659)	(9,564)	(1,097)	(32,654)
	2010	219,911	(107)	512	2,443	(126)	(18,495)	(9,154)	(10,232)	(14,169)		(49,328)
	2011	208,985	295	982	9,442	(2,992)	(1,550)	(8,784)	(23,851)			(26,458)
	2012	216,054	6,867	6,137	2,709	(1,846)	(10,597)	1,279				4,549
	2013	216,668	5,007	1,225	(1,947)	(300)	(7,198)					(3,213)
	2014	226,184	228	(532)	(141)	14,622						14,177
	2015	217,063	(355)	1,927	10,622							12,194
	2016	199,196	322	3,289								3,611
	2017	157,394	103									103
	2018	150,811										—
											(77,019)	
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		(69,399)	(60,063)	(55,625)	(34,282)	(21,844)	(32,760)	(37,778)	(29,592)	(44,164)	(21,310)	(406,817)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	384,560	371,254	123,143	114,520	237,663	84,575	322,238	86.8%
2009	104,850	99,497	38,608	34,523	73,130	20,927	94,057	94.5%
2010	148,683	127,404	48,549	30,351	78,899	25,706	104,605	82.1%
2011	238,365	202,830	109,769	32,210	141,979	30,172	172,151	84.9%
2012	235,648	237,006	106,725	22,930	129,655	26,799	156,453	66.0%
2013	242,046	221,843	114,594	27,331	141,925	26,609	168,534	76.0%
2014	291,293	268,679	146,258	64,279	210,536	12,423	222,960	83.0%
2015	335,084	299,884	154,164	71,636	225,800	35,509	261,309	87.1%
2016	346,087	318,862	143,337	98,602	241,940	47,666	289,606	90.8%
2017	391,414	380,922	137,630	148,065	285,695	62,407	348,101	91.4%
2018	500,098	458,588	86,046	108,047	194,093	194,774	388,867	84.8%
	3,218,128	2,986,769	1,208,823	752,494	1,961,315	567,567	2,528,881	84.7%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	—	—	—	—	—	—	—	N/A
2009	—	—	—	—	—	—	—	N/A
2010	—	—	—	—	—	—	—	N/A
2011	—	—	—	—	—	—	—	N/A
2012	—	—	—	—	—	—	—	N/A
2013	—	—	—	—	—	—	—	N/A
2014	2	1	—	—	—	—	—	—%
2015	—	1	—	—	—	—	—	—%
2016	—	—	—	—	—	—	—	N/A
2017	5,822	4,583	6,689	7,463	14,153	(8,161)	5,992	130.7%
2018	19,785	14,252	1	3,212	3,213	10,903	14,116	99.0%
	25,609	18,837	6,690	10,675	17,366	2,742	20,108	106.7%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	384,560	371,254	123,143	114,520	237,663	84,575	322,238	86.8%
2009	104,850	99,497	38,608	34,523	73,130	20,927	94,057	94.5%
2010	148,683	127,404	48,549	30,351	78,899	25,706	104,605	82.1%
2011	238,365	202,830	109,769	32,210	141,979	30,172	172,151	84.9%
2012	235,648	237,006	106,725	22,930	129,655	26,799	156,453	66.0%
2013	242,046	221,843	114,594	27,331	141,925	26,609	168,534	76.0%
2014	291,291	268,678	146,258	64,279	210,536	12,423	222,960	83.0%
2015	335,084	299,883	154,164	71,636	225,800	35,509	261,309	87.1%
2016	346,087	318,862	143,337	98,602	241,940	47,666	289,606	90.8%
2017	385,592	376,339	130,941	140,602	271,542	70,568	342,109	90.9%
2018	480,313	444,336	86,045	104,835	190,880	183,871	374,751	84.3%
	3,192,519	2,967,932	1,202,133	741,819	1,943,949	564,825	2,508,773	84.5%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	3,478	8,572	10,230	12,046	16,239	23,514	26,260	31,663	35,594	38,608
	2010	8,759	18,441	26,924	31,820	36,976	42,158	46,022	47,292	48,549	
	2011	25,621	55,529	73,892	86,637	95,269	102,722	108,525	109,769		
	2012	31,324	61,808	79,329	91,112	98,973	103,849	106,725			
	2013	37,418	67,405	86,755	100,034	107,576	114,594				
	2014	48,017	94,141	121,036	132,541	146,258					
	2015	61,187	108,523	133,919	154,164						
	2016	63,387	115,599	143,337							
	2017	72,110	130,941								
	2018	86,045									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	31,379	55,013	64,356	68,913	70,754	71,595	70,461	71,730	73,182	73,130
	2010	41,577	74,420	80,820	86,019	82,984	78,185	74,786	78,091	78,899	
	2011	71,410	124,289	133,081	134,676	133,896	134,072	139,217	141,979		
	2012	75,924	108,792	115,998	121,606	124,134	130,785	129,655			
	2013	91,551	128,730	133,600	136,326	142,104	141,925				
	2014	124,195	177,631	186,192	199,228	210,536					
	2015	142,170	194,201	218,002	225,800						
	2016	147,549	229,433	241,940							
	2017	177,179	271,542								
	2018	190,880									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	65,824	41,364	41,580	39,566	39,952	39,967	30,491	22,314	24,058	20,927
	2010	81,747	61,288	56,716	50,586	46,405	45,329	37,198	29,220	25,706	
	2011	113,226	69,080	65,230	70,820	67,222	56,523	38,313	30,172		
	2012	129,376	90,253	69,200	54,675	46,497	28,911	26,799			
	2013	100,374	70,927	53,082	39,327	29,609	26,609				
	2014	95,875	58,333	44,842	28,750	12,423					
	2015	106,987	60,562	41,714	35,509						
	2016	114,647	57,866	47,666							
	2017	159,655	70,568								
	2018	183,871									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	97,203	96,377	105,936	108,479	110,706	111,561	100,952	94,044	97,240	94,057
	2010	123,323	135,707	137,536	136,605	129,390	123,515	111,984	107,312	104,605	
	2011	184,635	193,369	198,310	205,496	201,118	190,595	177,530	172,151		
	2012	205,300	199,045	185,198	176,281	170,631	159,697	156,453			
	2013	191,925	199,657	186,682	175,653	171,713	168,534				
	2014	220,070	235,964	231,033	227,979	222,960					
	2015	249,157	254,763	259,716	261,309						
	2016	262,196	287,300	289,606							
	2017	336,833	342,110								
	2018	374,751									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	3.5%	8.6%	10.3%	12.1%	16.3%	23.6%	26.4%	31.8%	35.8%	38.8%	
	2010	6.9%	14.5%	21.1%	25.0%	29.0%	33.1%	36.1%	37.1%	38.1%		
	2011	12.6%	27.4%	36.4%	42.7%	47.0%	50.6%	53.5%	54.1%			
	2012	13.2%	26.1%	33.5%	38.4%	41.8%	43.8%	45.0%				
	2013	16.9%	30.4%	39.1%	45.1%	48.5%	51.7%					
	2014	17.9%	35.0%	45.0%	49.3%	54.4%						
	2015	20.4%	36.2%	44.7%	51.4%							
	2016	19.9%	36.3%	45.0%								
	2017	19.2%	34.8%									
	2018	19.4%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	31.5%	55.3%	64.7%	69.3%	71.1%	72.0%	70.8%	72.1%	73.6%	73.5%	
	2010	32.6%	58.4%	63.4%	67.5%	65.1%	61.4%	58.7%	61.3%	61.9%		
	2011	35.2%	61.3%	65.6%	66.4%	66.0%	66.1%	68.6%	70.0%			
	2012	32.0%	45.9%	48.9%	51.3%	52.4%	55.2%	54.7%				
	2013	41.3%	58.0%	60.2%	61.5%	64.1%	64.0%					
	2014	46.2%	66.1%	69.3%	74.2%	78.4%						
	2015	47.4%	64.8%	72.7%	75.3%							
	2016	46.3%	72.0%	75.9%								
	2017	47.1%	72.2%									
	2018	43.0%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	97.7%	96.9%	106.5%	109.0%	111.3%	112.1%	101.5%	94.5%	97.7%	94.5%	
	2010	96.8%	106.5%	108.0%	107.2%	101.6%	96.9%	87.9%	84.2%	82.1%		
	2011	91.0%	95.3%	97.8%	101.3%	99.2%	94.0%	87.5%	84.9%			
	2012	86.6%	84.0%	78.1%	74.4%	72.0%	67.4%	66.0%				
	2013	86.5%	90.0%	84.2%	79.2%	77.4%	76.0%					
	2014	81.9%	87.8%	86.0%	84.9%	83.0%						
	2015	83.1%	85.0%	86.6%	87.1%							
	2016	82.2%	90.1%	90.8%								
	2017	89.5%	90.9%									
	2018	84.3%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	97,203	(826)	9,559	2,543	2,227	855	(10,610)	(6,908)	3,196	(3,183)	(3,147)
	2010	123,323	12,384	1,829	(931)	(7,216)	(5,875)	(11,531)	(4,672)	(2,706)		(18,718)
	2011	184,635	8,734	4,941	7,186	(4,378)	(10,523)	(13,065)	(5,379)			(12,484)
	2012	205,300	(6,255)	(13,847)	(8,916)	(5,651)	(10,934)	(3,243)				(48,846)
	2013	191,925	7,732	(12,975)	(11,030)	(3,940)	(3,179)					(23,392)
	2014	220,070	15,894	(4,931)	(3,054)	(5,019)						2,890
	2015	249,157	5,606	4,953	1,594							12,153
	2016	262,196	25,104	2,306								27,410
	2017	336,833	5,276									5,276
	2018	374,751										—
												(58,858)
												(58,858)
												Total Development CY 09 - 18'
	CY 2009	(4,358)	(1,225)	31,802	4,328	(6,260)	(19,007)	(36,677)	(55,106)	(1,155)	(19,913)	(107,571)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor Proportional

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	28,915	28,915	22,782	1,342	24,125	21	24,146	83.5%
2009	17,808	14,664	9,890	641	10,531	9	10,541	71.9%
2010	62,811	38,999	33,023	553	33,577	126	33,702	86.4%
2011	131,093	103,893	92,938	2,259	95,197	646	95,843	92.3%
2012	172,831	163,964	99,677	2,734	102,411	772	103,183	62.9%
2013	162,498	152,365	103,135	3,209	106,345	1,521	107,865	70.8%
2014	218,145	196,983	134,611	14,697	149,308	4,349	153,657	78.0%
2015	266,678	233,507	149,528	26,694	176,222	12,221	188,443	80.7%
2016	275,897	252,306	141,785	43,298	185,083	19,301	204,384	81.0%
2017	291,389	282,185	127,717	62,251	189,968	31,863	221,830	78.6%
2018	360,420	332,497	85,884	79,166	165,050	92,579	257,629	77.5%
	1,988,485	1,800,278	1,000,970	236,844	1,237,817	163,408	1,401,223	77.8%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	—	—	—	—	—	—	—	N/A
2009	—	—	—	—	—	—	—	N/A
2010	—	—	—	—	—	—	—	N/A
2011	—	—	—	—	—	—	—	N/A
2012	—	—	—	—	—	—	—	N/A
2013	—	—	—	—	—	—	—	N/A
2014	—	—	—	—	—	—	—	N/A
2015	—	—	—	—	—	—	—	N/A
2016	—	—	—	—	—	—	—	N/A
2017	19	16	7	—	7	12	19	113.3%
2018	78	72	—	—	—	70	70	98.0%
	97	88	7	—	7	82	89	100.9%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	28,915	28,915	22,782	1,342	24,125	21	24,146	83.5%
2009	17,808	14,664	9,890	641	10,531	9	10,541	71.9%
2010	62,811	38,999	33,023	553	33,577	126	33,702	86.4%
2011	131,093	103,893	92,938	2,259	95,197	646	95,843	92.3%
2012	172,831	163,964	99,677	2,734	102,411	772	103,183	62.9%
2013	162,498	152,365	103,135	3,209	106,345	1,521	107,865	70.8%
2014	218,145	196,983	134,611	14,697	149,308	4,349	153,657	78.0%
2015	266,678	233,507	149,528	26,694	176,222	12,221	188,443	80.7%
2016	275,897	252,306	141,785	43,298	185,083	19,301	204,384	81.0%
2017	291,370	282,169	127,710	62,251	189,961	31,851	221,811	78.6%
2018	360,342	332,425	85,884	79,166	165,050	92,509	257,559	77.5%
	1,988,388	1,800,190	1,000,963	236,844	1,237,810	163,326	1,401,134	77.8%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor Proportional

NET BASIS

Paid Losses	Months									
	12	24	36	48	60	72	84	96	108	120
2009	2,639	6,523	6,958	7,748	7,855	9,423	9,601	9,674	9,807	9,890
2010	8,641	18,110	25,531	28,737	31,930	32,793	33,067	32,930	33,023	
2011	25,512	54,330	71,454	81,598	86,668	90,401	93,047	92,938		
2012	31,251	61,538	78,998	89,617	94,752	98,274	99,677			
2013	37,341	67,131	84,686	94,628	99,839	103,135				
2014	47,838	92,281	117,170	125,134	134,611					
2015	61,150	108,428	133,070	149,528						
2016	63,336	115,223	141,785							
2017	69,419	127,710								
2018	85,884									

Case Incurred Losses	Months									
	12	24	36	48	60	72	84	96	108	120
2009	4,491	8,763	8,700	9,468	8,886	10,449	10,522	10,524	10,505	10,531
2010	22,075	28,406	31,957	34,168	34,165	34,087	33,956	33,682	33,577	
2011	48,109	80,906	88,982	92,199	93,581	94,917	95,989	95,197		
2012	64,658	89,790	96,332	99,595	102,261	102,897	102,411			
2013	78,301	99,224	101,717	105,844	106,588	106,345				
2014	103,152	137,268	147,959	146,667	149,308					
2015	124,633	164,751	169,787	176,222						
2016	134,706	174,061	185,083							
2017	136,964	189,961								
2018	165,050									

IBNR	Months									
	12	24	36	48	60	72	84	96	108	120
2009	6,720	1,500	633	466	259	9	16	9	87	9
2010	10,831	3,905	2,172	405	354	149	136	148	126	
2011	35,521	3,991	2,415	4,114	3,022	935	222	646		
2012	66,309	39,761	17,505	5,334	1,052	386	772			
2013	50,714	28,492	13,008	3,284	2,071	1,521				
2014	54,393	27,786	12,208	7,117	4,349					
2015	59,703	25,173	16,864	12,221						
2016	63,305	27,911	19,301							
2017	82,161	31,851								
2018	92,509									

Ultimate Losses	Months									
	12	24	36	48	60	72	84	96	108	120
2009	11,211	10,263	9,333	9,934	9,146	10,459	10,537	10,534	10,592	10,541
2010	32,906	32,311	34,129	34,573	34,519	34,237	34,092	33,830	33,702	
2011	83,630	84,897	91,398	96,312	96,603	95,852	96,211	95,843		
2012	130,967	129,551	113,837	104,929	103,313	103,283	103,183			
2013	129,014	127,716	114,725	109,127	108,659	107,865				
2014	157,545	165,054	160,167	153,784	153,657					
2015	184,336	189,924	186,651	188,443						
2016	198,012	201,972	204,384							
2017	219,125	221,812								
2018	257,559									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor Proportional

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	18.0%	44.5%	47.4%	52.8%	53.6%	64.3%	65.5%	66.0%	66.9%	67.4%	
	2010	22.2%	46.4%	65.5%	73.7%	81.9%	84.1%	84.8%	84.4%	84.7%		
	2011	24.6%	52.3%	68.8%	78.5%	83.4%	87.0%	89.6%	89.5%			
	2012	19.1%	37.5%	48.2%	54.7%	57.8%	59.9%	60.8%				
	2013	24.5%	44.1%	55.6%	62.1%	65.5%	67.7%					
	2014	24.3%	46.8%	59.5%	63.5%	68.3%						
	2015	26.2%	46.4%	57.0%	64.0%							
	2016	25.1%	45.7%	56.2%								
	2017	24.6%	45.3%									
	2018	25.8%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	30.6%	59.8%	59.3%	64.6%	60.6%	71.3%	71.8%	71.8%	71.6%	71.8%	
	2010	56.6%	72.8%	81.9%	87.6%	87.6%	87.4%	87.1%	86.4%	86.1%		
	2011	46.3%	77.9%	85.6%	88.7%	90.1%	91.4%	92.4%	91.6%			
	2012	39.4%	54.8%	58.8%	60.7%	62.4%	62.8%	62.5%				
	2013	51.4%	65.1%	66.8%	69.5%	70.0%	69.8%					
	2014	52.4%	69.7%	75.1%	74.5%	75.8%						
	2015	53.4%	70.6%	72.7%	75.5%							
	2016	53.4%	69.0%	73.4%								
	2017	48.5%	67.3%									
	2018	49.7%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	76.5%	70.0%	63.6%	67.7%	62.4%	71.3%	71.9%	71.8%	72.2%	71.9%	
	2010	84.4%	82.9%	87.5%	88.7%	88.5%	87.8%	87.4%	86.7%	86.4%		
	2011	80.5%	81.7%	88.0%	92.7%	93.0%	92.3%	92.6%	92.3%			
	2012	79.9%	79.0%	69.4%	64.0%	63.0%	63.0%	62.9%				
	2013	84.7%	83.8%	75.3%	71.6%	71.3%	70.8%					
	2014	80.0%	83.8%	81.3%	78.1%	78.0%						
	2015	78.9%	81.3%	79.9%	80.7%							
	2016	78.5%	80.1%	81.0%								
	2017	77.7%	78.6%									
	2018	77.5%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	11,211	(948)	(930)	601	(788)	1,313	79	(4)	58	(51)	(670)
	2010	32,906	(595)	1,817	444	(54)	(282)	(145)	(262)	(127)		796
	2011	83,630	1,267	6,501	4,915	291	(752)	359	(368)			12,213
	2012	130,967	(1,416)	(15,714)	(8,909)	(1,615)	(30)	(100)				(27,784)
	2013	129,014	(1,298)	(12,991)	(5,598)	(468)	(794)					(21,149)
	2014	157,545	7,508	(4,887)	(6,383)	(127)						(3,889)
	2015	184,336	5,588	(3,273)	1,792							4,107
	2016	198,012	3,961	2,411								6,372
	2017	219,125	2,687									2,687
	2018	257,559										—
												(27,317)
												(28,646)
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		(526)	(2,205)	(1,730)	3,732	4,402	(10,536)	(14,375)	(6,701)	(6,037)	5,330	(28,646)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor Non-Proportional

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	355,645	342,339	100,361	113,178	213,538	84,554	298,092	87.1%
2009	87,043	84,833	28,717	33,881	62,599	20,918	83,516	98.4%
2010	85,872	88,404	15,525	29,797	45,322	25,580	70,903	80.2%
2011	107,271	98,937	16,831	29,951	46,782	29,526	76,308	77.1%
2012	62,817	73,042	7,048	20,196	27,244	26,026	53,270	72.9%
2013	79,548	69,478	11,459	24,122	35,581	25,088	60,668	87.3%
2014	73,148	71,695	11,647	49,582	61,228	8,075	69,303	96.7%
2015	68,406	66,378	4,637	44,941	49,578	23,288	72,866	109.8%
2016	70,189	66,556	1,552	55,305	56,857	28,365	85,222	128.0%
2017	100,025	98,737	9,913	85,814	95,727	30,544	126,271	127.9%
2018	139,678	126,092	161	28,882	29,043	102,194	131,238	104.1%
	1,229,642	1,186,491	207,851	515,649	723,499	404,158	1,127,657	95.0%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	—	—	—	—	—	—	—	N/A
2009	—	—	—	—	—	—	—	N/A
2010	—	—	—	—	—	—	—	N/A
2011	—	—	—	—	—	—	—	N/A
2012	—	—	—	—	—	—	—	N/A
2013	—	—	—	—	—	—	—	N/A
2014	2	1	—	—	—	—	—	—%
2015	—	1	—	—	—	—	—	—%
2016	—	—	—	—	—	—	—	N/A
2017	5,803	4,567	6,682	7,463	14,146	(8,173)	5,973	130.8%
2018	19,707	14,180	1	3,212	3,213	10,833	14,046	99.1%
	25,512	18,749	6,683	10,675	17,359	2,660	20,019	106.8%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	355,645	342,339	100,361	113,178	213,538	84,554	298,092	87.1%
2009	87,043	84,833	28,717	33,881	62,599	20,918	83,516	98.4%
2010	85,872	88,404	15,525	29,797	45,322	25,580	70,903	80.2%
2011	107,271	98,937	16,831	29,951	46,782	29,526	76,308	77.1%
2012	62,817	73,042	7,048	20,196	27,244	26,026	53,270	72.9%
2013	79,548	69,478	11,459	24,122	35,581	25,088	60,668	87.3%
2014	73,146	71,694	11,647	49,582	61,228	8,075	69,303	96.7%
2015	68,406	66,377	4,637	44,941	49,578	23,288	72,866	109.8%
2016	70,189	66,556	1,552	55,305	56,857	28,365	85,222	128.0%
2017	94,222	94,170	3,231	78,351	81,581	38,717	120,298	127.7%
2018	119,971	111,912	160	25,670	25,830	91,361	117,192	104.7%
	1,204,130	1,167,742	201,168	504,974	706,140	401,498	1,107,638	94.9%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor Non-Proportional

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	838	2,048	3,272	4,298	8,383	14,090	16,659	21,989	25,787	28,717
	2010	118	330	1,392	3,083	5,046	9,365	12,955	14,362	15,525	
	2011	109	1,200	2,438	5,039	8,600	12,321	15,478	16,831		
	2012	73	270	331	1,495	4,221	5,575	7,048			
	2013	77	274	2,070	5,405	7,737	11,459				
	2014	180	1,860	3,866	7,406	11,647					
	2015	36	95	850	4,637						
	2016	50	376	1,552							
	2017	2,690	3,231								
	2018	161									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	26,888	46,249	55,656	59,446	61,868	61,146	59,939	61,205	62,676	62,599
	2010	19,501	46,013	48,863	51,851	48,819	44,098	40,829	44,409	45,322	
	2011	23,301	43,383	44,098	42,478	40,314	39,155	43,228	46,782		
	2012	11,265	19,001	19,666	22,011	21,873	27,888	27,244			
	2013	13,250	29,507	31,883	30,482	35,516	35,581				
	2014	21,043	40,363	38,232	52,562	61,228					
	2015	17,537	29,450	48,214	49,578						
	2016	12,843	55,372	56,857							
	2017	40,215	81,581								
	2018	25,830									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	59,104	39,864	40,947	39,100	39,693	39,957	30,475	22,305	23,972	20,918
	2010	70,916	57,383	54,544	50,181	46,051	45,180	37,063	29,072	25,580	
	2011	77,705	65,090	62,814	66,706	64,200	55,588	38,091	29,526		
	2012	63,067	50,492	51,694	49,342	45,444	28,525	26,026			
	2013	49,661	42,435	40,074	36,043	27,538	25,088				
	2014	41,481	30,547	32,633	21,633	8,075					
	2015	47,284	35,389	24,850	23,288						
	2016	51,341	29,955	28,365							
	2017	77,494	38,717								
	2018	91,362									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	85,992	86,114	96,603	98,545	101,560	101,103	90,414	83,510	86,648	83,516
	2010	90,417	103,396	103,408	102,032	94,871	89,278	77,892	73,482	70,903	
	2011	101,005	108,472	106,913	109,184	104,514	94,743	81,320	76,308		
	2012	74,333	69,494	71,360	71,352	67,317	56,413	53,270			
	2013	62,911	71,941	71,957	66,525	63,054	60,668				
	2014	62,525	70,911	70,866	74,195	69,303					
	2015	64,821	64,839	73,065	72,866						
	2016	64,184	85,327	85,222							
	2017	117,709	120,298								
	2018	117,192									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Motor Non-Proportional

NET BASIS

Paid Loss Ratio	Months									
	12	24	36	48	60	72	84	96	108	120
2009	1.0%	2.4%	3.9%	5.1%	9.9%	16.6%	19.6%	25.9%	30.4%	33.9%
2010	0.1%	0.4%	1.6%	3.5%	5.7%	10.6%	14.7%	16.2%	17.6%	
2011	0.1%	1.2%	2.5%	5.1%	8.7%	12.5%	15.6%	17.0%		
2012	0.1%	0.4%	0.5%	2.0%	5.8%	7.6%	9.6%			
2013	0.1%	0.4%	3.0%	7.8%	11.1%	16.5%				
2014	0.3%	2.6%	5.4%	10.3%	16.2%					
2015	0.1%	0.1%	1.3%	7.0%						
2016	0.1%	0.6%	2.3%							
2017	2.9%	3.4%								
2018	0.1%									

Case Incurred Loss Ratio	Months									
	12	24	36	48	60	72	84	96	108	120
2009	31.7%	54.5%	65.6%	70.1%	72.9%	72.1%	70.7%	72.1%	73.9%	73.8%
2010	22.1%	52.0%	55.3%	58.7%	55.2%	49.9%	46.2%	50.2%	51.3%	
2011	23.6%	43.8%	44.6%	42.9%	40.7%	39.6%	43.7%	47.3%		
2012	15.4%	26.0%	26.9%	30.1%	29.9%	38.2%	37.3%			
2013	19.1%	42.5%	45.9%	43.9%	51.1%	51.2%				
2014	29.4%	56.3%	53.3%	73.3%	85.4%					
2015	26.4%	44.4%	72.6%	74.7%						
2016	19.3%	83.2%	85.4%							
2017	42.7%	86.6%								
2018	23.1%									

Ultimate Loss Ratio	Months									
	12	24	36	48	60	72	84	96	108	120
2009	101.4%	101.5%	113.9%	116.2%	119.7%	119.2%	106.6%	98.4%	102.1%	98.4%
2010	102.3%	117.0%	117.0%	115.4%	107.3%	101.0%	88.1%	83.1%	80.2%	
2011	102.1%	109.6%	108.1%	110.4%	105.6%	95.8%	82.2%	77.1%		
2012	101.8%	95.1%	97.7%	97.7%	92.2%	77.2%	72.9%			
2013	90.5%	103.5%	103.6%	95.7%	90.8%	87.3%				
2014	87.2%	98.9%	98.8%	103.5%	96.7%					
2015	97.7%	97.7%	110.1%	109.8%						
2016	96.4%	128.2%	128.0%							
2017	125.0%	127.7%								
2018	104.7%									

Loss Emergence	Months										Total Development AY 09-18'
	12	24	36	48	60	72	84	96	108	120	
2009	85,992	121	10,489	1,943	3,015	(458)	(10,689)	(6,904)	3,138	(3,132)	(2,477)
2010	90,417	12,979	12	(1,375)	(7,162)	(5,593)	(11,386)	(4,411)	(2,579)		(19,515)
2011	101,005	7,467	(1,560)	2,271	(4,669)	(9,771)	(13,423)	(5,012)			(24,697)
2012	74,333	(4,839)	1,867	(8)	(4,035)	(10,904)	(3,143)				(21,062)
2013	62,911	9,030	16	(5,432)	(3,471)	(2,386)					(2,243)
2014	62,525	8,386	(45)	3,329	(4,892)						6,778
2015	64,821	18	8,226	(199)							8,045
2016	64,184	21,143	(105)								21,038
2017	117,709	2,589									2,589
2018	117,192										—
											(31,544)
											(78,927)
											Total Development CY 09 - 18'
											(78,927)
											(78,927)
CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018		
(3,832)	980	33,531	596	(10,662)	(8,471)	(22,302)	(48,405)	4,882	(25,244)		(78,927)

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

**Reinsurance
Liability**

ITD Summary

Gross

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	923,275	805,829	302,587	33,264	335,852	23,138	358,990	44.5%
2009	272,702	241,308	137,438	27,986	165,424	14,155	179,579	74.4%
2010	238,062	243,937	130,899	17,510	148,409	14,638	163,047	66.8%
2011	229,728	242,920	139,402	38,360	177,762	26,087	203,849	83.9%
2012	242,817	232,796	118,101	21,381	139,482	29,415	168,897	72.6%
2013	268,673	237,823	104,214	21,352	125,567	57,069	182,635	76.8%
2014	365,466	292,885	91,715	36,161	127,877	79,568	207,445	70.8%
2015	345,319	300,890	81,816	38,074	119,890	100,396	220,286	73.2%
2016	422,489	358,743	75,535	53,085	128,620	143,483	272,103	75.8%
2017	420,817	429,457	55,765	61,281	117,046	199,701	316,747	73.8%
2018	439,524	471,236	22,665	42,617	65,281	277,461	342,742	72.7%
	4,168,872	3,857,824	1,260,137	391,071	1,651,210	965,111	2,616,320	67.8%

Ceded

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	37,244	37,244	(12)	—	(12)	8	(4)	—%
2009	13,797	13,797	—	—	—	—	—	—%
2010	11,923	11,923	6	—	6	2	8	0.1%
2011	12,048	12,048	—	—	—	—	—	—%
2012	11,922	11,922	—	—	—	—	—	—%
2013	3,087	3,087	—	—	—	—	—	—%
2014	3,683	3,662	—	—	—	—	—	—%
2015	3,869	3,890	38	—	38	33	71	1.8%
2016	73,808	26,264	5,465	3,357	8,822	9,739	18,561	70.7%
2017	89,680	75,100	13,148	11,104	24,252	28,632	52,884	70.4%
2018	121,378	104,063	3,025	6,631	9,656	61,524	71,180	68.4%
	382,439	303,000	21,670	21,092	42,762	99,938	142,700	47.1%

Net

Accident Year	Written Premium	Earned Premium	Paid Losses	Case Reserves	Case Incurred Losses	IBNR	Ultimate Losses	Ultimate Loss Ratio
2008 and prior	886,031	768,585	302,599	33,264	335,864	23,130	358,994	46.7%
2009	258,905	227,511	137,438	27,986	165,424	14,155	179,579	78.9%
2010	226,139	232,014	130,893	17,510	148,403	14,636	163,039	70.3%
2011	217,680	230,872	139,402	38,360	177,762	26,087	203,849	88.3%
2012	230,895	220,874	118,101	21,381	139,482	29,415	168,897	76.5%
2013	265,586	234,736	104,214	21,352	125,567	57,069	182,635	77.8%
2014	361,783	289,223	91,715	36,161	127,877	79,568	207,445	71.7%
2015	341,450	297,000	81,778	38,074	119,852	100,363	220,215	74.1%
2016	348,681	332,479	70,070	49,728	119,798	133,744	253,542	76.3%
2017	331,137	354,357	42,617	50,177	92,794	171,069	263,863	74.5%
2018	318,146	367,173	19,640	35,986	55,625	215,937	271,562	74.0%
	3,786,433	3,554,824	1,238,467	369,979	1,608,448	865,173	2,473,620	69.6%

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Liability

NET BASIS

		Months									
Paid Losses		12	24	36	48	60	72	84	96	108	120
	2009	2,362	18,050	45,721	58,070	74,900	104,685	123,355	127,714	133,788	137,438
	2010	2,857	18,381	47,163	63,554	85,939	99,721	111,091	122,123	130,894	
	2011	5,576	22,164	41,272	71,983	94,824	114,891	126,373	139,402		
	2012	3,832	13,567	29,710	60,621	80,356	103,522	118,101			
	2013	6,275	22,975	53,429	70,343	89,759	104,214				
	2014	7,588	29,613	49,689	72,139	91,715					
	2015	7,466	27,903	55,267	81,778						
	2016	12,133	38,158	70,071							
	2017	12,643	42,616								
	2018	19,639									

		Months									
Case Incurred Losses		12	24	36	48	60	72	84	96	108	120
	2009	18,206	54,753	87,402	103,765	124,777	134,082	145,624	144,942	147,770	165,424
	2010	22,797	51,364	86,039	109,844	120,960	128,828	130,650	140,205	148,404	
	2011	23,007	55,777	84,696	116,541	139,914	157,149	170,125	177,762		
	2012	15,634	46,809	79,275	103,298	119,591	131,461	139,482			
	2013	23,677	54,044	81,552	101,235	115,507	125,567				
	2014	21,573	54,067	80,896	113,425	127,877					
	2015	22,567	57,398	92,773	119,852						
	2016	39,222	75,313	119,798							
	2017	41,882	92,794								
	2018	55,625									

		Months									
IBNR		12	24	36	48	60	72	84	96	108	120
	2009	167,171	130,423	102,473	81,823	67,114	76,737	51,542	37,193	24,062	14,155
	2010	160,547	129,887	105,798	81,633	89,773	69,857	57,811	30,510	14,636	
	2011	158,769	125,203	97,014	84,029	70,236	48,942	35,797	26,087		
	2012	158,796	123,401	95,902	76,023	60,284	45,092	29,415			
	2013	156,640	129,479	108,045	90,125	74,868	57,069				
	2014	187,445	157,814	132,489	95,359	79,568					
	2015	198,057	163,393	128,142	100,363						
	2016	205,411	173,572	133,744							
	2017	229,049	171,070								
	2018	215,937									

		Months									
Ultimate Losses		12	24	36	48	60	72	84	96	108	120
	2009	185,377	185,176	189,875	185,588	191,891	210,819	197,166	182,135	171,832	179,579
	2010	183,344	181,250	191,837	191,477	210,733	198,684	188,461	170,716	163,040	
	2011	181,776	180,981	181,711	200,570	210,150	206,091	205,922	203,849		
	2012	174,430	170,210	175,177	179,321	179,875	176,554	168,897			
	2013	180,318	183,523	189,598	191,360	190,375	182,635				
	2014	209,018	211,882	213,385	208,784	207,444					
	2015	220,624	220,791	220,915	220,215						
	2016	244,633	248,886	253,542							
	2017	270,931	263,864								
	2018	271,563									

AXIS Capital Holdings Limited
2018 Loss Development Triangles
Values in Thousands USD

Reinsurance
Liability

NET BASIS

		Months										
Paid Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	1.0%	7.9%	20.1%	25.5%	32.9%	46.0%	54.2%	56.1%	58.8%	60.4%	
	2010	1.2%	7.9%	20.3%	27.4%	37.0%	43.0%	47.9%	52.6%	56.4%		
	2011	2.4%	9.6%	17.9%	31.2%	41.1%	49.8%	54.7%	60.4%			
	2012	1.7%	6.1%	13.5%	27.4%	36.4%	46.9%	53.5%				
	2013	2.7%	9.8%	22.8%	30.0%	38.2%	44.4%					
	2014	2.6%	10.2%	17.2%	24.9%	31.7%						
	2015	2.5%	9.4%	18.6%	27.5%							
	2016	3.6%	11.5%	21.1%								
	2017	3.6%	12.0%									
	2018	5.3%										
		Months										
Case Incurred Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	8.0%	24.1%	38.4%	45.6%	54.8%	58.9%	64.0%	63.7%	65.0%	72.7%	
	2010	9.8%	22.1%	37.1%	47.3%	52.1%	55.5%	56.3%	60.4%	64.0%		
	2011	10.0%	24.2%	36.7%	50.5%	60.6%	68.1%	73.7%	77.0%			
	2012	7.1%	21.2%	35.9%	46.8%	54.1%	59.5%	63.2%				
	2013	10.1%	23.0%	34.7%	43.1%	49.2%	53.5%					
	2014	7.5%	18.7%	28.0%	39.2%	44.2%						
	2015	7.6%	19.3%	31.2%	40.4%							
	2016	11.8%	22.7%	36.0%								
	2017	11.8%	26.2%									
	2018	15.1%										
		Months										
Ultimate Loss Ratio		12	24	36	48	60	72	84	96	108	120	
	2009	81.5%	81.4%	83.5%	81.6%	84.3%	92.7%	86.7%	80.1%	75.5%	78.9%	
	2010	79.0%	78.1%	82.7%	82.5%	90.8%	85.6%	81.2%	73.6%	70.3%		
	2011	78.7%	78.4%	78.7%	86.9%	91.0%	89.3%	89.2%	88.3%			
	2012	79.0%	77.1%	79.3%	81.2%	81.4%	79.9%	76.5%				
	2013	76.8%	78.2%	80.8%	81.5%	81.1%	77.8%					
	2014	72.3%	73.3%	73.8%	72.2%	71.7%						
	2015	74.3%	74.3%	74.4%	74.1%							
	2016	73.6%	74.9%	76.3%								
	2017	76.5%	74.5%									
	2018	74.0%										
		Months										
Loss Emergence		12	24	36	48	60	72	84	96	108	120	Total Development AY 09-18'
	2009	185,377	(201)	4,699	(4,287)	6,303	18,928	(13,653)	(15,031)	(10,303)	7,747	(5,798)
	2010	183,344	(2,093)	10,587	(361)	19,256	(12,049)	(10,223)	(17,745)	(7,676)		(20,304)
	2011	181,776	(795)	730	18,860	9,580	(4,059)	(169)	(2,073)			22,074
	2012	174,430	(4,220)	4,967	4,143	554	(3,321)	(7,656)				(5,533)
	2013	180,318	3,206	6,074	1,762	(985)	(7,740)					2,317
	2014	209,018	2,864	1,503	(4,601)	(1,339)						(1,573)
	2015	220,624	167	124	(699)							(408)
	2016	244,633	4,253	4,657								8,910
	2017	270,931	(7,067)									(7,067)
	2018	271,563										—
												(7,382)
		CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	Total Development CY 09 - 18'
		(1,738)	(2,100)	(378)	(611)	(84,630)	(21,293)	(45,789)	(43,595)	(42,920)	(23,886)	(266,940)

AXIS Capital Holdings Limited
2018 Loss Development Triangles

VII. SELECTED DISCLOSURES FROM 2018 ANNUAL REPORT ON FORM 10-K

We believe the most significant accounting judgment we make is the estimate of our reserve for losses and loss expenses ("loss reserves"). Our loss reserves represent management's estimate of the unpaid portion of our ultimate liability for losses and loss expenses ("ultimate losses") for (re)insured events that have occurred at or before the balance sheet date. Our loss reserves reflect both claims that have been reported ("case reserves") to us and claims that have been incurred but not reported ("IBNR") to us. Our loss reserves represent our best estimate of what the ultimate settlement and administration of claims will cost, based on our assessment of facts and circumstances known at that particular point in time.

Loss reserves are not an exact calculation of the liability but instead, are complex estimates. The process of estimating loss reserves involves a number of variables (refer to '*Selection of Reported Reserves - Management's Best Estimate*' below for further details). We review our estimate of loss reserves each reporting period and consider all significant facts and circumstances then known. As additional experience and other data become available and/or laws and legal interpretations change, we may adjust our previous estimates of loss reserves. Adjustments are recognized in the period in which they are determined therefore they can impact that period's underwriting results either favorably (indicating that our current estimates are lower than our previous estimates) or adversely (indicating that our current estimates are higher than our previous estimates).

Case Reserves

With respect to our insurance business, we are generally notified of losses by our insureds and/or their brokers. Based on this information, our claims personnel estimate our ultimate losses arising from the claim, including the cost of administering the claims settlement process. These estimates reflect the judgment of our claims personnel based on general reserving practices, the experience and knowledge of such personnel regarding the nature of the specific claim and, where appropriate, the advice of legal counsel, loss adjusters and other relevant consultants.

With respect to our reinsurance business, we are generally notified of losses by ceding companies and/or their brokers. For excess of loss contracts, we are typically notified of insured losses on specific contracts and record a case reserve for the estimated ultimate liability arising from the claim. For contracts written on a proportional basis, we typically receive aggregated claims information and record a case reserve based on that information. However, our proportional reinsurance contracts typically require that losses in excess of pre-defined amounts be separately notified so we can adequately evaluate them. Our claims department evaluates each specific loss notification we receive and records additional case reserves when a ceding company's reserve for a claim is not considered adequate.

In deciding whether to provide treaty reinsurance, we carefully review and analyze a cedant's underwriting and risk management practices to ensure appropriate underwriting, data capture and reporting procedures. We also undertake an extensive program of cedant audits, using outsourced legal and industry experience where necessary. This allows us to review cedants' claims administration practices to ensure that reserves are consistent with exposures, adequately established, and properly reported in a timely manner.

IBNR

The estimation of IBNR is necessary due to the time lags between when a loss event occurs and when it is actually reported, which is referred to as a reporting lag. Reporting lags may arise from a number of factors, including but not limited to: the nature of the loss, the use of intermediaries and complexities in the claims adjusting process. As we do not have specific information on IBNR, it must be estimated. IBNR is calculated by deducting incurred losses (i.e. paid losses and case reserves) from management's best estimate of ultimate losses. In contrast to case reserves, which are established at the contract level, IBNR reserves are generally estimated at an aggregate level and cannot be identified as reserves for a particular loss event or contract (refer to '*Reserving for Significant Catastrophic Events*' below for further details).

AXIS Capital Holdings Limited
2018 Loss Development Triangles

Reserving Methodology

Sources of Information

Our quarterly reserving process begins with the collection and analysis of paid and incurred claim data for each of our segments. The segmental data is disaggregated by reserve class and further disaggregated by underwriting year and accident year. We use underwriting year information to analyze our business and subsequently allocate reserves to the respective accident years. Our reserve classes are selected to ensure that the underlying contracts have homogeneous loss development characteristics, while remaining large enough to make the estimation of trends credible. We review our reserve classes on a regular basis and adjust them over time as our business evolves. The paid and incurred claim data, in addition to industry benchmarks, serves as a key input to many of the methods employed by our actuaries. The relative weights assigned to our own historical loss data versus industry data vary according to the length of the development profile for the reserve class being evaluated (refer to 'Claim Tail Analysis' below for further details).

Actuarial Analysis

Multiple actuarial methods are available to estimate ultimate losses. Each method has its own assumptions and its own advantages and disadvantages, with no single estimation method being better than the others in all situations and no one set of assumption variables being meaningful for all reserve classes. The relative strengths and weaknesses of the particular estimation methods when applied to a particular group of claims can also change over time.

The following is a brief description of the reserve estimation methods commonly employed by our actuaries and a discussion of their particular strengths and weaknesses:

- Expected Loss Ratio Method ("ELR Method"): This method estimates ultimate losses for an accident year or underwriting year by applying an expected loss ratio to the earned or written premium for that year. Generally, expected loss ratios are based on one or more of (a) an analysis of historical loss experience to date, (b) pricing information and (c) industry data, adjusted as appropriate, to reflect changes in rates and terms and conditions. This method is insensitive to actual incurred losses for the accident year or underwriting year in question and is, therefore, often useful in the early stages of development when very few losses have been incurred. Conversely, the lack of sensitivity to incurred/paid losses for the accident year or underwriting year in question means that this method is usually inappropriate in later stages of an accident year or underwriting year's development.
- Loss Development Method (also referred to as the "Chain Ladder Method" or "Link Ratio Method"): This method assumes that the losses incurred/paid for each accident year or underwriting year at a particular development stage follow a relatively similar pattern. It assumes that on average, every accident year or underwriting year will display the same percentage of ultimate losses incurred/paid at the same point in time after the inception of that year. The percentages incurred/paid are established for each development stage (e.g. 12 months, 24 months, etc.) after examining historical averages from historical loss development data and/or external industry benchmark information. Ultimate losses are then estimated by multiplying the actual incurred/paid losses by the reciprocal of the established incurred/paid percentage. The strengths of this method are that it reacts to loss emergence/payments and that it makes full use of historical claim emergence/payment experience. However, this method has weaknesses when the underlying assumption of stable loss development/payment patterns is not valid. This could be the consequence of changes in business mix, claim inflation trends or claim reporting practices and/or the presence of large claims, among other things. Furthermore, this method tends to produce volatile estimates of ultimate losses where there is volatility in the underlying incurred/paid patterns. In particular, where the expected percentage of incurred/paid losses is low, small deviations between actual and expected claims can lead to very volatile estimates of ultimate losses. As a result, this method is often unsuitable at early development stages for an accident year or underwriting year.

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- Bornhuetter-Ferguson Method ("BF Method"): This method can be seen as a combination of the ELR and Loss Development Methods, under which the Loss Development Method is given progressively more weight as an accident year or underwriting year matures. The main advantage of the BF Method is that it provides a more stable estimate of ultimate losses than the Loss Development Method at earlier stages of development, while remaining more sensitive to emerging loss development than the ELR Method. In addition, the BF Method allows for the incorporation of external market information through the use of expected loss ratios, whereas the Loss Development Method does not incorporate such information.

As part of our quarterly loss reserve review process, our actuaries employ the estimation method(s) that they believe will produce the most reliable estimate of ultimate losses, at that particular evaluation date, for each reserve class and accident year or underwriting year combination. Often, this is a blend (i.e. weighted average) of the results of two or more appropriate actuarial methods. These ultimate loss estimates are generally utilized to evaluate the adequacy of our ultimate loss estimates for previous accident or underwriting years, established in the prior reporting period. For the initial estimate of the current accident or underwriting year, the available claim data is typically insufficient to produce a reliable estimate of ultimate losses. As a result, our initial estimate for an accident or underwriting year is generally based on the ELR Method for longer tailed lines and a BF method for shorter tailed lines. The initial ELR for each reserve class is established collaboratively by our actuaries, underwriters and management at the start of the year as part of the planning process, taking into consideration prior accident years' or underwriting years' experience and industry benchmarks, adjusted after considering factors such as exposure trends, rate differences, changes in contract terms and conditions, business mix changes and other known differences between the current year and prior accident or underwriting years. The initial expected loss ratios for a given accident or underwriting year may be modified over time if the underlying assumptions, such as loss development or premium rate changes, differ from the original assumptions.

Key Actuarial Assumptions

The use of the above actuarial methods requires us to make certain explicit assumptions, the most significant of which are: (1) expected loss ratios and (2) loss development patterns.

In our earlier years, we placed significant reliance on industry benchmarks in establishing our expected loss ratios and selecting loss development patterns. Over time, we have placed more reliance on our historical loss experience in establishing these ratios and selecting these patterns where we believe the weight of our own actual experience has become sufficiently credible for consideration. The weight given to our experience differs for each of our three claim tail classes (refer to '*Claim Tail Analysis*' below for further details). In establishing expected loss ratios for our insurance segment, we give consideration to a number of other factors, including exposure trends, rate adequacy on new and renewal business, ceded reinsurance costs, changes in claims emergence and our underwriters' view of terms and conditions in the market environment. For our reinsurance segment, expected loss ratios are based on a contract-by-contract review, which considers information provided by clients together with estimates provided by our underwriters and actuaries about the impact of changes in pricing, terms and conditions and coverage. We also have considered the market experience of some classes of business as compiled and analyzed by an independent actuarial firm, as appropriate.

Claim Tail Analysis

In order to capture the key dynamics of our loss reserve development and potential volatility, our reserve classes should be considered according to their potential expected length of loss emergence and settlement, generally referred to as the "tail". We consider our business to consist of three claim tail classes: short-tail, medium-tail and long-tail. Favorable development on prior accident year reserves indicates that our current estimates are lower than our previous estimates, while adverse development indicates that our current estimates are higher than our previous estimates. Below is a discussion of the specifics of our loss reserve

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process as they apply to each claim tail class, as well as commentary on the factors contributing to our historical loss reserve development for each class.

Short-Tail Business

Our short-tail business generally includes exposures for which losses are usually known and paid within a relatively short period of time after the underlying loss event has occurred. Our short-tail business primarily relates to property coverages and includes terrorism, accident and health, discontinued lines - Novae, marine and certain aviation business within our insurance segment, together with the property, catastrophe, engineering, agriculture, marine and other, accident and health, and discontinued lines - Novae business within our reinsurance segment.

The key actuarial assumptions for our short-tail business in our early accident years were primarily developed with reference to industry benchmarks for both expected loss ratios and loss development patterns. As our own historical loss experience amassed, it gained credibility and became relevant for consideration in establishing these key actuarial assumptions. As a result, we gradually increased the weighting assigned to our own historical experience in selecting the expected loss ratios and loss development patterns utilized to establish our estimates of ultimate losses for an accident year.

Due to the relatively short reporting and settlement patterns for our short-tail business, we generally place more weight upon experience-based methods and other qualitative considerations in establishing reserves for recent and more mature accident years. As our experience developed more favorably than our initial expectations, we recognized favorable prior year development on short-tail business in recent years (refer to 'Underwriting Results - Consolidated - Prior Year Reserve Development' for further details).

Although our estimates of ultimate losses for our short-tail business are inherently less uncertain than for our medium and long-tail business, significant judgment is still required. For example, because much of our excess insurance and excess of loss reinsurance business has high attachment points, it is often difficult to estimate whether claims will exceed those attachment points. Also, the inherent uncertainties relating to catastrophe events previously discussed, together with our typically large line sizes, further add to the complexity of estimating our potential exposure. In addition, we use MGAs and other producers for certain business within our insurance segment; this can delay the reporting of loss information to us. We expect that the majority of development for an accident year or underwriting year will be recognized in the subsequent one to three years.

Medium-Tail Business

Our medium-tail business primarily consists of insurance and reinsurance professional lines, reinsurance credit and surety and discontinued lines - Novae within our insurance segment. Certain other classes of business, including aviation hull are also considered to have a medium-tail. Claim reporting and settlement periods on these classes are generally longer than those of our short-tail reserve classes. We also consider our insurance credit and political risk business to have a medium tail, due to the complex nature of claims and the potential additional time that may be required to realize our subrogation assets.

For our earliest accident and underwriting years, our initial key actuarial expected loss ratio and loss development assumptions were established utilizing industry benchmarks. Due to the longer claim tail, the length of time required to develop our own credible loss history for use in the reserving process is greater for our medium-tail business than for our short-tail business. As a result, the number of years where we relied heavily on industry benchmarks to establish our key actuarial assumptions is greater for our medium-tail business. Our reserving approach for medium-tail business is tailored by line of business, with our significant lines being specifically addressed below.

Insurance and Reinsurance Professional Lines

For our professional lines business and discontinued lines - Novae, claim payment and reporting patterns are typically medium to long-tail in nature. The underlying business is predominantly written on a claims-

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made basis. With respect to our key actuarial assumptions, we are progressively giving more weight to our own experience when establishing our expected loss ratios and our selected loss development patterns, though we continue to consider industry benchmarks.

Loss reporting patterns for professional lines business tend to be volatile, causing instability in actuarial indications based on incurred loss data until an accident year matures. Consequently, our initial loss reserves for an accident year or underwriting year are generally based upon an ELR method and the consideration of relevant qualitative factors. As accident years and underwriting years mature, we increasingly give more weight to methods that reflect our actual experience until our selections are based almost exclusively on experience-based methods. We evaluate the appropriateness of the transition to experience-based methods at the reserve class level, commencing this transition when we believe that our incurred loss development is sufficient to produce meaningful actuarial indications. The rate at which we transition fully to sole reliance on experience-based methods can vary by reserve class and by year, depending on our assessment of the stability and relevance of such indications. For some professional lines in our insurance segment, we also rely upon the evaluation of the open claim inventory in addition to the commonly employed actuarial methods when establishing reserves.

Our transition from the ELR method to experience-based methods began in 2008, when we commenced gradual transition for the 2004 and prior accident years. As our loss history continued to develop, the transition was expanded to include additional accident years. With the exception of the experience in our insurance professional lines during 2014 and 2015, our actual loss experience has generally been more favorable than or broadly in line with initial expectations and the transition has generally led to the recognition of net favorable prior year reserve development in recent years. During 2014, management continued to rely upon experience-based methods, an evaluation of the open claims inventory and other qualitative factors in establishing the ultimate loss estimates for our insurance professional lines reserve class. During 2015, updated actuarial assumptions in our Australian book of business impacting accident years 2010 to 2014 resulted in strengthening of our insurance professional lines reserve class, partially offset by favorable development in certain U.S. professional lines business. Refer to *'Underwriting Results - Consolidated - Prior Year Development'* for a discussion of the development recognized during the last three years.

We believe that there continues to be a relatively higher level of uncertainty around ultimate loss estimates for the business classes impacted by the global financial crisis in the 2007 to 2009 accident years. As a result, we continue to rely upon the evaluation of the open claims inventory in addition to the consideration of the actuarial indications, while exercising a greater degree of caution in recognizing potential favorable loss emergence, when establishing loss reserves for these accident years.

Reinsurance Credit and Surety

For our reinsurance credit and surety business, our initial and most recent underwriting year loss projections are generally based on the ELR method, with consideration given to qualitative factors. Given that there is a quicker and more stable reporting pattern for trade credit business, we generally commence the transition to experience-based methods sooner than for the surety business.

Insurance Credit and Political Risk

Refer to *'Reserving for Credit and Political Risk Business'* below for a discussion of specific loss reserve issues related to this business. When considering prior year reserve development for this line of business, it is important to note that the multi-year nature of the credit business distorts loss ratios when a single accident year is considered in isolation. In recent years, the average term of these contracts has been four to five years. The premiums we receive are generally earned evenly over the contract term, thus spanning multiple accident years. In contrast, losses incurred on these contracts, which can be characterized as low in frequency and high in severity, are reflected in a single accident year.

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The estimation of the value of our recoveries on credit and political risk business requires significant management judgment. At December 31, 2018, our estimated recoveries on credit insurance business were \$24 million (2017: \$57 million).

Long-Tail Business

In contrast to our short and medium-tail business, the claim tail for our long-tail business is expected to be notably longer, as claims are often reported and ultimately paid or settled years, or even decades, after the related loss events occur. Our long-tail business primarily relates to liability business written in our insurance and reinsurance segments, as well as our reinsurance motor business and discontinued lines - Novae in our insurance and reinsurance segments.

As a general rule, our estimates of accident year or underwriting year ultimate losses for our long-tail business are notably more uncertain than those for our short and medium-tail business. Factors that contribute additional uncertainty to estimates for our long-tail business include, but are not limited to:

- more significant weight given to industry benchmarks in forming our key actuarial assumptions;
- potential volatility of actuarial estimates, given the number of years of development it takes to produce a meaningful incurred loss as a percentage of ultimate losses;
- inherent uncertainties about loss trends, claims inflation (e.g. medical, judicial, social) and general economic conditions; and
- the possibility of future litigation, legislative or judicial change that may impact future loss experience relative to the prior industry loss experience relied upon in reserve estimation.

To date, our key actuarial assumptions for our long-tail business have been derived extensively from industry benchmarks supplemented with our own historical experience. Given our relatively short operating history in comparison to the development tail for this business, we do not believe that our own historical loss development for our long-tail business has amassed an appropriate volume to serve as a fully credible input into the key actuarial assumptions previously outlined. While we consider industry benchmarks that we believe reflect the nature and coverage of our business, our actual loss experience may differ from the benchmarks based on industry averages.

Due to the length of the development tail for this business, our reserve estimates for most accident years and underwriting years are predominantly based on the BF or ELR method and the consideration of qualitative factors. As part of our quarterly reserving process, we monitor actual paid and incurred loss emergence relative to expected loss emergence based on our selected loss development patterns. The drivers of any unfavorable loss emergence are investigated and, as a result, have led to an immediate recognition of adverse development in some instances. Prior to the fourth quarter of 2012, we did not recognize any favorable loss emergence. As a result, during some periods, we recognized net adverse development for our insurance liability business in light of unfavorable loss emergence for certain reserve class and accident year combinations (refer to *'Underwriting Results - Consolidated - Prior Year Reserve Development'* for further details).

Commencing with the fourth quarter 2012 reserving process, we began to give weight to actuarial methods that reflect our actual experience for liability business as we believed that our oldest accident years were at a stage of expected development where such methods would produce meaningful actuarial indications. In 2018, we continued to give weight to experience-based methods on the earlier years for our liability line of business leading to the recognition of some favorable experience on our reinsurance classes.

Reserving for Credit and Political Risk Business

Our insurance credit and political risk business consists primarily of credit insurance and confiscation, expropriation, nationalization and deprivation coverages ("CEND"). Claims for this business tend to be characterized by their severity risk, as opposed to their frequency risk therefore, claim payment and reporting

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patterns are anticipated to be volatile. Under the notification provisions of our credit insurance policies, we anticipate being advised of an insured event within a relatively short time period. Consequently, we generally estimate ultimate losses based on a contract-by-contract analysis which considers the contracts' terms, the facts and circumstances of underlying loss events and qualitative input from claims managers.

An important and distinguishing feature of many of these contracts is our contractual right, subsequent to payment of a claim to our insured, to be subrogated to, or otherwise have an interest in, the insured's rights of recovery under an insured loan or facility agreement. These estimated recoveries are recorded as an offset to our credit and political risk loss reserves. The lag between the date of a claim payment and our ultimate recovery from the corresponding security can result in negative case reserves at a point in time (as was the case at December 31, 2018 and 2017). The nature of the underlying collateral is specific to each transaction and we also estimate the value of this collateral on a contract-by-contract basis. This valuation process is inherently subjective and involves the application of management's judgment because active markets for the collateral often do not exist. Our estimates of values are based on numerous inputs, including information provided by our insureds, as well as third party sources including rating agencies, asset valuation specialists and other publicly available information. We also assess any post-event circumstances, including restructurings, liquidations and possession of asset proposals/agreements.

In some instances, upon becoming aware of a loss event related to our credit and political risk business, we negotiate a final settlement of all of our policy liabilities for a fixed amount. In most circumstances, this occurs when the insured moves to realize the benefit of the collateral that underlies the insured loan or facility and presents us with a net settlement proposal that represents a full and final payment by us under the terms of the policy. In consideration for this payment, we secure a cancellation of the policy, or a release of all claims, and waive our right to pursue a recovery of these settlement payments against the security that may have been available to us under the insured loan or facility agreement. In certain circumstances, cancellation by way of net settlement or full payment can result in an adjustment of the net premium to be received and earned on the policy.

Reserving For Significant Catastrophic Events

We cannot estimate losses from widespread catastrophic events, such as hurricanes and earthquakes, using the traditional actuarial methods described above. Loss reserves for such events are estimated by management after a catastrophe occurs by completing an in-depth analysis of individual contracts which may potentially have been impacted by the catastrophic event. This in-depth analysis may rely on several sources of information including:

- estimates of the size of insured industry losses from the catastrophic event and our corresponding market share;
- a review of our portfolio of contracts to identify those contracts which may be exposed to the catastrophic event;
- a review of modeled loss estimates based on information previously reported by customers and brokers, including exposure data obtained during the underwriting process;
- discussions of the impact of the event with our customers and brokers; and
- catastrophe bulletins published by various independent statistical reporting agencies.

We generally use a blend of these information sources to arrive at our aggregate estimate of the ultimate losses arising from the catastrophic event. In subsequent reporting periods, we review changes in paid and incurred losses in relation to each significant catastrophe and adjust our estimates of ultimate losses for each event if there are developments that are different from our previous expectations. Adjustments are recorded in the period in which they are identified.

There are additional risks affecting our ability to accurately estimate ultimate losses for catastrophic events. For example, the estimates of loss reserves related to hurricanes and earthquakes can be affected by factors including, but not limited to: the inability to access portions of impacted areas, infrastructure disruptions, the

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complexity of factors contributing to losses, legal and regulatory uncertainties, complexities involved in estimating business interruption losses and additional living expenses, the impact of demand surge, fraud and the limited nature of information available. For hurricanes, additional complex coverage factors may include determining whether damage was caused by flooding or wind, evaluating general liability and pollution exposures, and mold damage. The timing of a catastrophe, for example, near the end of a reporting period, can also affect the level of information available to us to estimate loss reserves for that reporting period.

Selection of Reported Reserves - Management's Best Estimate

Our quarterly reserving process involves the collaboration of our underwriting, claims, actuarial, legal, ceded reinsurance and finance departments, includes various segmental committee meetings and culminates with the approval of a single point best estimate by our Group Reserving Committee, which comprises senior management. In selecting this best estimate, management considers actuarial estimates and applies informed judgment regarding qualitative factors that may not be fully captured in these actuarial estimates. Such factors include, but are not limited to: the timing of the emergence of claims, volume and complexity of claims, social and judicial trends, potential severity of individual claims and the extent of internal historical loss data versus industry information. While these qualitative factors are considered in arriving at the point estimate, no specific provisions for qualitative factors are established.

With regard to establishing the fair value of reserves for losses and loss expenses for Novae at the acquisition date, weight was given to the observable value of these reserves based on the RITC transaction of the 2015 and prior years of account of Syndicate 2007, which was completed prior to the allocation of purchase price. Management made no change to the initial estimate when establishing its best estimate of reserves for losses and loss expenses at December 31, 2017. This is consistent with our general approach of recognizing all or part of the anticipated cost of third party liability commutations if the transaction has either completed or is considered sufficiently likely to be completed in the near term.

Beginning in 2013, we significantly enhanced the capabilities and resources dedicated to the actuarial reserving function. Consequently, from the first quarter of 2014, management began to rely upon its internal actuarial reserving function for the quarterly reserve evaluation process rather than utilizing the services of an independent actuarial firm. On an annual basis, we use an independent actuarial firm to provide an actuarial opinion on the reasonableness of our loss reserves for each of our operating subsidiaries and statutory reporting entities: such actuarial opinions are required to meet various insurance regulatory requirements. The actuarial firm also discusses its conclusions from the annual review with management and presents its findings to our Board of Directors.

Sensitivity Analysis

While we believe that our loss reserves at December 31, 2018 are adequate, new information, events or circumstances may result in ultimate losses that are materially greater or less than provided for in our loss reserves. As previously noted, there are many factors that may cause our reserves to increase or decrease, particularly those related to catastrophe losses and long-tail lines of business.

Our expected loss ratios are a key assumption in our estimate of ultimate losses for business at an early stage of development. All else remaining equal, a higher expected loss ratio would result in a higher ultimate loss estimate, and vice versa. Our assumed loss development patterns are another significant assumption in estimating our loss reserves. All else remaining equal, accelerating a loss reporting pattern (i.e. shortening the claim tail) would result in lower ultimate losses, as the estimated proportion of losses already incurred would be higher. The uncertainty in the timing of the emergence of claims (i.e. the length of the development pattern) is generally greater for a company like ours with a relatively limited operating history which, therefore, must rely on industry benchmarks to a certain extent when establishing loss reserve estimates.

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VIII. GLOSSARY

Accident Year means the year in which the event occurred that triggered a claim to us. All years referred to are years ending December 31st.

Additional Case Reserves are amounts that are held in addition to Case Reserves that result from our claims professionals determining that the established Case Reserves (which are often established by cedants or third parties) are expected to be insufficient to meet the expected future settlement amounts.

Case Incurred Losses is the sum of Paid Losses, plus Case Reserves and any Additional Case Reserves.

Case Incurred Loss Ratio is the ratio of Case Incurred Losses to Earned Premium, which shows the relationship between Case Incurred Losses and the associated premiums that are related to those losses.

Case Reserves are amounts set aside in relation to claims that have been made but not yet been paid and represent an assessment of the remaining amount, including LAE, to be paid in respect of each notified claim.

Ceded Claims are those amounts we received or expect to receive from third party reinsurers to whom we ceded premiums.

Ceded Premiums are those premiums payable by us to third party reinsurers.

Diagonals in the triangle from bottom left to top right represent evaluation dates. For example, the last diagonal in our published triangles shows the position of each Accident Year as at December 31, 2018.

Earned Premium is the amount of policy premiums allocated between Accident Years in accordance with the assumed incidence of risk which results from insurance and reinsurance contracts that do not all commence at the start of a given Accident Year.

Gross Premiums and Gross Losses are shown before the impact of any third party outwards reinsurance.

IBNR means incurred but not reported reserve, or a reserve amount held to cover expected future settlements in relation to all claims that have occurred but have not yet been reported to us, which includes an estimate for LAE. This includes a reserve provision for claims which may have already occurred and expected development (upward or downward) in existing Case Reserves and Additional Case Reserves.

Inception to Date ("ITD") means the period from 2002 through 2018; 2001 is considered immaterial for the purpose of this document.

Loss Adjustment Expenses ("LAE") are expenses incurred in handling claims. LAE include the cost of third party loss assessors and legal experts and the cost of internal time necessary to handle claims.

Loss Emergence is the change in ultimate losses from the previous development point. Loss emergence is shown separately for each accident year and calendar year.

Maturity is measured in months from the start of the Accident Year.

Net means the retained portion of premiums written or losses paid and incurred. Net Premium equals Gross Premium less Ceded Premium and Net Losses equals Gross Losses less Ceded Claims.

Paid Losses are claim amounts paid to insureds or ceding companies.

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Paid Loss Ratio is the ratio of Paid Losses to Earned Premium, which shows the relationship between paid losses and the associated premiums that are related to those losses.

Report Year / Claims Made Year refers to the year in which a claim is reported to us. All years referred to are years ending December 31st.

Subrogation - Paid losses, case reserves and IBNR are net of actual and expected subrogation recoveries.

Total Reserves is the unpaid losses and loss adjustment expenses.

Triangle is a cross tabulation of data usually showing financial quantities in respect of periods of exposure (e.g. Accident Years), each evaluated at regular intervals (maturities).

Underwriting Year means the year during which the contract incepts. Exposure from contracts incepting during the current underwriting year will potentially affect both the current accident year as well as future accident years.

Ultimate Losses are the total of all expected settlement amounts, whether paid or reserved, together with any associated LAE and are the estimated total amount of loss at the measurement date. For the purposes of this report, Ultimate Losses are calculated by adding: Paid Losses, Case and Additional Case Reserves and IBNR.

Ultimate Loss Ratio is the ratio of Ultimate Loss to Earned Premium, which shows the relationship between expected losses and the associated premiums that are related to those losses.