VALIDUS HOLDINGS LTD
Form 10-K
February 22, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2015
Commission file number 001-33606
VALIDUS HOLDINGS, LTD.
(Exact name of registrant as specified in its charter)

BERMUDA	98-0501001
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

29 Richmond Road, Pembroke, Bermuda HM 08
(Address of principal executive offices and zip code)
(441) 278-9000
(Registrant’s telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class:	Name of Each Exchange on Which Registered:
Common Shares, $0.175 par value per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý No o
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No ý
Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No o
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No o
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ý	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No ý

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2015 was $2,827.5 million computed upon the basis of the closing sales price of the Common Shares on June 30, 2015. For the purposes of this computation, shares held by directors and officers of the registrant have been excluded. Such exclusion is not intended, nor shall it be deemed, to be an admission that such persons are affiliates of the registrant.

As of February 18, 2016, there were 82,003,974 outstanding Common Shares, $0.175 par value per share, of the registrant.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates information from certain portions of the registrant’s definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended December 31, 2015.

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This Annual Report on Form 10-K contains “Forward-Looking Statements” as defined in the Private Securities Litigation Reform Act of 1995. A non-exclusive list of the important factors that could cause actual results to differ materially from those in such Forward-Looking Statements is set forth herein under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Cautionary Note Regarding Forward-Looking Statements.”

PART I

Item 1. Business

Overview

Validus Holdings, Ltd. was incorporated under the laws of Bermuda on October 19, 2005. Hereinafter, "the Company", "us" or "we" are used to describe any or all of Validus Holdings, Ltd. and its subsidiary companies. The Company conducts its operations worldwide through four operating segments which have been determined under U.S. GAAP segment reporting: Validus Re, Talbot, Western World, and AlphaCat. Validus Re is a Bermuda-based reinsurance segment focused on treaty reinsurance. Talbot is a specialty insurance segment, primarily operating within the Lloyd's insurance market through Syndicate 1183. Western World is a U.S. based specialty excess and surplus lines insurance segment operating within the U.S. commercial market. AlphaCat is a Bermuda-based investment adviser, managing capital for third parties and the Company in insurance linked securities and other investments in the property catastrophe reinsurance space.

We seek to establish ourselves as a leader in the global insurance and reinsurance markets. Our principal operating objective is to use our capital efficiently by underwriting primarily short-tail insurance and reinsurance contracts with superior risk and return characteristics. Our primary underwriting objective is to construct a portfolio of short-tail insurance and reinsurance contracts that maximizes our return on equity subject to prudent risk constraints on the amount of capital we expose to any single event. We manage our risks through a variety of means, including contract terms, portfolio selection, diversification criteria, including geographic diversification criteria, and proprietary and commercially available third-party vendor catastrophe models.

Since our formation in 2005, we have been able to achieve substantial success in the development of our business. Selected examples of our accomplishments are as follows:

- Raising approximately $1.0 billion of initial equity capital in December 2005 and underwriting $217.4 million in gross premiums written for the January 2006 renewal season;
- Building a risk analytics staff comprised of over 50 experts, many of whom have PhDs and Masters degrees in related fields;
- Developing Validus Capital Allocation and Pricing System (“VCAPS”), a proprietary computer-based system for modeling, pricing, allocating capital and analyzing catastrophe-exposed risks;
- Acquiring all of the outstanding shares of Talbot Holdings Ltd. ("Talbot") on July 2, 2007;
- Completing an initial public offering (“IPO”) on July 30, 2007;
- Acquiring all of the outstanding shares of IPC Holdings Ltd. (“IPC”) on September 4, 2009;
- Acquiring all of the outstanding shares of Flagstone Reinsurance Holdings, S.A. ("Flagstone") on November 30, 2012;
- Acquiring all of the outstanding shares of Western World Insurance Group, Inc. ("Western World") on October 2, 2014;
- Successfully launching a series of AlphaCat sidecars and ILS funds beginning on May 25, 2011 and managing third party capital of $2.1 billion as at January 1, 2016;
- Delivering a 12.0% compounded annual growth in book value per diluted common share plus accumulated dividends from formation to December 31, 2015;
- Repurchasing approximately 76.9 million common shares for an aggregate purchase price of approximately $2,531.2 million and paying an aggregate amount of $1,059.9 million in dividends from formation to February 18, 2016.

Our Operating Subsidiaries

The following chart shows how our Company and its principal subsidiaries operate:

(a) The AlphaCat sidecars and ILS funds are variable interest entities ("VIEs") which are jointly owned by the Company and third parties. The Company is the primary beneficiary and therefore the financial results of the AlphaCat sidecars and ILS funds are included in the Company's Consolidated Financial Statements, with the equity from third parties recorded in the Company's Consolidated Balance Sheets as noncontrolling interest and redeemable noncontrolling interest, respectively. Certain of the BetaCat ILS funds are VIEs and are consolidated by the Company as the primary beneficiary. For further details, refer to Note 9, "Variable Interest Entities," to the Consolidated Financial Statements in Part II, Item 8.

For a complete list of the Company’s subsidiaries, see Exhibit 21.

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Operating Segments

Validus Re: The Validus Re segment operates as a Bermuda-based provider of treaty reinsurance products on a global basis. Validus Re concentrates on first-party property and other reinsurance risks commonly referred to as short-tail in nature due to the relatively brief period between the occurrence and payment of a claim.

Validus Re entered the global reinsurance market in 2006 during a period of imbalance between the supply of underwriting capacity available for reinsurance on catastrophe-exposed property, marine and energy risks and demand for such reinsurance coverage.

Validus Re operates primarily through two reinsurance companies; Validus Reinsurance, Ltd. and Validus Reinsurance (Switzerland) Ltd. ("Validus Re Swiss"). Validus Reinsurance, Ltd. was registered as a Class 4 insurer under The Insurance Act 1978 of Bermuda, amendments thereto and related regulations (the “Insurance Act”) in November 2005. It commenced operations with approximately $1.0 billion of equity capital and a balance sheet unencumbered by any historical losses relating to the 2005 hurricane season, the events of September 11, 2001, asbestos or other legacy exposures affecting our industry.

Validus Re Swiss is based in Zurich, Switzerland. Through this local presence, the Company is in a position to closely follow and respond effectively to the changing needs of the various European and Bermuda insurance markets. Validus Re Swiss is licensed by the Swiss Financial Market Supervisory Authority, or FINMA, in Switzerland. Validus Re Swiss is also licensed as a permit company in Bermuda under the Companies Act and is registered in Bermuda as a Class 4 insurer under the Insurance Act, operating through its Bermuda branch, which complements our Swiss-based underwriters with a separate Bermuda underwriting platform.

The following are the primary lines in which Validus Re conducts its business. Details of gross premiums written by line of business, are provided below:

(Dollars in thousands)	Years Ended December 31, 2015 Gross Premiums Written	% of Total	2014 Gross Premiums Written	% of Total	2013 Gross Premiums Written	% of Total
Property	$547,409	48.6 %	$616,554	55.1 %	$728,798	59.4 %
Marine	152,670	13.5 %	190,959	17.1 %	194,001	15.8 %
Specialty	426,680	37.9 %	311,019	27.8 %	303,891	24.8 %
Total	$1,126,759	100.0 %	$1,118,532	100.0 %	$1,226,690	100.0 %

Property: Validus Re underwrites property catastrophe reinsurance, property per risk reinsurance and property pro rata reinsurance.

Property catastrophe: Property catastrophe reinsurance provides reinsurance for insurance companies’ exposures to an accumulation of property and related losses from separate policies, typically relating to natural disasters or other catastrophic events. Property catastrophe reinsurance is generally written on an excess of loss basis, which provides coverage to insurance companies when aggregate claims and claim expenses from a single occurrence for a covered peril exceed a certain amount specified in a particular contract. Under these contracts, the Company provides protection to an insurer for a portion of the total losses in excess of a specified loss amount, normally up to a maximum amount per loss and/or an aggregate amount across multiple losses, as specified in the contract. In the event of a loss, most contracts provide for coverage of a second occurrence following the payment of a premium to reinstate the coverage under the contract, which is referred to as a reinstatement premium. The coverage provided under excess of loss reinsurance contracts may be on a worldwide basis or limited in scope to specific regions or geographical areas. Coverage can also vary from “all property” perils, which is the most expansive form of coverage, to more limited coverage of specified perils such as windstorm-only coverage. Property catastrophe reinsurance contracts are typically “all risk” in nature, providing protection against losses from earthquakes and hurricanes, as well as other natural and man-made catastrophes such as floods, tornadoes, fires and storms. The predominant exposures covered are losses stemming from property damage and business interruption coverage resulting from a covered peril. Certain risks, such as war or nuclear contamination may be excluded, partially or wholly, from certain contracts. Gross premiums written on property catastrophe business during the year ended December 31, 2015 were $419.9 million.

Property per risk: Property per risk reinsurance provides reinsurance for insurance companies' excess retention on individual property and related risks, such as highly-valued buildings. Per risk reinsurance protects insurance companies on their primary insurance risks on a "single risk" basis. A "risk" in this context might mean the insurance coverage on one building or a group of buildings or the insurance coverage under a single policy which the reinsured treats as a single risk. Coverage is usually triggered by a large loss sustained by an individual risk rather than by smaller losses which fall below the specified retention of the reinsurance contract. Such property per risk coverages are generally written on an excess of loss basis, which provides the reinsured with protection

beyond a specified amount up to the limit set within the reinsurance contract. Gross premiums written on property per risk business during the year ended December 31, 2015 were $26.2 million.

Property pro rata: Property pro rata contracts require that the reinsurer share the premiums as well as the losses and loss expenses in an agreed proportion with the cedant. Gross premiums written on property pro rata business during the year ended December 31, 2015 were $101.3 million.

Marine: Validus Re underwrites reinsurance on marine risks covering damage to or losses of marine vessels and cargo, third-party liability for marine accidents and physical loss and liability from principally offshore energy properties. Validus Re underwrites marine on an excess of loss basis and on a pro rata basis. Gross premiums written on marine business during the year ended December 31, 2015 were $152.7 million.

Specialty: Validus Re underwrites other lines of business depending on an evaluation of pricing and market conditions, which include aerospace and aviation, agriculture, financial, terrorism, life, accident and health, nuclear, workers' compensation, crisis management, contingency, casualty, technical, composite and trade credit lines. The Company seeks to underwrite specialty lines with very limited exposure correlation with its property, marine and energy portfolios. With the exception of the aerospace and aviation, agriculture, financial and trade credit lines of business, which have a meaningful portion of its gross premiums written volume on a proportional basis, the Company's other specialty lines are written on an excess of loss basis. Gross premiums written on specialty business during the year ended December 31, 2015 were $426.7 million.

Talbot: Talbot writes primarily short-tail lines of business but, as a complement to Validus Re, focuses mostly on insurance, as opposed to reinsurance risks, and on specialty lines where Validus Re currently has limited or no presence (e.g., political lines, financial lines, contingency and accident and health). In addition, Talbot provides the Company with access to the Lloyd's marketplace where Validus Re does not operate. As a London-based insurer, Talbot also writes the majority of its premiums on risks outside the United States. Talbot's team of underwriters have, in many cases, spent most of their careers writing niche, short-tail business and bring their expertise to bear on expanding the Company's short-tail insurance franchise.

The Company has expanded and diversified its business through Syndicate 1183's access to Lloyd's license agreements with regulators around the world. Talbot Underwriting Risk Services, Ltd. (London), Talbot Underwriting Services (U.S.), Ltd. (New York), Talbot Underwriting (MENA) Ltd. (Dubai), Validus Reaseguros, Inc. (Miami), Talbot Underwriting (LATAM) S.A. (Chile), Talbot Risk Services (Labuan) Pte. Ltd. (Malaysia), and Talbot Risk Services Pte. Ltd. (Singapore and Australia), act as approved Lloyd's coverholders for Syndicate 1183.

The following are the primary lines in which Talbot conducts its business. Details of gross premiums written by line of business are provided below:

(Dollars in thousands)	Years Ended December 31, 2015 Gross Premiums Written	% of Total		2014 Gross Premiums Written	% of Total		2013 Gross Premiums Written	% of Total	
Property	$327,122	32.2	%	$337,210	30.6	%	$345,831	31.7	%
Marine	327,539	32.1	%	392,701	35.6	%	381,238	34.9	%
Specialty	364,174	35.7	%	371,859	33.8	%	364,821	33.4	%
Total	$1,018,835	100.0	%	$1,101,770	100.0	%	$1,091,890	100.0	%

Property: The main sub-classes within the property class are International and North American direct and facultative contracts, lineslips and binding authorities, together with a book of business written on a treaty reinsurance basis. The business written is mostly commercial and industrial insurance. Coverage provided includes all risks of direct physical loss or damage, business interruption and natural catastrophe perils. Property also includes downstream energy and construction business. Within the downstream energy sector, covered occupancies include oil, gas, petrochemicals, chemical, power generation and utilities and process industries. Coverage is typically all risks and includes machinery breakdown and business interruption where required. The primary focus within the construction line is on major capital projects, placed on a direct or facultative subscription basis. The business is mainly short-tail with premiums for reinsurance and direct and facultative business, substantially earned within 12 months and premiums for lineslips and binding authorities mainly earned within 12 months of the expiry of the contract, however there are a minority of

risks, particularly construction, with long-term policies. Gross premiums written on property business during the year ended December 31, 2015 were $327.1 million, including $45.5 million of treaty reinsurance.

Marine: The main types of business within the marine class are hull, cargo, upstream energy, marine and energy liabilities, yachts and a book of business written on a treaty reinsurance basis. Hull consists primarily of ocean going vessels and covers

worldwide risks on an all risks or total loss only basis. Cargo consists of worldwide transits with a particular emphasis on oil cargo, project cargo, pre-launch satellite and space risks, specie, fine art and high value motor vehicles. Upstream energy covers a variety of oil and gas industry exploration and production risks. The marine and energy liability account provides cover for protection and indemnity clubs and a wide range of companies operating in the marine and energy sectors. Most business written is short-tail, enabling a quicker and more accurate picture of expected profitability than is the case for long-tail business. The marine and energy liability account, which makes up $56.3 million of the $327.5 million of gross premiums written during the year ended December 31, 2015, is the primary long-tail business in this class.

Specialty: This class consists of political lines (comprising marine & aviation war, political risks and political violence, including war on land), aviation direct, aviation treaty, financial lines, accident and health, and contingency. With the exception of aviation treaty, most of the business within the specialty class is written on a direct or facultative basis or under a binding authority through a coverholder. Gross premiums written on the specialty business during the year ended December 31, 2015 were $364.2 million.

Political Lines: The marine and aviation political lines account covers physical damage to aircraft and marine vessels caused by acts of war and terrorism. The political risk account deals primarily with expropriation, contract frustration/trade credit, kidnap and ransom, and malicious and accidental product tamper. The political violence account mainly insures physical loss to property or goods anywhere in the world, caused by war, terrorism or civil unrest. This class is often written in conjunction with cargo, specie, property, upstream energy, contingency and political risk. The period of the risks can extend up to 36 months and beyond. Gross premiums written on political lines business during the year ended December 31, 2015 were $187.4 million.

Aviation: The aviation account insures major airlines, airport operations, aviation products and airports, general aviation, satellites and a book of business written on a treaty reinsurance basis. The coverage includes excess of loss treaties with medium to high attachment points. Gross premiums written on aviation business during the year ended December 31, 2015 were $87.6 million.

Financial Lines: Talbot’s financial lines team underwrites bankers blanket bond, commercial crime, computer crime, cyber- crime, professional indemnity and directors’ and officers’ coverage for various types of financial institutions and similar companies. The team also provides professional indemnity, directors' and officers' and cyber liability coverage to a more general selection of commercial clients. Bankers blanket bond and commercial crime insurance products are specifically designed to protect against direct financial loss caused by fraud/criminal actions and mitigate the damage such activities may have on the asset base of the insured. Computer crime insurance protects against the misappropriation of funds and assets via the insured's computer system. Professional indemnity insurance protects businesses in the event that legal action is taken against them by third parties claiming a breach of professional duty. Directors’ and Officers’ insurance protects the personal liability of directors and officers or policyholder costs for indemnification arising out of an alleged breach of a fiduciary duty. The financial lines account is on a claims made basis; however, it is deemed to be longer tail business due to claims development patterns. Gross premiums written on financial lines business for the year ended December 31, 2015 were $44.7 million.

Accident and Health: The accident and health account provides insurance in respect of individuals in both their personal and business activity together with corporations where they have an insurable interest relating to death or disability of employees or those under contract. Gross premiums written on accident and health business during the year ended December 31, 2015 were $27.1 million.

Contingency: The main types of covers written under the contingency account are event cancellation, non-appearance and prize indemnity business. Gross premiums written on contingency business during the year ended December 31, 2015 were $17.3 million.

Western World: On October 2, 2014, the Company acquired all of the outstanding shares of Western World, a U.S. based specialty excess and surplus lines insurance company. The acquisition provided the Company with enhanced access to the specialty U.S. commercial insurance market, the world's largest short-tail market, complementing the Company's existing market positions in both Bermuda reinsurance and the Lloyd's marketplace and increasing the Company's ability to leverage operational strengths in short-tail classes of business. In addition, the acquisition improves the Company's ability to manage (re)insurance cycles.

Western World primarily insures small to medium size commercial and institutional risks covering general liability, professional liability, product liability, miscellaneous malpractice and property classes through three wholly owned insurance subsidiaries: Western World Insurance Company ("WWIC"), Tudor Insurance Company ("Tudor") and Stratford Insurance Company ("Stratford"). WWIC, Tudor and Stratford are domiciled in New Hampshire. WWIC operates as a surplus lines insurer in all other jurisdictions. Tudor is licensed as a domestic surplus lines insurer in New Hampshire and is authorized to conduct business as a surplus lines insurer in all other U.S. jurisdictions. Stratford operates as an admitted insurer in 49 U.S. jurisdictions.

The following are the primary lines in which Western World conducts its business. Details of gross premiums written by line of business are provided below:

	Years Ended December 31,			
	2015		2014 (a)	
(Dollars in thousands)	Gross Premiums Written	Gross Premiums Written (%)	Gross Premiums Written	Gross Premiums Written (%)
Property	$53,018	19.0 %	$9,983	15.3 %
Liability	225,486	81.0 %	55,252	84.7 %
Total	$278,504	100.0 %	$65,235	100.0 %

(a) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

Property: This class consists of building, business personal property, and business income (with or without extra expense) coverages, including catastrophe, for small to medium size commercial habitational, industrial, service, and mercantile risks. Gross premiums written on property lines during the year ended December 31, 2015 were $53.0 million.

Liability: This class consists of general liability, professional liability, products liability, and miscellaneous malpractice occurrence-based coverage for contractors, dwellings, special events, manufacturers, social workers, drug clinics and exercise and health facilities. Coverage is also provided on a claims-made basis for lines such as directors' and officers' and errors and omissions liability for small to medium size enterprises and financial institutions. Gross premiums written on liability lines during the year ended December 31, 2015 were $225.5 million.

AlphaCat: AlphaCat Managers Ltd. ("AlphaCat Managers") is an asset manager that leverages the Company’s underwriting and analytical expertise primarily for third party investors. Validus Re also has a direct investment in certain AlphaCat funds and sidecars and is presented as a related party in the AlphaCat segment results. As an asset manager, AlphaCat Managers’ primary source of income is earned through management and performance fees.

The AlphaCat segment is a core element within the Company's strategic initiative to expand into capital markets activities by participating in the market for insurance linked securities ("ILS"). ILS are financial instruments whose fundamental value is determined by insurance losses caused by natural catastrophes such as major earthquakes and hurricanes. As the returns on ILS are primarily driven by natural catastrophes, when carefully structured, they are generally uncorrelated with the overall financial markets, making ILS an attractive asset class for capital markets investors.

AlphaCat invests in private reinsurance transactions, as well as catastrophe bonds, a common type of ILS issued by insurance and reinsurance companies. AlphaCat leverages the Company's extensive business sourcing, underwriting, research and analytic capabilities to construct ILS portfolios subject to prudent risk constraints.

AlphaCat investors access this uncorrelated asset class through various AlphaCat funds and sidecars that participate in the market via AlphaCat Reinsurance Ltd. ("AlphaCat Re"), a Bermuda provider of fully collateralized property catastrophe reinsurance and retrocession capacity and AlphaCat Master Fund Ltd. ("AlphaCat Master Fund"), a Bermuda investment fund investing in reinsurance related capital markets transactions. AlphaCat Re also enters into transactions on behalf of third party investors on a direct basis whereby all of the risks and rewards of the underlying transactions are transferred to the investors using notes payable to AlphaCat investors. Furthermore, certain of the funds and direct third party investors purchase catastrophe bonds directly under instruction from AlphaCat Managers.

BetaCat investors access the market through the BetaCat funds that participate in the market via BetaCat Fund Ltd., a Bermuda investment fund exclusively invested in catastrophe bonds (principal-at-risk variable rate notes and other event-linked securities, being referred to collectively as “Cat Bonds”) focused on property and casualty risk issued under Rule 144A of the Securities Act of 1933, as amended, following a passive buy-and-hold investment strategy.

During the fourth quarter of 2015, the Company early adopted Accounting Standards Update 2015-02, “Consolidation (Topic 810) Amendments to the Consolidation Analysis” issued by the United States Financial Accounting Standards Board (“FASB”), which changed the method in which the Company determines whether entities are consolidated by the Company. The adoption of this amended accounting guidance has been implemented utilizing a full retrospective application for all periods presented in the Company's Consolidated Financial Statements. These changes resulted in

the Company concluding that it is considered to be the primary beneficiary of the AlphaCat sidecars, the AlphaCat ILS funds and the BetaCat ILS funds and therefore the Company is required to consolidate these entities. The adoption of the amended guidance also resulted in the Company concluding that it was no longer required to consolidate PaCRe Ltd. ("PaCRe") due to the change in the VIE definition of "kick-out" rights under the amended guidance. For further details, refer to Note 2, "Basis of preparation and consolidation," and Note 9, "Variable Interest Entities," to the Consolidated Financial Statements in Part II, Item 8.

During the aforementioned periods, the AlphaCat segment includes AlphaCat Re and AlphaCat Master Fund, the AlphaCat sidecars, the AlphaCat ILS funds, the BetaCat ILS fund and PaCRe.

The following are the primary financial indicators for the AlphaCat segment:

Assets under management ("AUM"): AUM represents total assets managed by AlphaCat Managers on behalf of third party and related party investors. AUM includes the assets of the AlphaCat sidecars, the AlphaCat ILS funds, the BetaCat ILS fund, PaCRe and direct third-party investors. AUM as at January 1, 2016 was $2.4 billion.

	Assets Under Management As at January 1,	
(Dollars in thousands)	2016 (a)	2015
Third party	$2,059,519	$1,533,840
Related party	326,643	346,907
Total	$2,386,162	$1,880,747

(a) There are no PaCRe assets under management as at January 1, 2016.

Management fees: Management fee income represents management and performance fees earned on third party and related party AUM. Third party management fee income for the year ended December 31, 2015 was $19.7 million. Related party management fee income for the year ended December 31, 2015 was $5.3 million.

	Management Fees Years Ended December 31,		
(Dollars in thousands)	2015	2014	2013
Third party	$19,661	$18,667	16,629
Related party	5,309	7,467	9,693
Total	$24,970	$26,134	$26,322

Investment income from AlphaCat funds and sidecars: Investment income from AlphaCat funds and sidecars represents the Company's proportional share of income earned by the various AlphaCat funds and sidecars. Investment income from AlphaCat funds and sidecars for the year ended December 31, 2015 was $19.2 million.

	Investment income in AlphaCat funds and sidecars (a) Years Ended December 31,		
(Dollars in thousands)	2015	2014	2013
Investment income in AlphaCat funds and sidecars	$19,176	21,485	$32,566

(a) The investment income from the AlphaCat funds and sidecars is based on equity accounting.

Gross premiums written: Gross premiums written represent premiums written by AlphaCat Re on behalf of the AlphaCat funds and sidecars and direct third-party investors. Gross premiums written for the year ended December 31, 2015 were $176.1 million.

	Years Ended December 31,		
(Dollars in thousands)	2015	2014	2013
Gross premiums written	$176,126	$126,785	$131,134

Enterprise Risk Management

Risk Management Framework: The Company believes in having a culture that embraces sound risk management practices at all levels of the organization. We have therefore implemented an Enterprise Risk Management (“ERM”) framework (the “Framework”) that is aligned with the Company’s culture and responds to the needs of the business. The Framework has been established to identify, assess, quantify and manage risks and opportunities. In particular it is designed to:

- Establish the principles by which the Company can evaluate the risk/reward trade-offs associated with key strategic and tactical decisions.
- Establish a risk governance structure that, in respect of all activities related to ERM, operates with clearly defines roles and responsibilities.
- Establish minimum requirements that must be met by each of the Company’s segments.
- Identify and assess all risks and causes of risks arising out of the Company’s strategic initiatives, internal processes, and external environment.
- Establish a set of responses to manage the Company’s risks within its stated risk appetite and risk tolerances.
- Establish procedures through which near-miss and actual incidents, that either have the potential to impact or have impacted the Company, are reported and reviewed in order to inform the risk identification and assessment process.

Risk Governance: Our risk governance philosophy reflects the overall governance of the Company, with the segments given broad autonomy over the management of their business, while adhering to the overall strategy of the Company. Similarly, the segments have broad operational latitude over their risk management functions while staying within the parameters set by the Company.

The Company’s Board of Directors has established a separate Risk Committee ("RC") that is governed by a charter which is updated and reviewed periodically by the Board of Directors. The RC is responsible for, among other things, approving the Framework, working with management to ensure ongoing, effective implementation of the Framework and reviewing the Company’s specific risk limits as defined in the Framework, including limits related to major categories of risk. The implementation of risk policies and oversight of risk management is the responsibility of the Group Risk Management Committee ("GRMC"). The GRMC reports to the RC and is governed by a charter that is reviewed and approved annually by the RC. The GRMC also has two subcommittees, the Model Risk Subcommittee and the Operational Risk Subcommittee, both of which are governed by charters that are reviewed annually by the RC. Various risk policies are in place to facilitate consistent risk assessment across the Company and to ensure that strategic business decisions are supported by effective modeling and analysis.

Risk Appetite: The Company's risk appetite is expressed through a series of qualitative and quantitative statements, principles, limits, and tolerances that, in the aggregate, convey the Company's risk and reward preferences and set the risk parameters within which the Company and its segments operate. The risk appetite is proposed by management and approved by the Board of Directors.

The significant quantitative measures include meeting minimum returns on capital and risk-adjusted capital over a full insurance industry cycle, managing the probability of break-even or better and meeting or exceeding budgeted net income over a calendar year, and managing the probability of losing specified percentages of shareholders’ equity in a calendar year. They also include probability thresholds in respect of maintaining a buffer above regulatory and rating agency capital levels.

The Company also sets levels of concentration risks within its risk appetite, including those related to probable maximum losses, zonal aggregates and the contribution of various risk categories to the overall assessment of the Company’s risk capital.

Risk Classification: Risks are broadly divided into those that the Company assumes explicitly and from which it derives income and those that are a by-product of the operating and business environment, from which the Company does not earn income.

The risks assumed are categorized as catastrophe, reserve and premium risks (also together referred to as insurance risk), market (or investment) risk and credit risk. The Company’s goal is to get adequately compensated for these risks, while creating optimal insurance and investment portfolios subject to the constraints of the Company’s risk appetite. The remaining risks are categorized as operational and strategic risks, which typically include emerging risks, for which the Company’s goal is to identify, assess and mitigate to the extent considered appropriate.

Risk Ownership: The Company's risk management philosophy is to entrust risk identification and control activities with the employees who have the responsibility for and expertise in the areas giving rise to each risk. This not only creates workflow efficiencies but also promotes awareness of and accountability for risk at all levels of the Company. As such, primary risk ownership is assigned to the managers of functional areas. The risk identification and control activities are embedded in the job descriptions of risk owners and control operators and monitored by the GRMC.
Risk Assessment, Control and Mitigation: The Company performs a regular risk assessment process that considers the likelihood and impact of causes of risk, both before and after the existence of relevant controls. The approaches used to identify and update

causes of risk include scenario building, incident and near-miss reporting and market intelligence. Controls have been established to appropriately manage the likelihood and impact of risks, focused on those with the most significance and after considering the tolerance level established for each risk. New controls may also be designed as a result of the incident reporting process.

The Company also has in place policies, including underwriting, investment, and credit policies, to manage the assumption of risk. These policies provide for the Company's risk limits, tolerance levels and other guidelines, as well as the processes for ensuring compliance with the desired risk profile of the Company. The Company has at its disposal a variety of risk mitigation tools, including the purchase of reinsurance and retrocessional coverage, which it uses to ensure that its risk profile stays within prescribed limits and tolerance levels.

Exposure Management: In order to manage the assumption of insurance risk, the Company has established risk limits through both qualitative and quantitative considerations, including factors such as market share, history of and expertise in a class of business or jurisdiction, transparency and symmetry of available information, reliability of pricing models and availability and cost of reinsurance. These limits are reviewed at least annually and aligned to the overall risk appetite established by the Company's Board of Directors. In addition, a group exposure management policy is in place to ensure appropriate and consistent risk assessment and aggregation of exposures that accumulate between the operating companies in the group.

Three tools are used to measure and manage exposures:

- Absolute maximum limits - these are defined based on the underlying peril or coverage and include measures such as zonal aggregates, which convey the maximum contractual loss exposure.
- Probable maximum loss - these are defined where probabilistic event sets exist for underlying perils and are established for most natural catastrophe, aviation and upstream energy coverage, and conveys an extreme but likely loss exposure.
- Realistic disaster scenarios ("RDSs") - these are either prescribed by third parties or developed internally and convey a more intuitive view of potential loss outcome.

The Company will often use multiple tools to validate its exposure measurement and ensures that at least one of these tools is available for each class of business.

Model Validation Framework: The Company relies extensively on a wide range of models to support key decisions made across the business. We have therefore implemented a Model Validation Framework to establish a uniform set of validation and governance standards that ensure the quality and reliability of key models across the Company.

Portfolio Optimization: The Company has developed a comprehensive and integrated Economic Capital Model ("ECM") framework to facilitate the consistent assessment of risk, including risks classified as operational. This framework includes assessment at the individual operating company level, as well as across the Company. Using the ECM framework, the Company is able to assess the impact on risk appetite metrics of key strategic and tactical decisions as well as the risk return trade-offs associated with these decisions, including growth strategy, new product launch, business mix and retrocession strategy, mergers and acquisitions, planning and budgeting, investment strategy and capital management.

It is the goal of the Company to make the most efficient use of its capital and to achieve an adequate return for its shareholders. To that end, the Company seeks to maximize net income given the amount of capital at risk and subject to the risk limits, tolerance levels and other constraints that are imposed by our business, regulatory, and rating agency environments. The Company has therefore put in place portfolio optimization procedures, including the integrated use of the ECM within the annual planning process, in order to help shape portfolios that optimize their respective risk return profiles.

Underwriting Risk Management

The Company's underwriters manage risk by monitoring a number of qualitative and quantitative indicators. Our in-house pricing platform, VCAPS, provides reinsurance underwriters with a real-time view of the risk-adjusted profitability of each account. This allows them to examine the effects of contract terms and conditions as well as analyze the contribution of a contract to our overall risk capital and its impact on the projected incurred loss for one of our key stress scenarios. The Company's insurance operations also use sophisticated pricing platforms. Talbot maintains a suite of pricing models for the direct and facultative underwriting teams that includes VCAPS and other proprietary models, as well as models licensed from third parties. Western World is also able to leverage VCAPS for

real-time, location level catastrophe pricing, and also utilizes proprietary and vendor developed rating tools through the Western World Integrated Platform ("WWIP"). The Company believes that giving our underwriters the tools to make sound decisions at every turn is critical to our long-term success. To that end, we strive to create an environment that promotes close cooperation between our underwriting, catastrophe modeling, risk, claims, and actuarial functions.

All of the Company's underwriters adhere to a strict set of underwriting guidelines and letters of authority that specifically address the limits of their underwriting authority and their referral criteria. The Company's current underwriting guidelines and letters of authority include:

- lines of business that a particular underwriter is authorized to write;
- exposure limits by line of business;
- contractual exposures and limits requiring mandatory referrals; and
- levels of analysis to be performed by lines of business.

In general, our underwriting approach is to:

- seek high quality clients who have demonstrated superior performance over an extended period;
- evaluate our clients' exposures and make adjustments where their exposure is not adequately reflected;
- apply the comprehensive knowledge and experience of our entire underwriting team to make progressive and cohesive decisions about the business they underwrite; and
- employ our well-founded and carefully maintained market contacts within the Company to enhance our robust distribution capabilities.

Our underwriters have the responsibility to analyze all submissions and determine if the related potential exposures meet with both the Company's risk profile line size and aggregate limitations, in line with the business plan. In order to ensure compliance, we run appropriate management information reports and all lines are subject to regular audits.

All of the companies managed by AlphaCat are subject to investment or underwriting guidelines. These guidelines are established in the offering documentation of each AlphaCat company. AlphaCat manages investment portfolios in accordance with guidelines, which are subject to oversight by the respective company's board of directors. AlphaCat leverages the Company's underwriting and analytical resources. However, all investment and underwriting decisions are ultimately made by AlphaCat. When services are provided to AlphaCat by the Company's underwriting teams, the relevant underwriting risk management framework outlined in this section applies.

Use of Models

A pivotal factor in determining whether to found and fund the Company was the opportunity for differentiation based upon superior risk management expertise; specifically, managing catastrophe risk and optimizing our portfolio to generate attractive returns on capital while controlling our exposure to risk, and assembling a management team with the experience and expertise to do so. The Company's proprietary models are updated to reflect the latest science and data for the given peril-region of interest. This has enabled the Company to gain a competitive advantage over those reinsurers who rely exclusively on commercial models for pricing and portfolio management. The Company has made a significant investment in expertise in the risk modeling area to capitalize on this opportunity. The Company has assembled an experienced group of professional experts with a wide range of advanced degrees in the physical sciences/mathematics who are operating in an environment designed to allow them to use their expertise as a competitive advantage. While the Company uses both proprietary and commercial probabilistic models, catastrophe risk is ultimately subject to absolute aggregate limitations as discussed above.

Commercial Vendor Models: The Company licenses two major commercial vendor models (RMS and AIR) to assess the adequacy of risk pricing and to monitor its overall exposure to risk in correlated geographic zones for various natural catastrophe perils. The vendor models provide information that enables the Company to aggregate exposures by correlated event loss scenarios, which are probability-weighted. This enables the generation of exceedance probability curves for the portfolio and major geographic areas. All models have their strengths and weaknesses; our internal research projects target a greater understanding of, and if necessary, changes to frequency and severity for key peril-regions.

The Company also uses its quantitative expertise to improve the reliability of the vendor model outputs and expedite scientific review and operationalization of their findings to formulate its view of risk in the following areas:

- Ceding companies may often report insufficient data and many reinsurers may not be sufficiently critical in their analysis of this data. The Company generally scrutinizes data for anomalies that may indicate insufficient data quality. These circumstances are addressed by either declining the program or, if the variances are manageable, by modifying the model inputs and outputs, and ultimately, pricing to reflect insufficient data quality;
- Performing independent checks on the accuracy of reported building characteristics through third-party tools and the use of licensed data sources;

- Prior to making overall adjustments for changes in variable metrics, the Company carefully examines the adjustment against the latest scientific studies and technology available to ensure its impact to the business is thoroughly evaluated before adopting it into its systems; and
- To properly quantify risk, the Company frequently adjusts vendor models in advance of their updates based on the latest scientific studies and claims data from recent events.

In addition, many risks, such as second-event covers, aggregate excess of loss, or attritional loss components, cannot be fully evaluated using the vendor models. In order to better evaluate and price these risks, the Company has developed proprietary analytical tools, such as VCAPS and other models and data sets.

Proprietary Models: In addition to making frequency and severity adjustments to the vendor model outputs, the Company has implemented a proprietary pricing and risk management tool, VCAPS, to assist in pricing submissions and monitoring risk aggregation.

To supplement the analysis performed using vendor models, VCAPS uses the net loss pre-cat output of catastrophe models to generate a 100,000-year simulation set, which is used for both pricing and risk management. This approach allows more precise measurement and pricing of risk given the underlying exposures. The two primary benefits of this approach are:

- VCAPS takes into account annual limits, event/franchise/annual aggregate deductibles, and reinstatement premiums. This allows for more accurate evaluation of treaties with a broad range of features, including both common (reinstatement premium and annual limits) and complex features (second or third event coverage, aggregate excess of loss, attritional loss components, covers with varying attachment across different geographical zones or lines of businesses and covers with complicated structures); and
- VCAPS use of 100,000-year simulations enables robust pricing of catastrophe-exposed business. This is possible in real-time operation because the Company has designed a computing hardware platform and software environment to accommodate the significant computing needs.

In addition to VCAPS, the Company uses other proprietary models and other data in evaluating exposures. The Company cannot assure that the models and assumptions used by the software will accurately predict losses. Further, the Company cannot assure that the software is free of defects in the modeling logic or in the software code. In addition, the Company has not been granted copyright or other legal protection for VCAPS.

Geographic Diversification

The Company actively manages its aggregate exposures by geographic or risk zone to maintain a balanced and diverse portfolio of underlying risks. The coverage the Company is willing to provide for any risk located in a particular zone is limited to a predetermined level, thus limiting the net aggregate loss exposure from all contracts covering risks believed to be located in any zone. Contracts that have “worldwide” territorial limits have exposures in several geographic zones. Generally, if a proposed contract would cause the limit to be exceeded, the contract would be declined, regardless of its desirability, unless the Company buys reinsurance or retrocessional coverage, thereby reducing the net aggregate exposure to the maximum limit permitted or less.

For further details on gross premiums written allocated by the territory of coverage exposure refer to Note 26, "Segment Information," to the Consolidated Financial Statements in Part II, Item 8.

The effectiveness of geographic zone limits in managing risk exposure depends on the degree to which an actual event is confined to the zone in question and on the Company’s ability to determine the actual location of the risks believed to be covered under a particular insurance or reinsurance contract. Accordingly, there can be no assurance that risk exposure in any particular zone will not exceed that zone’s limits. Further control over diversification is achieved through guidelines covering the types and amount of business written in product classes and lines within a class.

Reinsurance Management

The Company enters into reinsurance agreements in order to mitigate its accumulation of loss, reduce its liability on individual risks and enable it to underwrite policies with higher limits. The ceding of the insurance risk does not legally discharge the Company from its primary liability for the full amount of the policies, and the Company is therefore required to pay the loss and bear collection risk if the reinsurer fails to meet its obligations under the reinsurance agreement.

Validus Re Retrocession: Validus Re monitors the opportunity to purchase retrocessional coverage on a continual basis and employs the VCAPS modeling system to evaluate the effectiveness of risk mitigation and exposure

management relative to the cost. This coverage may be purchased on an indemnity basis as well as on an index basis (e.g., industry loss warranties (“ILWs”)). Validus Re also considers and at times uses alternative retrocessional structures, including collateralized quota share facilities (“sidecars”) and other capital markets products (e.g., catastrophe bonds), where the pricing and terms are attractive.

When Validus Re buys retrocessional coverage on an indemnity basis, payment is for an agreed upon portion of the losses actually suffered. In contrast, when Validus Re buys an ILW cover, which is a reinsurance contract in which the payout is dependent on both the insured loss of the policy purchaser and the measure of the industry-wide loss, payment is made only if both Validus Re and the industry suffer a loss, as reported by one of a number of independent agencies, in excess of specified threshold amounts. With an ILW, Validus Re bears the risk of suffering a loss while receiving no payment under the ILW if the industry loss was less than the specified threshold amount.

Talbot Ceded Reinsurance: The reinsurance program is reviewed by the reinsurance purchasing team on an on-going basis in line with the main business planning process. This process incorporates advice and analytical work from our brokers, actuarial and capital modeling teams.

The review and any subsequent modification to the program is based upon the following:

- budgeted underwriting activity for the coming year;
- loss experience from prior years;
- loss information from the coming year's individual capital assessment calculations;
- expected changes to risk limits and aggregation limits and any other changes to Talbot's risk tolerance;
- scenario planning;
- changes to capital requirements; and
- RDSs prescribed by Lloyd's.

The main type of reinsurance purchased is losses occurring; however, for a few lines of business, where the timing of the loss event is less easily verified or where such cover is available, risk attaching policies are purchased.

The type, quantity and cost of cover of the proposed reinsurance program is reviewed by the Chief Executive Officer of the Talbot group, and ultimately authorized by the Talbot Underwriting Ltd. ("TUL") Board.

All reinsurance contracts arranged are authorized for purchase by the Talbot Managing Director. Slips are developed prior to inception to ensure that optimum cover is achieved. After purchase, cover notes are reviewed by the relevant class underwriters and presentations made to all underwriting staff to ensure they are aware of the boundaries of the cover.

Western World Ceded Reinsurance: The reinsurance program is managed by senior management. Western World uses brokers to provide guidance on modeling, prices and preparing contract terms and conditions. The main type of reinsurance purchased is excess of loss on a risk attaching basis. Western World utilizes reinsurance to reduce earnings volatility, protect capital and to limit its exposure to risk concentration.

AlphaCat: AlphaCat has ceded only a minimal level of business to third parties and will typically write contracts on a net retention basis only.

Distribution

Although we conduct some business on a direct basis with our treaty and facultative reinsurance clients, most of our business is derived through insurance and reinsurance intermediaries ("brokers"), who access business from clients and coverholders. We are able to attract business through our recognized lead capability in most classes we underwrite, particularly in classes where such lead ability is rare.

Currently, our largest broker relationships, as measured by gross premiums written, are with Marsh & McLennan, Aon Benfield Group Ltd. and Willis Group Holdings Ltd. The following table sets forth the Company's gross premiums written by broker:

	Gross Premiums Written Year Ended December 31, 2015						
(Dollars in thousands)	Validus Re	Talbot	Western World	AlphaCat	Eliminations	Total	% of Total
Name of Broker							
Marsh & McLennan	$456,267	$200,387	$—	$65,536	$(807)	$721,383	28.2%
Aon Benfield Group Ltd.	264,263	133,030	—	30,979	(31,582)	396,690	15.5%
Willis Group Holdings Ltd.	170,140	141,132	—	55,425	(1,125)	365,572	14.3%
Sub-total	890,670	474,549	—	151,940	(33,514)	1,483,645	58.0%

All Others/Direct	236,089	544,286	278,504	24,186	(9,204	)	1,073,861	42.0 %
Total	$1,126,759	$1,018,835	$278,504	$176,126	$(42,718	)	$2,557,506	100.0 %

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Reserve for Losses and Loss Expenses

For insurance and reinsurance companies, a significant judgment made by management is the estimation of the reserve for losses and loss expenses. The Company establishes its reserve for losses and loss expenses to cover the estimated incurred liability for both reported and unreported claims.

Loss reserves are established due to the significant periods of time that may lapse between the occurrence, reporting and payment of a loss. To recognize liabilities for unpaid losses and loss expenses, the Company estimates future amounts needed to pay claims and related expenses with respect to insured events. The Company's reserving practices and the establishment of any particular reserve reflects management's judgment concerning sound financial practice and does not represent any admission of liability with respect to any claim. Unpaid losses and loss expense reserves are established for reported claims ("case reserves") and incurred but not reported ("IBNR") claims. For information regarding the Company's unpaid losses and loss expense reserves on both a net and gross basis see Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Loss Reserves."

The nature of the Company's high excess of loss and catastrophe business can result in loss expenses and payments that are both irregular and significant. Such losses are part of the normal course of business for the Company. Adjustments to reserves for individual years can also be irregular and significant. Conditions and trends that have affected development of liabilities in the past may not necessarily occur in the future. Accordingly, it is inappropriate to extrapolate future redundancies or deficiencies based upon historical experience. See Part I, Item 1A, "Risk Factors" and Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Cautionary Note Regarding Forward-Looking Statements."

The tables below present the development of the Company's unpaid losses and loss expense reserves on both a net and gross basis. The cumulative redundancy (deficiency) calculated on a net basis differs from that calculated on a gross basis. As different reinsurance programs cover different underwriting years, net and gross loss experience will not develop proportionately. The top line of each table shows the estimated liability, net and gross of reinsurance recoveries, as at the balance sheet date for each of the indicated years. This represents the estimated amounts of losses and loss expenses, including IBNR, arising in the current and all prior years that are unpaid at that date. The tables also show the re-estimated amount of the previously recorded reserve liability based on experience as of the balance sheet date of each succeeding year. The estimate changes as more information becomes known about the frequency and severity of claims for individual years. The cumulative redundancy (deficiency) represents the aggregate change with respect to that liability originally estimated, as of December 31, 2015. The lower portion of each table also reflects the cumulative paid losses relating to these reserves. Conditions and trends that have affected development of liabilities in the past may not necessarily occur in the future.

Analysis of Losses and Loss Expense Reserve Development Net of Recoveries

	Years Ended December 31,									
(Dollars in thousands)	2006	2007	2008	2009	2010	2011	2012	2013	2014 (a)	201
Estimated liability for unpaid losses and loss expenses, net of reinsurance recoverable	$77,363	$791,713	$1,096,507	$1,440,369	$1,752,839	$2,258,658	$3,113,637	$2,677,779	$2,865,681	$2,6
Net loss reserves disposed							(36,521)			
Liability re-estimated as of: (a)										
One year later	60,106	722,010	1,018,930	1,283,759	1,596,720	2,083,378	2,854,533	2,418,538	2,559,544	
Two years later	54,302	670,069	937,696	1,181,987	1,451,448	1,954,084	2,674,432	2,220,231		
Three years later	50,149	606,387	902,161	1,085,664	1,404,349	1,860,323	2,564,794			
Four years later	46,851	584,588	847,935	1,053,327	1,361,282	1,795,230				
Five years later	45,946	547,965	827,153	1,013,019	1,325,476					
Six years later	45,199	544,656	825,567	983,468						
Seven years later	44,567	538,439	806,471							
Eight years later	43,605	535,082								
Nine years later	43,521									
Cumulative redundancy (deficiency) (b)	33,842	256,631	290,036	456,901	427,363	463,428	512,322	457,548	306,137	
Cumulative paid losses, net of reinsurance recoveries, as of: (c)										
One year later	$27,180	$216,469	$353,476	$384,828	$476,779	$631,889	$918,157	$781,571	$841,672	
	34,935	320,803	562,831	634,041	741,940	1,047,879	1,449,247	1,195,480		

Two years later							
Three years later	39,520	350,521	662,319	744,324	902,507	1,264,608	1,734,483
Four years later	41,746	374,788	722,652	818,184	1,002,242	1,426,015	
Five years later	41,901	390,895	753,899	854,823	1,097,473		
Six years later	43,571	403,540	769,119	879,730			
Seven years later	43,794	409,234	777,893				
Eight years later	43,164	417,348					
Nine years later	43,136						

(a) The reserves for losses and loss expenses of Western World are consolidated from the October 2, 2014 date of acquisition.

(b) See Part II Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” for further discussion.

(c) The impact of foreign currency exchange rate movements is excluded from the re-estimated liability and from paid losses.

Analysis of Losses and Loss Expense Reserve Development Gross of Recoveries

	Years Ended December 31,									
(Dollars in thousands)	2006	2007	2008	2009	2010	2011	2012	2013	2014 (a)	201
Estimated gross liability for unpaid losses and loss expenses	$77,363	$926,117	$1,305,303	$1,622,134	$2,035,973	$2,631,143	$3,553,604	$3,047,933	$3,243,147	$2,9
Gross loss reserves disposed							(36,590)			
Liability re-estimated as of: (a)										
One year later	60,106	846,863	1,223,018	1,484,646	1,854,565	2,422,343	3,285,727	2,729,731	2,875,177	
Two years later	54,302	791,438	1,164,923	1,385,533	1,705,995	2,257,704	3,078,291	2,498,325		
Three years later	50,149	745,624	1,134,043	1,288,915	1,648,273	2,157,008	2,952,844			
Four years later	46,851	721,730	1,079,842	1,252,042	1,574,858	2,094,123				
Five years later	45,946	675,884	1,055,033	1,198,135	1,537,184					
Six years later	45,199	668,266	1,034,276	1,170,729						
Seven years later	44,567	661,445	1,020,479							
Eight years later	43,605	658,137								
Nine years later	43,521									
Cumulative redundancy (deficiency) (b)	33,842	267,980	284,824	451,405	498,789	537,020	564,170	549,608	367,970	
Cumulative paid losses, gross of reinsurance recoveries, as of: (c)										
One year later	$27,180	$245,240	$437,210	$455,182	$557,894	$807,296	$1,066,846	$925,905	$969,098	
Two years later	34,935	394,685	706,249	709,309	878,406	1,279,820	1,690,521	1,428,007		
	39,520	452,559	825,159	864,918	1,057,705	1,574,951	2,044,388			

Three years later						
Four years later	41,746	480,277	898,338	950,013	1,187,167	1,777,074
Five years later	41,901	496,511	933,825	1,002,614	1,310,951	
Six years later	43,571	509,513	964,380	1,034,419		
Seven years later	43,794	517,630	978,334			
Eight years later	43,165	526,668				
Nine years later	43,137					

(a) The reserves for losses and loss expenses of Western World are consolidated from the October 2, 2014 date of acquisition.

(b) See Part II Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” for further discussion.

(c) The impact of foreign currency exchange rate movements is excluded from the re-estimated liability and from paid losses.

For information regarding the Company’s paid, unpaid and incurred losses and loss expenses and a reconciliation of beginning and ending unpaid losses and loss expenses for the most recent three years refer to Note 14, “Reserve for losses and loss expenses,” to the Consolidated Financial Statements in Part II, Item 8.

For information regarding the Company’s accounting policy for estimating the reserves for losses and loss expenses and the related risks, refer to Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations-Critical Accounting Policies and Estimates,” and Part I, Item 1A, “Risk Factors,” respectively.

Investment Management

The overriding goal of our investment management is capital preservation, such that the assets of the Company are invested to provide for the timely payment of all contractual obligations of policyholders and creditors, ensuring our ability to underwrite future business and to satisfy all regulatory and rating agency requirements. We aim to achieve these objectives through a clearly defined process that is driven by the enterprise-wide risk and capital position of Validus to ensure assets are invested in accordance with our defined financial objectives and risk tolerances. Our approach considers the joint impact of underwriting and investment risks to the Company, in the context of clear prioritization of underwriting needs and opportunities. As such, we structure our investment portfolio to support policyholder reserves and contingent risk exposures with a liquid portfolio of high quality fixed-

income investments with a comparable duration profile.

The Board of Directors, advised by our Finance Committee, Chief Financial Officer and Chief Investment Officer, oversees our investment strategy and has established the Company’s investment policy statement ("IPS"). The IPS provides a framework for the management and oversight of the Company's investment portfolio on a consolidated basis. The purpose of the IPS is to:

- communicate and align the Company’s investment philosophy and goals;
- provide transparency regarding investment policies, procedures and controls;
- set expectations and priorities of our third party investment managers;
- establish a framework for integrating investment management into our overall enterprise risk management ("ERM") process;
- mandate our investment parameters, including permissible asset classes and portfolio constraints, and governance structure for portfolio oversight and management;
- establish formalized criteria to measure, monitor, and evaluate investment performance and risk exposures on a regular basis; and
- ensure assets are invested in accordance with the overall financial goals and risk tolerances of the Company.

The IPS is updated annually or as otherwise appropriate to reflect changes to the Company, the economy, the regulatory environment or other factors.

Claims Management

Claims management includes the receipt of initial loss notifications, generation of appropriate responses to claim reports, identification and handling of coverage issues, determination of whether further investigation is required and, where appropriate, retention of legal representation, establishment of case reserves, approval of loss payments and notification to reinsurers.

Validus Re and AlphaCat: The role of our claims department is to investigate, evaluate and, if validated, pay claims efficiently. Our claims director has implemented claims handling guidelines and reporting and control procedures. The primary objectives of the claims department are to ensure that each claim is evaluated, processed and appropriately documented in a timely and efficient manner and information relevant to the management of the claim is retained.

Talbot: Where Talbot is the lead syndicate on business written, the claims adjusters will, in accordance with the respective policies, assess, investigate, appoint third party experts (including attorneys, loss adjusters or other experts) as required and communicate the Company's actions or findings to the Broker who represents the insured. The Company will also establish adequate reserves and promptly pay valid claims in accordance with the applicable "Lloyd's Claims Scheme" and "Lloyd's Claims Management Principles and Minimum Standards."

Where Talbot is not the lead syndicate, the claims handling and case reserves are established in accordance with the applicable "Lloyd's Claims Scheme" and "Lloyd's Claims Management Principles and Minimum Standards." Claims and claims movements are reviewed and monitored by the Talbot claims department. Claim financial reports are received daily from the "Xchanging" system pursuant to a centralized contract with Lloyd's.

Western World: The claims handling process is a key part of the relationship between the insured and Western World. It is the policy of Western World to investigate, analyze and resolve all claims promptly, fairly and efficiently. Western World's claims philosophy is to provide the highest quality customer service by employing experienced staff specialized in claims handling.

Competition

The insurance and reinsurance industries are highly competitive. We compete with major U.S., Bermuda, European and other international insurers and reinsurers and certain underwriting syndicates and insurers. We encounter competition in all of our classes of business but there is less competition in those of our lines where we are a specialist underwriter. The Company competes with insurance and reinsurance providers such as:

- Allied World Assurance Company Holdings, Limited., Arch Capital Group, Limited., Argo Group International Holdings, Ltd., Aspen Insurance Holdings Limited, AXIS Capital Holdings Limited, Endurance Specialty Holdings Ltd., Everest Re Group Limited, PartnerRe Ltd., and RenaissanceRe Holdings Ltd.;
- Amlin plc, Beazley plc, Brit plc, Hiscox Ltd., Novae Group plc and others in the Lloyd’s market;
- Scottsdale Insurance Company, Burlington Insurance Company, Nautilus Insurance Company, Essex Insurance Company, Penn-America Group, Inc., Colony Specialty Insurance Company, RSUI Group, Inc., and others in the

U.S. excess and surplus market;

- Asset managers and reinsurers who provide collateralized reinsurance and retrocessional coverage;

- Treaty and direct insurers, in not only the London but also the global market, that compete with Lloyd's on a worldwide basis;
- Various capital markets participants who access insurance and reinsurance business in securitized form, including through special purpose entities or derivative transactions; and
- Government-sponsored insurers and reinsurers.

Competition varies depending on the type of business being insured or reinsured and whether the Company is in a leading or following position. Competition in the types of business that the Company underwrites is based on many factors, including:

- premiums charged and other terms and conditions offered;
- services provided;
- financial ratings assigned by independent rating agencies;
- speed of claims payment;
- reputation;
- perceived financial strength; and
- the experience of the underwriter in the line of insurance or reinsurance written.

Increased competition could result in fewer submissions, lower premium rates, lower share of allocated cover, and less favorable policy terms, which could adversely impact the Company's growth and profitability. Capital market participants have created alternative products such as catastrophe bonds that are intended to compete with reinsurance products. The Company is unable to predict the extent to which these new, proposed or potential initiatives may affect the demand for products or the risks that may be available to be underwritten.

Regulation

The following is a discussion of the regulatory environment and certain key requirements in the jurisdictions of our significant operating subsidiaries.

Bermuda:

General: As a holding company, Validus Holdings, Ltd. is not subject to Bermuda insurance regulation. However, the Insurance Act 1978 and its related regulations (the "Insurance Act") regulates the Company's operating insurance subsidiaries in Bermuda, and it provides that no person may carry on any insurance business in or from within Bermuda unless registered as an insurer by the Bermuda Monetary Authority (the "BMA") under the Insurance Act. The Insurance Act makes no distinction between insurance and reinsurance business. The Company has five Bermuda licensed insurance subsidiaries: Validus Reinsurance, Ltd., a Class 4 insurer; Validus Reinsurance (Switzerland) Ltd (Bermuda Branch), a Class 4 insurer; IPCRe Limited ("IPCRe") (formerly known as Validus Re Americas, Ltd.), a Class 3A insurer; AlphaCat Reinsurance Ltd., a Class 3 insurer; and Mont Fort Re Ltd., a Class 3 insurer. The Company also has two Bermuda-based insurance subsidiaries, AlphaCat Re 2011, Ltd. and AlphaCat Re 2012, Ltd., each licensed as a Special Purpose Insurer ("SPI") under the Insurance Act. The summary below is limited to Class 3, 3A and 4 insurers and insurance groups.

Head Office: A Class 3A and 4 insurer must maintain its head office in Bermuda. The insurance business of the insurer must be directed and managed from Bermuda and, in determining whether the insurer complies with this requirement, the BMA considers various factors including where the underwriting, risk management and operational decision making of the insurer occurs; whether the presence of senior executives who are responsible for and involved in, the decision making related to the insurance business of the insurer are located in Bermuda; and where meetings of the board of directors of the insurer occur. The BMA may also have regard to the following matters: a) the location where management of the insurer meets to effect policy decisions of the insurer; b) the residence of the officers, insurance managers or employees of the insurer; and c) the residence of one or more directors of the insurer in Bermuda. The head office requirements do not apply to a Class 3A or 4 insurer which has a permit under section 134 of the Companies Act 1981 such as Validus Reinsurance (Switzerland) Ltd (Bermuda Branch).

Group Supervision: The BMA may, in respect of an insurance group, determine whether it is appropriate for it to be the group supervisor of that group. For purposes of the Insurance Act, an insurance group is defined as a group of companies that conducts insurance business. Where the BMA determines that it is the group supervisor, it shall designate a specified insurer that is a member of the insurance group to be the "designated insurer" in respect of that insurance group and it shall give written notice to the designated insurer and other competent authorities that it is the

group supervisor.

The BMA is our group supervisor and Validus Reinsurance, Ltd. is the "designated insurer" of our group.

Principal Representative and Principal Office: The Insurance Act requires that every insurer appoint and maintain a principal representative resident in Bermuda and maintain a principal office in Bermuda. It is the duty of the principal representative on his reaching a view that there is a likelihood of the insurer for which the principal representative acts becoming insolvent or that a

reportable event has, to the principal representative's knowledge, occurred, to immediately notify the BMA and to make a report in writing to the BMA within 14 days of the prior notification setting out all the particulars of the case that are available to the principal representative.
Where there has been a significant loss which is reasonably likely to cause the insurer to fail to comply with its enhanced capital requirement, the principal representative must also furnish the BMA with a capital and solvency return reflecting an enhanced capital requirement prepared using post-loss data. The principal representative must provide this within 45 days of notifying the BMA regarding the event.
Approved Independent Auditor: Class 3, 3A and 4 insurers must appoint an independent auditor who will annually audit and report on the statutory financial statements, GAAP Financial Statements (as defined below), and the statutory financial return of the insurer, all of which are required to be filed annually with the BMA. The independent auditor must be approved by the BMA.
Approved Loss Reserve Specialist: Class 3, 3A and 4 insurers are required to submit an opinion of their approved loss reserve specialist with their statutory financial return in respect of their losses and loss expense provisions. The loss reserve specialist, who will normally be a qualified casualty actuary, must be approved by the BMA.
Group Actuary: Every insurance group is required to submit an annual group actuarial opinion when filing its group statutory return. The group actuary must be approved by the BMA.
Annual Audited Financial Statements, Annual Statutory Financial Return and Annual Capital and Solvency Return: Class 3, 3A and 4 insurers must prepare annual statutory financial statements as prescribed in the Insurance Act. Effective January 1, 2016, the BMA will use the GAAP standard as the basis on which the statutory financial statements will be prepared, subject to the application of certain prudential filters. These GAAP based statutory financial statements will be used to prepare the Economic Balance Sheet. The statutory financial statements are separate from the annual financial statements prepared in accordance with GAAP Standards, which are published on the BMA website. Class 3, 3A and 4 insurers are also required to prepare and file with the BMA statutory financial returns unless granted an exemption under section 56 of the Insurance Act. The statutory financial return for Class 3 insurers includes, among other items, a report of the approved independent auditor on the statutory financial statements of such insurer, a cover sheet, a general business solvency certificate in relation to any general business undertaken, statutory declaration, statement of changes of control, own risk statement, underwriting analysis, schedule of segregated accounts where applicable, the statutory financial statements, the opinion of the loss reserve specialist, and a special purpose business solvency certificate in relation to any special purpose business undertaken.
The statutory financial return for Class 3A and 4 insurers includes, among other items, a report of the approved independent auditor on the statutory financial statements of the insurer, a cover sheet, a general business solvency certificate in relation to any general business undertaken, the statutory financial statements including a declaration of compliance, the opinion of the loss reserve specialist, and a schedule of ceded reinsurance. In addition, Class 3A and 4 insurers are required to file a capital and solvency return in respect of its general business which shall include, amongst other items, the regulatory risk based capital model, catastrophe risk return, reconciliation of net loss reserves, eligible capital and operational risk assessment.
Class 3A and 4 insurers must prepare and submit, on an annual basis, audited financial statements, including notes, prepared under GAAP standards ("GAAP Financial Statements"). The GAAP Financial Statements must be audited annually by the insurer's approved auditor who must prepare an auditor's report in accordance with generally accepted auditing standards. The insurer is required to file with the BMA annually the audited GAAP Financial Statements within four months from the end of the relevant financial year (unless specifically extended).
Audited Group Financial Statements, Group Statutory Financial Return and Group Capital and Solvency Return: Every insurance group is required to prepare an annual group statutory financial return which must be submitted to the BMA by the designated insurer within five months after its financial year end (unless specifically extended). The Group Rules prescribe the rules pertaining to the preparation and substance of the group statutory financial statements (which include, in statutory form, a group balance sheet, a group income statement, a group statement of capital and surplus, and notes thereto). The statutory financial return shall include, among other items, a report of the approved group auditor, an insurance group business solvency certificate, an insurance group cover sheet, particulars of ceded reinsurance comprising the top ten unaffiliated reinsurers for which the group has the highest recoverable balances and any reinsurer with recoverable balances exceeding 15% of the insurance group's statutory capital and surplus,

particulars of qualifying members, a list of non-insurance financial regulated entities owned by the group and details of all adjustments applied to the group financial statements in the form of a reconciliation of amounts reported as total assets, total liabilities, net income and total statutory capital and surplus.

Every insurance group must also prepare and submit a group capital and solvency return (the "Group Capital and Solvency Return") which comprises the group BSCR model or an approved group internal capital model where applicable, an opinion of a group actuary where applicable, along with the returns prescribed in the applicable schedules to the Group Rules. The Group Capital

and Solvency Return is submitted by the designated insurer on behalf of the group and must include a declaration signed by two directors of the parent company, one of which may be the chief executive, and either the chief risk officer of the parent company, or the chief financial officer of the parent company.

Every insurance group must prepare and submit, on an annual basis, consolidated audited financial statements including notes to the financial statements of the parent company of the group prepared under GAAP Standards ("Group Financial Statements"). The Group Financial Statements must be audited annually by the group's approved auditor who must prepare an auditor's report in accordance with generally accepted auditing standards. The designated insurer is required to file with the BMA annually the audited Group Financial Statements within five months from the end of the relevant financial year. The Group Financial Statements are published by the BMA on its website.

Minimum Solvency Margins: The value of the general business assets of licensed insurers must exceed the amount of its general business liabilities by an amount greater than the prescribed minimum solvency margin (“MSM,”) which for the 2015 financial year end was equal to:

Class 3 & 3A:

(a)$1,000,000;

(b)20% of net premiums written up to $6,000,000 (being gross premiums written less any premiums ceded by the insurer for reinsurance); or where net premiums written exceed $6,000,000, $1,200,000 plus 15% of the net premiums written in excess of $6,000,000; or

(c)15% of net losses and loss expense provisions and other insurance reserves (general business) and in the case of Class 3A insurers only 25% of the insurer's enhanced capital requirement.

Class 4:

(a)$100,000,000;

(b)50% of net premiums written (being gross premiums written less any premiums ceded by the insurer for reinsurance, but the insurer may not deduct more than 25% of gross premiums when computing net premiums written);

(c)15% of net losses and loss expense provisions and other insurance reserves (general business); or

(d)25% of the insurer's enhanced capital requirement.

Group Solvency: The Insurance (Prudential Standards) (Insurance Group Solvency Requirement) Rules 2011 and Insurance (Group Supervision) Rules 2011 (together, "Group Rules"), will apply as long as the BMA remains our group supervisor. The BMA has implemented and imposed many of the additional requirements described in this section as part of its efforts to gain equivalence under Solvency II. Solvency II is an EU directive covering the capital adequacy, risk management and regulatory reporting for insurers and was adopted by the European Parliament in April 2009. On November 26, 2015, the EU deemed the BMA fully equivalent for all regulatory purposes under Solvency II for insurers which takes effect on January 1, 2016. The Bermuda equivalence delegated act stands for a 90 day consultation period with the European Council and the European Parliament. The EU will continue to monitor the evolution of the Bermuda regime and fulfilment of equivalence requirements.

Minimum Liquidity Ratio: The Insurance Act provides a minimum liquidity ratio for general business insurers. An insurer engaged in general business is required to maintain the value of its relevant assets at not less than 75% of the amount of its relevant liabilities. Relevant assets include, but are not limited to, cash and time deposits, quoted investments, unquoted bonds and debentures, investments in mortgage loans on real estate, investment income due and accrued, accounts and premiums receivable, reinsurance balances receivable and funds held by ceding reinsurers. There are certain categories of assets which, unless specifically permitted by the BMA, do not automatically qualify as relevant assets, such as investments in and advances to affiliates. The relevant liabilities are total general business insurance reserves and total other liabilities less deferred income tax, sundry liabilities (by interpretation, those not specifically defined), letters of credit, guarantees and other instruments.

Enhanced Capital Requirement: Class 3A and 4 insurers are required to maintain available statutory capital and surplus with respect to its general business at a level equal to or in excess of its enhanced capital requirement (“ECR”) which is calculated at the end of its relevant year by reference to the Bermuda Solvency Capital Requirement (“BSCR”) model or an approved internal capital model. The BSCR employs a standard mathematical model that correlates risk underwritten by Bermuda insurers to the capital that is dedicated to the business. The ECR is equal to the higher of each insurer's MSM or the BSCR/approved internal capital model. The BMA expects Class 3A and 4 insurers to

operate at or above a target capital level ("TCL") which exceeds the insurer's ECR. The TCL for a Class 3A and 4 insurer is set at 120% of its ECR.

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Group Solvency Margin and Group Enhanced Capital Requirements: An insurance group must ensure that the value of the insurance group's total statutory economic capital and surplus calculated in accordance with the Group Solvency Rules exceeds the amount of the group's liabilities by the aggregate of: (i) the aggregate minimum margin of solvency of each qualifying member of the group controlled by the parent company; and (ii) the parent company's percentage shareholding in the member multiplied by the member's MSM, where the parent company exercises significant influence over a member of the group but does not control the member (the "Group MSM"). A member is a qualifying member of the insurance group if it is subject to solvency requirements in the jurisdiction in which it is registered.

Insurance groups are required to maintain available statutory capital and surplus to an amount that is equal to or exceeds the value of its group enhanced capital requirement ("Group ECR") which is calculated at the end of its relevant year by reference to the Group BSCR model or an approved internal capital model provided that the Group ECR shall at all times be an amount equal to or exceeding the Group MSM. The Group ECR is being phased in over a period of six years which commenced with the 2013 financial year end. For the 2015 financial year end the applicable Group ECR is equivalent to 70% of the amount determined by the Group BSCR or an approved internal capital model. This requirement will increase by increments of 10% in each of the following three years until 100% of the amount determined by the Group BSCR or an approved internal capital model for the ECR is required for the 2018 financial year end.

The BMA expects insurance groups to operate at or above a group TCL which exceeds the Group ECR. The TCL for insurance groups is set at 120% of its Group ECR.

Group Quarterly Financial Returns: In addition to the annual filings, a designated insurer is required to prepare and file, on behalf of the group, quarterly financial returns no later than the end of each May, August and November for the first, second and third quarters respectively. The quarterly financial return comprises unaudited consolidated group financial statements, a schedule of material intra-group transactions and risk concentrations.

Eligible Capital: To enable the BMA to better assess the quality of an insurer's capital resources, Class 3A and 4 insurers and insurance groups must maintain available capital in accordance with a '3 tiered capital regime'. All capital instruments are classified as either basic or ancillary capital which in turn are classified into one of three tiers (Tiers 1, 2 and 3) based on their "loss absorbency" characteristics ("Tiered Capital Requirements"). Eligibility limits are then applied to each tier in determining the amounts eligible to cover regulatory capital requirement levels. The highest capital is classified as Tier 1 Capital, lesser quality capital is classified as either Tier 2 Capital or Tier 3 Capital. Under this regime, not more than certain specified percentages of Tier 1, Tier 2 and Tier 3 Capital may be used to satisfy the Class 3A and 4 insurers' and Group's MSM and ECR requirements.

Economic Balance Sheet Framework: The Economic Balance Sheet ("EBS") framework is an accounting balance sheet approach using market consistent values for all current assets and current obligations relating to in-force business which applies to Class 3A and 4 insurers and insurance groups for which the BMA is group supervisor from the 2016 financial year end. The EBS framework is embedded as part of the Capital and Solvency Return and forms the basis for the insurer's ECR. There is a mandatory trial run of the EBS for all insurers and insurance groups for the 2015 year end and the EBS will have full effect as of 2016 year end.

Public Disclosures: Commencing with the 2016 financial year end, commercial insurers and insurance groups will be required to prepare and publish a Financial Condition Report (FCR). The FCR shall provide details of measures governing the business operations, corporate governance framework, solvency and financial performance. The FCR is intended to provide additional information to the public in relation to the insurer or insurance group's business model as applicable, whereby they can make an informed assessment on whether the business is run in a prudent manner. The FCR will be required to be filed on or before the filing date of the insurer or the insurance group's as applicable, statutory financial return and to be published on the insurance group's website, no later than fourteen days after being filed with the BMA.

Restrictions on Dividends and Distributions: A Class 3A and 4 insurer shall not declare or pay any dividends of more than 25% of its total statutory capital and surplus, as shown on its previous financial year statutory balance sheet, unless at least seven days before payment of the dividends it files with the BMA an affidavit confirming that it will continue to meet its relevant margins following such dividend payment. If it failed to meet any of its relevant margins on the last day of any financial year, a Class 3, 3A and 4 insurer shall not, without the approval of the BMA, declare

or pay any dividends during the next financial year. In addition, Class 3, 3A and 4 insurers must obtain the BMA's prior approval before reducing its total statutory capital, as shown in its previous year's financial statements, by 15% or more.

Furthermore, under the Companies Act, a Bermuda company may only declare or pay a dividend, or make a distribution out of contributed surplus as the case may be, if the company has no reasonable grounds for believing that it is, or would after the payment be, unable to pay its liabilities as they become due, or if the realizable value of its assets would be less than its liabilities.

The BMA Insurance Code of Conduct: All insurers are required to comply with the BMA’s Insurance Code of Conduct which establishes duties, requirements and standards to be complied with to ensure each insurer implements sound corporate governance,

risk management and internal controls. Failure to comply with these requirements may be taken into account by the BMA in determining whether an insurer is conducting its business in a sound and prudent manner.

Notification of Material Changes: All insurers are required to give 30 days' notice to the BMA of their intention to effect a material change within the meaning of the Insurance Act. For the purposes of the Insurance Act, the following changes are material: (i) the acquisition or transfer of insurance business being part of a scheme falling within, or any transaction relating to a scheme of arrangement under section 25 of the Insurance Act or section 99 of the Companies Act 1981; (ii) the amalgamation with or acquisition of another firm; (iii) engaging in unrelated business that is retail business; (iv) acquisition of controlling interest in an undertaking that is engaged in non-insurance business which offers services and products to persons who are not affiliates of the insurer; (v) outsourcing all or substantially all of the functions of actuarial, risk management, compliance, or internal audit; (vi) outsourcing of all or a material part of an insurer's underwriting activity, (vii) transfer other than by way of reinsurance of all or substantially all of a line of business, (viii) expansion into a material new line of business, (ix) the sale of an insurer; and (x) outsourcing of an officer role which includes a chief executive or senior executive performing the duties of underwriting, actuarial, risk management, compliance, internal audit, finance or investment matters.

No Class 3, 3A or 4 insurer shall take any steps to give effect to a material change, unless it has first served notice on the BMA that it intends to effect such material change and before the end of 30 days, either the BMA has notified such company in writing that it has no objection to such change or that period has lapsed without the BMA having issued a notice of objection.

Designated insurers are also required to give notice to the BMA if any member of its group intends to give effect to any material change as defined in clauses (ii) through (viii) above. The designated insurer shall notify the BMA of any material change, effected by a member of the group, within 30 days of such material change taking effect.

BMA's Powers of Investigation, Intervention and Obtaining Information: The BMA may require a registered person or a designated insurer to provide such information or reports the BMA may reasonably require with respect to matters that are likely to be material to the performance of its functions under the Insurance Act. In addition, it may require such person's or designated insurer's auditor, underwriter, accountant or any other person with relevant professional skill to prepare a report on any aspect pertaining thereto.

The BMA has certain powers of investigation relating to insurers and insurance groups, via the designated insurer, which it may exercise in the interest of such insurer's policyholders or potential policyholders. The BMA has certain powers of intervention relating to registered persons including insurers if there is any significant risk of insolvency or risk of not being able to meet its policyholders' obligations; or a breach of the Insurance Act or the registered person's license conditions.

Effective January 1, 2016, the approved auditor shall give written notice to the BMA if they (i) resign before the expiration of their term, (ii) become aware that they will be replaced as the approved auditor of the insurer, (iii) intend not to seek to be re-appointed, (iv) decide to include material modification of their report on the insurer's statutory financial statements and additional GAAP financial statements and in particular, a material qualification or a denial of their opinion, or the statement of an adverse opinion; or (v) become aware of any fact or matter which is likely to be of material significance for the discharge of the BMA's function under the Act. For the purpose of the Insurance Act, the following are considered material: (a) identification of a material misstatement in the insurer's statutory financial statements or additional GAAP financial statements resulting from fraud, error or illegal acts or the consequences of them; (b) conclusion that there is substantial doubt as to the ability of the insurer to continue as a going concern for a period of one year from the balance sheet date; (c) identification of adjustments to additional GAAP financial statements which individually or in aggregate, indicates the previous year's audited financial statements, prepared according GAAP, were materially misstated; (d) identification of adjustments to the insurer's statements or additional GAAP financial statements which individually or in aggregate, indicates that the previous year's audited annual financial statements, were materially misstated; (e) identification of a material weakness in internal control or material conflicts of interest during the conduct of normal audit procedures; or (f) unresolved disagreements with management pertaining to the application of GAAP or statutory reporting.

The BMA has the power to assist other regulatory authorities, including foreign insurance regulatory authorities, with their investigations involving insurance and reinsurance companies in Bermuda if it is satisfied that the assistance being requested is in connection with the discharge of regulatory responsibilities and that such cooperation is in the

public interest.

Shareholder Controller and other Notifications: Under the Insurance Act each shareholder controller or prospective shareholder controller will be responsible for notifying the BMA in writing if the shareholder controller becomes a controller, directly or indirectly, of 10%, 20%, 33% or 50% ("shareholder controller") of the Company and/or any of the Company's Bermuda insurance subsidiaries. In addition where a shareholder controller reduces its shareholding to or past such noted shareholding thresholds in any of the Company's Class 3A or Class 4 insurance subsidiaries such shareholder controller must notify the BMA no later than 45 days after the reduction or disposal. An officer includes a director, chief executive, or senior executive performing duties of underwriting, actuarial, risk management, compliance, internal audit, finance or investment matters. A controller includes a managing director, or a chief executive of the insurer or of another company of which it is a subsidiary, or any other person in accordance with whose

directions or instructions the directors or controllers of the insurer or a company of which the insurer is a subsidiary are accustomed to act, including any person who holds, or is entitled to exercise, 10% or more of the voting shares or voting power or is able to exercise a significant influence over the management of the insurer or a company of which the insurer is a subsidiary pursuant to the provisions of the Insurance Act.

United States

General: Western World's operating subsidiaries are domiciled in the state of New Hampshire. Western World Insurance Company operates as a surplus lines insurer in all other U.S. jurisdictions. Tudor Insurance Company is licensed as a domestic surplus lines insurer in New Hampshire and is authorized to conduct business as a surplus lines insurer in all other U.S. jurisdictions. Stratford Insurance Company operates as an admitted insurer in 49 U.S. jurisdictions. Talbot operates within the Lloyd’s insurance market through Syndicate 1183, and Lloyd’s operations are subject to regulation in the United States in addition to being regulated in the United Kingdom, as discussed further below. The Lloyd’s market is licensed to engage in insurance business in Illinois, Kentucky and the U.S. Virgin Islands and operates as an eligible excess and surplus lines insurer in all states and territories except Kentucky and the U.S. Virgin Islands. Validus Reaseguros, Inc., Validus Re America (New Jersey) Inc. and Talbot Underwriting Services (US) Ltd. are licensed reinsurance intermediaries in Florida, New Jersey, and New York, respectively.

Much of state insurance regulation follows model statutes or regulations developed or amended by the National Association of Insurance Commissioners ("NAIC") which is governed by the chief insurance regulators of each U.S. jurisdiction. Through the NAIC, state insurance regulators establish standards, best practices and coordinate regulatory oversight.

Holding Company Regulation: Western World's operating subsidiaries are subject to the insurance holding company laws of the state of New Hampshire. These regulations generally provide that each insurance company in the system is required to register with the state insurance department and furnish information concerning the operations of companies within the holding company system which may materially affect the operations, management or financial condition of the insurers within the system. All transactions within a holding company system affecting insurers must be fair and reasonable and notice to the state insurance department is required prior to the consummation of certain material transactions between an insurer and any entity in its holding company system. In addition, certain of such transactions cannot be consummated without prior approval from the state insurance department, or its failure to disapprove after receiving notice. The holding company acts also prohibit any person from directly or indirectly acquiring control of a U.S. insurance company unless that person has filed an application with specified information with the insurance company’s domiciliary commissioner and has obtained the commissioner’s prior approval. Under most states’ statutes, including New Hampshire, acquiring 10% or more of the voting securities of an insurance company or its parent company is presumptively considered an acquisition of control of the insurance company, although such presumption may be rebutted. Accordingly, any person or entity that acquires, directly or indirectly, 10% or more of the voting securities a U.S. insurance company without the prior approval of the commissioner will be in violation of these laws and may be subject to injunctive action requiring the disposition or seizure of those securities by the commissioner or prohibiting the voting of those securities, or to other actions that may be taken by the commissioner.

In 2010, the NAIC adopted amendments to the Insurance Holding Company System Regulatory Act and Regulation, which, among other changes, introduce the concept of “enterprise risk” within an insurance holding company system. If and when the amendments are adopted by a particular state, the amended Insurance Holding Company System Regulatory Act and Regulation would impose more extensive informational requirements on parents and other affiliates of licensed insurers or reinsurers with the purpose of protecting them from enterprise risk, including requiring an annual enterprise risk report by the ultimate controlling person identifying the material risks within the insurance holding company system that could pose enterprise risk to the licensed companies. The amended Insurance Holding Company System Regulatory Act also requires any controlling person of a U.S. insurance company seeking to divest its controlling interest in the insurance company to file with the commissioner a confidential notice of the proposed divestiture at least 30 days prior to the cessation of control; after receipt of the notice, the commissioner shall determine those instances in which the parties seeking to divest or to acquire a controlling interest will be required to file for or obtain approval of the transaction. The amended Insurance Holding Company System Regulatory Act and Regulation must be adopted by the individual states for the new requirements to apply to U.S.

domestic insurers and reinsurers. To date, only certain states, including New Hampshire, have enacted legislation adopting the amended Insurance Holding Company System Regulatory Act in some form.

Enterprise Risk: The NAIC has increased its focus on risks within an insurer's holding company system that may pose enterprise risk to the insurer. "Enterprise risk" is defined as any activity, circumstance, event or series of events involving one or more affiliates of an insurer that, if not remedied promptly, is likely to have a material adverse effect upon the financial condition or the liquidity of the insurer or its insurance holding company system as a whole. As noted above, the NAIC recently adopted amendments to its Model Insurance Holding Company System Regulatory Act and Regulation, which include, among other amendments, a requirement for the ultimate controlling person to file an enterprise risk report. In 2012, the NAIC adopted the Risk Management and Own Risk and Solvency Assessment ("ORSA") Model Act, which requires domestic insurers to maintain a risk management framework and establishes a legal requirement for domestic insurers to conduct an ORSA in accordance with the NAIC's ORSA Guidance Manual.

The ORSA Model Act provides that domestic insurers, or their insurance group, must regularly conduct an ORSA consistent with a process comparable to the ORSA Guidance Manual process. The ORSA Model Act also provides that, no more than once a year, an insurer's domiciliary regulator may request that an insurer submit an ORSA summary report, or any combination of reports that together contain the information described in the ORSA Guidance Manual, with respect to the insurer and/or the insurance group of which it is a member. If and when the ORSA Model Act is adopted by a particular state, the ORSA Model Act would impose more extensive filing requirements on parents and other affiliates of domestic insurers.

Statutory Accounting Practices: Statutory accounting practices, or "SAP," are a basis of accounting developed to assist U.S. insurance regulators in monitoring and regulating the solvency of insurance companies. It is primarily concerned with measuring an insurer's surplus to policyholders. Accordingly, statutory accounting focuses on valuing assets and liabilities of insurers at financial reporting dates in accordance with appropriate insurance law and regulatory provisions applicable in each insurer's domiciliary state. U.S. GAAP concerns an insurer's solvency, but it also concerns other financial measurements, such as income and cash flows. Accordingly, U.S. GAAP gives more consideration to appropriate matching of revenue and expenses and accounting for management's stewardship of assets than does SAP. As a direct result, different assets and liabilities and different amounts of assets and liabilities will be reflected in financial statements prepared in accordance with U.S. GAAP as opposed to SAP.

Statutory Accounting Practices established by the NAIC and adopted, in part, by the New Hampshire insurance regulator, determine, among other things, the amount of statutory surplus and statutory net income of Western World's insurance company subsidiaries and thus determine, in part, the amount of funds they have available to pay dividends.

Restrictions on Dividends and Distributions: The ability of an insurer to pay dividends or make other distributions is subject to insurance regulatory limitations of the insurance company's state of domicile. Generally, such laws limit the payment of dividends or other distributions above a specified level. Dividends or other distributions in excess of such thresholds are "extraordinary" and are subject to prior regulatory approval. Such dividends or distributions may be subject to applicable withholding or other taxes. Refer to Note 27, "Statutory and regulatory requirements," to the Consolidated Financial Statements in Part II, Item 8.

Insurance Regulatory Information System Ratios: The NAIC Insurance Regulatory Information System ("IRIS") was developed by a committee of state insurance regulators and is intended primarily to assist state insurance departments in executing their statutory mandates to oversee the financial condition of insurance companies operating in their respective states. IRIS identifies 13 industry ratios (referred to as "IRIS ratios") and specifies "usual values" for each ratio. Departure from the usual values of the IRIS ratios can lead to inquiries from individual state insurance commissioners as to certain aspects of an insurer's business. Our insurance subsidiaries have consistently met the majority of the IRIS ratio tests.

Risk-Based Capital Requirements: In order to enhance the regulation of insurer solvency, the NAIC adopted in December 1993 a formula and model law to implement risk-based capital requirements for property and casualty insurance companies. These risk-based capital requirements are designed to assess capital adequacy and to raise the level of protection that statutory surplus provides for policyholder obligations. The risk-based capital model for property and casualty insurance companies measures three major areas of risk facing property and casualty insurers:

- underwriting, which encompasses the risk of adverse loss developments and inadequate pricing;
- declines in asset values arising from credit risk; and
- declines in asset values arising from investment risks.

An insurer will be subject to varying degrees of regulatory action depending on how its statutory surplus compares to its risk-based capital calculation. For equity investments in an insurance company affiliate, the risk-based capital requirements for the equity securities of such affiliate would generally be our U.S.-based subsidiaries' proportionate share of the affiliate's risk-based capital requirement.

Under the approved formula, an insurer's total adjusted capital is compared to its authorized control level risk-based capital. If this ratio is above a minimum threshold, no company or regulatory action is necessary. Below this threshold are four distinct action levels at which a regulator can intervene with increasing degrees of authority over an insurer as the ratio of surplus to risk-based capital requirement decreases. The four action levels include:

- insurer is required to submit a plan for corrective action;

- insurer is subject to examination, analysis and specific corrective action;
- regulators may place insurer under regulatory control; and
- regulators are required to place insurer under regulatory control.

Western World's surplus (as calculated for statutory purposes) is above the risk-based capital thresholds that would require either company or regulatory action.

Guaranty Funds: Most states require all admitted insurance companies to participate in their respective guaranty funds which cover certain claims against insolvent insurers. Solvent insurers licensed in these states are required to cover the losses paid on behalf of insolvent insurers by the guaranty funds and are generally subject to annual assessments in the states by the guaranty funds to cover these losses.

Federal Regulation: Although state regulation is the dominant form of regulation for insurance business, the federal government in recent years has shown some concern over the adequacy of state regulation. It is not possible to predict the future impact of any potential federal regulations or other possible laws or regulations on our U.S. based subsidiaries' capital and operations, and such laws or regulations could materially adversely affect their business. In addition, a number of federal laws affect and apply to the insurance industry, including various privacy laws and the economic and trade sanctions implemented by the Office of Foreign Assets Control ("OFAC"). OFAC maintains and enforces economic sanctions against certain foreign countries and groups and prohibits U.S. persons from engaging in certain transactions with certain persons or entities. OFAC has imposed civil penalties on persons, including insurance companies, arising from violations of its economic sanctions program.

The Dodd-Frank Wall Street Reform and Consumer Protection Act: The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") created the Federal Insurance Office ("FIO") within the Department of Treasury, which is not a federal regulator or supervisor of insurance, but monitors the insurance industry for systemic risk, consults with the states regarding insurance matters and develops federal policy on aspects of international insurance matters. The Dodd-Frank Act also created a uniform system for non-admitted insurance premium tax payments based on the home state of the policyholder and provides for single state regulation for financial solvency and credit for reinsurance as discussed below.

Credit for Reinsurance: Certain provisions of the Dodd-Frank Act, which became effective on July 21, 2011, provide that only the state in which a primary insurer is domiciled may regulate the financial statement credit for reinsurance taken by that primary insurer. U.S. domiciled ceding companies typically receive full credit for outwards reinsurance protections in their statutory financial statements with respect to liabilities ceded to admitted U.S. domestic reinsurers. However, most states in the U.S. do not confer full credit for outwards reinsurance protections for liabilities ceded to non-admitted or unlicensed reinsurers, unless the reinsurer specifically collateralizes its obligations to the ceding company or is an authorized or trusteed reinsurer in the ceding company's state of domicile through the establishment of a Multi-Beneficiary Reinsurance Trust ("MBRT").

In December 2014, Validus Reinsurance, Ltd. established a MBRT to collateralize its (re)insurance liabilities associated with and for the benefit of U.S. domiciled cedants, and was approved as a trusteed reinsurer in the State of New Jersey. As a result, cedants domiciled in that state will receive automatic credit in their regulatory filings for the reinsurance provided prospectively by the Company. Following the approval by the State of New Jersey, the Company submitted applications in most other U.S. states and territories, respectively, to become a trusteed reinsurer. As of December 31, 2015, Validus Reinsurance, Ltd. was approved as a trusteed reinsurer in 48 states as well as Puerto Rico and the District of Columbia. In addition, Validus Re Swiss established a MBRT in December 2015 and was approved as a trusteed reinsurer in the State of New Jersey as at December 31, 2015. Following the approval by the State of New Jersey, Validus Re Swiss expects to submit applications in most other U.S. states and territories in 2016 to become a trusteed reinsurer. It is our intention over time to transition U.S. domiciled cedants with outstanding letters of credit to the MBRT and therefore reduce our reliance on letters of credit. Through Lloyd's, Talbot is also an accredited reinsurer in all states and territories of the United States. Lloyd's maintains various trust funds in the state of New York to protect its U.S. business and is therefore subject to regulation by the New York Department of Financial Services, which acts as the domiciliary department for Lloyd's U.S. trust funds. There are deposit trust funds in other states to support Lloyd's reinsurance and excess and surplus lines insurance business.

As a result of the requirements relating to the provision of credit for reinsurance, our reinsurance companies are indirectly subject to certain regulatory requirements imposed by jurisdictions in which ceding companies are approved as trusteed reinsurers. In addition, the insurance and reinsurance regulatory framework of Bermuda and the insurance of U.S. risk by companies based in Bermuda and not licensed or authorized in the United States recently has become the subject of increased scrutiny in many jurisdictions, including the United States. We are not able to predict the

future impact of changes in the laws and regulation to which we are or may become subject on the Company's financial condition or results of operations.

Tax Regulations: Talbot is subject to a Closing Agreement between Lloyd's and the U.S. Internal Revenue Service pursuant to which Talbot is subject to U.S. federal income tax to the extent its income is attributable to U.S. agents who have authority to bind Talbot. Specifically, U.S. federal income tax is imposed on 35% of its income attributable to U.S. binding authorities (70% for Illinois or Kentucky business).

Other Regulations: AlphaCat Managers Ltd. is a licensed insurance manager and is registered as an investment adviser with the U.S. Securities and Exchange Commission under the U.S. Investment Advisers Act of 1940, as amended. AlphaCat Managers

Ltd. is also registered as a "commodity pool operator" with the Commodity Futures Trading Commission (the "CFTC") and is a member of the National Futures Association.

United Kingdom

On April 1, 2013, the UK Financial Services Authority (“FSA”) ceased to exist in its current form and two new focused regulators were established, namely the Financial Conduct Authority (“FCA”) and the Prudential Regulation Authority (“PRA”), both of which fall under the Financial Services Markets Act 2000.

The Financial Conduct Authority (“FCA”) has a strong mandate for promoting confidence and transparency in financial services and gives greater protection for consumers of financial services.

The Prudential Regulation Authority (“PRA”) is responsible for the day-to-day supervision of financial institutions that are subject to significant prudential risk. It adopts a more judgment-based approach to regulation so that business models can be challenged, risks identified and action taken to preserve financial stability. The PRA also has an insurance objective of contributing to the securing of an appropriate degree of protection for those who are or may become policyholders.

In relation to insurance, the FCA and PRA both regulate insurers, insurance intermediaries and Lloyd’s itself. The FCA, PRA and Lloyd’s have common objectives in ensuring that the Lloyd’s market is appropriately regulated. To minimize duplication, there are arrangements with Lloyd’s for co-operation on supervision and enforcement.

Talbot’s underwriting activities are therefore regulated by both the FCA and PRA as well as being subject to the Lloyd’s “franchise” rules. All three have powers to remove their respective authorization for Talbot to manage Lloyd’s syndicates. Lloyd’s approves annually Syndicate 1183’s business plan and any subsequent material changes, and the amount of capital required to support that plan. Lloyd’s may require changes to any business plan presented to it or additional capital (known as Funds at Lloyd's) to be provided to support the underwriting. The Lloyd's internal model, which covers all members at Lloyd's, in aggregate, was approved by the PRA in December 2015.

Talbot Risk Services Pte, Ltd. operates in Singapore and Australia to source business in the Far East and Australia. In Singapore, Talbot Risk Services Pte, Ltd. operates under Lloyd's Asia Scheme which permits underwriters to write Singaporean business and non-Singaporean business locally through service companies in Singapore. In Australia, Talbot Risk Services Pte, Ltd sources business from the local region and holds an Australian Financial Services License which is issued by Australian Securities & Investments Commission. Talbot Underwriting (MENA) Ltd. operates in Dubai to source business from the Middle East and North Africa and is regulated by the Dubai Financial Services Authority.

An EU directive covering the capital adequacy, risk management and regulatory reporting for insurers, known as Solvency II was adopted by the European Parliament in April 2009. Solvency II came into force on January 1, 2016. Insurers and reinsurers have been and continue to undertake a significant amount of work to ensure that they meet the new requirements and this may divert resources from other operational roles. Talbot is currently in compliance with all Solvency II requirements.

Switzerland

Our Swiss reinsurance subsidiary, Validus Reinsurance (Switzerland) Ltd ("Validus Re Swiss"), is a société anonyme headquartered in Zurich, Switzerland. Validus Re Swiss maintains a branch office in Bermuda, Validus Reinsurance (Switzerland) Ltd. (Bermuda Branch), a Class 4 insurer.

Regulation and Supervision: Validus Re Swiss obtained its reinsurance license from the Swiss Federal Office of Private Insurance (now the Swiss Financial Market Supervisory Authority or "FINMA") in December 2006. The conduct of reinsurance business by a company headquartered in Switzerland requires a license granted by FINMA. In principle, licensing and supervision requirements are imposed on Validus Re Swiss as a standalone legal entity.

In general, FINMALaw is an overarching statute applying in as far as there is no contrary provision in the sectoral laws for insurance and reinsurance. Sectoral laws are those laws germane to a particular industry sector such as, for example, insurance, reinsurance and banking. Aside from some inconsequential amendments under FINMALaw unifying cross sectoral issues, the existing sectoral laws governing insurance and reinsurance continue in force, substantially unchanged.

The various legal and regulatory requirements that must be satisfied, are set forth primarily by the three following sets of rules and regulations: the Federal Insurance Supervisory Law (“ISL”); the Federal Private Insurance Supervision Ordinance (“ISO”); and the FINMA Insurance Supervision Ordinance, as well as by various implementing directives

and circulars. In general, the approach is principles based and allows for consideration of a justified application by management in relation to such principles.

A partial revision of the ISO ("revised ISO") entered into force on July 1, 2015. The revision focuses primarily on the themes of solvency, qualitative risk management and disclosure.

Under Swiss rules and regulations, Swiss reinsurance companies are generally subject to many, but not all, of the same provisions that apply to direct insurers, and include the following obligations:
Adequacy of Financial Resources: ISL Article 9 and ISO, sets out the minimum capital requirements and solvency requirements. The minimum capital for a reinsurance firm is CHF 10 million.
In addition, Validus Re Swiss must keep adequate disposable and unencumbered capital resources to cover its entire activities. In calculating the solvency margin, account is taken of the risks to which the firm is exposed, the insurance classes involved, the extent of the business, the geographical scope and internationally recognized principles (ISL Article 9). For Swiss reinsurance companies solvency is determined based on the Swiss Solvency Test ("SST"). Under this approach, a company's capital is considered adequate if its risk bearing capital ("RBC") exceeds its target capital ("TC"). RBC is defined as the difference between assets at a market-consistent value and discounted best estimated liabilities. TC is defined as the sum of a market value margin and the difference between the discounted one-year RBC and the current year RBC. The SST involves a sophisticated analysis to calculate the market-consistent valuation of all assets and liabilities with a methodological approach to risk categories (insurance risk, credit risk, etc.) subjecting them to scenario stress tests at a basic level in the context of the standard regulatory approach but, where appropriate, permitting the use of internal models in the overall management of risk, once such models are validated. The SST is very close to the “Solvency II” standard of the European Union. On June 5, 2015, Switzerland was granted by the European Commission full equivalence in all three areas of Solvency II: solvency calculation, group supervision and reinsurance. This decision was the outcome of a detailed assessment conducted by the European Insurance and Occupational Pensions Authority ("EIOPA").
For the SST all assets of Validus Re Swiss are considered. There is no direct constraint on permitted investments since the provisions regarding assets linked to reserves in the ISL do not apply to reinsurance firms. However, the use of derivative instruments is required to be fully considered as part of the risk management processes and limited to reducing investment or insurance risk or to secure investment efficiencies.
Sound Corporate Governance, Risk Management and Internal Control System: In addition to quantitative risk measures, FINMA requires full qualitative governance and control of risk in the firm. This includes requirements as to the ongoing fitness, propriety and competence of the directors and senior management, observance of ethical standards, objective and appropriate remuneration procedures, management of conflicts of interests, independence and adequate resourcing of control functions (including the responsible actuary, the risk management function and the internal audit function), as well as clear terms of reference and systems of delegation and report throughout.
ISL and ISO each require the appointment of a Responsible Actuary - an independent and properly qualified actuary responsible for ensuring that solvency margins are calculated correctly, proper accounting principles are used, and adequate technical reserves are established and that this person report to the Board periodically.
Insurance companies are required to implement documented procedures for risk management and internal control. While FINMA does not require a specific quantitative outcome in relation to operational risk, the firm is expected to undertake proper analysis and to account for it.
Revised ISO sets forth stricter requirements for risk management as well as for corporate governance. It also introduces specific requirements for an ORSA, which will notably require a yearly forward-looking self-assessment of the risk situation and capital requirements, including reporting requirements to FINMA.
Supervisory Process: The supervisory process includes the following requirements:
Annual Reporting and Disclosure: Validus Re Swiss is required to prepare an annual report at the end of each financial year on the solvency margins available, as well as an annual report on the calculation of target capital and on risk bearing capital. Validus Re Swiss files a corporate report incorporating financial statements prepared and audited in accordance with Swiss accounting rules and a supervisory report in the prescribed format. The supervisory report is to be submitted to FINMA by June 30 of each year in electronic form together with the annual report.
Revised ISO sets forth new requirements in terms of public disclosure, including the obligation to publish an annual report on the financial situation of insurance companies.
Ad Hoc Notifications: FINMA requires ad hoc notifications of all changes to the firm's scheme of operations which include the following: any changes to company statutes, details of its organizational structure or business activities (including expansion into new jurisdictions; changes involving at least a 10% equity holding or at least 10% of votes in the Company, or where there is a change of control allowing persons to exert a significant influence on the

Company's commercial activities; changes in management personnel, including the Responsible Actuary).

In addition, Validus Re Swiss is required to notify changes in levels of control of it upstream or by it downstream at 10%, 20%, 33% or 50% in terms of capital or voting rights.

There is a general duty to notify FINMA of all matters of which it might want to be advised (FINMALaw Article 29). This includes all material solvency matters, which are specified by circular to include a breach of solvency requirements, fluctuations of 10% or more in terms of assets, technical provisions, or of a significant retrocession contract of the company as well as redemption of any hybrid debt instruments; and any regulatory or criminal investigations brought against the company or the senior management or other significant events.

External Auditor Involvement: Audit firms are subjected to approval and supervision by FINMA and are a significant agent in the supervisory process applying to reinsurance companies (FINMALaw 24 et seq.). Auditors report both to the governing body of the company and to FINMA. They report to the Board on the financial statements of the company and on regulatory shortcomings with a requirement for remediation. Material shortcomings are reported directly to FINMA. A standardized audit report on these topics is prescribed by FINMA Directive. Failure to have an audit conducted in accordance with legal requirements, to fulfill the legal duty of cooperation with auditors or for the auditors to perform their role properly (including whistle blowing or failing to identify regulatory breaches) all attract criminal sanctions.

Intervention and Enforcement by the Regulator. FINMALaw provides for a wider range of supervisory intervention tools than previously provided for under the ISL such as the commencement of formal proceedings, including orders to comply with the law, leading up to withdrawal of license, declarations of unfitness for individuals, disgorgement and the appointment of independent specialists to investigate and implement remediation.

Capital Structure and Dividends: Validus Re Swiss is funded by equity in the form of paid in capital by shares and in share premium. Under Swiss corporate law as modified by insurance supervisory law, a non-life insurance company is obliged to contribute to statutory legal reserves a minimum of 20% of any annual profit up to 50% of statutory capital, being paid in share capital. Validus Re Swiss has been substantially funded by share premium. As of the date of this Annual Report we are advised that, share premium can be distributed to shareholders without being subject to withholding tax. However, the distribution of any special dividend to shareholders remains subject to the approval of FINMA which has regard to the maintenance of solvency and the interests of reinsureds and creditors.

Employment Practices

The following table details our personnel by geographic location as at December 31, 2015:

Location	Validus Re	Talbot	Western World	AlphaCat	Corporate	Total	%	
London, United Kingdom	—	289	—	—	61	350	40.0	%
New Jersey, United States	3	—	204	1	3	211	24.1	%
Pembroke, Bermuda	72	—	—	9	57	138	15.8	%
New York, United States	3	13	8	—	19	43	4.9	%
Republic of Singapore	11	25	—	—	—	36	4.1	%
Waterloo, Canada	—	—	—	—	26	26	3.0	%
Miami, United States	14	9	—	—	—	23	2.6	%
Dubai, United Arab Emirates	—	12	—	—	—	12	1.4	%
Santiago, Chile	—	8	—	—	—	8	0.9	%
Toronto, Canada	—	—	—	—	7	7	0.8	%
Sydney, Australia	—	6	—	—	—	6	0.7	%
Other U.S. locations	—	—	5	—	1	6	0.7	%
Zurich, Switzerland	5	—	—	—	—	5	0.6	%
Dublin, Ireland	3	—	—	—	—	3	0.3	%
Shanghai, China	—	2	—	—	—	2	0.1	%
Total	111	364	217	10	174	876	100.0	%

We believe our relations with our employees are excellent.

Available Information

The Company files periodic reports, proxy statements and other information with the SEC. The public may read and copy any materials filed with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The SEC's website address is http://www.sec.gov. The Company's common shares are traded on the NYSE under the symbol "VR." Similar information concerning the Company can be reviewed at the office of the NYSE at 20 Broad Street, New York, New York, 10005. The Company's website address is http://www.validusholdings.com. Information contained in this website is not part of this report.

The Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available free of charge, including through our website, as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Copies of the charters for the audit committee, the compensation committee, the corporate governance and nominating committee, the finance committee and the risk committee, as well as the Company's Corporate Governance Guidelines, Code of Business Conduct and Ethics for Directors, Officers and Employees (the "Code"), which applies to all of the Company's Directors, officers and employees, and Code of Ethics for Senior Officers, which applies to the Company's principal executive officer, principal accounting officer and other persons holding a comparable position, are available free of charge on the Company's website at http://www.validusholdings.com or by writing to Investor Relations, Validus Holdings, Ltd., 29 Richmond Road, Pembroke, HM 08, Bermuda. The Company will also post on its website any amendment to the Code and any waiver of the Code granted to any of its directors or executive officers to the extent required by applicable rules.

Item 1A. Risk Factors

Risks Related to Our Company

Claims on policies written under our short-tail insurance lines that arise from unpredictable and severe catastrophic events could adversely affect our financial condition or results of operations.

The majority of our gross premiums written to date are in short-tail lines, many of which have the potential to accumulate, which means we could become liable for a significant amount of losses in a brief period. The short-tail policies we write expose us to claims arising out of unpredictable natural and other catastrophic events, whether arising from natural causes such as hurricanes, windstorms, tsunamis, severe winter weather, earthquakes and floods, or man-made causes such as fires, explosions, acts of terrorism, war or political unrest. Many observers believe that the Atlantic basin is in the active phase of a multi-decade cycle in which conditions in the ocean and atmosphere, including warmer-than-average sea-surface temperatures and low wind shear, enhance hurricane activity. This increase in the number and intensity of tropical storms and hurricanes can span multiple decades (approximately 20 to 30 years). These conditions may translate to a greater potential for hurricanes to make landfall in the U.S. at higher intensities over the next several years. In addition, climate change may be causing changes in global temperatures, which may in the future increase the frequency and severity of natural catastrophes and the losses resulting therefrom. The extent of losses from catastrophes is a function of both the number and severity of the insured events and the total amount of insured exposure in the areas affected. Increases in the value and concentrations of insured property, the effects of inflation and changes in cyclical weather patterns may increase the severity of claims from natural catastrophic events in the future. Similarly, changes in global political and economic conditions may increase both the frequency and severity of man-made catastrophic events in the future. Claims from catastrophic events could reduce our earnings and cause substantial volatility in our results of operations for any fiscal quarter or year, which could adversely affect our financial condition, possibly to the extent of eliminating our shareholders' equity. Our ability to write new reinsurance policies could also be affected as a result of corresponding reductions in our capital. Underwriting is inherently a matter of judgment, involving important assumptions about matters that are unpredictable and beyond our control, and for which historical experience and probability analysis may not provide sufficient guidance. One or more catastrophic or other events could result in claims that substantially exceed our expectations and which would become due in a short period of time, which could materially adversely affect our financial condition, liquidity or results of operations.

Emerging claim and coverage issues could adversely affect our business.

As industry practices and legal, judicial, social and other environmental conditions change, unexpected and unintended issues related to claims and coverage may emerge. These issues may adversely affect our business by either extending coverage beyond our underwriting intent or by increasing the number or size of claims. In some instances, these changes may not become apparent until sometime after we have issued insurance or reinsurance contracts that are affected by the changes. For example, a (re)insurance contract might limit the amount that can be recovered as a result of flooding. However, if the flood damage was caused by an event that also caused extensive wind damage, the quantification of the two types of damage is often a matter of judgment. Similarly, one geographic zone could be affected by more than one catastrophic event. In this case, the amount recoverable from an insurer or reinsurer may in part be determined by the judgmental allocation of damage between the events. Given the magnitude of the amounts at stake, these types of issues occasionally necessitate judicial resolution. In addition, our actual losses may vary materially from our current estimate of the loss based on a number of factors, including receipt of additional information from insureds or brokers, the attribution of losses to coverages that had not previously been considered as exposed and inflation in repair costs due to additional demand for labor and materials. As a result, the full extent of liability under an insurance or reinsurance contract may not be known for many years after such contract is issued and a loss occurs. Our exposure to this uncertainty is greater in our longer tail lines (marine and energy liabilities, aviation products and airports (aviation direct), financial lines, construction, political risk and liability).

We depend on ratings from third party rating agencies. Our financial strength rating could be revised downward, which could affect our standing among brokers and customers, cause our premiums and earnings to decrease and limit our ability to pay dividends on our common shares.

Third-party rating agencies assess and rate the financial strength of insurers and reinsurers based upon criteria established by the rating agencies, which criteria are subject to change. The financial strength ratings assigned by

rating agencies to insurance and reinsurance companies represent independent opinions of financial strength and ability to meet policyholder obligations and are not directed toward the protection of investors. Ratings have become an increasingly important factor in establishing the competitive position of insurance and reinsurance companies. Insurers and intermediaries use these ratings as one measure by which to assess the financial strength and quality of insurers and reinsurers. These ratings are often a key factor in the decision by an insured or intermediary of whether to place business with a particular insurance or reinsurance provider. These ratings are not an evaluation directed toward the protection of investors or a recommendation to buy, sell or hold our common shares.

If our financial strength rating is reduced from current levels, our competitive position in the (re)insurance industry could suffer, and it would be more difficult for us to market our products. A downgrade could result in a significant reduction in the number of (re)insurance contracts we write as our customers and brokers that place such business, move to other competitors with higher financial strength ratings.

The substantial majority of reinsurance contracts issued through reinsurance brokers contain provisions permitting the ceding company to cancel such contracts in the event of a downgrade of the reinsurer by A.M. Best below "A-" (Excellent). We cannot predict in advance the extent to which this cancellation right would be exercised, if at all, or what effect any such cancellations would have on our financial condition or future operations, but such effect could be material and adverse. Consequently, substantially all of Validus Re's business could be affected by a downgrade of our A.M. Best rating below "A-".

The indenture governing our Junior Subordinated Deferrable Debentures would restrict us from declaring or paying dividends on our common shares if we are downgraded by A.M. Best to a financial strength rating of "B" (Fair) or below or if A.M. Best withdraws its financial strength rating on any of our material insurance subsidiaries. A downgrade of the Company's A.M. Best financial strength rating below "B++" (Fair) would also constitute an event of default under our credit facilities. Either of these events could, among other things, reduce the Company's financial flexibility.

If our risk management and loss limitation methods fail to adequately manage exposure to losses from catastrophic events, our financial condition and results of operations could be adversely affected.

We manage exposure to catastrophic losses by analyzing the probability and severity of the occurrence of catastrophic events and the impact of such events on our overall (re)insurance and investment portfolio. We use various tools to analyze and manage the reinsurance exposures assumed from insureds and ceding companies and risks from a catastrophic event that could have an adverse effect on our investment portfolio. VCAPS, our proprietary risk modeling software, enables us to assess the adequacy of reinsurance risk pricing and to monitor the overall exposure to insurance and reinsurance risk in correlated geographic zones. There can be no assurance that the models and assumptions used by the software will accurately predict losses. Further, there can be no assurance that the models are free of defects in the modeling logic or in the software code. In addition, we have not sought copyright or other legal protection for VCAPS.

In addition, much of the information that we enter into the risk modeling software is based on third-party data that may not be reliable, as well as estimates and assumptions that are dependent on many variables, such as assumptions about building material and labor demand surge, storm surge, the expenses of settling claims (known as loss adjustment expenses), insurance-to-value and storm intensity. Accordingly, if the estimates and assumptions that are entered into the proprietary risk model are incorrect, or if the proprietary risk model proves to be an inaccurate forecasting tool, the losses we might incur from an actual catastrophe could be materially higher than the expectation of losses generated from modeled catastrophe scenarios, and our financial condition and results of operations could be adversely affected.

A modeled outcome of net loss from a single event also relies in significant part on the reinsurance and retrocessional arrangements in place, or expected to be in place at the time of the analysis, and may change during the year. Modeled outcomes assume that the reinsurance in place responds as expected with minimal reinsurance failure or dispute. Reinsurance and retrocessional coverage is purchased to protect the inwards exposure in line with our risk appetite, but it is possible for there to be a mismatch or gap in cover which could result in higher than modeled losses. In addition, many parts of our reinsurance program are purchased with limited reinstatements and, therefore, the number of claims or events which may be recovered from second or subsequent events is limited. It should also be noted that renewal dates of the reinsurance and retrocessional program do not necessarily coincide with those of the inwards business written. Where inwards business is not protected by risks attaching reinsurance and retrocessional programs, the programs could expire resulting in an increase in the possible net loss retained and as such, could have a material adverse effect on our financial condition and results of operations.

We also seek to limit loss exposure through loss limitation provisions in policies we write, such as limitations on the amount of losses that can be claimed under a policy, limitations or exclusions from coverage and provisions relating to choice of forum, which are intended to assure that our policies are legally interpreted as intended. There can be no assurance that these contractual provisions will be enforceable in the manner expected or that disputes relating to

coverage will be resolved in our favor. If the loss limitation provisions in the policies are not enforceable or disputes arise concerning the application of such provisions, the losses we incur from a catastrophic event could be materially higher than expected and our financial condition and results of operations could be adversely affected.

The insurance and reinsurance business is historically cyclical and we expect to experience periods with excess underwriting capacity and unfavorable premium rates and policy terms and conditions, which could materially adversely affect our financial condition and results of operations.

The insurance and reinsurance industry has historically been cyclical. Insurers and reinsurers have experienced significant fluctuations in operating results due to competition, frequency of occurrence or severity of catastrophic events, levels of underwriting capacity, underwriting results of primary insurers, general economic conditions and other factors. The supply of insurance and reinsurance is related to prevailing prices, the level of insured losses and the level of industry surplus which, in turn, may fluctuate, including in response to changes in rates of return on investments being earned in the reinsurance industry.

The insurance and reinsurance pricing cycle has historically been a market phenomenon, driven by supply and demand rather than by the actual cost of coverage. The upward phase of a cycle is often triggered when a major event forces insurers and reinsurers to make large claim payments, thereby drawing down capital. This, combined with increased demand for insurance against the risk associated with the event, pushes prices upwards. Over time, insurers' and reinsurers' capital is replenished with the higher revenues. At the same time, new entrants flock to the industry seeking a part of the profitable business. This combination prompts a slide in prices—the downward cycle—until a major insured event potentially restarts the upward phase. As a result, the insurance and reinsurance business has been characterized by periods of intense competition on price and policy terms due to excessive underwriting capacity, which is the percentage of surplus or the dollar amount of exposure that a reinsurer is willing to place at risk, as well as periods when shortages of capacity result in favorable premium rates and policy terms and conditions.

Premium levels may be adversely affected by a number of factors which fluctuate and may contribute to price declines generally in the reinsurance industry. For example, as premium levels for many products increased subsequent to the significant natural catastrophes of 2004 and 2005, the supply of reinsurance increased, either as a result of capital provided by new entrants or by the commitment of additional capital by existing reinsurers. Increases in the supply of insurance and reinsurance may have consequences for the reinsurance industry generally and for us including fewer contracts written, lower premium rates, increased expenses for customer acquisition and retention, and less favorable policy terms and conditions. As a consequence, the Company will experience greater competition on most insurance and reinsurance lines. This could adversely affect the rates we receive for our (re)insurance and our gross premiums written. The insurance and reinsurance industry is currently experiencing a soft market whereby premiums tend to be lower, capacity is higher and competition increases.

The cyclical trends in the industry and the industry's profitability can also be affected significantly by volatile and unpredictable developments, such as natural disasters (e.g., catastrophic hurricanes, windstorms, tornadoes, earthquakes and floods), courts granting large awards for certain damages, fluctuations in interest rates, changes in the investment environment that affect market prices of investments and inflationary pressures that may tend to affect the size of losses experienced by insureds and primary insurance companies. We expect to experience the effects of cyclicality, which could materially adversely affect our financial condition and results of operations.

Competition for business in our industry is intense, and if we are unable to compete effectively, we may not be able to retain market share and our business may be materially adversely affected.

The insurance and reinsurance industries are highly competitive. We face intense competition, based upon (among other things) global capacity, product breadth, reputation and experience with respect to particular lines of business, relationships with (re)insurance intermediaries, quality of service, capital and perceived financial strength (including independent rating agencies' ratings), innovation and price. We compete with major global insurance and reinsurance companies and underwriting syndicates, many of which have extensive experience in (re)insurance and may have greater financial, marketing and employee resources available to them than us. Other financial institutions, such as banks and hedge funds, now offer products and services similar to our products and services through alternative capital markets products that are structured to provide protections similar to those provided by reinsurers. These products, such as catastrophe-linked bonds, compete with our products. In the future, underwriting capacity will continue to enter the market from these identified competitors and perhaps other sources. Increased competition could result in fewer submissions and lower rates, which could have a material adverse effect on our growth and profitability. If we are unable to compete effectively against these competitors, we may not be able to retain market share and this could adversely affect our financial condition and results of operations.

In addition, insureds have been retaining a greater proportion of their risk portfolios than previously, and industrial and commercial companies have been increasingly relying upon their own subsidiary insurance companies, known as captive insurance companies, self-insurance pools, risk retention groups, mutual insurance companies and other mechanisms for funding their risks, rather than risk transferring insurance. This has also put downward pressure on (re)insurance premiums.

Consolidation in the (re)insurance industry could adversely affect our business.

We believe that several (re)insurance industry participants are seeking to consolidate. These consolidated entities may try to use their enhanced market power to negotiate price reductions for our products and services and/or obtain a larger market share through increased line sizes. If competitive pressures reduce our prices, we would expect to write less business. As the (re)insurance industry consolidates, competition for customers will become more intense and the importance of acquiring and properly servicing each customer will become greater. We could incur greater expenses relating to customer acquisition and retention, further reducing our operating margins. In addition, insurance companies that merge may be able to spread their risks across a consolidated, larger capital base so that they require less reinsurance. Reinsurance intermediaries could also continue to consolidate, potentially adversely impacting our ability to access business and distribute our products. We could also experience more robust competition from larger, better capitalized competitors. Any of the foregoing could adversely affect our business or our results of operations.

If we underestimate our reserve for losses and loss expenses, our financial condition and results of operations could be adversely affected.

Our success depends on our ability to accurately assess the risks associated with the businesses and properties that we insure/reinsure. If unpredictable catastrophic events occur, or if we fail to adequately manage our exposure to losses or fail to adequately estimate our reserve requirements, our actual losses and loss expenses may deviate, perhaps substantially, from our reserve estimates.

We estimate the risks associated with our outstanding obligations, including the risk embedded within our unearned premiums. To do this, we establish reserves for losses and loss expenses (or loss reserves), which are liabilities that we record to reflect the estimated costs of claim payment and the related expenses that we will ultimately be required to pay in respect of premiums written and include case reserves and IBNR reserves. However, under U.S. GAAP, we are not permitted to establish reserves for losses until an event which gives rise to a claim occurs. As a result, only reserves applicable to losses incurred up to the reporting date may be set aside on our financial statements, with no allowance for the provision of loss reserves to account for possible other future losses, unless we deem the unearned premium reserve to be insufficient to cover future losses on risks that have already incepted. Case reserves are reserves established with respect to specific individual reported claims. IBNR reserves are reserves for estimated losses that we have incurred but that have not yet been reported to us.

Our reserve estimates do not represent an exact calculation of liability. Rather, they are estimates of what we expect the ultimate settlement and administration of claims will cost. These estimates are based upon actuarial and statistical projections, on our assessment of currently available data, predictions of future developments and estimates of future trends and other variable factors such as inflation. Establishing an appropriate level for our loss reserve estimates is an inherently uncertain process. It is likely that the ultimate liability will be greater or less than these estimates and that, at times, this variance will be material. Our reserve estimates are regularly refined as experience develops and claims are reported and settled. In addition, as we operate largely through intermediaries, reserving for our business can involve added uncertainty arising from our dependence on information from ceding companies which, in addition to the risk of receiving inaccurate information, involves an inherent time lag between reporting information from the primary insurer to us. Additionally, ceding companies employ differing reserving practices which add further uncertainty to the establishment of our reserves. Moreover, in certain circumstances, the Company has necessitated the use of industry loss emergence patterns in deriving IBNR. Loss emergence patterns are development patterns used to project current reported or paid loss amounts to their ultimate settlement value or amount. Further, expected losses and loss ratios are typically developed using vendor and proprietary computer models and these expected loss ratios are a material component in the calculation of IBNR. Actual loss ratios will deviate from expected loss ratios and ultimate loss ratios will be greater or less than expected loss ratios. Because of these uncertainties, it is possible that our estimates for reserves at any given time could prove inadequate.

To the extent we determine that actual losses and loss adjustment expenses from events which have occurred exceed our expectations and the loss reserves reflected in our financial statements, we will be required to reflect these changes in the current reporting period. This could cause a sudden and material increase in our liabilities and a reduction in our profitability, including operating losses and reduction of capital, which could materially restrict our ability to write new business and adversely affect our financial condition and results of operations and potentially our A.M. Best rating.

The preparation of our financial statements requires us to make many estimates and judgments which, if inaccurate, could cause volatility in our results.

Our Consolidated Financial Statements have been prepared in accordance with U.S. GAAP. Management believes the item that requires the most subjective and complex estimates is the reserve for losses and loss expenses. Following a major catastrophic event, the possibility of future litigation or legislative change that may affect interpretation of policy terms further increases the degree of uncertainty in the reserving process. The uncertainties inherent in the reserving process, together with the potential for unforeseen developments, including changes in laws and the prevailing interpretation of policy terms, may result in losses and loss expenses materially different than the reserves initially established. Changes to prior year reserves will affect current underwriting results by increasing net income if the prior year reserves prove to be redundant or by decreasing net income if the prior year reserves

prove to be insufficient. We expect volatility in results in periods in which significant loss events occur because U.S. GAAP does not permit insurers or reinsurers to reserve for loss events until they have occurred and are expected to give rise to a claim. As a result, we are not allowed to record contingency reserves to account for expected future losses. We anticipate that claims arising from future events will require the establishment of substantial reserves from time to time.

Changes in current accounting practices and future pronouncements could materially impact our reported financial results.

Unanticipated developments in accounting practices may require us to divert resources from other operational roles to comply with such developments, particularly if we are required to prepare information relating to prior periods for comparative purposes or significantly modify existing processes to apply the new requirements prospectively. The impact of changes in current accounting practices and future pronouncements cannot be predicted; however, they may affect the calculation of net income, net equity and other relevant financial statement line items.

We rely on key personnel and the loss of their services may adversely affect us. The Bermuda location of our head office may be an impediment to attracting and retaining experienced personnel.

Various aspects of our business depend on the services and skills of key personnel of the Company. We believe there are only a limited number of available qualified executives in the business lines in which we compete. We rely substantially upon the services of Edward J. Noonan, Chairman of our Board of Directors and Chief Executive Officer; Jeffrey D. Sangster, Executive Vice President and Chief Financial Officer; John J. Hendrickson, Director of Strategy, Risk Management and Corporate Development; Kean Driscoll, Executive Vice President and Chief Executive Officer of Validus Reinsurance, Ltd.; C.N. Rupert Atkin, Chief Executive Officer of the Talbot Group; Robert F. Kuzloski, Executive Vice President and General Counsel; Andrew E. Kudera, Executive Vice President and Chief Actuary; Lixin Zeng, Executive Vice President and Chief Executive Officer of AlphaCat Managers Ltd.; Romel Salam, Executive Vice President and Chief Risk Officer; Jonathan P. Ritz, Executive Vice President and Chief Operating Officer and Michael R. Moore, Executive Vice President and Chief Accounting Officer, among other key employees. The loss of any of their services or the services of other members of our management team or any difficulty in attracting and retaining other talented personnel could impede the further implementation of our business strategy, reduce our revenues and decrease our operational effectiveness. Although we have an employment agreement with each of the above named executives, there is a possibility that these employment agreements may not be enforceable in the event any of these employees leave. The employment agreements for each of the above-named executives provide that the terms of the agreement will continue for a defined period after either party giving notice of termination, and will terminate immediately upon the Company giving notice of termination for cause. We do not currently maintain key man life insurance policies with respect to these or any of our other employees. In addition, changes in employment laws, taxation and remuneration practices within our operating jurisdiction may adversely impact the retention or recruitment of key personnel.

The operating location of our head office and our primary Validus Re subsidiary may be an impediment to attracting and retaining experienced personnel. Under Bermuda law, non-Bermudians (other than spouses of Bermudians or permanent resident certificate holders) may not engage in any gainful occupation in Bermuda without an appropriate governmental work permit. Our success may depend in part on the continued services of key employees in Bermuda. A work permit may be granted or renewed upon demonstrating that, after proper public advertisement, no Bermudian (or spouse of a Bermudian or a holder of a permanent resident’s certificate) is available who meets the minimum standards reasonably required by the employer. A work permit is issued with an expiry date (up to ten years for senior executives) and no assurances can be given that any work permit will be issued or, if issued, renewed upon the expiration of the relevant term. If work permits are not obtained, or are not renewed, for our principal employees, we would lose their services, which could materially affect our business. Work permits are currently required for 47 of our Bermuda employees, the majority of whom have obtained three- or five-year work permits.

Certain of our directors and officers may have conflicts of interest with us.

Entities affiliated with some of our directors have sponsored or invested in, and may in the future sponsor or invest in, other entities engaged in or intending to engage in insurance and reinsurance underwriting, some of which compete with us. They have also entered into, or may in the future enter into, agreements with companies that compete with us.

We have a policy in place applicable to each of our directors and officers which provides for the resolution of potential conflicts of interest. However, we may not be in a position to influence any party's decision to engage in activities that would give rise to a conflict of interest, and they may take actions that are not in our shareholders' best interests.

We may require additional capital or credit in the future, which may not be available or only available on unfavorable terms.

We monitor our capital adequacy on a regular basis. The capital requirements of our business depend on many factors, including our premiums written, loss reserves, investment portfolio composition and risk exposures, as well as satisfying regulatory and rating agency capital requirements. Our ability to underwrite is largely dependent upon the quality of our claims paying and financial strength ratings as evaluated by independent rating agencies. To the extent that our existing capital is insufficient to fund our future operating requirements and/or cover claim losses, we may need to raise additional funds through financings or limit our growth. Any

equity or debt financing, if available at all, may be on terms that are unfavorable to us. In the case of equity financings, dilution to our shareholders could result, and, in any case, such securities may have rights, preferences and privileges that are senior to those of our outstanding securities. In addition, the capital and credit markets have recently been experiencing extreme volatility and disruption. In some cases, the markets have exerted downward pressure on the availability of liquidity and credit capacity for certain issuers. If we are not able to obtain adequate capital, our business, results of operations and financial condition could be adversely affected.

In addition, for certain of our subsidiaries as an alien insurer and reinsurer (not licensed in the U.S.), we are required to post collateral security with respect to any (re)insurance liabilities that we assume from insureds or ceding insurers domiciled in the U.S. in order for U.S. ceding companies to obtain full statutory and regulatory credit for our reinsurance. Other jurisdictions may have similar collateral requirements. Under applicable statutory provisions, these security arrangements may be in the form of letters of credit, insurance or reinsurance trusts maintained by trustees or funds-withheld arrangements where assets are held by the ceding company. We intend to satisfy such statutory requirements by maintaining the trust fund requirements for Talbot’s underwriting at Lloyd’s and Validus Re and by providing to primary insurers letters of credit issued under our credit facilities or access to our multi-beneficiary trusts. To the extent that we are required to post additional security in the future, we may require additional letter of credit capacity and there can be no assurance that we will be able to obtain such additional capacity or arrange for other types of security on commercially acceptable terms or on terms as favorable as under our current letter of credit facilities. Our inability to provide collateral satisfying the statutory and regulatory guidelines applicable to insureds and primary insurers would have a material adverse effect on our ability to provide (re)insurance to third parties and negatively affect our financial position and results of operations.

Security arrangements may subject our assets to security interests and/or require that a portion of our assets be pledged to, or otherwise held by, third parties. Although the investment income derived from our assets while held in trust typically accrues to our benefit, the investment of these assets is governed by the investment regulations of the state of domicile of the ceding insurer and therefore the investment returns on these assets may not be as high as they otherwise would be.

Loss of business from one or more major brokers could adversely affect us.

We market our insurance and reinsurance on a worldwide basis primarily through brokers, and we depend on a small number of brokers for a large portion of our revenues. For the year ended December 31, 2015, our business was primarily sourced from the following brokers: Marsh & McLennan 28.2%, Aon Benfield Group Ltd. 15.5%, and Willis Group Holdings Ltd. 14.3%. These three brokers provided a total of 58.0% of our gross premiums written for the year ended December 31, 2015. Loss of all or a substantial portion of the business provided by one or more of these brokers could adversely affect our business.

We assume a degree of credit risk associated with substantially all of our brokers.

In accordance with industry practice, we frequently pay amounts owed on claims under our policies to brokers and the brokers, in turn, pay these amounts over to the insured and reassured that have reinsured a portion of their liabilities with us. In some jurisdictions, if a broker fails to make such a payment, we might remain liable to the insured or reassured for the deficiency notwithstanding the broker’s obligation to make such payment. Conversely, in certain jurisdictions, when the insured or reassured pays premiums for these policies to the insurance and reinsurance brokers for payment to us, these premiums are considered to have been paid and the insured or reassured will no longer be liable to us for these premiums, whether or not we have actually received them. Consequently, we assume a degree of credit risk associated with substantially all of our brokers.

Our utilization of brokers, managing general agents and other third parties to support our business exposes us to operational and financial risks

Our insurance business relies upon brokers, managing general agents and other third parties to produce and service a portion of its operations. In these arrangements, we typically grant the third party the right to bind us to new and renewal policies, subject to underwriting guidelines we provide and other contractual restrictions and obligations. Should these third parties issue policies that contravene these guidelines, restrictions or obligations, we could nonetheless be deemed liable for such policies. Although we would intend to resist claims that exceed or expand on our underwriting intention, it is possible that we would not prevail in such an action, or that our managing general agent would be unable to adequately indemnify us for their contractual breach.

We also rely on managing general agents, third party administrators or other third parties we retain, to collect premiums and to pay valid claims. We could also be exposed to their or their producer's operational risk, including, but not limited to, contract wording errors, technological and staffing deficiencies and inadequate disaster recovery plans. We could also be exposed to potential liabilities relating to the claims practices of the third party administrators we have retained to manage the claims activity on this business. Although we have implemented monitoring and other oversight protocols, we cannot assure that these measures will be sufficient to mitigate all of these exposures.

Our success depends on our ability to establish and maintain effective operating procedures and internal controls. Failure to detect control issues and any instances of fraud could adversely affect us.

Our success is dependent upon our ability to establish and maintain operating procedures and internal controls (including the timely and successful implementation of information technology systems and programs) to effectively support our business and our regulatory and reporting requirements. We may not be successful in such efforts. Even when implemented, as a result of the inherent limitations in all control systems, no evaluation of controls can provide full assurance that all control issues and instances of fraud, if any, within the Company will be detected.

We may be unable to purchase reinsurance or retrocessional reinsurance in the future, and if we do successfully purchase reinsurance or retrocessional reinsurance, we may be unable to collect on claims submitted under such policies, which could adversely affect our business, financial condition and results of operations.

We purchase reinsurance and retrocessional reinsurance in order that we may offer insureds and cedants greater capacity, and to mitigate the effect of large and multiple losses on our financial condition. Reinsurance is a transaction whereby an insurer or reinsurer cedes to a reinsurer or retrocessional reinsurer all or part of the insurance it has written or reinsurance it has assumed. A reinsurer's or retrocessional reinsurer's insolvency or inability or refusal to make timely payments under the terms of its reinsurance agreement with us could have an adverse effect on us because we remain liable to our client. From time to time, market conditions have limited, and in some cases have prevented, insurers and reinsurers from obtaining the types and amounts of reinsurance or retrocessional reinsurance that they consider adequate for their business needs. Accordingly, we may not be able to obtain our desired amounts of reinsurance or retrocessional reinsurance or negotiate terms that we deem appropriate or acceptable or obtain reinsurance or retrocessional reinsurance from entities with satisfactory creditworthiness.

Our investment portfolio may suffer reduced returns or losses which could adversely affect our results of operations and financial condition. Any increase in interest rates or volatility in the fixed income markets could result in significant unrealized losses in the fair value of our investment portfolio which would reduce our net income.

Our operating results depend in part on the performance of our investment portfolio, which currently consists largely of fixed maturity securities, as well as the ability of our investment managers to effectively implement our investment strategy. Our Board of Directors, led by our Finance Committee, Chief Financial Officer and Chief Investment Officer oversees our investment strategy and IPS, which provides the framework for the management and oversight of the Company's investment portfolio. See "Business-Investment Management" for further details on the Company's IPS. While we follow a conservative investment strategy designed to emphasize the preservation of invested assets and to provide sufficient liquidity for the prompt payment of claims, we will nevertheless be subject to market-wide risks including illiquidity and pricing uncertainty and fluctuations, as well as to risks inherent in particular securities. Our investment performance may vary substantially over time, and there can be no assurance that we will achieve our investment objectives. The investment return including net investment income, net realized and the change in net unrealized gains (losses) on managed investments was $95.1 million, or 1.4% for the year ended December 31, 2015. Investment results will also be affected by general economic conditions, market volatility, interest rate fluctuations, liquidity and credit risks beyond our control. In addition, our need for liquidity may result in investment returns below our expectations. Also, with respect to certain of our investments, we are subject to prepayment or reinvestment risk. At December 31, 2015, 25.1% of our managed fixed maturities portfolio is comprised of mortgage-backed and asset-backed securities which are subject to prepayment risk. Although we attempt to manage the risks of investing in a changing interest rate environment, a significant increase in interest rates could result in significant losses, realized or unrealized, in the fair value of our investment portfolio and, consequently, could have an adverse effect on our results of operations.

A portion of our investment portfolio is allocated to investments which have risk characteristics different from our short-term and fixed maturity investment portfolio which could adversely affect our results of operations, financial condition and cash flows.

A portion of our investment portfolio is allocated to hedge funds, investment funds and private equity investments, including our investments in investment affiliates, which contain risk characteristics different from our short-term and fixed maturity investment portfolio. These investments expose us to market risk and may experience significant volatility in their investment returns and valuations which could have an adverse impact our results of operations and financial condition. Furthermore, certain of these investments also expose us to liquidity risk and may be illiquid due

to contractual provisions or market conditions. If we require significant amounts of cash on short notice in excess of anticipated cash obligations, then we may have difficulty selling these investments in a timely manner or we may be forced to sell or terminate them at unfavorable values which could adversely impact our results of operations, financial condition and cash flows.

Investment methodologies and assumptions are subject to differing interpretations and unrealized losses taken on our investments are subjective which could adversely affect our results of operations and financial condition.

The valuation of our investments may include methodologies, estimations and assumptions that are subject to differing interpretations and could result in changes to our investment valuations. During periods of market disruptions, it may be difficult to value certain securities if trading becomes less frequent or market data less observable. There may also be certain asset classes that become illiquid due to the financial environment. As a result, valuation of securities in our investment portfolio may require more subjectivity and management judgment. Valuation methods that require greater estimation may result in values which may be greater or less than the value at which the investments may be ultimately sold. In addition, rapidly changing and unpredictable credit and equity market conditions could materially affect the valuation of securities as reported in our Consolidated Financial Statements.

The determination of the unrealized losses taken on our investments are also partially subjective and could materially impact our financial position. Unrealized losses vary by investment type and are based upon our periodic evaluations and assessments of known and inherent risks associated with the respective asset class. Evaluations are revised as conditions change, and management reflects unrealized losses in operations on a quarterly basis. Furthermore, additional unrealized losses may need to be taken in the future. Subjective unrealized losses could adversely affect our financial condition and our results of operations.

Our operating results may be adversely affected by currency fluctuations.

Our reporting currency is the U.S. dollar and the majority of our operating companies have a functional currency of the U.S. dollar. Many of our companies maintain both assets and liabilities in local currencies. Therefore, we are exposed to foreign exchange risk on the assets and liabilities denominated in those foreign currencies. Foreign exchange risk is reviewed as part of our risk management process. Locally required capital levels may be invested in home currencies in order to satisfy regulatory requirements and to support local insurance operations. The principal currencies potentially creating unhedged foreign exchange risk are the Australian dollar, New Zealand dollar, Japanese yen, British pound sterling and the Euro. As a result of the accounting treatment for non-monetary items, we may experience volatility in our income statement during a period when movement in foreign exchange rates fluctuate significantly. In accordance with U.S. GAAP, non-monetary items are not re-measured at the reporting date and are therefore translated at historic exchange rates. Non-monetary items include unearned premiums and deferred acquisition costs. Therefore, a mismatch arises in the income statement between the amount of premium recognized at historical exchange rates and the related claims which are re-measured using currency rates at the reporting date which can cause volatility in the income statement. We look to manage our economic foreign currency exposure through matching our major foreign-denominated assets and liabilities, as well as through the use of currency derivatives. However, there is no guarantee that we will effectively mitigate our exposure to foreign exchange losses. Refer to Part II, Item 7A “Quantitative and Qualitative Disclosures About Market Risk” for further discussion of foreign currency risk.

Heightened European sovereign debt risk could adversely affect our results of operations and financial condition.

Our managed fixed maturity portfolio contains certain European government and government agency securities and European corporate securities which are subject to increased liquidity risk, interest rate risk and default risk as a result of heightened European sovereign debt risk. As of December 31, 2015, our managed fixed maturity portfolio contains $134.6 million or 2.5% of European government and government agency securities and $183.5 million or 3.4% of European corporate securities. Increased defaults, and/or a significant increase in interest rates could result in losses, realized or unrealized, in the fair value of our investment portfolio and, consequently, could have an adverse effect on our results of operations.

System security risks, data protection breaches, cyber-attacks and systems integration issues could disrupt our internal operations or information technology services provided to customers, and any such disruption could affect our ability to conduct our business, our financial condition and our ability to meet the demands of our customers and stakeholders.

We depend on the proper functioning and availability of our information technology platform, including communications and data processing systems, in operating our business. These systems consist of proprietary software programs that are integral to the efficient operation of our business and include our pricing and exposure management

system, VCAPS, and other non-proprietary systems such as our policy administration, actuarial and accounting systems. A prolonged failure of, or inability to access, one or more of our operational systems could significantly impair our ability to process premiums and claims, pay claims, perform actuarial modeling, prepare internal and external financial statements and information, as well as conduct other daily business activities. Such failure could have a material adverse effect on our results of operations.

We are also required to effect electronic transmissions with third parties including brokers, client's vendors and others with whom we do business, and to facilitate the oversight conducted by our Board of Directors. Security breaches arising from cyber-attacks could expose us to a risk of loss or misuse of our information, litigation and potential liability and could impact the availability, reliability, speed, accuracy or other proper functioning of our IT systems. We may not have the resources or technical sophistication to anticipate or prevent rapidly evolving types of cyber-attacks. A significant cyber incident, including system failure, security breach,

disruption by malware or other damage could interrupt or delay our operations, result in a violation of applicable privacy and other laws, damage our reputation, cause a loss of customers or give rise to monetary fines and other penalties, which could be significant.

The Company has a Business Continuity Program which has been developed to provide reasonable assurance of business continuity in the event of disruptions at the company's critical facilities. The key elements of the program are business recovery, systems and data recovery. In the area of information security, we have developed and implemented a framework of principles, policies and technology to protect the information provided to us by our clients and that of the company from cyber-attacks and other misappropriation, corruption or loss. Safeguards are applied to maintain the confidentiality, integrity and availability of information; however, there is no guarantee that these measures will be sufficient to mitigate all of these exposures.

We may be exposed to risk in connection with our management of third party capital.

Our operating subsidiaries may owe certain legal duties and obligations to third party investors (including reporting obligations) and are subject to a variety of often complex laws and regulations relating to the management of third party capital. Compliance with some of these laws and regulations requires significant management time and attention. Although we seek to continually monitor our policies and procedures to attempt to ensure compliance, there could be faulty judgments, simple errors or mistakes, or the failure of our personnel to adhere to established policies and procedures that could result in our failure to comply with applicable laws or regulations which could result in significant liabilities, penalties or other losses to the Company, and seriously harm our business and results of operations. In addition to the forgoing, our third party capital providers may redeem their interests in our managed funds, which could materially impact the financial condition of such funds, and could in turn materially impact our financial condition and results of operations. Moreover, we can provide no assurance that we will be able to attract and raise additional third party capital for our existing funds or for potential new funds and therefore we may forego existing and/or potential fee income and other income generating opportunities.

The ongoing development of our U.S. excess and surplus lines insurance operations is subject to increased risk from changing market conditions.

Excess and surplus lines insurance is a substantial portion of the business written by our newly acquired U.S. operating subsidiary, Western World. Excess and surplus lines insurance covers risks that are typically more complex and unusual than standard risks and require a high degree of specialized underwriting. As a result, excess and surplus lines risks do not often fit the underwriting criteria of standard insurance carriers. Our excess and surplus lines insurance business fills the insurance needs of businesses with unique characteristics and is generally considered higher risk than those in the standard market. If our underwriting staff inadequately judges and prices the risks associated with the business underwritten in the excess and surplus lines market, our financial results could be adversely impacted.

Further, the excess and surplus lines market is significantly affected by the conditions of the property and casualty insurance market in general. The impact of this cyclicality can be more pronounced in the excess and surplus market than in the standard insurance market. During times of hard market conditions (when market conditions are more favorable to insurers), as rates increase and coverage terms become more restrictive, business tends to move from the admitted market to the excess and surplus lines market and growth in the excess and surplus market can be significantly more rapid than growth in the standard insurance market. When soft market conditions are prevalent (when market conditions are less favorable to insurers), standard insurance carriers tend to loosen underwriting standards and expand market share by moving into business lines traditionally characterized as excess and surplus lines, exacerbating the effect of rate decreases. If we fail to manage the cyclical nature and volatility of the revenues and profit we generate in the excess and surplus lines market, our financial results could be adversely impacted.

A decrease in the fair value of Talbot, Western World and/or our intangible assets may result in future impairments.

Goodwill and intangible assets are assessed for impairment on an annual basis or more frequently if events or changes in circumstances indicate that the carrying amount may not be recoverable. These assessments require us to use significant judgment in making various estimates and assumptions, such as the determination of expected future cash flows and/or earnings, and actual results may ultimately be materially different from such estimates and assumptions. For example, expected future cash flows and/or earnings may be materially and negatively impacted as a result of, among other things, a decrease in renewals and new business, loss of key personnel, lower-than-expected yields

and/or cash flows from our investment portfolio or higher-than-expected claims activity and incurred losses as well as other general economic factors. As a result of these potential changes, the estimated fair value of Talbot, Western World and/or our intangible assets may decrease, causing the carrying value to exceed the fair value and the goodwill and/or intangible assets to be impaired. If an impairment is determined to exist, the carrying value of the goodwill and/or intangible asset is adjusted to its implied fair value with the corresponding expense recorded in our income statement in the period in which the impairment is determined. If we are required to record goodwill impairments in the future, our financial condition and results of operations would be negatively affected.

Risks Related to Acquisitions and New Ventures

Any future acquisitions or new ventures may expose us to operational risks.

We may in the future make strategic acquisitions, either of other companies or selected books of business, or grow our business organically. Any future acquisitions or new ventures may expose us to operational challenges and risks, including:

- integrating financial and operational reporting systems;
- integration into new geographical regions;
- establishing satisfactory budgetary and other financial controls;
- funding increased capital needs and overhead expenses;
- retaining management personnel required for existing operations;
- obtaining management personnel required for expanded operations;
- obtaining necessary regulatory permissions;
- funding cash flow shortages that may occur if anticipated revenues are not realized or are delayed, whether by general economic or market conditions or unforeseen internal difficulties;
- the value of assets related to acquisitions or new ventures may be lower than expected or may diminish due to credit defaults or changes in interest rates and liabilities assumed may be greater than expected;
- the assets and liabilities related to acquisitions or new ventures may be subject to foreign currency exchange rate fluctuation; and
- financial exposures in the event that the sellers of the entities we acquire are unable or unwilling to meet their indemnification, reinsurance and other obligations to us.

Our failure to manage successfully these operational challenges and risks may adversely impact our results of operations.

Risks Related to Lloyd’s and Other U.K. Regulatory Matters

The regulation of Lloyd’s members and of Lloyd’s by the U.K. Financial Conduct Authority (“FCA”) and Prudential Regulation Authority (“PRA”) and under European Directives and other local laws may result in intervention that could have a significant negative impact on Talbot.

Talbot operates in a regulated jurisdiction. Its underwriting activities are regulated by the FCA and PRA and franchised by Lloyd’s. The FCA and PRA have substantial powers of intervention in relation to the Lloyd’s managing agents (such as Talbot Underwriting Ltd.) which it regulates, including the power to remove their authorization to manage Lloyd’s syndicates. In addition, the Lloyd’s Franchise Board is responsible for approving every syndicate's annual business plan, including the maximum premium volume they may write, and may require changes to any business plan presented to it or additional capital (known as Funds at Lloyd's or "FAL") to be provided to support underwriting. The Lloyd's internal model, which covers all members at Lloyd's, in aggregate, was approved by the PRA in December 2015. An adverse determination in any of these cases could lead to a change in business strategy which may have an adverse effect on Talbot’s financial condition and results of operations.

An EU directive covering the capital adequacy, risk management and regulatory reporting for insurers, known as Solvency II was adopted by the European Parliament in April 2009. Solvency II came into force on January 1, 2016. Insurers and reinsurers have been and continue to undertake a significant amount of work to ensure that they meet the new requirements and this may divert resources from other operational roles. Talbot is currently in compliance with all Solvency II requirements.

Additionally, Lloyd’s worldwide insurance and reinsurance business is subject to local regulation. Changes in such regulation may have an adverse effect on Lloyd’s generally and on Talbot in particular.

Should Lloyd’s Council decide additional levies are required to support the central fund, this could adversely affect Talbot.

The central fund, which is funded by annual contributions and loans from Lloyd’s members, acts as a policyholders’ protection fund to make payments where any Lloyd’s member has failed to pay, or is unable to pay, valid claims. The Lloyd’s Council may resolve to make payments from the central fund for the advancement and protection of policyholders, which could lead to additional or special contributions being payable by Lloyd’s members, including Talbot. This, in turn, could adversely affect Talbot and the Company.

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The failure of Lloyd’s to satisfy the PRA’s annual solvency test could result in limitations on managing agents’ ability, including Talbot’s ability, to underwrite or the commencement of legal proceedings against Lloyd’s.
The PRA requires Lloyd’s to satisfy an annual solvency test. The solvency requirement in essence measures whether Lloyd’s has sufficient assets in the aggregate to meet all outstanding liabilities of its members, both current and in run-off. If Lloyd’s fails to satisfy the test in any year, the PRA may require Lloyd’s to cease trading and/or its members to cease or reduce underwriting. In the event of Lloyd’s failing to meet any solvency requirement, either the Society of Lloyd’s or the PRA may apply to the court for a Lloyd’s Market Reorganization Order (“LMRO”). On the making of an order a “reorganization controller” is appointed, and for its duration, a moratorium is imposed preventing any proceedings or legal process from being commenced or continued against any party that is the subject of such an order, which, if made, would apply to the market as a whole, including members, former members, managing agents, members’ agents, Lloyd’s brokers, approved run-off companies and managing general agents unless individual parties are specifically excluded.
A downgrade in Lloyd’s ratings would have an adverse effect on Syndicate 1183’s rating as well its standing among brokers and customers and cause its premiums and earnings to decrease.
The ability of Lloyd’s syndicates to trade in certain classes of business at current levels is dependent on the maintenance of a satisfactory credit rating issued by a recognized rating agency. The financial security of the Lloyd’s market is regularly assessed by three independent rating agencies, A.M. Best, Standard & Poor’s and Fitch Ratings. Lloyd's current ratings are: A.M. Best: A, Positive Outlook; Standard & Poor's: A+, Stable Outlook; Fitch Ratings: AA-, Stable Outlook. Syndicate 1183 is also rated A, Positive Outlook, by A.M. Best. Syndicate 1183 benefits from Lloyd’s current ratings and would be adversely affected, along with all other syndicates at Lloyd's, if the current ratings were downgraded from their present levels.
An increase in the charges paid by Talbot to participate in the Lloyd’s market could adversely affect Talbot’s financial and operating results.
Lloyd’s imposes a number of charges on businesses operating in the Lloyd’s market, including, for example, annual subscriptions and central fund contributions for members and policy signing charges. The basis and amounts of charges may be varied by Lloyd’s and could adversely affect Talbot and the Company.
An increase in the level or type of deposits required by U.S. Situs Trust Deeds to be maintained by Lloyd’s syndicates could result in Syndicate 1183 being required to make a cash call which could adversely affect Talbot’s financial performance.
The U.S. Situs Trust Deeds require syndicates transacting certain types of business in the United States to maintain minimum deposits as protection for U.S. policyholders. These deposits represent the syndicates' estimates of unpaid claims liabilities (less premiums receivable) relating to this business, adjusted for provisions for potential bad debt on premiums earned but not received and for any anticipated profit on unearned premiums. No credit is generally allowed for potential reinsurance recoveries. The New York Insurance Department and the U.S. National Association of Insurance Commissioners ("NAIC") currently require funding of 30% of gross liabilities in relation to insurance business classified as “Surplus Lines.” The “Credit for Reinsurance” trust fund is usually required to be funded at 100% of gross liabilities. The funds contained within the deposits are not ordinarily available to meet trading expenses. U.S. regulators may increase the level of funding required or change the requirements as to the nature of funding. Accordingly, in the event of a major claim arising in the United States, for example from a major catastrophe, syndicates participating in such U.S. business may be required to make cash calls on their members to meet claims payments and deposit funding obligations. This could adversely affect Talbot.
Risks Related to Taxation
Our non U.S companies may be subject to U.S. tax.
We intend to operate in such a manner that none of our non-U.S. companies would be unintendedly considered engaged in a U.S. trade or business. No definitive standards, however, are provided by the Internal Revenue Code of 1986, as amended (the “Code”), U.S. Treasury regulations or court decisions regarding activities that constitute the conduct of a U.S. trade or business. Because that determination is essentially factual, there can be no assurance that the Internal Revenue Service (the “IRS”) will not contend that we are engaged in a U.S. trade or business. If we were found to be so engaged, we could be subject to U.S. corporate income and branch profits tax on our earnings that are effectively connected to such U.S. trade or business.

If the group company involved is entitled to the benefits of a U.S. income tax treaty (the “Treaty”), it would not be subject to U.S. income tax on any income protected by the Treaty unless that income is attributable to a permanent establishment in the U.S. The income tax treaty between the U.S. and Bermuda (the “Bermuda Treaty”) clearly applies to premium income, but may be construed as not protecting other income such as investment income. If any of the Company's Bermuda-based subsidiaries were found to be engaged in a trade or business in the U.S. and were entitled to the benefits of the Bermuda Treaty in general, but the

Bermuda Treaty was found not to protect investment income, a portion of the relevant subsidiary's investment income could be subject to U.S. tax.

U.S. persons who hold common shares may be subject to U.S. income taxation at ordinary income rates on our undistributed earnings and profits.

Controlled Foreign Corporation Status: The Company should not be a controlled foreign corporation ("CFC") because its organizational documents provide that if the common shares owned, directly, indirectly or by attribution, by any person would otherwise represent more than 9.09% of the aggregate voting power of all the Company's common shares, the voting rights attached to those common shares will be reduced so that such person may not exercise and is not attributed more than 9.09% of the total voting power of the common shares. There can be no assurance, however, that the provisions of the Organizational Documents will operate as intended and that the Company will not be considered a CFC. If the Company were considered a CFC, any shareholder that is a U.S. person that owns directly, indirectly or by attribution, 10% or more of the voting power of the Company may be subject to current U.S. income taxation at ordinary income tax rates on all or a portion of the Company's undistributed earnings and profits attributable to the Company's insurance and reinsurance income, including underwriting and investment income. Any gain realized on sale of common shares by such shareholder may also be taxed as a dividend to the extent of the Company's earnings and profits attributed to such shares during the period that the shareholder held the shares and while the Company was a CFC (with certain adjustments).

Related Person Insurance Income: If the related person insurance income ("RPII") of any of the Company's non-U.S. insurance subsidiaries were to equal or exceed 20% of that subsidiary's gross insurance income in any taxable year, and U.S. persons were treated as owning 25% or more of the subsidiary's stock, by vote or value, a U.S. person who directly or indirectly owns any common shares on the last day of such taxable year on which the 25% threshold is met would be required to include in income for U.S. federal income tax purposes that person's ratable share of that subsidiary's RPII for the taxable year. The amount to be included in income is determined as if the RPII were distributed proportionately to U.S. shareholders on that date, regardless of whether that income is distributed. The amount of RPII to be included in income is limited by such shareholder's share of the subsidiary's current-year earnings and profits, and possibly reduced by the shareholder's share of prior year deficits in earnings and profits. The amount of RPII earned by a subsidiary will depend on several factors, including the identity of persons directly or indirectly insured or reinsured by that subsidiary. Although we do not believe that the 20% threshold will be met for our non-U.S. insurance subsidiaries, some of the factors that might affect that determination in any period may be beyond our control. Consequently, we cannot assure that we will not exceed the RPII threshold in any taxable year.

If a U.S. person disposes of shares in a non-U.S. insurance corporation that had RPII (even if the 20% threshold was not met) and the 25% threshold is met at any time during the five-year period ending on the date of disposition, and the U.S. person owned any shares at such time, any gain from the disposition will generally be treated as a dividend to the extent of the holder's share of the corporation's undistributed earnings and profits that were accumulated during the period that the holder owned the shares (possibly whether or not those earnings and profits are attributable to RPII). In addition, the shareholder will be required to comply with specified reporting requirements, regardless of the amount of shares owned. We believe that those rules should not apply to a disposition of common shares because the Company is not itself directly engaged in the insurance business. We cannot assure, however, that the IRS will not successfully assert that those rules apply to a disposition of common shares.

U.S. persons who hold common shares will be subject to adverse tax consequences if the Company is considered a passive foreign investment company for U.S. federal income tax purposes.

If the Company is considered a passive foreign investment company ("PFIC") for U.S. federal income tax purposes, a U.S. holder who owns common shares will be subject to adverse tax consequences, including a greater tax liability than might otherwise apply and an interest charge on certain taxes that are deferred as a result of the Company's non-U.S. status. We currently do not expect that the Company will be a PFIC for U.S. federal income tax purposes in the current taxable year or the foreseeable future because, through Validus Reinsurance, Ltd., Talbot 2002 Underwriting Capital Ltd., Validus Reinsurance (Switzerland) Ltd and Talbot Underwriting Ltd., it intends to be predominantly engaged in the active conduct of a global insurance and reinsurance business. We cannot assure you, however, that the Company will not be deemed to be a PFIC by the IRS. No regulations currently exist regarding the application of the PFIC provisions to an insurance company.

Changes in U.S. tax laws may be retroactive and could subject a U.S. holder of our common shares to other adverse tax consequences.

The tax treatment of non-U.S. companies and their U.S. and non-U.S. insurance and reinsurance subsidiaries has been the subject of Congressional discussion and legislative proposals in the U.S. We cannot assure you that future legislative action will not increase the amount of U.S. tax payable by us.

In addition, the U.S. federal income tax laws and interpretations, including those regarding whether a company is engaged in a U.S. trade or business or is a PFIC, or whether U.S. holders would be required to include “subpart F income” or RPII in their gross income, are subject to change, possibly on a retroactive basis. The regulations regarding the application of the PFIC rules to insurance companies and the regulations regarding RPII are still in proposed form and we cannot be certain if, when, or in what form, such regulations or pronouncements may be finalized, and whether such guidance will have a retroactive effect.

The Obama administration’s proposed budget for Fiscal Year 2017 could disallow a deduction for premiums paid for reinsurance.

Insurance companies are generally allowed a deduction for premiums paid for reinsurance. The proposed U.S. budget for fiscal year 2017 contains a proposal that denies an insurance company a deduction for reinsurance premiums paid to affiliated foreign companies to the extent that the foreign reinsurer is not subject to U.S. income tax with respect to the premiums received. Furthermore, the proposed law would exclude from the insurance company’s income any return premiums, ceding commissions or reinsurance recovered with respect to reinsurance policies for which a premium deduction is denied. Based on the information currently available to us, it is uncertain to what extent this legislation will adversely impact us.

We may become subject to taxes in Bermuda after March 31, 2035, which may have a material adverse effect on our results of operations.

Under current Bermuda law, we are not subject to tax on income or capital gains. We have received from the Minister of Finance under The Exempted Undertaking Tax Protection Act 1966, as amended, an assurance that, in the event that Bermuda enacts legislation imposing tax computed on profits, income, any capital asset, gain or appreciation, or any tax in the nature of estate duty or inheritance, then the imposition of any such tax shall not be applicable to us or to any of our operations or shares, debentures or other obligations, until March 31, 2035. We could be subject to taxes in Bermuda after that date. This assurance is subject to the provision that it is not to be construed to prevent the application of any tax or duty to such persons as are ordinarily resident in Bermuda or to prevent the application of any tax payable in accordance with the provisions of the Land Tax Act 1967 or otherwise payable in relation to any property leased to us. The Company's Bermuda-domiciled subsidiaries each pay annual Bermuda government fees and each Bermuda subsidiary licensed insurer and reinsurer pays an annual insurance license fee. In addition, all entities employing individuals in Bermuda are required to pay a payroll tax and there are other sundry taxes payable, directly or indirectly, to the Bermuda government.

The impact of Bermuda's letter of commitment to the Organization for Economic Cooperation and Development ("OECD") to eliminate harmful tax practices is uncertain and could adversely affect our tax status in Bermuda.

The OECD has published reports and launched a global initiative among member and non-member countries on measures to limit harmful tax competition. These measures are largely directed at counteracting the effects of tax havens and preferential tax regimes in countries around the world. Bermuda was not listed in the most recent report as an uncooperative tax haven jurisdiction because it had previously committed to eliminate harmful tax practices, to embrace international tax standards for transparency, to exchange information and to eliminate an environment that attracts business with no substantial domestic activity. We are not able to predict what changes will arise from the commitment or whether such changes will subject us to additional taxes.

Our non-U.K. companies may be subject to U.K. tax.

We intend to operate in such a manner that none of our non-U.K. companies would be resident in the U.K. for tax purposes. A company incorporated outside the U.K. will be deemed resident if its business is centrally managed and controlled from the U.K. The concept of central management and control is not defined in statute but derives from case law and the determination of residence is subjective, therefore Her Majesty's Revenue and Customs ("HMRC") might contend successfully that one or more of our companies are resident in the U.K.

Furthermore, we intend to operate in such a manner that none of our non-U.K. companies carry on a trade wholly or partly in the U.K. Case law has held that whether or not a trade is being carried on is a matter of fact and emphasis is placed on where operations take place from which the profits in substance arise. This judgment is subjective. The HRMC might contend successfully that one or more of our non-U.K. companies, is conducting business in the U.K. For tax purposes, a non-U.K. tax resident company will only be subject to corporation tax if it carries on a trade in the U.K. through a permanent establishment. However, that company will still have an income tax liability if it carries on

a trade in the U.K., even absent a permanent establishment, unless that company is treaty-protected.

We may become subject to taxation on profits generated in Bermuda as a result of the OECD's final recommendations on Base erosion and profit shifting ("BEPS")

In 2015, the OECD published final recommendations on BEPS. These recommendations propose the development of rules to prevent base erosion and profit shifting which may drive fundamental changes in the perception of tax structuring and transfer pricing by tax authorities. The recommendations include adopting transfer pricing rules or special measures to ensure that returns will not accrue to an entity solely because it has contractually assumed risks or has provided capital. BEPS will likely put a much greater

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emphasis on the location of individuals and their contributions towards profit generation. This would notably result in a significant change to the existing transfer pricing rules and could potentially have a significant impact on the allocation of taxable profits throughout the Company. Furthermore, these developments might also result in significant changes to the rules that govern the creation of a taxable presence in a foreign country. As a consequence, profits currently generated in Bermuda may become subject to taxation outside Bermuda.

Our non-Swiss companies may be subject to taxation in Switzerland.

We intend to operate in such a manner that none of our non-Swiss companies would be resident in Switzerland for tax purposes. A company incorporated outside Switzerland will be deemed resident if its business is centrally managed and controlled from Switzerland. However, the analysis is factual and the Swiss tax authorities might contend successfully that one or more of our non-Swiss group companies are resident in Switzerland.

Furthermore, a group company incorporated and managed outside of Switzerland should not be liable for Swiss corporation taxation unless it carries on business through a permanent establishment in Switzerland. From a Swiss tax perspective, a permanent establishment is a fixed place of business through which a company performs business activities that are considered as being quantitatively and qualitatively significant by the tax authorities, and may include a branch, office, agency or place of management. As of the date of this Annual Report, the Validus group intends to operate in such a manner so that none of our non-Swiss companies will carry on business through a permanent establishment in Switzerland. If any of our companies were to be treated as carrying on business in Switzerland through a branch or agency or of having a permanent establishment in Switzerland, our results of operations could be adversely affected.

Diverted Profit Tax in the U.K.

The U.K. Authorities enacted a new Diverted Profits Tax as of April 1, 2015 on profits of multinationals artificially diverted from the U.K. The tax rate will be 25%. Diverted Profits Tax will apply in two situations; (a) where a foreign company has artificially avoided having a taxable presence in the U.K, or (b) where a group has entered into a tax advantageous structure or transaction that lacks economic substance.

Although the legislation intends to address aggressive tax planning which is artificial or lacks economic substance, the legislation has a wider reach. The Validus group has significant U.K. operations and several intragroup reinsurance agreements. We believe that these transactions have economic substance and should fall outside the intended reach of the Diverted Profit Tax. However, we are not able to predict the financial impact of the new Diverted Profits Tax and such impact may be adverse.

Risks Related to Laws and Regulations Applicable to Us

If we become subject to insurance statutes and regulations in addition to the statutes and regulations that currently apply to us, there could be a significant and negative impact on our business.

We currently conduct our business in a manner such that we expect the Company will not be subject to insurance and/or reinsurance licensing requirements or regulations in any jurisdiction other than Bermuda, Switzerland, the United States, and, with respect to Talbot, the U.K. and jurisdictions to which Lloyd’s is subject. See “Business—Regulation.” Although we do not currently intend to engage in activities which would require us to comply with insurance and reinsurance licensing requirements of other jurisdictions, should we choose to engage in activities that would require us to become licensed in such jurisdictions, we cannot assure you that we will be able to do so or that we will be able to do so in a timely manner.

The insurance and reinsurance regulatory framework has recently become subject to increased scrutiny in many jurisdictions. Governmental authorities in both the U.S. and worldwide have become increasingly interested in the potential risks posed by the insurance industry as a whole, and to commercial and financial systems in general. For example, the U.S. Congress and the current administration have made, or called for consideration of, several additional proposals relating to a variety of issues with respect to financial regulation reform, including the Dodd-Frank Act that was signed into law by President Obama on July 21, 2010. The Dodd-Frank Act represented a comprehensive overhaul of the regulation of the financial services industry within the United States and established a Federal Insurance Office under the U.S. Treasury Department to monitor all aspects of the insurance industry and of lines of business other than certain health insurance, certain long-term care insurance and crop insurance. The director of the Federal Insurance Office has the ability to recommend that an insurance company or an insurance holding company be subject to heightened prudential standards under the supervision of the Federal Reserve. In addition,

some state legislators have considered or enacted laws that will alter and likely increase state regulation of insurance and reinsurance companies and holding companies. Furthermore, the NAIC, which is an association of the insurance commissioners of all 50 states and the District of Columbia, regularly reexamines existing laws and regulations.

Government regulators are generally concerned with the protection of policyholders rather than other constituencies, such as our shareholders. We are not able to predict the exact nature, timing or scope of changes in laws and regulations to which we are or may become subject; however, compliance with such laws and regulations may result in additional costs which may adversely impact our results of operations.

Our international business is subject to applicable laws and regulations relating to sanctions and foreign corrupt practices, the violation of which could adversely affect our operations.

We must comply with all applicable economic sanctions and anti-bribery laws and regulations of the United States and other foreign jurisdictions where we operate, including the United Kingdom and the European Community. United States laws and regulations applicable to us include the economic trade sanctions laws and regulations administered by the United States Department of the Treasury's Office of Foreign Assets Control ("OFAC") as well as certain laws administered by the United States Department of State. In addition, we are subject to the Foreign Corrupt Practices Act ("FCPA") and other anti-bribery laws such as the UK Bribery Act that generally bar corrupt payments or unreasonable gifts to foreign governments or officials. Although we have policies and controls in place that are designed to ensure compliance with these laws and regulations, it is possible that an employee or intermediary could fail to comply with applicable laws and regulations. In such event, we could be exposed to civil penalties, criminal penalties and other sanctions, including fines or other punitive actions. In addition, such violations could damage our business and/or our reputation. Such criminal or civil sanctions, penalties, other sanctions, and damage to our business and/or reputation could have a material adverse effect on our financial condition and results of operations.

Risks Related to Ownership of Our Common Shares

Because Validus Holdings, Ltd. is a holding company and substantially all of our operations are conducted by our main operating subsidiaries our ability to meet any ongoing cash requirements and to pay dividends will depend on our ability to obtain cash dividends or other cash payments or obtain loans from these subsidiaries.

We conduct substantially all of our operations through subsidiaries. Our ability to meet our ongoing cash requirements, including any debt service payments or other expenses, and pay dividends on our common shares in the future, will depend on our ability to obtain cash dividends or other cash payments or obtain loans from these subsidiaries and as a result will depend on the financial condition of these subsidiaries. The inability of these subsidiaries to pay dividends in an amount sufficient to enable us to meet our cash requirements could have a material adverse effect on us and the value of our common shares. Each of these subsidiaries is a separate and distinct legal entity that has no obligation to pay any dividends or to lend or advance us funds and may be restricted from doing so by contract, including other financing arrangements, charter provisions or applicable legal and regulatory requirements or rating agency constraints. The payment of dividends by these subsidiaries to us is limited under Bermuda, U.K. and U.S. laws and regulations. The Insurance Act provides that our Bermuda Class 3B and 4 insurance subsidiaries may not declare or pay in any financial year dividends of more than 25% of their total statutory capital and surplus (as shown on their statutory balance sheets in relation to the previous financial year) unless they file an affidavit with the BMA at least seven days prior to the payment signed by at least two directors and such subsidiary's principal representative, stating that in their opinion such subsidiaries will continue to satisfy the required margins following declaration of those dividends, though there is no additional requirement for BMA approval. In addition, before reducing its total statutory capital by 15% or more (as set out in its previous years' statutory financial statements) each of our Class 3A and Class 4 insurance subsidiaries must make application to the BMA for permission to do so, such application to consist of an affidavit signed by at least two directors and such subsidiary's principal representative stating that in their opinion the proposed reduction in capital will not cause such subsidiaries to fail to meet its relevant margins, and such other information as the BMA may require. Each of our Class 3 insurance subsidiaries must make application to the BMA before reducing its total statutory capital by 15% or more and should provide such information as the BMA may require. During 2016, the Bermuda regulated subsidiaries have the ability to distribute up to $1,030.8 million of unrestricted net assets as dividend payments and/or return of capital to Validus Holdings, Ltd. without prior regulatory approval.

Talbot manages Syndicate 1183 (the "Syndicate") at Lloyd's. Lloyd's requires Talbot to hold cash and investments in trust for the benefit of policyholders either as Syndicate trust funds or as Funds at Lloyd's ("FAL"). Talbot may not distribute funds from the Syndicate into its corporate member's trust accounts unless, firstly, they are represented by audited profits and, secondly, the Syndicate has adequate future cash flow to service its policyholders. Talbot's

corporate member may not distribute funds to Talbot’s unregulated bank or investment accounts unless they are represented by a surplus of cash and investments over the FAL requirement. Additionally, U.K. company law prohibits Talbot’s corporate name from declaring a dividend to the Company unless it has profits available for distribution. The determination of whether a company has profits available for distribution is based on its accumulated realized profits less its accumulated realized losses. While the U.K. insurance regulatory laws do not impose statutory restrictions on a corporate name’s ability to declare a dividend, the FCA and PRA rules require maintenance of each insurance company’s solvency margin within its jurisdiction.

Western World's operating subsidiaries are domiciled in the state of New Hampshire. New Hampshire insurance laws limit the amount of dividends Western World may pay to the Company in any 12 month period without prior approval of the New Hampshire

State Insurance Department. These limitations are based on the lesser of: a maximum of 10% of prior year end statutory surplus as determined under statutory accounting practices or the net income, not including realized capital gains, for the 12-month period ending December 31, next preceding, but shall not include pro rata distributions of any class of the insurer's own securities. In determining whether a dividend or distribution is extraordinary, an insurer may carry forward net income from the previous two calendar years that has not already been paid out as dividends. This carry-forward shall be computed by taking the net income from the second and third preceding calendar years, not including realized capital gains, less dividends paid in the second and immediate preceding calendar years. During 2016, the maximum dividend that may be paid to the Company by Western World without obtaining prior approval is $15.1 million.

The timing and amount of any cash dividends on our common shares are at the discretion of our Board of Directors and will depend upon our results of operations and cash flows, our financial position and capital requirements, general business conditions, legal, tax, regulatory, rating agency and contractual constraints or restrictions and any other factors that our Board of Directors deems relevant. In addition, the indentures governing our Junior Subordinated Deferrable Debentures would restrict us from declaring or paying dividends on our common shares if we are downgraded by A.M. Best to a financial strength rating of “B” (Fair) or below or if A.M. Best withdraws its financial strength rating on any of our material insurance subsidiaries.

Future sales of our common shares and grants of restricted shares may affect the market price of our common shares and the future exercise of options may result in immediate and substantial dilution of the common shares.

As of December 31, 2015 (but without giving effect to unvested restricted shares), we had 82,900,617 common shares outstanding. Approximately 3,968,129 of these outstanding shares were subject to the volume limitations and other conditions of Rule 144 under the Securities Act of 1933, as amended, which we refer to as the “Securities Act.” In addition, we have filed one or more registration statements on Form S-8 under the Securities Act to register common shares issued or reserved for issuance under our Amended and Restated 2005 Long Term Incentive Plan (the “Plan”). The number of common shares that have been reserved for issuance under the Plan is equal to 2,753,292 of which 1,971,922 shares remain available as of December 31, 2015. We cannot predict what effect, if any, future sales of our common shares, or the availability of common shares for future sale, will have on the market price of our common shares. Sales of substantial amounts of our common shares in the public market, or the perception that sales of this type could occur, could depress the market price of our common shares and may make it more difficult for our shareholders to sell their common shares at a time and price that they deem appropriate.

Our Bye-laws authorize our Board of Directors to issue one or more series of common shares and preferred shares without shareholder approval. Specifically, we have an authorized share capital of 571,428,571 shares ($0.175 par value per share), which can consist of common shares and/or preference shares, as determined by our Board of Directors. The Board of Directors has the right to issue the remaining shares without obtaining any approval from our shareholders and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any series or designation of such series. Any issuance of our preferred stock could adversely affect the voting power of the holders of our common shares and could have the effect of delaying, deferring, or preventing the payment of any dividends (including any liquidating dividends) and any change in control of us. If a significant number of either common or preferred shares are issued, it may cause the market price of our common shares to decline.

Our classified board structure may prevent a change in our control.

Our Board of Directors is divided into three classes of directors. Each year one class of directors is elected by the shareholders for a three year term. The staggered terms of our directors may reduce the possibility of a tender offer or an attempt at a change in control, even though a tender offer or change in control might be in the best interest of our shareholders.

There are provisions in our Bye-laws that reduce the voting rights of voting common shares that are held by a person or group to the extent that such person or group holds more than 9.09% of the aggregate voting power of all common shares entitled to vote on a matter.

In general, and except as provided below, shareholders have one vote for each common share held by them and are entitled to vote at all meetings of shareholders. However, if, and for so long as, the common shares of a shareholder, including any votes conferred by “controlled shares” (as defined below), would otherwise represent more than 9.09% of the aggregate voting power of all common shares entitled to vote on a matter, including an election of directors, the votes conferred by such shares will be reduced by whatever amount is necessary such that, after giving effect to any such reduction (and any other reductions in voting power required by our Bye-laws), the votes conferred by such shares represent 9.09% of the aggregate voting power of all common shares entitled to vote on such matter. “Controlled shares” include, among other things, all shares that a person is deemed to own directly, indirectly or constructively (within the meaning of Section 958 of the Code, or Section 13(d) (3) of the Securities and Exchange Act of 1934, as amended (the “Exchange Act”)). At December 31, 2015, there were 85,640,063 common shares, of which 7,784,681 common shares would confer votes that represent 9.09% of the aggregate voting power of all common shares entitled to vote generally at an election of directors. An investor who does not hold, and is not deemed under the provisions of our Bye-laws to own, any of our common shares may therefore purchase up to such amount without being subject to voting cutback provisions in our Bye-laws.

In addition, we have the authority under our Bye-laws to request information from any shareholder for the purpose of determining ownership of controlled shares by such shareholder.

There are regulatory limitations on the ownership and transfer of our common shares which could result in the delay or denial of any transfers shareholders might seek to make.

The BMA must approve all issuances and transfers of securities of a Bermuda exempt company except where a general permission applies under the Exchange Control Act 1972 and related regulations. We have received permission from the BMA to issue our common shares and securities, and for the free transferability of our common shares and securities, as long as the common shares are listed on the New York Stock Exchange or other appointed exchange, to and among persons who are residents and non-residents of Bermuda for exchange control purposes. Any other transfers remain subject to approval by the BMA and such approval may be denied or delayed. Additionally issuances and transfers of voting or controlling shares of Bermuda registered insurance subsidiaries requires application to, or notification to, the BMA Insurance Division (depending on the circumstances) pursuant to the Insurance Act.

A shareholder of our Company may have greater difficulties in protecting its interests than as a shareholder of a U.S. corporation.

The Companies Act 1981 (the “Companies Act”), which applies to us, differs in material respects from laws generally applicable to U.S. corporations and their shareholders. Taken together with the provisions of our Bye-laws, some of these differences may result in a shareholder having greater difficulties in protecting its interests as a shareholder of our company than it would have as a shareholder of a U.S. corporation. This affects, among other things, the circumstances under which transactions involving an interested director are voidable, whether an interested director can be held accountable for any benefit realized in a transaction with our Company, what approvals are required for business combinations by our Company with a large shareholder or a wholly owned subsidiary, what rights a shareholder may have as a shareholder to enforce specified provisions of the Companies Act or our Bye-laws, and the circumstances under which we may indemnify our directors and officers.

We are a Bermuda company and it may be difficult for our shareholders to enforce judgments against us or against our directors and executive officers.

We were incorporated under the laws of Bermuda and our business is based in Bermuda. In addition, certain of our directors and officers reside outside the United States, and a portion of our assets and the assets of such persons may be located in jurisdictions outside the United States. As such, it may be difficult or impossible to effect service of process within the United States upon us or those persons, or to recover against us or them on judgments of U.S. courts, including judgments predicated upon the civil liability provisions of the U.S. federal securities laws. Further, no claim may be brought in Bermuda against us or our directors and officers in the first instance for violation of U.S. federal securities laws because these laws have no extraterritorial application under Bermuda law and do not have

force of law in Bermuda; however, a Bermuda court may impose civil liability, including the possibility of monetary damages, on us or our directors and officers if the facts alleged in a complaint constitute or give rise to a cause of action under Bermuda law. Currently, of our executive officers, Kean Driscoll, Jeffrey Sangster, Robert Kuzloski, Michael Moore and Lixin Zeng reside in Bermuda, Edward Noonan, John Hendrickson, Romel Salam, Andrew Kudera and Jonathan Ritz maintain residences in both Bermuda and the United States and Rupert Atkin resides in the United Kingdom. Of our directors, Edward Noonan and John Hendrickson maintain residences in both Bermuda and the United States, Jean-Marie Nessi resides in France, Michael Carpenter resides in the United Kingdom and the remainder reside in the United States.

We have been advised by Bermuda counsel that there is doubt as to whether the courts of Bermuda would enforce judgments of U.S. courts obtained in actions against us or our directors and officers, predicated upon the civil liability provisions of the U.S. federal securities laws, or original actions brought in Bermuda against us or such persons predicated solely upon U.S. federal securities laws. Further, we have been advised by Bermuda counsel that there is no treaty in effect between the United States and Bermuda providing for the enforcement of judgments of U.S. courts in civil and commercial matters, and there are grounds upon which Bermuda courts may decline to enforce the judgments of U.S. courts. Some remedies available under the laws of U.S. jurisdictions, including some remedies available under the U.S. federal securities laws, may not be allowed in Bermuda courts as contrary to public policy in Bermuda. Because judgments of U.S. courts are not automatically enforceable in Bermuda, it may be difficult for our shareholders to recover against us based upon such judgments.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company and its subsidiaries occupy office space in Australia, Bermuda, Canada, Chile, England, Ireland, Malaysia, Singapore, Switzerland, United Arab Emirates, and the United States. We renew and enter into leases in the ordinary course of business as required. The main operating locations of the Company and its primary leaseholders are described below. We believe our current facilities and the leaseholds with respect thereto are sufficient for us to conduct our operations.

Legal entity	Location	Expiration date
Validus Holdings, Ltd.	Pembroke, Bermuda	December 31, 2021
Validus Research Inc.	Waterloo, Canada	March 31, 2020
Validus Services, Inc. and Talbot Underwriting Services (U.S.) Ltd.	New York, New York, USA	October 31, 2020
Talbot Holdings Ltd. and Talbot Underwriting Services Ltd.	London, England	June 22, 2024
Validus Reinsurance (Switzerland) Ltd	Zurich, Switzerland	January 31, 2019
Western World Insurance Group, Inc.	Franklin Lakes, New Jersey, USA	May 31, 2016

Item 3. Legal Proceedings

During the normal course of business, the Company and its subsidiaries are subject to litigation and arbitration. Legal proceedings such as claims litigation are common in the insurance and reinsurance industry in general. The Company and its subsidiaries may be subject to lawsuits and regulatory actions in the normal course of business that do not arise from or directly relate to claims on reinsurance treaties or contracts or insurance policies.

Litigation typically can include, but is not limited to, allegations of underwriting errors or misconduct, employment claims, regulatory activity, shareholder disputes or disputes arising from business ventures. These events are difficult, if not impossible, to predict with certainty. It is Company policy to dispute all allegations against the Company and/or its subsidiaries that management believes are without merit.

As at December 31, 2015, the Company was not a party to, or involved in any litigation or arbitration that it believes could have a material adverse effect on the financial condition, results of operations or liquidity of the Company.

Executive Officers of the Company

The following table provides information regarding our executive officers and key employees as of February 22, 2016:

Name	Age	Position
Edward J. Noonan	57	Chairman of the Board of Directors and Chief Executive Officer of the Validus Group
Jeffrey D. Sangster	43	Executive Vice President and Chief Financial Officer
C.N. Rupert Atkin	57	Chief Executive Officer of the Talbot Group
Kean D. Driscoll	42	Executive Vice President and Chief Executive Officer of Validus Reinsurance, Ltd.
John J. Hendrickson	55	Director of Strategy, Risk Management and Corporate Development
Andrew E. Kudera	56	Executive Vice President and Chief Actuary
Robert F. Kuzloski	52	Executive Vice President and General Counsel
Michael R. Moore	46	Executive Vice President and Chief Accounting Officer
Romel Salam	49	Executive Vice President and Chief Risk Officer
Jonathan P. Ritz	48	Executive Vice President and Chief Operating Officer
Lixin Zeng	47	Executive Vice President and Chief Executive Officer of AlphaCat Managers Ltd.

Edward J. Noonan has been Chairman of our Board and the Chief Executive Officer of the Company since its formation. Mr. Noonan has over 30 years of experience in the insurance and reinsurance industry, serving most recently as the acting Chief Executive Officer of Global Indemnity plc (NASDAQ: GBLI) from February 2005 through October 2005 and as a member of the Board of Directors from December 2003 to May 2007. Mr. Noonan served as President and Chief Executive Officer of American Re-Insurance Company from 1997 to 2002, having joined American Re in 1983. Mr. Noonan also served as Chairman of Inter-Ocean Reinsurance Holdings of Hamilton, Bermuda from 1997 to 2002. Mr. Noonan is also a Director of Central Mutual Insurance Company and All American Insurance Company, both of which are property and casualty companies based in Ohio.

Jeffrey D. Sangster has served as Executive Vice President and Chief Financial Officer of the Company since February 2013. Mr. Sangster joined the Company in October 2006 and has served in various finance positions during that time, including Chief Accounting Officer and Chief Financial Officer of Validus Reinsurance, Ltd. Mr. Sangster has 18 years of experience in the reinsurance industry and was previously with Endurance, Centre Group and Ernst & Young. Mr. Sangster is Chartered Accountant and a member of the Chartered Professional Accountants of Bermuda and the Chartered Professional Accountants of Manitoba.

C. N. Rupert Atkin began his career at the Alexander Howden Group in 1980 before moving to Catlin Underwriting Agencies in 1984. After six years at Catlin he left to join Talbot, then Venton Underwriting Ltd to start Syndicate 1183 as Active Underwriter. In November 2001, Mr. Atkin was made Director of Underwriting. Following the sale of Talbot to Validus in the summer of 2007 Mr. Atkin was appointed as Chief Executive Officer of Talbot. Mr. Atkin has served or is still serving on a variety of market bodies including chairing the Lloyd's Underwriters' Association and Joint War Risk Committee and being a member of the Lloyd's Insurance Services Board, Lloyd's Regulatory Board, Lloyd's Professional Standards Committee and Lloyd's Charities Trust Committee. Mr. Atkin was Chairman of the Lloyd's Market Association from 2012 to 2015, served on the Council of Lloyd's from 2007 through January 2016, and was Deputy Chairman of Lloyd's from 2014 through January 2016. On November 19, 2015, the Company announced the planned retirement of Mr. Atkin as Chief Executive Officer of Talbot to be effective February 29, 2016, at which point Mr. Atkin will assume the role of Chairman of Talbot.

Kean D. Driscoll is the Chief Executive Officer of Validus Reinsurance, Ltd., the reinsurance segment for the Validus Group. He was a founding member of the Company, and previously served as Chief Underwriting Officer. Mr. Driscoll has 20 years of experience as a reinsurance underwriter, and was previously with Quanta Re, and Zurich Re N.A. (Converium). Mr. Driscoll holds a B.A. in Literature from Colgate University and an M.B.A. from Columbia University, where he graduated with Honors.

John J. Hendrickson has been a director of the Company since its formation. In February 2013, Mr. Hendrickson joined Validus Group as Director of Strategy, Risk Management and Corporate Development. Prior to this, Mr. Hendrickson was the Founder and Managing Partner of SFRi LLC, an independent investment and advisory firm

specializing in the insurance industry. From 1995 to 2004, Mr. Hendrickson held various positions with Swiss Re, including as Member of the Executive Board, Head of Capital Partners (Swiss Re's Merchant Banking Division) and Managing Partner of Securitas Capital. From 1985 to 1995, Mr. Hendrickson was with

Smith Barney, the U.S. investment banking firm. Mr. Hendrickson has also served as a director of insurance and reinsurance companies, including serving as audit committee chair.

Andrew E. Kudera has served as Chief Actuary of the Company since January 2010. Previously, Mr. Kudera operated an independent actuarial consulting firm which served as corporate actuary and loss reserve specialist for Validus Reinsurance, Ltd. from its inception through to the end of 2008. Prior to establishing his own consulting firm, Mr. Kudera was the Chief Reserving Actuary for Endurance Specialty Holdings Ltd., a large international insurance and reinsurance company. Mr. Kudera has over 30 years of actuarial and financial management experience in the insurance industry, primarily in a consulting capacity. Mr. Kudera is a Fellow of the Casualty Actuarial Society, a Member of the American Academy of Actuaries, an Associate of the Society of Actuaries, and a Fellow of the Canadian Institute of Actuaries.

Robert F. Kuzloski joined the company in January 2009 and served as Executive Vice President and Chief Corporate Legal Officer of the Company until August of 2012 when he was appointed Executive Vice President and General Counsel of the Company. Prior to joining the Company in January of 2009, Mr. Kuzloski served as Senior Vice President and Assistant General Counsel of XL Capital Ltd. Prior to that, Mr. Kuzloski worked as an attorney at the law firm of Cahill Gordon & Reindel LLP where he specialized in general corporate and securities law, mergers and acquisitions and corporate finance.

Michael R. Moore serves as Executive Vice President and Chief Accounting Officer of the Company, a position he has held since June 2013. Mr. Moore has over 20 years of experience, including 16 years in the insurance and reinsurance industry. Prior to this role, Mr. Moore served as a Senior Vice President, Corporate Operations at Axis Capital, Chief Accounting Officer at Endurance Specialty Holdings Ltd. and as a Senior Manager with Ernst & Young. Mr. Moore received a Bachelor of Commerce, with distinction, from the University of Alberta in 1993 and he is a Chartered Accountant and member of the Chartered Professional Accountants of Bermuda and Chartered Professional Accountants of Canada.

Romel Salam serves as Executive Vice President and Chief Risk Officer of the Company, a position he has held since April 2013. He was promoted to his current role after serving for three years as Chief Actuary and Chief Risk Officer of Validus Reinsurance, Ltd, the reinsurance arm of Validus Group. Prior to joining the Company in 2010, Romel was a Senior Vice President at Transatlantic Reinsurance where he spent 20 years in positions of increasing responsibility. Romel is a Fellow of the Casualty of Actuarial Society and a Member of the American Academy of Actuaries.

Jonathan P. Ritz joined the Company in October 2010 and currently serves as Executive Vice President and Chief Operating Officer of the Company. Mr. Ritz has over 20 years of experience in the (re)insurance and brokerage industries. Most recently, Mr. Ritz served as Chief Operating Officer of IFG Companies-Burlington Insurance Group. Prior to IFG, Mr. Ritz served as Chief Operating Officer of the specialty lines division of ICAT Holdings LLC. From 2007 to 2008, Mr. Ritz was a Managing Director at Guy Carpenter and from 1997 to 2007 he held various positions with United America Insurance Group including Chief Operating Officer and Senior Vice President of ceded reinsurance.

Lixin Zeng, Ph.D., CFA serves as Executive Vice President and Chief Executive Officer of AlphaCat Managers Ltd. and has played a key role in AlphaCat since its formation in 2008. Prior to this role, he was Executive Risk Officer of Validus Reinsurance, Ltd., responsible for developing and executing the catastrophe risk strategy of the entire Validus Group. Mr. Zeng was one of the original employees at the founding of the Company in 2005. His prior positions include: Chief Catastrophe Risk Officer at the ACE Group from 2004 to 2005, Head of Development at Willis Re Inc. from 2001 to 2004, Analyst at EW Blanch Co. from 1998 to 2001 and Research Scientist at Arkwright Mutual Insurance Co from 1996 to 1998. Mr. Zeng has expertise in insurance portfolio optimization and risk management and has published multiple articles in professional journals on related topics. He has a Ph.D. in atmospheric sciences from the University of Washington where he graduated in 1996. He received a B.S. in Meteorology from Beijing University, graduating in 1990 and is a CFA charter holder.

Item 4. Mine Safety Disclosure—Not Applicable

PART II
All amounts presented in this part are in U.S. dollars except as otherwise noted.

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

The Company's common shares, $0.175 par value per share, are listed on the New York Stock Exchange under the symbol "VR."

The following tables set forth the high and low sales prices per share, as reported on the New York Stock Exchange Composite Tape, of the Company's common shares per fiscal quarter for the two most recent fiscal years.

	High	Low
2015:		
1st Quarter	$42.34	$38.88
2nd Quarter	$45.50	$41.50
3rd Quarter	$47.49	$42.81
4th Quarter	$48.49	$42.00

	High	Low
2014:		
1st Quarter	$40.20	$34.68
2nd Quarter	$38.43	$36.01
3rd Quarter	$39.72	$36.16
4th Quarter	$42.35	$37.45

There were approximately 44 record holders of our common shares as of December 31, 2015. This figure does not represent the actual number of beneficial owners of our common shares because such shares are frequently held in "street name" by securities dealers and others for the benefit of individual owners.

Performance Graph

Set forth below is a line graph comparing the percentage change in the cumulative total shareholder return, assuming the reinvestment of dividends, over the five year period through December 31, 2015 as compared to the cumulative total return of the S&P 500 Stock Index and the cumulative total return of an index of the Company's peer group. The peer group index is comprised of the following companies: Allied World Assurance Company Holdings, Ltd., Arch Capital Group, Ltd., Argo Group International Holdings, Ltd., Aspen Insurance Holdings Limited, AXIS Capital Holdings Limited, Endurance Specialty Holdings Ltd., Everest Re Group, Ltd., PartnerRe Ltd., and RenaissanceRe Holdings Ltd.

Dividend Policy

On February 2, 2016, the Company approved an increase in its regular quarterly dividend to $0.35 from $0.32 per common share.

We are a holding company and have no direct operations. Our ability to pay dividends depends, in part, on the ability of our principal operating subsidiaries to pay dividends to us. As a holding company, Validus Holdings, Ltd.'s principal source of income is dividends or other sources of permitted payments from its subsidiaries. These funds provide the cash flow required for dividend payments to the Company's shareholders. During 2016, the Bermuda regulated subsidiaries have the ability to distribute up to $1,030.8 million of unrestricted net assets as dividend payments and/or return of capital to Validus Holdings, Ltd. without prior regulatory approval. The Companies Act limits the Company's ability to pay dividends and distributions to shareholders. Total statutory capital and surplus and total statutory capital of our subsidiaries are relevant to the calculation of net assets that are free of restriction for the payment of dividends and/or return of capital to Validus Holdings Ltd. See "Risk Factors, Risks Related to Ownership of Our Common Shares." Because Validus Holdings, Ltd. is a holding company and substantially all of our operations are conducted by our main operating subsidiaries our ability to meet any ongoing cash requirements and to pay dividends will depend on our ability to obtain cash dividends or other cash payments or obtain loans from these subsidiaries.

Share Repurchase Program
The Company has repurchased approximately 76.9 million common shares for an aggregate purchase price of $2.5 billion from the inception of the share repurchase program to February 18, 2016.
The Company expects the purchases under its share repurchase program to be made from time to time in the open market or in privately negotiated transactions. The timing, form and amount of the share repurchases under the program will depend on a variety of factors, including market conditions, the Company’s capital position relative to internal and rating agency targets, legal requirements and other factors.
On February 3, 2015, the Board of Directors of the Company approved an increase to the Company's common share repurchase authorization to $750.0 million. This amount is in addition to the $2.3 billion of common shares repurchased by the Company through February 3, 2015 under its previously authorized share repurchase programs. The repurchase program may be modified, extended or terminated by the Board of Directors at any time. The remaining amount available under the current share repurchase authorization is $493.2 million as of February 18, 2016.
Share repurchases include repurchases by the Company of shares, from time to time, from employees in order to facilitate the payment of withholding taxes on restricted shares which have vested. We repurchase these shares at their fair market value, as determined by reference to the closing price of our common shares on the day the restricted shares vested.

		Share Repurchase Activity by Quarter (c)		
Effect of share repurchases:	As at December 31, 2014 (cumulative)	Quarter ended March 31, 2015	Quarter ended June 30, 2015	Quarter ended September 30, 2015
	(Dollars in thousands, except share and per share amounts)			
Aggregate purchase price (a)	$2,231,301	$58,108	$85,115	$60,695
Shares repurchased	70,045,504	1,430,489	1,968,842	1,352,940
Average price (a)	$31.86	$40.62	$43.23	$44.86

		Fourth Quarter Share Repurchase Activity (c)			
Effect of share repurchases:	As at September 30, 2015 (cumulative)	October	November	December	Quarter ended December 31, 2015
	(Dollars in thousands, except share and per share amounts)				
Aggregate purchase price (a)	$2,435,218	$—	$42,547	$13,966	$56,513
Shares repurchased	74,797,775	—	937,985	295,520	1,233,505
Average price (a)	$32.56	$—	$45.36	$47.26	$45.81
Maximum number of shares that may yet be purchased under the program (b)		13,026,025	11,630,551	11,453,053	11,453,053

		Share Repurchase Activity Post Year End			
Effect of share repurchases:	As at December 31, 2015 (cumulative)	January	February	As at February 18, 2016	Cumulative to Date Effect
	(Dollars in thousands, except share and per share amounts)				
Aggregate purchase price (a)	$2,491,731	$18,377	$21,045	$39,422	$2,531,153
Shares repurchased	76,031,280	419,668	478,033	897,701	76,928,981
Average price (a)	$32.77	$43.79	$44.02	$43.91	$32.90

(a) Share transactions are on a trade date basis through February 18, 2016 and are inclusive of commissions. Average share price is rounded to two decimal places.
(b)

The maximum number of shares that may yet be purchased under the program is calculated using the month end closing price.

(c) The share repurchase activity during the three months ended March 31 resulted in an accretive impact on book value per diluted share of $0.01. The share repurchase activity during the three months ended June 30, September 30, and December 31 resulted in a dilutive impact on book value per diluted share of $0.03, $0.04, and $0.05, respectively.

Item 6. Selected Financial Data

The summary Consolidated Statements of Comprehensive Income data for the years ended December 31, 2015, December 31, 2014, December 31, 2013, December 31, 2012 and December 31, 2011 and the summary Consolidated Balance Sheet data as of December 31, 2015, December 31, 2014, December 31, 2013, December 31, 2012 and December 31, 2011 are derived from our audited Consolidated Financial Statements. The Company was formed on October 19, 2005 and completed the acquisitions of Talbot, IPC, Flagstone and Western World on July 2, 2007, September 4, 2009, November 30, 2012 and October 2, 2014, respectively. Flagstone is included in the Company's consolidated results for the one month ended December 31, 2012 and for subsequent fiscal year ends. Western World is included in the Company's consolidated results from the October 2, 2014 date of acquisition.

(Dollars in thousands, except share and per share amounts)	Years Ended December 31, 2015	2014 (a)	2013 (a)	2012 (a)	2011 (a)
Revenues					
Gross premiums written	$2,557,506	$2,358,865	$2,388,446	$2,284,917	$2,124,691
Reinsurance premiums ceded	(328,681)	(313,208)	(375,800)	(307,506)	(289,241)
Net premiums written	2,228,825	2,045,657	2,012,646	1,977,411	1,835,450
Change in unearned premiums	18,064	(52,602)	86,149	14,315	(33,307)
Net premiums earned	2,246,889	1,993,055	2,098,795	1,991,726	1,802,143
Gain on bargain purchase, net of expenses (b)	—	—	—	17,701	—
Net investment income	127,824	100,086	96,089	107,947	112,296
Net realized gains (losses) on investments	2,298	14,917	(764)	18,233	28,532
Change in net unrealized (losses) gains on investments	(32,395)	(2,842)	(52,419)	36,766	(19,991)
Income (loss) from investment affiliate	4,281	8,411	4,790	(964)	—
Other insurance related income and other loss	5,111	1,229	(6,607)	22,362	5,718
Foreign exchange (losses) gains	(8,731)	(12,181)	3,949	5,084	(22,124)
Total revenues	2,345,277	2,102,675	2,143,833	2,198,855	1,906,574
Expenses					
Losses and loss expenses	977,833	765,015	776,796	1,035,390	1,244,401
Policy acquisition costs	410,058	339,467	360,403	349,766	314,184
General and administrative expenses	363,709	329,362	316,008	276,092	197,497
Share compensation expenses	38,341	33,073	27,630	26,709	34,296
Finance expenses	74,742	68,324	68,007	59,710	54,817
Transaction expenses (c)	—	8,096	—	—	17,433
Total expenses	1,864,683	1,543,337	1,548,844	1,747,667	1,862,628
Income before taxes, (loss) income from operating affiliates and (income) attributable to AlphaCat investors	480,594	559,338	594,989	451,188	43,946
Tax expense	(6,376)	(155)	(383)	(2,501)	(824)
(Loss) Income from operating affiliate	(3,949)	(4,340)	542	(1,758)	—
(Income) attributable to AlphaCat investors	(2,412)	—	—	—	—
Net income	467,857	554,843	595,148	446,929	43,122
Net (income) attributable to noncontrolling interest	(92,964)	(74,880)	(62,482)	(38,491)	(21,793)
Net income available to Validus	374,893	479,963	532,666	408,438	21,329
Other comprehensive (loss) income					
Change in foreign currency translation adjustments	(3,716)	(7,501)	(1,954)	3,648	(1,146)
Change in minimum pension liability, net of tax	544	(210)	—	—	—
Change in fair value of cash flow hedge	(841)	(228)	—	—	—
Comprehensive income available to Validus	$370,880	$472,024	$530,712	$412,086	$20,183
Earnings per share					
Weighted average number of common shares and common share equivalents					

outstanding										
Basic	83,107,236		90,354,745		102,202,274		97,184,110		98,607,439	
Diluted	86,426,760		94,690,271		103,970,289		102,384,923		100,928,284	
Basic earnings per share available to common shareholders	$4.47		$5.24		$5.02		$4.13		$0.14	
Earnings per diluted share available to common shareholders	$4.34		$5.07		$4.94		$3.99		$0.14	
Cash dividends declared per share	$1.28		$1.20		$3.20		$1.00		$1.00	
Selected financial ratios										
Losses and loss expense ratio (d)	43.5	%	38.4	%	37.0	%	52.0	%	69.1	%
Policy acquisition cost ratio (e)	18.3	%	17.0	%	17.1	%	17.6	%	17.4	%
General and administrative expense ratio (f)	17.9	%	18.2	%	16.4	%	13.8	%	12.9	%
Expense ratio (g)	36.2	%	35.2	%	33.5	%	31.4	%	30.3	%
Combined ratio (h)	79.7	%	73.6	%	70.5	%	83.4	%	99.4	%
Return on average equity (i)	10.3	%	13.0	%	14.0	%	11.3	%	0.6	%

(a) The summary Consolidated Statements of Comprehensive Income data for the years ended December 31, 2014, 2013, 2012, and 2011 have been restated for the impact of the adoption of ASU 2015-02 "Consolidation." For further details, refer to Note 2, "Basis of preparation and consolidation," to the Consolidated Financial Statements in Part II, Item 8.

(b) The gain on bargain purchase, net of expenses, arose from the acquisition of Flagstone on November 30, 2012 and is net of transaction related expenses.

(c) The transaction expenses related to costs incurred in connection with the Company's proposed acquisition of Transatlantic Holdings, Inc. during 2011. Transaction expenses incurred during 2014 relate to the acquisition of Western World. Transaction expenses are primarily comprised of legal, financial advisory and audit related services.

(d) The losses and loss expense ratio is calculated by dividing losses and loss expenses by net premiums earned.

(e) The policy acquisition cost ratio is calculated by dividing policy acquisition costs by net premiums earned.

(f) The general and administrative expense ratio is calculated by dividing the sum of general and administrative expenses and share compensation expenses by net premiums earned.

(g) The expense ratio is calculated by combining the policy acquisition cost ratio and the general and administrative expense ratio.

(h) The combined ratio is calculated by combining the losses and loss expense ratio, the policy acquisition cost ratio and the general and administrative expense ratio.

(i) Return on average equity is calculated by dividing the net income available to Validus for the period by the average of the beginning, ending and intervening quarter end shareholders' equity available to Validus balances.

The following table sets forth summarized balance sheet data as of December 31, 2015, 2014, 2013, 2012 and 2011:

	As at December 31,				
(Dollars in thousands, except share and per share amounts)	2015	2014 (a)	2013 (a)	2012 (a)	2011 (a)
Summary Balance Sheet Data:					
Investments at fair value	$7,788,822	$7,381,128	$6,704,961	$7,210,428	$5,463,303
Cash and cash equivalents and restricted cash	796,379	723,404	929,825	1,138,096	840,532
Total assets	10,515,812	10,112,564	9,457,046	10,266,212	7,848,927
Reserve for losses and loss expenses	2,996,567	3,243,147	3,047,933	3,553,604	2,631,143
Unearned premiums	966,210	989,229	822,280	903,734	781,787
Senior notes payable	245,161	244,960	244,758	244,556	244,154
Debentures payable	537,668	539,277	541,416	540,709	289,800
Total shareholders' equity available to Validus	3,638,975	3,586,586	3,704,094	4,020,827	3,448,425
Book value per common share (b)	43.90	42.76	38.57	37.26	34.67
Book value per diluted common share (c)	42.33	39.65	36.23	35.22	32.28
Tangible book value per common share (d)	40.06	38.91	37.25	36.04	33.31
Tangible book value per diluted common share (e)	38.63	36.19	35.03	34.11	31.08

(a) The summary Consolidated Balance Sheet data as at December 31, 2014, 2013, 2012, and 2011 have been restated for the impact of the adoption of ASU 2015-02 "Consolidation." For further details, refer to Note 2, "Basis of preparation and consolidation," in Part II, Item 8.

(b) Book value per common share is defined as total shareholders' equity available to Validus divided by the number of common shares outstanding as at the end of the period, giving no effect to dilutive securities.

(c) Book value per diluted common share is calculated based on total shareholders' equity available to Validus plus the assumed proceeds from the exercise of outstanding options and warrants, divided by the sum of common shares, unvested restricted shares and options and warrants outstanding (assuming their exercise). Book value per diluted common share is a non-GAAP financial measure, which are described in the section entitled "Non-GAAP Financial Measures."

(d)

Tangible book value per common share is defined as total shareholders' equity available to Validus, excluding the value of intangible assets and goodwill, divided by the number of common shares outstanding as at the end of the period, giving no effect to dilutive securities. Tangible book value per common share is a non-GAAP financial measure, which are described in the section entitled "Non-GAAP Financial Measures."

(e) Tangible book value per diluted common share is calculated based on total shareholders' equity available to Validus, less intangible assets and goodwill, plus the assumed proceeds from the exercise of outstanding options and warrants, divided by the sum of common shares, unvested restricted shares and options and warrants outstanding (assuming their exercise). Tangible book value per diluted common share is a non-GAAP financial measure, which are described in the section entitled "Non-GAAP Financial Measures."

The above summary consolidated financial information should be read together with the other information contained in this Annual Report on Form 10-K, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Consolidated Financial Statements and related notes included elsewhere herein.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following is a discussion and analysis of the Company’s consolidated results of operations for the years ended December 31, 2015, 2014 and 2013 and the Company’s consolidated financial condition, liquidity and capital resources at December 31, 2015 and 2014. This discussion and analysis should be read in conjunction with the Company’s audited Consolidated Financial Statements and related notes thereto included elsewhere within this filing. For a variety of reasons, the Company’s historical financial results may not accurately indicate future performance. See “Cautionary Note Regarding Forward-Looking Statements.” The Risk Factors set forth in Item 1A above present a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained herein.

Executive Overview

The Company conducts its operations worldwide through four operating segments which have been determined under U.S. GAAP segment reporting to be Validus Re, Talbot, Western World, and AlphaCat. Validus Re is a Bermuda-based reinsurance segment focused on treaty reinsurance. Talbot is a specialty insurance segment, primarily operating within the Lloyd's insurance market through Syndicate 1183. Western World is a U.S. based specialty excess and surplus lines insurance segment operating within the U.S. commercial market. AlphaCat is a Bermuda-based investment adviser, managing capital for third parties and the Company in insurance linked securities and other investments in the property catastrophe reinsurance space. The Company has a corporate function ("Corporate"), which includes the activities of the parent company, and which carries out certain functions for the group, including investment management. Corporate includes investment income on a managed basis and other non-segment expenses, predominantly general and administrative, stock compensation and finance expenses. Corporate also denotes the activities of certain key executives such as the Chief Executive Officer and Chief Financial Officer. The Company's corporate expenses, capital servicing and debt costs and investment results are presented separately within the non-segment discussion.

The Company’s strategy is to concentrate primarily on short-tail risks, which has been an area where management believes prices and terms provide an attractive risk-adjusted return and the management team has proven expertise. The Company’s profitability in any given period is based upon premium and investment revenues, less net losses and loss expenses, acquisition expenses and operating expenses. The diversified portfolio as measured by gross premium written, is comprised of 46% insurance and 54% reinsurance for the year ended December 31, 2015. Financial results in the insurance and reinsurance industry are influenced by the frequency and/or severity of claims and losses, including as a result of catastrophic events, changes in interest rates, financial markets and general economic conditions, the supply of insurance and reinsurance capacity and changes in legal, regulatory and judicial environments.

On October 2, 2014, the Company acquired all of the outstanding shares of Western World. The acquisition provided the Company with enhanced access to the specialty U.S. commercial insurance market, the world's largest short-tail market, complementing the Company's existing market positions in both Bermuda reinsurance and the Lloyd's marketplace and increasing the Company's ability to leverage operational strengths in short-tail classes of business. In addition, the acquisition improves the Company's ability to manage (re)insurance cycles.

Business Outlook and Trends

We underwrite global property insurance and reinsurance and have large aggregate exposures to natural and man-made disasters. The occurrence of claims from catastrophic events results in substantial volatility, and can have material adverse effects on the Company’s financial condition and results and its ability to write new business. This volatility affects results for the period in which the loss occurs because U.S. accounting principles do not permit reinsurers to reserve for such catastrophic events until they occur. Catastrophic events of significant magnitude historically have been relatively infrequent, although management believes the property catastrophe reinsurance market has experienced a higher level of worldwide catastrophic losses in terms of both frequency and severity in the period from 1992 to the present. We also expect that increases in the values and concentrations of insured property will increase the severity of such occurrences in the future. The Company seeks to reflect these types of trends when pricing contracts.

Property and other reinsurance premiums have historically risen in the aftermath of significant catastrophic losses. As loss reserves are established, industry surplus is depleted and the industry’s capacity to write new business diminishes.

The global property and casualty insurance and reinsurance industry has historically been highly cyclical. Since 2007, increased capital provided by new entrants or by the commitment of capital by existing insurers and reinsurers increased the supply of insurance and reinsurance which resulted in a softening of rates on most lines. From 2010 to 2012, there was an increased level of catastrophe activity, principally the Chilean earthquake, Deepwater Horizon, the Tohoku earthquake, the New Zealand earthquakes and Superstorm Sandy, but the Company continues to see increased competition and decreased premium rates in most classes of business. In the

absence of significant catastrophes in recent years, the market supply of capital is greater than the demand and therefore we expect to see continued pressure on rates in the near term.
The following tables present a summary of the Validus Re and AlphaCat segments' January 2016 and 2015 renewals by line of business:

	Validus Re segment premium (a)					
(Dollars in thousands)	U.S. Property	International Property	Marine	Specialty	Casualty	Total
2016	$93,782	$92,302	$95,310	$137,942	$22,643	$441,979
2015	$90,036	$113,135	$125,981	$110,940	$—	$440,092
Increase (Decrease)	4.2 %	(18.4)%	(24.4)%	24.4 %	— %	0.4 %

	AlphaCat segment premium					
(Dollars in thousands)	U.S. Property	International Property	Marine	Specialty	Casualty	Total
2016	$127,192	$41,288	$—	$—	$—	$168,480
2015	$52,986	$47,844	$—	$—	$—	$100,830
Increase (Decrease)	140.0 %	(13.8)%	— %	— %	— %	67.0 %

	Validus Re segment and AlphaCat segment premium (a)					
(Dollars in thousands)	U.S. Property	International Property	Marine	Specialty	Casualty	Total
2016	$220,974	$133,590	$95,310	$137,942	$22,643	$610,459
2015	$143,022	$160,979	$125,981	$110,940	$—	$540,922
Increase (Decrease)	54.5 %	(17.0)%	(24.4)%	24.4 %	— %	12.9 %

(a) The renewal data above does not include intercompany eliminations between Validus Re and Talbot.
During the January 2016 renewal season, the Validus Re and AlphaCat segments underwrote $610.5 million in gross premiums written (excluding U.S. agriculture premiums and net of intercompany eliminations between Validus Re and AlphaCat), an increase of 12.9% from the prior year renewal period. This increase was primarily driven by an increase in AlphaCat AUM and new business in the casualty and specialty lines, offset by rate reductions in the property and marine lines. The U.S. property lines experienced rate declines in the low single-digits, while rate declines in the international property lines were more challenging, with rates down closer to 10%. The marine lines experienced rate declines in the mid-single digits due to the worldwide reduction in oil prices.
Business written by the Talbot and Western World segments is distributed evenly throughout the year. Through December 31, 2015, the Talbot segment experienced a whole account rate decrease of approximately 6.6% driven primarily by decreases in the aviation, marine hull and energy classes. The marine hull and energy rate decreases were due primarily to the worldwide reduction in oil prices. The Western World segment experienced a whole account rate increase of approximately 3.1% through December 31, 2015, however the increase was primarily driven by corrective pricing in some classes as the underlying run rate was essentially flat.

Financial Measures

The Company believes that the primary financial indicator for evaluating performance and measuring the overall growth in value generated for shareholders is book value per diluted common share. Book value per diluted common share plus accumulated dividends, together with other important financial indicators, is shown below:

	As at December 31,	
	2015	2014
Book value per diluted common share plus accumulated dividends	$52.49	$48.53
Book value per diluted common share	$42.33	$39.65
Tangible book value per diluted common share	$38.63	$36.19

Book value per diluted common share plus accumulated dividends is considered by management to be the primary indicator of financial performance, as we believe growth in book value on a diluted basis, plus the dividends that have accumulated, ultimately translates into the return that a shareholder will receive. Book value per diluted common share plus accumulated dividends increased by $3.96, or 8.2%, from $48.53 at December 31, 2014 to $52.49 at December 31, 2015. Cash dividends per common share are an integral part of the value created for shareholders. The Company paid quarterly cash dividends of $0.32 (December 31, 2014: $0.30) per common share and common share equivalent during the year ended December 31, 2015. On February 2, 2016, the Company announced a quarterly cash dividend of $0.35 per common share, which represents an increase of $0.03 or 9.4% on the prior year quarterly cash dividend of $0.32, payable on March 31, 2016 to holders of record on March 15, 2016.

Book value per diluted common share plus accumulated dividends is calculated based on total shareholders' equity available to Validus plus the assumed proceeds from the exercise of outstanding options and warrants, divided by the sum of common shares, unvested restricted shares and options and warrants outstanding (assuming their exercise), plus accumulated dividends. Book value per diluted common share plus accumulated dividends is a non-GAAP financial measure, which are described in the section entitled "Non-GAAP Financial Measures."

Book value per diluted common share is considered by management to be a measure of returns to common shareholders, as we believe growth in book value on a diluted basis ultimately translates into growth in stock price. Book value per diluted common share after dividends paid increased by $2.68, or 6.8%, from $39.65 at December 31, 2014 to $42.33 at December 31, 2015. Growth in book value per diluted common share inclusive of dividends for the years ended December 31, 2015 and 2014 was 10.0% and 8.7%, respectively. Book value per diluted common share is a non-GAAP financial measure, which are described in the section entitled "Non-GAAP Financial Measures." All outstanding warrants expired on December 12, 2015 and no further warrants are anticipated to be issued.

Tangible book value per diluted common share is considered by management to be a measure of returns to common shareholders excluding intangible assets and goodwill, as we believe growth in tangible book value on a diluted basis ultimately translates into growth in the tangible value of the Company. Tangible book value per diluted common share increased by $2.44, or 6.7%, from $36.19 at December 31, 2014 to $38.63 at December 31, 2015. Tangible book value per diluted common share is calculated based on total shareholders' equity available to Validus, less intangible assets and goodwill, plus the assumed proceeds from the exercise of outstanding options and warrants, divided by the sum of common shares, unvested restricted shares and options and warrants outstanding (assuming their exercise). Tangible book value per diluted common share is a non-GAAP financial measure, which are described in the section entitled "Non-GAAP Financial Measures."

	Years Ended December 31,		
	2015	2014	2013
Underwriting income	$463,061	$529,610	$622,128
Net operating income available to Validus	$409,749	$480,762	$588,973
Return on average equity	10.3%	13.0%	14.0%
Net operating return on average equity	11.3%	13.1%	15.5%

Underwriting income measures the performance of the Company's core underwriting function, excluding revenues and expenses such as net investment income, finance expenses, tax (expense) benefit, income (loss) from operating affiliates, (income) attributable to AlphaCat investors, net realized and change in net unrealized gains (losses) on investments, income (loss) from investment affiliate, foreign exchange gains (losses), other income (loss), non-recurring items and net (income) loss attributable to noncontrolling interest. The Company believes the reporting

of underwriting income enhances the understanding of results by highlighting the underlying profitability of the Company’s core insurance and reinsurance operations. Underwriting income for the years ended December 31,

2015, 2014 and 2013 was $463.1 million, $529.6 million and $622.1 million, respectively. Underwriting income is a non-GAAP financial measure, which are described in the section entitled “Non-GAAP Financial Measures."

Net operating income available to Validus is defined as net income (loss) excluding net realized and change in net unrealized gains (losses) on investments, income (loss) from investment affiliate, foreign exchange gains (losses), other income (loss), non-recurring items and operating income (loss) attributable to noncontrolling interest. This measure focuses on the underlying fundamentals of the Company's operations without the influence of gains (losses) from the sale of investments, translation of non-U.S. dollar currencies, non-recurring items and income (loss) attributable to noncontrolling interest. Net operating income available to Validus for the years ended December 31, 2015, 2014 and 2013 was $409.7 million, $480.8 million and $589.0 million, respectively. Net operating income available to Validus is a non-GAAP financial measure, which are described in the section entitled “Non-GAAP Financial Measures.”

Return on average equity represents the return generated on common shareholders’ equity during the year. Return on average equity is calculated by dividing the net income available to Validus for the year by the average shareholders’ equity available to Validus during the year. Average shareholders’ equity is the average of the beginning, ending and intervening quarter end shareholders’ equity balances. The Company’s objective is to generate superior returns on capital that appropriately reward shareholders for the risks assumed. The return on average equity for the years ended December 31, 2015, 2014 and 2013 was 10.3%, 13.0% and 14.0% respectively.

Net operating return on average equity represents the operating return generated on common shareholders’ equity during the year. Net operating return on average equity is calculated by dividing the net operating income available to Validus for the year by the average shareholders’ equity available to Validus during the year. Average shareholders’ equity is the average of the beginning, ending and intervening quarter end shareholders’ equity balances. The net operating return on average equity for the years ended December 31, 2015, 2014 and 2013 was 11.3%, 13.1% and 15.5% respectively. Net operating return on average equity is a non-GAAP financial measure, which are described in the section entitled “Non-GAAP Financial Measures.”

Fourth Quarter 2015 Summarized Consolidated Results of Operations

The following table presents results of operations for the three months ended December 31, 2015 and 2014:

	Three Months Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Underwriting income			
Gross premiums written	$309,605	$(27,038)	$336,643
Reinsurance premiums ceded	(33,128)	495	(33,623)
Net premiums written	276,477	(26,543)	303,020
Change in unearned premiums	266,823	13,202	253,621
Net premiums earned	543,300	(13,341)	556,641
Other insurance related income	969	(575)	1,544
Underwriting revenues	544,269	(13,916)	558,185
Underwriting deductions			
Losses and loss expenses	214,748	(8,975)	223,723
Policy acquisition costs	102,285	12,978	89,307
General and administrative expenses	98,563	(610)	99,173
Share compensation expenses	10,062	1,241	8,821
Total underwriting deductions	425,658	4,634	421,024
Underwriting income (a)	$118,611	$(18,550)	$137,161
Net investment income	31,612	1,443	30,169
Finance expenses	(16,581)	1,024	(17,605)
Operating income before taxes, income (loss) from operating affiliates and (income) attributable to AlphaCat investors	133,642	(16,083)	149,725
Tax benefit	756	513	243
Loss from operating affiliates	(1,708)	5,369	(7,077)
(Income) attributable to AlphaCat investors	(974)	(974)	—
Net operating income (a)	$131,716	$(11,175)	$142,891
Net (income) attributable to noncontrolling interest	(26,321)	(5,304)	(21,017)
Net operating income available to Validus	$105,395	$(16,479)	$121,874
Supplemental information:			
Losses and loss expenses			
Current period excluding items below	$272,889	$(21,834)	$294,723
Current period—notable loss events	(86)	(6,896)	6,810
Current period—non-notable loss events	56	(9,490)	9,546
Change in prior accident years	(58,111)	29,245	(87,356)
Total losses and loss expenses	$214,748	$(8,975)	$223,723
Selected ratios:			
Net premiums written / Gross premiums written	89.3 %	(0.7)	90.0 %
Losses and loss expense ratio			
Current period excluding items below	50.2 %	(2.8)	53.0 %
Current period—notable loss events	— %	(1.2)	1.2 %
Current period—non-notable loss events	— %	(1.7)	1.7 %
Change in prior accident years	(10.7)%	5.0	(15.7)%
Losses and loss expenses	39.5 %	(0.7)	40.2 %

Policy acquisition costs	18.8	%	2.8	16.0	%
General and administrative expenses (b)	20.0	%	0.6	19.4	%
Expense ratio	38.8	%	3.4	35.4	%
Combined ratio	78.3	%	2.7	75.6	%

(a) Non-GAAP Financial Measures. In presenting the Company's results, management has included and discussed underwriting income and operating income that are not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled "Non-GAAP Financial Measures."

(b) The general and administrative expense ratio includes share compensation expenses.

Fourth Quarter 2015 Results

Highlights for the fourth quarter are as follows:

- Gross premiums written for the three months ended December 31, 2015 were $309.6 million compared to $336.6 million for the three months ended December 31, 2014, a decrease of $27.0 million, or 8.0%. There has been overall pressure on premium rates in certain classes and in addition, non renewal of certain contracts in conjunction with general market conditions contributed to an overall decrease in gross premiums written.
- The decrease in gross premiums written for the three months ended December 31, 2015 was primarily due to the decreases in gross premiums written in the Validus Re and Talbot segments, offset by increases in gross premiums written in the Western World and AlphaCat segments.
- Gross premiums written for the three months ended December 31, 2015 in the Validus Re segment were $14.3 million compared to $32.7 million for the three months ended December 31, 2014, a decrease of $18.4 million or 56.2%. This decrease was primarily driven by decreases in the marine and specialty lines of $15.9 million and $4.0 million, respectively. The decrease in the marine lines was primarily driven by an $11.0 million commutation of a Flagstone contract with a Lloyd's counterparty which occurred during the three months ended December 31, 2014. The decrease in the specialty lines was due primarily to a $15.0 million reduction in crop reinsurance premium estimates, partially offset by new casualty business of $7.1 million which was written during the three months ended December 31, 2015.
- Gross premiums written for the three months ended December 31, 2015 in the Talbot segment were $229.7 million compared to $247.4 million for the three months ended December 31, 2014, a decrease of $17.8 million or 7.2%. This decrease was primarily due to reduced premiums in the cargo line of $9.2 million, due to ongoing market conditions and economic factors which have reduced new business and renewals.
- The decrease in gross premiums written for the three months ended December 31, 2015 was partially offset by an increase in gross premiums written in the Western World segment of $5.9 million primarily as a result of the addition of new property and flood products to their existing lines, partially offset by a reduction in premiums on other lines which did not meet the Company's risk profile.
- Underwriting revenues for the three months ended December 31, 2015 were $544.3 million compared to $558.2 million for the three months ended December 31, 2014, a decrease of $13.9 million or 2.5% due to the decrease in gross premiums written described above and the subsequent impact on net premium earned.
- Losses and loss expenses for the three months ended December 31, 2015 were $214.7 million compared to $223.7 million, a decrease of $9.0 million or 4.0% primarily as a result of no notable or non-notable losses incurred during the three months ended December 31, 2015.
- Loss ratios by line of business were as follows:

	Three Months Ended December 31,		
	2015	Change	2014
Property	25.7 %	2.5	23.2 %
Marine	34.7 %	6.3	28.4 %
Specialty	54.2 %	(11.5)	65.7 %
Liability	61.8 %	(6.5)	68.3 %
All lines	39.5 %	(0.7)	40.2 %

- Combined ratio for the three months ended December 31, 2015 was 78.3% which included $58.1 million of favorable loss reserve development on prior accident years, benefiting the loss ratio by 10.7 percentage points compared to a combined ratio for the three months ended December 31, 2014 of 75.6% which included $87.4 million of favorable loss reserve development on prior accident years, benefiting the loss ratio by 15.7 percentage points. The favorable development of $58.1 million for the three months ended December 31, 2015 was primarily from non-event reserves

in the amount of $47.8

60

million. Favorable development on prior accident years from event specific reserves was $10.3 million. The terms event or event specific refer to aggregate notable and non-notable losses incurred in current or prior accident years.

- The decrease in the loss ratio in the specialty lines of 11.5 percentage points was primarily due to a large number of losses below the non-notable loss threshold during the three months ended December 31, 2014, primarily in the Talbot segment's political risk class.
- Policy acquisition costs for the three months ended December 31, 2015 increased by $13.0 million or 14.5%, primarily as a result of increases in the Western World and Validus Re segments. Policy acquisition costs in the Western World segment for the three months ended December 31, 2015 were $14.3 million compared to $3.2 million for the three months ended December 31, 2014 primarily due to the impact of the acquisition fair value adjustments. Policy acquisition costs in the Validus Re segment for the three months ended December 31, 2015 were $37.5 million compared to $35.1 million for the three months ended December 31, 2014, an increase of $2.4 million or 6.7%. This increase was primarily driven by profit commissions and a large proportional contract in the specialty lines that carries higher acquisition costs.
- Underwriting income for the three months ended December 31, 2015 decreased by $18.6 million or 13.5% primarily as a result of the changes in underwriting revenues and deductions as described above.
- Net operating income available to Validus for the three months ended December 31, 2015 was $105.4 million compared to $121.9 million for the three months ended December 31, 2014, a decrease of $16.5 million, or 13.5%.
- Net income available to Validus for the three months ended December 31, 2015 was $69.0 million compared to $125.9 million for the three months ended December 31, 2014, a decrease of $56.9 million, or 45.2%. The decrease in net income available to Validus was primarily due to an unfavorable movement in the change in unrealized losses of $32.8 million as a result of a rising interest rate environment as compared to the prior year quarter.
- Annualized return on average equity of 7.6% and annualized net operating return on average equity of 11.6% for the three months ended December 31, 2015 compared to 13.8% and 13.4%, respectively, for the three months ended December 31, 2014.

Full Year 2015 Summarized Consolidated Results of Operations and Financial Condition

The Company acquired Western World on October 2, 2014, therefore the results of Western World have been included in the Company's consolidated results from the date of acquisition. The following table presents results of operations for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Underwriting income					
Gross premiums written	$2,557,506	$198,641	$2,358,865	$(29,581)	$2,388,446
Reinsurance premiums ceded	(328,681)	(15,473)	(313,208)	62,592	(375,800)
Net premiums written	2,228,825	183,168	2,045,657	33,011	2,012,646
Change in unearned premiums	18,064	70,666	(52,602)	(138,751)	86,149
Net premiums earned	2,246,889	253,834	1,993,055	(105,740)	2,098,795
Other insurance related income	6,113	2,641	3,472	(698)	4,170
Underwriting revenues	2,253,002	256,475	1,996,527	(106,438)	2,102,965
Underwriting deductions					
Losses and loss expenses	977,833	212,818	765,015	(11,781)	776,796
Policy acquisition costs	410,058	70,591	339,467	(20,936)	360,403
General and administrative expenses	363,709	34,347	329,362	13,354	316,008
Share compensation expenses	38,341	5,268	33,073	5,443	27,630
Total underwriting deductions	1,789,941	323,024	1,466,917	(13,920)	1,480,837
Underwriting income (a)	$463,061	$(66,549)	$529,610	$(92,518)	$622,128
Net investment income	127,824	27,738	100,086	3,997	96,089
Finance expenses	(74,742)	(6,418)	(68,324)	(317)	(68,007)
Operating income before taxes, income (loss) from operating affiliates and (income) attributable to AlphaCat investors	516,143	(45,229)	561,372	(88,838)	650,210
Tax expense	(6,376)	(6,221)	(155)	228	(383)
(Loss) income from operating affiliates	(3,949)	391	(4,340)	(4,882)	542
(Income) attributable to AlphaCat investors	(2,412)	(2,412)	—	—	—
Net operating income (a)	$503,406	$(53,471)	$556,877	$(93,492)	$650,369
Net (income) attributable to noncontrolling interest	(93,657)	(17,542)	(76,115)	(14,719)	(61,396)
Net operating income available to Validus	$409,749	$(71,013)	$480,762	$(108,211)	$588,973
Supplemental information:					
Losses and loss expenses					
Current period excluding items below	$1,164,775	$210,131	$954,644	$16,083	$938,561
Current period—notable loss events	96,964	62,020	34,944	(25,875)	60,819
Current period—non-notable loss events	22,231	(12,437)	34,668	34,668	—
Change in prior accident years	(306,137)	(46,896)	(259,241)	(36,657)	(222,584)
Total losses and loss expenses	$977,833	$212,818	$765,015	$(11,781)	$776,796
Selected ratios:					
Net premiums written / Gross premiums written	87.1%	0.4	86.7%	2.4	84.3%
Losses and loss expense ratio					
Current period excluding items below	51.8%	3.9	47.9%	3.2	44.7%

Current period—notable loss events	4.3 %	2.5	1.8 %	(1.1)	2.9 %
Current period—non-notable loss events	1.0 %	(0.7)	1.7 %	1.7	— %
Change in prior accident years	(13.6)%	(0.6)	(13.0)%	(2.4)	(10.6)%
Losses and loss expenses	43.5 %	5.1	38.4 %	1.4	37.0 %
Policy acquisition costs	18.3 %	1.3	17.0 %	(0.1)	17.1 %
General and administrative expenses (b)	17.9 %	(0.3)	18.2 %	1.8	16.4 %
Expense ratio	36.2 %	1.0	35.2 %	1.7	33.5 %
Combined ratio	79.7 %	6.1	73.6 %	3.1	70.5 %

(a) Non-GAAP Financial Measures. In presenting the Company's results, management has included and discussed underwriting income and operating income that are not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled "Non-GAAP Financial Measures."

(b) The general and administrative expense ratio includes share compensation expenses.

Full Year 2015 Summarized Consolidated Results of Operations and Financial Condition

Highlights for the full year include the following:

- Gross premiums written for the year ended December 31, 2015 were $2,557.5 million compared to $2,358.9 million for the year ended December 31, 2014, an increase of $198.6 million, or 8.4%.
- The increase in gross premiums written for the year ended December 31, 2015 was primarily due to the acquisition of Western World which resulted in an increase in gross written premiums of $213.3 million. Also contributing to this increase was an increase in the gross premiums written in the AlphaCat segment of $49.3 million for the year ended December 31, 2015 primarily due to the increase in assets under management. These increases were offset by a decrease in gross premiums written in the Talbot segment of $82.9 million primarily as a result of a decrease in the upstream energy and cargo lines due to ongoing market conditions and economic factors, including the worldwide reduction in oil prices, which have reduced new business and renewals. For further details of the movements in gross premiums written in the Company's segments, refer to the commentary below in the individual segment discussion.
- Underwriting revenues for the year ended December 31, 2015 were $2,253.0 million compared to $1,996.5 million for the year ended December 31, 2014, an increase of $256.5 million or 12.8% due to the increase in gross premiums written described above and the subsequent impact on net premium earned.
- The increase in losses and loss expenses of $212.8 million or 27.8% was primarily as a result of the acquisition of Western World which resulted in an increase of $120.8 million during the year ended December 31, 2015. Also contributing to this increase were notable losses incurred for the year ended December 31, 2015 which were $97.0 million compared to $34.9 million for the year ended December 31, 2014, an increase of $62.0 million.
- Loss ratios by line of business were as follows:

	Years Ended December 31,				
	2015	Change	2014	Change	2013
Property	23.0 %	6.7	16.3 %	(5.0)	21.3 %
Marine	47.5 %	7.0	40.5 %	(7.3)	47.8 %
Specialty	57.9 %	(6.1)	64.0 %	9.4	54.6 %
Liability	69.3 %	1.0	68.3 %	68.3	— %
All lines	43.5 %	5.1	38.4 %	1.4	37.0 %

- Combined ratio for the year ended December 31, 2015 was 79.7% which included $306.1 million of favorable loss reserve development on prior accident years, benefiting the loss ratio by 13.6 percentage points compared to a combined ratio for the year ended December 31, 2014 of 73.6% which included $259.2 million of favorable loss reserve development on prior accident years, benefiting the loss ratio by 13.0 percentage points.
- The decrease in the loss ratio in the specialty lines of 6.1 percentage points was primarily due to a large number of losses below the non-notable loss threshold during the year ended December 31, 2014, primarily in the Talbot segment's political risk class. For further details of the movements in losses and the loss ratios incurred in the Company's segments, refer to the commentary below in the individual segment discussion.
- The increase in policy acquisition costs during the year ended December 31, 2015 of $70.6 million or 20.8% was primarily as a result of the acquisition of Western World, contributing $38.2 million to this increase. Also contributing to this increase was an increase in the policy acquisition costs in the Validus Re segment of $24.7 million, primarily driven by profit commissions and a large proportional contract in the specialty lines that carries higher acquisition costs. For further details of the movements in policy acquisition costs in the Company's segments, refer to the commentary below in the individual segment discussion.
- Underwriting income for the year ended December 31, 2015 decreased by $66.5 million or 12.6% primarily as a result of the changes in underwriting revenues and deductions as described above.

- Net operating income available to Validus for the year ended December 31, 2015 was $409.7 million compared to $480.8 million for the year ended December 31, 2014, a decrease of $71.0 million, or 14.8%.
- Net income available to Validus for the year ended December 31, 2015 was $374.9 million compared to $480.0 million for the year ended December 31, 2014, a decrease of $105.1 million, or 21.9%. The decrease in net income available to Validus was primarily due to an unfavorable movement in the change in unrealized losses of $29.6 million as a result of a rising interest rate environment as compared to the prior year.
- Return on average equity of 10.3% and net operating return on average equity of 11.3% for the year ended December 31, 2015 compared to 13.0% and 13.1%, respectively, for the year ended December 31, 2014.

Overview of the Results of Operations for Years Ended December 31, 2015 and December 31, 2014 compared to the Years Ended December 31, 2014 and December 31, 2013, respectively.

The Company acquired Western World on October 2, 2014, therefore, the results of Western World have been included in the Company's consolidated results from the date of acquisition. As a result, there is no comparative information included for the nine months ended September 30, 2014 or the year ended December 31, 2013.

The change in net operating income available to Validus, excluding the impact of Western World, for the year ended December 31, 2015 compared to the year ended December, 31 2014 is described in the following table:

(Dollars in thousands)	Increase (decrease) to net operating income available to Validus over the years ended December 31, 2015 compared to 2014		
	Validus Holdings, Ltd. Consolidated	Western World Segment	Validus Holdings, Ltd. Consolidated excluding the Western World Segment
Net premiums earned	$253,834	$185,654	$68,180
Other insurance related income	2,641	780	1,861
Incurred current year losses, excluding notable and non-notable loss events below	(210,131)	(132,570)	(77,561)
Notable loss events	(62,020)	—	(62,020)
Non-notable loss events	12,437	—	12,437
Prior period loss development	46,896	11,727	35,169
Other underwriting deductions (a)	(110,206)	(67,781)	(42,425)
Underwriting income (b)	(66,549)	(2,190)	(64,359)
Other operating expenses and income, net (c)	13,078		13,078
Net operating income (b)	(53,471)		(51,281)
Net operating (income) loss attributable to noncontrolling interest	(17,542)		(17,542)
Net operating income available to Validus (b)	$(71,013)		$(68,823)

(a) Other underwriting deductions consist of policy acquisition costs, general & administrative expenses and share compensation expenses.

(b) Non-GAAP Financial Measures. In presenting the Company’s results, management has included and discussed underwriting income and operating income that are not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled “Non-GAAP Financial Measures.”

(c) Other operating expenses and income, net, consists of net investment income, finance expenses, taxes, income (loss) from operating affiliates and (income) loss attributable to AlphaCat investors.

The Year Ended December 31, 2015 compared to the Year Ended December 31, 2014

Net operating income available to Validus for the year ended December 31, 2015 was $409.7 million compared to $480.8 million for the year ended December 31, 2014, a decrease of $71.0 million or 14.8%.

Net operating income available to Validus excluding the Western World segment for the year ended December 31, 2015 was $404.1 million compared to $473.0 million for the year ended December 31, 2014, a decrease of $68.8 million or 14.6%.

The primary factors driving the decrease in net operating income available to Validus excluding the Western World segment were:

- An increase in losses and loss expenses of $92.0 million, comprised of:

an increase in incurred current year losses, excluding notable and non-notable losses of $77.6 million; and

an increase in notable loss events of $62.0 million; offset by,

a decrease in non-notable loss events of $12.4 million; and

an increase in favorable prior period development of $35.2 million; and

- An increase in policy acquisition costs of $32.4 million primarily due to new agricultural business written in the Validus Re segment; offset by,
- An increase in net premiums earned of $68.2 million, primarily due to new agriculture business written in the Validus Re segment.

The change in net operating income available to Validus, excluding the impact of Western World, for the year ended December 31, 2014 compared to the year ended December, 31 2013 is described in the following table:

	Increase (decrease) to net operating income available to Validus over the years ended December 31, 2014 compared to 2013		
(Dollars in thousands)	Validus Holdings, Ltd. Consolidated	Western World Segment	Validus Holdings, Ltd. Consolidated excluding the Western World Segment
Net premiums earned	$(105,740)	$72,996	$(178,736)
Other insurance related income	(698)	264	(962)
Incurred current year losses, excluding notable and non-notable loss events below	(16,083)	(62,275)	46,192
Notable loss events	25,875	—	25,875
Non-notable loss events	(34,668)	—	(34,668)
Prior period loss development	36,657	11,240	25,417
Other underwriting deductions (a)	2,139	(14,425)	16,564
Underwriting income (b)	(92,518)	7,800	(100,318)
Other operating expenses and income, net (c)	(974)		(974)
Net operating income (b)	(93,492)		(101,292)
Net operating (income) loss attributable to noncontrolling interest	(14,719)		(14,719)
Net operating income available to Validus (b)	$(108,211)		$(116,011)

(a) Other underwriting deductions consist of policy acquisition costs, general & administrative expenses and share compensation expenses.

(b) Non-GAAP Financial Measures. In presenting the Company's results, management has included and discussed underwriting income and operating income that are not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled "Non-GAAP Financial Measures."

(c) Other operating expenses and income, net, consists of net investment income, finance expenses, taxes, income (loss) from operating affiliates and (income) loss attributable to AlphaCat investors.

The Year Ended December 31, 2014 compared to the Year Ended December 31, 2013

Net operating income available to Validus for the year ended December 31, 2014 was $480.8 million compared to $589.0 million for the year ended December 31, 2013, a decrease of $108.2 million or 18.4%.

Net operating income available to Validus excluding the Western World segment for the year ended December 31, 2014 was $473.0 million compared to $589.0 million for the year ended December 31, 2013, a decrease of $116.0 million or 19.7%.

The primary factors driving the decrease in net operating income available to Validus excluding the Western World segment were:

- A decrease in net premiums earned of $178.7 million, primarily within the Validus Re segment, due to a reduction in gross premiums written, the timing of the purchase of retrocessional coverage and the effect of the Flagstone run-off business; offset by,
- A decrease in losses and loss expenses of $62.8 million, comprised of:

a decrease in incurred current year losses, excluding notable and non-notable losses of $46.2 million;
a decrease in notable loss events of $25.9 million; and
an increase in favorable prior period development of $25.4 million; offset by,
an increase in non-notable losses of $34.7 million.

Segment Reporting

Management has determined that the Company operates in four reportable segments Validus Re, Talbot, Western World, and AlphaCat.

Fourth Quarter 2015 Summarized Results of Operations - Validus Re Segment

The following table presents underwriting income for the three months ended December 31, 2015 and 2014:

	Three Months Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Underwriting income			
Gross premiums written	$14,349	$(18,392)	$32,741
Reinsurance premiums ceded	(87)	(2,105)	2,018
Net premiums written	14,262	(20,497)	34,759
Change in unearned premiums	217,652	21,951	195,701
Net premiums earned	231,914	1,454	230,460
Other insurance related income	257	(517)	774
Underwriting revenues	232,171	937	231,234
Underwriting deductions			
Losses and loss expenses	100,485	41,043	59,442
Policy acquisition costs	37,478	2,355	35,123
General and administrative expenses	20,174	(808)	20,982
Share compensation expenses	2,685	72	2,613
Total underwriting deductions	160,822	42,662	118,160
Underwriting income (a)	$71,349	$(41,725)	$113,074
Supplemental information:			
Losses and loss expenses			
Current period excluding items below	$122,707	$48,857	$73,850
Current period—notable loss events	288	(6,522)	6,810
Current period—non-notable loss events	56	(9,490)	9,546
Change in prior accident years	(22,566)	8,198	(30,764)
Total losses and loss expenses	$100,485	$41,043	$59,442
Selected ratios:			
Net premiums written / Gross premiums written	99.4 %	(6.8)	106.2 %
Losses and loss expense ratio			
Current period excluding items below	52.9 %	20.9	32.0 %
Current period—notable loss events	0.1 %	(2.9)	3.0 %
Current period—non-notable loss events	— %	(4.1)	4.1 %
Change in prior accident years	(9.7)%	3.6	(13.3)%
Losses and loss expenses	43.3 %	17.5	25.8 %
Policy acquisition costs	16.1 %	0.8	15.3 %
General and administrative expenses (b)	9.9 %	(0.3)	10.2 %
Expense ratio	26.0 %	0.5	25.5 %
Combined ratio	69.3 %	18.0	51.3 %

(a) Non-GAAP Financial Measures. In presenting the Company’s results, management has included and discussed underwriting income that is not calculated under standards or rules that comprise U.S. GAAP. Such measures are

referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled “Non-GAAP Financial Measures.”

(b) The general and administrative expense ratio includes share compensation expenses.

Fourth Quarter 2015 Summarized Results of Operations - Validus Re Segment

Highlights for the fourth quarter include the following:

- Gross premiums written for the three months ended December 31, 2015 were $14.3 million compared to $32.7 million for the three months ended December 31, 2014, a decrease of $18.4 million, or 56.2%. Gross premiums written for the three months ended December 31, 2015 included $15.6 million of property premiums, $(0.7) million of marine premiums and ($0.5) million of specialty premiums, compared to $14.0 million of property premiums, $15.3 million of marine premiums and $3.5 million of specialty premiums for the three months ended December 31, 2014. The decrease in the marine lines of $15.9 million was primarily driven by an $11.0 million commutation of a Flagstone contract with a Lloyd's counterparty which occurred during the three months ended December 31, 2014. The decrease in the specialty lines was due primarily to a $15.0 million reduction in crop reinsurance premium estimates, partially offset by new casualty business of $7.1 million which was written during the three months ended December 31, 2015.
- The loss ratio for the three months ended December 31, 2015 was 43.3% compared to 25.8% for the three months ended December 31, 2014, an increase of 17.5 percentage points. The loss ratio for the three months ended December 31, 2015 included favorable loss reserve development on prior accident years of $22.6 million, benefiting the loss ratio by 9.7 percentage points. The favorable development on prior accident years from non-event and event specific reserves were $18.0 million and $4.6 million, respectively. The loss ratio for the three months ended December 31, 2014 included favorable loss reserve development on prior accident years of $30.8 million, benefiting the loss ratio by 13.3 percentage points. The increase in the loss ratio for the three months ended December 31, 2015 was primarily due to increased agriculture business, increased frequency of losses below the non-notable loss threshold and a reduced impact from favorable loss reserve development compared to the prior year quarter.
- The combined ratio for the three months ended December 31, 2015 was 69.3% compared to 51.3% for the three months ended December 31, 2014, an increase of 18.0 percentage points.
- Underwriting income for the three months ended December 31, 2015 was $71.3 million compared to $113.1 million for the three months ended December 31, 2014, a decrease of $41.7 million, or 36.9%.

Full Year 2015 Results of Operations - Validus Re Segment

The following table presents underwriting income for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,					
(Dollars in thousands)	2015	Change	2014	Change		2013
Underwriting income						
Gross premiums written	$1,126,759	$8,227	$1,118,532	$(108,158)		$1,226,690
Reinsurance premiums ceded	(149,088)	14,590	(163,678)	46,754		(210,432)
Net premiums written	977,671	22,817	954,854	(61,404)		1,016,258
Change in unearned premiums	12,542	50,112	(37,570)	(155,249)		117,679
Net premiums earned	990,213	72,929	917,284	(216,653)		1,133,937
Other insurance related income	3,575	416	3,159	(16,063)		19,222
Underwriting revenues	993,788	73,345	920,443	(232,716)		1,153,159
Underwriting deductions						
Losses and loss expenses	457,976	150,686	307,290	(122,736)		430,026
Policy acquisition costs	166,387	24,717	141,670	(39,109)		180,779
General and administrative expenses	78,428	3,689	74,739	(16,521)		91,260
Share compensation expenses	10,350	611	9,739	2,071		7,668
Total underwriting deductions	713,141	179,703	533,438	(176,295)		709,733
Underwriting income (a)	$280,647	$(106,358)	$387,005	$(56,421)		$443,426
Selected ratios:						
Net premiums written / Gross premiums written	86.8%	1.4	85.4%	2.6		82.8%
Losses and loss expenses	46.2%	12.7	33.5%	(4.4)		37.9%
Policy acquisition costs	16.8%	1.3	15.5%	(0.5)		16.0%
General and administrative expenses (b)	9.0%	(0.2)	9.2%	0.5		8.7%
Expense ratio	25.8%	1.1	24.7%	—	an increase	24.7%
Combined ratio	72.0%	13.8	58.2%	(4.4)	a decrease	62.6%

(a) Non-GAAP Financial Measures. In presenting the Company’s results, management has included and discussed underwriting income that is not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled “Non-GAAP Financial Measures.”

(b) The general and administrative expense ratio includes share compensation expenses.

Gross Premiums Written

Business Mix - Ratio of Gross Premiums Written by Line of Business to Total Gross Premiums Written

	Years Ended December 31,									
	2015		Change		2014		Change		2013	
(Dollars in thousands)	Gross Premiums Written	% of Total	Gross Premiums Written	% of Total	Gross Premiums Written	% of Total	Gross Premiums Written	% of Total	Gross Premiums Written	% of Total
Property	$547,409	48.6%	$(69,145)	(6.5)	$616,554	55.1%	$(112,244)	(4.3)	$728,798	59.4%
Marine	152,670	13.5%	(38,289)	(3.6)	190,959	17.1%	(3,042)	1.3	194,001	15.8%

Specialty	426,680	37.9 %	115,661	10.1	311,019	27.8 %	7,128	3.0	303,891	24.8 %
Total	$1,126,759	100.0 %	$8,227		$1,118,532	100.0 %	$(108,158)		$1,226,690	100.0 %

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The decrease in gross premiums written in the property lines of $69.1 million was primarily due to a reduction in business written in the catastrophe excess of loss lines of $76.8 million. This decrease was driven by reductions in our participation on various programs due to current market conditions. The decrease in gross premiums written in the marine lines of $38.3 million was due to non-renewals as a result of current market conditions and business historically written in marine lines being renewed in specialty lines. Further contributing to the decrease was a gain on the commutation of a Flagstone contract with a Lloyd's counterparty which occurred in the three months ended December 31, 2014. The increase in gross premiums written in the specialty lines of $115.7 million was primarily due to a significant new agriculture deal, a significant increase in an existing agriculture deal and new casualty business of $7.1 million which was written during the three months ended December 31, 2015. These increases were offset by various non-renewals.

Reinsurance Premiums Ceded

	Reinsurance Premiums Ceded				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Property	$121,518	$(18,138)	$139,656	$(16,445)	$156,101
Marine	17,127	603	16,524	471	16,053
Specialty	10,443	2,945	7,498	(30,780)	38,278
Total	$149,088	$(14,590)	$163,678	$(46,754)	$210,432

Reinsurance premiums ceded in the property lines decreased by $18.1 million primarily as a result of renewing the Company's main retrocession program at reduced rates. The increase in reinsurance premiums ceded in the specialty lines of $2.9 million was primarily due to a composite marine program being renewed in the specialty lines.

Net Premiums Written

	Net Retention - Ratio of Net Premiums Written to Gross Premiums Written									
	Years Ended December 31,									
	2015		Change		2014		Change		2013	
(Dollars in thousands)	Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written
Property	$425,891	77.8 %	$(51,007)	0.5	$476,898	77.3 %	$(95,799)	(1.3)	$572,697	78.6 %
Marine	135,543	88.8 %	(38,892)	(2.5)	174,435	91.3 %	(3,513)	(0.4)	177,948	91.7 %
Specialty	416,237	97.6 %	112,716	—	303,521	97.6 %	37,908	10.2	265,613	87.4 %
Total	$977,671	86.8 %	$22,817	1.4	$954,854	85.4 %	$(61,404)	2.6	$1,016,258	82.8 %

The changes in net premiums written and net retention ratios are driven by factors highlighted above in respect of gross premiums written and reinsurance premiums ceded.

Net Premiums Earned

	Net Premiums Earned				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Property	$431,126	$(39,169)	$470,295	$(201,372)	$671,667
Marine	147,565	(19,691)	167,256	(28,157)	195,413
Specialty	411,522	131,789	279,733	12,876	266,857
Total	$990,213	$72,929	$917,284	$(216,653)	$1,133,937

The decrease in the property lines net premiums earned of $39.2 million was as a result of lower gross premiums written during the year ended December 31, 2015 compared to the year ended December 31, 2014, offset by the earned impact of the reduction in reinsurance premiums ceded. The decrease in the marine lines net premiums earned of $19.7 million was due to lower gross premiums written during the year ended December 31, 2015, as well as the impact of adjustments to run off business. The increase in net premiums earned in the specialty lines of $131.8 million was primarily due to an increase in gross premiums written during the year ended December 31, 2015.

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Other Insurance Related Income

	Other Insurance Related Income				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Other insurance related income	$3,575	$416	$3,159	$(16,063)	$19,222

Other insurance related income for the year ended December 31, 2015 includes a recoverable for federal excise taxes of $2.3 million.

Losses and Loss Expenses

	Losses and Loss Expense Ratio - All Lines				
	Years Ended December 31,				
	2015	Change	2014	Change	2013
All lines—current period excluding items below	50.1%	12.8	37.3%	(0.9)	38.2%
All lines—current period—notable loss events	7.3%	4.9	2.4%	(2.5)	4.9%
All lines—current period—non-notable loss events	1.8%	(1.5)	3.3%	3.3	0.0%
All lines—change in prior accident years	(13.0)%	(3.5)	(9.5)%	(4.3)	(5.2)%
All lines—loss ratio	46.2%	12.7	33.5%	(4.4)	37.9%

	Losses and Loss Expenses - All Lines				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
All lines—current period excluding items below	$496,566	$154,028	$342,538	$(91,430)	$433,968
All lines—current period—notable loss events	72,470	50,001	22,469	(32,847)	55,316
All lines—current period—non-notable loss events	17,556	(12,327)	29,883	29,883	—
All lines—change in prior accident years	(128,616)	(41,016)	(87,600)	(28,342)	(59,258)
All lines - losses and loss expenses	$457,976	$150,686	$307,290	$(122,736)	$430,026

Notable Loss Events

Losses and loss expenses from notable loss events were $72.5 million for the year ended December 31, 2015, which represented 7.3 percentage points of the loss ratio. Losses and loss expenses from Tianjin, a third quarter notable loss event, were $35.8 million. Net of $3.1 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $32.7 million. Losses and loss expenses from Pemex, a second quarter notable loss event, were $36.7 million for the year ended December 31, 2015. Net of $8.9 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $27.7 million.

Losses and loss expenses from a single notable loss event, Tripoli Airport, were $22.5 million for the year ended December 31, 2014, which represented 2.4 percentage points of the loss ratio. Net of $3.0 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $19.5 million.

Non-notable Loss Events

Losses and loss expenses from non-notable loss events for the year ended December 31, 2015 were $17.6 million compared to $29.9 million for the year ended December 31, 2014. The non-notable loss event for the year ended December 31, 2015 was the Chilean earthquake.

Losses and Loss Expenses by Line of Business

	Losses and Loss Expense Ratio - Property Lines				
	Years Ended December 31,				
	2015	Change	2014	Change	2013
Property—current period excluding items below	26.9 %	8.2	18.7 %	(5.5)	24.2 %
Property—current period—notable loss events	5.4 %	5.4	0.0 %	(8.2)	8.2 %
Property—current period—non-notable loss events	4.0 %	(2.4)	6.4 %	6.4	0.0 %
Property—change in prior accident years	(16.3)%	(0.1)	(16.2)%	(4.0)	(12.2)%
Property—loss ratio	20.0 %	11.1	8.9 %	(11.3)	20.2 %

	Losses and Loss Expenses - Property Lines				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Property—current period excluding items below	$115,825	$27,955	$87,870	$(74,332)	$162,202
Property—current period—notable loss events	23,310	23,310	—	(55,316)	55,316
Property—current period—non-notable loss events	17,440	(12,443)	29,883	29,883	—
Property—change in prior accident years	(70,343)	5,721	(76,064)	5,546	(81,610)
Property—losses and loss expenses	$86,232	$44,543	$41,689	$(94,219)	$135,908

During the year ended December 31, 2015, the property lines incurred $23.3 million of losses and loss expenses from a third quarter notable loss event, Tianjin, which represented 5.4 percentage points of the property lines loss ratio. Net of $1.8 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $21.5 million.

The property lines incurred no losses and loss expenses from notable loss events during the year ended December 31, 2014.

During the year ended December 31, 2015, the property lines incurred $17.4 million of losses and loss expenses from a single non-notable loss event, the Chilean earthquake, which represented 4.0 percentage points of the property lines loss ratio. During the year ended December 31, 2014, the property lines incurred $29.9 million of losses and loss expenses from non-notable loss events, which represented 6.4 percentage points of the property lines loss ratio.

The property lines current period loss ratio, excluding the impact of notable and non-notable loss events, increased by 8.2 percentage points as a result of higher attritional losses in the year, including $10.0 million of losses and loss expenses from flooding in Texas during the second quarter. The favorable development on prior accident years for the year ended December 31, 2015 of $70.3 million included favorable development on event specific reserves of $32.4 million. The remainder was primarily due to favorable development on attritional losses. The favorable development on prior accident years for the year ended December 31, 2014 of $76.1 million was primarily due to favorable development on attritional losses.

	Losses and Loss Expense Ratio - Marine Lines				
	Years Ended December 31,				
	2015	Change	2014	Change	2013
Marine—current period excluding items below	56.4 %	17.1	39.3 %	(2.1)	41.4 %
Marine—current period—notable loss events	32.2 %	32.2	0.0 %	0.0	0.0 %
Marine—current period—non-notable loss events	0.0 %	0.0	0.0 %	0.0	0.0 %
Marine—change in prior accident years	(26.7)%	(22.6)	(4.1)%	(17.8)	13.7 %
Marine—loss ratio	61.9 %	26.7	35.2 %	(19.9)	55.1 %

	Losses and Loss expenses - Marine Lines				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Marine—current period excluding items below	$83,271	$17,522	$65,749	$(15,189)	$80,938
Marine—current period—notable loss events	47,495	47,454	41	41	—
Marine—current period—non-notable loss events	—	—	—	—	—
Marine—change in prior accident years	(39,460)	(32,630)	(6,830)	(33,535)	26,705
Marine—losses and loss expenses	$91,306	$32,346	$58,960	$(48,683)	$107,643

During the year ended December 31, 2015, the marine lines incurred $12.5 million of losses and loss expenses from a third quarter notable loss event, Tianjin, which represented 8.5 percentage points of the marine lines loss ratio. Net of $1.3 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $11.2 million. In addition, losses and loss expenses from Pemex, a second quarter notable loss event, were $35.0 million which represented 23.7 percentage points of the marine lines loss ratio. Net of $8.4 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $26.6 million.

The marine lines current period loss ratio, excluding the impact of notable and non-notable loss events, increased by 17.1 percentage points as a result of higher attritional losses in the current year. The favorable development of $39.5 million on prior accident years for the year ended December 31, 2015 was primarily due to favorable development on attritional losses; whereas, the lower favorable development of $6.8 million on prior accident years for the year ended December 31, 2014 was primarily due to adverse development on Costa Concordia, partially offset by favorable development on the Gryphon Alpha mooring failure.

	Losses and Loss Expense Ratio - Specialty Lines				
	Years Ended December 31,				
	2015	Change	2014	Change	2013
Specialty—current period excluding items below	72.3 %	4.7	67.6 %	(3.9)	71.5 %
Specialty—current period—notable loss events	0.4 %	(7.6)	8.0 %	8.0	0.0 %
Specialty—current period—non-notable loss events	0.0 %	0.0	0.0 %	0.0	0.0 %
Specialty—change in prior accident years	(4.6)%	(2.9)	(1.7)%	(0.1)	(1.6)%
Specialty—loss ratio	68.1 %	(5.8)	73.9 %	4.0	69.9 %

	Losses and Loss Expenses - Specialty Lines				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Specialty—current period excluding items below	$297,470	$108,551	$188,919	$(1,909)	$190,828
Specialty—current period—notable loss events	1,665	(20,763)	22,428	22,428	—
Specialty—current period—non-notable loss events	116	116	—	—	—
Specialty—change in prior accident years	(18,813)	(14,107)	(4,706)	(353)	(4,353)
Specialty—losses and loss expenses	$280,438	$73,797	$206,641	$20,166	$186,475

During the year ended December 31, 2015, the specialty lines incurred $1.7 million of losses and loss expenses from a second quarter notable loss event, Pemex, which represented 0.4 percentage points of the specialty lines loss ratio. During the year ended December 31, 2014, the specialty lines incurred $22.4 million of losses and loss expenses from a single notable loss event, Tripoli Airport, which represented 8.0 percentage points of the specialty lines loss ratio. Net of $3.0 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $19.4 million.

The specialty lines current period loss ratio, excluding the impact of notable and non-notable loss events, increased by 4.7 percentage points, primarily due to a change in business mix to include more agriculture business and higher

attritional losses in the current year. The favorable loss reserve development on prior accident years of $18.8 million during the year ended December 31, 2015 was due to favorable development on agricultural loss estimates and favorable development on attritional losses. The lower favorable development of $4.7 million on prior accident years in the year ended December 31, 2014 was primarily due to an increase in the loss estimate on agriculture losses.

Policy Acquisition Costs

(Dollars in thousands)	Policy Acquisition Costs Years Ended December 31, 2015		Change		2014		Change		2013	
	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned
Property	$74,655	17.3 %	$(2,300)	0.9	$76,955	16.4 %	$(27,962)	0.8	$104,917	15.6 %
Marine	30,024	20.3 %	3,300	4.3	26,724	16.0 %	(9,626)	(2.6)	36,350	18.6 %
Specialty	61,708	15.0 %	23,717	1.4	37,991	13.6 %	(1,521)	(1.2)	39,512	14.8 %
Total	$166,387	16.8 %	$24,717	1.3	$141,670	15.5 %	$(39,109)	(0.5)	$180,779	16.0 %

The acquisition cost ratio for the marine lines increased by 4.3 percentage points primarily due to premium adjustments to existing business. The 1.4 percentage point increase in the acquisition cost ratio for the specialty lines was driven by profit commissions and a large proportional contract that carries higher acquisition costs.

Underwriting Income Before General and Administrative and Share Compensation Expenses

(Dollars in thousands)	Underwriting Income Before General and Administrative and Share Compensation Expenses Years Ended December 31, 2015	Change	2014	Change	2013
Property	$270,239	$(81,412)	$351,651	$(79,191)	$430,842
Marine	26,235	(55,337)	81,572	30,152	51,420
Specialty	69,376	34,275	35,101	(5,769)	40,870
Other insurance related income	$3,575	416	$3,159	(16,063)	$19,222
Total	$369,425	$(102,058)	$471,483	$(70,871)	$542,354

The changes in underwriting income before general and administrative and share compensation expenses are driven by factors highlighted above in respect of gross premiums written, reinsurance premiums ceded, other insurance related income, losses and loss expenses and policy acquisition costs.

General and Administrative and Share Compensation Expenses

(Dollars in thousands)	General and Administrative and Share Compensation Expenses Years Ended December 31, 2015		Change		2014		Change		2013	
	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned
General and administrative expenses	$78,428	7.9 %	$3,689	(0.2)	$74,739	8.1 %	$(16,521)	0.1	$91,260	8.0 %
Share compensation expenses	10,350	1.1 %	611	—	9,739	1.1 %	2,071	0.4	7,668	0.7 %
Total	$88,778	9.0 %	$4,300	(0.2)	$84,478	9.2 %	$(14,450)	0.5	$98,928	8.7 %

The increase in general and administrative expenses of $3.7 million or 4.9% was due primarily to a greater retention of costs within the segment and an increase in staff costs related to overseas underwriting operations during the year ended December 31, 2015. This increase was partially offset by a reduction in office and infrastructure costs in the current year related to entities that are no longer in use as a result of efficiencies achieved through rationalization of historical Flagstone entities. Share compensation expenses were comparable for the years ended December 31, 2015 and 2014.

Selected Underwriting Ratios

The underwriting results of an insurance or reinsurance company are often measured by reference to its combined ratio, which is the sum of the losses and loss expense ratio and the expense ratio. The losses and loss expense ratio is calculated by dividing losses and loss expenses incurred (including estimates for incurred but not reported losses) by net premiums earned. The expense ratio is calculated by dividing acquisition costs combined with general and administrative expenses by net premiums earned. The following table presents the losses and loss expense ratio, policy acquisition cost ratio, general and administrative expense ratio, expense ratio and combined ratio for the years ended December 31, 2015, 2014 and 2013.

	Years Ended December 31,				
	2015	Change	2014	Change	2013
Losses and loss expense ratio	46.2 %	12.7	33.5 %	(4.4)	37.9 %
Policy acquisition cost ratio	16.8 %	1.3	15.5 %	(0.5)	16.0 %
General and administrative expense ratio (a)	9.0 %	(0.2)	9.2 %	0.5	8.7 %
Expense ratio	25.8 %	1.1	24.7 %	0.0	24.7 %
Combined ratio	72.0 %	13.8	58.2 %	(4.4)	62.6 %

(a) The general and administrative expense ratio includes share compensation expenses.

The increase in the combined ratio for the year ended December 31, 2015 of 13.8 percentage points compared to the year ended December 31, 2014 was due to the movement in the underlying ratios as discussed above.

Fourth Quarter 2015 Summarized Results of Operations - Talbot Segment

The following table presents underwriting income for the three months ended December 31, 2015 and 2014:

	Three Months Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Underwriting income			
Gross premiums written	$229,687	$(17,759)	$247,446
Reinsurance premiums ceded	(34,752)	3,344	(38,096)
Net premiums written	194,935	(14,415)	209,350
Change in unearned premiums	8,985	(2,888)	11,873
Net premiums earned	203,920	(17,303)	221,223
Other insurance related income	287	(424)	711
Underwriting revenues	204,207	(17,727)	221,934
Underwriting deductions			
Losses and loss expenses	78,810	(39,736)	118,546
Policy acquisition costs	46,197	(2,582)	48,779
General and administrative expenses	39,965	(3,832)	43,797
Share compensation expenses	3,178	266	2,912
Total underwriting deductions	168,150	(45,884)	214,034
Underwriting income (a)	$36,057	$28,157	$7,900
Supplemental information:			
Losses and loss expenses			
Current period excluding items below	$102,296	$(58,224)	$160,520
Current period—notable loss events	(374)	(374)	—
Current period—non-notable loss events	—	—	—
Change in prior accident years	(23,112)	18,862	(41,974)
Total losses and loss expenses	$78,810	$(39,736)	$118,546
Selected ratios:			
Net premiums written / Gross premiums written	84.9%	0.3	84.6%
Losses and loss expense ratio			
Current period excluding items below	50.2%	(22.4)	72.6%
Current period—notable loss events	(0.2)%	(0.2)	—%
Current period—non-notable loss events	—%	—	—%
Change in prior accident years	(11.3)%	7.7	(19.0)%
Losses and loss expenses	38.7%	(14.9)	53.6%
Policy acquisition costs	22.6%	0.5	22.1%
General and administrative expenses (b)	21.2%	0.1	21.1%
Expense ratio	43.8%	0.6	43.2%
Combined ratio	82.5%	(14.3)	96.8%

(a) Non-GAAP Financial Measures. In presenting the Company’s results, management has included and discussed underwriting income that is not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled “Non-GAAP Financial Measures.”

(b) The general and administrative expense ratio includes share compensation expenses.

Fourth Quarter 2015 Summarized Results of Operations - Talbot Segment

Highlights for the fourth quarter include the following:

- Gross premiums written for the three months ended December 31, 2015 were $229.7 million compared to $247.4 million for the three months ended December 31, 2014, a decrease of $17.8 million, or 7.2%. Gross premiums written for the three months ended December 31, 2015 included $73.9 million of property premiums, $60.6 million of marine premiums and $95.1 million of specialty premiums compared to $76.1 million of property premiums, $72.9 million of marine premiums and $98.4 million of specialty premiums for the three months ended December 31, 2014. The decrease in the marine premiums of $12.2 million was driven by decreases in a number of classes, but primarily due to reduced premiums in the cargo line of $9.2 million, due to ongoing market conditions and economic factors which have reduced new business and renewals, together with the non-recurrence of favorable adjustments in the prior year.
- The loss ratio for the three months ended December 31, 2015 was 38.7% compared to 53.6% for the three months ended December 31, 2014, a decrease of 14.9 percentage points. The loss ratio for the three months ended December 31, 2015 included favorable loss reserve development on prior accident years of $23.1 million, benefiting the loss ratio by 11.3 percentage points. The favorable development on prior accident years is primarily from non-event reserves in the amount of $19.3 million. Favorable development on prior accident years from event specific reserves was $3.8 million. The loss ratio for the three months ended December 31, 2014 included favorable loss reserve development on prior accident years of $42.0 million, benefiting the loss ratio by 19.0 percentage points.
- The decrease in the loss ratio excluding notable and non-notable losses and changes in prior accident years was primarily due to a large number of losses below the non-notable loss threshold during the three months ended December 31, 2014, primarily in the Talbot segment's political risk class.
- The combined ratio for the three months ended December 31, 2015 was 82.5% compared to 96.8% for the three months ended December 31, 2014, a decrease of 14.3 percentage points.
- Underwriting income for the three months ended December 31, 2015 was $36.1 million compared to $7.9 million for the three months ended December 31, 2014, an increase of $28.2 million.

Full Year 2015 Results of Operations - Talbot Segment

The following table presents underwriting income for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Underwriting income					
Gross premiums written	$1,018,835	$(82,935)	$1,101,770	$9,880	$1,091,890
Reinsurance premiums ceded	(198,896)	(6,685)	(192,211)	33,900	(226,111)
Net premiums written	819,939	(89,620)	909,559	43,780	865,779
Change in unearned premiums	18,152	47,937	(29,785)	5,300	(35,085)
Net premiums earned	838,091	(41,683)	879,774	49,080	830,694
Other insurance related income	851	(244)	1,095	(724)	1,819
Underwriting revenues	838,942	(41,927)	880,869	48,356	832,513
Underwriting deductions					
Losses and loss expenses	347,322	(76,072)	423,394	77,057	346,337
Policy acquisition costs	187,535	373	187,162	16,424	170,738
General and administrative expenses	155,306	4,478	150,828	14,370	136,458
Share compensation expenses	12,373	1,027	11,346	1,733	9,613
Total underwriting deductions	702,536	(70,194)	772,730	109,584	663,146
Underwriting income (a)	$136,406	$28,267	$108,139	$(61,228)	$169,367
Selected ratios:					
Net premiums written / Gross premiums written	80.5 %	(2.1)	82.6 %	3.3	79.3 %
Losses and loss expenses	41.4 %	(6.7)	48.1 %	6.4	41.7 %
Policy acquisition costs	22.4 %	1.1	21.3 %	0.8	20.5 %
General and administrative expenses (b)	20.0 %	1.6	18.4 %	0.8	17.6 %
Expense ratio	42.4 %	2.7	39.7 %	1.6	38.1 %
Combined ratio	83.8 %	(4.0)	87.8 %	8.0	79.8 %

(a) Non-GAAP Financial Measures. In presenting the Company’s results, management has included and discussed underwriting income that is not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled “Non-GAAP Financial Measures.”

(b) The general and administrative expense ratio includes share compensation expenses.

Gross Premiums Written

Business Mix - Ratio of Gross Premiums Written by Line of Business to Total Gross Premiums Written

	Years Ended December 31,									
	2015		Change		2014		Change		2013	
(Dollars in thousands)	Gross Premiums Written	% of Total	Gross Premiums Written	% of Total	Gross Premiums Written	% of Total	Gross Premiums Written	% of Total	Gross Premiums Written	% of Total
Property	$327,122	32.2 %	$(10,088)	1.6	$337,210	30.6 %	$(8,621)	(1.1)	$345,831	31.7 %
Marine	327,539	32.1 %	(65,162)	(3.5)	392,701	35.6 %	11,463	0.7	381,238	34.9 %
Specialty	364,174	35.7 %	(7,685)	1.9	371,859	33.8 %	7,038	0.4	364,821	33.4 %
Total	$1,018,835	100.0 %	$(82,935)		$1,101,770	100.0 %	$9,880		$1,091,890	100.0 %

Talbot gross premiums written for the year ended December 31, 2015 translated at 2014 exchange rates would have been $1,033.2 million, a decrease of $68.6 million on the prior year period.

The decrease in gross premiums written in the property lines of $10.1 million was primarily due to a decrease in the property treaty lines of $9.3 million which related primarily to the Latin American business now being written directly through Validus Re Swiss. In addition, renewed business in the downstream energy and power international lines has decreased due to unfavorable market conditions. These decreases were partially offset by an increase in the construction lines as a result of new projects and amendments to existing contracts. The decrease in gross premiums written in the marine lines of $65.2 million was primarily driven by a decrease in the upstream energy and cargo lines due to ongoing market conditions and economic factors, including the worldwide reduction in oil prices, which have reduced new business and renewals. Also contributing to the decrease was a decrease in the marine hull lines primarily as a result of 18-month policies written during the year ended December 31, 2014 and not due for renewal in the current year. The decrease in gross premiums written in the specialty lines of $7.7 million was primarily driven by a decrease in the aviation treaty lines as a result of a higher level of reinstatement premiums and adjustments to prior year policies during the year ended December 31, 2014.

Reinsurance Premiums Ceded

	Reinsurance Premiums Ceded Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Property	$103,677	$(8,271)	$111,948	$(30,015)	$141,963
Marine	34,087	9,159	24,928	558	24,370
Specialty	61,132	5,797	55,335	(4,443)	59,778
Total	$198,896	$6,685	$192,211	$(33,900)	$226,111

The decrease in reinsurance premiums ceded in the property lines of $8.3 million was due primarily to a decrease in the property treaty lines of $4.2 million due to lower quota share premiums as a result of certain underlying Latin American business now being written through Validus Re Swiss. This decrease was also due to a decrease in reinstatement premiums in the current year. The increase in the marine lines of $9.2 million was primarily due to the reinstatement premium impact of the second quarter notable loss event, Pemex. The increase in the specialty lines of $5.8 million was primarily due to reinstatement premiums across a number of classes.

Net Premiums Written

	Net Retention - Ratio of Net Premiums Written to Gross Premiums Written Years Ended December 31,									
	2015		Change		2014		Change		2013	
(Dollars in thousands)	Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written
Property	$223,445	68.3 %	$(1,817)	1.5	$225,262	66.8 %	$21,394	7.8	$203,868	59.0 %
Marine	293,452	89.6 %	(74,321)	(4.1)	367,773	93.7 %	10,905	0.1	356,868	93.6 %
Specialty	303,042	83.2 %	(13,482)	(1.9)	316,524	85.1 %	11,481	1.5	305,043	83.6 %
Total	$819,939	80.5 %	$(89,620)	(2.1)	$909,559	82.6 %	$43,780	3.3	$865,779	79.3 %

The changes in net premiums written and net retention ratios are driven by factors highlighted above in respect of gross premiums written and reinsurance premiums ceded.

Net Premiums Earned

	Net Premiums Earned Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Property	$221,303	$12,527	$208,776	$17,026	$191,750
Marine	318,958	(47,380)	366,338	17,491	348,847
Specialty	297,830	(6,830)	304,660	14,563	290,097
Total	$838,091	$(41,683)	$879,774	$49,080	$830,694

The changes in the net premiums earned were consistent with the pattern of net premiums written influencing the earned premiums for the year ended December 31, 2015 compared to the year ended December 31, 2014 and are driven by factors highlighted above in respect of gross premiums written and reinsurance premiums ceded.

Losses and Loss Expenses

	Losses and Loss Expense Ratio - All Lines				
	Years Ended December 31,				
	2015	Change	2014	Change	2013
All lines—current period excluding items below	55.4 %	(6.9)	62.3 %	3.6	58.7 %
All lines—current period—notable loss events	2.9 %	1.5	1.4 %	0.8	0.6 %
All lines—current period—non-notable loss events	0.6 %	0.1	0.5 %	0.5	0.0 %
All lines—change in prior accident years	(17.5)%	(1.4)	(16.1)%	1.5	(17.6)%
All lines—loss ratio	41.4 %	(6.7)	48.1 %	6.4	41.7 %

	Losses and Loss Expenses - All Lines				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
All lines—current period excluding items below	$464,510	$(82,790)	$547,300	$59,467	$487,833
All lines—current period—notable loss events	24,494	12,019	12,475	7,781	4,694
All lines—current period—non-notable loss events	4,675	(110)	4,785	4,785	—
All lines—change in prior accident years	(146,357)	(5,191)	(141,166)	5,024	(146,190)
All lines—losses and loss expenses	$347,322	$(76,072)	$423,394	$77,057	$346,337

Notable Loss Events

Losses and loss expenses from notable loss events were $24.5 million for the year ended December 31, 2015, which represented 2.9 percentage points of the loss ratio. Losses and loss expenses from Tianjin, a third quarter notable loss event, were $11.6 million. Net of reinstatement premiums of $0.8 million, the effect of this event on net operating income was a reduction of $10.8 million. Losses and loss expenses from Pemex, a second quarter notable loss event, were $12.9 million for the year ended December 31, 2015. Including reinstatement premiums payable, the effect of this event on net operating income was a reduction of $24.0 million.

Losses and loss expenses from a single notable loss event, Tripoli Airport, were $12.5 million for the year ended December 31, 2014, which represented 1.4 percentage points of the loss ratio. Net of $0.8 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $11.7 million.

Non-notable Loss Events

Losses and loss expenses from non-notable loss events for the year ended December 31, 2015 were $4.7 million compared to $4.8 million for the year ended December 31, 2014. The non-notable loss event for the year ended December 31, 2015 was the Chilean earthquake.

Losses and Loss Expenses by Line of Business

	Losses and Loss Expense Ratio - Property Lines									
	Years Ended December 31,									
	2015		Change		2014		Change		2013	
Property—current period excluding items below	59.3	%	(11.5	)	70.8	%	9.2		61.6	%
Property—current period—notable loss events	1.7	%	1.7		0.0	%	(1.9	)	1.9	%
Property—current period—non-notable loss events	1.9	%	(0.4	)	2.3	%	2.3		0.0	%
Property—change in prior accident years	(23.7	)%	2.1		(25.8	)%	(2.0	)	(23.8	)%
Property—loss ratio	39.2	%	(8.1	)	47.3	%	7.6		39.7	%

	Losses and Loss Expenses - Property Lines									
	Years Ended December 31,									
(Dollars in thousands)	2015		Change		2014		Change		2013	
Property—current period excluding items below	$131,298		$(16,374	)	$147,672		$29,520		$118,152	
Property—current period—notable loss events	3,727		3,727		—		(3,694	)	3,694	
Property—current period—non-notable loss events	4,175		(610	)	4,785		4,785		—	
Property—change in prior accident years	(52,393	)	1,386		(53,779	)	(8,087	)	(45,692	)
Property—losses and loss expenses	$86,807		$(11,871	)	$98,678		$22,524		$76,154	

During the year ended December 31, 2015, the property lines incurred $3.3 million of losses and loss expenses from a third quarter notable loss event, Tianjin, which represented 1.5 percentage points of the property lines loss ratio. Net of $0.2 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $3.1 million. In addition, losses and loss expenses from Pemex, a second quarter notable loss event, were $0.4 million which represented 0.2 percentage points of the property lines loss ratio. Net of $0.1 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $0.3 million. The property lines incurred no losses and loss expenses from notable loss events during the year ended December 31, 2014.

During the year ended December 31, 2015, the property lines incurred $4.2 million in losses and loss expenses from a single non-notable loss event, the Chilean earthquake, which represented 1.9 percentage points of the property lines loss ratio. During the year ended December 31, 2014, the property lines incurred $4.8 million in losses and loss expenses from non-notable loss events which represented 2.3 percentage points of the property lines loss ratio.

The property lines current period loss ratio, excluding the impact of notable and non-notable loss events, decreased by 11.5 percentage points as a result of lower attritional losses in the current year and a construction fire loss of $8.3 million included in the year ended December 31, 2014. The favorable development of $52.4 million on prior accident years for the year ended December 31, 2015 primarily relates to favorable development on attritional losses and certain events, including the Thailand floods, which was a 2011 notable loss event. The favorable development of $53.8 million on prior accident years for the year ended December 31, 2014 primarily relates to a combination of favorable development on attritional losses and notable loss events, primarily the Tohoku earthquake, which was a 2011 notable loss event.

	Losses and Loss Expense Ratio - Marine Lines									
	Years Ended December 31,									
	2015		Change		2014		Change		2013	
Marine—current period excluding items below	54.2	%	2.8		51.4	%	(5.2	)	56.6	%
Marine—current period—notable loss events	6.5	%	6.4		0.1	%	(0.2	)	0.3	%
Marine—current period—non-notable loss events	0.2	%	0.2		0.0	%	0.0		0.0	%
Marine—change in prior accident years	(20.0	)%	(11.4	)	(8.6	)%	4.6		(13.2	)%
Marine—loss ratio	40.9	%	(2.0	)	42.9	%	(0.8	)	43.7	%

	Losses and Loss Expenses - Marine Lines				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Marine—current period excluding items below	$173,174	$(15,209)	$188,383	$(9,094)	$197,477
Marine—current period—notable loss events	20,767	20,576	191	(809)	1,000
Marine—current period—non-notable loss events	500	500	—	—	—
Marine—change in prior accident years	(63,920)	(32,523)	(31,397)	14,695	(46,092)
Marine—losses and loss expenses	$130,521	$(26,656)	$157,177	$4,792	$152,385

During the year ended December 31, 2015, the marine lines incurred $8.3 million of losses and loss expenses from a third quarter notable loss event, Tianjin, which represented 2.6 percentage points of the marine lines loss ratio. Net of $0.5 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $7.8 million. In addition, losses and loss expenses from a second quarter notable loss event, Pemex were $12.5 million which represented 3.9 percentage points of the marine lines loss ratio. Including reinstatement premiums payable, the effect of this event on net operating income was a reduction of $23.6 million.

The marine lines current period loss ratio, excluding the impact of notable and non-notable loss events, increased by 2.8 percentage points primarily due to higher attritional losses in the current period. The favorable development of $63.9 million and $31.4 million on prior accident years for the years ended December 31, 2015 and 2014, respectively, was primarily due to favorable development on attritional losses.

	Losses and Loss Expense Ratio - Specialty Lines				
	Years Ended December 31,				
	2015	Change	2014	Change	2013
Specialty—current period excluding items below	53.7 %	(15.7)	69.4 %	10.0	59.4 %
Specialty—current period—notable loss events	0.0 %	(4.0)	4.0 %	4.0	0.0 %
Specialty—current period—non-notable loss events	0.0 %	0.0	0.0 %	0.0	0.0 %
Specialty—change in prior accident years	(10.1)%	8.3	(18.4)%	0.4	(18.8)%
Specialty—loss ratio	43.6 %	(11.4)	55.0 %	14.4	40.6 %

	Losses and Loss Expenses - Specialty Lines				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Specialty—current period excluding items above	$160,038	$(51,207)	$211,245	$39,041	$172,204
Specialty—current period—notable loss events	—	(12,284)	12,284	12,284	—
Specialty—current period—non-notable loss events	—	—	—	—	—
Specialty—change in prior accident years	(30,044)	25,946	(55,990)	(1,584)	(54,406)
Specialty—losses and loss expenses	$129,994	$(37,545)	$167,539	$49,741	$117,798

The specialty lines incurred no losses and loss expenses from notable loss events during the year ended December 31, 2015. Losses and loss expenses from a single notable loss event, Tripoli Airport, were $12.3 million for the year ended December 31, 2014, which represented 4.0 percentage points of the loss ratio. Net of $0.8 million of reinstatement premiums, the effect of this event on net operating income was a reduction of $11.5 million.

The specialty lines current period loss ratio, excluding the impact of notable and non-notable loss events, decreased by 15.7 percentage points primarily due to a large number of losses below the non-notable loss threshold during the three months ended December 31, 2014, primarily in the political risk class and lower attritional losses in the current period. The favorable development of $30.0 million and $56.0 million on prior accident years for the years ended December 31, 2015 and 2014, respectively, was primarily due to favorable development on attritional losses.

Policy Acquisition Costs

	Policy Acquisition Costs									
	Years Ended December 31,									
	2015		Change		2014		Change		2013	
(Dollars in thousands)	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned
Property	$32,768	14.8 %	$5,219	1.6	$27,549	13.2 %	$5,239	1.6	$22,310	11.6 %
Marine	82,705	25.9 %	(5,374)	1.9	88,079	24.0 %	7,780	1.0	80,299	23.0 %
Specialty	72,062	24.2 %	528	0.7	71,534	23.5 %	3,405	0.0	68,129	23.5 %
Total	$187,535	22.4 %	$373	1.1	$187,162	21.3 %	$16,424	0.8	$170,738	20.5 %

The property acquisition cost ratio increased by 1.6 percentage points due to lower ceded acquisition costs on quota share premiums as a result of the Latin American business being written through Validus Re Swiss. This business was previously written through Talbot and ceded to Validus Re through the second quarter of 2014. The marine acquisition cost ratio increased by 1.9 percentage points primarily due to the reinstatement premium impact of the second quarter notable loss event, Pemex and increases in acquisition costs across a number of classes, primarily in the upstream energy class, during the year ended December 31, 2014.

Underwriting Income Before General and Administrative and Share Compensation Expenses

	Underwriting Income Before General and Administrative and Share Compensation Expenses				
	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Property	$101,728	$19,179	$82,549	$(10,737)	$93,286
Marine	105,732	(15,350)	121,082	4,919	116,163
Specialty	95,774	30,187	65,587	(38,583)	104,170
Other insurance related income	851	(244)	1,095	(724)	1,819
Total	$304,085	$33,772	$270,313	$(45,125)	$315,438

The changes in underwriting income before general and administrative and share compensation expenses are driven by factors highlighted above in respect of gross premiums written, reinsurance premiums ceded, losses and loss expenses and policy acquisition costs.

General and Administrative and Share Compensation Expenses

	General and Administrative and Share Compensation Expenses									
	Years Ended December 31,									
	2015		Change		2014		Change		2013	
(Dollars in thousands)	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned
General and administrative expenses	$155,306	18.5 %	$4,478	1.4	$150,828	17.1 %	$14,370	0.7	$136,458	16.4 %
Share compensation expenses	12,373	1.5 %	1,027	0.2	11,346	1.3 %	1,733	0.1	9,613	1.2 %
Total	$167,679	20.0 %	$5,505	1.6	$162,174	18.4 %	$16,103	0.8	$146,071	17.6 %

General and administrative expenses translated at 2014 exchange rates would have been $162.4 million, an increase of $11.6 million. This increase was primarily due to a greater retention of costs within the segment together with an increase in the performance bonus accrual. Share compensation expense ratios were comparable for the years ended December 31, 2015 and 2014.

Selected Underwriting Ratios

The following table presents the losses and loss expense ratio, policy acquisition cost ratio, general and administrative expense ratio, expense ratio and combined ratio for the years ended December 31, 2015, 2014 and 2013.

	Years Ended December 31,								
	2015		Change		2014		Change	2013	
Losses and loss expense ratio	41.4	%	(6.7	)	48.1	%	6.4	41.7	%
Policy acquisition cost ratio	22.4	%	1.1		21.3	%	0.8	20.5	%
General and administrative expense ratio (a)	20.0	%	1.6		18.4	%	0.8	17.6	%
Expense ratio	42.4	%	2.7		39.7	%	1.6	38.1	%
Combined ratio	83.8	%	(4.0	)	87.8	%	8.0	79.8	%

(a) The general and administrative expense ratio includes share compensation expenses.

The decrease in the combined ratio for the year ended December 31, 2015 of 4.0 percentage points compared to the year ended December 31, 2014 was due to the movement in the underlying ratios as discussed above.

Fourth Quarter 2015 Summarized Results of Operations - Western World Segment

The following table presents underwriting income for the three months ended December 31, 2015 and 2014:

	Three Months Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Underwriting income			
Gross premiums written	$71,132	$5,897	$65,235
Reinsurance premiums ceded	(5,487)	941	(6,428)
Net premiums written	65,645	6,838	58,807
Change in unearned premiums	(3,925)	(18,114)	14,189
Net premiums earned	61,720	(11,276)	72,996
Other insurance related income	257	(7)	264
Underwriting revenues	61,977	(11,283)	73,260
Underwriting deductions			
Losses and loss expenses	33,780	(17,255)	51,035
Policy acquisition costs	14,298	11,129	3,169
General and administrative expenses	9,578	(1,543)	11,121
Share compensation expenses	558	423	135
Total underwriting deductions	58,214	(7,246)	65,460
Underwriting income (a)	$3,763	$(4,037)	$7,800
Supplemental information:			
Losses and loss expenses			
Current period excluding items below	$41,108	$(21,167)	$62,275
Current period—notable loss events	—	—	—
Current period—non-notable loss events	—	—	—
Change in prior accident years	(7,328)	3,912	(11,240)
Total losses and loss expenses	$33,780	$(17,255)	$51,035
Selected ratios:			
Net premiums written / Gross premiums written	92.3%	2.2	90.1%
Losses and loss expense ratio			
Current period excluding items below	66.6%	(18.7)	85.3%
Current period—notable loss events	—%	—	—%
Current period—non-notable loss events	—%	—	—%
Change in prior accident years	(11.9)%	3.5	(15.4)%
Losses and loss expenses	54.7%	(15.2)	69.9%
Policy acquisition costs	23.2%	18.8	4.4%
General and administrative expenses (b)	16.4%	1.0	15.4%
Expense ratio	39.6%	19.8	19.8%
Combined ratio	94.3%	4.6	89.7%

(a) Non-GAAP Financial Measures. In presenting the Company's results, management has included and discussed underwriting income that is not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled "Non-GAAP Financial Measures."

(b) The general and administrative expense ratio includes share compensation expenses.

Fourth Quarter 2015 Summarized Results of Operations - Western World Segment

Highlights for the fourth quarter include the following:

- Gross premiums written for the three months ended December 31, 2015 were $71.1 million compared to $65.2 million for the three months ended December 31, 2014, an increase of $5.9 million, or 9.0%. Gross premiums written for the three months ended December 31, 2015 included $13.9 million of property premiums and $57.2 million of liability premiums, compared to $10.0 million of property premiums and $55.3 million of liability premiums for the three months ended December 31, 2014.
- The loss ratio for the three months ended December 31, 2015 was 54.7% compared to 69.9% for the three months ended December 31, 2014, a decrease of 15.2 percentage points. The loss ratio for the three months ended December 31, 2015 included favorable loss reserve development on prior accident years on non-event reserves in the amount of $7.3 million, benefiting the loss ratio by 11.9 percentage points. Of this, $2.3 million or 3.8 percentage points arose from the amortization of the risk premium adjustment accounted for at the time of the acquisition of Western World. The risk premium adjustment during the three months ended December 31, 2015 represents the last risk premium adjustment related to the acquisition. The loss ratio for the three months ended December 31, 2014 included favorable loss reserve development on prior accident years of $11.2 million, benefiting the loss ratio by 15.4 percentage points. Of this, $4.6 million or 6.3 percentage points arose from the amortization of the risk premium adjustment accounted for at the time of the acquisition of Western World.
- The combined ratio for the three months ended December 31, 2015 was 94.3% compared to 89.7% for the three months ended December 31, 2014, an increase of 4.6 percentage points.
- Underwriting income for the three months ended December 31, 2015 was $3.8 million compared to $7.8 million for the three months ended December 31, 2014, a decrease of $4.0 million, or 51.8%.

Full Year 2015 Results of Operations - Western World Segment

The Company acquired Western World on October 2, 2014, therefore, the results of Western World have been included in the Company's consolidated results from the date of acquisition.

The following table presents underwriting income for the years ended December 31, 2015 and 2014:

(Dollars in thousands)	Years Ended December 31, 2015	Change	2014 (c)
Underwriting income			
Gross premiums written	$278,504	$213,269	$65,235
Reinsurance premiums ceded	(18,877)	(12,449)	(6,428)
Net premiums written	259,627	200,820	58,807
Change in unearned premiums	(977)	(15,166)	14,189
Net premiums earned	258,650	185,654	72,996
Other insurance related income	1,044	780	264
Underwriting revenues	259,694	186,434	73,260
Underwriting deductions			
Losses and loss expenses	171,878	120,843	51,035
Policy acquisition costs	41,408	38,239	3,169
General and administrative expenses	38,715	27,594	11,121
Share compensation expenses	2,083	1,948	135
Total underwriting deductions	254,084	188,624	65,460
Underwriting income (a)	$5,610	$(2,190)	$7,800
Selected ratios:			
Net premiums written / Gross premiums written	93.2 %	3.1	90.1 %
Losses and loss expenses	66.4 %	(3.5)	69.9 %
Policy acquisition costs	16.0 %	11.6	4.4 %
General and administrative expense (b)	15.8 %	0.4	15.4 %
Expense ratio	31.8 %	12.0	19.8 %
Combined ratio	98.2 %	8.5	89.7 %

(a) Non-GAAP Financial Measures. In presenting the Company's results, management has included and discussed underwriting income that is not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled "Non-GAAP Financial Measures."

(b) The general and administrative expense ratio includes share compensation expenses.

(c) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

Gross Premiums Written

	Business Mix - Ratio of Gross Premiums Written by Line of Business to Total Gross Premiums Written								
	Years Ended December 31,								
	2015			Change			2014		
(Dollars in thousands)	Gross Premiums Written	% of Total		Gross Premiums Written	% of Total		Gross Premiums Written	% of Total	
Property	$53,018	19.0	%	$43,035	3.7		$9,983	15.3	%
Liability	225,486	81.0	%	170,234	(3.7	)	55,252	84.7	%
Total	$278,504	100.0	%	$213,269			$65,235	100.0	%

(a) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

The property lines consist largely of commercial package property, program and brokerage business. During the three months ended March 31, 2015, Western World began writing brokerage property business. Gross premiums written in the brokerage property class totaled $12.0 million for the year ended December 31, 2015. During the three months ended December 31, 2014, Western World discontinued writing binding authority commercial auto business and a large bar and tavern program. The liability lines consist largely of commercial package liability, program and other liability business.

Reinsurance Premiums Ceded

	Reinsurance Premiums Ceded		
	Years Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Property	$4,347	$2,812	$1,535
Liability	14,530	9,637	4,893
Total	$18,877	$12,449	$6,428

The Western World reinsurance program includes various treaties, including a binding authority excess of loss, brokerage casualty, brokerage professional, property per risk excess of loss and property catastrophe excess of loss.

Net Premiums Written

	Net Retention - Ratio of Net Premiums Written to Gross Premiums Written							
	Years Ended December 31,							
	2015			Change		2014		
(Dollars in thousands)	Net Premiums Written	% of Gross Premiums Written		Net Premiums Written	% of Gross Premiums Written	Net Premiums Written	% of Gross Premiums Written	
Property	$48,671	91.8	%	$40,223	7.2	$8,448	84.6	%
Liability	210,956	93.6	%	160,597	2.5	50,359	91.1	%
Total	$259,627	93.2	%	$200,820	3.1	$58,807	90.1	%

(a) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

Net premiums written and the net retention ratio were driven by the factors highlighted above in respect of gross premiums written and reinsurance premiums ceded.

Net Premiums Earned

	Net Premiums Earned		
	Years Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Property	$44,083	$32,829	$11,254
Liability	214,567	152,825	61,742
Total	$258,650	$185,654	$72,996

Net premiums earned were driven by the earnings pattern of net premiums written.

Losses and Loss Expenses

	Losses and Loss Expense Ratio - All Lines		
	Years Ended December 31,		
	2015	Change	2014
All lines—current period excluding items below	75.3 %	(10.0)	85.3 %
All lines—current period—notable loss events	0.0 %	0.0	0.0 %
All lines—current period—non-notable loss events	0.0 %	0.0	0.0 %
All lines—change in prior accident years (a)	(8.9)%	6.5	(15.4)%
All lines—loss ratio (a)	66.4 %	(3.5)	69.9 %

	Losses and Loss Expenses - All Lines		
	Years Ended December 31,		
(Dollars in thousands)	2015	Change	2014
All lines—current period excluding items below	$194,845	$132,570	$62,275
All lines—current period—notable loss events	—	—	—
All lines—current period—non-notable loss events	—	—	—
All lines—change in prior accident years (a)	(22,967)	(11,727)	(11,240)
All lines—losses and loss expenses (a)	$171,878	$120,843	$51,035

(a) Upon closing the acquisition, an adjustment of $15,586 was made to increase net reserves to reflect fair value. This adjustment was fully amortized to income through a reduction in losses and loss expenses of $10,979 during the year ended December 31, 2015 (2014: $4,607), benefiting the loss ratio by 4.2 percentage points (2014: 6.3 percentage points).

(b) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

Notable and Non-Notable Loss Events

There were no notable or non-notable loss events for the years ended December 31, 2015 or 2014.

Losses and Loss Expenses by Line of Business

	Losses and Loss Expense Ratio - Property Lines		
	Years Ended December 31,		
	2015	Change	2014
Property—current period excluding items below	66.1 %	(3.7)	69.8 %
Property—current period—notable loss events	0.0 %	0.0	0.0 %
Property—current period—non-notable loss events	0.0 %	0.0	0.0 %
Property—change in prior accident years (a)	(13.7)%	(22.8)	9.1 %
Property—loss ratio (a)	52.4 %	(26.5)	78.9 %

	Losses and Loss Expenses - Property Lines		
	Years Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Property—current period excluding items below	$29,149	$21,289	$7,860
Property—current period—notable loss events	—	—	—
Property—current period—non-notable loss events	—	—	—
Property—change in prior accident years (a)	(6,045)	(7,068)	1,023
Property—losses and loss expenses (a)	$23,104	$14,221	$8,883

(a) Upon closing the acquisition, an adjustment of $409 was made to decrease net reserves to reflect fair value. This adjustment was fully amortized to income through an increase in losses and loss expenses of $288 during the year ended December 31, 2015 (2014: $121), increasing the loss ratio by 0.7 percentage points (2014: 1.1 percentage points).

The property lines current period loss ratio was 66.1% percentage points, representing attritional claims experienced during the year. The favorable development of $6.0 million on prior accident years for the year ended December 31,

2015 primarily relates to favorable development on attritional losses.

	Losses and Loss Expense Ratio - Liability Lines		
	Years Ended December 31,		
	2015	Change	2014
Liability—current period excluding items below	77.2 %	(11.0)	88.2 %
Liability—current period—notable loss events	0.0 %	0.0	0.0 %
Liability—current period—non-notable loss events	0.0 %	0.0	0.0 %
Liability—change in prior accident years (a)	(7.9)%	12.0	(19.9)%
Liability—loss ratio (a)	69.3 %	1.0	68.3 %

	Losses and Loss Expenses - Liability Lines		
	Years Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Liability—current period excluding items above	$165,696	$111,281	$54,415
Liability—current period—notable loss events	—	—	—
Liability—current period—non-notable loss events	—	—	—
Liability—change in prior accident years (a)	(16,922)	(4,659)	(12,263)
Liability—losses and loss expenses (a)	$148,774	$106,622	$42,152

(a) Upon closing the acquisition, an adjustment of $15,995 was made to increase net reserves to reflect fair value. This adjustment was fully amortized to income through a reduction in losses and loss expenses of $11,267 during the year ended December 31, 2015 (2014: $4,728), benefiting the loss ratio by 5.3 percentage points (2014: 7.7 percentage points).

The liability lines current period loss ratio was 77.2% percentage points, representing attritional claims experienced during the period. The liability lines experienced favorable loss reserve development of $16.9 million during the year ended December 31, 2015 due to the amortization of the fair value adjustment as noted in the table footnote above and favorable development on attritional losses.

Policy Acquisition Costs

	Policy Acquisition Costs					
	Years Ended December 31,					
	2015		Change		2014	
(Dollars in thousands)	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned	Policy Acquisition Costs	% of Net Premiums Earned
Property	$6,948	15.8 %	$6,339	10.4	$609	5.4 %
Liability	34,460	16.1 %	31,900	12.0	2,560	4.1 %
Total (a)	$41,408	16.0 %	$38,239	11.6	$3,169	4.4 %

(a) Upon closing the acquisition, an adjustment of $34,736 was made to reduce deferred acquisition costs to reflect fair value. These deferred acquisition costs would otherwise have been expensed in the amount of $21,822 during the year ended December 31, 2015 (2014: $12,914) benefiting the policy acquisition cost ratio by 8.4 percentage points (2014:17.7 percentage points).

(b) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

The property acquisition cost ratio for the year ended December 31, 2015 was 15.8% and the liability acquisition cost ratio for the year ended December 31, 2015 was 16.1%. The impact of the acquisition fair value adjustments on the policy acquisition cost ratio as noted in the table footnote above.

Underwriting Income Before General and Administrative and Share Compensation Expenses

	Underwriting Income Before General and Administrative and Share Compensation Expenses		
	Years Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Property	$14,031	$12,269	$1,762
Liability	31,333	14,303	17,030
Other insurance related income	1,044	780	264
Total	$46,408	$27,352	$19,056

(a) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

The changes in underwriting income before general and administrative and share compensation expenses are driven by factors highlighted above in respect of gross premiums written, reinsurance premiums ceded, losses and loss expenses and policy acquisition costs.

General and Administrative and Share Compensation Expenses

	General and Administrative and Share Compensation Expenses					
	Years Ended December 31,					
	2015		Change		2014	
(Dollars in thousands)	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned	Expenses	% of Net Premiums Earned
General and administrative expenses	$38,715	15.0 %	$27,594	(0.2)	$11,121	15.2 %
Share compensation expenses	2,083	0.8 %	1,948	0.6	135	0.2 %
Total	$40,798	15.8 %	$29,542	0.4	$11,256	15.4 %

On an annualized basis, the decrease in general and administrative expenses of $5.8 million was primarily due to the decrease in professional fees related to the acquisition of Western World and a decrease in retention and salary costs as compared to the prior year. These decreases were offset by an increase in staff costs related to new offices opened in Boston and in New York. The increase in share compensation expenses of $1.5 million was primarily due to a full year's expenses on issued grants for the year ended December 31, 2015 compared to only one month expense on issued grants during the prior year.

Selected Underwriting Ratios

The following table presents the losses and loss expense ratio, policy acquisition cost ratio, general and administrative expense ratio, expense ratio and combined ratio for the years ended December 31, 2015 and 2014.

	Years Ended December 31,		
	2015	Change	2014
Losses and loss expense ratio	66.4 %	(3.5)	69.9 %
Policy acquisition cost ratio	16.0 %	11.6	4.4 %
General and administrative expense ratio (a)	15.8 %	0.4	15.4 %
Expense ratio	31.8 %	12.0	19.8 %
Combined ratio	98.2 %	8.5	89.7 %

(a) The general and administrative expense ratio includes share compensation expenses.

(b) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

The combined ratio for the year ended December 31, 2015 reflects the underlying ratios highlighted above.

Fourth Quarter 2015 Summarized Results of Operations - AlphaCat Segment

The following table presents Validus' share of the AlphaCat segment income on an asset manager basis for the three months ended December 31, 2015 and 2014:

	Three Months Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Revenue - management fees			
Third party	$5,039	$568	$4,471
Related party	1,251	(188)	1,439
Total revenue	6,290	380	5,910
Expenses			
General and administrative expenses	3,232	973	2,259
Share compensation expenses	140	(31)	171
Finance expenses	53	(1,564)	1,617
Foreign exchange (gains) losses	(7)	4	(11)
Total expenses	3,418	(618)	4,036
Income before investments from AlphaCat Funds and Sidecars	$2,872	$998	$1,874
Investment income (loss) from AlphaCat Funds and Sidecars (b)			
AlphaCat Sidecars	1,618	(1,400)	3,018
AlphaCat ILS Funds - Lower Risk (c)	2,037	149	1,888
AlphaCat ILS Funds - Higher Risk (c)	1,820	(699)	2,519
BetaCat ILS Funds	461	512	(51)
PaCRe	(1,708)	5,369	(7,077)
Total investment income from AlphaCat Funds and Sidecars	4,228	3,931	297
Validus' share of AlphaCat income	$7,100	$4,929	$2,171
Supplemental information:			
Gross premiums written			
AlphaCat Sidecars	$329	$562	$(233)
AlphaCat ILS Funds - Lower Risk (c)	1,275	938	337
AlphaCat ILS Funds - Higher Risk (c)	36	36	—
AlphaCat Direct (d)	(5)	(5)	—
Total	$1,635	$1,531	$104

(a) In presenting the Company’s results, management has included and discussed the results of AlphaCat, which are presented on an asset manager basis. Validus' share of AlphaCat income is a non-GAAP measure and is not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled “Non-GAAP Financial Measures.”

(b) The investment income from the AlphaCat funds and sidecars is based on equity accounting.

(c) Lower risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of less than 7%, whereas higher risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of greater than 7%. Expected loss represents the average annual loss over the set of simulation scenarios divided by the total limit.

(d) AlphaCat Direct includes direct investments from third party investors in AlphaCat Re.

Fourth Quarter 2015 Summarized Results of Operations - AlphaCat Segment

Highlights for the fourth quarter include the following:

- AlphaCat's assets under management were $2,386.2 million as at January 1, 2016, compared to $2,238.6 million as at October 1, 2015. Third party assets under management were $2,059.5 million as at January 1, 2016, compared to $1,877.4 million as at October 1, 2015. During the three months ended December 31, 2015, a total of $662.7 million of capital was raised, of which $629.2 million was raised from third parties, while $470.3 million was returned to PaCRe investors, including $423.3 million to third parties, as this entity was off risk as of January 1, 2016.
- Management fees earned for the three months ended December 31, 2015 were $6.3 million, of which $1.3 million were earned from related parties, compared to $5.9 million for the three months ended December 31, 2014, of which $1.4 million were earned from related parties. The increase of $0.4 million in management fees between periods was driven by an increase in assets under management.
- Total expenses for the three months ended December 31, 2015 were $3.4 million, compared to $4.0 million for the three months ended December 31, 2014, a decrease of $0.6 million. Included within the expenses for the three months ended December 31, 2015 was $0.1 million of non-recurring finance expenses related to the raising of third party capital.
- Income before investment income from AlphaCat Funds and Sidecars for the three months ended December 31, 2015 was $2.9 million, compared to $1.9 million for the three months ended December 31, 2014, an increase of $1.0 million.
- Investment income from AlphaCat Funds and Sidecars for the three months ended December 31, 2015 was $5.9 million, compared to $7.4 million for the three months ended December 31, 2014, a decrease of $1.4 million.
- Validus' share of PaCRe's net loss for the three months ended December 31, 2015 was $1.7 million, compared to $7.1 million for the three months ended December 31, 2014, a decrease of $5.4 million. As at December 31, 2015, PaCRe was off-risk and being wound down. The underlying investment in the Paulson hedge funds were liquidated effective November 30, 2015.
- Validus' share of AlphaCat's net income for the three months ended December 31, 2015 was $7.1 million, compared to $2.2 million for the three months ended December 31, 2014, an increase of $4.9 million. Excluding Validus' share of PaCRe's net loss, Validus' share of AlphaCat income for the three months ended December 31, 2015 was $8.8 million, compared to $9.3 million for the three months ended December 31, 2014, a decrease of $0.4 million.

Full Year 2015 Results of Operations - AlphaCat Segment

The following table presents Validus' share of the AlphaCat segment income on an asset manager basis for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Revenue - management fees					
Third party	$19,661	$994	$18,667	$2,038	$16,629
Related party	5,309	(2,158)	7,467	(2,226)	9,693
Total revenue	24,970	(1,164)	26,134	(188)	26,322
Expenses					
General and administrative expenses	12,115	1,981	10,134	1,733	8,401
Share compensation expenses	580	79	501	33	468
Finance expenses	9,312	5,895	3,417	(80)	3,497
Foreign exchange gains	(16)	4	(20)	(22)	2
Total expenses	21,991	7,959	14,032	1,664	12,368
Income before investments from AlphaCat Funds and Sidecars	$2,979	$(9,123)	$12,102	$(1,852)	$13,954
Investment income (loss) from AlphaCat Funds and Sidecars (b)					
AlphaCat Re & Master Fund	—	1,377	(1,377)	(2,399)	1,022
AlphaCat Sidecars	5,504	(5,021)	10,525	(1,871)	12,396
AlphaCat ILS Funds - Lower Risk (c)	7,491	(483)	7,974	126	7,848
AlphaCat ILS Funds - Higher Risk (c)	8,428	(326)	8,754	(2,004)	10,758
BetaCat ILS Funds	1,702	1,753	(51)	(51)	—
PaCRe	(3,949)	391	(4,340)	(4,882)	542
Total investment income from AlphaCat Funds and Sidecars	19,176	(2,309)	21,485	(11,081)	32,566
Validus' share of AlphaCat income	$22,155	$(11,432)	$33,587	$(12,933)	$46,520
Supplemental information:					
Gross premiums written					
AlphaCat Sidecars	$45,755	$(4,268)	$50,023	$(19,603)	$69,626
AlphaCat ILS Funds - Lower Risk (c)	91,363	39,099	52,264	9,153	43,111
AlphaCat ILS Funds - Higher Risk (c)	34,228	9,730	24,498	6,101	18,397
AlphaCat Direct (d)	4,780	4,780	—	—	—
Total	$176,126	$49,341	$126,785	$(4,349)	$131,134

(a) In presenting the Company’s results, management has included and discussed the results of AlphaCat, which are presented on an asset manager basis. Validus' share of AlphaCat income is a non-GAAP measure and is not calculated under standards or rules that comprise U.S. GAAP. Such measures are referred to as non-GAAP. Non-GAAP measures may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP. Further discussion of these measures is presented in the section entitled “Non-GAAP Financial Measures.”

(b) The investment income from the AlphaCat funds and sidecars is based on equity accounting.

(c) Lower risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of less than 7%, whereas higher risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of greater than 7%. Expected loss

represents the average annual loss over the set of simulation scenarios divided by the total limit.
(d) AlphaCat Direct includes direct investments from third party investors in AlphaCat Re.

Revenue - Management Fees
The increase in management fees earned from third parties of $1.0 million was driven by an increase in third party assets under management. The decrease in management fees earned from related parties of $2.2 million was driven by a decrease in related party assets under management.
Expenses
The increase in general and administrative expenses of $2.0 million was primarily due to an increase in staff costs and professional fees during the current year. The share compensation expenses for the years ended December 31, 2015 and 2014 were comparable. The increase in finance expenses of $5.9 million was primarily due to fees incurred in relation to raising new capital.
Investment income from AlphaCat Funds and Sidecars
The decrease in investment income from AlphaCat Funds and Sidecars of $2.7 million was primarily due to the reduction in related party assets under management and the change in the ratio of higher to lower risk investments during the current year. The decrease in Validus' share of PaCRe's net loss of $0.4 million was primarily due to reduced losses on the investment portfolio in PaCRe.
Assets Under Management

	Assets Under Management (a)		
	As at January 1,		
(Dollars in thousands)	2016	Change	2015
Assets Under Management - Related Party			
AlphaCat Sidecars	$ 35,416	$ (25,124)	$ 60,540
AlphaCat ILS Funds - Lower Risk (c)	164,014	26,248	137,766
AlphaCat ILS Funds - Higher Risk (c)	65,464	(10,212)	75,676
AlphaCat Direct (d)	—	—	—
BetaCat ILS Funds	61,749	39,778	21,971
PaCRe (b)	—	(50,954)	50,954
Total	$ 326,643	$ (20,264)	$ 346,907
Assets Under Management - Third Party			
AlphaCat Sidecars	$ 154,386	$ (135,018)	$ 289,404
AlphaCat ILS Funds - Lower Risk (c)	1,102,462	413,891	688,571
AlphaCat ILS Funds - Higher Risk (c)	434,851	337,571	97,280
AlphaCat Direct (d)	367,820	367,820	—
BetaCat ILS Funds	—	—	—
PaCRe (b)	—	(458,585)	458,585
Total	2,059,519	525,679	1,533,840
Total Assets Under Management	$ 2,386,162	$ 505,415	$ 1,880,747

(a) The Company’s assets under management are represented by investments made by related parties and third parties in the feeder funds and on a direct basis.
(b) There are no PaCRe assets under management as at January 1, 2016.
(c) Lower risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of less than 7%, whereas higher risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of greater than 7%. Expected loss represents the average annual loss over the set of simulation scenarios divided by the total limit.
(d) AlphaCat Direct includes direct investments from third party investors in AlphaCat Re.

AlphaCat's assets under management were $2.4 billion as at January 1, 2016, compared to $1.9 billion as at January 1, 2015. Third party assets under management were $2.1 billion as at January 1, 2016, compared to $1.5 billion as at January 1, 2015. During the year ended December 31, 2015, a total of $1,171.7 million of capital was raised, of which $1,097.9 million was raised from third parties. During the year ended December 31, 2015, $755.7 million was returned to investors, of which $625.3 million was returned to third party investors. The amounts returned to investors included $470.3 million returned to PaCRe investors, which included $423.3 million to third parties, as this entity was off risk as of January 1, 2016.

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Fourth Quarter 2015 Summarized Consolidated Non-Segment Results

The following table presents non-segment income and expense items on a consolidated basis for the three months ended December 31, 2015 and 2014:

	Three Months Ended December 31,		
(Dollars in thousands)	2015	Change	2014
Investment income			
Net investment income (a)	$29,885	$1,448	$28,437
Operating expenses			
General and administrative expenses	(24,222)	(4,528)	(19,694)
Share compensation expenses	(3,501)	(511)	(2,990)
Finance expenses (a)	(15,448)	(480)	(14,968)
Tax expenses	756	513	243
Total operating expenses	(42,415)	(5,006)	(37,409)
Other items			
Net realized (losses) gains on investments (a)	(3,353)	(9,550)	6,197
Change in net unrealized losses on investments (a)	(34,515)	(33,045)	(1,470)
(Loss) income from investment affiliate	(1,261)	(1,791)	530
Foreign exchange gains (a)	852	(3,005)	3,857
Other income (loss)	1,576	2,346	(770)
Transaction expenses (b)	—	4,695	(4,695)
Total other items	(36,701)	(40,350)	3,649
Total corporate and investment information	$(49,231)	$(43,908)	$(5,323)

(a) These items exclude the components which are included in the Company's share of AlphaCat and amounts which are consolidated from VIEs.

(b) The Company acquired Western World on October 2, 2014, therefore the results of Western World have been included in the Company's consolidated results from the date of acquisition. The transaction expenses relate to costs incurred in connection with the acquisition of Western World and are primarily comprised of legal, financial advisory, and audit related services.

Highlights for the fourth quarter include the following:

- Net investment income for the three months ended December 31, 2015 was $29.9 million compared to $28.4 million for the three months ended December 31, 2014, an increase of $1.4 million, or 5.1%.
- General and administrative expenses for the three months ended December 31, 2015, were $24.2 million compared to $19.7 million for the three months ended December 31, 2014, an increase of $4.5 million or 23.0%.
- Share compensation expenses for the three months ended December 31, 2015 were $3.5 million compared to $3.0 million for the three months ended December 31, 2014, an increase of $0.5 million or 17.1%.
- Net realized losses on investments for the three months ended December 31, 2015 were $3.4 million compared to gains of $6.2 million for the three months ended December 31, 2014, a decrease of $9.6 million.
- The change in net unrealized losses on investments for the three months ended December 31, 2015 was $34.5 million compared to $1.5 million for the three months ended December 31, 2014, an unfavorable movement of $33.0 million.

Full Year 2015 Summarized Consolidated Non-Segment Results

The following table presents non-segment income and expense items on a consolidated basis for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Investment income					
Net investment income (a)	$121,166	$25,366	$95,800	$3,593	$92,207
Operating expenses					
General and administrative expenses	(75,724)	4,486	(80,210)	(2,367)	(77,843)
Share compensation expenses	(12,955)	(1,603)	(11,352)	(1,471)	(9,881)
Finance expenses (a)	(61,071)	(762)	(60,309)	(1,866)	(58,443)
Tax expenses	(6,376)	(6,221)	(155)	228	(383)
Total operating expenses	(156,126)	(4,100)	(152,026)	(5,476)	(146,550)
Other items					
Net realized gains (losses) on investments (a)	1,698	(10,462)	12,160	12,986	(826)
Change in net unrealized losses on investments (a)	(32,007)	(30,977)	(1,030)	53,558	(54,588)
Income from investment affiliate	4,281	(4,130)	8,411	3,621	4,790
Foreign exchange (losses) gains (a)	(8,172)	2,528	(10,700)	(14,024)	3,324
Other loss	(1,002)	1,241	(2,243)	8,534	(10,777)
Transaction expenses (b)	—	8,096	(8,096)	(8,096)	—
Total other items	(35,202)	(33,704)	(1,498)	56,579	(58,077)
Total corporate and investment information	$(70,162)	$(12,438)	$(57,724)	$54,696	$(112,420)

(a) These items exclude the components which are included in the Company's share of AlphaCat and amounts which are consolidated from VIEs.

(b) The Company acquired Western World on October 2, 2014, therefore the results of Western World have been included in the Company's consolidated results from the date of acquisition. The transaction expenses relate to costs incurred in connection with the acquisition of Western World and are primarily comprised of legal, financial advisory, and audit related services.

Net Investment Income

	Net Investment Income Years Ended December 31,				
(Dollars in thousands)	2015	Change	2014	Change	2013
Managed investments					
Fixed maturities and short-term investments	$113,627	$20,583	$93,044	$(2,342)	$95,386
Other investments	13,307	8,196	5,111	5,111	—
Cash and cash equivalents	1,911	(3,195)	5,106	428	4,678
Securities lending income	16	5	11	5	6
Total gross investment income	128,861	25,589	103,272	3,202	100,070
Investment expenses	(7,695)	(223)	(7,472)	391	(7,863)
Total managed net investment income	$121,166	$25,366	$95,800	$3,593	$92,207

The increase in managed net investment income for the year ended December 31, 2015 was $25.4 million or 26.5% and was primarily due to a change in asset allocation intended to improve yield. Managed net investment income from other investments includes distributed and undistributed net income from certain investments.

The Company's managed yield-bearing portfolio had an effective yield of 1.91% for the year ended December 31, 2015 (2014: 1.51%). Investment yield is calculated by dividing total managed net investment income by the average balance of the yield bearing assets managed by the Company's portfolio managers. Average assets for the year ended

is the average of the beginning, ending and intervening quarter end asset balances.

General and Administrative and Share Compensation Expenses

Corporate general and administrative expenses for the year ended December 31, 2015, excluding eliminations, were $75.7 million compared to $80.2 million for the year ended December 31, 2014, a decrease of $4.5 million or 5.6%. This decrease was due primarily to the retention of certain costs within the operating segments. Corporate general and administrative expenses are comprised of executive and board expenses, internal and external audit expenses and other costs relating to the Company as a whole.

Corporate share compensation expenses for the year ended December 31, 2015 were $13.0 million compared to $11.4 million for the year ended December 31, 2014, an increase of $1.6 million or 14.1%.

Finance Expenses

Finance expenses, excluding the Company's share of AlphaCat finance expenses from consolidated VIEs, for the year ended December 31, 2015 were $61.1 million compared to $60.3 million for the year ended December 31, 2014, an increase of $0.8 million or 1.3%.

Tax expenses

Tax expenses for the year ended December 31, 2015, were $6.4 million compared to $0.2 million for the year ended December 31, 2014, an increase of $6.2 million. This increase was primarily driven by the Company's ongoing expansion in the U.S.

As of December 31, 2015, the Company had pre-tax net operating loss carry forwards (“NOLs”) of approximately $651.6 million that are available to offset future taxable income. Some of the NOLs will begin expiring in 2018 and others are available to reduce future taxable income over an indefinite period of time. As of December 31, 2015, the Company had a gross deferred tax asset related to our NOLs of $167.9 million against which a full valuation allowance was provided.

For further information about income taxes refer to Note 21, "Income taxes," to the Consolidated Financial Statements in Part II, Item 8.

Net Realized and Change in Net Unrealized (Losses) Gains on Investments

Net realized gains on managed investments for the year ended December 31, 2015 were $1.7 million compared to $12.2 million for the year ended December 31, 2014, an unfavorable movement of $10.5 million. The realized gains primarily resulted from the sale of managed fixed maturities.

The change in net unrealized losses on managed investments for the year ended December 31, 2015 was $32.0 million compared to $1.0 million for the year ended December 31, 2014, an unfavorable movement of $31.0 million. The unfavorable movement was primarily due to a rising interest rate environment during 2015 as compared to 2014.

Income From Investment Affiliate

The income from investment affiliate relates to the income earned from the Company's investment in the Aquiline Financial Services Fund II L.P. which is recorded on a three-month lag and therefore reflects the underlying performance of that fund for the twelve months ended September 30, 2015, 2014 and 2013. For further details, refer to Note 10, "Investments in affiliates," to the Consolidated Financial Statements in Part II, Item 8.

Foreign Exchange (Losses) Gains

The Company's reporting currency is the U.S. dollar. As a significant portion of the Company's operations are transacted in currencies other than the U.S. dollar, fluctuations in foreign exchange rates may affect year-to-year comparisons. The Company's largest foreign currency fluctuation exposure is to the following currencies, with the movement in each currency against the U.S. dollar for the years ended December 31, 2015, 2014 and 2013 shown in the table below:

	Years Ended December 31,					
U.S. dollar (weakened) strengthened against:	2015		2014		2013	
British Pound sterling	5.4	%	6.3	%	(1.9	)%
Euro	11.4	%	13.5	%	(4.0	)%
Canadian dollar	19.2	%	9.4	%	6.8	%
Swiss franc	0.7	%	11.3	%	(2.5	)%
Australian dollar	11.8	%	9.1	%	16.6	%
New Zealand dollar	14.2	%	5.5	%	0.6	%
Singapore dollar	6.5	%	5.0	%	3.4	%
Japanese yen	0.8	%	13.7	%	21.4	%
South African rand	34.3	%	10.4	%	23.8	%

Foreign exchange losses for the year ended December 31, 2015 were $8.2 million compared to losses of $10.7 million for the year ended December 31, 2014, a favorable movement of $2.5 million, or 23.6%, due primarily to the U.S. dollar strengthening against the Australian, Canadian, and New Zealand dollars, the Euro, the British Pound sterling and the South African Rand.

The Company currently hedges foreign currency exposure by substantively balancing assets (primarily cash and premium receivables) with liabilities (primarily case reserves and event IBNR) for certain major non-U.S. dollar currencies, or by entering into forward foreign currency contracts. Consequently, the Company aims to have a limited exposure to foreign exchange fluctuations.

Other Loss

Other loss for the years ended December 31, 2015 and 2014 of $1.0 million and $2.2 million, respectively, primarily resulted from adjustments related to assets acquired in the purchase of Flagstone.

Transaction Expenses

Transaction expenses for the year ended December 31, 2015 were $nil compared to $8.1 million for the year ended December 31, 2014. The transaction expenses relate to costs incurred in connection with the acquisition of Western World and are primarily comprised of legal, financial advisory, and audit related services. The Company acquired Western World on October 2, 2014, therefore the results of Western World have been included in the Company's consolidated results from the date of acquisition.

Non-GAAP Financial Measures

The operating results of an insurance or reinsurance company are also often measured by reference to its underwriting income and net operating income, which are non-GAAP financial measures. Underwriting income and net operating income available to Validus, as set out in the table below, is reconciled to net income available to Validus (the most directly comparable GAAP financial measure) by the addition or subtraction of certain Consolidated Statement of Comprehensive Income (Loss) line items, as illustrated below.

	Three Months Ended December 31,	
(Dollars in thousands)	2015	2014 (a)
Underwriting income	$118,611	$137,161
Net investment income	31,612	30,169
Finance expenses	(16,581)	(17,605)
Tax benefit	756	243
Loss from operating affiliates	(1,708)	(7,077)
(Income) attributable to AlphaCat investors	(974)	—
Net operating income attributable to noncontrolling interest	(26,321)	(21,017)
Net operating income available to Validus	$105,395	$121,874
Net realized (losses) gains on investments	(2,928)	6,902
Change in net unrealized losses on investments	(34,862)	(2,040)
(Loss) income from investment affiliate	(1,261)	530
Foreign exchange gains	797	3,674
Other income (loss)	1,576	(770)
Transaction expenses	—	(4,695)
Net loss attributable to noncontrolling interest	325	433
Net income available to Validus	$69,042	$125,908

	Years Ended December 31,		
(Dollars in thousands)	2015	2014 (a)	2013
Underwriting income	$463,061	$529,610	$622,128
Net investment income	127,824	100,086	96,089
Finance expenses	(74,742)	(68,324)	(68,007)
Tax expense	(6,376)	(155)	(383)
(Loss) income from operating affiliates	(3,949)	(4,340)	542
(Income) attributable to AlphaCat investors	(2,412)	—	—
Net operating (income) attributable to noncontrolling interest	(93,657)	(76,115)	(61,396)
Net operating income available to Validus	$409,749	$480,762	$588,973
Net realized gains (losses) on investments	2,298	14,917	(764)
Change in net unrealized losses on investments	(32,395)	(2,842)	(52,419)
Income from investment affiliate	4,281	8,411	4,790
Foreign exchange (losses) gains	(8,731)	(12,181)	3,949
Other loss	(1,002)	(2,243)	(10,777)
Transaction expenses	—	(8,096)	—
Net loss (income) attributable to noncontrolling interest	693	1,235	(1,086)
Net income available to Validus	$374,893	$479,963	$532,666

(a) The results of operations for Western World are consolidated from the October 2, 2014 date of acquisition.

The Company uses underwriting income as a primary measure of underwriting results in its analysis of historical financial information and when performing its budgeting and forecasting processes. Analysts, investors and rating agencies who follow the Company request this non-GAAP financial information on a regular basis. In addition, underwriting income is one of the factors considered by the compensation committee of our Board of Directors in determining the total annual incentive compensation.

Underwriting income is the primary financial measure for the Company's insurance and reinsurance operating segments: Validus Re, Talbot and Western World. The results of the AlphaCat operating segment are presented on an asset manager basis, which is also non-GAAP. Refer to Part II, Item 8, Note 26. "Segment information," for a reconciliation of segmental income to net income available to Validus.

Net operating income available to Validus indicates the performance of the Company’s core underwriting function and includes net investment income, finance expenses, tax expense, income (loss) from operating affiliates and (income) attributable to AlphaCat investors and excludes net operating (income) attributable to noncontrolling interest and certain other revenues and expenses such as the reconciling items in the table above. The Company believes the reporting of net operating income available to Validus enhances the understanding of results by highlighting the underlying profitability of the Company’s core insurance and reinsurance business. This profitability is influenced significantly by earned premium growth, adequacy of the Company’s pricing and loss frequency and severity. Over time it is also influenced by the Company’s underwriting discipline, which seeks to manage exposure to loss through favorable risk selection and diversification, its management of claims, its use of reinsurance and its ability to manage its expense ratio, which it accomplishes through its management of acquisition costs and other underwriting expenses. The Company excludes the U.S. GAAP measures noted above, in particular net realized and change in net unrealized gains and losses on investments, from its calculation of net operating income available to Validus because the amount of these gains and losses is heavily influenced by, and fluctuates in part, according to availability of investment market opportunities. The Company believes these amounts are largely independent of its core underwriting activities and including them distorts the analysis of trends in its operations. In addition to presenting net income available to Validus determined in accordance with U.S. GAAP, the Company believes that showing underwriting income and net operating income available to Validus provides investors with a valuable measure of profitability and enables investors, analysts, rating agencies and other users of its financial information to more easily analyze the Company’s results in a manner similar to how management analyzes the Company’s underlying business performance.

Underwriting income and net operating income available to Validus should not be viewed as a substitute for U.S. GAAP net income available to Validus as there are inherent material limitations associated with the use of underwriting income and net operating income available to Validus as compared to using net income available to Validus, which is the most directly comparable U.S. GAAP financial measure. The most significant limitation is the ability of users of the financial information to make comparable assessments of underwriting income and operating income with other companies, particularly as these measures may be defined or calculated differently by other companies. Therefore, the Company provides prominence in this filing to the use of the most comparable U.S. GAAP financial measure, net income available to Validus, which includes the reconciling items in the table above. The Company compensates for these limitations by providing both clear and transparent disclosure of net income available to Validus and reconciliation of underwriting income and net operating income available to Validus to net income available to Validus.

In presenting the Company's results, management has also included and discussed certain schedules containing book value and tangible book value per diluted common share and book value per diluted common share plus accumulated dividends that are not calculated in accordance with U.S. GAAP.

Such measures described above which are referred to as non-GAAP, may be defined or calculated differently by other companies. These measures should not be viewed as a substitute for those determined in accordance with U.S. GAAP.

The following tables present reconciliations of book value per diluted common share to book value per common share, the most comparable U.S. GAAP financial measure, at December 31, 2015 and December 31, 2014.

	As at December 31, 2015			
(Dollars in thousands, except share and per share amounts)	Equity Amount	Shares	Exercise Price (a)	Book Value Per Share
Book value per common share				
Total shareholders' equity available to Validus	$3,638,975	82,900,617		$43.90
Tangible book value per common share				$40.06
Book value per diluted common share				
Total shareholders' equity available to Validus	3,638,975	82,900,617		
Assumed exercise of outstanding warrants (b)	—	—	$—	
Assumed exercise of outstanding stock options (b)	1,319	65,401	$20.17	
Unvested restricted shares	—	3,026,376		
Book value per diluted common share	$3,640,294	85,992,394		$42.33
Adjustment for accumulated dividends				10.16
Book value per diluted common share plus accumulated dividends				$52.49
Tangible book value per diluted common share				$38.63

	As at December 31, 2014			
(Dollars in thousands, except share and per share amounts)	Equity Amount	Shares	Exercise Price (a)	Book Value Per Share
Book value per common share				
Total shareholders' equity available to Validus	$3,586,586	83,869,845		$42.76
Tangible book value per common share				$38.91
Book value per diluted common share				
Total shareholders' equity available to Validus	3,586,586	83,869,845		
Assumed exercise of outstanding warrants (b)	90,950	5,174,114	$17.58	
Assumed exercise of outstanding stock options (b)	20,581	1,160,057	$17.74	
Unvested restricted shares	—	3,068,564		
Book value per diluted common share	$3,698,117	93,272,580		$39.65
Adjustment for accumulated dividends				8.88
Book value per diluted common share plus accumulated dividends				$48.53
Tangible book value per diluted common share				$36.19

(a) Weighted average exercise price for those warrants and stock options that have an exercise price lower than book value per share.

(b) Using the "as-if-converted" method, assuming all proceeds received upon exercise of warrants and stock options will be retained by the Company and the resulting common shares from exercise remain outstanding.

Liquidity and Capital Resources
Investments
During the fourth quarter of 2015, the Company enhanced disclosures around the allocation of invested assets and the related returns between managed and non-managed cash and investments. Non-managed cash and investments represent assets held in support of consolidated AlphaCat VIEs, refer to Note 9, "Variable interest entities," to the Consolidated Financial Statements in Part II, Item 8 for further details. As such, prior period disclosures have been revised to conform to current period presentation.
At December 31, 2015, the Company's managed cash and investment portfolio totaled $6.4 billion, compared to $6.7 billion at December 31, 2014, a decrease of $0.2 billion, or 3.3%, primarily as a result of share repurchases under the Company's share repurchase program. Refer to Note 7, "Investments," to the Consolidated Financial Statements in Part II, Item 8 for further details.
A significant portion of (re)insurance contracts written by the Company provide short-tail reinsurance coverage for losses resulting mainly from natural and man-made catastrophes, which could result in payment of a substantial amount of losses at short notice. Accordingly, the Company's investment portfolio is primarily structured to provide liquidity, which means the investment portfolio contains a significant amount of relatively short-term fixed maturity investments. The Company's IPS specifically requires certain minimum thresholds of cash, short-term investments, and highly-rated fixed maturity securities relative to our consolidated net reserves and estimates of probable maximum loss exposures at the 1 in 100 year threshold to provide necessary liquidity in a wide range of reasonable scenarios. As such, we structure our managed cash and investment portfolio to support policyholder reserves and contingent risk exposures with a liquid portfolio of high quality fixed-income investments with a comparable duration profile.
The Company's IPS requires managed investments to have an average duration in the range of 0.75 years to 3.00 years. At December 31, 2015, the average duration of the Company's managed investment portfolio was 2.15 years (December 31, 2014: 1.96 years). This duration is reviewed regularly based on changes in the duration of the Company's liabilities and in general market conditions.
The Company's IPS also requires certain minimum credit quality standards for its managed fixed maturity portfolio, including a minimum weighted average portfolio rating of A+. Further limits on asset classes and security types are also mandated. In addition, the Company stress-tests the downside risks within its asset portfolio using internal and external inputs and stochastic modeling processes to help define and limit asset risks to acceptable levels that are consistent with our overall ERM framework. At December 31, 2015, the Company's managed fixed maturity portfolio had an average credit quality rating of A+ (December 31, 2014: AA-).
The value of the Company's managed fixed maturity portfolio will fluctuate with, among other factors, changes in the interest rate environment and in overall economic conditions. Additionally, the structure of the Company's overall managed investment portfolio exposes the Company to other risks, including insolvency or reduced credit quality of corporate debt securities, prepayment, default and structural risks on asset-backed securities, mortgage-backed securities and bank loans and liquidity risks on certain other investments, including hedge funds, investment funds and private equity investments. For further details on market risks, refer to Part I, Item 7A "Quantitative And Qualitative Disclosures About Market Risk".

As part of the ongoing risk management process, the Company monitors the aggregation of country or jurisdiction risk exposure. Jurisdiction risk exposure is the risk that events within a jurisdiction, such as currency crises, regulatory changes and other political events, will adversely affect the ability of obligors within the jurisdiction to honor their obligations. The following table provides a breakdown of the fair value of jurisdiction risk exposures outside the United States within the Company's managed fixed maturity portfolio:

	As at December 31, 2015		
(Dollars in thousands)	Fair Value	% of Total	
Germany	$53,259	7.8	%
United Kingdom	48,254	7.1	%
Supranational	33,019	4.8	%
France	21,075	3.1	%
Province of Ontario	15,896	2.3	%
Norway	15,861	2.3	%
Province of Manitoba	12,981	1.9	%
Jordan	10,073	1.5	%
Other (individual jurisdictions below $10,000)	27,550	4.0	%
Total Managed Non-U.S. Government Securities	237,968	34.8	%
European Corporate Securities	183,501	26.8	%
United Kingdom Corporate Securities	131,656	19.2	%
Other Non-U.S. Corporate Securities	131,413	19.2	%
Total Managed Non-U.S. Fixed Maturity Portfolio	$684,538	100.0	%

At December 31, 2015, the Company did not have an aggregate exposure to any single issuer of more than 0.9% of managed cash and investments, other than with respect to government and agency securities. The top ten exposures to fixed income corporate issuers at December 31, 2015 are as follows:

(Dollars in thousands)	As at December 31, 2015			
Issuer (a)	Fair Value (b)	S&P Rating (c)	% of Total Managed Cash and Investments	
JPMorgan Chase & Co	$56,421	A-	0.9	%
HSBC Holdings plc	54,172	A	0.8	%
Morgan Stanley	47,242	BBB+	0.7	%
Bank of America Corp	43,274	BBB	0.7	%
Goldman Sachs Group	43,173	BBB+	0.7	%
Citigroup Inc	41,984	BBB	0.7	%
Wells Fargo & Company	39,604	BBB+	0.6	%
US Bancorp	34,294	AA-	0.5	%
Bank of New York Mellon Corp	33,492	A	0.5	%
UBS Group AG	31,495	A-	0.5	%
Total	$425,151		6.6	%

(a) Issuers exclude government-backed government-sponsored enterprises and cash and cash equivalents.

(b) Credit exposures represent only direct exposure to fixed maturities and short-term investments of the parent issuer and its major subsidiaries. These exposures exclude asset and mortgage backed securities that were issued, sponsored or serviced by the parent.

(c) Investment ratings are the median of Moody's, Standard & Poor's and Fitch, presented in Standard & Poor's equivalent rating. For investments where three ratings are unavailable, the lower of the ratings shall apply, presented in Standard & Poor's equivalent rating.

Reserve for Losses and Loss Expenses

At December 31, 2015, gross and net reserves for losses and loss expenses were estimated using the methodology as outlined in the Critical Accounting Policies and Estimates section below. The following tables indicate the breakdown of gross and net reserves for losses and loss expenses between lines of business and between case reserves and IBNR.

	As at December 31, 2015		
(Dollars in thousands)	Gross Case Reserves	Gross IBNR	Total Gross Reserve for Losses and Loss Expenses
Property	$426,772	$444,771	$871,543
Marine	386,161	420,200	806,361
Specialty	282,310	448,530	730,840
Liability	183,454	404,369	587,823
Total	$1,278,697	$1,717,870	$2,996,567

	As at December 31, 2015		
(Dollars in thousands)	Net Case Reserves	Net IBNR	Total Net Reserve for Losses and Loss Expenses
Property	$378,422	$397,155	$775,577
Marine	346,678	375,611	722,289
Specialty	246,344	399,035	645,379
Liability	171,530	331,206	502,736
Total	$1,142,974	$1,503,007	$2,645,981

The following table sets forth a reconciliation of gross and net reserves for losses and loss expenses by segment for the year ended December 31, 2015.

	Year Ended December 31, 2015					
(Dollars in thousands)	Validus Re Segment	Talbot Segment	Western World	AlphaCat Segment	Eliminations	Total
Reserve for losses and loss expenses, beginning of year	$1,333,878	$1,352,056	$613,551	$15,278	$(71,616)	$3,243,147
Losses and loss expenses recoverable	(70,279)	(290,581)	(88,222)	—	71,616	(377,466)
Net reserves for losses and loss expenses, beginning of year	1,263,599	1,061,475	525,329	15,278	—	2,865,681
Increase (decrease) in net reserves for losses and loss expenses in respect of losses occurring in:						
Current year	586,592	493,679	194,845	8,854	—	1,283,970
Prior years	(128,616)	(146,357)	(22,967)	(8,197)	—	(306,137)
Total incurred losses and loss expenses	457,976	347,322	171,878	657	—	977,833
Foreign exchange	(16,674)	(13,015)	—	(5)	—	(29,694)
Net paid losses	(594,087)	(386,809)	(182,026)	(4,917)	—	(1,167,839)
Net reserves for losses and loss expenses, end of year	1,110,814	1,008,973	515,181	11,013	—	2,645,981
	36,055	293,662	85,150	—	(64,281)	350,586

Losses and loss expenses recoverable						
Reserve for losses and loss expenses, end of year	$1,146,869	$1,302,635	$600,331	$11,013	$(64,281)	$2,996,567

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The amount of recorded reserves represents management’s best estimate of expected losses and loss expenses on premiums earned. For the year ended December 31, 2015, favorable loss reserve development on prior accident years was $306.1 million, of which $128.6 million related to the Validus Re segment, $146.4 million related to the Talbot segment, $23.0 million related to the Western World segment and $8.2 million related to the AlphaCat segment. Incurred losses for the year ended December 31, 2015 included $97.0 million of losses from notable loss events, of which $72.5 million related to the Validus Re segment and $24.5 million related to the Talbot segment.

The management of insurance and reinsurance companies use significant judgment in the estimation of reserves for losses and loss expenses. Given the magnitude of some notable loss events and other uncertainties inherent in loss estimation, meaningful uncertainty remains regarding the estimation for these events. The Company's actual ultimate net loss may vary materially from these estimates. Ultimate losses for notable loss events are estimated through detailed review of contracts which are identified by the Company as potentially exposed to the specific notable loss event. However, there can be no assurance that the ultimate loss amount estimated for a specific contract will be accurate, or that all contracts with exposure to a specific notable loss event will be identified in a timely manner. Potential losses in excess of the estimated ultimate loss assigned to a contract on the basis of a specific review, or loss amounts from contracts not specifically included in the detailed review may be reserved for in the reserve for potential development on notable loss events. Any reserve for potential development on notable loss events (or “RDE”) is included as part of the Company's overall reserve as defined and disclosed in the Critical Accounting Policies and Estimates section.

As at December 31, 2012, the reserve for potential development on 2011 notable loss events was $42.2 million. During the year ended December 31, 2013, the Company allocated the full $42.2 million to the New Zealand earthquake and Gryphon Alpha mooring failure, both 2011 events. Contract complexity, the nature and number of perils arising from these events, limits and sub limits exposed, the quality, flow and timing of information received by the Company, information regarding retrocessional covers, assumptions, both explicit and implicit, regarding future paid and reported loss development patterns, frequency and severity trends, claims settlement practices and potential changes in the legal environment led to complexity and volatility in the ultimate loss estimates for these events. As at December 31, 2013, the reserve for potential development on 2010 and 2011 notable loss events had been fully allocated, respectively. No RDE has been established for 2013, 2014 or 2015 notable loss events; therefore, as at December 31, 2015 the Company had no reserve for potential development on notable loss events.

For disclosure purposes, only those notable loss events which have an ultimate loss estimate above $30.0 million are disclosed separately and included in the reserves for notable loss event roll forward table below. To the extent that there are increased complexity and volatility factors relating to notable loss events in the aggregate, additions to the RDE may be established for a specific accident year. The Company increased the threshold for disclosure for notable loss events effective January 1, 2011, from $5.0 million to $15.0 million and further increased the threshold effective January 1, 2013 from $15.0 million to $30.0 million. Non-notable losses events which aggregate to $15.0 million or more but less than $30.0 million on a consolidated basis have been disclosed from January 1, 2013.

The reserves for notable loss events table below does not disclose 2010, 2011 or 2012 notable loss events. Deepwater Horizon, a 2010 event, had closing reserves of $19.7 million as at December 31, 2015. The New Zealand earthquakes of 2010 and 2011, had total closing reserves of $119.1 million as at December 31, 2015. Superstorm Sandy, a 2012 event, had total closing reserves of $68.4 million as at December 31, 2015 and Costa Concordia, also a 2012 event, had total closing reserves of $27.5 million as at December 31, 2015.
Reserves for Notable Loss Events (Dollars in thousands)

2013 Notable Loss Event		Years Ended December 31,								
		2013			2014			2015		
Notable Loss Event	Initial Estimate (a)	Development (Favorable) / Unfavorable (b)	Allocations of RDE	Closing Estimate (c) December 31, 2013	Development (Favorable) / Unfavorable (b)	Allocations of RDE	Closing Estimate (c) December 31, 2014	Development (Favorable) / Unfavorable (b)	Allocations of RDE	Closing Estimate (c) December 31, 2015
European Floods	$77,587	$(16,762)	—	$60,825	$(25,938)	—	$34,887	(4,589)	—	$30,298

	Years Ended December 31,					
	2013		2014		2015	
Notable Loss Event	Paid Loss (Recovery)	Closing Reserve (d) December 31, 2013	Paid Loss (Recovery)	Closing Reserve (d) December 31, 2014	Paid Loss (Recovery)	Closing Reserve (d) December 31, 2015
European Floods	$8,006	$52,819	$11,864	$15,017	$3,830	$6,598

2014 Notable Loss Event		Years Ended December 31,					
		2014			2015		
Notable Loss Event	Initial Estimate (a)	Development (Favorable) / Unfavorable (b)	Allocations of RDE	Closing Estimate (c) December 31, 2014	Development (Favorable) / Unfavorable (b)	Allocations of RDE	Closing Estimate (c) December 31, 2015
Tripoli Airport (e)	$28,134	$6,810	—	$34,944	$(1,196)	—	$33,748

	Years Ended December 31,			
	2014		2015	
Notable Loss Event	Paid Loss (Recovery)	Closing Reserve (d) December 31, 2014	Paid Loss (Recovery)	Closing Reserve (d) December 31, 2015
Tripoli Airport (e)	$—	$34,944	$22,938	$10,810

Years Ended December 31,

2015 Notable Loss Events

Notable Loss Events	Initial Estimate (a)	2015 Development (Favorable) / Unfavorable (b)	Allocations of RDE	Closing Estimate (c) December 31, 2015
Pemex	$48,074	$1,464	—	$49,538
Tianjin	47,789	(362)	—	47,427
Total 2015 Notable Loss Events	$95,863	$1,102	$—	$96,965

Notable Loss Events	Years Ended December 31, 2015 Paid Loss (Recovery)	Closing Reserve (d) December 31, 2015
Pemex	$44	$49,494
Tianjin	—	47,427
Total 2015 Notable Loss Events	$44	$96,921

(a) Includes paid losses, case reserves and IBNR reserves.
(b) Development other than allocation of RDE.
(c) Excludes impact of movements in foreign exchange rates.
(d) Closing Reserve for the period equals Closing Estimate for the period less cumulative Paid Losses (Recovery).
(e) As at September 30, 2014, the initial estimate for Tripoli Airport was below the $30.0 million notable loss event threshold; however, during the fourth quarter of 2014 adverse development caused this event to exceed the notable loss event threshold.

Sources of Liquidity

Holding Company Liquidity

Validus Holdings, Ltd. is a holding company and conducts no operations of its own. The Company relies primarily on cash dividends and other permitted payments from operating subsidiaries within the Validus Re, Talbot, Western World and AlphaCat segments to pay dividends, finance expenses and other holding company expenses. There are restrictions on the payment of dividends from most operating subsidiaries, primarily due to regulatory requirements in the jurisdictions in which the operating subsidiaries are domiciled. Refer to Part I, Item 1, "Regulation" and 27, “Statutory and regulatory requirements,” to the Consolidated Financial Statements for further discussion on the regulatory requirements in the jurisdictions in which the Company operates. Also refer to Part II, Item 5, “Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities” for further discussion of the Company’s dividend policy. The Company believes the dividend/distribution capacity of the Company’s subsidiaries will provide the Company with sufficient liquidity for the foreseeable future. The Company continues to generate substantial cash from operating activities and remains in a strong financial position, with resources available for reinvestment in existing businesses, strategic acquisitions and managing capital structure to meet its short and long-term objectives.

The following table details the capital resources of certain subsidiaries of the Company on an unconsolidated basis:

(Dollars in thousands)	Capital at December 31, 2015
Validus Reinsurance, Ltd. (excluding capital supporting FAL) (a) (b)	$3,562,458
Talbot Holdings, Ltd. (including capital supporting FAL) (b)	887,249
Other, net	(27,903)
Redeemable noncontrolling interest in AlphaCat ILS funds	1,111,714
Noncontrolling interest in AlphaCat Sidecars	154,662
Total consolidated capitalization	5,688,180
Senior notes payable	(245,161)
Debentures payable	(537,668)
Redeemable noncontrolling interest in AlphaCat ILS funds	(1,111,714)
Total shareholders’ equity	$3,793,637

(a) Validus Reinsurance, Ltd. (excluding capital supporting FAL) includes capital of $640,684 relating to Western World Insurance Group, Inc.

(b) Validus Reinsurance, Ltd. (excluding capital supporting FAL) excludes capital of $586,393 which supports Talbot's FAL. This capital was included in Talbot Holdings, Ltd. (including capital supporting FAL).

Sources and Uses of Cash

The Company has written certain (re)insurance business that has loss experience generally characterized as having low frequency and high severity. This results in volatility in both results and operational cash flows. The potential for large claims or a series of claims under one or more reinsurance contracts means that substantial and unpredictable payments may be required within relatively short periods of time. As a result, cash flows from operating activities may fluctuate, perhaps significantly, between individual quarters and years. Management believes the Company’s unused credit facility amounts and highly liquid investment portfolio are sufficient to support any potential operating cash flow deficiencies.

In addition to relying on premiums received and investment income from the investment portfolio, the Company intends to meet these cash flow demands by carrying a substantial amount of short and medium term investments that would mature, or possibly be sold, prior to the settlement of expected liabilities. The Company cannot provide assurance, however, that it will successfully match the structure of its investments with its liabilities due to uncertainty related to the timing and severity of loss events.

There are three main sources (uses) of cash flows for the Company: operating activities, investing activities and financing activities. The movement in net cash provided by or used in operating, investing and financing activities and the effect of foreign currency rate changes on cash and cash equivalents for the years ended December 31, 2015, 2014 and 2013 are provided in the following table:

	Years Ended December 31,		
(Dollars in thousands)	2015	2014 (a)	2013
Net cash provided by operating activities	$334,506	$340,161	$235,366
Net cash (used in) provided by investing activities	(370,834)	(162,681)	253,813
Net cash provided by (used in) financing activities	226,641	(331,102)	(864,048)
Effect of foreign currency rate changes on cash and cash equivalents	(17,605)	(25,310)	(6,364)
Net increase (decrease) in cash	$172,708	$(178,932)	$(381,233)

(a) The results of operations for Western World are consolidated from the October 2, 2014 date of acquisition.

Operating Activities

Cash flow from operating activities is derived primarily from the receipt of premiums less the payment of losses and loss expenses related to underwriting activities.

Net cash provided by operating activities during the year ended December 31, 2015 was $334.5 million compared to $340.2 million for year ended December 31, 2014, an unfavorable movement of $5.7 million. This unfavorable movement was due to the timing of cash receipts and payments, notably with regard to premiums receivable and losses payable, respectively.

We anticipate that cash flows from operations will continue to be sufficient to cover cash outflows under our contractual commitments as well as most loss scenarios through the foreseeable future. Refer to the “Capital Resources” section below for further information on our anticipated obligations.

Investing Activities

Cash flow from investing activities is derived primarily from the receipt of net proceeds on the Company’s investment portfolio. As at December 31, 2015, the Company’s portfolio was composed of fixed income investments, short-term and other investments amounting to $7.8 billion or 90.8% (2014: $7.4 billion or 91.0%) of total cash and investments. For further details related to investments pledged as collateral, refer to Note 7 (d), "Investments," to the Consolidated Financial Statements in Part II, Item 8.

Net cash used in investing activities during the year ended December 31, 2015 was $370.8 million compared to $162.7 million for the year ended December 31, 2014, an unfavorable movement of $208.2 million. This unfavorable movement was due primarily to a decrease in the sales and maturities of fixed maturity investments of $1,136.4 million; offset by, the non recurrence of cash paid for the acquisition of Western World of $643.5 million which occurred during the year ended December 31, 2014, a decrease in the purchases of fixed maturity investments of $166.8 million and an increase in the sales of other investments of $137.6 million.

Financing Activities

Cash flow from financing activities is derived primarily from the issuance and purchase of shares in the Company and its subsidiaries, including third party investments in the AlphaCat ILS funds and sidecars, as well as the issuance of notes payable to AlphaCat investors.

Net cash provided by (used in) financing activities during the year ended December 31, 2015 was $226.6 million compared to ($331.1) million during the year ended December 31, 2014, a favorable movement of $557.7 million. This favorable movement was driven primarily by a decrease in the repurchase of common shares under the share repurchase program of $250.5 million, an increase in third party investments in redeemable noncontrolling interest of $199.0 million and an increase in the issuance of notes payable to AlphaCat investors of $75.5 million.

Capital Resources

The following table details the Company's capital position as at December 31, 2015, 2014 and 2013.

	As at December 31,		
Capitalization (Dollars in thousands)	2015	2014	2013
Senior Notes (a)	$245,161	$244,960	$244,758
Junior Subordinated Deferrable Debentures (JSDs) (a)	289,800	289,800	289,800
Flagstone Junior Subordinated Deferrable Debentures (JSDs) (a)	247,868	249,477	251,616
Total debt	782,829	784,237	786,174
Redeemable noncontrolling interest	1,111,714	617,791	300,936
Ordinary shares, capital and surplus available to Validus	3,651,544	3,595,142	3,704,711
Accumulated other comprehensive loss	(12,569)	(8,556)	(617)
Noncontrolling interest	154,662	292,274	375,026
Total shareholders' equity	3,793,637	3,878,860	4,079,120
Total capitalization	$5,688,180	$5,280,888	$5,166,230
Total capitalization available to Validus (b)	$4,421,804	$4,370,823	$4,490,268
Debt to total capitalization	13.8%	14.9%	15.2%
Debt (excluding JSDs) to total capitalization	4.3%	4.6%	4.7%

(a) Refer to Part II, Item 8, Note 20, “Debt and financing arrangements," to the Consolidated Financial Statements for further details and discussion on the debt and financing arrangements of the Company.

(b) Total capitalization available to Validus equals total capitalization less noncontrolling interests.

Shareholders' Equity

Shareholders' equity available to Validus at December 31, 2015 was $3,639.0 million.

On February 2, 2016, the Company announced a quarterly cash dividend of $0.35 per common share, which is payable on March 31, 2016 to shareholders of record on March 15, 2016. The timing and amount of any future cash dividends, however, will be at the discretion of the Board and will depend upon results of operations and cash flows, the Company's financial position and capital requirements, general business conditions, legal, tax, regulatory, rating agency and contractual constraints or restrictions and any other factors that the Board deems relevant.

On February 6, 2013, the Company approved a special dividend in the amount of $2.00 per common share and common share equivalent. The dividend was paid on February 26, 2013 to shareholders and warrant holders of record on February 19, 2013.

The Company may from time to time repurchase its securities, including common shares, Junior Subordinated Deferrable Debentures and Senior Notes. On February 3, 2015, the Board of Directors of the Company approved an increase in the Company's common share repurchase authorization to $750.0 million. This amount was in addition to the $2,274.4 million of common shares repurchased by the Company through February 3, 2015 under its previously authorized share repurchase programs.

The Company has repurchased approximately 76,031,280 common shares for an aggregate purchase price of $2,491.7 million from the inception of its share repurchase program to December 31, 2015. The Company had $532.7 million remaining under its authorized share repurchase program as of December 31, 2015.

The Company expects the purchases under its share repurchase program to be made from time to time in the open market or in privately negotiated transactions. The timing, form and amount of the share repurchases under the program will depend on a variety of factors, including market conditions, the Company's capital position relative to internal and rating agency targets, legal requirements and other factors. The repurchase program may be modified, extended or terminated by the Board of Directors at any time.

Debt and financing arrangements

The following table details the Company’s debt and financing arrangements as at December 31, 2015.

(Dollars in thousands)	Maturity Date / Term (a)	Commitment	Issued and Outstanding (b)
2006 Junior Subordinated Deferrable Debentures	June 15, 2036	$150,000	$150,000
2007 Junior Subordinated Deferrable Debentures	June 15, 2037	200,000	139,800
Flagstone 2006 Junior Subordinated Deferrable Debentures	September 15, 2036	134,118	134,118
Flagstone 2007 Junior Subordinated Deferrable Debentures	September 15, 2037	113,750	113,750
Total debentures payable		597,868	537,668
2010 Senior Notes due 2040	January 26, 2040	250,000	250,000
Total debentures and senior notes payable		847,868	787,668
$85,000 syndicated unsecured letter of credit facility	December 9, 2020	85,000	—
$300,000 syndicated secured letter of credit facility	December 9, 2020	300,000	235,540
$24,000 secured bi-lateral letter of credit facility	Evergreen	24,000	10,543
AlphaCat Re secured letter of credit facility	Evergreen	30,000	30,000
IPC bi-lateral facility	Evergreen	25,000	9,241
$236,000 Flagstone bi-lateral facility	Evergreen	236,000	193,764
Total credit and other facilities		700,000	479,088
Total debt and financing arrangements		$1,547,868	$1,266,756

(a) The arrangement is indicated as evergreen if, unless written notice to the contrary is given, it automatically renews on a regular basis.

(b) Indicates utilization of commitment amount, not necessarily drawn borrowings.

For additional information about our debt, including the terms of our financing arrangements, basis for interest rates and debt covenants, refer to Part II, Item 8, Note 20, "Debt and financing arrangements," to the Consolidated Financial Statements for further details.

Noncontrolling interest

The shareholders in the AlphaCat ILS funds have rights that enable them, subject to certain limitations, to redeem their shares. The third party equity is therefore recorded in the Company’s Consolidated Balance Sheets as redeemable noncontrolling interest. When and if a redemption notice is received, the fair value of the redemption is reclassified to a liability. As at December 31, 2015 and 2014, the amount of the Company's total capitalization owed to third parties as redeemable noncontrolling interest was $1,111.7 million and $617.8 million, respectively.

The AlphaCat sidecars have no shareholder redemption rights. Therefore, the third party equity is recorded in the Company's Consolidated Balance Sheets as noncontrolling interest. As at December 31, 2015 and 2014, the amount of the Company's total capitalization owed to third parties as noncontrolling interest was $154.7 million and $292.3 million, respectively.

Refer to Part II, Item 8, Note 9, "Variable Interest Entities," and Note 11, "Noncontrolling interest," to the Consolidated Financial Statements for further details.

Contractual Obligations and Commitments

The Company's contractual obligations and commitments as at December 31, 2015 are set out below:

	Payment Due by Period				
(Dollars in thousands)	Total	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
Reserve for losses and loss expenses (a)	$2,996,567	$1,278,741	$1,106,406	$406,083	$205,337
2006 Junior Subordinated Deferrable Debentures - principal (b)	150,000	—	—	—	150,000
2006 Junior Subordinated Deferrable Debentures - interest(b)	n/a	8,747	17,494	17,494	8,747 p.a.
2007 Junior Subordinated Deferrable Debentures - principal (b)	139,800	—	—	—	139,800
2007 Junior Subordinated Deferrable Debentures - interest (b)	n/a	7,242	14,483	14,483	7,242 p.a.
Flagstone 2006 Junior Subordinated Deferrable Debentures - principal (b)	134,118	—	—	—	134,118
Flagstone 2006 Junior Subordinated Deferrable Debentures - interest (b)	n/a	8,765	17,531	17,531	8,765 p.a.
Flagstone 2007 Junior Subordinated Deferrable Debentures - principal (b)	113,750	—	—	—	113,750
Flagstone 2007 Junior Subordinated Deferrable Debentures - interest (b)	n/a	6,732	13,464	13,464	6,732 p.a.
2010 Senior Notes due 2040 - principal (b)	250,000	—	—	—	250,000
2010 Senior Notes due 2040 - interest (b)	n/a	22,188	44,375	44,375	22,188 p.a.
Notes payable to AlphaCat investors (c)	75,493	75,493	—	—	—
Projected pension benefit obligation (d)	15,722	715	6,344	2,116	6,547
Operating lease obligations (e)	90,678	11,391	21,807	20,137	37,343
Aquiline Financial Services Fund II L.P. (e)	4,096	4,096	—	—	—
Aquiline Financial Services Fund III L.P. (e)	86,110	86,110	—	—	—
AlphaCat ILS fund (e)	9,536	9,536	—	—	—
Fixed maturity investments (e)	34,888	34,888	—	—	—
Other investments (e)	185,548	185,548	—	—	—
Structured settlements (e)	3,108	3,108	—	—	—

(a) The reserve for losses and loss expenses represents an estimate, including actuarial and statistical projections at a given point in time of an insurer's or reinsurer's expectations of the ultimate settlement and administration costs of claims incurred. As such, the actual payment of the reserve for losses and loss expenses will differ from estimated payouts. Refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations-Critical Accounting Policies and Estimates" for further details and discussion on the Company's reserve for losses and loss expenses.

(b) Refer to Part II, Item 8, Note 20, "Debt and financing arrangements," to the Consolidated Financial Statements for further details and discussion on the debt and financing arrangements of the Company. The Company has entered into interest rate swaps which fix the rates of interest on the Junior Subordinated Deferrable Debentures ("JSDs"). The terms of the swaps are matched to the maturity date of the JSDs. The interest payments in the table above reflects the Company's contractual obligations with respect to the swaps.

(c) Refer to Part II, Item 8, Note 9, "Variable Interest Entities," to the Consolidated Financial Statements for further details describing the notes payable to AlphaCat investors.

(d) Refer to Part II, Item 8, Note 18. "Retirement and pension plans," to the Consolidated Financial Statements for further details describing the projected pension benefit obligation.

(e)

Refer to Part II, Item 8, Note 23 “Commitments and contingencies,” to the Consolidated Financial Statements for further details describing these commitments and obligations. There are no defined contractual commitment dates for the Aquiline fund, fixed maturity and other investment commitments as well as the structured settlement obligations, therefore these are included in the less than one year category.

Goodwill and Intangible Assets

The Company has performed an impairment analysis of its carried goodwill and intangible assets as required by U.S. GAAP. Based on this analysis, management has concluded that an impairment adjustment is not required against the carried goodwill and carried intangible assets. For information about goodwill and intangible assets refer to Note 6, "Goodwill and other intangible assets," to the Consolidated Financial Statements in Part II, Item 8.

Off-Balance Sheet Arrangements

The Company is not party to any off-balance sheet transaction, agreement or other contractual arrangement as defined by Item 303(a) (4) of Regulation S-K to which an entity unconsolidated with the Company is a party that management believes is reasonably likely to have a current or future effect on its financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that the Company believes is material to investors. For further details related to the Company's variable interest entities, refer to Notes 9 and 10, "Variable interest entities," and "Investments in affiliates," respectively, to the Consolidated Financial Statements in Part II, Item 8.

Ratings

The following table summarizes the financial strength ratings of the Company and its principal reinsurance and insurance subsidiaries from internationally recognized rating agencies as of February 22, 2016:

	A.M. Best	S&P	Moody’s	Fitch
Validus Holdings, Ltd.				
Issuer credit rating	bbb	BBB+	Baa2	A-
Senior debt	bbb	BBB+	Baa2	BBB+
Subordinated debt	bbb-	—	Baa3	BBB
Preferred stock	bb+	BBB-	Ba1	—
Outlook on ratings	Stable	Stable	Positive	Stable
Validus Reinsurance, Ltd.				
Financial strength rating	A	A	A3	A
Outlook on ratings	Stable	Stable	Positive	Stable
Lloyd's of London				
Financial strength rating applicable to all Lloyd's syndicates	A	A+	—	AA-
Outlook on ratings	Positive	Stable	—	Stable
Talbot Syndicate 1183				
Financial strength rating	A	—	—	—
Outlook on ratings	Positive	—	—	—
Validus Reinsurance (Switzerland) Ltd (b)				
Financial strength rating	A	A	—	—
Outlook on ratings	Stable	Stable	—	—
Western World Insurance Company				
Financial strength rating	A	—	—	—
Outlook on ratings	Stable	—	—	—

Critical Accounting Policies and Estimates
The Company’s Consolidated Financial Statements have been prepared in accordance with U.S. GAAP. The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect reported and disclosed amounts of assets and liabilities, as well as disclosure of contingent assets and liabilities as at the balance sheet date and the reported amounts of revenues and expenses during the reporting period. Management believes the following accounting policies are critical to the Company’s financial reporting as the application of these policies requires management to make significant judgments. Management believes the estimates that require the most subjective and complex judgments are (1) reserve for losses and loss expenses, (2) premiums, (3) reinsurance premiums ceded and reinsurance recoverables (4) investment valuation and (5) the valuation of goodwill and intangible assets.
Reserve for Losses and Loss Expenses
Description: The Company believes that the most significant accounting judgment made by management is our estimate of reserve for losses and loss expenses. The Company establishes its reserve for losses and loss expenses to cover the estimated remaining liability for both reported claims (“case reserves”) and unreported amounts (“incurred but not reported” or “IBNR" reserves). For insurance and reinsurance business, the IBNR reserves include provision for loss incidents that have occurred but have not yet been reported to the Company as well as for future variation in case reserves (where the claim has been reported but the ultimate cost is not yet known). The provision for future variation in current case reserves is generally calculated using actuarial estimates of total IBNR at the aggregated line of business level. Additional individual claim IBNR amounts are sometimes calculated for larger claims within our insurance and reinsurance businesses. Within the reinsurance business, the portion of total IBNR related to future variation on known claims is calculated at the individual claim level in some instances (either as an additional case reserve or individual claim IBNR). Within the insurance business, the provision for future variation in current case reserves is generally calculated using actuarial estimates of total IBNR, while individual claim IBNR amounts are sometimes calculated for larger claims. IBNR is established by the Company separately for certain large or catastrophe losses and smaller “attritional” losses. The Company has procedures in place to aggregate large or catastrophe losses on a consolidated basis for financial reporting and disclosure purposes. Loss events which have an ultimate loss estimate at or above $30.0 million on a consolidated basis are disclosed separately and included in the reserves for notable loss event roll forward table. In addition, non-notable loss events which aggregate to $15.0 million or more but less than $30.0 million on a consolidated basis are disclosed separately and included in the Company's analysis of losses and loss expenses. Notable and non-notable loss events are first determined at the respective operating segments based on segment thresholds and are then aggregated and only disclosed if it is determined that they reach the respective consolidated threshold for notable and non-notable loss event disclosure.
For all lines of business, the Company’s reserve for losses and loss expenses and loss reserves recoverable consist of three categories: (1) case reserves, (2) in certain circumstances, additional case reserves ("ACR"), and (3) IBNR reserves. The reserves and recoverables for attritional and large or catastrophe losses are established on an annual and interim basis as follows:
1.Case reserves: Case reserves generally are analyzed and established by each segment’s claims department on all lines, making use of third party input where appropriate (including, for the reinsurance business, reports of losses from ceding companies). For insurance business where Talbot is not the lead underwriter on the business, the case reserves are established by the lead underwriter and validated by the central Lloyd’s market claims bureau, with a sample reviewed by Talbot.
2.ACR: ACR are established for Validus Re and AlphaCat business by our claims department in cases where we believe the case reserves reported by the cedant requires adjustment. ACR supplement case reserves based on information obtained through ceding company audits or other sources. ACR are not generally used at Talbot or Western World as claim volumes are generally greater and thus the potential for future variation in case reserve estimates on known claims often can be analyzed at an aggregate level using historical data.
3.IBNR reserves:
a.Large or catastrophe events—IBNR reserves are established for all lines based on each segment’s estimates for known loss events for which not all claims have been reported to the Company. In establishing such IBNR reserves, the Company accumulates loss information from modeling agencies, where possible, publicly available sources and

information contained in client reports and estimates. The loss information is applied to the Company's book of in-force contracts to establish an estimate of the Company's ultimate exposure to the loss event. For the largest loss events, the Company estimates an ultimate loss expectation for the individual event. Paid losses, case reserves and any additional case reserves are then deducted from the ultimate loss to ascertain the IBNR estimate for these individual large claims or catastrophe events. The size of event for which the Company establishes a separate ultimate loss estimate may vary based on an assessment of the materiality of the event, as well as on other factors such as complexity and volatility.

b.Attritional losses—IBNR reserves are established using some combination of the actuarial methods described above, including the Chain Ladder method, the Generalized Cape Cod method and the Bornhuetter-Ferguson method. In situations where limited historic development data is available and/or the year being analyzed is more recent (less mature), the expected loss method and the Bornhuetter-Ferguson method are more commonly used. Under all methods used, an ultimate loss amount is established. Paid losses, case reserves and any additional case reserves are then deducted from the ultimate loss to ascertain the attritional IBNR reserves.

For all case reserves, ACR and IBNR, net reserves are estimated by first estimating gross reserves, then estimating reinsurance recoverables.

Judgments and Uncertainties: Loss reserve estimates for insurance and reinsurance business are not precise in that they deal with the inherent uncertainty in the outcome of insurance and reinsurance claims made on the Company, many of which have not yet been reported to the Company. Estimating loss reserves requires management to make assumptions, both explicit and implicit, regarding future paid and reported loss development patterns, frequency and severity trends, claims settlement practices, potential changes in the legal environment and other factors. These estimates and judgments are based on numerous factors, and may be revised over time as additional experience or other data becomes available, as new or improved methodologies are developed or as current laws change.

As predominantly a broker market insurer and reinsurer, the Company must rely on loss information reported to us by brokers from clients, where such information is often incomplete or changing. The quality and type of information received varies by client and by the nature of the business, insurance or reinsurance.

For insurance business, the Company receives from brokers details of potential claims, on the basis of which the Company’s loss adjusters make estimates of the likely ultimate outcome of the claims. In determining these reserves, the Company takes into account a number of factors including the facts and circumstances of the individual claim, the nature of the coverage and historical information about its experience on similar types of claims. For insurance business where Talbot is not the lead underwriter, the case reserves are established by the lead underwriter and validated centrally by the Lloyd’s market claims bureau, with a sample reviewed by the Company. The sum of the individual claim estimates for lead and follow business constitutes the case reserves.

For reinsurance business, the Company typically receives from brokers details of paid losses and estimated case reserves recorded by the ceding company. In addition to this, the ceding company’s estimated provision for IBNR losses is sometimes also available, although this in itself introduces additional uncertainty owing to the differing and typically unknown reserving practices of ceding companies.

There will also be a time lag between a loss occurring and it being reported, first by the original claimant to its insurer, via the insurance broker, and, for reinsurance business, subsequently from the insurer to the reinsurer via the reinsurance broker.

The Company writes a mix of predominantly short-tail business, both insurance and reinsurance. The combination of low claim frequency and high claim severity that is characteristic of much of this short-tail business makes the available data more volatile and less reliable for predicting ultimate losses. For example, in property lines, there can be additional uncertainty in loss estimation related to large catastrophe events, whether natural or man-made. With wind events, such as hurricanes, the damage assessment process may take more than a year. The cost of claims is also subject to volatility due to supply shortages for construction materials and labor. In the case of earthquakes, the damage assessment process may take longer as buildings are discovered to have structural weaknesses not initially detected.

The Company also writes longer tail insurance lines of business through Talbot and Western World. Talbot's longer tail lines of business predominantly include financial lines, marine and energy liabilities, aviation products and airports (aviation direct), construction and political risk. Western World's longer tail lines predominantly include liability coverages for contractors, manufacturers and health care related classes. These longer tail lines represent 16.9% of the Company's gross premiums written for the year ended December 31, 2015. In contrast to our short-tail business, the claim tail for our longer tail lines of business is expected to be notably longer as claims are often reported and ultimately paid or settled years after the related loss event occurs. In the intervening period between occurrence, reporting and settlement, additional facts regarding individual claims and trends will often become known and current laws and case law may change, affecting the ultimate value of the claim.

Taken together, these issues add considerable uncertainty to the process of estimating ultimate losses, hence loss reserves, and this uncertainty is increased for reinsurance business compared with insurance business due to the additional parties in the chain of reporting from the original claimant to the reinsurer.

As a result of the uncertainties described above, the Company must estimate IBNR reserves, which consist of a provision for future development on known loss events, as well as a provision for claims which have occurred but which have not yet been reported to us by clients. Because of the degree of reliance that is necessarily placed on brokers and (re)insured companies for claims reporting, the associated time lag, the low frequency/high severity nature of much of the business underwritten, the rapidly emerging and changing nature of facts and circumstances surrounding large events and, for reinsurance business, the varying reserving practices among ceding companies as described above, reserve estimates are highly dependent on management's judgment and are subject to uncertainty. The Company strives to take account of these uncertainties in the judgments and assumptions made when establishing loss reserves, but it is not possible to eliminate the uncertainties. As a result, there is a risk that the Company's actual losses may be higher or lower than the reserves booked.

For the Company's insurance business written by Talbot and Western World, where a longer reserving history exists, the Company examines the development of its own historical paid and incurred losses to identify trends, which it then incorporates into the reserving process where it deems appropriate.

For the Company's reinsurance business, where the Company relies more heavily on information provided by clients in order to assist it in estimating reserves, the Company performs certain processes in order to help assess the completeness and accuracy of such information as follows:

1.In addition to information received from clients on reported claims, the Company also uses information on the patterns of client loss reporting and loss settlements from previous events in order to estimate the Company's ultimate liability related to these events;

2.The Company uses reinsurance industry information in order to perform consistency checks on the data provided by ceding companies and to identify trends in loss reporting and settlement activity. Where it deems appropriate, the Company incorporates such information in establishing reinsurance reserves; and

3.For both insurance and reinsurance business, the Company supplements the loss information received from clients with loss estimates developed by market share techniques and third party catastrophe models when such information is available.

Although there is normally a lag in receiving reinsurance data from cedants, the Company currently has adequate procedures in place regarding the timeliness related to the processing of assumed reinsurance information and there is no significant backlog. The Company actively manages its relationships with brokers and clients and considers existing disputes with counterparties to be in the normal course of business.

As described above, the reserve for losses and loss expenses includes both a component for outstanding case reserves for claims which have been reported and a component for IBNR reserves. IBNR reserves are the difference between ultimate losses and reported losses, where reported losses are the sum of paid losses and outstanding case reserves. Ultimate losses are estimated by management using various actuarial methods, including exposure-based and loss-based methods, as well as other qualitative assessments regarding claim trends.

The Company uses a reserving methodology that establishes a point estimate for ultimate losses. The point estimate represents management's best estimate of ultimate losses and loss expenses. The Company does not select a range as part of its loss reserving process. The extent of reliance on management judgment in the reserving process differs depending on the circumstances surrounding the estimations, including the volume and credibility of data, the perceived relevance of historical data to future conditions, the level of stability in the Company's operational processes for handling losses (including claims practices and systems) and other factors. The Company reviews its reserving assumptions and methodologies on a quarterly basis. Two of the most critical assumptions in establishing reserves are loss emergence patterns and expected loss ratios. Loss emergence patterns are critical to the reserving process as they can be one key indicator of the ultimate liability. A pattern of reported loss emergence which is different from expectations may indicate a change in the loss climate and may thus influence the estimate of future payments that should be reflected in reserves. Expected loss ratios are a primary component in the Company's calculation of estimated ultimate losses for business at an early stage in its development.

Loss emergence patterns for the business written by Talbot and Western World are generally derived from its own historic loss development triangulations and in some instances, the business written by Talbot is also supplemented by Lloyd's market data. For the business written by Validus Re and AlphaCat, where its own historic loss development triangulations are currently more limited, greater use is made of market data including reinsurance industry data

available from organizations such as statistical bureaus and consulting firms, where appropriate. Expected loss ratios are estimated in a variety of ways, largely dependent upon the data available. Wherever it deems appropriate, management incorporates the Company’s own loss experience in establishing initial expected loss ratios and reserves. This is particularly true for the business written by Talbot and Western World where a longer reserving history exists and expected losses and loss ratios consider, among other things, rate increases and changes in terms and conditions that have

been observed in the market. For reinsurance business, expected losses and loss ratios are typically developed using vendor and proprietary computer models. The information used in these models is collected by underwriters and actuaries during the initial pricing of the business.

The Company has large catastrophe event ultimate loss reserve estimation procedures for the investigation, analysis, and estimation of ultimate losses resulting from large catastrophe events. The determination regarding which events follow these procedures is made by members of senior management from relevant departments within the Company. The procedures are designed to facilitate the communication of information between various relevant functions and provide an efficient approach to determining the estimated loss for the event.

In developing estimates for large catastrophe events, the Company considers various sources of information including: specific loss estimates reported by our cedants and policyholders, overall insurance industry loss estimates reported by our brokers and by claims reporting services, proprietary and third party vendor models and internal data regarding insured or reinsured exposures related to the geographical location of the event. Use of these various sources enables management to estimate the ultimate loss for known events with a higher degree of accuracy and timeliness than if the Company relied solely on one data source. Indicated ultimate loss estimates for catastrophe events are compiled by a committee of management, and these indicated ultimate losses are incorporated into the process of selecting management’s best estimate of reserves.

As with large catastrophe events, the Company separately estimates ultimate losses for certain large claims using a number of methods, including estimation based on vendor models, analyses of specific industry occurrences and facts, as well as information from cedants and policyholders on individual contract involvements.

During 2010 and 2011, given the complexity and severity of notable loss events, explicit reserves for potential development on 2010 and 2011 notable loss events (RDE) were included within the Company's IBNR reserving process. As uncertainties surrounding initial estimates on notable loss events developed, this reserve has been allocated to specific notable loss events. No RDE was established for 2013, 2014, or 2015 notable loss events.

The requirement for a reserve for potential development on notable loss events in a quarter is a function of (a) the number of significant events occurring in that quarter and (b) the complexity and volatility of those events. Complexity and volatility factors considered are as follows:

• Contract complexity;
• Nature and number of perils arising from an event;
• Limits and sub limits exposed;
• Quality, timing and flow of information received from each loss;
• Timing of receipt of information to the Company;
• Information regarding retrocessional covers;
• Assumptions, both explicit and implicit, regarding future paid and reported loss development patterns;
• Frequency and severity trends;
• Claims settlement practices; and
• Potential changes in the legal environment.

Each of these factors may lead to associated volatility for each notable loss event as well as consideration of the total reserve for loss events in the aggregate. Consequently, all of these factors are considered in the aggregate for the events occurring in the quarter, recognizing that it is more likely that one or some of the events may deteriorate significantly, rather than all deteriorating proportionately. The establishment of each quarter's requirement for a reserve for potential development on notable loss events takes place as part of the quarterly evaluation of the Company's overall reserve requirements. It is not directly linked in isolation to any one significant/notable loss in the quarter. The reserve for potential development on notable loss events is evaluated by our in-house actuaries as part of their normal process in setting of indicated reserves for the quarter. In ensuing quarters, senior management and the in-house actuaries revisit and re-estimate certain events previously considered in the catastrophe loss event process as well as events that have subsequently emerged in the current quarter. To the extent that there has been adverse development on a notable loss event, if there is RDE remaining from that accident year, an allocation from the respective accident year RDE will be made to the notable loss event. If there is no remaining RDE relating to the accident year of the loss, then adverse development will be recorded for the notable loss event.

Changes to the reserve for potential development on notable loss events will be considered in light of changes to previous loss estimates from notable loss events in this re-estimation process. To the extent that there are continued complexity and volatility factors relating to notable loss events in the aggregate, additions to the RDE may be established for a specific accident year.

Management's loss estimates are subject to annual corroborative review by independent external actuaries using generally accepted actuarial techniques and other analytical and qualitative methods.

The Company's reserving methodology was not changed materially in the year ended December 31, 2015 from the methodology used in the year ended December 31, 2014. Management's best estimate of the gross reserve for losses and loss expenses and loss reserves recoverable at December 31, 2015 were $3.0 billion and $350.6 million, respectively. The following table sets forth a breakdown between gross case reserves and gross IBNR by segment at December 31, 2015.

	As at December 31, 2015		
(Dollars in thousands)	Gross Case Reserves	Gross IBNR	Total Gross Reserve for Losses and Loss Expenses
Validus Re	$508,275	$638,594	$1,146,869
Talbot	616,459	686,176	1,302,635
Western World	188,477	411,854	600,331
AlphaCat	595	10,418	11,013
Eliminations	(35,109)	(29,172)	(64,281)
Total	$1,278,697	$1,717,870	$2,996,567

Management's best estimate of the gross reserve for losses and loss expenses and loss reserves recoverable at December 31, 2014 were $3.2 billion and $377.5 million, respectively. The following table sets forth a breakdown between gross case reserves and gross IBNR by segment at December 31, 2014.

	As at December 31, 2014		
(Dollars in thousands)	Gross Case Reserves	Gross IBNR	Total Gross Reserve for Losses and Loss Expenses
Validus Re	$722,163	$611,715	$1,333,878
Talbot	637,229	714,827	1,352,056
Western World	174,631	438,920	613,551
AlphaCat	7,858	7,420	15,278
Eliminations	(41,148)	(30,468)	(71,616)
Total	$1,500,733	$1,742,414	$3,243,147

To the extent insurance and reinsurance industry data is relied upon to aid in establishing reserve estimates, there is a risk that the data may not match the Company's risk profile or that the industry's reserving practices overall differ from those of the Company and its clients. In addition, reserving can prove especially difficult should a significant loss event take place near the end of an accounting period, particularly if it involves a catastrophic event. These factors further contribute to the degree of uncertainty in the reserving process.

The uncertainties inherent in the reserving process, together with the potential for unforeseen developments, including changes in laws and the prevailing interpretation of policy terms, may result in losses and loss expenses materially different from the reserves initially established. Changes to prior year reserves will affect current period underwriting income by increasing income if the prior year ultimate losses are reduced or decreasing income if the prior year ultimate losses are increased. The Company expects volatility in results in periods when significant loss events occur because U.S. GAAP does not permit insurers or reinsurers to reserve for loss events until they have both occurred and are expected to give rise to a claim. As a result, the Company is not allowed to record contingency reserves to account for expected future losses. The Company anticipates that claims arising from future events will require the establishment of substantial reserves in future periods.

Effect if Actual Results Differ From Assumptions: Given the risks and uncertainties associated with the process for estimating reserves for losses and loss expenses, management has performed an evaluation of the potential variability in loss reserves and the impact this variability may have on reported results, financial condition and liquidity. Because

of the inherent uncertainties discussed above, we have developed a reserving philosophy which attempts to incorporate prudent assumptions and estimates, and we have generally experienced favorable net development on prior year reserves in the last several years. However, there is no assurance that this will occur in future periods. Management's best estimate of the net reserve for losses and loss expenses at December 31, 2015 is $2.6 billion. The following tables show the effect on estimated net reserves for losses and loss expenses as of December 31, 2015 of a change in two of the most critical assumptions in establishing reserves: (1) loss emergence patterns, accelerated or decelerated by three and six months; and (2) expected loss ratios varied by plus or minus five and ten percent. Management believes that a reasonably likely scenario is represented by such a standard, as used by some professional actuaries as part of their review of an insurer's or reinsurer's reserves.

Utilizing this standard as a guide, management has selected these variances to determine reasonably likely scenarios of variability in the loss emergence and loss ratio assumptions. These scenarios consider normal levels of catastrophe events. Loss reserves may vary beyond these scenarios in periods of heightened or reduced claim activity. The reserves resulting from the changes in the assumptions are not additive and should be considered separately. The following tables vary the assumptions employed therein independently. In addition, the tables below do not adjust any parameters other than the ones described above. Specifically, reinsurance collectability was not explicitly stressed as part of the calculations below.

Net reserve for losses and loss expenses at December 31, 2015—Sensitivity to loss emergence patterns

Change in assumption	Reserve for losses and loss expenses
	(Dollars in thousands)
Six month acceleration	$2,367,743
Three month acceleration	$2,495,379
No change (selected)	$2,645,981
Three month deceleration	$2,803,396
Six month deceleration	$2,947,607

Net reserve for losses and loss expenses at December 31, 2015—Sensitivity to expected loss ratios

Change in assumption	Reserve for losses and loss expenses
	(Dollars in thousands)
10% favorable	$2,437,631
5% favorable	$2,541,832
No change (selected)	$2,645,981
5% unfavorable	$2,750,131
10% unfavorable	$2,854,331

The most significant variance in the above scenarios, six month deceleration in loss emergence patterns, would have the effect of increasing losses and loss expenses by $301.6 million.

Management believes that the reserve for losses and loss expenses are sufficient to cover expected claims incurred before the reporting date on the basis of the methodologies and judgments used to support its estimates. However, there can be no assurance that actual payments will not vary significantly from total reserves. The reserve for losses and loss expenses and the methodology of estimating such reserve are regularly reviewed and updated as new information becomes known. Any resulting adjustments are reflected in income in the period in which they become known.

Premiums

Description: For insurance business, written premium estimates are determined from the business plan estimates of premiums by class, the aggregate of underwriters' estimates on a policy-by-policy basis, and projections of ultimate premiums using generally accepted actuarial methods. In particular, direct insurance premiums are recognized in accordance with the type of contract written. The majority of our insurance premium is accepted on a direct open market or facultative (proportional or non-proportional) basis. We receive a premium which is identified in the policy and this premium will typically adjust only if the underlying insured values adjust.

A limited portion of our insurance business is written on a line slip basis or binder, under which we assume a fixed percentage of the premiums and losses on a particular risk or group of risks along with numerous other unrelated insurers. Although premiums on this business are not contractually stated, we recognize gross premiums written based on an estimate provided by the client, via the broker.

For reinsurance business, where the assumed reinsurance premium is written on an excess of loss (non-proportional) or on a pro-rata (proportional) basis, reinsurance contracts are generally written prior to the time the underlying direct policies are written by cedants and accordingly cedants must estimate such premiums when purchasing reinsurance coverage. For excess of loss contracts, the deposit premium is defined in the contract. The deposit premium is based on the client's estimated premiums, and this estimate is the amount recorded as written premium in the period the risk incepts. In the majority of cases, these contracts are adjustable to reflect the changes in underlying risks during the

contract period. For pro-rata contracts, an estimate of written premium is recorded in the period in which the risk incepts. The written premiums estimate is based on the pro rata cession percentage, on information

provided by ceding companies and on management's judgment. Management critically evaluates the information provided by ceding companies based on experience with the cedant, broker and the underlying book of business and may modify the initial premium estimates provided by the cedant.
The table below identifies the extent of premiums that were written on a proportional and non-proportional basis:

	Years Ended December 31,								
	2015			2014 (a)			2013		
(Dollars in thousands)	Gross Premiums Written	% of Total		Gross Premiums Written	% of Total		Gross Premiums Written	% of Total	
Proportional	$725,135	28.4	%	$600,537	25.5	%	$639,955	26.8	%
Non-proportional	1,832,371	71.6	%	1,758,328	74.5	%	1,748,491	73.2	%
Total	$2,557,506	100.0	%	$2,358,865	100.0	%	$2,388,446	100.0	%

(a) The results of operations for Western World are consolidated from the October 2, 2014 date of acquisition.
Premium earning: For contracts written on a losses occurring basis or claims made basis, being the majority of our insurance and excess of loss reinsurance business, premium income is generally earned proportionately over the expected risk period, usually 12 months. For contracts written on a risks attaching basis, being primarily our pro-rata reinsurance business, premiums are generally earned over a 24 month period due to the fact that some of the underlying exposures may attach towards the end of the contract, and such underlying exposures generally have a 12 month coverage period. The portion of the premium related to the unexpired portion of the policy at the end of any reporting period is presented on the consolidated balance sheet as unearned premiums. Changes in circumstance subsequent to contract inception can impact the earning period. For example, when the exposure limit for a contract is reached, we fully earn any associated unearned premium.
Judgments and Uncertainties: On a quarterly basis, the Company evaluates the appropriateness of premium estimates based on the latest information available, which may include actual reported premium to date, the latest premium estimates as provided by cedants and brokers, historical experience, management's professional judgment, underlying values as necessary, information obtained during the underwriting renewal process, as well as an assessment of relevant economic conditions. Past experience may not be indicative of how future premium estimates develop.
For business written on a facultative basis, endorsements, based on reports by our clients of changes in the original contractual cover, are recorded in the period in which the client reports are received, which would normally be over the life of the cover or shortly afterwards. Typically, the adjustment to the original premium is an insignificant portion of the total premium written.
For business written on a facility basis, although a premium estimate is not contractually stated for the amount of business to be written under any particular facility, an initial estimate of the expected premium written is received from the coverholder via the broker. Our estimate of premium is derived by reference to one or more of the following: the historical premium volume experienced by any facility, historical premium volume of similar facilities, the estimates provided by the broker and industry information on the underlying business. We actively monitor the development of actual reported premium against the estimates made; where actual reported premiums deviate from the estimate, we carry out an analysis to determine the cause and may, if necessary, adjust the estimated premiums.
For business written on an excess of loss basis, premium adjustments, based on reports by the clients of actual premium, are recorded in the period in which the cedant reports are received, which would normally be within six months to one year subsequent to the expiration of the contract. Typically the adjustment to the deposit premium is an insignificant portion of the total premium written. Many of our excess of loss contracts also include provisions that require an automatic reinstatement of coverage in the event of a loss. Reinstatement premiums are recognized when a triggering loss event occurs and losses are recorded by us. While the reinstatement premium amount is defined by contract terms, our recognition of reinstatement premiums is dependent on our estimate of losses and loss expenses, which reflect management's best judgment as described above in "Reserve for Losses and Loss Expenses".
For business written on a proportional basis, we review premium estimates on a quarterly basis and evaluate their reasonability in light of actual reported premium to date, the latest premium estimates as provided by cedants and brokers, historical experience, management's professional judgment, information obtained during the underwriting renewal process, as well as an assessment of relevant economic conditions. Factors contributing to changes from the

initial premium estimates may include changes in renewal rates, rates of new business or underlying exposures. As a result of this review process, any adjustments to estimates are recognized in gross premiums written during the period they are determined. Such changes in premium estimates may directly impact net premiums earned in the period they are determined because the adjustment may need to be substantially or fully earned.

The Company believes that reasonably likely changes in assumptions made in the estimation process would not have a significant impact on gross premiums written as recorded.

Credit risk: Management includes an assessment of the creditworthiness of cedants in the review process above, primarily based on market knowledge, reports from rating agencies, the timeliness of cedants' payments and the status of current balances owing. Based on this assessment, management believes that as at December 31, 2015 no provision for doubtful accounts is necessary for receivables from cedants.

Reinsurance Premiums Ceded and Reinsurance Recoverables

Description: As discussed in Item 1 "Business" the Company primarily uses ceded reinsurance for risk mitigation purposes. Validus Re purchases reinsurance on an excess of loss and a proportional basis together with ILW coverage. Talbot purchases reinsurance on an excess of loss and a proportional basis together with a relatively small amount of facultative reinsurance and ILWs. Western World purchases reinsurance on an excess of loss basis with a relatively small amount of facultative reinsurance.

Judgments and Uncertainties: For excess of loss business, the amount of reinsurance premium payable is usually contractually documented at inception and management judgment is only necessary in respect of any loss-related elements of the reinsurance premium, for example, reinstatement or adjustment premiums and loss-related commissions. The full reinsurance premium ceded is recorded at inception and if the contract is purchased on a "losses occurring" basis, the reinsurance premium ceded is expensed on a straight line basis over the life of the contract. If the policy is purchased on a "risks attaching" basis, the reinsurance premium ceded is expensed in line with how the inwards gross premium, to which the risk attaching policy relates, is earned. After the contract has expired, a No Claims Bonus may be received for certain policies, and this is recorded as a reinsurance premium adjustment in the period in which it can be reasonably determined.

Paid losses recoverable and loss reserves recoverable balances include amounts owed to us in respect of paid and unpaid ceded losses and loss expenses, respectively. The balances are presented net of a provision for non-recoverability. As at December 31, 2015, loss reserves recoverable balances were $350.6 million and paid losses recoverable balances were $23.1 million. In establishing our reinsurance recoverable balances, significant judgment is exercised by management in determining the amount of unpaid losses and loss expenses to be ceded as well as our ability to cede losses and loss expenses under our reinsurance contracts.

The Company's ceded unpaid losses and loss expenses consists of two elements, those for reported losses and those for IBNR. Ceded amounts for IBNR are developed as part of our loss reserving process. Consequently, the estimation of ceded unpaid losses and loss expenses is subject to similar risks and uncertainties in the estimation of gross IBNR (see "Reserve for Losses and Loss Expenses" above). As at December 31, 2015, ceded IBNR recoverable balances were $214.9 million.

Although our reinsurance recoverable balances are derived from our determination of contractual provisions, the recoverability of such amounts may ultimately differ due to the potential for a reinsurer to become financially impaired or insolvent or for a contractual dispute over contract language or coverage. Consequently, we review our reinsurance recoverable balances on a regular basis to determine if there is a need to establish a provision for non-recoverability. In performing this review, the Company uses judgment in assessing the credit worthiness of our reinsurers and the contractual provisions of our reinsurance agreements. As at December 31, 2015, the Company had a provision for non-recoverability of $5.0 million. In the event that the credit worthiness of our reinsurers were to deteriorate, actual uncollectible amounts could be significantly greater than our provision for non-recoverability.

The Company uses a variety of methods to estimate uncollectible reinsurance, with the primary method being a default analysis. The primary components of the default analysis are reinsurance recoverable balances by reinsurer and default factors used to determine the portion of a reinsurer's balance deemed to be uncollectible. Default factors require considerable judgment and are determined using the current rating, or rating equivalent, of each reinsurer as well as other key considerations and assumptions.

At December 31, 2015, the use of different assumptions within the model could have an effect on the provision for uncollectible reinsurance reflected in the Company's Consolidated Financial Statements. To the extent the creditworthiness of the Company's reinsurers was to deteriorate due to an adverse event affecting the reinsurance industry, such as a large number of major catastrophes, actual uncollectible amounts could be significantly greater than the Company's provision.

Investment Valuation

Description: Consistent with U.S. GAAP, the Company recognizes investments at their fair value in the Consolidated Balance Sheets. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. U.S. GAAP also established a three level valuation hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon whether the inputs to the valuation of an asset or liability are observable or unobservable in the market at the measurement date, with quoted market prices being the highest level (“Level 1”) and unobservable inputs being the lowest level (“Level 3”). Generally, the degree of judgment used in measuring the fair value of financial instruments inversely correlates with the availability of observable inputs.
Judgments and Uncertainties: The Company’s external investment accounting service provider receives prices from independent pricing sources to measure the fair values of a majority of the Company's investments. These independent pricing sources

are prioritized with respect to reliability to ensure that only the highest priority pricing inputs are used. The independent pricing sources are received via automated feeds from indices, pricing and broker-dealers services. Pricing is also obtained from other external investment managers. This information is applied consistently across all portfolios. The Company’s external investment accounting service provider confirms and documents all prices received from broker-dealers on a daily basis for quality control and audit purposes.

In addition to internal controls, management relies on the effectiveness of the valuation controls in place at the Company’s external investment accounting service provider (supported by a Statement on Standards for Attestation Engagements No. 16 Report) in conjunction with regular discussion and analysis of the investment portfolio’s structure and performance. To date, management has not noted any issues or discrepancies related to investment valuation.

For further details on the valuation of the Company's remaining investment portfolio refer to Note 8, "Fair value measurements," to the Consolidated Financial Statements in Part II, Item 8.

Refer to Item 7A, “Quantitative and Qualitative Disclosures About Market Risk” for further discussion of interest rate risk and a sensitivity analysis of the impact of interest rate variances on the valuation of the Company’s fixed maturity and short-term investments.

Goodwill and Other Intangible Assets

Goodwill represents the excess of purchase price over the fair value of nets assets acquired from the acquisition of Talbot and Western World. Intangible assets with a finite life are amortized over the estimated useful life of the asset. Intangible assets with an indefinite useful life are not amortized.

Goodwill and intangible assets are assessed for impairment at least annually and more frequently if events or changes in circumstances indicate that the carrying amount may not be recoverable. Such events or circumstances may include an economic downturn in a geographic market or change in the assessment of future operations. In performing this assessment, the Company may first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test described in ASC Topic 350 “Intangibles-Goodwill and Other.” Similarly, the Company may first assess qualitative factors to determine whether it is more likely than not that an indefinite-lived intangible asset is impaired as a basis for determining whether it is necessary to perform the quantitative impairment test described in ASC Topic 350 "Intangibles - Goodwill and Other - General Intangibles Other than Goodwill." If the goodwill or intangible asset is impaired, it is written down to its realizable value with a corresponding expense reflected in the Consolidated Statements of Comprehensive Income.

As at December 31, 2015, neither the Company’s initial valuation nor its subsequent valuations has indicated any impairment of the Company’s goodwill and intangible assets of $196.8 million and $121.3 million, respectively. For further details refer to Note 6, "Goodwill and other intangible assets," to the Consolidated Financial Statements in Part II, Item 8.

Regulation
Reference is made to Part I, Item 1 "Business" for a discussion with respect to the impact of regulation on the Company.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS
The Private Securities Litigation Reform Act of 1995 (“PSLRA”) provides a “safe harbor” for forward-looking statements. Any prospectus, prospectus supplement, the Company’s Annual Report to shareholders, any proxy statement, any other Form 10-K, Form 10-Q or Form 8-K of the Company or any other written or oral statements made by or on behalf of the Company may include forward-looking statements that reflect the Company’s current views with respect to future events and financial performance. Such statements include forward-looking statements both with respect to the Company in general, and to the insurance and reinsurance sectors in particular. Statements that include the words “expect”, “intend”, “plan”, “believe”, “project”, “anticipate”, “will”, “may”, and similar statements of a future or forward-look nature identify forward-looking statements for purposes of the PSLRA or otherwise. All forward-looking statements address matters that involve risks and uncertainties. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in such statements and, therefore, you should not place undue reliance on any such statement.
We believe that these factors include, but are not limited to, the following:

- unpredictability and severity of catastrophic events;
- our ability to obtain and maintain ratings, which may affect by our ability to raise additional equity or debt financings, as well as other factors described herein;
- adequacy of the Company’s risk management and loss limitation methods;
- cyclicality of demand and pricing in the insurance and reinsurance markets;
- the Company’s ability to implement its business strategy during “soft” as well as “hard” markets;
- adequacy of the Company’s loss reserves;
- continued availability of capital and financing;
- the Company’s ability to identify, hire and retain, on a timely and unimpeded basis and on anticipated economic and other terms, experienced and capable senior management, as well as underwriters, claims professionals and support staff;
- acceptance of our business strategy, security and financial condition by rating agencies and regulators, as well as by brokers and (re)insureds;
- competition, including increased competition, on the basis of pricing, capacity, coverage terms or other factors;
- potential loss of business from one or more major insurance or reinsurance brokers;
- the Company’s ability to implement, successfully and on a timely basis, complex infrastructure, distribution capabilities, systems, procedures and internal controls, and to develop accurate actuarial data to support the business and regulatory and reporting requirements;
- general economic and market conditions (including inflation, volatility in the credit and capital markets, interest rates and foreign currency exchange rates) and conditions specific to the insurance and reinsurance markets in which we operate;
- the integration of businesses we may acquire or new business ventures, including overseas offices, we may start and the risk associated with implementing our business strategies and initiatives with respect to the new business ventures;
- accuracy of those estimates and judgments used in the preparation of our financial statements, including those related to revenue recognition, insurance and other reserves, reinsurance recoverables, investment valuations, intangible assets, bad debts, taxes, contingencies, litigation and any determination to use the deposit method of accounting, which, for a relatively new insurance and reinsurance company like our company, are even more difficult to make than those made in a mature company because of limited historical information;
- the effect on the Company’s investment portfolio of changing financial market conditions including inflation, interest rates, liquidity and other factors;
- acts of terrorism, political unrest, outbreak of war and other hostilities or other non-forecasted and unpredictable events;

- availability and cost of reinsurance and retrocession coverage;
- the failure of reinsurers, retrocessionaires, producers or others to meet their obligations to us;
- the timing of loss payments being faster or the receipt of reinsurance recoverables being slower than anticipated by us;
- changes in domestic or foreign laws or regulations, or their interpretations;
- changes in accounting principles or the application of such principles by regulators;
- statutory or regulatory or rating agency developments, including as to tax policy and reinsurance and other regulatory matters such as the adoption of proposed legislation that would affect Bermuda-headquartered companies and/or Bermuda-based insurers or reinsurers; and
- the other factors set forth herein under Part I Item 1A "Risk Factors" and under Part II Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the other sections of this Annual Report on Form 10-K for the year ended December 31, 2015, as well as the risk and other factors set forth in the Company's other filings with the SEC, as well as management's response to any of the aforementioned factors.

In addition, other general factors could affect our results, including: (a) developments in the world's financial and capital markets and our access to such markets; (b) changes in regulations or tax laws applicable to us, and (c) the effects of business disruption or economic contraction due to terrorism or other hostilities.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included herein or elsewhere. Any forward-looking statements made in this report are qualified by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us or our business or operations. We undertake no obligation to update publicly or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

Item 7A. Quantitative And Qualitative Disclosures About Market Risk

We are principally exposed to five types of market risk:

- interest rate risk;
- foreign currency risk;
- credit risk;
- liquidity risk; and
- inflation risk.

Interest Rate Risk: The Company’s managed fixed maturity portfolio is exposed to interest rate risk. Fluctuations in interest rates have a direct impact on the market valuation of these investments. As interest rates rise and credit spreads widen, the market value of the Company’s fixed maturity portfolio falls and the Company has the risk that cash outflows will have to be funded by selling assets, which will be trading at depreciated values. As interest rates decline and credit spreads tighten, the market value of the Company’s fixed income portfolio increases and the Company has reinvestment risk, as funds reinvested may earn less than is necessary to match anticipated liabilities. We manage interest rate risk by selecting investments with characteristics such as duration, yield, currency and liquidity tailored to the anticipated cash outflow characteristics of the insurance and reinsurance liabilities the Company assumes.

The following table indicates the impact on the Company’s managed fixed maturity portfolio from an immediate 100 basis point increase and decrease in market interest rates (based on U.S. treasury yield):

(Dollars in thousands)	December 31, 2015 Increase (decrease) in market value		December 31, 2014 Increase (decrease) in market value	
Immediate 100 basis point increase in market interest rates	$(126,908)	(2.4)%	$(125,604)	(2.2)%
Immediate 100 basis point decrease in market interest	$127,976	2.4%	$121,290	2.1%

As at December 31, 2015, the Company held $1,334.8 million (December 31, 2014: $1,456.8 million), or 25.1% (December 31, 2014: 26.7%) of the Company’s managed fixed maturity portfolio in asset-backed and mortgage-backed securities. Some of these assets are exposed to prepayment risk, which occurs when the frequency with which holders of the underlying loans prepay the outstanding principal before the maturity date changes. The adverse impact of prepayment is more evident in a declining interest rate environment. As a result, the Company will be exposed to reinvestment risk, as cash flows received by the Company will be accelerated and will be reinvested at the prevailing interest rates.

Foreign Currency Risk: Certain of the Company’s reinsurance contracts provide that ultimate losses may be payable in foreign currencies depending on the country of original loss. Foreign currency exchange rate risk exists to the extent that there is an increase in the exchange rate of the foreign currency in which losses are ultimately owed. Therefore, we manage our foreign currency risk by seeking to match our net assets or net liabilities held in foreign currencies under insurance and reinsurance policies that are payable in foreign currencies with cash and investments that are denominated in such currencies.

The following table presents the Company’s monetary assets and liabilities held in foreign currencies and the Company's non-monetary assets and liabilities that do not require revaluation:

	As at December 31,			
	2015		2014	
(Dollars in thousands)	Balance	% of Total	Balance	% of Total
Total monetary assets held in foreign currencies	$568,153	5.4%	$606,293	6.0%
Total monetary liabilities held in foreign currencies	$732,730	13.1%	$738,488	13.1%
Total non-monetary assets that do not require revaluation	$81,718	0.8%	$19,828	0.2%
Total non-monetary liabilities that do not require revaluation	$15,937	0.3%	$92,383	1.6%

When necessary, we may also use derivatives to economically hedge un-matched foreign currency exposures, specifically forward contracts. For further information on the accounting treatment of our foreign currency derivatives, refer to Part II, Item 8, Note 12, "Derivatives," in the Consolidated Financial Statements. To the extent foreign currency exposure is not hedged or otherwise matched, the Company may experience exchange losses, which in turn would adversely affect the results of operations and financial condition.

Credit Risk: The Company is exposed to credit risk from the possibility that counterparties may default on their obligations. The Company’s primary credit risks reside in investment in U.S. and non-U.S. corporate bonds and amounts recoverable from reinsurers. The Company attempts to limit its credit exposure by purchasing high quality fixed income investments to maintain a minimum weighted average portfolio credit rating of A+ on its managed fixed maturity portfolio. As at December 31, 2015, the Company’s managed fixed maturity portfolio had an average credit quality rating of A+ (December 31, 2014: AA-).

In addition, the Company's IPS limits the amount of “risk assets” in its managed cash and investments portfolio, such as non-investment grade debt securities, private equity investments, private placements that are not subject to rule 144A, hedge funds and other alternative assets to a maximum of 35% of shareholders’ equity available to Validus. The Company’s managed cash and investment portfolio had risk assets of $837.9 million or 22.1% of shareholders’ equity available to Validus as at December 31, 2015 (December 31, 2014: $666.9 million or 17.2%).

The Company also limits its aggregate exposure to any single issuer to 3.75% or less of its total managed cash and investment portfolio, excluding government and agency securities, depending on the credit rating of the issuer. The Company did not have an aggregate exposure to any single issuer of more than 0.9% of total managed cash and investments, other than with respect to government and agency securities as at December 31, 2015 (December 31, 2014: 1.2%).

Furthermore, fixed maturity investments in below investment grade securities are limited to no more than 15% of the Company's managed cash and investment portfolio. As at December 31, 2015, 10.3% (December 31, 2014: 7.9%) of the managed cash and investment portfolio was below Baa3/BBB-.

The amount of the maximum exposure to credit risk is indicated by the carrying value of the Company’s financial assets. The Company evaluates the financial condition of its reinsurers and monitors concentration of credit risk arising from its exposure to individual reinsurers. The reinsurance program is generally placed with reinsurers whose rating, at the time of placement, was A- or better rated by S & P or the equivalent with other rating agencies. Exposure to a single reinsurer is also controlled with restrictions dependent on rating. At December 31, 2015, 98.7% of reinsurance recoverables (which includes loss reserves recoverable and recoverables on paid losses) were from reinsurers rated A- or better, or from reinsurers posting full collateral (December 31, 2014: 98.0% rated A- or better).

Liquidity risk: Certain of the Company’s investments may become illiquid. Disruption in the credit markets may materially affect the liquidity of the Company’s investments, including non-agency residential mortgage-backed securities and bank loans which represent 9.4% at December 31, 2015 (December 31, 2014: 7.3%) of managed cash and investments. If the Company requires significant amounts of cash on short notice in excess of normal cash requirements (which could include claims on a major catastrophic event) in a period of market illiquidity, the investments may be difficult to sell in a timely manner and may have to be disposed of for less than what may otherwise have been possible under other conditions. At December 31, 2015, the Company had $855.9 million (December 31, 2014: $932.3 million) of unrestricted, liquid assets, defined as managed unpledged cash and cash equivalents, short term investments, government and government agency securities.

For details on the Company's debt and financing arrangements, refer to Part II, Item 8, Note 20, “Debt and financing arrangements,” to the Consolidated Financial Statements.

Inflation Risk: We do not believe that inflation has had or will have a material effect on the Company's combined results of operations, except insofar as (a) inflation may affect interest rates, and (b) losses and loss expenses may be affected by inflation.

Item 8. Financial Statements and Supplementary Data

Reference is made to Item 15 (a) of this Report for the Consolidated Financial Statements of Validus Holdings, Ltd. and the Notes thereto, as well as the Schedules to the Consolidated Financial Statements.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of disclosure controls and procedures pursuant to Rules 13a-15 and 15d-15 promulgated under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures are effective to provide reasonable assurance that all material information relating to the Company required to be filed in this report has been made known to them in a timely fashion.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended.

The Company's internal control over financial reporting was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2015. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control—Integrated Framework (2013) (the "Framework"). Based on its assessment, management concluded that, as of December 31, 2015, the Company's internal control over financial reporting was effective based on the Framework criteria.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2015 has been audited by PricewaterhouseCoopers Ltd., an independent registered public accounting firm, as stated in their report included in this filing.

Changes in Internal Control Over Financial Reporting

There have been no changes in internal control over financial reporting identified in connection with the Company's evaluation required pursuant to Rules 13a-15 and 15d-15 promulgated under the Securities Exchange Act of 1934, as amended, that occurred during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Certain of the information required by this item relating to the executive officers of the Company may be found starting at page 47. The balance of the information required by this item is omitted because a definitive proxy statement that involves the election of directors will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year pursuant to Regulation 14A, which proxy statement is incorporated herein by reference.

Item 11. Executive Compensation

This item is omitted because a definitive proxy statement that involves the election of directors will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year pursuant to Regulation 14A, which proxy statement is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

Equity Compensation Plan Information

The following table displays certain information regarding our equity compensation plans at December 31, 2015:

(Dollars in thousands)	Number of Securities to be Issued Upon Exercise of Outstanding Options and Restricted Stock	Weighted-Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity compensation plans
2005 Amended and Restated Long-Term Incentive Plan	3,091,777	$20.17	1,971,922
Director Stock Compensation Plan	—		52,104

The balance of the information required by this item is omitted because a definitive proxy statement that involves the election of directors will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year pursuant to Regulation 14A, which proxy statement is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

This item is omitted because a definitive proxy statement that involves the election of directors will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year pursuant to Regulation 14A, which proxy statement is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

This item is omitted because a definitive proxy statement that involves the election of directors will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year pursuant to Regulation 14A, which proxy statement is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

Financial Statements, Financial Statement Schedules and Exhibits.

(a) Financial Statements and Financial Statement Schedules are included as pages F-1 to F-102.

(b) The exhibits numbers followed by an asterisk (*) indicate exhibits physically filed with this Annual Report on Form 10-K. All other exhibit numbers indicate exhibits filed by incorporation by reference.

EXHIBITS

Exhibit Number		Description of Document
2.1		Stock Purchase Agreement, dated as of June 23, 2014, by and among Western World Insurance Group, Inc., the shareholders of Western World Insurance Group, Inc., Validus Specialty, Inc., Validus Holdings, Ltd. (solely for purposes of Article I, Section 5.08, Section 6.08, Section 9.03 and Article XI), and Andrew S. Frazier (in his capacity as the Sellers' Representative) (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on June 27, 2014)
2.2	*	Stock Purchase Agreement dated as of the 24th day of November, 2015, by and between WRM America Indemnity Holding Company, LLC, a Delaware limited liability company, and Western World Insurance Company, a New Hampshire corporation and, solely for purposes of Section 12.17 and Section 12.18 hereof, Teiva Securityholders Representative, LLC, a Delaware limited liability company and, solely for purposes of Section 12.18 hereof, the Securityholders (as defined therein).
3.1		Memorandum of Association dated October 10, 2005 (Incorporated by reference from S-1 SEC File No. 333-139989)
3.2		Amended and Restated Bye-laws (Incorporated by reference from S-1 SEC File No. 333-139989)
4.1		Specimen Common Share Certificate (Incorporated by reference from S-1 SEC File No. 333-139989)
4.2		Certificate of Deposit of Memorandum of Increase of Share Capital dated October 28, 2005 (Incorporated by reference from S-1 SEC File No. 333-139989)
4.3		9.069% Junior Subordinated Deferrable Debentures Indenture dated as of June 15, 2006 (Incorporated by reference from S-1 SEC File No. 333-139989)
4.4		Form of 9.069% Junior Subordinated Deferrable Debentures (Included in Exhibit 4.5 hereto) (Incorporated by reference from S-1 SEC File No. 333-139989)
4.5		First Supplemental Indenture to the 9.069% Junior Subordinated Deferrable Debentures Indenture dated as of September 15, 2006 (Incorporated by reference from S-1 SEC File No. 333-139989)
4.6		8.480% Junior Subordinated Deferrable Debentures Indenture dated as of June 29, 2007 (Incorporated by reference from S-1 SEC File No. 333-139989)
4.7		Form of 8.480% Junior Subordinated Deferrable Debentures (Included in Exhibit 4.8 hereto) (Incorporated by reference from S-1 SEC File No. 333-139989)
4.8		Senior Note Indenture, by and between Validus Holdings, Ltd. and The Bank of New York Mellon, dated January 26, 2010 (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on January 26, 2010)

4.9	8.875% Senior Notes Supplemental Indenture, by and between Validus Holdings, Ltd. and The Bank of New York Mellon, dated January 26, 2010 (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on January 26, 2010)
4.10	Form of 8.875% Senior Note (Included in Exhibit 4.10 hereto) (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on January 26, 2010)
4.11	Junior Subordinated Indenture dated as of August 23, 2006, between Flagstone Reinsurance Holdings Limited and JP Morgan Chase Bank, National Association, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)

4.12	First Supplemental Indenture, dated as of May 17, 2010, among Flagstone Reinsurance Holdings, S.A., Flagstone Reinsurance Holdings Limited and The Bank of New York Mellon Trust Company, National Association, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.13	Second Supplemental Indenture, dated as of November 30, 2012, among Flagstone Reinsurance Holdings (Bermuda) Limited, Flagstone Reinsurance Holding, S.A. and The Bank of New York Mellon Trust Company, National Association, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.14	Third Supplemental Indenture, dated as of November 30, 2012, among Validus UPS, Ltd., Validus Holdings, Ltd. and The Bank of New York Mellon Trust Company, National Association, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.15	Junior Subordinated Indenture, dated as of September 20, 2007, between Flagstone Reinsurance Holdings Limited and The Bank of New York Trust Company, National Association, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.16	First Supplemental Indenture, dated as of May 17, 2010, among Flagstone Reinsurance Holdings, S.A., Flagstone Reinsurance Holdings Limited and The Bank of New York Mellon Trust Company, National Association, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.17	Second Supplemental Indenture, dated as of November 30, 2012, among Flagstone Reinsurance Holdings (Bermuda) Limited, Flagstone Reinsurance Holdings, S.A. and The Bank of New York Mellon Trust Company, National Association, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.18	Third Supplemental Indenture, dated as of November 30, 2012, among Flagstone Finance S.A., Validus UPS, Ltd., Validus Holdings, Ltd. and Wilmington Trust Company, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.19	Junior Subordinated Indenture, dated as of June 8, 2007, among Flagstone Finance S.A., Flagstone Reinsurance Holdings Limited and Wilmington Trust Company, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.20	First Supplemental Indenture, dated as of May 17, 2010, among Flagstone Finance S.A., Flagstone Reinsurance Holdings, S.A. and Wilmington Trust Company, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.21	Second Supplemental Indenture, dated as of November 30, 2012, among Flagstone Finance S.A., Flagstone Reinsurance Holdings (Bermuda) Limited, Flagstone Reinsurance Holdings, S.A. and Wilmington Trust Company, as trustee (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.22	Third Supplemental Indenture, dated as of November 30, 2012, among Flagstone Finance S.A, Validus UPS, Ltd., Validus Holdings, Ltd. and Wilmington Trust Company, as trustee (Incorporated

	by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.23	Note Purchase Agreement, dated as of August 23, 2006, between Flagstone Reinsurance Holdings Limited and Merrill Lynch International (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.24	Amendment No. 2, dated as of November 30, 2012, to the Note Purchase Agreement, among Validus UPS, Ltd., Validus Holdings, Ltd. and the noteholders named therein (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
4.25	Amendment No. 2, dated as of November 30, 2012, to the Note Purchase Agreement, among Validus UPS, Ltd., Validus Holdings, Ltd. and the noteholders named therein (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 30, 2012)
10.1	Five-Year Unsecured Revolving Credit and Letter of Credit Facility, dated as of December 9, 2015, among Validus Holdings, Ltd., Validus Reinsurance, Ltd., the Lenders party thereto, JPMorgan Chase Bank, N.A., as administrative agent for the Lenders and Lloyds Securities Inc., as syndication agent (Incorporated by reference from the Company’s Current Report on Form 8-K filed on December 10, 2015)
10.2	Five-Year Secured Letter of Credit Facility, dated as of December 9, 2015, among Validus Holdings, Ltd., Validus Reinsurance, Ltd., the Lenders party thereto, JPMorgan Chase Bank, N.A., as administrative agent for the Lenders and Lloyds Securities Inc., as syndication agent (Incorporated by reference from the Company’s Current Report on Form 8-K filed on December 10, 2015)

10.3	Amended and Restated Employment Agreement between Validus Holdings, Ltd. and Lixin Zeng dated as of November 1, 2012 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2012 filed with the SEC on November 6. 2012)
10.3.1	Amendment No.1 to Amended and Restated Employment Agreement between Validus Holdings, Ltd. and Lixin Zeng dated as of March 12, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.4	Amended and Restated Employment Agreement dated as of February 15, 2013 between Validus Holdings, Ltd. and Jeffrey D. Sangster (Incorporated by reference from the Company's Annual Report on Form 10-K for year ended December 31, 2012, filed with the SEC on February 15, 2013).
10.4.1	Amendment to No. 1 to Amended and Restated Employment Agreement between Jeffrey D. Sangster and Validus Holdings, Ltd. dated as of March 12, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.5	Amended and Restated Employment Agreement between Validus Holdings, Ltd. and Edward J. Noonan (Incorporated by reference from S-1 SEC File No. 333-139989)
10.5.1	Amendment No.1 to Amended and Restated Employment Agreement between Validus Holdings, Ltd. and Edward J. Noonan (Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2008, filed with the SEC on November 13, 2008)
10.5.2	Amendment No. 2 to Amended and Restated Employment Agreement between Edward J. Noonan and Validus Holdings, Ltd. dated as of March 12, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.6	Employment Agreement dated as of September 1, 2010 between Validus Holdings, Ltd. and Jonathan P. Ritz. (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on September 8, 2010)
10.6.1	Amendment No. 1 to Employment Agreement between Validus Holdings, Ltd. and Jonathan P. Ritz dated as of October 1, 2010 (Incorporated by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on February 18, 2011)
10.6.2	Amendment No. 2 to Employment Agreement between Jonathan P. Ritz and Validus America, Inc. dated as of March 12, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.7	Service Agreement between Talbot Underwriting Services, Ltd. and Charles Neville Rupert Atkin (Incorporated by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2007, filed with the SEC on March 6, 2008)
10.7.1	Amendment No. 1 to Service Agreement between C.N. Rupert Atkin and Talbot Underwriting Services Ltd. dated as of March 27, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.8	Amended and Restated Employment Agreement between Validus Holdings, Ltd. and Robert F. Kuzloski dated as of April 1, 2011 (Incorporated by reference from the Company's Quarterly Report

	on Form 10-Q for the period ended September 30, 2011, filed with the SEC on November 4, 2011)
10.8.1	Amendment No. 1 to Amended and Restated Employment Agreement between Validus Holdings, Ltd. and Robert F. Kuzloski dated as of August 1, 2012 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2012 filed with the SEC on November 6, 2012)
10.8.2	Amendment No. 2 to Amended and Restated Employment Agreement between Robert F. Kuzloski and Validus Holdings, Ltd. dated as of March 12, 2015 (Incorporated by reference from the Company’s Quarterly Report on Form 10-Q filed on May 8, 2015)
10.9	Employment Agreement between Validus Holdings, Ltd. and Andrew Kudera dated as of February 2, 2010 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2011, filed with the SEC on November 4, 2011)
10.9.1	Amendment No. 1 to Employment Agreement between Andrew E. Kudera and Validus Holdings, Ltd. dated as of March 12, 2015 (Incorporated by reference from the Company’s Quarterly Report on Form 10-Q filed on May 8, 2015)

10.10	Employment Agreement dated October 25 2012 between Validus America, Inc. and for purposes of Section 12.04, countersigned by Validus Holdings, Ltd. and John J. Hendrickson (Incorporated by reference from the Company's Annual Report on Form 10-K for year ended December 31, 2012, filed with the SEC on February 15, 2013)
10.10.1	Amendment No. 1 to Employment Agreement between John J. Hendrickson and Validus America, Inc. dated as of March 12, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.11	Employment Agreement dated as of April 2, 2013 between Validus America, Inc. and Romel Salam (Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2013 filed with the SEC on May 6, 2013)
10.11.1	Amendment No. 1 to Employment Agreement between Validus America, Inc. and Romel Salam dated as of May 20, 2014 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2014 filed with the SEC on August 7, 2014)
10.11.2	Amendment No. 2 to Employment Agreement between Romel Salam and Validus America, Inc. dated as of March 12, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.12	Amended and Restated Employment Agreement dated as of April 30, 2013 between Validus Services (Bermuda), Ltd. and Kean Driscoll (Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2013 filed with the SEC on May 6, 2013)
10.12.1	Amendment No. 1 to Amended and Restated Employment Agreement between Kean Driscoll and Validus Services (Bermuda) Ltd. dated as of March 12, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.13	Employment Agreement dated as of June 19, 2013, between Validus Holdings, Ltd. and Michael Moore (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on June 24, 2013)
10.13.1	Amendment No. 1 to Employment Agreement between Michael Moore and Validus Holdings, Ltd. dated as of March 12, 2015 (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on May 8, 2015)
10.14	Investment Manager Agreement with BlackRock Financial Management, Inc. (Incorporated by reference from S-1 SEC File No. 333-139989)
10.15	Risk Reporting & Investment Accounting Services Agreement with BlackRock Financial Management, Inc. (Incorporated by reference from S-1 SEC File No. 333-139989)
10.16	Amended and Restated Validus Holdings, Ltd. 2005 Long Term Incentive Plan (As Amended and Restated Effective May 7, 2015) (Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on November 6, 2015)
10.17	Form of Amended Post-IPO Restricted Share Award Agreement for Validus Executive Officers (Incorporated by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on February 18, 2011)

10.18	Form of Amended Restricted Share Agreement for Talbot Executive Officers (Incorporated by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on February 18, 2011)
10.19	Amended and Restated Restricted Share Agreement between Validus Holdings, Ltd. and Edward J. Noonan (Incorporated by reference from S-1 SEC File No. 333-139989)
10.20	Stock Option Agreement between Validus Holdings, Ltd. and Edward J. Noonan (Incorporated by reference from S-1 SEC File No. 333-139989)
10.21	Form of Stock Option Agreement for Executive Officers prior to 2008 (Incorporated by reference from S-1 SEC File No. 333-139989)
10.22	Form of Stock Option Agreement for Executive Officers commencing in 2008 (Incorporated by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2007, filed with the SEC on March 6, 2008)
10.23	Form of Performance Share Award Agreement for Validus Executive Officers (Incorporated by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on February 18, 2011)

10.24		Form of Performance Share Award Agreement for Talbot Executive Officers (Incorporated by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on February 18, 2011)
10.25		Nonqualified Supplemental Deferred Compensation Plan (Incorporated by reference from S-1 SEC File No. 333-139989)
10.26		Validus Holdings, Ltd. Director Stock Compensation Plan (Incorporated by reference from S-1 SEC File No. 333-139989)
10.27		Amendment No. 1 to Validus Holdings, Ltd. Directors Stock Compensation Plan dated as of January 5, 2009 (Incorporated by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2008 filed with the SEC on February 27, 2009)
10.28		Subscription Agreement dated as of November 7, 2014 between Aquiline Capital Partners III GP (Offshore) Ltd. and Validus Reinsurance, Ltd. (Incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 7, 2014)
21	*	Subsidiaries of the Registrant
23	*	Consent of PricewaterhouseCoopers Ltd.
24		Power of attorney (Incorporated by Reference from signature page)
31	*	Rule 13a-14(a)/15d-14(a) Certifications
32	*	Section 1350 Certification
101.INS	*	XBRL Instance Document
101.SCH	*	XBRL Taxonomy Extension Schema Document
101.CAL	*	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	*	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	*	XBRL Taxonomy Extension Definition Linkbase Document

*Filed herewith

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in Pembroke, Bermuda, on February 22, 2016.

Validus Holdings, Ltd.

By: /s/ EDWARD J. NOONAN
Name: Edward J. Noonan
Title: Chief Executive Officer

By: /s/ JEFFREY D. SANGSTER
Name: Jeffrey D. Sangster
Title: Executive Vice President and Chief Financial Officer

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POWER OF ATTORNEY

We, the undersigned directors and executive officers of Validus Holdings, Ltd. hereby severally constitute Edward J. Noonan and Jeffrey D. Sangster, and each of them singly, our true and lawful attorneys with full power to them and each of them to sign for us, and in our names in the capacities indicated below, any and all amendments to the Annual Report on Form 10-K filed with the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys to any and all amendments to said Annual Report on Form 10-K.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ EDWARD J. NOONAN Name: Edward J. Noonan	Chairman of the Board of Directors and Chief Executive Officer (Principal Executive Officer)	February 22, 2016
/s/ JEFFREY D. SANGSTER Name: Jeffrey D. Sangster	Executive Vice President and Chief Financial Officer (Principal Finance Officer)	February 22, 2016
/s/ MICHAEL R. MOORE Name: Michael R. Moore	Executive Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 22, 2016
/s/ MAHMOUD ABDALLAH Name: Mahmoud Abdallah	Director	February 22, 2016
/s/ MICHAEL E. A. CARPENTER Name: Michael E. A. Carpenter	Director	February 22, 2016
/s/ MATTHEW J. GRAYSON Name: Matthew J. Grayson	Director	February 22, 2016
/s/ JEFFREY W. GREENBERG Name: Jeffrey W. Greenberg	Director	February 22, 2016
/s/ JOHN J. HENDRICKSON Name: John J. Hendrickson	Director	February 22, 2016
/s/ JEAN-MARIE NESSI Name: Jean-Marie Nessi	Director	February 22, 2016
/s/ MANDAKINI PURI Name: Mandakini Puri	Director	February 22, 2016
/s/ DR. THERESE M. (TERRI) VAUGHAN Name: Dr. Therese M. (Terri) Vaughan	Director	February 22, 2016
/s/ CHRISTOPHER E. WATSON Name: Christopher E. Watson	Director	February 22, 2016

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AND FINANCIAL STATEMENT SCHEDULES

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Schedules other than those listed are omitted for the reason that they are not required, are not applicable or that equivalent information has been included in the financial statements, notes thereto, or elsewhere herein.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Validus Holdings, Ltd.
In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Validus Holdings, Ltd. and its subsidiaries at December 31, 2015 and December 31, 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedules listed in the accompanying index present fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedules, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedules, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.
As discussed in Note 2 to the consolidated financial statements, the method in which the Company assesses entities for consolidation was changed in the fourth quarter of 2015.
A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.
Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers Ltd.
Hamilton, Bermuda
February 22, 2016

PART I. FINANCIAL INFORMATION
ITEM I. FINANCIAL STATEMENTS
Validus Holdings, Ltd.
Consolidated Balance Sheets
As at December 31, 2015 and 2014
(Expressed in thousands of U.S. dollars, except share and per share information)

	December 31, 2015	December 31, 2014
Assets		
Fixed maturities trading, at fair value (amortized cost: 2015—$5,556,900; 2014—$5,546,994)	$5,510,331	$5,545,231
Short-term investments trading, at fair value (amortized cost: 2015—$1,941,615; 2014—$1,501,360)	1,941,635	1,501,212
Other investments, at fair value (cost: 2015—$315,963; 2014—$320,476)	336,856	334,685
Cash and cash equivalents	723,109	550,401
Restricted cash	73,270	173,003
Total investments and cash	8,585,201	8,104,532
Investments in affiliates, equity method (cost: 2015—$70,186; 2014—$107,501)	88,065	114,450
Premiums receivable	658,682	706,467
Deferred acquisition costs	181,002	161,022
Prepaid reinsurance premiums	77,992	82,947
Securities lending collateral	4,863	470
Loss reserves recoverable	350,586	377,466
Paid losses recoverable	23,071	38,078
Income taxes recoverable	16,228	—
Deferred tax asset	21,661	23,821
Receivable for investments sold	39,766	18,318
Intangible assets	121,258	126,924
Goodwill	196,758	195,897
Accrued investment income	23,897	24,865
Other assets	126,782	137,307
Total assets	$10,515,812	$10,112,564
Liabilities		
Reserve for losses and loss expenses	$2,996,567	$3,243,147
Unearned premiums	966,210	989,229
Reinsurance balances payable	75,380	129,071
Securities lending payable	5,329	936
Deferred tax liability	3,847	5,541
Payable for investments purchased	77,475	68,574
Accounts payable and accrued expenses	627,331	395,178
Notes payable to AlphaCat investors	75,493	—
Senior notes payable	245,161	244,960
Debentures payable	537,668	539,277
Total liabilities	$5,610,461	$5,615,913
Commitments and contingent liabilities		
Redeemable noncontrolling interest	1,111,714	617,791

Shareholders’ equity		
Common shares, 571,428,571 authorized, par value $0.175 (Issued: 2015—160,570,772; 2014—155,554,224; Outstanding: 2015—82,900,617; 2014—83,869,845)	$28,100	$27,222
Treasury shares (2015—77,670,155; 2014—71,684,379)	(13,592)	(12,545)
Additional paid-in-capital	1,002,980	1,207,493
Accumulated other comprehensive loss	(12,569)	(8,556)
Retained earnings	2,634,056	2,372,972
Total shareholders’ equity available to Validus	3,638,975	3,586,586
Noncontrolling interest	154,662	292,274
Total shareholders’ equity	$3,793,637	$3,878,860
Total liabilities, noncontrolling interests and shareholders’ equity	$10,515,812	$10,112,564

The accompanying notes are an integral part of these Consolidated Financial Statements.

Validus Holdings, Ltd.
Consolidated Statements of Comprehensive Income
For the Years Ended December 31, 2015, 2014 and 2013
(Expressed in thousands of U.S. dollars, except share and per share information)

	December 31, 2015	December 31, 2014	December 31, 2013
Revenues			
Gross premiums written	$2,557,506	$2,358,865	$2,388,446
Reinsurance premiums ceded	(328,681)	(313,208)	(375,800)
Net premiums written	2,228,825	2,045,657	2,012,646
Change in unearned premiums	18,064	(52,602)	86,149
Net premiums earned	2,246,889	1,993,055	2,098,795
Net investment income	127,824	100,086	96,089
Net realized gains (losses) on investments	2,298	14,917	(764)
Change in net unrealized losses on investments	(32,395)	(2,842)	(52,419)
Income from investment affiliate	4,281	8,411	4,790
Other insurance related income and other loss	5,111	1,229	(6,607)
Foreign exchange (losses) gains	(8,731)	(12,181)	3,949
Total revenues	2,345,277	2,102,675	2,143,833
Expenses			
Losses and loss expenses	977,833	765,015	776,796
Policy acquisition costs	410,058	339,467	360,403
General and administrative expenses	363,709	329,362	316,008
Share compensation expenses	38,341	33,073	27,630
Finance expenses	74,742	68,324	68,007
Transaction expenses	—	8,096	—
Total expenses	1,864,683	1,543,337	1,548,844
Income before taxes, (loss) income from operating affiliate and (income) attributable to AlphaCat investors	480,594	559,338	594,989
Tax expense	(6,376)	(155)	(383)
(Loss) income from operating affiliate	(3,949)	(4,340)	542
(Income) attributable to AlphaCat investors	(2,412)	—	—
Net income	$467,857	$554,843	$595,148
Net (income) attributable to noncontrolling interest	(92,964)	(74,880)	(62,482)
Net income available to Validus	$374,893	$479,963	$532,666
Other comprehensive loss			
Change in foreign currency translation adjustments	(3,716)	(7,501)	(1,954)
Change in minimum pension liability, net of tax	544	(210)	—
Change in fair value of cash flow hedge	(841)	(228)	—
Other comprehensive loss	$(4,013)	$(7,939)	$(1,954)
Comprehensive income available to Validus	$370,880	$472,024	$530,712
Earnings per share			
Weighted average number of common shares and common share equivalents outstanding			

Basic	83,107,236	90,354,745	102,202,274
Diluted	86,426,760	94,690,271	103,970,289
Basic earnings per share available to common shareholders	$4.47	$5.24	$5.02
Earnings per diluted share available to common shareholders	$4.34	$5.07	$4.94
Cash dividends declared per share	$1.28	$1.20	$3.20

The accompanying notes are an integral part of these Consolidated Financial Statements.

Validus Holdings, Ltd.
Consolidated Statements of Shareholders' Equity
For the Years Ended December 31, 2015, 2014 and 2013
(Expressed in thousands of U.S. dollars, except share and per share information)

	December 31, 2015	December 31, 2014	December 31, 2013
Common shares			
Balance—Beginning of year	$27,222	$27,036	$26,722
Common shares issued, net	878	186	314
Balance—End of year	$28,100	$27,222	$27,036
Treasury shares			
Balance—Beginning of year	$(12,545)	$(10,228)	$(7,836)
Repurchase of common shares	(1,047)	(2,317)	(2,392)
Balance—End of year	$(13,592)	$(12,545)	$(10,228)
Additional paid-in capital			
Balance—Beginning of year	$1,207,493	$1,677,894	$2,160,478
Common shares issued, net	16,529	5,161	898
Repurchase of common shares	(259,383)	(508,635)	(511,112)
Share compensation expenses	38,341	33,073	27,630
Balance—End of year	$1,002,980	$1,207,493	$1,677,894
Accumulated other comprehensive loss			
Balance—Beginning of year	$(8,556)	$(617)	$(2,953)
Amounts reclassified to retained earnings	—	—	4,290
Other comprehensive loss	(4,013)	(7,939)	(1,954)
Balance—End of year	$(12,569)	$(8,556)	$(617)
Retained earnings			
Balance—Beginning of year	$2,372,972	$2,010,009	$1,844,416
Dividends	(113,809)	(117,000)	(362,783)
Net income	467,857	554,843	595,148
Net (income) attributable to noncontrolling interest	(92,964)	(74,880)	(62,482)
Amounts reclassified from accumulated other comprehensive loss	—	—	(4,290)
Balance—End of year	$2,634,056	$2,372,972	$2,010,009
Total shareholders' equity available to Validus	$3,638,975	$3,586,586	$3,704,094
Noncontrolling interest	$154,662	$292,274	$375,026
Total shareholders' equity	$3,793,637	$3,878,860	$4,079,120

The accompanying notes are an integral part of these Consolidated Financial Statements.

Validus Holdings, Ltd.
Consolidated Statements of Cash Flows
For the Years Ended December 31, 2015, 2014 and 2013
(Expressed in thousands of U.S. dollars, except share and per share information)

	December 31, 2015	December 31, 2014	December 31, 2013
Cash flows provided by (used in) operating activities			
Net income	$467,857	$554,843	$595,148
Adjustments to reconcile net income to cash provided by (used in) operating activities:			
Share compensation expenses	38,341	33,073	27,630
(Gain) loss on sale of subsidiary	—	(709)	3,237
Amortization of discount on senior notes	108	108	108
Income from investment affiliate	(4,281)	(8,411)	(4,790)
Net realized (gains) losses on investments	(2,298)	(14,917)	764
Change in net unrealized losses on investments	32,395	2,842	52,419
Amortization of intangible assets	5,666	4,538	4,162
Loss (income) from operating affiliates	3,949	4,340	(542)
Foreign exchange losses included in net income	18,907	23,591	1,912
Amortization of premium on fixed maturity investments	23,075	19,107	19,093
Change in:			
Premiums receivable	44,154	22,034	139,539
Deferred acquisition costs	(19,980)	(27,131)	14,255
Prepaid reinsurance premiums	4,955	34,443	(4,695)
Loss reserves recoverable	24,659	81,824	69,910
Paid losses recoverable	15,111	43,580	(33,807)
Income taxes recoverable	(16,477)	—	—
Deferred tax asset	1,979	—	—
Accrued investment income	878	2,417	2,499
Other assets	10,023	31,264	(75,623)
Reserve for losses and loss expenses	(231,345)	(404,280)	(491,380)
Unearned premiums	(23,019)	18,161	(81,454)
Reinsurance balances payable	(52,785)	(32,262)	(1,580)
Deferred tax liability	(1,820)	(45,380)	(1,008)
Accounts payable and accrued expenses	(5,546)	(2,914)	(431)
Net cash provided by operating activities	334,506	340,161	235,366
Cash flows provided by (used in) investing activities			
Proceeds on sales of fixed maturity investments	3,842,408	4,756,555	4,370,548
Proceeds on maturities of fixed maturity investments	332,410	554,619	490,459
Purchases of fixed maturity investments	(4,225,031)	(4,391,814)	(5,392,728)
(Purchases) sales of short-term investments, net	(436,690)	(329,301)	934,759
(Purchases) sales of other investments, net	(5,988)	(143,597)	26,508
(Increase) decrease in securities lending collateral	(4,393)	2,922	(3,167)
Investment in operating affiliates	—	—	(6,500)
Redemption from operating affiliates	46,603	—	—
Investment in investment affiliates, net	(19,886)	(12,468)	(14,492)
Decrease (increase) in restricted cash	99,733	27,489	(172,962)
Proceeds on sale of subsidiary, net of cash	—	16,459	21,388
Purchase of subsidiary, net of cash acquired	—	(643,545)	—
Net cash (used in) provided by investing activities	(370,834)	(162,681)	253,813

Cash flows provided by (used in) financing activities			
Net proceeds on issuance of notes payable to AlphaCat investors	75,493	—	—
Issuance of common shares, net	17,407	5,347	1,211
Purchases of common shares under share repurchase program	(260,430)	(510,952)	(513,504)
Dividends paid	(112,991)	(117,043)	(360,071)
Increase (decrease) in securities lending payable	4,393	(2,922)	3,167
Third party investment in redeemable noncontrolling interest	499,200	300,200	142,190
Third party redemption of redeemable noncontrolling interest	(86,934)	(13,192)	—
Third party investment in noncontrolling interest	9,600	117,243	136,619
Third party distributions of noncontrolling interest	(168,733)	(237,183)	(289,260)
Third party subscriptions received on AlphaCat Funds and Sidecars	249,636	127,400	15,600
Net cash provided by (used in) financing activities	226,641	(331,102)	(864,048)
Effect of foreign currency rate changes on cash and cash equivalents	(17,605)	(25,310)	(6,364)
Net increase (decrease) in cash	172,708	(178,932)	(381,233)
Cash and cash equivalents—beginning of year	550,401	729,333	1,110,566
Cash and cash equivalents—end of year	$723,109	$550,401	$729,333
Taxes paid during the year	$16,050	$42,689	$5,407
Interest paid during the year	$55,047	$54,526	$52,191

The accompanying notes are an integral part of these Consolidated Financial Statements.

1. Nature of the business

Validus Holdings, Ltd. (together with its wholly and majority owned subsidiaries, the “Company”) was incorporated under the laws of Bermuda on October 19, 2005. The Company provides reinsurance coverage, insurance coverage and insurance linked securities management through four distinct global operating segments, Validus Re, Talbot, Western World, and AlphaCat. Validus Re is a Bermuda-based reinsurance segment focused on treaty reinsurance. Talbot is a specialty insurance segment, primarily operating within the Lloyd's insurance market through Syndicate 1183. Western World is a U.S. based specialty excess and surplus lines insurance segment operating within the U.S. commercial market. AlphaCat is a Bermuda-based investment adviser, managing capital for third parties and the Company in insurance linked securities and other investments in the property catastrophe reinsurance space.

On October 9, 2013, the Company completed the sale of its wholly-owned Cyprus-domiciled subsidiary, Flagstone Alliance Insurance and Reinsurance plc for net cash proceeds of $21,400.

On October 2, 2014, the Company acquired all of the outstanding shares of Western World Insurance Group Inc. ("Western World"), a U.S. based specialty excess and surplus lines insurance company. The results of operations for Western World are consolidated from the date of acquisition. Refer to Note 5, "Business combinations," for further information.

2. Basis of preparation and consolidation

These Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”). The Company consolidates in these Consolidated Financial Statements the results of operations and financial position of all voting interest entities ("VOE") in which the Company has a controlling financial interest and all variable interest entities ("VIE") in which the Company is considered to be the primary beneficiary. The consolidation assessment, including the determination as to whether an entity qualifies as a VIE or VOE, depends on the facts and circumstances surrounding each entity.

During the fourth quarter of 2015, the Company early adopted Accounting Standards Update 2015-02, “Consolidation (Topic 810) Amendments to the Consolidation Analysis” issued by the United States Financial Accounting Standards Board (“FASB”), which changed the method in which the Company determines whether entities are consolidated by the Company. The adoption of this amended accounting guidance has been implemented utilizing a full retrospective application for all periods presented in the Company's Consolidated Financial Statements.

The amended guidance includes changes in the identification of the primary beneficiary of investment companies considered to be VIEs. These changes resulted in the Company concluding that it is considered to be the primary beneficiary of the AlphaCat sidecars, the AlphaCat ILS funds and the BetaCat ILS funds and therefore the Company is required to consolidate these entities. The adoption of the amended guidance also resulted in the Company concluding that it was no longer required to consolidate PaCRe Ltd. ("PaCRe") due to the change in the VIE definition of "kick-out" rights under the amended guidance. The cumulative effect of these changes on the Company's retained earnings was a gain of $405.

All significant intercompany accounts and transactions have been eliminated.

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(Expressed in thousands of U.S. dollars, except share and per share information)

The following tables present the impact of the application of the amended accounting guidance on the Company's results as at and for the year ended December 31, 2014:

	As at December 31, 2014		
	As previously reported	Adjustment for adoption of new consolidation guidance	Revised
Total assets	$10,311,621	$(199,057)	$10,112,564
Total liabilities	6,185,112	(569,199)	5,615,913
Redeemable noncontrolling interest	79,956	537,835	617,791
Total shareholders' equity available to Validus	3,587,958	(1,372)	3,586,586
Noncontrolling interest	458,595	(166,321)	292,274
Total shareholders' equity	4,046,553	(167,693)	3,878,860
Total liabilities, noncontrolling interests, and shareholders' equity	10,311,621	(199,057)	10,112,564

	For the Year Ended December 31, 2014		
	As previously reported	Adjustment for adoption of new consolidation guidance	Revised
Total revenues	$2,085,122	$17,553	$2,102,675
Total expenses	1,547,420	(4,083)	1,543,337
Net income	445,871	108,972	554,843
Net loss (income) attributable to noncontrolling interest	35,464	(110,344)	(74,880)
Net income available to Validus	481,335	(1,372)	479,963
Comprehensive income available to Validus	473,396	(1,372)	472,024
Basic earnings per share available to common shareholders	$5.26	$(0.02)	$5.24
Earnings per diluted share available to common shareholders	$5.08	$(0.01)	$5.07

	For the Year Ended December 31, 2014		
	As previously reported	Adjustment for adoption of new consolidation guidance	Revised
Net cash provided by operating activities	$241,781	$98,380	$340,161
Net cash provided by (used in) investing activities	121,582	(284,263)	(162,681)
Net cash used in financing activities	(489,507)	158,405	(331,102)
Effect of foreign currency rate changes on cash and cash equivalents	(30,764)	5,454	(25,310)
Net decrease in cash	(156,908)	(22,024)	(178,932)
Cash and cash equivalents - beginning of year	734,148	(4,815)	729,333
Cash and cash equivalents - end of year	577,240	(26,839)	550,401

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The following tables present the impact of the application of the amended accounting guidance on the Company's results for the year ended December 31, 2013:

	For the Year Ended December 31, 2013		
	As previously reported	Adjustment for adoption of new consolidation guidance	Revised
Total revenues	$2,158,532	$(14,699)	$2,143,833
Total expenses	1,561,314	(12,470)	1,548,844
Net income	542,361	52,787	595,148
Net (income) loss attributable to noncontrolling interest	(9,695)	(52,787)	(62,482)
Net income available to Validus	532,666	—	532,666
Comprehensive income available to Validus	530,712	—	530,712
Basic earnings per share available to common shareholders	$5.02	$—	$5.02
Earnings per diluted share available to common shareholders	$4.94	$—	$4.94

	For the Year Ended December 31, 2013		
	As previously reported	Adjustment for adoption of new consolidation guidance	Revised
Net cash provided by operating activities	$265,274	$(29,908)	$235,366
Net cash (used in) provided by investing activities	(321,436)	575,249	253,813
Net cash used in financing activities	(264,048)	(600,000)	(864,048)
Effect of foreign currency rate changes on cash and cash equivalents	(6,364)	—	(6,364)
Net decrease in cash	(326,574)	(54,659)	(381,233)
Cash and cash equivalents - beginning of year	1,060,722	49,844	1,110,566
Cash and cash equivalents - end of year	734,148	(4,815)	729,333

The preparation of these financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. While management believes that the amounts included in the Consolidated Financial Statements reflect its best estimates and assumptions, actual results could differ from those estimates. The Company’s principal estimates include:

- reserve for losses and loss expenses;
- premium estimates for business written on a line slip or proportional basis;
- the valuation of goodwill and intangible assets;
- reinsurance recoverable balances including the provision for uncollectible amounts; and
- investment valuation of financial assets.

The term “ASC” used in these notes refers to Accounting Standard Codification issued by the FASB.

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3. Significant accounting policies

The following is a summary of significant accounting policies adopted by the Company.

(a) Premiums

Insurance premiums written are recorded in accordance with the terms of underlying policies. Reinsurance premiums written are recorded at the inception of the policy and are estimated based on information received from brokers, ceding companies and reinsureds, and any subsequent differences arising on such estimates will be recorded in the periods in which they are determined. Premiums written are earned on a pro-rated basis over the term of the policy. For contracts and policies written on a losses occurring basis, the risk period is generally the same as the contract or policy terms. For contracts written on a policies attaching basis, the risk period is based on the terms of the underlying contracts and policies and is generally assumed to be 24 months. The portion of the premiums written applicable to the unexpired terms of the underlying contracts and policies in force is recorded as unearned premiums. Reinstatement premiums are recorded at the time a loss event occurs and coverage limits for the remaining life of the contract are reinstated under predefined contract terms. The accrual of reinstatement premiums is based on our estimate of losses and loss expenses, which reflects management’s judgment, as described in Note 3(c), “Reserve for losses and loss expenses,” below.

(b) Policy acquisition costs

Policy acquisition costs are costs that vary with, and are directly related to, the successful production of new and renewal business, and consist principally of commissions and brokerage expenses. Acquisition costs are shown net of commissions earned on reinsurance ceded. These costs are deferred and amortized over the periods in which the related premiums are earned. Deferred acquisition costs are limited to their estimated realizable value based on the related unearned premiums and anticipated claims expenses. The realizable value of the Company’s deferred acquisition costs is determined without consideration of investment income. Policy acquisition costs also include profit commissions. Profit commissions are recognized on a basis consistent with our estimate of losses and loss expenses.

(c) Reserve for losses and loss expenses

The reserve for losses and loss expenses includes reserves for unpaid reported losses and for losses incurred but not reported (“IBNR”). The reserve for unpaid reported losses and loss expenses is established by management based on reports from brokers, ceding companies and insureds and represents the estimated ultimate cost of events or conditions that have been reported to, or specifically identified by, the Company. The reserve for incurred but not reported losses and loss expenses is established by management based on actuarially determined estimates of ultimate losses and loss expenses. Inherent in the estimate of ultimate losses and loss expenses are expected trends in claim severity and frequency and other factors which may vary significantly as claims are settled. Accordingly, ultimate losses and loss expenses may differ materially from the amounts recorded in the Consolidated Financial Statements. These estimates are reviewed regularly and, as experience develops and new information becomes known, the reserves are adjusted as necessary. Such adjustments, if any, will be recorded in earnings in the period in which they become known. Prior period development arises from changes to these estimates recognized in the current year that relate to reserves for losses and loss expenses established in previous calendar years.

(d) Reinsurance

In the normal course of business, the Company seeks to reduce the potential amount of loss arising from claims events by reinsuring certain levels of risk assumed in various areas of exposure with other insurers or reinsurers. The accounting for reinsurance ceded depends on the method of reinsurance. If the policy is on a “losses occurring” basis, reinsurance premiums ceded are expensed (and any commissions thereon are earned) on a pro-rata basis over the period the reinsurance coverage is provided. If the policy is a “risks attaching” policy, reinsurance premiums ceded are expensed (and any commissions thereon are earned) in line with the earning of the gross premiums to which the risk attaching policy relates. Prepaid reinsurance premiums represent the portion of premiums ceded applicable to the

unexpired term of policies in force. Mandatory reinstatement premiums ceded are recorded at the time the loss event occurs. Reinsurance recoverables are based on contracts in force at the time of the underlying loss event. The method for determining the reinsurance recoverable on unpaid losses and loss expenses involves the actuarial estimates of unpaid losses and loss expenses as well as a determination of the Company's ability to cede unpaid losses and loss expenses under its reinsurance treaties. The use of different assumptions could have a material effect on the provision for uncollectible reinsurance. To the extent the creditworthiness of the Company's reinsurers was to deteriorate due to adverse events affecting the reinsurance industry,

such as a large number of major catastrophes, actual uncollectible amounts could be significantly greater than the Company’s provision. Amounts recoverable from reinsurers are estimated in a manner consistent with the underlying liabilities.

(e) Investments

The Company classifies its fixed maturity and short-term investments as trading and accounts for its other investments in accordance with U.S. GAAP guidance for "Financial Instruments." As such, all investments are carried at fair value with interest and dividend income and realized and unrealized gains and losses included in net income for the year. All investment transactions are recorded on a first-in-first-out basis and realized gains and losses on the sale of investments are determined on the basis of amortized cost. Interest on fixed maturity securities is recorded in net investment income when earned and is adjusted for any amortization of premium or accretion of discount.

For mortgage-backed securities, and any other holdings for which there is a prepayment risk, prepayment assumptions are evaluated and revised as necessary. Any adjustments required due to the resultant change in effective yields and maturities are recognized retrospectively. Prepayment fees or call premiums that are only payable to the Company when a security is called prior to its maturity, are earned when received and reflected in net investment income.

Short-term investments primarily comprise of investments with a remaining maturity of less than one year at time of purchase and money market funds held at the Company’s investment managers. Certain short-term investments relate to funds held in trust in support of collateralized reinsurance transactions.

Restricted cash primarily relates to funds held in trust for support of collateralized reinsurance transactions.

The fair value of other investments is generally recorded on the basis of the net asset valuation criteria established by the managers of the investments, normally based upon the governing documents of such investments. In addition, due to a lag in reporting, some of the fund managers, fund administrators, or both, are unable to provide final fund valuations as of the Company’s reporting date. In these circumstances, the Company estimates the fair value of these funds by starting with the prior month’s or prior quarter's fund valuation, adjusting these valuations for capital calls, redemptions or distributions and the impact of changes in foreign currency exchange rates, and then estimating the return for the current period. In circumstances in which the Company estimates the return for the current period, it uses all credible information available. This includes utilizing preliminary estimates reported by its fund managers, obtaining the valuation of underlying portfolio investments where such underlying investments are publicly traded and therefore have a readily observable price, using information that is available to the Company with respect to the underlying investments, reviewing various indices for similar investments or asset classes, as well as estimating returns based on the results of similar types of investments for which the Company has reported results, or other valuation methods, as necessary. Actual final fund valuations may differ, perhaps materially so, from the Company’s estimates and these differences are recorded in the period they become known as a change in estimate.

(f) Fair value of financial instruments

Fair value is defined as the price received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date reflecting the highest and best use valuation concepts. The guidance for “Fair Value Measurement and Disclosure” provides a framework for measuring fair value by creating a hierarchy of fair value measurements that distinguishes market data between observable independent market inputs and unobservable market assumptions by the reporting entity. The guidance further expands disclosures about such fair value measurements. The guidance applies broadly to most existing accounting pronouncements that require or permit fair value measurements (including both financial and non-financial assets and liabilities) but does not require any new fair value measurements. The Company has adopted all authoritative guidance in effect as of the balance sheet date regarding certain market conditions that allow for fair value measurements that incorporate unobservable inputs where active market transaction based measurements are unavailable.

(g) Derivative instruments

Fair Value Hedges

The Company uses derivative instruments in the form of foreign currency forward exchange contracts to manage foreign currency risk. A foreign currency forward exchange contract involves an obligation to purchase or sell a specified amount of a specified currency at a future date at a price set at the time of the contract. Foreign currency forward exchange contracts will not eliminate fluctuations in the value of our assets and liabilities denominated in foreign currencies but rather allow the Company to

establish a rate of exchange for a future point in time. The foreign currency forward exchange contracts are recorded as derivatives at fair value as either assets or liabilities, depending on their rights or obligations, with changes in fair value recorded as a net foreign exchange gain or loss in the Company's Statements of Comprehensive Income.

To qualify for hedge accounting treatment, a derivative must be highly effective in mitigating the designated changes in value or cash flow of the hedged item. The Company formally documents all relationships between designated hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The documentation process includes linking derivatives to specific assets or liabilities on the balance sheet. The Company also formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. The Company assesses the effectiveness of its designated hedges on an individual currency basis. If the ratio obtained with this method is within the range of 80% to 125%, the Company considers the hedge effective.

The Company discontinues hedge accounting prospectively when it is determined that the derivative is no longer highly effective in offsetting changes in the fair value or cash flows of a hedged item; the derivative is de-designated as a hedging instrument; or the derivative expires or is sold, terminated or exercised. To the extent that the Company discontinues hedge accounting, because, based on management's assessment, the derivative no longer qualifies as an effective hedge, the derivative will continue to be carried in the Consolidated Balance Sheets at its fair value, with changes in its fair value recognized in current period net income through foreign exchange gains (losses).

Cash Flow Hedges

The Company uses derivative instruments in the form of interest rate swaps to manage the interest rate exposure associated with certain assets and liabilities. These derivatives are recorded at fair value. Changes in the fair value of a derivative that is designated and qualifies as a cash flow hedge are recorded in other comprehensive income ("OCI") and are reclassified into earnings when the variability of the cash flow of the hedged item impacts earnings. Gains and losses on derivative contracts that are reclassified from OCI to current period earnings are included in the line item in the Consolidated Statements of Comprehensive Income in which the cash flows of the hedged item are recorded. Any hedge ineffectiveness is recorded immediately in current period earnings.

To qualify for hedge accounting treatment, a derivative must be highly effective in mitigating the designated changes in value or cash flow of the hedged item. The Company formally documents all relationships between designated hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The documentation process includes linking derivatives to specific assets or liabilities on the balance sheet. The Company also formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. The Company assesses the effectiveness of its designated hedges on an individual contract basis. The Company currently applies the long haul method when assessing the hedge's effectiveness.

The Company discontinues hedge accounting prospectively when it is determined that the derivative is no longer highly effective in offsetting changes in the fair value or cash flows of a hedged item; the derivative is de-designated as a hedging instrument; or the derivative expires or is sold, terminated or exercised. When hedge accounting is discontinued because the Company becomes aware that it is not probable that the forecasted transaction will occur, the derivative continues to be carried on the balance sheet at its fair value, and gains and losses that were accumulated in OCI are recognized immediately in earnings.

(h) Cash and cash equivalents

The Company considers time deposits and money market funds with an original maturity of one month or less as equivalent to cash.

(i) Foreign exchange

The U.S. dollar is the functional currency of the Company and the majority of its subsidiaries. For these companies, monetary assets and liabilities denominated in foreign currencies are revalued at the exchange rates in effect at the

balance sheet date and revenues and expenses denominated in foreign currencies are translated at the prevailing exchange rate on the transaction date with the resulting foreign exchange gains and losses included in earnings. Non-monetary assets and liabilities denominated in foreign currencies are revalued at the exchange rate in effect at the time of the underlying transaction.

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Assets and liabilities of subsidiaries whose functional currency is not the U.S. dollar are translated at prevailing year end exchange rates. Revenue and expenses of such foreign operations are translated at average exchange rates during the year. The net effect of translation differences between functional and reporting currencies in foreign operations, net of applicable deferred income taxes, is included in accumulated other comprehensive income ("AOCI").

(j) Stock plans

The Company accounts for its stock plans in accordance with the U.S. GAAP fair value recognition provisions for "Stock Compensation." Accordingly, the Company recognizes the compensation expense for stock option grants, restricted share grants and performance share awards based on the fair value of the award on the date of grant over the requisite service period.

(k) Warrants

The Company has accounted for certain warrant contracts issued to our sponsoring investors in conjunction with the capitalization of the Company, and which may be settled by the Company using either the physical settlement or net-share settlement methods, in accordance with U.S. GAAP guidance for "Derivatives and Hedging, Contracts in Entity's Own Equity." Accordingly, the fair value of these warrants has been recorded in equity as an addition to additional paid-in capital.

(l) Earnings per share

Basic earnings per common share is calculated by dividing net income available to common shareholders by the weighted average number of common shares outstanding. Earnings per diluted common share are based on the weighted average number of common shares and share equivalents excluding any anti-dilutive effects of warrants, options and other awards under stock plans.

(m) Income taxes and uncertain tax provisions

Deferred tax assets and liabilities are recorded in accordance with U.S. GAAP "Income Taxes" guidance. Consistent with this guidance, the Company records deferred income taxes which reflect the tax effect of the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases.

The Company and its Bermuda domiciled subsidiaries are not subject to any income, withholding or capital gains taxes under current Bermuda law. The Company has operating subsidiaries in various other jurisdictions around the world, including but not limited to the U.K., U.S., Switzerland, Luxembourg and Canada that are subject to relevant taxes in those jurisdictions.

The Company recognizes the tax benefits of uncertain tax positions only where the position is more likely than not to be sustained upon audit by tax authorities. The Company would recognize accruals for any interest and penalties related to uncertain tax positions in income tax expenses.

(n) Goodwill and other intangible assets

The Company accounts for goodwill and other intangible assets recognized in business combinations in accordance with ASC Topic 805 "Business Combinations."

A purchase price paid that is in excess of the fair value of the net assets acquired ("goodwill") arising from a business combination is recorded as an asset, and is not amortized. Where the fair value of the net assets acquired exceeds the consideration paid ("negative goodwill"), the acquirer will record a gain as a result of the bargain purchase, to be recognized through the consolidated statements of comprehensive income at the close of the transaction.

Intangible assets with a finite life are amortized over the estimated useful life of the asset. Intangible assets with an indefinite useful life are not amortized. Refer to Note 6, "Goodwill and other intangible assets," for further information.

Goodwill and intangible assets are assessed for impairment on an annual basis or more frequently if events or changes in circumstances indicate that it is more likely than not that an impairment exists. Such events or circumstances may include an economic downturn in a geographic market or change in the assessment of future operations. In performing this assessment, the Company may first assess qualitative factors to determine whether it is more likely than not that

the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test described in ASC Topic 350 “Intangibles—Goodwill and Other.” Similarly, the Company may first assess qualitative factors to determine whether it is more likely than not that an indefinite-lived intangible asset is impaired as a basis for determining whether it is necessary to perform the quantitative impairment test described in ASC Topic 350 “Intangibles - Goodwill and Other - General Intangibles Other

than Goodwill." The factors assessed in making this determination included the overall insurance industry outlook, business strategy, premium rates, earnings sustainability, market capitalization and the regulatory and political environment.

If goodwill or an intangible asset is impaired, it is written down to its fair value with a corresponding expense reflected in the Consolidated Statements of Comprehensive Income.

(o) Investments in affiliates

Investments in which the Company has significant influence over the operating and financial policies of the investee are accounted for under the equity method of accounting. Under this method, the Company records its proportionate share of income or loss from such investments in its results for the period.

(p) Variable interest entities

The Company determines whether it has relationships with entities defined as VIEs in accordance with ASC Topic 810 "Consolidation." A VIE is consolidated by the variable interest holder that is determined to be the primary beneficiary.

An entity in which the Company holds a variable interest is a VIE if any of the following conditions exist: (a) the total equity investment at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support, (b) as a group, the holders of equity investment at risk lack either the direct or indirect ability through voting rights or similar rights to make decisions about an entity's activities that most significantly impact the entity's economic performance or the obligation to absorb the expected losses or right to receive the expected residual returns, or (c) the voting rights of some investors are disproportionate to their obligation to absorb the expected losses of the entity, their rights to receive the expected residual returns of the entity, or both and substantially all of the entity's activities either involve or are conducted on behalf of an investor with disproportionately few voting rights.

The primary beneficiary is defined as the variable interest holder that is determined to have the controlling financial interest as a result of having both (a) the power to direct the activities of a VIE that most significantly impact the economic performance of the VIE and (b) the obligation to absorb losses or right to receive benefits from the VIE that could potentially be significant to the VIE. At inception of the VIE, as well as following an event that requires reassessment, the Company determines whether it is the primary beneficiary based on the facts and circumstances surrounding each entity.

Refer to Notes 2 and 9, "Basis of Preparation and Consolidation," and "Variable interest entities," for further details.

(q) Noncontrolling interests

The Company accounts for its noncontrolling interests in accordance with ASC Topic 810 "Consolidation." Redeemable noncontrolling interests are presented as a mezzanine item, between liabilities and shareholders' equity, in the Company's Consolidated Balance Sheet and the non-redeemable noncontrolling interests are presented within shareholders' equity in the Company's Consolidated Balance Sheets and Consolidated Statements of Shareholders' Equity. The net (income) loss attributable to noncontrolling interest is presented separately in the Company's Consolidated Statements of Comprehensive Income. Refer to Note 11, "Noncontrolling interest," for further details.

4. Recent accounting pronouncements
(a) Adoption of New Accounting Standards
Consolidation (Topic 810) Amendments to the Consolidation Analysis
In February 2015, the FASB issued Accounting Standard Update 2015-02, “Consolidation (Topic 810) Amendments to the Consolidation Analysis” (ASU 2015-02). The amendments in this update modify the evaluation of whether limited partnerships and similar legal entities are VIEs or VOEs. The amendment also eliminates the presumption that a general partner should consolidate a limited partnership and affects the consolidation analysis of reporting entities that are involved with VIEs, particularly those that have fee arrangements and related party relationships. The amendment also provides a scope exception from consolidation guidance for reporting entities with interests in legal entities that are required to comply with or operate in accordance with requirements that are similar to those in Rule 2a-7 of the Investment Company Act of 1940 for registered money market funds. The amendments in this Update are effective for interim and annual periods beginning after December 15, 2015, with early adoption permitted.
During the fourth quarter of 2015, the Company early adopted and implemented this guidance utilizing the full retrospective approach for all periods presented in the Company's Consolidated Financial Statements. Refer to Note 2, “Basis of preparation and consolidation,” for further information.
Interest - Imputation of Interest (Subtopic 835-30) - Simplifying the Presentation of Debt Issuance Costs
In April 2015, the FASB issued Accounting Standard Update 2015-03, “Interest - Imputation of Interest (Subtopic 835-30) - Simplifying the Presentation of Debt Issuance Costs” (ASU 2015-03). The amendments in this Update simplify the presentation of debt issuance costs and require that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by the amendments in this Update. The amendments in this Update are effective for interim and annual reporting periods beginning after December 15, 2015, with early adoption permitted.
During the fourth quarter of 2015, the Company early adopted and implemented this guidance utilizing the full retrospective approach for all periods presented in the Company's Consolidated Financial Statements. Adoption of this guidance resulted in the reclassification of debt issuance costs against the carrying amount of the Company's senior notes payable for the years ended December 31, 2015 and 2014 of $2,252 and $2,346, respectively.
Fair Value Measurement (Topic 820) - Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)
In May 2015, the FASB issued Accounting Standard Update 2015-07, “Fair Value Measurement (Topic 820) - Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)” (ASU 2015-07). The amendments in this Update remove the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. The amendments in this Update are effective for interim and annual periods beginning after December 15, 2015, with early adoption permitted.
During the fourth quarter of 2015, the Company early adopted and implemented this guidance utilizing the full retrospective approach for all periods presented in the Company's Consolidated Financial Statements. Refer to Note 8, “Fair value measurements,” for further information. Adoption of this guidance did not have a material impact on the Company’s Consolidated Financial Statements.
(b) Recently Issued Accounting Standards Not Yet Adopted
In May 2014, the FASB issued Accounting Standard Update 2014-09, “Revenue from Contracts with Customers (Topic 606)” (ASU 2014-09). The guidance in this Update affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets, unless those contracts are within the scope of other standards (for example, insurance contracts or lease contracts). The core

principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The original effective date for the amendments in this Update was for annual reporting periods beginning after December 15, 2016; however, in August 2015, the FASB delayed the effective date by one year through the issuance of Accounting Standards Update 2015-14, "Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date" (ASU 2015-14). As such, the new effective date is for interim and annual reporting periods beginning

after December 15, 2017. Entities may adopt the standard as of the original effective date, however, earlier adoption is not permitted. The Company is currently evaluating the impact of this guidance on the Company’s Consolidated Financial Statements.

In May 2015, the FASB issued Accounting Standard Update 2015-09, “Financial Services - Insurance (Topic 944) - Disclosures about Short-Duration Contracts” (ASU 2015-09). The amendments in this Update enhance annual disclosures relating to reserves for losses and loss expenses by requiring the following: (1) net incurred and paid claims development information by accident year; (2) a reconciliation of incurred and paid claims development information to the aggregate carrying amount of the reserve for losses and loss expenses; (3) for each accident year presented, total IBNR plus expected development on case reserves included in the reserve for losses and loss expenses, accompanied by a description of reserving methodologies and any changes thereto; (4) for each accident year presented, quantitative information about claim frequency (unless impracticable) accompanied by a qualitative description of methodologies used for determining claim frequency information and any changes thereto; and (5) the average annual percentage payout of incurred claims by age for the same number of accident years presented. The amendments in this Update are effective for annual reporting periods beginning after December 15, 2015 and interim reporting periods thereafter. Early adoption is permitted. The Company has evaluated the impact of this guidance and it will not have a material impact on the Company's Consolidated Financial Statements; however, it will require significant additional disclosures.

In September 2015, the FASB issued Accounting Standard Update 2015-16, “Business Combinations (Topic 805) - Simplifying the Accounting for Measurement-Period Adjustments” (ASU 2015-16). The amendments in this Update simplify the accounting for adjustments made to provisional amounts recognized in a business combination by eliminating the requirement to retrospectively account for those adjustments. The amendments in this Update are effective for interim and annual reporting periods beginning after December 15, 2015. The Company has evaluated the impact of this guidance and it will not have a material impact on the Company's Consolidated Financial Statements as at December 31, 2015.

In January 2016, the FASB issued Accounting Standard Update 2016-01, “Financial Instruments-Overall (Subtopic 825-10) - Recognition and measurement of financial assets and financial liabilities” (ASU 2016-01). The amendments in this Update address certain aspects of recognition, measurement and disclosure of financial instruments. The amendments in this Update are effective for interim and annual reporting periods beginning after December 15, 2017. Early adoption is not permitted. The Company is currently evaluating the impact of this guidance on the Company’s Consolidated Financial Statements.

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5. Business combination

Western World Insurance Group, Inc. acquisition

On October 2, 2014, Validus Specialty, Inc., a wholly owned subsidiary of the Company, acquired all of the issued and outstanding capital stock of Western World for an aggregate purchase price of $692,305 in cash. The Western World acquisition was undertaken to enhance the Company's access to the specialty U.S. commercial insurance market. Additional factors that added to the value of Western World included its State Licenses, Brand Name, Distribution Network and Technology. These factors resulted in a market value greater than the value of net tangible and intangible assets which resulted in the recognition of goodwill. This goodwill is reflective of the strategic benefits that a U.S. based insurer can provide to the Company.

For reporting purposes, the results of Western World's operations have been included in the Consolidated Financial Statements as a separate segment from the acquisition date.

The estimates of fair values for tangible and intangible assets acquired and liabilities assumed were determined by management based on various market and income analyses. Significant judgment was required to arrive at these estimates of fair value and changes to assumptions used could have led to materially different results.

The fair value of net assets acquired, including pro forma GAAP adjustments, are summarized as follows:

Total purchase price		$692,305
Assets acquired		
Cash and cash equivalents	$48,760	
Investments	1,126,185	
Receivables	37,848	
Other assets	19,418	
Tangible assets acquired		1,232,211
Intangible asset - State licenses	$12,325	
Intangible asset - Brand name	5,756	
Intangible asset - Distribution network	4,651	
Intangible asset - Technology	2,323	
Intangible assets acquired		$25,055
Liabilities acquired		
Net loss reserves and paid losses recoverable	$523,315	
Unearned premiums, net of expenses	135,686	
Other liabilities	81,464	
Liabilities acquired		740,465
Excess purchase price (goodwill) as at December 31, 2014		$175,504
Measurement period adjustments (a)		$861
Excess purchase price (goodwill) as at December 31, 2015		$176,365

(a) During the year ended December 31, 2015, measurement period adjustments of $861 were made to certain other assets, net of taxes.

For details on the intangible assets acquired, refer to Note 6, "Goodwill and other intangible assets."

The Company also incurred transaction expenses related to the Western World acquisition. Transaction expenses included legal, financial advisory and audit related services.

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Supplemental Pro Forma Information

Operating results of Western World have been included in the Consolidated Financial Statements from the October 2, 2014 acquisition date. The following selected unaudited pro forma financial information has been provided to present a summary of the combined results of the Company and Western World, assuming the transaction had been effected on January 1, 2013.

The unaudited pro forma data is for informational purposes only and does not necessarily represent results that would have occurred if the transaction had taken place on the basis assumed above.

	Years ended December 31,	
	2014	2013
(Dollars in thousands)	(unaudited)	(unaudited)
Net premiums earned	$2,216,349	$2,325,407
Net operating income	$481,179	$645,696
Net income	$448,071	$561,832

The following selected audited information has been provided to present a summary of the results of Western World that have been included in the Consolidated Financial Statements for the year ended December 31, 2014.

(Dollars in thousands)	From Acquisition Date to December 31, 2014
Net premiums written	$58,807
Total revenue	78,325
Total expenses	(66,882)
Net income	$11,443

6. Goodwill and other intangible assets

Following the acquisition of Western World on October 2, 2014, the Company recorded intangible assets for State Licenses, Brand Name, Distribution Network and Technology (including certain amortization thereon) and goodwill. Brand Name and Distribution Network were estimated to have finite useful economic lives of 10 years on acquisition and are being amortized on a straight line basis over such period. Technology was estimated to have a finite useful economic life of 5 years on acquisition and is being amortized on a straight line basis over such period. Indefinite-lived intangible assets recognized in conjunction with the acquisition consist of State Licenses that provide a legal right to transact insurance business in those jurisdictions indefinitely.

Following the acquisition of Talbot Holdings Ltd. on July 2, 2007, the Company recorded intangible assets for Syndicate Capacity, Trademark and Distribution Network (including certain amortization thereon) and goodwill. Syndicate Capacity represents Talbot's authorized premium income limit to write insurance business in the Lloyd's market. Talbot has owned 100% of Syndicate 1183's capacity since 2002 and there are no third party tenure rights. The capacity is renewed annually at no cost to Talbot, but may be freely purchased or sold, subject to Lloyd's approval. The ability to write insurance business under the syndicate capacity is indefinite with the premium income limit being set yearly by Talbot, subject to Lloyd's approval. Trademark and Distribution Network were estimated to have finite useful economic lives of 10 years on acquisition and are being amortized on a straight line basis over such periods. Syndicate Capacity and goodwill are estimated to have indefinite useful lives. Goodwill includes amounts related to the value of the workforce.

The following table shows an analysis of goodwill by segment:

	Talbot	Western World	Total
Goodwill at December 31, 2013	$20,393	$—	$20,393
Acquired during the year	—	175,504	175,504
Goodwill at December 31, 2014	$20,393	$175,504	$195,897
Measurement period adjustments	—	861	861
Goodwill at December 31, 2015	$20,393	$176,365	$196,758

There was no accumulated impairment loss at any of the dates indicated. During the year ended December 31, 2015, measurement period adjustments of $861 were made to certain other assets, net of taxes.

The gross carrying value and accumulated amortization of intangible assets by type at December 31, 2015 and 2014 are as follows:

	As at December 31, 2015		As at December 31, 2014	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Finite-lived intangible assets				
Trade name and customer relationships	$18,189	$(12,187)	$18,189	$(10,971)
Distribution network	39,831	(30,485)	39,831	(26,500)
Technology	2,323	(581)	2,323	(116)
Total	$60,343	$(43,253)	$60,343	$(37,587)
Indefinite-lived intangible assets				
Syndicate capacity	$91,843	n/a	$91,843	n/a
State licenses	12,325	n/a	12,325	n/a
Total	$104,168		$104,168	

Amortization expense was $5,666, $4,538, and $4,162 for the years ended December 31, 2015, 2014 and 2013, respectively.

The estimated remaining amortization expense for the finite-lived intangible assets is as follows:

	Total Remaining Amortization Expense
2016	$5,667
2017	3,586
2018	1,505
2019	1,389
2020 and thereafter	4,943
	$17,090

As described in Note 3(n), “Goodwill and other intangible assets,” the Company performed a qualitative assessment and it was determined that goodwill and intangible assets were not impaired. The factors assessed in making this determination included the overall insurance industry outlook, business strategy, premium rates, earnings sustainability, market capitalization and the regulatory and political environment.

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7. Investments
During the fourth quarter of 2015, the Company enhanced disclosures around the allocation of invested assets and the related returns between managed and non-managed investments. Non-managed investments represent assets held in support of consolidated AlphaCat VIEs, refer to Note 9, "Variable interest entities," for further details. As such, prior period disclosures have been revised to conform to current period presentation.
The amortized cost (or cost), gross unrealized gains and (losses) and estimated fair value of investments as at December 31, 2015 were as follows:

	Amortized Cost or Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Managed investments				
U.S. government and government agency	$940,428	$333	$(3,559)	$937,202
Non-U.S. government and government agency	241,549	257	(3,838)	237,968
U.S. states, municipalities and political subdivisions	299,929	2,322	(962)	301,289
Agency residential mortgage-backed securities	606,676	6,361	(2,455)	610,582
Non-agency residential mortgage-backed securities	27,025	310	(415)	26,920
U.S. corporate	1,503,614	1,594	(15,257)	1,489,951
Non-U.S. corporate	453,178	797	(7,405)	446,570
Bank loans	592,981	275	(17,045)	576,211
Asset-backed securities	440,363	344	(3,583)	437,124
Commercial mortgage-backed securities	263,310	131	(3,306)	260,135
Total fixed maturities	5,369,053	12,724	(57,825)	5,323,952
Short-term investments	237,349	20	—	237,369
Other investments				
Fund of hedge funds	1,457	—	(40)	1,417
Hedge funds	14,018	6,962	—	20,980
Private equity investments	53,489	12,751	(2,469)	63,771
Investment funds	188,121	600	—	188,721
Overseas deposits	54,484	—	—	54,484
Mutual funds	4,394	3,089	—	7,483
Total other investments	315,963	23,402	(2,509)	336,856
Total managed investments	$5,922,365	$36,146	$(60,334)	$5,898,177
Non-managed investments				
Catastrophe bonds	$187,847	$635	$(2,103)	$186,379
Short-term investments	1,704,266	—	—	1,704,266
Total non-managed investments	1,892,113	635	(2,103)	1,890,645
Total investments	$7,814,478	$36,781	$(62,437)	$7,788,822

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The amortized cost (or cost), gross unrealized gains and (losses) and estimated fair value of investments as at December 31, 2014 were as follows:

	Amortized Cost or Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Managed investments				
U.S. government and government agency	$759,232	$1,755	$(901)	$760,086
Non-U.S. government and government agency	279,493	1,215	(1,980)	278,728
U.S. states, municipalities and political subdivisions	448,668	1,780	(825)	449,623
Agency residential mortgage-backed securities	520,685	9,697	(1,151)	529,231
Non-agency residential mortgage-backed securities	37,954	369	(516)	37,807
U.S. corporate	1,500,963	3,960	(5,217)	1,499,706
Non-U.S. corporate	564,386	2,765	(3,989)	563,162
Bank loans	457,537	200	(8,733)	449,004
Asset-backed securities	647,422	1,250	(1,190)	647,482
Commercial mortgage-backed securities	242,332	598	(692)	242,238
Total fixed maturities	5,458,672	23,589	(25,194)	5,457,067
Short-term investments	318,440	13	(161)	318,292
Other investments				
Fund of hedge funds	2,570	125	(920)	1,775
Preferred stock	6,535	—	(201)	6,334
Hedge funds	11,671	6,963	—	18,634
Private equity investments	48,995	4,987	(611)	53,371
Investment funds	177,898	437	(111)	178,224
Overseas deposits	66,608	—	—	66,608
Mutual funds	6,199	3,540	—	9,739
Total other investments	320,476	16,052	(1,843)	334,685
Total managed investments	$6,097,588	$39,654	$(27,198)	$6,110,044
Non-managed investments				
Catastrophe bonds	$88,322	$768	$(926)	$88,164
Short-term investments	1,182,920	—	—	1,182,920
Total non-managed investments	1,271,242	768	(926)	1,271,084
Total investments	$7,368,830	$40,422	$(28,124)	$7,381,128

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(a) Fixed maturity investments
The following table sets forth certain information regarding the investment ratings of the Company's fixed maturities portfolio as at December 31, 2015 and 2014.

	As at December 31, 2015		As at December 31, 2014	
	Estimated Fair Value	% of Total	Estimated Fair Value	% of Total
Managed fixed maturities				
AAA	$2,367,642	43.0 %	$2,494,239	45.0 %
AA	569,386	10.3 %	848,226	15.3 %
A	1,031,326	18.7 %	1,086,091	19.6 %
BBB	691,538	12.6 %	505,208	9.1 %
Total investment grade managed fixed maturities	4,659,892	84.6 %	4,933,764	89.0 %
BB	235,724	4.3 %	338,108	6.1 %
B	179,069	3.2 %	113,863	2.0 %
CCC	5,706	0.1 %	12,733	0.2 %
CC	1,015	0.0 %	3,926	0.1 %
C	—	0.0 %	1,344	0.0 %
NR	242,546	4.4 %	53,329	1.0 %
Total non-investment grade managed fixed maturities	664,060	12.0 %	523,303	9.4 %
Total managed fixed maturities	$5,323,952	96.6 %	$5,457,067	98.4 %
Non-managed catastrophe bonds				
BBB	$1,911	0.0 %	$—	0.0 %
BB	70,962	1.3 %	24,864	0.4 %
B	30,698	0.6 %	31,377	0.6 %
NR	82,808	1.5 %	31,923	0.6 %
Total non-investment grade non-managed catastrophe bonds	184,468	3.4 %	88,164	1.6 %
Total non-managed fixed maturities	186,379	3.4 %	88,164	1.6 %
Total fixed maturities	$5,510,331	100.0 %	$5,545,231	100.0 %

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The amortized cost and estimated fair value amounts for fixed maturity securities held at December 31, 2015 and 2014 are shown below by contractual maturity. Actual maturity may differ from contractual maturity because certain borrowers may have the right to call or prepay certain obligations with or without call or prepayment penalties.

	As at December 31, 2015		As at December 31, 2014	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Managed investments				
Due in one year or less	$367,132	$366,019	$312,843	$313,248
Due after one year through five years	2,965,920	2,936,053	3,088,653	3,084,790
Due after five years through ten years	548,183	539,083	495,925	490,616
Due after ten years	150,444	148,036	112,858	111,655
	4,031,679	3,989,191	4,010,279	4,000,309
Asset-backed and mortgage-backed securities	1,337,374	1,334,761	1,448,393	1,456,758
Total managed fixed maturities	$5,369,053	$5,323,952	$5,458,672	$5,457,067
Non-managed catastrophe bonds				
Due in one year or less	$7,504	$7,544	$—	$—
Due after one year through five years	165,093	163,575	87,072	86,910
Due after five years through ten years	15,250	15,260	1,250	1,254
Due after ten years	—	—	—	—
Total non-managed fixed maturities	187,847	186,379	88,322	88,164
Total fixed maturities	$5,556,900	$5,510,331	$5,546,994	$5,545,231

(b) Other investments

The following tables set forth certain information regarding the Company's other investment portfolio as at December 31, 2015 and 2014:

Other investments	Estimated Fair Value as at December 31, 2015	Investments with redemption restrictions	Investments without redemption restrictions	Redemption frequency (a)	Redemption notice period (a)
Fund of hedge funds	$1,417	$1,417	$—		
Hedge funds	20,980	20,980	—		
Private equity investments	63,771	63,771	—		
Investment funds	188,721	167,910	20,811	Daily	2 days
Overseas deposits	54,484	54,484	—		
Mutual funds	7,483	—	7,483	Daily	Daily
Total other investments	$336,856	$308,562	$28,294		

(a) The redemption frequency and notice periods only apply to investments without redemption restrictions.

Other investments	Estimated Fair value as at December 31, 2014	Investments with redemption restrictions	Investments without redemption restrictions	Redemption frequency (a)	Redemption notice period (a)
Fund of hedge funds	$1,775	$1,775	$—		
Preferred stock	6,334	—	6,334	Daily	n/a
Hedge funds	18,634	18,634	—		
Private equity investments	53,371	53,371	—		
Investment funds	178,224	104,787	73,437	Daily	1-2 days
Overseas deposits	66,608	66,608	—		
Mutual funds	9,739	—	9,739	Daily	Daily
Total other investments	$334,685	$245,175	$89,510		

(a) The redemption frequency and notice periods only apply to investments without redemption restrictions.

Other investments include alternative investments in various funds and pooled investment schemes. These alternative investments employ various investment strategies primarily involving, but not limited to, investments in collateralized obligations, fixed income securities, private equities, distressed debt and equity securities.

Certain securities included in other investments are subject to redemption restrictions and are unable to be redeemed from the funds. Distributions from these funds will be received as the underlying investments of the funds are liquidated. Currently, it is not known to the Company when these underlying assets will be sold by their investment managers; however, it is estimated that the majority of the underlying assets of the investments would liquidate over 5 to 10 years from inception of the funds. In addition, one of the investment funds with a fair value of 167,910 (December 31, 2014: $104,787), has a lock-up period of 4 years as at December 31, 2015 and may also impose a redemption gate. A lock-up period refers to the initial amount of time an investor is contractually required to remain invested before having the ability to redeem. Typically, the imposition of a gate delays a portion of the requested redemption, with the remaining portion settled in cash shortly after the redemption date. Furthermore, the underlying investments held in the overseas deposit funds are liquid and will generally trade freely in an open market. However, the Company's ability to withdraw from the overseas deposit funds is restricted by an annual and quarterly, funding and release process for Lloyd's market participants.

The Company's maximum exposure to any of these alternative investments is limited to the invested amounts and any remaining capital commitments. Refer to Note 23, "Commitments and contingencies," for further details. As at December 31, 2015, the Company does not have any plans to sell any of the other investments listed above.

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(c) Net investment income

Net investment income was derived from the following sources:

	Years Ended December 31,		
	2015	2014	2013
Managed investments			
Fixed maturities and short-term investments	$113,627	$93,044	$95,386
Other investments	13,307	5,111	—
Cash and cash equivalents	1,911	5,106	4,678
Securities lending income	16	11	6
Total gross investment income	128,861	103,272	100,070
Investment expenses	(7,695)	(7,472)	(7,863)
Total managed net investment income	$121,166	$95,800	$92,207
Non managed investments			
Fixed maturities and short-term investments	$6,528	$4,204	$3,847
Restricted cash, cash and cash equivalents	130	82	35
Total non-managed net investment income	6,658	4,286	3,882
Total net investment income	$127,824	$100,086	$96,089

Net investment income from other investments includes distributed and undistributed net income from certain investment funds.

(d) Net realized gains (losses) and change in net unrealized losses on investments

The following represents an analysis of net realized gains (losses) and the change in net unrealized losses on investments:

	Years Ended December 31,		
	2015	2014	2013
Managed fixed maturities, short-term and other investments			
Gross realized gains	$15,678	$20,201	$27,318
Gross realized (losses)	(13,980)	(8,041)	(28,144)
Net realized gains (losses) on investments	1,698	12,160	(826)
Change in net unrealized losses on investments	(32,007)	(1,030)	(54,588)
Total net realized and change in net unrealized (losses) gains on managed investments	$(30,309)	$11,130	$(55,414)
Non-managed fixed maturities, short-term and other investments			
Gross realized gains	$600	$2,757	$62
Gross realized (losses)	—	—	—
Net realized gains on investments	600	2,757	62
Change in net unrealized (losses) gains on investments	(388)	(1,812)	2,169
Total net realized and change in net unrealized gains on non-managed investments	212	945	2,231
Total net realized and change in net unrealized (losses) gains on total investments	$(30,097)	$12,075	$(53,183)

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(e) Pledged investments
The following tables outline investments and cash pledged as collateral under the Company's credit facilities. For further details on the credit facilities, refer to Note 20, “Debt and financing arrangements”:

	As at December 31, 2015		
Description	Commitment	Issued and Outstanding	Investments and cash pledged as collateral
$85,000 syndicated unsecured letter of credit facility	$85,000	$—	$—
$300,000 syndicated secured letter of credit facility	300,000	235,540	370,909
$24,000 secured bi-lateral letter of credit facility	24,000	10,543	47,607
AlphaCat Re secured letter of credit facility	30,000	30,000	30,153
IPC bi-lateral facility	25,000	9,241	—
$236,000 Flagstone bi-lateral facility	236,000	193,764	377,866
Total	$700,000	$479,088	$826,535

	As at December 31, 2014		
Description	Commitment	Issued and Outstanding	Investments and cash pledged as collateral
$400,000 syndicated unsecured letter of credit facility	$400,000	$—	$—
$525,000 syndicated secured letter of credit facility	525,000	276,455	395,750
$200,000 secured bi-lateral letter of credit facility	200,000	15,649	35,645
Talbot FAL facility	25,000	25,000	31,048
AlphaCat Re secured letter of credit facility	30,000	30,000	30,078
IPC bi-lateral facility	40,000	15,897	99,437
$375,000 Flagstone bi-lateral facility	375,000	198,389	430,782
Total	$1,595,000	$561,390	$1,022,740

In addition, $4,056,788 of cash and cash equivalents, restricted cash, short-term investments and fixed maturities were pledged during the normal course of business as at December 31, 2015 (December 31, 2014: $3,150,295). Of those, $4,007,215 were held in trust (December 31, 2014: $3,122,074). Pledged assets are generally for the benefit of the Company's cedants and policyholders, to support AlphaCat's fully collateralized reinsurance transactions and to facilitate the accreditation of Validus Reinsurance, Ltd., Validus Reinsurance (Switzerland) Ltd. ("Validus Re Swiss") and Talbot as an alien insurer/reinsurer by certain regulators.
In December 2014, Validus Reinsurance, Ltd. established a Multi-Beneficiary Reinsurance Trust ("MBRT") to collateralize its (re)insurance liabilities associated with and for the benefit of U.S. domiciled cedants, and was approved as a trusteed reinsurer in the State of New Jersey. As a result, cedants domiciled in that state will receive automatic credit in their regulatory filings for the reinsurance provided prospectively by the Company. As of December 31, 2015, Validus Reinsurance, Ltd. was approved as a trusteed reinsurer in 48 states as well as Puerto Rico and the District of Columbia. In addition, Validus Re Swiss established a MBRT in December 2015 and was approved as a trusteed reinsurer in the State of New Jersey as at December 31, 2015.
(f) Securities lending
The Company participates in a securities lending program whereby certain securities from its portfolio are loaned to third parties for short periods of time through a lending agent. The Company retains all economic interest in the securities it lends and receives a fee from the borrower for the temporary use of the securities. Collateral in the form of cash, government securities and letters of credit is required at a rate of 102% of the market value of the loaned securities and is held by a third party.

8. Fair value measurements

(a) Classification within the fair value hierarchy

Fair value is defined as the price to sell an asset or transfer a liability in an orderly transaction between market participants. Under U.S. GAAP, a company must determine the appropriate level in the fair value hierarchy for each fair value measurement. The fair value hierarchy prioritizes the inputs, which refer broadly to assumptions market participants would use in pricing an asset or liability, into three levels. It gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The level in the fair value hierarchy within which a fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

The three levels of the fair value hierarchy are described below:

Level 1 - Fair values are measured based on unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access.

Level 2 - Fair values are measured based on quoted prices in active markets for similar assets or liabilities, quoted prices for identical assets or liabilities in inactive markets, or for which significant inputs are observable (e.g., interest rates, yield curves, prepayment speeds, default rates, loss severities, etc.) or can be corroborated by observable market data.

Level 3 - Fair values are measured based on inputs that are unobservable and significant to the overall fair value measurement. The unobservable inputs reflect the Company's own judgments about assumptions where there is little, if any, market activity for that asset or liability that market participants might use.

The availability of observable inputs can vary from financial instrument to financial instrument and is affected by a wide variety of factors including, for example, the type of financial instrument, whether the financial instrument is new and not yet established in the marketplace, and other characteristics particular to the instrument. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires significantly more judgment.

Accordingly, the degree of judgment exercised by management in determining fair value is greatest for instruments categorized in Level 3. In periods of market dislocation, the observability of prices and inputs may be reduced for many instruments. This may lead the Company to change the selection of our valuation technique (for example, from market to cash flow approach) or to use multiple valuation techniques to estimate the fair value of a financial instrument. These circumstances could cause an instrument to be reclassified between levels within the fair value hierarchy.

During the fourth quarter of 2015, the Company early adopted and implemented ASU 2015-07, “Fair Value Measurement (Topic 820) - Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent).” As such, the investments measured at fair value using the net asset value (“NAV”) per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. Refer to Note 4, “Recent accounting policies, adoption of new accounting standards,” for further details.

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At December 31, 2015, the Company's investments were allocated between Levels 1, 2 and 3 as follows:

	Level 1	Level 2	Level 3	Fair value based on NAV practical expedient	Total
Managed investments					
U.S. government and government agency	$—	$937,202	$—	$—	$937,202
Non-U.S. government and government agency	—	237,968	—	—	237,968
U.S. states, municipalities and political subdivisions	—	301,289	—	—	301,289
Agency residential mortgage-backed securities	—	610,582	—	—	610,582
Non-agency residential mortgage-backed securities	—	26,920	—	—	26,920
U.S. corporate	—	1,489,951	—	—	1,489,951
Non-U.S. corporate	—	446,570	—	—	446,570
Bank loans	—	343,874	232,337	—	576,211
Asset-backed securities	—	437,124	—	—	437,124
Commercial mortgage-backed securities	—	260,135	—	—	260,135
Total fixed maturities	—	5,091,615	232,337	—	5,323,952
Short-term investments	222,678	14,691	—	—	237,369
Other investments					
Fund of hedge funds	—	—	—	1,417	1,417
Hedge funds	—	—	—	20,980	20,980
Private equity investments	—	—	—	63,771	63,771
Investment funds	—	20,811	—	167,910	188,721
Overseas deposits	—	—	—	54,484	54,484
Mutual funds	—	7,483	—	—	7,483
Total other investments	—	28,294	—	308,562	336,856
Total managed investments	$222,678	$5,134,600	$232,337	$308,562	$5,898,177
Non-managed investments					
Catastrophe bonds	$—	$172,879	$13,500	$—	$186,379
Short-term investments	1,704,266	—	—	—	1,704,266
Total non-managed investments	1,704,266	172,879	13,500	—	1,890,645
Total investments	$1,926,944	$5,307,479	$245,837	$308,562	$7,788,822

At December 31, 2014, the Company's investments were allocated between Levels 1, 2 and 3 as follows:

	Level 1	Level 2	Level 3	Fair value based on NAV practical expedient	Total
Managed investments					
U.S. government and government agency	$—	$760,086	$—	$—	$760,086
Non-U.S. government and government agency	—	278,728	—	—	278,728
U.S. states, municipalities and political subdivisions	—	449,623	—	—	449,623
Agency residential mortgage-backed securities	—	529,231	—	—	529,231
Non-agency residential mortgage-backed securities	—	37,807	—	—	37,807
U.S. corporate	—	1,499,706	—	—	1,499,706
Non-U.S. corporate	—	563,162	—	—	563,162
Bank loans	—	416,256	32,748	—	449,004
Asset-backed securities	—	647,482	—	—	647,482
Commercial mortgage-backed securities	—	242,238	—	—	242,238
Total fixed maturities	—	5,424,319	32,748	—	5,457,067
Short-term investments	209,934	108,358	—	—	318,292
Other investments					
Fund of hedge funds	—	—	—	1,775	1,775
Preferred stock	—	6,334	—	—	6,334
Hedge funds	—	—	—	18,634	18,634
Private equity investments	—	—	—	53,371	53,371
Investment funds	—	73,437	—	104,787	178,224
Overseas deposits	—	—	—	66,608	66,608
Mutual funds	—	9,739	—	—	9,739
Total other investments	—	89,510	—	245,175	334,685
Total managed investments	$209,934	$5,622,187	$32,748	$245,175	$6,110,044
Non-managed investments					
Catastrophe bonds	$—	$70,664	$17,500	$—	$88,164
Short-term investments	1,182,920	—	—	—	1,182,920
Total non-managed investments	$1,182,920	$70,664	$17,500	$—	$1,271,084
Total investments	$1,392,854	$5,692,851	$50,248	$245,175	$7,381,128

At December 31, 2015, managed Level 3 investments totaled $232,337 (December 31, 2014: $32,748), representing 3.9% (December 31, 2014: 0.5%) of total managed investments.

(b) Valuation techniques

There have been no material changes in the Company's valuation techniques during the period, or periods, represented by these Consolidated Financial Statements. The following methods and assumptions were used in estimating the fair value of each class of financial instrument recorded in the Consolidated Balance Sheets.

Fixed maturity investments

In general, valuation of the Company's fixed maturity investment portfolio is provided by pricing services, such as index providers and pricing vendors, as well as broker quotations. The pricing vendors provide valuations for a high volume of liquid securities that are actively traded. For securities that do not trade on an exchange, the pricing services generally utilize market data and other observable inputs in matrix pricing models to determine month end prices. Prices are generally verified using third party data. Securities which are priced by an index provider are generally included in the index.

In general, broker-dealers value securities through their trading desks based on observable inputs. The methodologies include mapping securities based on trade data, bids or offers, observed spreads, and performance on newly issued securities. Broker-dealers also determine valuations by observing secondary trading of similar securities. Prices obtained from broker quotations are considered non-binding, however they are based on observable inputs and by observing secondary trading of similar securities obtained from active, non-distressed markets. The Company considers these Level 2 inputs as they are corroborated with other market observable inputs. The techniques generally used to determine the fair value of the Company's fixed maturity investments are detailed below by asset class.

U.S. government and government agency

U.S. government and government agency securities consist primarily of debt securities issued by the U.S. Treasury and mortgage pass-through agencies such as the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation and the Government National Mortgage Association. Fixed maturity investments included in U.S. government and government agency securities are primarily priced by pricing services. When evaluating these securities, the pricing services gather information from market sources and integrate other observations from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The fair value of each security is individually computed using analytical models which incorporate option adjusted spreads and other daily interest rate data. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.

Non-U.S. government and government agency

Non-U.S. government and government agency securities consist of debt securities issued by non-U.S. governments and their agencies along with supranational organizations (also known as sovereign debt securities). Securities held in these sectors are primarily priced by pricing services who employ proprietary discounted cash flow models to value the securities. Key quantitative inputs for these models are daily observed benchmark curves for treasury, swap and high issuance credits. The pricing services then apply a credit spread for each security which is developed by in-depth and real time market analysis. For securities in which trade volume is low, the pricing services utilize data from more frequently traded securities with similar attributes. These models may also be supplemented by daily market and credit research for international markets. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.

U.S. states, municipalities and political subdivisions

The Company's U.S. states, municipalities and political subdivisions portfolio contains debt securities issued by U.S. domiciled state and municipal entities. These securities are generally priced by independent pricing services using the techniques described for U.S. government and government agency securities described above. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.

Agency residential mortgage-backed securities

The Company's agency residential mortgage-backed investments are primarily priced by pricing services using a mortgage pool specific model which utilizes daily inputs from the active to be announced (“TBA”) market which is very liquid, as well as the U.S. treasury market. The model also utilizes additional information, such as the weighted average maturity, weighted average coupon and other available pool level data which is provided by the sponsoring agency. Valuations are also corroborated with daily active market quotes. As the significant inputs used to price these

securities are observable, the fair value of these investments are classified as Level 2.

Non-agency residential mortgage-backed securities
The Company's non-agency mortgage-backed investments include non-agency prime residential mortgage-backed fixed maturity investments. The Company has no fixed maturity investments classified as sub-prime held in its fixed maturity investments portfolio. Securities held in these sectors are primarily priced by pricing services using an option adjusted spread model or other relevant models, which principally utilize inputs including benchmark yields, available trade information or broker quotes, and issuer spreads. The pricing services also review collateral prepayment speeds, loss severity and delinquencies among other collateral performance indicators for the securities valuation, when applicable. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.
U.S. corporate
Corporate debt securities consist primarily of investment-grade debt of a wide variety of U.S. corporate issuers and industries. The Company's corporate fixed maturity investments are primarily priced by pricing services. When evaluating these securities, the pricing services gather information from market sources regarding the issuer of the security and obtain credit data, as well as other observations, from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The pricing services also consider the specific terms and conditions of the securities, including any specific features which may influence risk. In certain instances, securities are individually evaluated using a spread which is added to the U.S. treasury curve or a security specific swap curve as appropriate. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.
Non-U.S. corporate
Non-U.S. corporate debt securities consist primarily of investment-grade debt of a wide variety of non-U.S. corporate issuers and industries. The Company's non-U.S. corporate fixed maturity investments are primarily priced by pricing services. When evaluating these securities, the pricing services gather information from market sources regarding the issuer of the security and obtain credit data, as well as other observations, from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The pricing services also consider the specific terms and conditions of the securities, including any specific features which may influence risk. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.
Bank loans
The Company's bank loan investments consist primarily of below-investment-grade debt of a wide variety of corporate issuers and industries. The Company's bank loans are primarily priced by pricing services. When evaluating these securities, the pricing services gather information from market sources regarding the issuer of the security and obtain credit data, as well as other observations, from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The pricing services also consider the specific terms and conditions of the securities, including any specific features which may influence risk. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.
Also, included in the bank loan portfolio is a collection of loan participations held through an intermediary. A third party pricing service provides monthly valuation reports for each loan and participation using a combination of quotations from loan pricing services, leveraged loan indices or market price quotes obtained directly from the intermediary. Significant unobservable inputs used to price these securities include credit spreads and default rates; therefore, the fair value of these investments are classified as Level 3.
Catastrophe bonds
Catastrophe bonds are priced based on broker or underwriter bid indications. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2. To the extent that these

indications are based on significant unobservable inputs, the fair value of the relevant bonds will be classified as a Level 3.

Asset-backed securities
Asset backed securities include mostly investment-grade debt securities backed by pools of loans with a variety of underlying collateral, including automobile loan receivables, student loans, credit card receivables, and collateralized loan obligations originated by a variety of financial institutions. Securities held in these sectors are primarily priced by pricing services. The pricing services apply dealer quotes and other available trade information such as bids and offers, prepayment speeds which may be adjusted for the underlying collateral or current price data, the U.S. treasury curve and swap curve as well as cash settlement. The pricing services determine the expected cash flows for each security held in this sector using historical prepayment and default projections for the underlying collateral and current market data. In addition, a spread is applied to the relevant benchmark and used to discount the cash flows noted above to determine the fair value of the securities held in this sector. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.
Commercial mortgage-backed securities
Commercial mortgage backed securities are investment-grade debt primarily priced by pricing services. The pricing services apply dealer quotes and other available trade information such as bids and offers, prepayment speeds which may be adjusted for the underlying collateral or current price data, the U.S. treasury curve and swap curve as well as cash settlement. The pricing services determine the expected cash flows for each security held in this sector using historical prepayment and default projections for the underlying collateral and current market data. In addition, a spread is applied to the relevant benchmark and used to discount the cash flows noted above to determine the fair value of the securities held in this sector. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.
Short term investments
Short term investments consist primarily of highly liquid securities, all with maturities of less than one year from the date of purchase. The fair value of the portfolio is generally determined using amortized cost which approximates fair value. As the highly liquid money market-type funds are actively traded, the fair value of these investments are classified as Level 1. To the extent that the remaining securities are not actively traded due to their approaching maturity, the fair value of these investments are classified as Level 2.
Fund of hedge funds
The fund of hedge funds includes a side pocket. While a redemption request has been submitted, the timing of receipt of proceeds on the side pocket is unknown. The fund's administrator provides a monthly reported NAV with a three month delay in its valuation. The fund manager has provided an estimate of the fund NAV at year end based on the estimated performance provided from the underlying funds. To determine the reasonableness of the estimated NAV, the Company compares the fund administrator's NAV to the fund manager's estimated NAV that incorporates relevant valuation sources on a timely basis. Material variances are recorded in the current reporting period while immaterial variances are recorded in the following reporting period. The fair value of these investments are measured using the NAV practical expedient and therefore have not been categorized within the fair value hierarchy.
Preferred stock
The Company's preferred stock portfolio contains preferred term securities typically sold by nonpublic financial services companies through a collateralized debt obligation product. The fair value of these investments is determined based on quoted market prices in active markets. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.
Hedge funds
The hedge funds consist of one investment assumed in the acquisition of Flagstone Reinsurance Holdings, S.A. ("Flagstone") (the "Flagstone hedge fund"). The Flagstone hedge fund's administrator provides quarterly NAVs with a three month delay in valuation. The fair value of this investment is measured using the NAV practical expedient and therefore has not been categorized within the fair value hierarchy.

Private equity investments

The private equity funds provide quarterly or semi-annual partnership capital statements with a three or six month delay which are used as a basis for valuation. These private equity investments vary in investment strategies and are not actively traded in any open markets. The fair value of these investments are measured using the NAV practical expedient and therefore have not been categorized within the fair value hierarchy.

Investment funds

Investment funds consist of one pooled investment and one structured securities fund. The pooled investment is invested in fixed income securities with high credit ratings and is only open to Lloyd’s Trust Fund participants. The fair value of units in the investment fund is based on the NAV of the fund as reported by Lloyd’s Treasury & Investment Management. As the fund NAV is published, the fair value of this investment is classified as Level 2. The structured securities fund invests across asset backed, residential mortgage backed and commercial mortgage backed securities. The fair value of units in the investment fund is based on the NAV of the fund as reported by the independent fund administrator. The fund's administrator provides a monthly reported NAV with a one month delay in its valuation. The fair value of these investments are measured using the NAV practical expedient and therefore have not been categorized within the fair value hierarchy.

Overseas deposits

The Company's share of a portfolio of Lloyd's overseas deposits are managed centrally by Lloyd's and invested according to local regulatory requirements. The composition of the portfolio varies and the deposits are made across the market. The fair value of the deposits is based on the portfolio level reporting that is provided by Lloyd's. The fair value of these investments are measured using the NAV practical expedient and therefore have not been categorized within the fair value hierarchy.

Mutual funds

Mutual funds consist of two investment funds which are invested in various quoted investments. The fair value of units in the mutual funds are based on the NAV of the funds as reported by the fund manager. As the NAVs for each fund are published, the fair value of these investments are classified as Level 2.

(c) Level 3 Investments

The following table presents a reconciliation of the beginning and ending balances for all investments measured at fair value on a recurring basis using Level 3 inputs during the years ended December 31, 2015 and 2014:

	As at December 31, 2015		
	Bank Loans	Catastrophe Bonds	Total
Level 3 investments—Beginning of year	$32,748	$17,500	$50,248
Purchases	230,070	—	230,070
Sales	(1,036)	(3,989)	(5,025)
Settlements	(27,429)	—	(27,429)
Net realized losses	—	(11)	(11)
Change in net unrealized losses	(2,016)	—	(2,016)
Level 3 investments—End of year	$232,337	$13,500	$245,837

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	As at December 31, 2014		
	Bank Loans	Catastrophe Bonds	Total
Level 3 investments—Beginning of year	$—	$—	$—
Purchases	32,986	12,500	45,486
Settlements	—	(1,500)	(1,500)
Change in net unrealized losses	(238)	(203)	(441)
Transfers into Level 3	—	6,703	6,703
Level 3 investments—End of year	$32,748	$17,500	$50,248

There have not been any transfers into or out of Level 3 during the year ended December 31, 2015. During the year ended December 31, 2014 there was a transfer of investments from Level 2 into Level 3 of the fair value hierarchy. This transfer was due to a reassessment of the extent of unobservable inputs used in establishing the fair value of certain catastrophe bonds.

(d) Financial Instruments Not Carried at Fair Value

U.S. GAAP guidance in relation to the fair value of financial instruments is also applicable to disclosures of financial instruments not carried at fair value, except for certain financial instruments, including insurance contracts and investments in affiliates. The carrying values of cash and cash equivalents (including restricted amounts), accrued investment income, other assets, net payable for investments purchased and accounts payable and accrued expenses approximated their fair values at December 31, 2015, due to their respective short maturities. As these financial instruments are not actively traded, their respective fair values are classified within Level 2.

9. Variable interest entities

The Company consolidates all VOEs in which it has a controlling financial interest and all VIEs in which it is considered to be the primary beneficiary. The Company’s VIEs primarily include entities related to the AlphaCat segment.

(a) Consolidated VIEs

AlphaCat sidecars

Beginning on May 25, 2011, the Company joined with other investors in capitalizing a series of sidecars for the purpose of investing in collateralized reinsurance and retrocessional contracts. Certain of these sidecars deployed their capital through transactions entered into by AlphaCat Reinsurance Ltd. (“AlphaCat Re”). Each of these entities return capital once the risk period expires and all losses have been paid out. The AlphaCat sidecars are VIEs and are consolidated by the Company as the primary beneficiary. The Company's maximum exposure to any of the sidecars is the amount of capital invested at any given time and any remaining capital commitments. Refer to Note 23, "Commitments and contingencies," for further details.

AlphaCat ILS funds

Beginning on December 17, 2012, The Company joined with other investors in capitalizing the AlphaCat ILS funds for the purpose of investing in instruments with returns linked to property catastrophe reinsurance, retrocession and insurance linked securities (“ILS”) contracts. The AlphaCat ILS funds have varying risk profiles and are categorized by the expected loss of the fund. Expected loss represents the average annual loss over the set of simulation scenarios divided by the total limit. Lower risk ILS funds are defined as having a maximum permitted portfolio expected loss of less than 7%, whereas higher risk ILS funds have a maximum permitted portfolio expected loss of greater than 7%. The AlphaCat ILS funds primarily deploy their capital through transactions entered into by AlphaCat Re and AlphaCat Master Fund Ltd. (“AlphaCat Master Fund”). The AlphaCat ILS funds are VIEs and are consolidated by the Company as the primary beneficiary. The Company's maximum exposure to any of the funds is the amount of capital invested at any given time and any remaining capital commitments. Refer to Note 23, "Commitments and contingencies," for further details.

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AlphaCat Re and AlphaCat Master Fund
The Company utilizes AlphaCat Re and AlphaCat Master Fund (collectively the “master funds”), both market facing entities, for the purpose of writing collateralized reinsurance and investing in capital markets products, respectively, on behalf of certain entities within the AlphaCat segment and direct third party investors. AlphaCat Re enters into transactions on behalf of the AlphaCat sidecars and ILS funds (collectively the “feeder funds”) and direct third party investors, whereas AlphaCat Master Fund only enters into transactions on behalf of certain AlphaCat ILS funds. All of the risks and rewards of the underlying transactions are allocated to the feeder funds and direct third party investors using notes payable to AlphaCat investors. The master funds are VIEs and are consolidated by the Company as the primary beneficiary. As such, any notes issued to the feeder funds are eliminated on consolidation and only notes issued to direct third party investors remain on the Consolidated Balance Sheets.
Notes are issued during the course of a year by AlphaCat Re to third party investors in order to write collateralized reinsurance on their behalf. The underlying collateralized reinsurance contracts typically have a twelve month duration; however, the notes do not have a stated maturity date. Since repayment is dependent on the settlement of the underlying transactions, the notes are subsequently redeemed as the underlying transactions are settled. The investments made by third parties on a direct basis are provided as consideration for these notes to AlphaCat Re, which are consolidated in the Company’s Consolidated Financial Statements. The effective economic interest in AlphaCat Re that results from these transactions is represented on the Consolidated Balance Sheets as notes payable to AlphaCat investors. The subsequent income or loss generated by the collateralized reinsurance is transferred to third party investors as (income) attributable to AlphaCat investors in the Company’s Consolidated Statements of Comprehensive Income. The notes do not have any principal amount, since the final amount payable is dependent on the income or loss of the underlying transactions. To the extent that the (income) loss attributable to AlphaCat investors has not been returned to investors, it is included in accounts payable and accrued expenses in the Consolidated Balance Sheets.
The following tables present a reconciliation of the beginning and ending notes payable to AlphaCat investors for the year ended December 31, 2015:

	Year Ended December 31, 2015
Notes payable to AlphaCat investors, beginning of year	$—
Issuance of notes payable to AlphaCat investors	75,770
Foreign exchange losses	(277)
Notes payable to AlphaCat investors, end of year	$75,493

The income attributable to AlphaCat investors for the year ended December 31, 2015 was $2,412.
BetaCat ILS funds
The BetaCat ILS funds invest exclusively in catastrophe bonds (principal-at-risk variable rate notes and other event-linked securities, being referred to collectively as “Cat Bonds”) focused on property and casualty risk issued under Rule 144A of the Securities Act of 1933, as amended, following a passive buy-and-hold investment strategy. One of the funds is a VIE and is consolidated by the Company as the primary beneficiary. The remaining funds are VOEs and are consolidated by the Company as it owns all of the voting equity interests. The Company's maximum exposure to any of the funds is the amount of capital invested at any given time.

The following table presents the total assets and total liabilities of the Company’s consolidated VIEs, excluding intercompany eliminations, as at December 31, 2015 and 2014:

	As at December 31, 2015		As at December 31, 2014	
	Total Assets	Total Liabilities	Total Assets	Total Liabilities
AlphaCat sidecars	$206,581	$14,804	$389,910	$37,542
AlphaCat ILS funds - Lower Risk (a)	$1,268,070	$143,371	$856,980	$161,406
AlphaCat ILS funds - Higher Risk (a)	$522,867	$300,122	$173,646	$18,371
AlphaCat Re and AlphaCat Master Fund	$1,615,779	$1,615,609	$946,723	$946,553
BetaCat ILS funds	$64,221	$2,472	$16,189	$278

(a) Lower risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of less than 7%, whereas higher risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of greater than 7%. Expected loss represents the average annual loss over the set of simulation scenarios divided by the total limit.

Assets of consolidated VIEs can only be used to settle obligations and liabilities of the consolidated VIEs and do not have recourse to the general credit of the Company. Investments of these entities are presented separately in Note 7, “Investments,” as non-managed investments.

(b) Non-Consolidated VIEs

The Company invests in private equity and other investment vehicles as part of the Company's investment portfolio. The activities of these VIEs are generally limited to holding investments and the Company's involvement in these entities is passive in nature. The Company's maximum exposure to the VIEs is the amount of capital invested at any given time, and the Company does not have the power to direct the activities which most significantly impact the VIEs economic performance. The Company is therefore not the primary beneficiary of these VIEs.

10. Investments in affiliates

The following table presents the Company's investments in affiliates as at December 31, 2015 and 2014:

	Years Ended December 31,	
	2015	2014
Investment affiliate	$87,673	$63,506
Operating affiliate	392	50,944
Investments in affiliates	$88,065	$114,450

(a) Investment affiliate

Aquiline Financial Services Fund II L.P.

On December 20, 2011, the Company entered into an Assignment and Assumption Agreement (the "Agreement") with Aquiline Capital Partners LLC, a Delaware limited liability company (the "Assignor") and Aquiline Capital Partners II GP (Offshore) Ltd., a Cayman Islands company limited by shares (the "Aquiline II General Partner") pursuant to which the Company has assumed 100% of the Assignor's interest in Aquiline Financial Services Fund II L.P. (the "Aquiline II Partnership") representing a total capital commitment of $50,000 (the "Aquiline II Commitment"), as a limited partner in the Partnership (the "Transferred Interest"). The Transferred Interest is governed by the terms of an Amended and Restated Exempted Limited Partnership Agreement of the Fund dated January 9, 2013 (the "Aquiline II Limited Partnership Agreement").

On October 2, 2014, the Company assumed an additional investment in the Aquiline II Partnership as part of the Western World acquisition representing a total capital commitment of $10,000. This interest is also governed by the terms of the Aquiline II Limited Partnership Agreement.

The partnership is a VIE and the Company is not the primary beneficiary. Therefore, the Company's investment in the fund has been treated as an equity method investment. The partnership provides a quarterly capital account statement, with a three month delay in its valuation, which was used as the basis for calculating the Company's share of partnership income for the period.

In accordance with the terms of the Agreement, no limited partner has the right to withdraw from the partnership or to withdraw any part of its capital account without prior consent from the general partner. The Company's maximum exposure to the fund is limited to the amount invested and any remaining capital commitment. Refer to Note 23, "Commitments and contingencies," for further details.

Aquiline Financial Services Fund III L.P.

On November 7, 2014, the Company, entered into a Subscription Agreement (the "Subscription Agreement") with Aquiline Capital Partners III GP (Offshore) Ltd., a Cayman Islands company limited by shares (the "Aquiline III General Partner") pursuant to which the Company committed and agreed to purchase limited partnership or other comparable limited liability equity interests (the "Limited Partnership Interests") in Aquiline Financial Services Fund III L.P., a Cayman Islands exempted limited partnership (the "Aquiline III Partnership"), and/or one or more Alternative Investment Vehicles and Intermediate Entities (together with the Aquiline III Partnership, the "Fund" or the "Entities") with a capital commitment (the "Aquiline III Commitment") in an amount equal to $100,000, as a limited partner in the Aquiline III Partnership. The Limited Partnership Interests are governed by the terms of an Amended and Restated Exempted Limited Partnership Agreement dated as of November 7, 2014 (the “Aquiline III Limited Partnership Agreement”).

The partnership is a VIE and the Company is not the primary beneficiary. Therefore, the Company's investment in the fund has been treated as an equity method investment. The partnership provides a quarterly capital account statement, with a three month delay in its valuation, which was used as the basis for calculating the Company's share of partnership income for the period.

In accordance with the terms of the Agreement, no limited partner has the right to withdraw from the partnership or to withdraw any part of its capital account without prior consent from the general partner. The Company's maximum exposure to the fund is limited to the amount invested and any remaining capital commitment. Refer to Note 23, "Commitments and contingencies," for further details.

The following table presents a reconciliation of the beginning and ending investment in the Company's investment affiliate balance for the years ended December 31, 2015 and 2014:

	Years Ended December 31,	
	2015	2014
Investment affiliate, beginning of year	$63,506	$34,500
Addition due to Western World acquisition	—	8,127
Net capital contributions	19,886	12,468
Income from investment affiliate	4,281	8,411
Investment affiliate, end of year	$87,673	$63,506

The following table presents the Company’s investment in the Partnerships as at December 31, 2015:

	Investment at cost	Voting ownership %	Equity ownership %	Carrying value
Aquiline Financial Services Fund II L.P.	$55,904	— %	8.1 %	$73,880
Aquiline Financial Services Fund III L.P.	$13,890	— %	13.7 %	$13,793
Total	$69,794			$87,673

The following table presents the Company’s investment in the Partnership as at December 31, 2014:

	Investment at cost	Voting ownership %	Equity ownership %	Carrying value

Aquiline Financial Services Fund II L.P.	$51,001	—	%	8.1	%	$63,506

(b) Operating affiliate

PaCRe, Ltd.

On April 2, 2012, the Company joined with other investors in capitalizing PaCRe, a Class 4 Bermuda reinsurer formed for the purpose of writing high excess property catastrophe reinsurance. However, during the fourth quarter of 2015, PaCRe's Class 4 license was surrendered and the company was considered off-risk effective January 1, 2016. The Company's investment in PaCRe has been treated as an equity method investment. The Company's maximum exposure to the fund is the amount of capital invested at any given time.

The following table presents a reconciliation of the beginning and ending investment in the Company's operating affiliate balance for the years ended December 31, 2015 and 2014:

	Years Ended December 31,	
	2015	2014
Operating affiliate, beginning of year	$50,944	$55,284
Return of investment	(46,603)	—
Loss from operating affiliate	(3,949)	(4,340)
Operating affiliate, end of year	$392	$50,944

The following table presents the Company’s investment in PaCRe as at December 31, 2015:

	Investment at cost	Voting ownership %	Equity ownership %	Carrying value
Investment in PaCRe	$392	100.0 %	10.0 %	$392

The following table presents the Company’s investment in PaCRe as at December 31, 2014:

	Investment at cost	Voting ownership %	Equity ownership %	Carrying value
Investment in PaCRe	$56,500	100.0 %	10.0 %	$50,944

11. Noncontrolling interest

Investors in the AlphaCat ILS funds have rights that enable shareholders, subject to certain limitations, to redeem their shares. The third party equity is therefore recorded in the Company's Consolidated Balance Sheets as redeemable noncontrolling interest. When and if a redemption notice is received, the fair value of the redemption is reclassified to a liability.

The AlphaCat sidecars have no shareholder redemption rights. Therefore, the third party equity is recorded in the Company's Consolidated Balance Sheets as noncontrolling interest.

The following tables present a reconciliation of the beginning and ending balances of redeemable noncontrolling interest and noncontrolling interest for the years ended December 31, 2015 and 2014:

	Year Ended December 31, 2015		
	Redeemable noncontrolling interest	Noncontrolling interest	Total
Balance, beginning of year	$617,791	$292,274	$910,065
Issuance of shares	499,199	9,600	508,799
Income attributable to noncontrolling interest	71,419	21,545	92,964
Redemption of shares	(65,895)	—	(65,895)
Redemptions payable	(10,800)	—	(10,800)
Distributions	—	(168,757)	(168,757)
Balance, end of year	$1,111,714	$154,662	$1,266,376

	Year Ended December 31, 2014		
	Redeemable noncontrolling interest	Noncontrolling interest	Total
Balance, beginning of year	$300,936	$375,026	$675,962
Issuance of shares	300,202	117,244	417,446
Income attributable to noncontrolling interest	37,692	37,188	74,880
Redemption of shares	—	—	—
Redemptions payable	(21,039)	—	(21,039)
Distributions	—	(237,184)	(237,184)
Balance, end of year	$617,791	$292,274	$910,065

12. Derivative instruments

The Company enters into derivative instruments for risk management purposes, specifically to hedge unmatched foreign currency exposures and interest rate exposures. As at December 31, 2015, the Company held foreign currency forward contracts to mitigate the risk of fluctuations in the U.S. dollar against a number of foreign currencies. In addition, the Company held two interest rate swaps to fix the payment of interest on the Company's 2006 and 2007 Junior Subordinated Deferrable Debentures, as well as three interest rate swaps and one cross-currency interest rate swap to fix the payment of interest and mitigate the foreign exchange rate impact on Flagstone's 2006 and 2007 Junior Subordinated Deferrable Debentures.

As at December 31, 2015, none of the Company's foreign currency forward contracts were designated as hedging instruments for accounting purposes. Whereas, all but one of the Company's foreign currency forward contracts were designated as hedging instruments for accounting purposes as at December 31, 2014.

The following table summarizes information on the classification and amount of the fair value of derivatives not designated as hedging instruments for accounting purposes on the Consolidated Balance Sheets at December 31, 2015 and December 31, 2014:

	As at December 31, 2015			As at December 31, 2014		
Derivatives not designated as hedging instruments:	Notional Exposure	Asset Derivative at Fair Value (a)	Liability Derivative at Fair Value (a)	Notional Exposure	Asset Derivative at Fair Value (a)	Liability Derivative at Fair Value (a)
Foreign currency forward contracts	$255,840	$2,601	$3,211	$26,755	$1,685	$—

(a) Asset and liability derivatives are classified within other assets and accounts payable and accrued expenses, respectively, on the Consolidated Balance Sheets. The net impact on earnings, recognized in income within foreign exchange gains (losses) and other income (loss), relating to the foreign currency forward contracts that were not designated as hedging instruments during the year ended December 31, 2015 was $(610) and $139, respectively (2014: $nil and $(133), respectively).

The following table summarizes information on the classification and amount of the fair value of derivatives designated as hedging instruments for accounting purposes on the Consolidated Balance Sheets at December 31, 2015 and December 31, 2014:

	As at December 31, 2015			As at December 31, 2014		
Derivatives designated as hedging instruments:	Notional Exposure	Asset Derivative at Fair Value (a)	Liability Derivative at Fair Value (a)	Notional Exposure	Asset Derivative at Fair Value (a)	Liability Derivative at Fair Value (a)
Foreign currency forward contracts	$—	$—	$—	$210,333	$408	$2,813
Interest rate swap contracts	$552,263	$21	$1,942	$552,263	$25	$1,169

(a) Asset and liability derivatives are classified within other assets and accounts payable and accrued expenses, respectively, on the Consolidated Balance Sheets.

(a) Classification within the fair value hierarchy

As described in Note 8, "Fair value measurements," under U.S. GAAP, a company must determine the appropriate level in the fair value hierarchy for each fair value measurement. The assumptions used within the valuation of the Company's derivative instruments are observable in the marketplace, can be derived from observable data or are

supported by observable levels at which other similar transactions are executed in the marketplace. Accordingly, these derivatives were classified within Level 2 of the fair value hierarchy.

(b) Derivative instruments designated as a fair value hedge

The Company designates certain foreign currency derivative instruments as fair value hedges for accounting purposes and formally and contemporaneously documents all relationships between the derivative instruments and hedged items and links the derivative instruments to specific assets and liabilities. The Company assesses the effectiveness of these hedges, both at inception and on an on-going basis and determines whether the hedges are highly effective in offsetting changes in fair value of the linked hedged items.

The following table provides the total impact on earnings, recognized in income within foreign exchange gains (losses), relating to the derivative instruments formally designated as fair value hedges for accounting purposes along with the impact of the related hedged items for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,		
Foreign currency forward contracts	2015	2014	2013
Amount of loss recognized in income on derivative	$(12,279)	$(9,651)	$(728)
Amount of gain on hedged item recognized in income attributable to risk being hedged	$12,279	$9,651	$728
Amount of gain recognized in income on derivative (ineffective portion)	$—	$—	$—

(c) Derivative instruments designated as a cash flow hedge

The Company designates its interest rate derivative instruments as cash flow hedges for accounting purposes and formally and contemporaneously documents all relationships between the hedging instruments and hedged items and links the derivative instruments to specific assets and liabilities. The Company assesses the effectiveness of the hedges, both at inception and on an on-going basis and determines whether the hedges are highly effective in offsetting changes in fair value of the linked hedged items. The Company currently applies the long haul method when assessing the hedge's effectiveness.

The following table provides the total impact on other comprehensive income (loss) and earnings relating to the derivative instruments formally designated as cash flow hedges along with the impact of the related hedged items for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,		
Interest rate swap contracts	2015	2014	2013
Amount of effective portion recognized in other comprehensive income	$13,740	$13,302	$11,107
Amount of effective portion subsequently reclassified to earnings	$(12,899)	$(13,074)	$(11,107)
Amount of ineffective portion excluded from effectiveness testing	$(841)	$(228)	$—

The above balances relate to interest payments and have therefore been classified as finance expenses in the Consolidated Statements of Comprehensive Income.

(d) Balance sheet offsetting

There was no balance sheet offsetting activity as at December 31, 2015 or December 31, 2014.

The Company currently provides cash collateral as security for interest rate swap contracts. The Company does not provide cash collateral or financial instruments as security for foreign currency forward contracts. Our derivative instruments are generally traded under International Swaps and Derivatives Association master netting agreements, which establish terms that apply to all transactions. On a periodic basis, the amounts receivable from or payable to the counterparties are settled in cash.

The Company has not elected to settle multiple transactions with an individual counterparty on a net basis.

13. Premiums receivable

Premiums receivable are composed of premiums in the course of collection, net of commissions and brokerage, and premiums accrued but unbilled, net of commissions and brokerage. It is common practice in the insurance and reinsurance industry for premiums to be paid on an installment basis, therefore significant amounts will be considered unbilled and will not become due until a future date, which is typically no later than expiration of the underlying coverage period. The following is a breakdown of the components of premiums receivable at December 31, 2015 and 2014:

	Premiums in course of collection	Premiums accrued but unbilled	Total
Balance as at December 31, 2014	$84,901	$621,566	$706,467
Change during 2015	10,251	(58,036)	(47,785)
Balance as at December 31, 2015	$95,152	$563,530	$658,682

	Premiums in course of collection	Premiums accrued but unbilled	Total
Balance as at December 31, 2013	$73,594	$621,683	$695,277
Change during 2014	11,307	(117)	11,190
Balance as at December 31, 2014	$84,901	$621,566	$706,467

14. Reserve for losses and loss expenses

Reserves for losses and loss expenses are based in part upon the estimation of case reserves from broker, insured and ceding company reported data. The Company also uses statistical and actuarial methods to estimate ultimate expected losses and loss expenses, from which incurred but not reported losses can be calculated. The period of time from the occurrence of a loss to the reporting of a loss to the Company and to the settlement of the Company's liability may be several months or years. During this period, additional facts and trends may be revealed. As these factors become apparent, reserves will be adjusted, sometimes requiring an increase or decrease in the overall reserves of the Company, and at other times requiring a reallocation of incurred but not reported reserves to specific case reserves. These estimates are reviewed and adjusted regularly, and such adjustments, if any, are reflected in earnings in the period in which they become known. While management believes that it has made a reasonable estimate of ultimate losses, there can be no assurances that ultimate losses and loss expenses will not exceed this estimate.

The following table represents an analysis of paid and unpaid losses and loss expenses incurred and a reconciliation of the beginning and ending unpaid losses and loss expenses for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,		
	2015	2014	2013
Reserve for losses and loss expenses, beginning of year	$3,243,147	$3,047,933	$3,553,604
Losses and loss expenses recoverable	(377,466)	(370,154)	(439,967)
Net reserves for losses and loss expenses, beginning of year	2,865,681	2,677,779	3,113,637
Net reserves acquired (disposed)	—	525,091	(36,519)
Increase (decrease) in net reserves for losses and loss expenses in respect of losses occurring in:			
Current year	1,283,970	1,024,256	999,380
Prior years (a)	(306,137)	(259,241)	(222,584)
Total incurred losses and loss expenses (a)	977,833	765,015	776,796
Less net losses and loss expenses paid in respect of losses occurring in:			
Current year	(326,167)	(245,084)	(244,682)
Prior years	(841,672)	(818,569)	(918,070)
Total net paid losses	(1,167,839)	(1,063,653)	(1,162,752)
Foreign exchange gain	(29,694)	(38,551)	(13,383)
Net reserve for losses and loss expenses, end of year	2,645,981	2,865,681	2,677,779
Losses and loss expenses recoverable	350,586	377,466	370,154
Reserve for losses and loss expenses, end of year	$2,996,567	$3,243,147	$3,047,933

Incurred losses and loss expenses comprise:

	Years Ended December 31,		
	2015	2014	2013
Gross losses and loss expenses (a)	$1,083,695	$826,826	$907,850
Reinsurance recoverable	(105,862)	(61,811)	(131,054)
Net incurred losses and loss expenses (a)	$977,833	$765,015	$776,796

(a) Upon closing the acquisition of Western World, an adjustment of $15,586 was made to increase net reserves to reflect fair value. This adjustment was fully amortized to income through a reduction in losses and loss expenses of $10,979 and $4,607 during the years ended December 31, 2015 and 2014, respectively.

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The December 31, 2015 and 2014 gross reserves balances comprise reserves for reported claims of $1,278,697 and $1,500,733, respectively, and reserves for claims incurred but not reported of $1,717,870 and $1,742,414, respectively. The net favorable development on prior years by segment and line of business is as follows:

	Year Ended December 31, 2015				
	Property	Marine	Specialty	Liability	Total
Validus Re	$(70,343)	$(39,460)	$(18,813)	$—	$(128,616)
Talbot	(52,393)	(63,920)	(30,044)	—	(146,357)
Western World (a)	(6,045)	—	—	(16,922)	(22,967)
AlphaCat	(8,197)	—	—	—	(8,197)
Net favorable development (a)	$(136,978)	$(103,380)	$(48,857)	$(16,922)	$(306,137)

The Validus Re segment experienced favorable development on prior years primarily due to favorable development on event specific reserves and attritional losses, which included favorable development on agricultural loss estimates. The Talbot segment experienced favorable development on prior years primarily due to favorable development on attritional losses and certain events, including the Thailand floods, which was a 2011 notable loss event. The Western World segment experienced favorable development on prior years primarily due to the amortization of the fair value adjustment made at the acquisition date as well as favorable development on attritional losses.

	Year Ended December 31, 2014				
	Property	Marine	Specialty	Liability	Total (a)
Validus Re	$(76,064)	$(6,830)	$(4,706)	$—	$(87,600)
Talbot	(53,779)	(31,397)	(55,990)	—	(141,166)
Western World (a)	1,023	—	—	(12,263)	(11,240)
AlphaCat	(19,235)	—	—	—	(19,235)
Net favorable development (a)	$(148,055)	$(38,227)	$(60,696)	$(12,263)	$(259,241)

(a) Upon closing the acquisition of Western World, an adjustment of $15,586 was made to increase net reserves to reflect fair value. This adjustment was fully amortized to income through a reduction in losses and loss expenses of $10,979 and $4,607 during the years ended December 31, 2015 and 2014, respectively.

The Validus Re segment experienced favorable development on prior years primarily due to favorable development on the Gryphon Alpha mooring failure and attritional losses, partially offset by adverse development on Costa Concordia and an increase in the loss estimate on agriculture losses. The Talbot segment experienced favorable development on prior years primarily due to a combination of favorable development on attritional losses and notable loss events, primarily the Tohoku earthquake, which was a 2011 notable loss event. The Western World segment experienced favorable development on prior years primarily due to the amortization of the fair value adjustment made at the acquisition date as well as favorable development on attritional losses. The AlphaCat segment experienced favorable development on prior years primarily due to the partial release of a 2013 aggregate excess of loss contract.

	Year Ended December 31, 2013			
	Property	Marine	Specialty	Total
Validus Re	$(81,610)	$26,705	$(4,353)	$(59,258)
Talbot	(45,692)	(46,092)	(54,406)	(146,190)
AlphaCat	(17,136)	—	—	(17,136)
Net favorable development	$(144,438)	$(19,387)	$(58,759)	$(222,584)

The Validus Re property and specialty lines experienced favorable development primarily due to lower claims emergence on attritional losses, although the property lines experienced unfavorable development due to increased estimate of ultimate losses on the New Zealand earthquakes of 2010 and 2011, both notable loss events. The Validus Re marine lines experienced unfavorable development primarily due to an increased estimate of ultimate losses on

Costa Concordia. Talbot experienced favorable development across all lines, primarily due to lower than expected claims development on attritional losses. The AlphaCat segment experienced favorable development on prior years primarily due to favorable development on Superstorm Sandy, a 2012 notable loss event, and attritional losses.

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15. Accounts payable and accrued expenses

The following are the components of accounts payable and accrued expenses:

	Years Ended December 31,	
	2015	2014
Accrued interest on debt	$10,771	$12,224
Subscriptions received in advance on AlphaCat ILS funds and sidecars	412,036	162,400
Redemptions made on AlphaCat ILS funds	10,800	21,039
Accrued income attributable to AlphaCat investors	2,412	—
Income tax payable	8,856	2,369
Accrued pension liability	15,722	16,493
Trade and compensation payables	166,734	180,653
Total accounts payable and accrued expenses	$627,331	$395,178

16. Reinsurance

The Company enters into reinsurance and retrocession agreements in order to mitigate its accumulation of loss, reduce its liability on individual risks, enable it to underwrite policies with higher limits and increase its aggregate capacity. The cession of insurance and reinsurance does not legally discharge the Company from its primary liability for the full amount of the policies, and the Company is required to pay the loss and bear collection risk if the reinsurer fails to meet its obligations under the reinsurance or retrocession agreement. Amounts recoverable from reinsurers are estimated in a manner consistent with the underlying liabilities.

(a) Effects of reinsurance on premiums written and earned

The effects of reinsurance on premiums written and earned for the years ended December 31, 2015, 2014 and 2013 are as follows:

	Year Ended December 31, 2015											
	Validus Re		Talbot		Western World		AlphaCat		Eliminations		Total	
	Written	Earned	Written	Earned	Written	Earned	Written	Earned	Written	Earned	Written	Earned
Direct	$—	$—	$560,251	$570,669	$278,504	$281,570	$—	$—	$—	$—	$838,755	$8
Assumed	1,126,759	1,141,184	458,584	467,268	—	17	176,126	164,544	(42,718)	(41,513)	1,718,751	1,7
Ceded	(149,088)	(150,971)	(198,896)	(199,846)	(18,877)	(22,937)	(4,538)	(4,609)	42,718	41,513	(328,681)	(33
Total	$977,671	$990,213	$819,939	$838,091	$259,627	$258,650	$171,588	$159,935	$—	$—	$2,228,825	$2

	Year Ended December 31, 2014											
	Validus Re		Talbot		Western World		AlphaCat		Eliminations		Total	
	Written	Earned	Written	Earned	Written	Earned	Written	Earned	Written	Earned	Written	Earned
Direct	$—	$—	$617,793	$576,136	$65,235	$80,838	$—	$—	$—	$—	$683,028	$656
Assumed	1,118,532	1,109,659	483,977	508,634	—	—	126,785	126,534	(53,457)	(60,912)	1,675,837	1,683
Ceded	(163,678)	(192,375)	(192,211)	(204,996)	(6,428)	(7,842)	(4,348)	(3,533)	53,457	60,912	(313,208)	(347,
Total	$954,854	$917,284	$909,559	$879,774	$58,807	$72,996	$122,437	$123,001	$—	$—	$2,045,657	$1,99

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	Year Ended December 31, 2013									
	Validus Re		Talbot		AlphaCat		Eliminations		Total	
	Written	Earned	Written	Earned	Written	Earned	Written	Earned	Written	Earned
Direct	$—	$—	$544,722	$519,045	$—	$—	$—	$—	$544,722	$519,045
Assumed	1,226,690	1,360,735	547,168	532,069	131,134	134,688	(61,268)	(62,508)	1,843,724	1,964,984
Ceded	(210,432)	(226,798)	(226,111)	(220,420)	(525)	(524)	61,268	62,508	(375,800)	(385,234)
Total	$1,016,258	$1,133,937	$865,779	$830,694	$130,609	$134,164	$—	$—	$2,012,646	$2,098,795

(b) Credit risk

The Company evaluates the financial condition of its reinsurers and monitors concentration of credit risk arising from its exposure to individual reinsurers. The reinsurance program is generally placed with reinsurers whose rating, at the time of placement, was A- or better as rated by Standard & Poor's or the equivalent with other rating agencies. Exposure to a single reinsurer is also controlled with restrictions dependent on rating. At December 31, 2015, 98.7% (December 31, 2014: 98.0%) of reinsurance recoverables (which includes loss reserves recoverable and recoverables on paid losses and $214,863 of total IBNR recoverable (December 31, 2014: $231,129)) were fully collateralized or from reinsurers rated A- or better.

Reinsurance recoverables by reinsurer as at December 31, 2015 and December 31, 2014 are as follows:

	As at December 31, 2015		As at December 31, 2014	
	Reinsurance Recoverable	% of Total	Reinsurance Recoverable	% of Total
Top 10 reinsurers	$303,108	81.1 %	$312,205	75.1 %
Other reinsurers’ balances > $1 million	61,222	16.4 %	94,247	22.7 %
Other reinsurers’ balances < $1 million	9,327	2.5 %	9,092	2.2 %
Total	$373,657	100.0 %	$415,544	100.0 %

	As at December 31, 2015		
Top 10 Reinsurers	Rating	Reinsurance Recoverable	% of Total
Swiss Re	AA-	$83,048	22.2 %
Lloyd's Syndicates	A+	66,356	17.8 %
Hannover Re	AA-	43,765	11.7 %
Everest Re	A+	43,060	11.5 %
Munich Re	AA-	18,707	5.0 %
Transatlantic Re	A+	11,923	3.2 %
Hamilton Re	A-	10,898	2.9 %
National Indemnity Company	AA+	10,293	2.8 %
XL Re	A+	8,728	2.3 %
Toa Re	A+	6,330	1.7 %
Total		$303,108	81.1 %

	As at December 31, 2014			
Top 10 Reinsurers	Rating	Reinsurance Recoverable	% of Total	
Swiss Re	AA-	$70,848	17.0	%
Lloyd's Syndicates	A+	62,318	15.0	%
Everest Re	A+	51,425	12.4	%
Hannover Re	AA-	40,927	9.8	%
Fully Collateralized	NR	23,315	5.6	%
Munich Re	AA-	19,384	4.7	%
Transatlantic Re	A+	12,418	3.0	%
XL Re	A+	11,114	2.7	%
Berkshire Hathaway Homestate	AA+	10,372	2.5	%
Merrimack Mutual Fire Insurance	A+	10,084	2.4	%
Total		$312,205	75.1	%

NR: Not rated

At December 31, 2015 and December 31, 2014, the provision for uncollectible reinsurance relating to reinsurance recoverables was $4,997 and $4,755, respectively. To estimate the provision for uncollectible reinsurance, the reinsurance recoverable is first allocated to applicable reinsurers. This determination is based on a process rather than an estimate, although an element of judgment is applied, especially in relation to ceded IBNR. The Company then uses default factors to determine the portion of a reinsurer’s balance deemed to be uncollectible. Default factors require considerable judgment and are determined in part using the current rating, or rating equivalent, of each reinsurer as well as other key considerations and assumptions.

17. Share capital

(a) Authorized and issued

The Company’s authorized share capital is 571,428,571 common shares with a par value of $0.175 per share. The holders of common shares are entitled to receive dividends. Holders of common shares are allocated one vote per share, provided that, if the controlled shares of any shareholder or group of related shareholders constitute more than 9.09 percent of the outstanding common shares of the Company, their voting power will be reduced to 9.09 percent.

The Company may from time to time repurchase its securities, including common shares, Junior Subordinated Deferrable Debentures and Senior Notes. On February 3, 2015, the Board of Directors of the Company approved an increase in the Company's common share repurchase authorization to $750,000. This amount was in addition to the $2,274,401 of common shares repurchased by the Company through February 3, 2015 under its previously authorized share repurchase programs.

The Company has repurchased approximately 76,031,280 common shares for an aggregate purchase price of $2,491,731 from the inception of its share repurchase program to December 31, 2015. The Company had $532,670 remaining under its authorized share repurchase program as of December 31, 2015.

The Company expects the purchases under its share repurchase program to be made from time to time in the open market or in privately negotiated transactions. The timing, form and amount of the share repurchases under the program will depend on a variety of factors, including market conditions, the Company’s capital position relative to internal and rating agency targets, legal requirements and other factors. The repurchase program may be modified, extended or terminated by the Board of Directors at any time.

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The following table is a summary of the common shares issued and outstanding:

	Common Shares
Common shares issued, December 31, 2014	155,554,224
Restricted share awards vested, net of shares withheld	614,945
Restricted share units vested, net of shares withheld	13,260
Options exercised	782,465
Warrants exercised	3,593,715
Direct issuance of common stock	639
Performance shares vested, net of shares withheld	11,524
Common shares issued, December 31, 2015	160,570,772
Treasury shares, December 31, 2015	(77,670,155)
Common shares outstanding, December 31, 2015	82,900,617

	Common Shares
Common shares issued, December 31, 2013	154,488,497
Restricted share awards vested, net of shares withheld	615,659
Restricted share units vested, net of shares withheld	10,265
Options exercised	412,656
Direct issuance of common stock	1,380
Performance shares vested, net of shares withheld	25,767
Common shares issued, December 31, 2014	155,554,224
Treasury shares, December 31, 2014	(71,684,379)
Common shares outstanding, December 31, 2014	83,869,845

	Common Shares
Common shares issued, December 31, 2012	152,698,191
Restricted share awards vested, net of shares withheld	796,838
Restricted share units vested, net of shares withheld	14,381
Options exercised	351,509
Warrants exercised	591,480
Direct issuance of common stock	1,266
Performance shares vested, net of shares withheld	31,897
Deferred share units vested, net of shares withheld	2,935
Common shares issued, December 31, 2013	154,488,497
Treasury shares, December 31, 2013	(58,444,185)
Common shares outstanding, December 31, 2013	96,044,312

(b) Warrants

The Company had no outstanding warrants at December 31, 2015 (2014: 5,174,114). Each warrant provided the holder with the option to purchase a common share at a specified exercise price. All outstanding warrants expired on December 12, 2015 and no further warrants are anticipated to be issued.

The warrants were settled using either the physical settlement or net-share settlement methods. The warrants have been classified as equity instruments, in accordance with U.S. GAAP guidance for "Derivatives and Hedging, Contracts in Entity's own Equity." The warrants were measured at fair value and recorded in additional paid-in capital. The fair value of each warrant issued was estimated on the date of grant using the Black-Scholes option-pricing model. The volatility assumption used, of approximately 30.0%, was derived from the historical volatility of the share price of a range of publicly-traded Bermuda reinsurance companies of a similar business nature to the Company. No allowance was made for any potential illiquidity associated with the private trading of the Company's shares. The other assumptions in the warrant-pricing model were as follows:

	July 24, 2007 Issuance		February 3, 2006 Issuance		December 15, 2005 Issuance	
Warrants issued	256,409		8,593		8,446,727	
Average strike price	$20.00		$17.50		$17.50	
Volatility	30.0	%	30.0	%	30.0	%
Risk-free rate	4.5	%	4.5	%	4.5	%
Expected dividend yield	0.0	%	0.0	%	0.0	%
Expected term (years)	8		10		10	
Calculated fair value per warrant	$11.28		$8.89		$8.89	

During the year ended December 31, 2015, 5,154,077 warrants were exercised, while 20,037 warrants expired without being exercised. During the year ended December 31, 2014, no warrants were exercised.

(c) Deferred share units

Under the terms of the Company's Director Stock Compensation Plan, non-management directors may elect to receive their director retainer fees in deferred share units rather than cash. The number of share units distributed in case of election under the plan is equal to the amount of the annual retainer fee otherwise payable to the director on such payment date divided by 100% of the fair market value of a share on such payment date. Additional deferred share units are issued in lieu of dividends that accrue on these deferred share units. There were no outstanding deferred share units at December 31, 2015 (2014: nil).

(d) Dividends

The Company announced four quarterly cash dividends of $0.32 per common share and $0.32 per common share equivalent for which each outstanding warrant was exercisable, during the year ended December 31, 2015 (2014: $0.30). These dividends were paid on March 31, 2015, June 30, 2015, September 30, 2015 and December 31, 2015 to holders of record on March 13, 2015, June 15, 2015, September 15, 2015 and December 15, 2015, respectively.

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18. Retirement and pension plans
(a) Defined benefit plans
Senior executives and retired selected key employees of Western World participate in non-qualified, unfunded, defined benefit plans. Benefits for these plans are based on final average earnings, social security benefits earned at retirement date and years of service.
The assumptions used to determine net periodic pension expense for the years ended December 31, 2015 and 2014 are as follows:

	Years Ended December 31,			
	2015		2014	
Discount rate	2.75	%	3.00	%
Increase in compensation levels rate	5.00	%	5.00	%

The assumptions used to determine benefit obligations as at December 31, 2015 and 2014 are as follows:

	As at December 31,			
	2015		2014	
Discount rate	4.00	%	2.75	%
Increase in compensation levels rate	5.00	%	5.00	%

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The following tables present a reconciliation of the beginning and ending funded status and the net amounts recognized for the defined benefit plans for the years ended December 31, 2015 and 2014:

	Years Ended December 31,	
	2015	2014 (a)
Change in benefit obligation:		
Projected benefit obligation at beginning of year (a)	$16,493	$20,885
Service cost	1,024	295
Interest cost	434	145
Actuarial (gains) losses	(46)	1
Benefit payments	(98)	(24)
Settlements	(2,085)	(4,809)
Projected benefit obligation at end of year	$15,722	$16,493
Change in plan assets:		
Fair value of plan assets at beginning of year (a)	$—	$—
Employer contributions	2,186	6,495
Benefit payments	(98)	(24)
Settlements	(2,088)	(6,471)
Fair value of plan assets at end of year	—	—
Funded status at end of year	$(15,722)	$(16,493)
Net amount recognized in accounts payable and accrued expenses	$(15,722)	$(16,493)
Amounts recognized in accumulated other comprehensive loss (income) consist of:		
Net (gain) loss	$(517)	$322
Prior service credit	4	2
Net amount recognized	$(513)	$324

	As at December 31, 2015	As at December 31, 2014
Projected benefit obligation	$15,722	$16,493
Accumulated benefit obligation	$13,308	$11,971
Fair value of plan assets	$—	$—

(a) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

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The components of net periodic pension expense for the years ended December 31, 2015 and 2014 are as follows:

	Years Ended December 31,	
	2015	2014 (a)
Service cost	$1,024	$295
Interest cost	434	145
Amortization of prior service cost	(2)	(2)
Amortization of net loss	312	80
Net periodic benefit cost	1,768	518
Settlement loss	484	1,322
Net periodic pension expense	$2,252	$1,840

Other changes in plan assets and benefit obligations recognized in other comprehensive (loss) income are as follows for the years ended December 31, 2015 and 2014:

	Years Ended December 31,	
	2015	2014 (a)
Net (gain) loss	$(43)	$1,961
Amortization of loss	(312)	(317)
Amortization of prior service cost	2	2
Settlement loss	(484)	(1,322)
Total recognized in other comprehensive (loss) income	$(837)	$324
Total recognized in net pension expense and other comprehensive (loss) income (before tax effects)	$1,415	$2,164

(a) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

The estimated amount of net loss and prior service cost expected to be amortized from accumulated other comprehensive (loss) income into net periodic pension expense over the next fiscal year is $2.

The employer benefit payments/settlements for the year ended December 31, 2015 were $2,183 (December 31, 2014: $4,833). As at December 31, 2015, the projected benefits are as follows:

2016	$919
2017	8,061
2018	92
2019	89
2020	2,631
2021-2025	8,413
Total benefit payments required	$20,205

(b) Other pension plans

The Company provides pension benefits to eligible employees through various plans which are managed externally and sponsored by the Company. The Company’s contributions are expensed as incurred. The Company’s expenses for its defined contribution retirement plans for the years ended December 31, 2015, 2014 and 2013 were $13,684, $10,606 and $7,621, respectively.

19. Stock plans

(a) Long Term Incentive Plan

The Company’s Amended and Restated 2005 Long Term Incentive Plan (“LTIP”) provides for grants to employees of options, stock appreciation rights (“SARs”), restricted shares, restricted share units, performance shares, dividend equivalents or other share-based awards. The total number of shares reserved for issuance under the LTIP are 2,753,292 shares of which 1,971,922 shares are remaining. The LTIP is administered by the Compensation Committee of the Board of Directors. No SARs have been granted to date. Grant prices are established at the fair market value of the Company’s common shares at the date of grant.

i. Options

Options may be exercised for voting common shares upon vesting. Options have a life of 10 years and vest either pro rata or at the end of the required service period from the date of grant. Fair value of the option awards at the date of grant is determined using the Black-Scholes option-pricing model.

Expected volatility is based on stock price volatility of comparable publicly-traded companies. The Company used the simplified method consistent with U.S. GAAP authoritative guidance on stock compensation expenses to estimate expected lives for options granted during the period as historical exercise data was not available and the options met the requirement as set out in the guidance.

The Company has not granted any stock option awards since September 4, 2009. These stock option awards were fully amortized during the year ended December 31, 2012.

A modification event was triggered as a result of a $2.00 per share special dividend declared and paid in 2013 (the "Special Dividend"). In accordance with the terms of the LTIP under which the options were issued, an adjustment was required to protect the holders of such stock options from changes in the value of the stock options following the declaration of the 2013 Special Dividend. The modification of the options included a decrease in the exercise price of each stock option and an increase in the number of shares underlying each stock option. The fair value of the options before and after the modification was unchanged.

Activity with respect to options for the year ended December 31, 2015 was as follows:

	Options	Weighted Average Grant Date Fair Value	Weighted Average Grant Date Exercise Price	Total Intrinsic Value (a)	Company Proceeds Received
Options outstanding and exercisable, December 31, 2014	1,160,057	$7.12	$ 17.74		
Options exercised	(1,094,656)	7.09	17.60	$26,367	$6,277
Options outstanding and exercisable, December 31, 2015	65,401	$7.74	$ 20.17		

Activity with respect to options for the year ended December 31, 2014 was as follows:

	Options	Weighted Average Grant Date Fair Value	Weighted Average Grant Date Exercise Price	Total Intrinsic Value (a)	Company Proceeds Received
Options outstanding and exercisable, December 31, 2013	1,572,713	$6.66	$ 18.88		
Options exercised	(412,656)	5.36	22.07	$7,459	$9,107
Options outstanding and exercisable, December 31, 2014	1,160,057	$7.12	$ 17.74		

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Activity with respect to options for the year ended December 31, 2013 was as follows:

	Options	Weighted Average Grant Date Fair Value	Weighted Average Grant Date Exercise Price	Total Intrinsic Value (a)	Company Proceeds Received
Options outstanding and exercisable, December 31, 2012	1,823,947	$6.52	$ 20.69		
Options regranted (modified)	1,833,414	6.76	19.02		
Options exercised	(351,509)	5.94	22.91	$4,963	$8,052
Options cancelled (modified)	(1,733,139)	6.76	20.12		
Options outstanding and exercisable, December 31, 2013	1,572,713	$6.66	$ 18.88		

(a) The total intrinsic value in the tables above represent the amount by which the market price of the Company's common stock is greater than the option strike price multiplied by the number of options exercised during the year.

There were no unamortized share compensation expenses in respect of options since December 31, 2012. The aggregate intrinsic value of the options outstanding and exercisable at December 31, 2015 was $1,740.

ii. Restricted share awards

Restricted shares granted under the LTIP vest either pro rata or at the end of the required service period and contain certain restrictions during the vesting period, relating to, among other things, forfeiture in the event of termination of employment and transferability. Share compensation expenses of $35,386 were recorded for the year ended December 31, 2015 (2014: $31,335; 2013: $27,750). The expenses represent the proportionate accrual of the fair value of each grant based on the remaining vesting period.

Activity with respect to unvested restricted share awards for the year ended December 31, 2015 was as follows:

	Restricted Share Awards	Weighted Average Grant Date Fair Value
Restricted share awards outstanding, December 31, 2014	2,858,711	$35.81
Restricted share awards granted	724,357	43.67
Restricted share awards vested	(788,758)	34.41
Restricted share awards forfeited	(54,864)	38.14
Restricted share awards outstanding, December 31, 2015	2,739,446	$38.25

Activity with respect to unvested restricted share awards for the year ended December 31, 2014 was as follows:

	Restricted Share Awards	Weighted Average Grant Date Fair Value
Restricted share awards outstanding, December 31, 2013	2,684,745	$33.74
Restricted share awards granted	1,051,348	37.81
Restricted share awards vested	(797,446)	31.44
Restricted share awards forfeited	(79,936)	36.09
Restricted share awards outstanding, December 31, 2014	2,858,711	$35.81

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Activity with respect to unvested restricted share awards for the year ended December 31, 2013 was as follows:

	Restricted Share Awards	Weighted Average Grant Date Fair Value
Restricted share awards outstanding, December 31, 2012	2,170,547	$29.24
Restricted share awards granted	1,594,672	36.07
Restricted share awards vested	(969,562)	28.12
Restricted share awards forfeited	(110,912)	28.34
Restricted share awards outstanding, December 31, 2013	2,684,745	$33.74

At December 31, 2015, there were $69,143 (2014: $74,670; 2013: $69,219) of total unrecognized share compensation expenses in respect of restricted share awards that are expected to be recognized over a weighted-average period of 2.4 years (2014: 2.7 years; 2013: 3.2 years).

iii. Restricted share units

Restricted share units under the LTIP vest either ratably or at the end of the required service period and contain certain restrictions during the vesting period, relating to, among other things, forfeiture in the event of termination of employment and transferability. Share compensation expenses of $1,160 were recorded for the year ended December 31, 2015 (2014: $876; 2013: $585). The expenses represent the proportionate accrual of the fair value of each grant based on the remaining vesting period.

Activity with respect to unvested restricted share units for the year ended December 31, 2015 was as follows:

	Restricted Share Units	Weighted Average Grant Date Fair Value
Restricted share units outstanding, December 31, 2014	103,484	$36.54
Restricted share units granted	28,057	42.91
Restricted share units vested	(19,455)	34.58
Restricted share units issued in lieu of cash dividends	3,143	37.53
Restricted share units forfeited	(892)	35.42
Restricted share units outstanding, December 31, 2015	114,337	$38.47

Activity with respect to unvested restricted share units for the year ended December 31, 2014 was as follows:

	Restricted Share Units	Weighted Average Grant Date Fair Value
Restricted share units outstanding, December 31, 2013	66,518	$33.74
Restricted share units granted	53,025	38.10
Restricted share units vested	(18,325)	30.71
Restricted share units issued in lieu of cash dividends	2,266	35.00
Restricted share units outstanding, December 31, 2014	103,484	$36.54

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Activity with respect to unvested restricted share units for the year ended December 31, 2013 was as follows:

	Restricted Share Units	Weighted Average Grant Date Fair Value
Restricted share units outstanding, December 31, 2012	47,238	$29.61
Restricted share units granted	36,635	36.11
Restricted share units vested	(21,814)	28.17
Restricted share units issued in lieu of cash dividends	4,459	30.70
Restricted share units outstanding, December 31, 2013	66,518	$33.74

At December 31, 2015, there were $2,790 (2014: $2,774; 2013: $1,678) of total unrecognized share compensation expenses in respect of restricted share units that are expected to be recognized over a weighted-average period of 2.6 years (2014: 3.1 years; 2013: 3.4 years).

iv. Performance share awards

The performance share awards contain a performance based component. The performance component relates to the compounded growth in the Dividend Adjusted Book Value per Diluted Share (“DBVPS”) over a three year period. For performance share awards granted during the period, the grant date is based on the DBVPS at the end of the most recent financial reporting year. The performance period end DBVPS will be the DBVPS three years after the grant date DBVPS. The fair value estimate earns over the requisite attribution period and the estimate will be reassessed at the end of each performance period which will reflect any adjustments in the consolidated statements of comprehensive income in the period in which they are determined.

Share compensation expenses of $1,795 were recorded for the year ended December 31, 2015 (2014: $862; 2013: $(705)). The share compensation expenses represent the proportionate accrual of the fair value of each grant based on the remaining vesting period. The negative expense is due to a reversal of expenses on unvested performance share awards based on a review of current and projected performance criteria.

Activity with respect to unvested performance share awards for the year ended December 31, 2015 was as follows:

	Performance Share Awards	Weighted Average Grant Date Fair Value
Performance share awards outstanding, December 31, 2014	106,369	$36.03
Performance share awards granted	81,569	45.03
Performance share awards vested	(15,344)	31.38
Performance share awards outstanding, December 31, 2015	172,594	$40.70

Activity with respect to unvested performance share awards for the year ended December 31, 2014 was as follows:

	Performance Share Awards	Weighted Average Grant Date Fair Value
Performance share awards outstanding, December 31, 2013	101,820	$33.56
Performance share awards granted	52,639	37.33
Performance share awards vested	(32,746)	32.62
Performance share awards conversion adjustment	(15,344)	31.38
Performance share awards outstanding, December 31, 2014	106,369	$36.03

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Activity with respect to unvested performance share awards for the year ended December 31, 2013 was as follows:

	Performance Share Awards	Weighted Average Grant Date Fair Value
Performance share awards outstanding, December 31, 2012	220,845	$31.81
Performance share awards granted	38,386	36.11
Performance share awards vested	(39,094)	28.70
Performance share awards forfeited	(18,701)	31.05
Performance share awards conversion adjustment	(99,616)	$33.05
Performance share awards outstanding, December 31, 2013	101,820	$33.56

At December 31, 2015, there were $4,011 (2014: $2,232; 2013: $1,642) of total unrecognized share compensation expenses in respect of performance share awards that are expected to be recognized over a weighted-average period of 2.1 years (2014: 2.1 years; 2013: 2.0 years).

(b) Total share compensation expenses

The breakdown of share compensation expenses by award type was as follows:

	Years Ended December 31,		
	2015	2014	2013
Restricted share awards	$35,386	$31,335	$27,750
Restricted share units	1,160	876	585
Performance share awards	1,795	862	(705)
Total	$38,341	$33,073	$27,630

In addition, the Company recorded $1,729 of associated tax benefits for the year ended December 31, 2015 (2014: $1,610; 2013: $1,423). The Company also recognized $4,419 of net windfall taxes at December 31, 2015 in relation to share vestings and option exercises from inception to date, of which $906 was recorded for the year ended December 31, 2015.

20. Debt and financing arrangements

(a) Financing structure

The financing structure at December 31, 2015 was:

	Commitment	Issued and outstanding (a)	Drawn
2006 Junior Subordinated Deferrable Debentures	$150,000	$150,000	$150,000
2007 Junior Subordinated Deferrable Debentures	200,000	139,800	139,800
Flagstone 2006 Junior Subordinated Deferrable Debentures	134,118	134,118	134,118
Flagstone 2007 Junior Subordinated Deferrable Debentures	113,750	113,750	113,750
Total debentures payable	597,868	537,668	537,668
2010 Senior Notes due 2040	250,000	250,000	245,161
Total debentures and senior notes payable	847,868	787,668	782,829
$85,000 syndicated unsecured letter of credit facility	85,000	—	—
$300,000 syndicated secured letter of credit facility	300,000	235,540	—
$24,000 secured bi-lateral letter of credit facility	24,000	10,543	—
AlphaCat Re secured letter of credit facility	30,000	30,000	—
IPC bi-lateral facility	25,000	9,241	—
$236,000 Flagstone bi-lateral facility	236,000	193,764	—
Total credit and other facilities	700,000	479,088	—
Total debt and financing arrangements	$1,547,868	$1,266,756	$782,829

The financing structure at December 31, 2014 was:

	Commitment	Issued and outstanding (a)	Drawn
2006 Junior Subordinated Deferrable Debentures	$150,000	$150,000	$150,000
2007 Junior Subordinated Deferrable Debentures	200,000	139,800	139,800
Flagstone 2006 Junior Subordinated Deferrable Debentures	135,727	135,727	135,727
Flagstone 2007 Junior Subordinated Deferrable Debentures	113,750	113,750	113,750
Total debentures payable	599,477	539,277	539,277
2010 Senior Notes due 2040	250,000	250,000	244,960
Total debentures and senior notes payable	849,477	789,277	784,237
$400,000 syndicated unsecured letter of credit facility	400,000	—	—
$525,000 syndicated secured letter of credit facility	525,000	276,455	—
$200,000 secured bi-lateral letter of credit facility	200,000	15,649	—
Talbot FAL facility	25,000	25,000	—
AlphaCat Re secured letter of credit facility	30,000	30,000	—
IPC bi-lateral facility	40,000	15,897	—
$375,000 Flagstone bi-lateral facility	375,000	198,389	—
Total credit and other facilities	1,595,000	561,390	—
Total debt and financing arrangements	$2,444,477	$1,350,667	$784,237

(a) Indicates utilization of commitment amount, not necessarily drawn borrowings.

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(b) Senior notes and junior subordinated deferrable debentures
The following table summarizes the key terms of the Company's senior notes and junior subordinated deferrable debentures:

Description	Issuance date	Commitment	Maturity date	Interest Rate as at Issuance Date		December 31, 2015		Interest payments due
2006 Junior Subordinated Deferrable Debentures	June 15, 2006	$150,000	June 15, 2036	9.069	%(a)	5.831	%(e)	Quarterly
Flagstone 2006 Junior Subordinated Deferrable Debentures	August 23, 2006	$134,118	September 15, 2036	3.540	%(b)	6.463	%(e)	Quarterly
2007 Junior Subordinated Deferrable Debentures	June 21, 2007	$200,000	June 15, 2037	8.480	%(c)	5.180	%(e)	Quarterly
Flagstone 2007 Junior Subordinated Deferrable Debentures	June 8, 2007	$88,750	July 30, 2037	3.000	%(b)	5.900	%(e)	Quarterly
Flagstone 2007 Junior Subordinated Deferrable Debentures	September 20, 2007	$25,000	September 15, 2037	3.100	%(b)	5.983	%(e)	Quarterly
2010 Senior Notes due 2040	January 26, 2010	$250,000	January 26, 2040	8.875	%(d)	8.875	%(d)	Semi-annually in arrears

(a) Fixed interest rate for 5 years, floating interest rate of three-month LIBOR plus 3.550% thereafter, reset quarterly.
(b) Floating interest rate of three-month LIBOR plus amount stated, reset quarterly.
(c) Fixed interest rate for 5 years, floating interest rate of three-month LIBOR plus 2.950% thereafter, reset quarterly.
(d) Fixed interest rate.
(e) Fixed interest rate as a result of interest rate swap contracts entered into by the Company.

Senior Notes

The Senior Notes due 2040 (the "2010 Senior Notes") were part of a registered public offering. The 2010 Senior Notes mature on January 26, 2040. The Company may redeem the notes, in whole at any time, or in part from time to time, at the Company's option on not less than 30 nor more than 60 days' notice, at a make-whole redemption price as described in "Description of the Notes - Optional Redemption" in the 2010 Senior Notes prospectus supplement. In addition, the Company may redeem the notes, in whole, but not in part, at any time upon the occurrence of certain tax events as described in "Description of the Notes - Redemption for Tax Purposes" in the prospectus supplement.
Debt issuance costs are amortized to income over the life of the 2010 Senior Notes and are presented on a net basis within the senior notes payable balance in the Company's Consolidated Balance Sheets. There were no redemptions made during the years ended December 31, 2015 and 2014.
The 2010 Senior Notes are unsecured and unsubordinated obligations of the Company and rank equally in right of payment with all of the Company's existing and future unsecured and unsubordinated indebtedness. The 2010 Senior Notes will be effectively junior to all of the Company's future secured debt, to the extent of the value of the collateral securing such debt, and will rank senior to all our existing and future subordinated debt. The 2010 Senior Notes are structurally subordinated to all obligations of the Company's subsidiaries.
Future payments of principal of $250,000 on the 2010 Senior Notes are all expected to be after 2020.

Junior subordinated deferrable debentures

The Company participated in private placements of junior subordinated deferrable interest debentures due 2036 and 2037 (respectively, the “2006 Junior Subordinated Deferrable Debentures” and “2007 Junior Subordinated Deferrable Debentures”).

Debt issuance costs for the 2006 and 2007 Junior Subordinated Deferrable Debentures were amortized to income over the five year optional redemption periods. They are redeemable at the Company's option at par. There were no redemptions made during the years ended December 31, 2015 and 2014.

As part of the acquisition of Flagstone, the Company assumed junior subordinated deferrable debentures due 2036 and 2037 (respectively, the "Flagstone 2006 Junior Subordinated Deferrable Debentures" and "Flagstone 2007 Junior Subordinated Deferrable Debentures"). These debentures are redeemable quarterly at par. There were no redemptions made during the years ended December 31, 2015 and 2014.

Future payments of principal of $537,668 on the debentures discussed above are all expected to be after 2020.

(c) Credit facilities

i. $85,000 syndicated unsecured letter of credit facility and $300,000 syndicated secured letter of credit facility

On December 9, 2015, the Company entered into a $85,000 five-year unsecured credit facility with various counterparties as co-documentation agents and the lenders party thereto, which provides for letter of credit and revolving credit availability for the Company (the "Five Year Unsecured Facility") (the full $85,000 of which is available for letters of credit and/or revolving loans). The Five Year Unsecured Facility was provided by a syndicate of commercial banks. Letters of credit under the Five Year Unsecured Facility are available to support obligations in connection with the reinsurance business of the Company and its subsidiaries. Loans under the Five Year Unsecured Facility are available for the general corporate and working capital purposes of the Company. The Company may request that existing lenders under the Five Year Unsecured Facility or prospective additional lenders agree to make available additional commitments from time to time so long as the aggregate commitments under the Four Year Unsecured Facility do not exceed $150,000.

Also on December 9, 2015, the Company entered into a $300,000 five-year secured credit facility, with the same parties, which provides for letter of credit availability for the Company (the "Five Year Secured Facility" and together with the Five Year Unsecured Facility, the "Credit Facilities"). The Five Year Secured Facility was also provided by a syndicate of commercial banks. Letters of credit under the Five Year Secured Facility will be available to support obligations in connection with the reinsurance business of the Company. The Company may request that existing lenders under the Five Year Secured Facility or prospective additional lenders agree to make available additional commitments from time to time so long as the aggregate commitments under the Five Year Secured Facility do not exceed $400,000. The obligations of the Company under the Five Year Secured Facility are secured by cash and securities deposited into cash collateral accounts from time to time with The Bank of New York Mellon.

As of December 31, 2015, there were $235,540 in outstanding letters of credit under the Five Year Secured Facility and $nil outstanding under the Five Year Unsecured Facility.

The Credit Facilities contain covenants that include, among other things (i) the requirement that the Company initially maintain a minimum level of consolidated net worth of at least $2,600,000 and, commencing with the end of the fiscal quarter ending June 30, 2015, to be increased quarterly by an amount equal to 25.0% of the Company's consolidated net income (if positive) for such quarter plus 50.0% of the aggregate increases in the consolidated shareholders' equity of the Company during such fiscal quarter by reason of the issuance and sale of common equity interests of the Company, including upon any conversion of debt securities of the Company into such equity interests, (ii) the requirement that the Company maintain at all times a consolidated total debt to consolidated total capital ratio not greater than 0.35:1.00, and (iii) the requirement that Validus Reinsurance, Ltd. and any other material insurance subsidiaries maintain a financial strength rating by A.M. Best of not less than "B++" (Fair). In addition, the Credit Facilities contain customary negative covenants applicable to the Company, including limitations on the ability to pay dividends and other payments in respect of equity interests at any time that the Company is otherwise in default with respect to certain provisions under the respective Credit Facilities, limitations on the ability to incur liens, sell assets, merge or consolidate with others, enter into transactions with affiliates, and limitations on the ability of its subsidiaries

to incur indebtedness. The Credit Facilities also contain customary affirmative covenants, representations and warranties and events of default for credit facilities of its type. As of December 31, 2015, the Company was in compliance with all covenants and restrictions under the Credit Facilities.

On December 9, 2015, upon entering into the Credit Facilities, the Company terminated its $400,000 four-year unsecured credit facility, dated March 9, 2012 and its $525,000 four-year secured credit facility, also dated March 9, 2012. No early termination penalties were incurred. The Company was in compliance with all covenants and restrictions thereof through the termination date.

ii. Talbot FAL facility

On November 30, 2015, the Company terminated its Funds-at-Lloyd's Standby Letter of Credit Facility (the "Talbot FAL Facility") provided and arranged by Lloyds Bank plc and INGBank N.V., London Branch. As of December 31, 2014, the Company had $25,000 in outstanding letters of credit under the Talbot FAL facility. The Company was in compliance with all covenants and restrictions thereof through the termination date.

iii. $25,000 IPC bi-lateral facility

The Company assumed an existing evergreen letter of credit facility through the acquisition of IPC Holdings, Ltd. (the "IPC bi-lateral facility"). As of December 31, 2015, there were $9,241 outstanding letters of credit issued under the IPC bi-lateral facility (December 31, 2014: $15,897). As of December 31, 2015, and throughout the reporting periods presented, the Company was in compliance with all covenants and restrictions under the IPC bi-lateral facility.

iv. $24,000 secured bi-lateral letter of credit facility

The Company is party to an evergreen secured bi-lateral letter of credit facility with Citibank Europe plc (the "Secured bi-lateral letter of credit facility"). As of December 31, 2015, $10,543 (December 31, 2014: $15,649) of letters of credit were outstanding under the Secured bi-lateral letter of credit facility. During the year the size of the facility was decreased to $24,000 from $200,000. The Secured bi-lateral letter of credit facility has no fixed termination date and as of December 31, 2015, and throughout the reporting periods presented, the Company is in compliance with all terms and covenants thereof.

v. $30,000 AlphaCat Re secured letter of credit facility

In 2013, AlphaCat Re entered into a secured evergreen letter of credit facility with Comerica Bank. This facility provided for letters of credit issued by AlphaCat Re to be used to support its reinsurance obligations. As of December 31, 2015, $30,000 (December 31, 2014: $30,000) of letters of credit were outstanding under this facility. As of December 31, 2015, and throughout the reporting periods presented, AlphaCat Re was in compliance with all covenants and restrictions thereof.

vi. $236,000 Flagstone bi-lateral facility

As part of the Flagstone Acquisition, the Company assumed an evergreen Letters of Credit Master Agreement between Citibank Europe plc and Flagstone Reassurance Suisse, S.A. (the "Flagstone Bi-Lateral Facility"). During 2015, the size of the facility was decreased to $236,000 from $375,000. As of December 31, 2015, the Flagstone Bi-Lateral Facility had $193,764 (December 31, 2014: $198,389) letters of credit issued and outstanding. As of December 31, 2015, and throughout the reporting periods presented, the Company was in compliance with all covenants and restrictions under the Flagstone Bi-Lateral Facility.

(d) Finance expenses

Finance expenses consist of interest on the junior subordinated deferrable debentures and senior notes, the amortization of debt offering costs, credit facilities fees, bank charges, AlphaCat financing fees and Talbot FAL facility costs as follows:

	Years Ended December 31,		
	2015	2014	2013
2006 Junior Subordinated Deferrable Debentures	$8,868	$8,868	$8,868
2007 Junior Subordinated Deferrable Debentures	7,341	7,341	7,341
Flagstone 2006 Junior Subordinated Deferrable Debentures	8,989	9,001	8,259
Flagstone 2007 Junior Subordinated Deferrable Debentures	7,123	7,129	6,222
2010 Senior Notes due 2040	22,388	22,388	22,388
Credit facilities	6,006	5,516	6,544
Bank charges, Talbot FAL facility and other charges	4,592	4,536	4,813
AlphaCat fees (a)	9,435	3,545	3,572
Total finance expenses	$74,742	$68,324	$68,007

(a) Includes finance expenses incurred by AlphaCat Managers Ltd. in relation to fund raising for the AlphaCat sidecars, the AlphaCat ILS funds and AlphaCat direct.

21. Income taxes

The Company provides for income taxes based upon amounts reported in the financial statements and the provisions of currently enacted tax laws. The Company is registered in Bermuda and is subject to Bermuda law with respect to taxation. Under current Bermuda law, the Company is not taxed on any Bermuda income or capital gains and has received an undertaking from the Bermuda Minister of Finance that, in the event of any Bermuda income or capital gains taxes being imposed, the Company will be exempt from such taxes until March 31, 2035.

The Company has subsidiaries and branches with operations in several jurisdictions outside Bermuda, including but not limited to the United Kingdom (U.K.), the United States (U.S.), Switzerland and Canada that are subject to relevant taxes in those jurisdictions. Within Note 26, "Segment information," of these Consolidated Financial Statements, gross premiums written are allocated to the territory of coverage exposure and therefore do not correlate to pre-tax income generated in any of the territories identified.

The Company's income (loss) before income tax for the years ended December 31, 2015, 2014 and 2013 was generated in the following jurisdictions:

	Years Ended December 31,		
	2015	2014	2013
Income before tax—Bermuda	$470,454	$518,476	$599,354
Income before tax—United Kingdom	13,621	10,824	4,668
Loss before tax—United States	(4,176)	(11,752)	(464)
Income (loss) before tax—Switzerland	2,276	9,941	(225)
Income before tax—Canada	493	2,773	57
Income before tax—Other	(2,074)	29,076	(8,401)
Income before tax—Total	$480,594	$559,338	$594,989

Income tax expense is comprised of current and deferred tax. Income tax expense (benefit) is as follows:

	Years Ended December 31,		
	2015	2014	2013
Current income tax expense			
U.S.	$739	$21,257	$—
Non-U.S.	6,028	26,179	1,781
Total current income tax expense	$6,767	$47,436	$1,781
Deferred income tax (benefit) expense			
U.S.	$1,360	$(24,998)	$880
Non-U.S.	(1,751)	(22,283)	(2,278)
Total deferred income tax benefit	$(391)	$(47,281)	$(1,398)
Total income tax expense (benefit)			
U.S.	$2,099	$(3,741)	$880
Non-U.S.	4,277	3,896	(497)
Total income tax expense	$6,376	$155	$383

The table below is a reconciliation of the actual income tax expense for the years ended December 31, 2015, 2014 and 2013 to the amount computed by applying the effective tax rate of 0% under Bermuda law to income before taxes:

	Years Ended December 31,		
	2015	2014	2013
Expected tax expense at Bermuda statutory rate of 0%	$—	$—	$—
Foreign tax rate differential	6,462	7,993	(2,399)
Change in valuation allowance	9,830	(7,284)	4,967
Tax exempt income and expenses not deductible	393	(6,055)	(263)
Share compensation tax windfall	825	3,513	—
Impact of enacted changes in tax rates	69	250	(407)
Prior years tax adjustments	(12,272)	666	(461)
Other	1,069	1,072	(1,054)
Actual income tax expense	$6,376	$155	$383

Deferred tax assets and liabilities primarily represent the tax effect of temporary differences between the carrying value of assets and liabilities for financial statement purposes and such values as measured by tax laws and regulations in countries in which the operations are taxable. Deferred tax assets may also represent the tax effect of tax loss carryforwards.

In assessing whether a deferred tax asset can be recovered and assessing the need for valuation allowance, the Company considers all positive and negative evidence to determine whether it is more likely than not that the tax benefit of part or all of a deferred tax asset will be realized. The Company's framework for assessing the recoverability of deferred tax assets primarily considers the sustainability of recent taxable income, the expected occurrence of future taxable income, the changes in deferred tax liabilities and available tax planning strategies. The reliance on the positive and negative evidence is commensurate with the extent to which they can be objectively verified.

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Significant components of the Company’s deferred tax assets and liabilities at December 31, 2015 and 2014 were as follows:

	As at December 31,	
	2015	2014
Deferred tax asset		
Tax losses carried forward	$167,929	$158,789
Deferred compensation	7,504	5,527
Deferred interest expense	2,047	2,210
Tax credits carried forward	2,761	4,016
Discounting of loss reserves	11,882	13,721
Risk premium reserve	—	3,842
Unearned premiums reserve	4,291	8,505
Pension	5,503	5,864
Other	4,111	3,813
Deferred tax asset, gross of valuation allowance	206,028	206,287
Valuation allowance	167,929	158,099
Net deferred tax asset	$38,099	$48,188
Deferred tax liability		
Lloyd's underwriting (loss) profit taxable in future periods	$(47)	$636
Deferred acquisition costs	1,989	3,348
Intangibles	8,111	8,638
Unrealized appreciation on investments	7,073	9,101
Properties and fixed assets	2,044	4,993
Other	1,115	3,192
Deferred tax liability	20,285	29,908
Net deferred tax asset (liability)	$17,814	$18,280

The Company has undistributed earnings in several foreign subsidiaries. If such earnings were to be distributed, as dividends or otherwise, they may be subject to income and withholding taxes. As a general rule, the Company intends to only distribute earnings that can be distributed in a tax free manner and indefinitely reinvest any other earnings. Determination of the amount of unrecognized deferred tax liability related to these earnings is not practicable due to different possible methods for repatriating earnings.

At December 31, 2015, the Company had net operating and capital loss carry forwards inclusive of cumulative currency translation adjustments as follows:

Tax Jurisdiction	Losses carried forward	Tax effect	Expiration
United Kingdom	$32	$6	None
United States	$17,378	$6,082	2029-2035
Switzerland	$225,795	$47,417	2018-2020
Luxembourg	$386,883	$112,196	None
Singapore	$21,148	$2,115	None
Other	$366	$113	None

The valuation allowance as at December 31, 2015 of $167,929 (2014: $158,099) relates to tax loss carry forwards of subsidiaries primarily in Luxembourg, Switzerland, Singapore and the United States. The Company believes it is necessary to establish a full valuation allowance against the tax assets related to such losses after review of all available positive and negative evidence, including uncertainty regarding the ability of the concerned operations to generate future taxable income to utilize the loss carryforwards and realize the deferred tax assets. The reliance on the positive and negative evidence is commensurate with the extent to which they can be objectively verified. If the Company's positive evidence continue to develop favorably in the foreseeable future, it is possible that a portion of the valuation allowance will be reversed. There was no significant change in the position taken as at December 31, 2015 or 2014.

At December 31, 2015 and 2014, the Company had no accrued liabilities for tax, interest and penalties relating to uncertain tax positions. Interest and penalties related to uncertain tax positions would be recognized in income tax expense.

At December 31, 2014, the Company had open examinations of certain subsidiaries by the U.K. HM Revenue and Customs and the New York State Department of Taxation and Finance. These examinations were closed with no material adjustments. At December 31, 2015, the Company had an open examination of certain U.S. subsidiaries by the U.S. Internal Revenue Service for the tax year 2012. In January 2016, the IRS completed this examination with no adjustment. The Company has open tax years that are potentially subject to examinations by local tax authorities in the following major tax jurisdictions: the United Kingdom, 2014 and 2015; the United States, 2012 to 2015; Switzerland, 2011 to 2015; and Canada, 2011 to 2015.

22. Accumulated other comprehensive loss

The changes in accumulated other comprehensive loss, by component for the years ended December 31, 2015, 2014 and 2013 is as follows:

	Foreign currency translation adjustment	Minimum pension liability	Cash flow hedge	Total
Balance, net of tax December 31, 2012	$(2,953)	$—	$—	$(2,953)
Amounts reclassified to retained earnings	4,290	—	—	4,290
Net current period other comprehensive income, net of tax	(1,954)	—	—	(1,954)
Balance, net of tax December 31, 2013	$(617)	$—	$—	$(617)
Net current period other comprehensive loss, net of tax	(7,501)	(210)	(228)	(7,939)
Balance, net of tax December 31, 2014	$(8,118)	$(210)	$(228)	$(8,556)
Net current period other comprehensive loss, net of tax	(3,716)	544	(841)	(4,013)
Balance, net of tax December 31, 2015	$(11,834)	$334	$(1,069)	$(12,569)

23. Commitments and contingencies

(a) Concentrations of credit risk

The Company underwrites a significant amount of its reinsurance business through three particular brokers as set out below. There is credit risk associated with payments of insurance and reinsurance balances to the Company if these brokers are unable to fulfill their contractual obligations. These companies are large, well established, and there are no indications they are financially distressed. There were no other brokers or parties insured or reinsured that accounted for more than 10% of gross premiums written for the periods mentioned.

The following table shows the percentage of gross premiums written by broker for the years ended December 31, 2015, 2014 and 2013:

	Year Ended December 31,					
	2015		2014		2013	
Marsh & McLennan	28.2	%	28.5	%	21.4	%
Aon Benfield Group Ltd.	15.5	%	20.0	%	29.4	%
Willis Group Holdings Ltd.	14.3	%	18.0	%	19.2	%

(b) Employment agreements

The Company has entered into employment agreements with certain individuals that provide for executive benefits and severance payments under certain circumstances.

(c) Operating leases

The Company leases office space and office equipment under operating leases. Total rent expense with respect to these operating leases for the year ended December 31, 2015 was approximately $10,143 (2014: $10,540, 2013: $10,214). Future minimum lease commitments are as follows:

	Total future minimum lease payments
2016	$11,391
2017	11,077
2018	10,730
2019	10,483
2020	9,654
2021 and thereafter	37,343
Total	$90,678

(d) Funds at Lloyd’s

Talbot operates in Lloyd’s through a corporate member, Talbot 2002 Underwriting Capital Ltd (“T02”), which is the sole participant in Syndicate 1183. Lloyd’s sets T02’s required capital annually based on Syndicate 1183’s business plan, rating environment and reserving environment together with input arising from Lloyd’s discussions with, inter alia, regulatory and rating agencies. Such capital, called Funds at Lloyd’s (“FAL”), comprises cash and investments. The Company provided FAL in the amount of $617,000 for the 2016 underwriting year (2015 underwriting year: $595,100).

The amounts which are provided as FAL are not available for distribution to the Company for the payment of dividends. Talbot’s corporate member may also be required to maintain funds under the control of Lloyd’s in excess of its capital requirement and such funds also may not be available for distribution to the Company for the payment of dividends. See Note 7(d) for investments pledged as collateral.

(e) Lloyd’s Central Fund

Whenever a member of Lloyd’s is unable to pay its debts to policyholders, such debts may be payable by the Lloyd’s Central Fund. If Lloyd’s determines that the Central Fund needs to be increased, it has the power to assess premium levies on current Lloyd’s members up to 3% of a member’s underwriting capacity in any one year. The Company does not believe that any assessment is likely in the foreseeable future and has not provided any allowance for such an assessment. However, based on the Company’s 2016 estimated premium income at Lloyd’s of £600,000, at December 31, 2015 exchange rate of £1 equals $1.48 and assuming the maximum 3% assessment, the Company would be assessed approximately $26,640.

(f) Investment affiliate commitments

As discussed in Note 10, "Investments in affiliates," on December 20, 2011 the Company entered into an Assignment and Assumption Agreement with Aquiline Capital Partners LLC, pursuant to which it assumed total capital commitments of $50,000. The Company’s remaining commitment at December 31, 2015 was $3,413 (December 31, 2014: $7,500).

On October 2, 2014, the Company assumed an additional investment in Aquiline Capital Partners II GP (Offshore) Ltd. as part of the Western World acquisition representing a total capital commitment of $10,000. The Company's remaining capital commitment at December 31, 2015 was $683 (December 31, 2014: $1,499).

On November 7, 2014, the Company entered into a Subscription Agreement with Aquiline Capital Partners III GP (Offshore) Ltd., pursuant to which it assumed total capital commitments of $100,000 in respect of Limited Partnership Interests in Aquiline Financial Services Fund III L.P. (the "Fund"). The Company’s remaining commitment at December 31, 2015 was $86,110 (December 31, 2014: $100,000).

(g) AlphaCat commitments

On December 29, 2014, the Company entered into an agreement with an AlphaCat sidecar pursuant to which it assumed total capital commitments of $28,000. The Company’s remaining commitment at December 31, 2015 was $nil (December 31, 2014: $2,400).

On December 29, 2014, the Company entered into an agreement with an AlphaCat ILS fund pursuant to which it assumed total capital commitments of $20,000. On December 29, 2015, the Company assumed an additional capital commitment of $20,000. The Company’s remaining commitment at December 31, 2015 was $10,000 (December 31, 2014: $8,000).

On December 30, 2015, the Company entered into an agreement with another AlphaCat ILS fund pursuant to which it assumed total capital commitments of $25,000. The Company’s remaining commitment at December 31, 2015 was $9,536.

(h) Fixed maturity commitments

At December 31, 2015, the Company had an outstanding commitment to participate in certain secured loan facilities through participation agreements with an established loan originator. The undrawn amount under the revolver facility participations as at December 31, 2015 was $34,888 (December 31, 2014: $7,539).

(i) Other investment commitments

At December 31, 2015, the Company had capital commitments in private equity investments of $263,000 (December 31, 2014: $153,000). The Company's remaining commitment to these investments at December 31, 2015 was $185,548 (December 31, 2014: $83,712).

(j) Structured settlements

As at December 31, 2015, the Company is contingently liable for the present value of amounts not yet due under annuities purchased by Western World where the claimant is the payee for the amount of $3,108 (December 31, 2014: $3,412).

24. Related party transactions

The transactions listed below are classified as related party transactions as principals and/or directors of each counter party are members of the Company's board of directors.

Aquiline Capital Partners, LLC and its related companies ("Aquiline"), which own 1,523,978 shares in the Company, have two employees on the Company's Board of Directors who do not receive compensation from the Company, and are shareholders of Group Ark Insurance Holdings Ltd. ("Group Ark"). Christopher E. Watson, a director of the Company, serves as a director of Group Ark. Pursuant to reinsurance agreements with a subsidiary of Group Ark, the Company recognized gross premiums written during the year ended December 31, 2015 of $2,718 (2014: $2,073, 2013: $2,899) respectively, with $82 included in premiums receivable at December 31, 2015 (December 31, 2014: $335). The Company also recognized reinsurance premiums ceded during the year ended December 31, 2015 of $24 (2014: $126, 2013: $90) and had reinsurance balances payable of $4 at December 31, 2015 (December 31, 2014: $4). The Company recorded $790 of loss reserves recoverable at December 31, 2015 (December 31, 2014: $1,063). Earned premium adjustments of $2,833 were recorded during the year ended December 31, 2015 (2014: $1,982, 2013: $2,911).

On November 24, 2009, the Company entered into an Investment Management Agreement with Conning, Inc. ("Conning") to manage a portion of the Company's investment portfolio. Aquiline acquired Conning on June 16, 2009. Jeffrey W. Greenberg, a director of the Company, served as a director of Conning Holdings Corp., the parent company of Conning. During the third quarter of 2015, Aquiline disposed of its investment in Conning. Therefore, effective September 30, 2015, Conning was no longer a related party. Investment management fees earned by Conning for the year ended December 31, 2015 were $841 (2014: $1,125, 2013: $500), with $515 included in accounts payable and accrued expenses at December 31, 2014.

On December 20, 2011, the Company entered into an Assignment and Assumption Agreement (the "Agreement") with Aquiline Capital Partners LLC, a Delaware limited liability company (the "Assignor") and Aquiline Capital Partners II GP (Offshore) Ltd., a Cayman Islands company limited by shares (the "General Partner") pursuant to which the Company has assumed 100% of the Assignor's interest in Aquiline Financial Services Fund II L.P. (the "Aquiline II Partnership") representing a total capital commitment of $50,000 (the "Aquiline II Commitment"), as a limited partner in the Partnership (the "Transferred Interest"). On October 2, 2014, the Company assumed an additional investment in the Aquiline II Partnership as part of the Western World acquisition representing a total capital commitment of $10,000. Messrs. Greenberg and Watson, directors of the Company, serve as managing principal and senior principal, respectively, of Aquiline Capital Partners LLC. For the year ended December 31, 2015, the Company incurred $1,519 in partnership fees (2014: $410, 2013: $1,236) and made net capital contributions of $6,093 (2014: $12,468, 2013: $14,492), with $nil included in accounts payable and accrued expenses at December 31, 2015 (December 31, 2014: $nil).

On November 7, 2014, the Company entered into a Subscription Agreement (the "Subscription Agreement") with Aquiline Capital Partners III GP (Offshore) Ltd., a Cayman Islands company limited by shares (the "Aquiline III General Partner") pursuant to which the Company is committing and agreeing to purchase limited partnership or other comparable limited liability equity interests (the "Limited Partnership Interests") in Aquiline Financial Services Fund III L.P., a Cayman Islands exempted limited partnership (the "Aquiline III Partnership"), and/or one or more Alternative Investment Vehicles and Intermediate Entities (together with the Aquiline III Partnership, the "Fund" or the "Entities") with a capital commitment (the "Aquiline III Commitment") in an amount equal to $100,000, as a limited partner in the Aquiline Financial Services III Partnership. For the year ended December 31, 2015, the Company incurred no partnership fees (2014: $nil) and made net capital contributions of $13,793 (December 31, 2014: $nil), with $nil included in accounts payable and accrued expenses at December 31, 2015 (December 31, 2014: $nil).

On November 24, 2015, Western World, a subsidiary of the Company, entered into a Stock Purchase Agreement (the "Agreement") with WRM America Indemnity Holding Company, LLC (the "Seller"), a company owned in part by Aquiline Financial Services Fund LP and Aquiline Financial Services Fund (Offshore) LP (collectively, "Aquiline"), pursuant to which Western World will purchase all of the issued and outstanding shares of capital stock of WRM America Indemnity Company, Inc. ("WRMAI"), a New York stock property and casualty insurance company. Under the terms of the Agreement, Western World has agreed to pay an amount equal to the sum of: (i) the amount of policyholder surplus of WRMAI as of the Closing Date, as shown on the Closing Balance Sheet, and (ii) $3,750. The Agreement includes customary indemnities and conditions to closing including the approval by The New York Department of Financial Services of the acquisition of control of WRMAI by Western World.
Certain shareholders of the Company and their affiliates, as well as employers of entities associated with directors or officers have purchased insurance and/or reinsurance from the Company in the ordinary course of business. The Company believes these transactions were settled for arm's length consideration.

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25. Earnings per share
The following table sets forth the computation of basic earnings per share and earnings per diluted share available to common shareholders for the years ended December 31, 2015, 2014 and 2013:

	Years Ended December 31,		
	2015	2014	2013
Basic earnings per share			
Net income	$467,857	$554,843	$595,148
(Income) attributable to noncontrolling interest	(92,964)	(74,880)	(62,482)
Net income available to Validus	$374,893	$479,963	$532,666
Less: Dividends and distributions declared on outstanding warrants	(3,566)	(6,208)	(19,214)
Income available to common shareholders	$371,327	$473,755	$513,452
Weighted average number of common shares outstanding	83,107,236	90,354,745	102,202,274
Basic earnings per share available to common shareholders	$4.47	$5.24	$5.02
Earnings per diluted share			
Net income	$467,857	$554,843	$595,148
(Income) attributable to noncontrolling interest	(92,964)	(74,880)	(62,482)
Net income available to Validus	$374,893	$479,963	$532,666
Less: Dividends and distributions declared on outstanding warrants	—	—	(19,214)
Income available to common shareholders	$374,893	$479,963	$513,452
Weighted average number of common shares outstanding	83,107,236	90,354,745	102,202,274
Share equivalents:			
Warrants	2,090,248	2,789,032	—
Stock options	151,867	745,561	1,026,543
Unvested restricted shares	1,077,409	800,933	741,472
Weighted average number of diluted common shares outstanding	86,426,760	94,690,271	103,970,289
Earnings per diluted share available to common shareholders	$4.34	$5.07	$4.94

Share equivalents that would result in the issuance of common shares of 167,417, 199,740 and 366,821 were outstanding for the years ended December 31, 2015, 2014 and 2013, respectively but were not included in the computation of earnings per diluted share because the effect would be antidilutive.

26. Segment information

The Company conducts its operations worldwide through four operating segments, which have been determined under U.S. GAAP segment reporting to be Validus Re, Talbot, Western World and AlphaCat. The Company's operating segments are strategic business units that offer different products and services. They are managed and have capital allocated separately because each segment requires different strategies.

During the fourth quarter of 2015, the Company made certain changes in its presentation of segment information. The changes were made to present the results of Validus Re, Talbot and Western World on an underwriting income basis and the results of AlphaCat on an asset manager basis. Investment results, foreign exchange, other income (loss), finance expenses and income taxes are now presented on a consolidated basis, reflecting how the Company operationally manages these areas. The Company's assets primarily comprise cash and investments which are managed on a consolidated basis; accordingly, the Company's assets have not been presented on a segmental basis. The presentation changes have not had an effect on the reportable income or loss to any of the operating segments and all prior period disclosures have been revised to conform to current period presentation.

Underwriting income and the AlphaCat asset manager view are non-GAAP financial measures. A reconciliation of segmental income to net income available to Validus is included in the tables below.

Validus Re Segment

The Validus Re segment is focused on treaty reinsurance. The primary lines in which the segment conducts business are property, marine and specialty which includes agriculture, aerospace and aviation, financial lines of business, nuclear, terrorism, life, accident & health, workers' compensation, crisis management, contingency, technical lines, composite, trade credit and casualty.

Talbot Segment

The Talbot segment focuses on a wide range of marine and energy, political lines, commercial property, financial lines, contingency, accident & health and aviation classes of business on an insurance or facultative reinsurance basis and principally property, aerospace and marine classes of business on a treaty reinsurance basis.

Western World Segment

The Western World segment is focused on providing commercial insurance products on a surplus lines and specialty admitted basis. Western World specializes in underwriting classes of business that are not easily placed in the standard insurance market due to their complexity, high hazard, or unusual nature; including general liability, property and professional liability classes of business.

AlphaCat Segment

The AlphaCat segment leverages the Company's underwriting and analytical expertise and earns management and performance fees from the Company and other third party investors primarily through the AlphaCat ILS funds and sidecars.

Corporate and Investment information

The Company has a corporate function ("Corporate"), which includes the activities of the parent company, and which carries out certain functions for the group, including investment management. Corporate includes investment income on a managed basis and other non-segment expenses, predominantly general and administrative, stock compensation and finance expenses. Corporate also denotes the activities of certain key executives such as the Chief Executive Officer and Chief Financial Officer. For internal reporting purposes, Corporate is reflected separately; however, Corporate is not considered an operating segment under these circumstances. Other reconciling items include, but are not limited to, the elimination of certain inter segment revenues and expenses and other items that are not allocated to the operating segments.

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The following tables summarize the results of our operating segments and "Corporate and Investments":

	Years Ended December 31,		
Validus Re Segment Information	2015	2014	2013
Underwriting income			
Gross premiums written	$1,126,759	$1,118,532	$1,226,690
Reinsurance premiums ceded	(149,088)	(163,678)	(210,432)
Net premiums written	977,671	954,854	1,016,258
Change in unearned premiums	12,542	(37,570)	117,679
Net premiums earned	990,213	917,284	1,133,937
Other insurance related income	3,575	3,159	19,222
Underwriting revenues	993,788	920,443	1,153,159
Underwriting deductions			
Losses and loss expenses	457,976	307,290	430,026
Policy acquisition costs	166,387	141,670	180,779
General and administrative expenses	78,428	74,739	91,260
Share compensation expenses	10,350	9,739	7,668
Total underwriting deductions	713,141	533,438	709,733
Underwriting income	$280,647	$387,005	$443,426
Selected ratios:			
Net premiums written / Gross premiums written	86.8 %	85.4 %	82.8 %
Losses and loss expenses	46.2 %	33.5 %	37.9 %
Policy acquisition costs	16.8 %	15.5 %	16.0 %
General and administrative expenses (a)	9.0 %	9.2 %	8.7 %
Expense ratio	25.8 %	24.7 %	24.7 %
Combined ratio	72.0 %	58.2 %	62.6 %

(a) The general and administrative expense ratio includes share compensation expenses.

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	Years Ended December 31,		
Talbot Segment Information	2015	2014	2013
Underwriting income			
Gross premiums written	$1,018,835	$1,101,770	$1,091,890
Reinsurance premiums ceded	(198,896)	(192,211)	(226,111)
Net premiums written	819,939	909,559	865,779
Change in unearned premiums	18,152	(29,785)	(35,085)
Net premiums earned	838,091	879,774	830,694
Other insurance related income	851	1,095	1,819
Underwriting revenues	838,942	880,869	832,513
Underwriting deductions			
Losses and loss expenses	347,322	423,394	346,337
Policy acquisition costs	187,535	187,162	170,738
General and administrative expenses	155,306	150,828	136,458
Share compensation expenses	12,373	11,346	9,613
Total underwriting deductions	702,536	772,730	663,146
Underwriting income	$136,406	$108,139	$169,367
Selected ratios:			
Net premiums written / Gross premiums written	80.5 %	82.6 %	79.3 %
Losses and loss expenses	41.4 %	48.1 %	41.7 %
Policy acquisition costs	22.4 %	21.3 %	20.5 %
General and administrative expenses (a)	20.0 %	18.4 %	17.6 %
Expense ratio	42.4 %	39.7 %	38.1 %
Combined ratio	83.8 %	87.8 %	79.8 %

(a) The general and administrative expense ratio includes share compensation expenses.

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	Years Ended December 31,	
Western World Segment Information	2015	2014 (b)
Underwriting income		
Gross premiums written	$278,504	$65,235
Reinsurance premiums ceded	(18,877)	(6,428)
Net premiums written	259,627	58,807
Change in unearned premiums	(977)	14,189
Net premiums earned	258,650	72,996
Other insurance related income	1,044	264
Underwriting revenues	259,694	73,260
Underwriting deductions		
Losses and loss expenses	171,878	51,035
Policy acquisition costs	41,408	3,169
General and administrative expenses	38,715	11,121
Share compensation expenses	2,083	135
Total underwriting deductions	254,084	65,460
Underwriting income	$5,610	$7,800
Selected ratios:		
Net premiums written / Gross premiums written	93.2 %	90.1 %
Losses and loss expenses	66.4 %	69.9 %
Policy acquisition costs	16.0 %	4.4 %
General and administrative expenses (a)	15.8 %	15.4 %
Expense ratio	31.8 %	19.8 %
Combined ratio	98.2 %	89.7 %

(a) The general and administrative expense ratio includes share compensation expenses.
(b) The results of Western World have been included in the Company's consolidated results from the October 2, 2014 date of acquisition.

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	Years Ended December 31,		
AlphaCat Segment Information (a)	2015	2014	2013
Revenue - management fees			
Third party	$19,661	$18,667	$16,629
Related party	5,309	7,467	9,693
Total revenue	24,970	26,134	26,322
Expenses			
General and administrative expenses	12,115	10,134	8,401
Share compensation expenses	580	501	468
Finance expenses	9,312	3,417	3,497
Foreign exchange (gains) losses	(16)	(20)	2
Total expenses	21,991	14,032	12,368
Income before investments from AlphaCat Funds and Sidecars	2,979	12,102	13,954
Investment income (loss) from AlphaCat Funds and Sidecars (b)			
AlphaCat Re & Master Fund	—	(1,377)	1,022
AlphaCat Sidecars	5,504	10,525	12,396
AlphaCat ILS Funds - Lower Risk (c)	7,491	7,974	7,848
AlphaCat ILS Funds - Higher Risk (c)	8,428	8,754	10,758
BetaCat ILS Funds	1,702	(51)	—
PaCRe	(3,949)	(4,340)	542
Total investment income from AlphaCat Funds and Sidecars	19,176	21,485	32,566
Validus' share of AlphaCat income	$22,155	$33,587	$46,520
Supplemental information:			
Gross premiums written			
AlphaCat Sidecars	$45,755	$50,023	$69,626
AlphaCat ILS Funds - Lower Risk (c)	91,363	52,264	43,111
AlphaCat ILS Funds - Higher Risk (c)	34,228	24,498	18,397
AlphaCat Direct (d)	4,780	—	—
Total	$176,126	$126,785	$131,134

(a) The results of AlphaCat are presented on an asset manager basis, which is non-GAAP. A reconciliation of segmental income to net income available to Validus is included in the tables below.
(b) The investment income from the AlphaCat funds and sidecars is based on equity accounting.
(c) Lower risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of less than 7%, whereas higher risk AlphaCat ILS funds have a maximum permitted portfolio expected loss of greater than 7%. Expected loss represents the average annual loss over the set of simulation scenarios divided by the total limit.
(d) AlphaCat Direct includes direct investments from third party investors in AlphaCat Re.

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	Years Ended December 31,		
Corporate and Investment Information	2015	2014	2013
Investment income			
Net investment income (a)	$121,166	$95,800	$92,207
Operating expenses			
General and administrative expenses	(75,724)	(80,210)	(77,843)
Share compensation expenses	(12,955)	(11,352)	(9,881)
Finance expenses (a)	(61,071)	(60,309)	(58,443)
Tax expenses	(6,376)	(155)	(383)
Total operating expenses	(156,126)	(152,026)	(146,550)
Other items			
Net realized gains (losses) on investments (a)	1,698	12,160	(826)
Change in net unrealized losses on investments (a)	(32,007)	(1,030)	(54,588)
Income from investment affiliate	4,281	8,411	4,790
Foreign exchange (losses) gains (a)	(8,172)	(10,700)	3,324
Other loss	(1,002)	(2,243)	(10,777)
Transaction expenses (b)	—	(8,096)	—
Total other items	(35,202)	(1,498)	(58,077)
Total Corporate and Investment information	$(70,162)	$(57,724)	$(112,420)

(a) These items exclude the components which are included in Validus' share of AlphaCat and amounts which are consolidated from VIEs.

(b) The transaction expenses relate to costs incurred in connection with the acquisition of Western World, which was completed on October 2, 2014. Transaction expenses are primarily comprised of legal, financial advisory and audit related services.

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The following tables reconcile the results of our operating segments and "Corporate & Investments" to the Consolidated results of the Company for the years indicated:

	Year Ended December 31, 2015						
	Validus Re Segment	Talbot Segment	Western World Segment	AlphaCat & Consolidated Variable Interest Entities	Corporate & Investments	Eliminations	Total
Underwriting income							
Gross premiums written	$1,126,759	$1,018,835	$278,504	$176,126		$(42,718)	$2,557,506
Reinsurance premiums ceded	(149,088)	(198,896)	(18,877)	(4,538)		42,718	(328,681)
Net premiums written	977,671	819,939	259,627	171,588		—	2,228,825
Change in unearned premiums	12,542	18,152	(977)	(11,653)		—	18,064
Net premiums earned	990,213	838,091	258,650	159,935		—	2,246,889
Other insurance related income	3,575	851	1,044	25,524		(24,881)	6,113
Underwriting revenues	993,788	838,942	259,694	185,459		(24,881)	2,253,002
Underwriting deductions							
Losses and loss expenses	457,976	347,322	171,878	657		—	977,833
Policy acquisition costs	166,387	187,535	41,408	16,327		(1,599)	410,058
General and administrative expenses	78,428	155,306	38,715	39,055	75,724	(23,519)	363,709
Share compensation expenses	10,350	12,373	2,083	580	12,955	—	38,341
Total underwriting deductions	713,141	702,536	254,084	56,619	88,679	(25,118)	1,789,941
Underwriting income (loss)	$280,647	$136,406	$5,610	$128,840	$(88,679)	$237	$463,061

Other items (a)				(17,967)	(102,649)		(120,616)
Net investment income				6,658	121,166		127,824
(Income) attributable to AlphaCat investors				(2,412)	—		(2,412)
Net (income) attributable to noncontrolling interest				(92,964)	—		(92,964)
Segmental income	280,647	136,406	5,610	22,155	(70,162)	237	
Net income available to Validus							$374,893

(a) Other items includes finance expenses, tax expenses, foreign exchange gains (losses), net realized and change in net unrealized gains (losses) on investments, income from investment and operating affiliates and other income (loss).

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	Year Ended December 31, 2014						
	Validus Re Segment	Talbot Segment	Western World Segment (c)	AlphaCat & Consolidated Variable Interest Entities	Corporate & Investments	Eliminations	Total
Underwriting income							
Gross premiums written	$1,118,532	$1,101,770	$65,235	$ 126,785		$ (53,457)	$2,358,865
Reinsurance premiums ceded	(163,678)	(192,211)	(6,428)	(4,348)		53,457	(313,208)
Net premiums written	954,854	909,559	58,807	122,437		—	2,045,657
Change in unearned premiums	(37,570)	(29,785)	14,189	564		—	(52,602)
Net premiums earned	917,284	879,774	72,996	123,001		—	1,993,055
Other insurance related income	3,159	1,095	264	25,750		(26,796)	3,472
Underwriting revenues	920,443	880,869	73,260	148,751		(26,796)	1,996,527
Underwriting deductions							
Losses and loss expenses	307,290	423,394	51,035	(16,704)		—	765,015
Policy acquisition costs	141,670	187,162	3,169	11,584		(4,118)	339,467
General and administrative expenses	74,739	150,828	11,121	36,298	80,210	(23,834)	329,362
Share compensation expenses	9,739						