

VALIDUS HOLDINGS LTD  
Form 10-K  
February 19, 2014

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, 2013  
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:  
Common Shares, \$0.175 par value per share

Name of Each Exchange on Which Registered:  
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  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

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

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

Indicate by check mark 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.

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

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

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The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2013 was \$2,735.5 million computed upon the basis of the closing sales price of the Common Shares on June 30, 2013. 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 14, 2014, there were 93,363,830 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, 2013.

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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

All amounts presented in this part are in thousands of U.S. dollars except as otherwise noted.

### Item 1. Business

#### Overview

Validus Holdings, Ltd. was incorporated under the laws of Bermuda on October 19, 2005. Our initial investor, which we refer to as our founding investor, is Aquiline Capital Partners LLC, a private equity firm dedicated to investing in financial services companies. Other sponsoring investors included private equity funds managed by Goldman Sachs Capital Partners, Vestar Capital Partners, New Mountain Capital and Merrill Lynch Global Private Equity. Hereinafter, “the Company”, “us” or “we” is used to describe any or all of Validus Holdings, Ltd. and its subsidiary companies. The Company conducts its operations worldwide through three operating segments which have been determined under U.S. GAAP segment reporting: Validus Re, AlphaCat and Talbot. Validus Re is a Bermuda-based reinsurance segment focused on short tail lines of reinsurance. AlphaCat is a Bermuda-based investment adviser, managing capital from third parties and the Company in insurance linked securities and other investments in the property catastrophe reinsurance space. Talbot is a specialty insurance segment, primarily operating within the Lloyd’s insurance market through Syndicate 1183.

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 40 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. 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;
- Raising \$135.0 million of third party initial capital for AlphaCat Re 2011, Ltd. (“AlphaCat Re 2011”) on May 25, 2011 and a further \$60.0 million of additional third party capital on December 23, 2011;
- Raising \$450.0 million of third party capital for PaCRe, Ltd. (“PaCRe”) a Class 4 Bermuda reinsurer formed for the purpose of writing high excess property catastrophe reinsurance, on April 2, 2012 and a further \$58.5 million on May 1, 2013;
- Raising \$43.5 million of third party capital for AlphaCat Re 2012, Ltd. (“AlphaCat Re 2012”) on May 29, 2012;
- Acquiring all of the outstanding shares of Flagstone Reinsurance Holdings, S.A. (“Flagstone”) on November 30, 2012;



Raising \$185.0 million of third party capital for AlphaCat 2013, Ltd. ("AlphaCat 2013") on December 17, 2012;  
Raising \$292.2 million of third party subscriptions for AlphaCat Insurance Linked Securities ("ILS") funds;  
Raising \$138.0 million of third party capital for AlphaCat 2014, Ltd. ("AlphaCat 2014") on December 20, 2013;  
Delivering a 12.7% compounded annual growth in book value per diluted common share plus accumulated dividends from formation to December 31, 2013;  
Increasing the annual dividend by 20% from \$1.00 to \$1.20 per common share and per common share equivalent and declaring a \$2.00 special dividend per common share and per common share equivalent on February 6, 2013; and  
Repurchasing approximately 59.6 million common shares for an aggregate purchase price of \$1,821.1 million and paying an aggregate amount of \$830.3 million in dividends from formation to February 14, 2014.

Our Operating Subsidiaries -

The following chart shows how our Company and its principal operating subsidiaries are organized.

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

- (a) AlphaCat Re 2011, AlphaCat Re 2012, AlphaCat 2013 and AlphaCat 2014 are non-consolidated operating affiliates that are owned 22.3%, 37.9%, 19.7% and 19.6%, respectively by the Company.
- (b) Two of the funds are consolidated and the third is owned 9.1% by the Company.
- (c) The Company has an equity interest of 10% in PaCRe, the remaining 90% interest is held by third party investors.

Operating Segments

Validus Re: Validus Re operates as a Bermuda-based provider of short-tail 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 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 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.

On September 4, 2009, the Company acquired all of the outstanding shares of IPC. The primary lines in which IPC conducted business were property catastrophe reinsurance and, to a limited extent, property-per-risk excess, aviation (including satellite) and other short-tail reinsurance on a worldwide basis. For segmental reporting purposes, the results of IPC's operations since the acquisition date have been included within the Validus Re segment in the Consolidated Financial Statements.

On November 30, 2012, the Company acquired all of the outstanding shares of Flagstone, strengthening the Company's leading property catastrophe reinsurance and short-tail specialty insurance platform. The primary lines in which Flagstone conducted business were property catastrophe reinsurance, property pro rata and per-risk excess and short tail specialty and casualty reinsurance such as aviation, energy, personal accident and health, satellite, marine and workers' compensation catastrophe. For segmental reporting purposes, the results of Flagstone's operations since the acquisition date have been included within the Validus Re segment in the Consolidated Financial Statements. As part of this acquisition, the Company acquired Flagstone Reassurance Suisse, SA and renamed it Validus Reinsurance (Switzerland) Ltd. ("Validus Re Swiss"). 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)	Year Ended December 31, 2013		Year Ended December 31, 2012		Year Ended December 31, 2011		
	Gross Premiums Written	Gross Premiums Written (%)	Gross Premiums Written	Gross Premiums Written (%)	Gross Premiums Written	Gross Premiums Written (%)	
Property	\$744,630	59.9	% \$771,617	68.2	% \$786,937	70.6	%
Marine	194,001	15.6	% 257,469	22.7	% 232,401	20.9	%
Specialty	303,891	24.5	% 102,873	9.1	% 95,155	8.5	%
Total	\$1,242,522	100.0	% \$1,131,959	100.0	% \$1,114,493	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, 2013 were \$620.4 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

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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, 2013 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, 2013 were \$98.1 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, 2013 were \$194.0 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 & health, nuclear, workers' compensation, crisis management, contingency, motor, technical lines and composite 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 and financial 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, 2013 were \$303.9 million.

**AlphaCat:** The AlphaCat segment manages strategic relationships that leverage the Company's underwriting and investment expertise and earns management, performance and underwriting fees. AlphaCat Managers, Ltd. ("AlphaCat Managers"), formed in 2008, is a core element within the Company's strategic initiative to expand into capital market 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 market investors.

AlphaCat helps investors take advantage of this uncorrelated asset class through various funds and sidecars, currently accessing the market via AlphaCat Reinsurance Ltd., a Bermuda provider of fully collateralized property catastrophe reinsurance and retrocession capacity and AlphaCat Master Fund, a Bermuda investment fund investing in reinsurance-related capital markets transactions. 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. The AlphaCat segment also includes the results of PaCRe since its formation in 2012.

During the first quarter of 2012, to better align the Company's operating and reporting structure with its strategy, there was a change in the Company's segment structure. This change included reporting the AlphaCat group of companies as a separate operating segment. The AlphaCat segment currently also includes AlphaCat Re 2011, AlphaCat Re 2012, AlphaCat 2013, AlphaCat 2014, PaCRe and AlphaCat ILS funds.

The following are the primary line items for the AlphaCat segment:

(Dollars in thousands)	Year ended December 31,				
	2013	Change	2012	Change	2011
Managed gross premiums written	\$ 143,146	(4,945 )	\$ 148,091	72,364	\$ 75,727
Other income	26,424	3,195	23,229	11,763	11,466
Income from operating affiliates	14,289	1,709	12,580	12,580	—

**Managed gross premiums written:** Managed gross premiums written includes gross premiums written by our non-consolidated affiliates, AlphaCat Re 2011 and AlphaCat Re 2012. A reconciliation of managed gross premiums written to gross premiums written, the most comparable U.S. GAAP financial measure, is presented in the section

entitled "Non-GAAP Financial Measures." Managed gross premiums written for the year ended December 31, 2013 were \$143.1 million.

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Other income: Other income includes third party and related party management fee income. Other income for the year ended December 31, 2013 was \$26.4 million.

Income from operating affiliates: AlphaCat's operating affiliates, at December 31, 2013 were AlphaCat Re 2011, AlphaCat Re 2012, AlphaCat 2013, AlphaCat 2014 and one of the AlphaCat ILS funds. Further detail on each of the operating affiliates can be seen at Item 15 (a) of this Report in the Consolidated Financial Statements of Validus Holdings, Ltd. and the Notes thereto. Income from operating affiliates for the year ended December 31, 2013 was \$14.3 million.

Talbot: On July 2, 2007, the Company acquired all of the outstanding shares of Talbot Holdings Ltd. Talbot Holdings Ltd. is the Bermuda parent of a specialty insurance group primarily operating within the Lloyd's insurance market through Syndicate 1183. The acquisition provided the Company with significant benefits in terms of product line and geographic diversification as well as offering the Company broader access to underwriting expertise. Similar to Validus Re, 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., war, financial institutions, 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 Reasegueros, Inc. (Miami), Validus Re Chile S.A. (Chile), Talbot Risk Services (Labuan) Pte Limited (Malaysia), and Talbot Risk Services Pte, Ltd. (Singapore), 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:

	Year Ended December 31, 2013		Year Ended December 31, 2012		Year Ended December 31, 2011		
	Gross Premiums Written	Gross Premiums Written (%)	Gross Premiums Written	Gross Premiums Written (%)	Gross Premiums Written	Gross Premiums Written (%)	
(Dollars in thousands)							
Property	\$345,831	31.7 %	\$324,910	30.1 %	\$306,317	30.2 %	
Marine	381,238	34.9 %	396,207	36.7 %	341,821	33.7 %	
Specialty	364,821	33.4 %	357,519	33.2 %	365,984	36.1 %	
Total	\$1,091,890	100.0 %	\$1,078,636	100.0 %	\$1,014,122	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 onshore energy and construction business. Within the onshore 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 with long-term policies. Gross premiums written on property business during the year ended December 31, 2013 were \$345.8 million, including \$89.4 million of treaty reinsurance.

Marine: The main types of business within the marine class are hull, cargo, offshore 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 cargo 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. Offshore 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. Each of the sub-classes within the marine class has a different profile of contracts written. Some, such as energy, derive up to 40.0% of their business through writing facultative contracts while others, such as cargo, only derive 18.0% through this method. Each of the sub-classes also has a different geographical risk allocation. 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 \$61.5 million of the \$381.2 million of gross premiums written during the year ended December 31, 2013, is the primary long-tail business in this class.

**Specialty:** This class consists of war (comprising marine & aviation war, political risks and political violence, including war on land), financial institutions, contingency, accident and health, aviation direct and aviation treaty. 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, 2013 were \$364.8 million.

**War:** The marine & aviation war 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, energy, contingency and political risk. The period of the risks can extend up to 36 months and beyond. Gross premiums written on war business during the year ended December 31, 2013 were \$186.5 million.

**Aviation:** The aviation account insures major airlines, airport operations, aviation products and airports (aviation direct), general aviation and satellites. 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, 2013 were \$95.3 million.

**Financial Institutions:** Talbot's financial institutions team underwrites bankers blanket bond, professional indemnity and directors' and officers' coverage for various types of financial institutions and similar companies. Bankers blanket bond 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. Professional indemnity insurance protects businesses in the event that legal action is taken against them by third parties claiming professional negligence. Directors' and officers' insurance protects directors and officers against personal liability for losses incurred by a third party due to negligent performance by a director or officer. The financial institutions account is longer tail business as the periods of time between the occurrence, reporting and settlement of claims can be several years. Gross premiums written on financial institutions business for the year ended December 31, 2013 were \$38.2 million, comprising:

(Dollars in thousands)	Year Ended December 31, 2013		
	Gross Premiums Written	Gross Premiums Written (%)	
Bankers blanket bond	\$23,972	62.7	%
Professional indemnity	12,435	32.5	%
Directors' and Officers'	1,819	4.8	%
Total	\$38,226	100.0	%

The risks covered in financial institutions are primarily fraud related and are principally written on an excess of loss basis. Talbot's financial institutions account is concentrated on non-U.S. based clients, with 41.8% of gross premiums written in 2013 generated in Europe, 11.7% from the U.S. and 46.5% from other geographical regions. In addition, Talbot seeks to write regional accounts rather than global financial institutions with exposure in multiple jurisdictions and has only limited participation in exposures to publicly listed U.S. companies.

**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, 2013 were \$24.6 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, 2013 were \$20.0 million.



## 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, 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 that 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 management committee of the Company that oversees risk management is the Group Risk Management Committee (“GRMC”).

**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.

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**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.

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 offshore 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.

**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 group. 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 paying close attention to 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. In addition, 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. 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:

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- 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 group 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 current with emerging scientific trends. 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 who operate 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 has global licenses for all three major commercial vendor models (RMS, AIR and EQECAT), to assess the adequacy of risk pricing and to monitor its overall exposure to risk in correlated geographic zones. Commencing in January 2012, the Company incorporated RMS version 11 into its vendor models. The vendor models enable 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. Once exposures are modeled using one of the vendor models, the other two models are used as a reasonability check and validation of the loss scenarios developed and reported by the first. The three commercial models each have unique strengths and weaknesses. For example, it is sometimes necessary to impose changes to frequency and severity ahead of changes made by the model vendors.

The Company also uses its quantitative expertise to improve the reliability of the vendor model outputs 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 pricing to reflect insufficient data quality;

- Prior to making overall adjustments for changes in climate variables, other variables are carefully examined (for example, demand surge, storm surge, and secondary uncertainty); and

- To properly quantify risk, we frequently adjust vendor models based on the latest scientific studies and claims data.

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 gross loss 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 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.

The following table sets forth the gross premiums written allocated to the territory of coverage:

(Dollars in thousands)	Year Ended December 31, 2013						%	%
	Gross Premiums Written							
	Validus Re	AlphaCat	Talbot	Eliminations	Total			
United States	\$466,555	\$50,848	\$93,357	\$(10,673)	\$600,087	25.1	%	
Worldwide excluding United States	71,421	14,801	142,294	(9,263)	219,253	9.1	%	
(a)								
Australia and New Zealand	22,882	2,216	11,097	(607)	35,588	1.5	%	
Europe	68,685	2,533	51,667	(4,270)	118,615	4.9	%	
Latin America and Caribbean	7,225	—	155,798	(8,970)	154,053	6.4	%	
Japan	43,055	653	5,971	(979)	48,700	2.0	%	
Canada	4,277	818	10,768	(1,406)	14,457	0.6	%	
Rest of the world (b)	29,401	—	92,652	(5,065)	116,988	4.9	%	
Sub-total, non United States	246,946	21,021	470,247	(30,560)	707,654	29.4	%	
Worldwide including United States	179,709	75,140	80,538	(11,166)	324,221	13.5	%	
Other locations non-specific (c)	349,312	—	447,748	(27,916)	769,144	32.0	%	
Total	\$1,242,522	\$147,009	\$1,091,890	\$(80,315)	\$2,401,106	100.0	%	

(a) Represents risks in two or more geographic zones.

(b) Represents risk in one geographic zone.

The Other locations non-specific category refers to business for which an analysis of exposure by geographic zone (c) is not applicable, such as marine and aerospace risks, since these exposures can span multiple geographic areas and, in some instances, are not fixed locations.



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.

**AlphaCat:** AlphaCat has ceded only a minimal level of business to third parties and will typically write contracts on a net retention basis only, since most contracts are fully collateralized.

**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 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 discussed and reviewed by the Chief Executive Officer of the Talbot group, and ultimately authorized by the Talbot Underwriting Ltd ("TUL") Board. Once this has occurred, the reinsurance program is purchased in the months prior to the beginning of the covered period. All reinsurance contracts arranged are authorized for purchase by the 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.

### 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 Aon Benfield Group Ltd., Marsh & McLennan and Willis Group Holdings Ltd. The following table sets forth the Company’s gross premiums written by broker:

(Dollars in thousands) Name of Broker	Year Ended December 31, 2013 Gross Premiums Written						%
	Validus Re	AlphaCat	Talbot	Eliminations	Total		
Aon Benfield Group Ltd.	\$504,389	\$39,114	\$177,596	\$(9,708)	\$711,391	29.6	%
Marsh & McLennan	288,013	37,724	199,435	(12,029)	513,143	21.4	%
Willis Group Holdings Ltd.	259,089	43,605	164,784	(9,008)	458,470	19.1	%
Sub-total	1,051,491	120,443	541,815	(30,745)	1,683,004	70.1	%
All Others/Direct	191,031	26,566	550,075	(49,570)	718,102	29.9	%
Total	\$1,242,522	\$147,009	\$1,091,890	\$(80,315)	\$2,401,106	100.0	%

### 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.

The following tables show certain information with respect to the Company’s gross and net reserves:

(Dollars in thousands)	As at December 31, 2013		
	Gross Case Reserves	Gross Incurred But Not Reported Reserves	Total Gross Reserve for Losses and Loss Expenses
Property	\$795,143	\$643,051	\$1,438,194
Marine	486,087	421,633	907,720
Specialty	256,651	427,834	684,485
Total	\$1,537,881	\$1,492,518	\$3,030,399

(Dollars in thousands)	As at December 31, 2013		
	Net Case Reserves	Net Incurred But Not Reported Reserves	Total Net Reserve for Losses and Loss Expenses
Property	\$699,491	\$548,400	\$1,247,891
Marine	439,005	386,992	825,997
Specialty	226,071	360,286	586,357
Total	\$1,364,567	\$1,295,678	\$2,660,245

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.



The nature of the Company's high excess of loss liability 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, 2013. 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 (b)	2013
Estimated liability for unpaid losses and loss expense, net of reinsurance recoverable	\$77,363	\$791,713	\$1,096,507	\$1,440,369	\$1,752,839	\$2,258,658	\$3,077,606	\$2,660,245
Net loss reserves disposed							(36,519)	
Liability re-estimated as of: (c)								
One year later	60,106	722,010	1,018,930	1,283,759	1,596,720	2,083,378	2,835,639	
Two years later	54,302	670,069	937,696	1,181,987	1,451,448	1,954,084		
Three years later	50,149	606,387	902,161	1,085,664	1,404,349			
Four years later	46,851							