ARCH CAPITAL GROUP LTD. Form 10-K March 02, 2009

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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **FORM 10-K**

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

For the Fiscal Year Ended December 31, 2008

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF 0 THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

to

Commission File No. 0-26456

## ARCH CAPITAL GROUP LTD.

(Exact name of registrant as specified in its charter)

### Bermuda

(State or other jurisdiction of incorporation or organization)

### Not applicable

(I.R.S. Employer Identification No.)

### Wessex House, 45 Reid Street

Hamilton HM 12, Bermuda (Address of principal executive offices)

### (441) 278-9250

(Registrant's telephone number, including area code)

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

### **Title of Each Class**

Common Shares, \$0.01 par value per share

8.000% Non-Cumulative Preferred Shares, Series A, \$0.01 par value per share 7.875% Non-Cumulative Preferred

Shares, Series B, \$0.01 par value per share

Name of each Exchange on which Registered

NASDAQ Stock Market (Common Shares) New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Exchange 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 \( \times \) 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 Exchange 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 Exchange Act 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  $\circ$  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. ý

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

Large accelerated filer ý Accelerated filer o Non-accelerated filer o Smaller reporting company o (Do not check if a 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 o No ý

The aggregate market value of the voting and non-voting common equity held by non-affiliates, computed by reference to the closing price as reported by the NASDAQ Stock Market as of the last business day of the Registrant's most recently completed second fiscal quarter, was approximately \$3.64 billion.

As of February 25, 2009, there were 60,554,456 of the registrant's common shares outstanding.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of Part III and Part IV incorporate by reference our definitive proxy statement for the 2009 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A before April 30, 2009.

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#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 ("PLSRA") provides a "safe harbor" for forward-looking statements. This report or any other written or oral statements made by or on behalf of us may include forward-looking statements, which reflect our current views with respect to future events and financial performance. All statements other than statements of historical fact included in or incorporated by reference in this report are forward-looking statements. Forward-looking statements, for purposes of the PLSRA or otherwise, can generally be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue" and similar statements of a future or forward-looking nature or their negative or variations or similar terminology.

Forward-looking statements involve our current assessment of risks and uncertainties. Actual events and results may differ materially from those expressed or implied in these statements. Important factors that could cause actual events or results to differ materially from those indicated in such statements are discussed below, elsewhere in this report and in our periodic reports filed with the Securities and Exchange Commission ("SEC"), and include:

our ability to successfully implement our business strategy during "soft" as well as "hard" markets;

acceptance of our business strategy, security and financial condition by rating agencies and regulators, as well as by brokers and our insureds and reinsureds;

our ability to maintain or improve our ratings, which may be affected by our ability to raise additional equity or debt financings, by ratings agencies' existing or new policies and practices, as well as other factors described herein;

general economic and market conditions (including inflation, interest rates, foreign currency exchange rates and prevailing credit terms) and conditions specific to the reinsurance and insurance markets in which we operate;

competition, including increased competition, on the basis of pricing, capacity, coverage terms or other factors;

developments in the world's financial and capital markets and our access to such markets;

our ability to successfully integrate, establish and maintain operating procedures (including the implementation of improved computerized systems and programs to replace and support manual systems) to effectively support our underwriting initiatives and to develop accurate actuarial data;

the loss of key personnel;

the integration of businesses we have acquired or may acquire into our existing operations;

accuracy of those estimates and judgments utilized 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, income taxes, contingencies and 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 since relatively limited historical information has been reported to us through December 31, 2008;

greater than expected loss ratios on business written by us and adverse development on claim and/or claim expense liabilities related to business written by our insurance and reinsurance subsidiaries;

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severity and/or frequency of losses;

claims for natural or man-made catastrophic events in our insurance or reinsurance business could cause large losses and substantial volatility in our results of operations;

acts of terrorism, political unrest and other hostilities or other unforecasted and unpredictable events;

losses relating to aviation business and business produced by a certain managing underwriting agency for which we may be liable to the purchaser of our prior reinsurance business or to others in connection with the May 5, 2000 asset sale described in our periodic reports filed with the SEC;

availability to us of reinsurance to manage our gross and net exposures and the cost of such reinsurance;

the failure of reinsurers, managing general agents, third party administrators 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;

our investment performance, including legislative or regulatory developments that may adversely affect the market value of our investments:

material differences between actual and expected assessments for guaranty funds and mandatory pooling arrangements;

changes in accounting principles or policies or in our application of such accounting principles or policies;

changes in the political environment of certain countries in which we operate or underwrite business;

statutory or regulatory developments, including as to tax policy and matters and insurance 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/or changes in regulations or tax laws applicable to us, our subsidiaries, brokers or customers; and

the other matters set forth under Item 1A "Risk Factors", Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other sections of this Annual Report on Form 10-K, as well as the other factors set forth in Arch Capital Group Ltd.'s other documents on file with the SEC, and management's response to any of the aforementioned factors.

All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with other cautionary statements that are included herein or elsewhere. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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#### PART I

#### ITEM 1. BUSINESS

We refer you to Item 1A "Risk Factors" for a discussion of risk factors relating to our business.

#### **OUR COMPANY**

#### General

Arch Capital Group Ltd. ("ACGL" and, together with its subsidiaries, the "Company," "we," or "us") is a Bermuda public limited liability company with over \$3.8 billion in capital at December 31, 2008 and, through operations in Bermuda, the United States, Europe and Canada, writes insurance and reinsurance on a worldwide basis. While we are positioned to provide a full range of property and casualty insurance and reinsurance lines, we focus on writing specialty lines of insurance and reinsurance.

We launched an underwriting initiative in October 2001 to meet current and future demand in the global insurance and reinsurance markets. Since that time, we have attracted a proven management team with extensive industry experience and enhanced our existing global underwriting platform for our insurance and reinsurance businesses. It is our belief that our underwriting platform, our experienced management team and our strong capital base that is unencumbered by significant pre-2002 risks have enabled us to establish a strong presence in the insurance and reinsurance markets. For 2008, our seventh full year of operation, we wrote \$2.8 billion of net premiums, reported net income available to common shareholders of \$265.1 million and earned a return on average equity of 7.8%. Diluted book value per share was \$51.36 at December 31, 2008, compared to \$55.12 per share at December 31, 2007.

ACGL's registered office is located at Clarendon House, 2 Church Street, Hamilton HM 11, Bermuda (telephone number: (441) 295-1422), and its principal executive offices are located at Wessex House, 45 Reid Street, Hamilton HM 12, Bermuda (telephone number: (441) 278-9250). ACGL makes available free of charge through its website, located at <a href="http://www.archcapgroup.bm">http://www.archcapgroup.bm</a>, its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The public may read and copy any materials ACGL files with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC (such as ACGL) and the address of that site is <a href="http://www.sec.gov">http://www.sec.gov</a>.

### **Our History**

ACGL was formed in September 2000 and became the sole shareholder of Arch Capital Group (U.S.) Inc. ("Arch-U.S.") pursuant to an internal reorganization transaction completed in November 2000, as described below. Arch-U.S. is a Delaware company formed in March 1995 under the original name of "Risk Capital Holdings, Inc.," which commenced operations in September 1995 following the completion of an initial public offering. From that time until May 2000, Arch-U.S. provided reinsurance and other forms of capital for insurance companies through its wholly owned subsidiary, Arch Reinsurance Company ("Arch Re U.S."), a Nebraska corporation formed in 1995 under the original name of "Risk Capital Reinsurance Company."

On May 5, 2000, Arch-U.S. sold the prior reinsurance operations of Arch Re U.S. to White Mountains Reinsurance Company of America ("WTM Re"), formerly known as Folksamerica Reinsurance Company, in an asset sale, but retained its surplus and U.S.-licensed reinsurance platform. The sale was precipitated by, among other things, losses on the reinsurance business of Arch Re U.S.

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and increasing competition, which had been adversely affecting the results of operations and financial condition of Arch Re U.S. The WTM Re transaction, which resulted from extensive arm's length negotiation, was structured as a transfer and assumption agreement (and not as reinsurance) and, accordingly, the loss reserves (and any related reinsurance recoverables) related to the transferred business are not included in the balance sheet of Arch Re U.S. However, in the event that WTM Re refuses or is unable to make payment of claims on the reinsurance business assumed by it in the May 2000 sale and the notice given to reinsureds is found not to be an effective release by such reinsureds, Arch Re U.S. would be liable for such claims. In addition, Arch Re U.S. retained all liabilities not assumed by WTM Re, including all liabilities not arising under reinsurance agreements transferred to WTM Re in the asset sale. On November 8, 2000, following the approval by Arch-U.S.'s shareholders, Arch-U.S. completed an internal reorganization that resulted in Arch-U.S. becoming a wholly owned subsidiary of ACGL.

During the period from May 2000 through the announcement of our underwriting initiative in October 2001, we built and acquired insurance businesses that were intended to enable us to generate both fee-based revenue (e.g., commissions and advisory and management fees) and risk-based revenue (i.e., insurance premium). As part of this strategy, we built an underwriting platform that was intended to enable us to maximize risk-based revenue during periods in the underwriting cycle when we believed it was more favorable to assume underwriting risk. In October 2001, we concluded that underwriting conditions favored dedicating our attention exclusively to building our insurance and reinsurance businesses.

The development of our underwriting platform included the following steps: (1) after the completion of the WTM Re asset sale, we retained our U.S.-licensed reinsurer, Arch Re U.S., and Arch Excess & Surplus Insurance Company ("Arch E&S"), currently an approved excess and surplus lines insurer in 47 states and the District of Columbia and an admitted insurer in one state; (2) in May 2001, we formed Arch Reinsurance Ltd. ("Arch Re Bermuda"), our Bermuda-based reinsurance and insurance subsidiary; (3) in June 2001, we acquired Arch Risk Transfer Services Ltd., which included Arch Insurance Company ("Arch Insurance"), currently an admitted insurer in 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and Guam with a branch office in Canada, and rent-a-captive and other facilities that provide insurance and alternative risk transfer services; (4) in February 2002, we acquired Arch Specialty Insurance Company ("Arch Specialty"), currently an approved excess and surplus lines insurer in 49 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands and an admitted insurer in one state; (5) in June 2003, we acquired Arch Indemnity Insurance Company (formerly known as Western Diversified Casualty Insurance Company) ("Arch Indemnity"), an admitted insurer in 49 states and the District of Columbia; (6) in May 2004, our London-based subsidiary, Arch Insurance Company (Europe) Limited ("Arch Insurance Europe"), was approved by the Financial Services Authority in the U.K. to commence insurance underwriting activities and began writing a range of specialty commercial lines in Europe and the U.K. during the 2004 third quarter; (7) in January 2005, Arch Insurance received its federal license to commence underwriting in Canada and began writing business in the first quarter of 2005; and (8) in November 2006, Arch Reinsurance Ltd., Hamilton (Bermuda), European Branch Zurich ("Arch Re Bermuda Swiss Branch"), the Swiss branch of Arch Re Bermuda, was registered with the commercial register of the Canton of Zurich to commence reinsurance underwriting activities in Switzerland. All liabilities arising out of the business of Arch Specialty and Arch Indemnity prior to the closing of our acquisitions of such companies were reinsured and guaranteed by the respective sellers, Sentry Insurance a Mutual Company ("Sentry") and Protective Life Corporation and certain of its affiliates.

In 2007, we (1) formed Arch Re Accident & Health ApS ("Arch Re Denmark"), a Danish underwriting agency which conducts accident and health underwriting as a branch office of Arch Reinsurance Europe Underwriting Limited ("Arch Re Europe"), which was formed in 2008 and is described below; (2) acquired the assets of Wexford Underwriting Managers, Inc. ("Wexford"), a

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managing general agent, to write excess workers' compensation and employers' liability insurance, a new line of business for us at the time; and (3) launched our property facultative reinsurance underwriting operations which are headquartered in Farmington, Connecticut. On January 22, 2008, Arch Re Bermuda and Gulf Investment Corporation GSC ("GIC") entered into a joint venture agreement for the purpose of forming a reinsurance company in the Dubai International Financial Centre. GIC is owned equally by the six member states of the Gulf Cooperation Council ("GCC"), which include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. In May 2008, we provided \$100.0 million of funding to Gulf Reinsurance Limited ("Gulf Re"), a newly formed reinsurer based in the Dubai International Financial Centre, pursuant to the joint venture agreement with GIC. Gulf Re provides property and casualty reinsurance primarily in those member states of the GCC.

In 2008, we expanded our underwriting platform through the formation of Arch Re Europe, an Irish company based in Dublin which was authorized by the Irish Financial Services Regulatory Authority in October 2008 to underwrite reinsurance. The operations of Arch Re Bermuda Swiss Branch were transferred to the newly formed Swiss branch of Arch Re Europe called Arch Reinsurance Europe Underwriting Limited, Dublin (Ireland), Zurich Branch ("Arch Re Europe Swiss Branch"). Arch Re Europe Swiss Branch commenced underwriting from the date of transfer. Arch Re Bermuda Swiss Branch was de-registered as a branch in early 2009. In addition, in the first quarter of 2009, we received approval in principle from the Lloyd's Franchise Board and the Financial Services Authority in the United Kingdom to establish a managing agent and syndicate at Lloyd's. The newly formed Syndicate 2012 is expected to commence underwriting in the second quarter of 2009.

The growth of our insurance and reinsurance platforms was supported through the net proceeds of: (1) an equity capital infusion of \$763.2 million led by funds affiliated with Warburg Pincus LLC ("Warburg Pincus funds") and Hellman & Friedman LLC ("Hellman & Friedman funds") in late 2001; (2) a public offering of 7,475,000 of our common shares with net proceeds of \$179.2 million in April 2002; (3) the exercise of class A warrants by our principal shareholders and other investors in September 2002, which provided net proceeds of \$74.3 million; (4) a March 2004 public offering of 4,688,750 of our common shares with net proceeds of \$179.3 million; (5) a May 2004 public offering of \$300.0 million principal amount of our 7.35% senior notes due May 2034 with net proceeds of \$296.4 million, of which \$200.0 million was used to repay all amounts outstanding under our existing credit facility; (6) a February 2006 public offering of \$200.0 million of our 8.00% series A non-cumulative preferred shares with a liquidation preference of \$25.00 per share with net proceeds of \$193.5 million; and (7) a May 2006 public offering \$125.0 million of our 7.875% series B non-cumulative preferred shares with a liquidation preference of \$25.00 per share with net proceeds of \$120.9 million.

The board of directors of ACGL authorized the investment of up to \$1.5 billion in ACGL's common shares through a share repurchase program. Such amount consisted of a \$1.0 billion authorization in February 2007 and a \$500.0 million authorization in May 2008. Repurchases under the program may be effected from time to time in open market or privately negotiated transactions through February 2010. Since the inception of the share repurchase program, ACGL has repurchased approximately 15.3 million common shares for an aggregate purchase price of \$1.05 billion. The timing and amount of the repurchase transactions under this program will depend on a variety of factors, including market conditions and corporate and regulatory considerations. In connection with the repurchase program, the Warburg Pincus funds waived their rights relating to share repurchases under their shareholders agreement with ACGL for all repurchases of common shares by ACGL under the repurchase program in open market transactions and certain privately negotiated transactions. In May 2007, the Hellman & Friedman funds ceased to own shares of ACGL and their rights under the shareholders agreement with ACGL terminated.

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### **Operations**

We classify our businesses into two underwriting segments, insurance and reinsurance. For an analysis of our underwriting results by segment, see note 3, "Segment Information," of the notes accompanying our consolidated financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations Results of Operations."

#### **Our Insurance Operations**

Our insurance operations are conducted in Bermuda, the United States, Europe and Canada. Our insurance operations in Bermuda are conducted through Arch Insurance (Bermuda), a division of Arch Re Bermuda, which has an office in Hamilton, Bermuda. In the U.S., our insurance group's principal insurance subsidiaries are Arch Insurance, Arch E&S, Arch Specialty and Arch Indemnity. The headquarters for our insurance group's U.S. support operations (excluding underwriting units) relocated from New York City to Jersey City, New Jersey during the first quarter of 2009. The insurance group has additional offices throughout the U.S., including four regional offices located in: Alpharetta, Georgia; Chicago, Illinois; New York, New York; and San Francisco, California. In addition, Arch Insurance has a branch office in Toronto, Canada. Our insurance group's European operations are conducted through Arch Insurance Europe, based in London, which also has branches in Germany, Italy, Spain, Denmark and Sweden. In the first quarter of 2009, we received approval in principle from the Lloyd's Franchise Board and the Financial Services Authority in the United Kingdom to establish a managing agent and syndicate at Lloyd's. The syndicate will enhance our underwriting platform by providing us with access to Lloyd's extensive distribution network and worldwide licenses. The newly formed Syndicate 2012 is expected to commence underwriting in the second quarter of 2009. Syndicate 2012 will be managed by its managing agent, Arch Underwriting Lloyd's Ltd, based in the London office of Arch Insurance Europe. As of February 15, 2009, our insurance group had approximately 990 employees.

Strategy. Our insurance group's strategy is to operate in lines of business in which underwriting expertise can make a meaningful difference in operating results. The insurance group focuses on talent-intensive rather than labor-intensive business and seeks to operate profitably (on both a gross and net basis) across all of its product lines. To achieve these objectives, our insurance group's operating principles are to:

Capitalize on Profitable Underwriting Opportunities. Our insurance group believes that its experienced management and underwriting teams are positioned to locate and identify business with attractive risk/reward characteristics. As profitable underwriting opportunities are identified, our insurance group will continue to seek to make additions to their product portfolio in order to take advantage of market trends. This may include adding underwriting and other professionals with specific expertise in specialty lines of insurance.

Centralize Responsibility for Underwriting. Our insurance group consists of a range of product lines. The underwriting executive in charge of each product line oversees all aspects of the underwriting product development process within such product line. Our insurance group believes that centralizing the control of such product line with the respective underwriting executive allows for close management of underwriting and creates clear accountability for results. Our U.S. insurance group has four regional offices, and the executive in charge of each region is primarily responsible for all aspects of the marketing and distribution of our insurance group's products, including the management of broker and other producer relationships in such executive's respective region. In our non-U.S. offices, a similar philosophy is observed, with responsibility for the management of each product line residing with the senior underwriting executive in charge of such product line.

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Maintain a Disciplined Underwriting Philosophy. Our insurance group's underwriting philosophy is to generate an underwriting profit through prudent risk selection and proper pricing. Our insurance group believes that the key to this approach is adherence to uniform underwriting standards across all types of business. Our insurance group's senior management closely monitors the underwriting process.

Focus on Providing Superior Claims Management. Our insurance group believes that claims handling is an integral component of credibility in the market for insurance products. Therefore, our insurance group believes that its ability to handle claims expeditiously and satisfactorily is a key to its success. Our insurance group employs experienced claims professionals and also utilizes experienced external claims managers (third party administrators) where appropriate.

*Utilize a Brokerage Distribution System.* Our insurance group believes that by utilizing a brokerage distribution system, consisting of select international, national and regional brokers, both wholesale and retail, it can efficiently access a broad customer base while maintaining underwriting control and discipline.

Our insurance group writes business on both an admitted and non-admitted basis. Our insurance group focuses on the following areas:

*Casualty*. Our insurance group's casualty unit writes primary and excess casualty insurance coverages, including railroad and middle market energy business.

Construction and National Accounts. Our insurance group's construction unit provides primary and excess casualty coverages to middle and large accounts in the construction industry. The construction unit also provides coverage for environmental and design professionals, including policies for architectural and engineering firms and construction projects, pollution legal liability coverage for fixed sites, and alternative markets business, including captive insurance programs. Our insurance group's national accounts casualty unit provides a wide range of products for middle and large accounts and specializes in loss sensitive primary casualty insurance programs, including large deductible, self-insured retention and retrospectively rated programs.

*Executive Assurance*. Our insurance group's executive assurance unit focuses on directors' and officers' liability insurance coverages for corporate and financial institution clients. This unit also writes financial institution errors and omissions coverages, employment practices liability insurance, pension trust errors and omissions/fiduciary liability insurance and fidelity bonds.

*Healthcare*. Our insurance group's healthcare unit provides medical professional and general liability insurance coverages for the healthcare industry, including excess professional liability programs for large, integrated hospital systems, outpatient facilities, clinics and long-term care facilities.

*Professional Liability.* Our insurance group's professional liability unit has the following principal areas of focus: (i) large law firms and accounting firms and professional programs; and (ii) miscellaneous professional liability, including coverages for consultants, network security, securities broker-dealers, wholesalers, captive agents and managing general agents.

*Programs*. Our insurance group's programs unit targets program managers with unique expertise and niche products offering general liability, commercial automobile, inland marine and non-catastrophe-exposed property business. This unit offers primarily package policies, underwriting workers' compensation and umbrella liability business in support of desirable package programs.

*Property, Marine and Aviation (including Special Risks).* Our insurance group's property unit provides primary and excess general property insurance coverages, including catastrophe-exposed property coverage, for commercial clients. The special risks unit provides onshore and offshore

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property insurance coverages for commercial clients primarily in the energy industry. The special risks unit also provides contractors all risk, erection all risk, aerospace (consisting of aviation and satellite risks) and stand alone terrorism insurance coverage for commercial clients.

*Surety*. Our insurance group's surety unit provides contract surety coverages, including contract bonds (payment and performance bonds) for mid-size and large contractors and specialty contract bonds for homebuilders and developers.

Other. Our insurance group also includes the following units: (i) excess workers compensation, which provides excess workers compensation and employers' liability insurance coverages for qualified self-insured groups, associations and trusts in a wide range of businesses; (ii) lender products, which provides collateral protection insurance coverages for financial institutions and specialty insurance coverage for automotive dealers; and (iii) travel and accident, which provides specialty travel and accident and related insurance products for individual and group travelers, as well as travel agents and suppliers.

*Underwriting Philosophy.* Our insurance group's underwriting philosophy is to generate an underwriting profit (on both a gross and net basis) through prudent risk selection and proper pricing across all types of business. One key to this philosophy is the adherence to uniform underwriting standards across each product line that focuses on the following:

risk selection;
desired attachment point;
limits and retention management;
due diligence, including financial condition, claims history, management, and product, class and territorial exposure;
underwriting authority and appropriate approvals; and
collaborative decision-making.

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Premiums Written and Geographic Distribution. Set forth below is summary information regarding net premiums written for our insurance group:

	Years Ended December 31,						
	2008		2007		2006		
		% of		% of		% of	
(U.S. dollars in thousands)	Amount	Total	Amount	Total	Amount	Total	
Net premiums written							
Property, marine and aviation	\$ 334,635	20.2	\$ 328,967	19.2	\$ 320,928	19.4	
Programs	270,449	16.3	235,793	13.7	225,653	13.7	
Professional liability	246,891	14.9	269,479	15.7	276,081	16.7	
Construction and national accounts	240,458	14.5	227,936	13.3	193,265	11.7	
Executive assurance	193,602	11.7	185,351	10.8	193,694	11.8	
Casualty	116,096	7.0	183,267	10.7	220,244	13.3	
Surety	50,376	3.0	56,061	3.3	81,195	4.9	
Healthcare	44,596	2.7	63,757	3.7	68,026	4.1	
Other(1)	160,500	9.7	166,937	9.6	72,970	4.4	
Total	\$1,657,603	100.0	\$1,717,548	100.0	\$1,652,056	100.0	
Net premiums written by client location							
United States	\$1,242,906	75.0	\$1,323,376	77.1	\$1,340,792	81.2	
Europe	244,849	14.8	250,824	14.6	182,815	11.0	
Other	169,848	10.2	143,348	8.3	128,449	7.8	
Total	\$1,657,603	100.0	\$1,717,548	100.0	\$1,652,056	100.0	
Net premiums written by underwriting location							
United States	\$1,236,712	74.6	\$1,309,401	76.2	\$1,297,974	78.6	
Europe	342,021	20.6	330,746	19.3	269,128	16.3	
Other	78,870	4.8	77,401	4.5	84,954	5.1	
Total	\$1,657,603	100.0	\$1,717,548	100.0	\$1,652,056	100.0	

(1) Includes excess workers' compensation and employers' liability business, lender products and travel and accident business.

Marketing. Our insurance group's products are marketed principally through a group of licensed independent retail and wholesale brokers. Clients (insureds) are referred to our insurance group through a large number of international, national and regional brokers and captive managers who receive from the insured or insurer a set fee or brokerage commission usually equal to a percentage of gross premiums. In the past, our insurance group also entered into contingent commission arrangements with some brokers that provide for the payment of additional commissions based on volume or profitability of business. In general, our insurance group has no implied or explicit commitments to accept business from any particular broker and, neither brokers nor any other third parties have the authority to bind our insurance group, except in the case where underwriting authority may be delegated contractually to selected program administrators. Such administrators are subject to a due diligence financial and operational review prior to any such delegation of authority and ongoing reviews and audits are carried out as deemed necessary by our insurance group to assure the continuing integrity of underwriting and related business operations. See "Risk Factors Risks Relating to Our Company We could be materially adversely affected to the extent that managing general agents, general agents and other producers in our program business exceed their underwriting authorities or

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otherwise breach obligations owed to us." For information on major brokers, see note 11, "Commitments and Contingencies Concentrations of Credit Risk," of the notes accompanying our consolidated financial statements.

Risk Management and Reinsurance. In the normal course of business, our insurance group may cede a portion of its premium through quota share, surplus share, excess of loss and facultative reinsurance agreements. Reinsurance arrangements do not relieve our insurance group from its obligations to insureds. Reinsurance recoverables are recorded as assets, predicated on the reinsurers' ability to meet their obligations under the reinsurance agreements. If the reinsurers are unable to satisfy their obligations under the agreements, our insurance subsidiaries would be liable for such defaulted amounts. Our insurance subsidiaries, through their respective reinsurance security committees ("RSC"), are selective with regard to reinsurers, seeking to place reinsurance with only those reinsurers which meet and maintain specific standards of established criteria for financial strength. Each RSC evaluates the financial viability of its reinsurers through financial analysis, research and review of rating agencies' reports and also monitors reinsurance recoverables and letters of credit with unauthorized reinsurers. The financial analysis includes ongoing assessments of reinsurers, including a review of the financial stability, appropriate licensing, reputation, claims paying ability and underwriting philosophy of each reinsurer. Our insurance group will continue to evaluate its reinsurance requirements. See note 4, "Reinsurance," of the notes accompanying our consolidated financial statements.

For catastrophe-exposed insurance business, our insurance group seeks to limit the amount of exposure to catastrophic losses it assumes through a combination of managing aggregate limits, underwriting guidelines and reinsurance. For a discussion of our risk management policies, see "Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies, Estimates and Recent Accounting Pronouncements Ceded Reinsurance" and "Risk Factors Risks Relating to Our Industry The failure of any of the loss limitation methods we employ could have a material adverse effect on our financial condition or results of operations."

Claims Management. Our insurance group's claims management function is performed by claims professionals, as well as experienced external claims managers (third party administrators), where appropriate. In addition to investigating, evaluating and resolving claims, members of our insurance group's claims departments work with underwriting professionals as functional teams in order to develop products and services desired by the group's customers.

### **Our Reinsurance Operations**

Our reinsurance operations are conducted on a worldwide basis through our reinsurance subsidiaries, Arch Re Bermuda, Arch Re U.S. and Arch Re Europe. Arch Re Bermuda has offices in Bermuda. Arch Re Bermuda's branch office in Switzerland transferred its operations to Arch Re Europe in the fourth quarter of 2008. However, Arch Re Bermuda retained the reinsurance business written by Arch Re Bermuda Swiss Branch from its opening in 2006 until the time its operations were transferred to Arch Re Europe Swiss Branch. In the first quarter of 2009, Arch Re Bermuda Swiss Branch was formally de-registered from the commercial register of the Canton of Zurich. Our newly-formed reinsurance company, Arch Re Europe, is headquartered in Dublin with a branch office in Zurich. Arch Re Europe commenced underwriting in the fourth quarter of 2008 to complement the existing property and casualty treaty capabilities within our reinsurance group. Arch Re U.S. operates out of its office in Morristown, New Jersey. Our property facultative reinsurance operations are primarily conducted through Arch Re U.S. with certain executive functions conducted through Arch Re Facultative Underwriters Inc. located in Farmington, Connecticut. Arch Re Denmark is a subsidiary of Arch Re Bermuda which underwrote travel and accident reinsurance on behalf of Arch Insurance Europe until the end of 2008. Commencing January 1, 2009, Arch Re Denmark started underwriting travel and accident reinsurance on behalf of Arch Re Europe. As of February 15, 2009, our reinsurance group had approximately 160 employees.

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*Strategy*. Our reinsurance group's strategy is to capitalize on our financial capacity, experienced management and operational flexibility to offer multiple products through our operations. The reinsurance group's operating principles are to:

Actively Select and Manage Risks. Our reinsurance group only underwrites business that meets certain profitability criteria, and it emphasizes disciplined underwriting over premium growth. To this end, our reinsurance group maintains centralized control over reinsurance underwriting guidelines and authorities.

Maintain Flexibility and Respond to Changing Market Conditions. Our reinsurance group's organizational structure and philosophy allows it to take advantage of increases or changes in demand or favorable pricing trends. Our reinsurance group believes that its existing Bermuda-, U.S.- and European-based platform, broad underwriting expertise and substantial capital facilitates adjustments to its mix of business geographically and by line and type of coverage. Our reinsurance group believes that this flexibility allows it to participate in those market opportunities that provide the greatest potential for underwriting profitability.

*Maintain a Low Cost Structure.* Our reinsurance group believes that maintaining tight control over its staffing level and operating primarily as a broker market reinsurer permits it to maintain low operating costs relative to its capital and premiums.

Our reinsurance group writes business on both a proportional and non-proportional basis and writes both treaty and facultative business. In a proportional reinsurance arrangement (also known as pro rata reinsurance, quota share reinsurance or participating reinsurance), the reinsurer shares a proportional part of the original premiums and losses of the reinsured. The reinsurer pays the cedent a commission which is generally based on the cedent's cost of acquiring the business being reinsured (including commissions, premium taxes, assessments and miscellaneous administrative expenses) and may also include a profit factor. Non-proportional (or excess of loss) reinsurance indemnifies the reinsured against all or a specified portion of losses on underlying insurance policies in excess of a specified amount, which is called a "retention."

Non-proportional business is written in layers and a reinsurer or group of reinsurers accepts a band of coverage up to a specified amount. The total coverage purchased by the cedent is referred to as a "program." Any liability exceeding the upper limit of the program reverts to the cedent.

Our reinsurance group generally seeks to write significant lines on less commoditized classes of coverage, such as specialty property and casualty reinsurance treaties. However, with respect to other classes of coverage, such as property catastrophe and casualty clash, our reinsurance group participates in a relatively large number of treaties and assumes smaller lines where it believes that it can underwrite and process the business efficiently.

Our reinsurance group focuses on the following areas:

Casualty. Our reinsurance group reinsures third party liability and workers' compensation exposures from ceding company clients primarily on a treaty basis. The exposures that it reinsures include, among others, directors' and officers' liability, professional liability, automobile liability, workers' compensation and excess and umbrella liability. Our reinsurance group writes this business on a proportional and non-proportional basis. On proportional and non-proportional "working casualty business," which is treated separately from casualty clash business, our reinsurance group prefers to write treaties where there is a meaningful amount of actuarial data and where loss activity is more predictable.

*Property Excluding Property Catastrophe.* Our treaty reinsurance group reinsures individual property risks of a ceding company. Property per risk treaty and pro rata reinsurance contracts written by our treaty reinsurance group cover claims from individual insurance policies issued by reinsureds and include both personal lines and commercial property exposures (principally

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covering buildings, structures, equipment and contents). The primary perils in this business include fire, explosion, collapse, riot, vandalism, wind, tornado, flood and earthquake.

Through our property facultative reinsurance group, we also write reinsurance on a facultative basis whereby the reinsurer assumes part of the risk under a single insurance contract. Facultative reinsurance is typically purchased by ceding companies for individual risks not covered by their reinsurance