ARCH CAPITAL GROUP LTD.

Form 10-K February 26, 2016

> UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

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

OR

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

For the Fiscal Year Ended December 31, 2015

Commission File 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.)

Waterloo House, Ground Floor

100 Pitts Bay Road, Pembroke HM 08, 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

Name of each exchange on which registered

NASDAQ Stock Market (Common Shares)

6.75% Non-Cumulative Preferred Shares, Series C, \$0.01

par value per share

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 b 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 b

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 b No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes b No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) 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. Large accelerated Filer by Accelerated Filer o Non-accelerated Filer o Smaller reporting company o

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

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 \$7.89 billion.

As of February 23, 2016, there were 122,078,177 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 2016 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A before April 30, 2016.

ARCH CAPITAL GROUP LTD. TABLE OF CONTENTS

Item		Page
PART I		
ITEM 1. ITEM 1A. ITEM 1B. ITEM 2. ITEM 3. ITEM 4.	BUSINESS RISK FACTORS UNRESOLVED STAFF COMMENTS PROPERTIES LEGAL PROCEEDINGS MINE SAFETY DISCLOSURES	4 49 76 76 76 76 76
171111		
<u>ITEM 5.</u>	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	<u>76</u>
<u>ITEM 6.</u>	SELECTED FINANCIAL DATA	<u>79</u>
<u>ITEM 7.</u>	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION	<u>81</u>
ITEM 7A.	AND RESULTS OF OPERATIONS QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	<u>136</u>
<u>ITEM 8.</u>	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	<u>136</u>
<u>ITEM 9.</u>	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING	<u>207</u>
ITEM 9A.	AND FINANCIAL DISCLOSURE CONTROLS AND PROCEDURES	207
ITEM 9B.	OTHER INFORMATION	<u>207</u>
PART III		
<u>ITEM 10.</u>	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	<u>208</u>
<u>ITEM 11.</u>	EXECUTIVE COMPENSATION	<u>208</u>
<u>ITEM 12.</u>	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	<u>208</u>
<u>ITEM 13.</u>	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	<u>209</u>
<u>ITEM 14.</u>	PRINCIPAL ACCOUNTANT FEES AND SERVICES	<u>209</u>
PART IV		
<u>ITEM 15.</u>	EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	<u>209</u>
1		

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 ("PSLRA") 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 PSLRA or otherwise, can generally be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue 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, prevailing credit terms and the depth and duration of a recession) and conditions specific to the reinsurance and insurance markets (including the length and magnitude of the current "soft" market) in which we operate; competition, including increased competition, on the basis of pricing, capacity (including alternative sources of capital), coverage terms, or other factors;

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

our ability to successfully enhance, integrate and maintain operating procedures (including information technology) to effectively support our current and new business;

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, 2015;

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;

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;

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 fair value of our investments;

Table of Contents

changes in general economic conditions, including new or continued sovereign debt concerns in Eurozone countries or downgrades of U.S. securities by credit rating agencies, which could affect our business, financial condition and results of operations;

the volatility of our shareholders' equity from foreign currency fluctuations, which could increase due to us not matching portions of our projected liabilities in foreign currencies with investments in the same currencies; 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;

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.

Table of Contents

PART I

ITEM 1. BUSINESS

As used in this report, references to "we," "us," "our" or the "Company" refer to the consolidated operations of Arch Capital Group Ltd. ("ACGL") and its subsidiaries. Tabular amounts are in U.S. Dollars in thousands, except share amounts, unless otherwise noted. 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. is a Bermuda public limited liability company with \$7.10 billion in capital at December 31, 2015 and, through operations in Bermuda, the United States, Europe, Canada, Australia and Dubai, writes insurance and reinsurance on a worldwide basis. While we are positioned to provide a full range of property, casualty and mortgage insurance and reinsurance lines, we focus on writing specialty lines of insurance and reinsurance. For 2015, we wrote \$3.35 billion of net premiums and reported net income available to Arch common shareholders of \$515.8 million. Book value per common share was \$47.95 at December 31, 2015, compared to \$45.58 per share at December 31, 2014.

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 Waterloo House, Ground Floor, 100 Pitts Bay Road, Pembroke HM 08, Bermuda (telephone number: (441) 278-9250). ACGL makes available free of charge through its website, located at www.archcapgroup.com, 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 www.sec.gov. Our History

Our current operations were built on an existing underwriting platform through 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 global insurance and reinsurance markets.

Prior to the 2001 underwriting initiative, our insurance underwriting platform consisted of Arch Insurance (Bermuda), a division of Arch Reinsurance Ltd. ("Arch Re Bermuda"), our Bermuda-based reinsurer and insurer, and our U.S.-licensed insurers, Arch Insurance Company ("Arch Insurance"), Arch Excess & Surplus Insurance Company ("Arch E&S"), Arch Specialty Insurance Company ("Arch Specialty") and Arch Indemnity Insurance Company ("Arch Indemnity"). We established Arch Insurance Company (Europe) Limited ("Arch Insurance Company Europe"), our United Kingdom-based subsidiary, in 2004, and we expanded our North American presence when Arch Insurance opened a branch office in Canada in 2005. In January 2013, Arch Insurance Canada Ltd. ("Arch Insurance Canada"), a Canada domestic company, commenced operations and replaced the branch office. In 2009, we established a managing agent and syndicate 2012 ("Arch Syndicate 2012") at Lloyd's of London ("Lloyd's"). See "Operations—Insurance Operations" for further details on our insurance operations.

Prior to the 2001 underwriting initiative, our reinsurance underwriting platform consisted of Arch Re Bermuda and Arch Reinsurance Company ("Arch Re U.S."), our U.S.-licensed reinsurer. Our reinsurance operations in Europe began in November 2006 with the formation of a Swiss branch of Arch Re Bermuda, and the formation of a Danish underwriting agency in 2007. In addition to the U.S. reinsurance activities of Arch Re U.S., we launched our property facultative reinsurance underwriting operations in 2007, which underwrite in the U.S., Canada and Europe. We formed Arch Reinsurance Europe Designated Activity Company (formerly Arch Reinsurance Underwriting Europe Limited and referred to as "Arch Re Europe"), our Ireland-based reinsurance company, in 2008. In 2011, we launched treaty operations in

Table of Contents

Canada and in April 2012 we acquired the credit and surety reinsurance operations of Ariel Reinsurance Company Ltd. ("Ariel Re"). In May 2015, we obtained complete ownership and effective control of Gulf Reinsurance Limited, previously a joint venture. See "Operations—Reinsurance Operations" for further details on our reinsurance operations. Our mortgage group includes the results of Arch Mortgage Insurance Company ("Arch MI U.S.") and Arch Mortgage Insurance Designated Activity Company (formerly Arch Mortgage Insurance Limited and referred to as "Arch MI Europe"), leading providers of mortgage insurance products and services to the U.S. and European markets, respectively. Arch MI U.S. is approved as an eligible mortgage insurer by Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac"), each a government sponsored enterprise, or "GSE." The mortgage segment also includes GSE credit risk-sharing transactions and mortgage reinsurance for the U.S. and Australian markets. See "Operations—Mortgage Operations" for further details on our mortgage operations. On March 20, 2014, we acquired approximately 11% of Watford Holdings Ltd.'s common equity and a warrant to purchase additional common equity for \$100 million. Watford Holdings Ltd. is the parent of Watford Re Ltd., a then newly-formed multi-line Bermuda reinsurance company (together with Watford Holdings Ltd., "Watford Re"). Watford Re raised approximately \$1.1 billion of capital. We serve as Watford Re's reinsurance underwriting manager and Highbridge Principal Strategies, LLC ("Highbridge"), a subsidiary of JPMorgan Chase & Co., manages Watford Re's investment assets, each under separate long term services agreements. The results of Watford Re are included in our consolidated financial statements. See "Operations—Other Operations" for further details on Watford Re. The growth of our underwriting platforms was supported through the net proceeds of: (1) an equity capital infusion of \$763 million led by funds affiliated with Warburg Pincus LLC and Hellman & Friedman LLC in late 2001; (2) a public offering of 7.5 million of our common shares with net proceeds of \$179 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 million; (4) a March 2004 public offering of 4.7 million of our common shares with net proceeds of \$179 million; (5) a May 2004 public offering of \$300 million principal amount of our 7.35% senior notes due May 2034; (6) a February 2006 public offering of \$200 million of our 8.00% series A non-cumulative preferred shares; (7) a May 2006 public offering of \$125 million of our 7.875% series B non-cumulative preferred shares; (8) an April 2012 public offering of \$325 million of our 6.75% series C non-cumulative preferred shares which was used to redeem all series A and series B preferred shares; and (9) a December 2013 public offering of \$500 million principal amount of 5.144% senior notes due November 1, 2043 by Arch Capital Group (U.S.) Inc. ("Arch-U.S."), a wholly owned subsidiary of ACGL, and fully and unconditionally guaranteed by ACGL.

The board of directors of ACGL has authorized the investment in ACGL's common shares through a share repurchase program. Repurchases under the share repurchase program may be effected from time to time in open market or privately negotiated transactions. Since the inception of the share repurchase program in February 2007 through December 31, 2015, ACGL has repurchased 124.1 million common shares for an aggregate purchase price of \$3.61 billion. At December 31, 2015, the total remaining authorization under the share repurchase program was \$521.8 million.

Operations

We classify our businesses into three underwriting segments — insurance, reinsurance and mortgage — and two other operating segments — 'other' and corporate (non-underwriting). For an analysis of our underwriting results by segment, see note 5, "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." Insurance Operations

Our insurance operations are conducted in Bermuda, the United States, Europe, Canada, Australia and South Africa. Our insurance operations in Bermuda are conducted through Arch Insurance (Bermuda), a division of Arch Re Bermuda, and Alternative Re Limited.

In the U.S., our insurance group's principal insurance subsidiaries are Arch Insurance, Arch Specialty, Arch Indemnity and Arch E&S. Arch Insurance is an admitted insurer in 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and Guam. Arch Specialty is an approved excess and surplus lines insurer in 49 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands and an authorized insurer in one state. Arch Indemnity is an admitted insurer in 49 states and the District of Columbia. Arch E&S, which is not currently writing business, is an

Table of Contents

and surplus lines insurer in 47 states and the District of Columbia and an authorized insurer in one state. The headquarters for our insurance group's U.S. support operations (excluding underwriting units) is in Jersey City, New Jersey. The insurance group has offices throughout the U.S., including four regional offices located in Alpharetta, Georgia, Chicago, Illinois, New York, New York and San Francisco, California and additional branch offices. Our insurance operations in Canada are conducted through Arch Insurance Canada, a Canada domestic company which is authorized in all Canadian provinces and territories. Arch Insurance Canada is headquartered in Toronto, Ontario with other regional offices in Canada. Our insurance operations in Europe are conducted on two platforms, Arch Insurance Company Europe and Arch Syndicate 2012 (the U.K. insurance operations are collectively referred to as "Arch Insurance Europe"). Arch Insurance Europe conducts its operations from London, England. Arch Insurance Company Europe is approved as an excess and surplus lines insurer in 27 states and the District of Columbia and also has branches in Germany, Italy, Spain and Sweden. Arch Underwriting at Lloyd's Ltd ("AUAL") is the managing agent of Arch Syndicate 2012 and is responsible for the daily management of Arch Syndicate 2012. Arch Syndicate 2012 has enhanced our underwriting platform by providing us with access to Lloyd's extensive distribution network and worldwide licenses. Arch Underwriting at Lloyd's (Australia) Pty Ltd, based in Sydney, Australia, and Arch Underwriting Managers at Lloyd's (South Africa) (Pty) Limited, based in Johannesburg, South Africa, are Lloyd's services companies which underwrite exclusively for Arch Syndicate 2012. Arch Underwriting Agency (Australia) Pty. Ltd. is an Australian agency which also underwrites for Arch Syndicate 2012 and third parties.

As of February 23, 2016, our insurance group had approximately 1,310 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 its 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.

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.

Table of Contents

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

Construction and national accounts: primary and excess casualty coverages to middle and large accounts in the construction industry and a wide range of products for middle and large national accounts, specializing in loss sensitive primary casualty insurance programs (including large deductible, self-insured retention and retrospectively rated programs).

Excess and surplus casualty: primary and excess casualty insurance coverages, including middle market energy business, and contract binding, which primarily provides casualty coverage through a network of appointed agents to small and medium risks.

Lenders products: collateral protection, debt cancellation and service contract reimbursement products to banks, credit unions, automotive dealerships and original equipment manufacturers and other specialty programs that pertain to automotive lending and leasing.

Professional lines: directors' and officers' liability, errors and omissions liability, employment practices liability, fiduciary liability, crime, professional indemnity and other financial related coverages for corporate, private equity, venture capital, real estate investment trust, limited partnership, financial institution and not-for-profit clients of all sizes and medical professional and general liability insurance coverages for the healthcare industry. The business is predominately written on a claims-made basis.

Programs: primarily package policies, underwriting workers' compensation and umbrella liability business in support of desirable package programs, targeting program managers with unique expertise and niche products offering general liability, commercial automobile, inland marine and property business with minimal catastrophe exposure. Property, energy, marine and aviation: primary and excess general property insurance coverages, including catastrophe-exposed property coverage, for commercial clients. Coverages for marine include hull, war, specie and

liability. Aviation and stand alone terrorism are also offered.

Travel, accident and health: specialty travel and accident and related insurance products for individual, group travelers, travel agents and suppliers, as well as accident and health, which provides accident, disability and medical plan insurance coverages for employer groups, medical plan members, students and other participant groups. Other: includes alternative market risks (including captive insurance programs), excess workers' compensation and employer's liability insurance coverages for qualified self-insured groups, associations and trusts, and contract and commercial surety coverages, including contract bonds (payment and performance bonds) primarily for medium and large contractors and commercial surety bonds for Fortune 1,000 companies and smaller transaction business programs.

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.

Table of Contents

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

written for our mourance group.							
	Year Ended	Decembe	r 31,				
	2015		2014		2013		
INSURANCE SEGMENT	Amount	% of Total	Amount	% of Total	Amount	% of Total	
Net premiums written							
Professional lines	\$434,024	21	\$476,604	22	\$476,193	24	
Programs	423,157	21	480,580	22	419,673	22	
Construction and national accounts	299,463	15	286,994	13	271,110	14	
Excess and surplus casualty	204,856	10	212,519	10	149,286	8	
Property, energy, marine and aviation	203,186	10	244,640	11	280,551	14	
Travel, accident and health	160,132	8	145,732	7	104,903	5	
Lenders products	106,916	5	100,407	5	101,576	5	
Other	213,937	11	199,178	9	145,504	8	
Total	\$2,045,671	100	\$2,146,654	100	\$1,948,796	100	
Net premiums written by client location							
United States	\$1,710,918	84	\$1,726,181	80	\$1,526,156	78	
Europe	187,020	9	240,136	11	226,254	12	
Asia and Pacific	64,638	3	79,564	4	95,970	5	
Other	83,095	4	100,773	5	100,416	5	
Total	\$2,045,671	100	\$2,146,654	100	\$1,948,796	100	
Net premiums written by underwriting location							
United States	\$1,673,867	82	\$1,688,887	79	\$1,478,930	76	
Europe	317,998	16	394,430	18	389,763	20	
Other	53,806	3	63,337	3	80,103	4	
Total	\$2,045,671	100	\$2,146,654	100	\$1,948,796	100	

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 provided for the payment of additional commissions based on volume or profitability of business. Currently, some of our contracts with brokers provide for additional commissions based on volume. We have also entered into service agreements with select international brokers that provide access to their proprietary industry analytics. 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 select 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 exceed their underwriting authorities or if our agents, our insureds or other third parties commit fraud or otherwise breach obligations owed to us." For information on major brokers, see note 15, "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 on a quota share or excess of loss basis through treaty or facultative reinsurance agreements. Reinsurance

arrangements do not relieve our insurance group from its primary 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 principal insurance subsidiaries, with oversight by a group-wide reinsurance steering committee ("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. The RSC evaluates the financial viability of its reinsurers through financial analysis, research and review of rating agencies' reports and also monitors reinsurance

Table of Contents

recoverables and collateral with unauthorized reinsurers. The financial analysis includes ongoing qualitative and quantitative 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 7, "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 clients. Reinsurance Operations

Our reinsurance operations are conducted on a worldwide basis through our reinsurance subsidiaries, Arch Re Bermuda, Arch Re U.S., Arch Re Europe and Gulf Reinsurance Limited. Arch Re Bermuda is a registered Class 4 insurer and long-term insurer and is headquartered in Hamilton, Bermuda. Arch Re U.S. is licensed or is an accredited or otherwise approved reinsurer in 50 states and the District of Columbia and the provinces of Ontario and Quebec in Canada with its principal U.S. offices in Morristown, New Jersey. Our property facultative reinsurance operations are conducted primarily through Arch Re U.S. with certain executive functions conducted through Arch Re Facultative Underwriters Inc. located in Farmington, Connecticut. The property facultative reinsurance operations have offices throughout the U.S., Canada and in Europe. Arch Re Europe, licensed and authorized as a non-life reinsurer and a life reinsurer, is headquartered in Dublin, Ireland with branch offices in Zurich and London.

In May 2008, we provided \$100.0 million of funding to Gulf Reinsurance Limited, a wholly owned subsidiary of Gulf Re Holdings Limited (collectively, "Gulf Re"), pursuant to the joint venture agreement with Gulf Investment Corporation GSC ("GIC"). Under the agreement, Arch Re Bermuda and GIC each owned 50% of Gulf Re. Gulf Re provides property and casualty reinsurance primarily in the member states of the Gulf Cooperation Council, which include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. We entered into a number of strategic initiatives related to Gulf Re in the 2014 fourth quarter, including an agreement to acquire complete ownership and effective control of Gulf Re. Such agreement was approved by the Dubai Financial Services Authority in April 2015 and the transaction closed on May 14, 2015. GIC will continue to participate equally with us in the financial results of Gulf Re and have the ability to purchase shares in Gulf Re over the next seven years.

In October 2008, Arch Re Europe was licensed and authorized as a non-life reinsurer and as a life reinsurer in November 2009. In April 2012, we acquired the credit and surety reinsurance operations of Ariel Re based in Zurich, Switzerland. Treaty operations in Canada commenced in 2011 and, beginning in 2015, the business is written through the Canadian branch of Arch Re U.S. ("Arch Re Canada").

As of February 23, 2016, our reinsurance group had approximately 280 employees.

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 platforms in Bermuda, the U.S., Europe, Dubai and Canada, broad underwriting expertise and substantial capital facilitate adjustments to its mix of business geographically and by

Table of Contents

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.

The reinsurance group's treaty operations generally seek 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, the reinsurance group's treaty operations participate in a relatively large number of treaties where they believe that they can underwrite and process the business efficiently. The reinsurance group's property facultative operations write reinsurance on a facultative basis whereby they assume part of the risk under primarily single insurance contracts. Facultative reinsurance is typically purchased by ceding companies for individual risks not covered by their reinsurance treaties, for unusual risks or for amounts in excess of the limits on their reinsurance treaties.

Our reinsurance group focuses on the following areas:

Casualty: provides coverage to ceding company clients on third party liability and workers' compensation exposures from ceding company clients, primarily on a treaty basis. Exposures include, among others, executive assurance, professional liability, workers' compensation, excess and umbrella liability, excess motor and healthcare business. Marine and aviation: provides coverage for energy, hull, cargo, specie, liability and transit, and aviation business, including airline and general aviation risks. Business written may also include space business, which includes coverages for satellite assembly, launch and operation for commercial space programs.

Other specialty: provides coverage to ceding company clients for non-excess motor, including U.K. business primarily emanating from two clients, and other lines including surety, accident and health, workers' compensation catastrophe, agriculture, trade credit and political risk.

Property catastrophe: provides protection for most catastrophic losses that are covered in the underlying policies written by reinsureds, including hurricane, earthquake, flood, tornado, hail and fire, and coverage for other perils on a case-by-case basis. Property catastrophe reinsurance provides coverage on an excess of loss basis when aggregate losses and loss adjustment expense from a single occurrence or an aggregation of losses from a covered peril exceed the retention specified in the contract.

Property excluding property catastrophe: provides coverage for both personal lines and commercial property exposures and principally covers buildings, structures, equipment and contents. The primary perils in this business include fire, explosion, collapse, riot, vandalism, wind, tornado, flood and earthquake. Business is assumed on both a proportional and excess of loss basis. In addition, facultative business is written which focuses on commercial property risks on an excess of loss basis.

Other. includes life reinsurance business on both a proportional and non-proportional basis, casualty clash business and, in limited instances, non-traditional business which is intended to provide insurers with risk management solutions that complement traditional reinsurance.

Underwriting Philosophy. Our reinsurance group employs a disciplined, analytical approach to underwriting reinsurance risks that is designed to specify an adequate premium for a given exposure commensurate with the amount of

Table of Contents

capital it anticipates placing at risk. A number of our reinsurance group's underwriters are also actuaries. It is our reinsurance group's belief that employing actuaries on the front-end of the underwriting process gives it an advantage in evaluating risks and constructing a high quality book of business.

As part of the underwriting process, our reinsurance group typically assesses a variety of factors, including: adequacy of underlying rates for a specific class of business and territory;

the reputation of the proposed cedent and the likelihood of establishing a long-term relationship with the cedent, the geographic area in which the cedent does business, together with its catastrophe exposures, and our aggregate exposures in that area;

historical loss data for the cedent and, where available, for the industry as a whole in the relevant regions, in order to compare the cedent's historical loss experience to industry averages;

projections of future loss frequency and severity; and

the perceived financial strength of the cedent.

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

written for our remainance group.						
	Year Ended					
	2015		2014		2013	
REINSURANCE SEGMENT	Amount	% of Total	Amount	% of Total	Amount	% of Total
Net premiums written						
Casualty	\$303,093	29	\$317,996	25	\$306,304	23
Other specialty	298,794	29	405,126	32	417,865	32
Property excluding property catastrophe	280,511	27	343,043	27	292,536	22
Property catastrophe	91,620	9	137,471	11	220,749	17
Marine and aviation	50,834	5	50,444	4	64,380	5
Other	13,556	1	11,911	1	11,167	1
Total	\$1,038,408	100	\$1,265,991	100	\$1,313,001	100
Net premiums written by client location						
United States	\$470,484	45	\$589,255	47	\$706,388	54
Europe	307,165	30	355,735	28	327,059	25
Asia and Pacific	94,609	9	142,626	11	94,252	7
Bermuda	80,888	8	77,620	6	87,047	7
Other	85,262	8	100,755	8	98,255	7
Total	\$1,038,408	100	\$1,265,991	100	\$1,313,001	100
Net premiums written by underwriting location						
Bermuda	\$281,985	27	\$394,351	31	\$459,467	35
United States	439,190	42	492,891	39	507,183	39
Europe	298,790	29	343,823	27	309,129	24
Other	18,443	2	34,926	3	37,222	3
Total	\$1,038,408	100	\$1,265,991	100	\$1,313,001	100

Marketing. Our reinsurance group generally markets its reinsurance products through brokers, except our property facultative reinsurance group, which generally deals directly with the ceding companies. Brokers do not have the authority to bind our reinsurance group with respect to reinsurance agreements, nor does our reinsurance group commit in advance to accept any portion of the business that brokers submit to them. Our reinsurance group generally pays brokerage fees to brokers based on negotiated percentages of the premiums written through such brokers. For information on major brokers, see note 15, "Commitments and Contingencies—Concentrations of Credit Risk," of the notes accompanying our consolidated financial statements.

Risk Management and Retrocession. Our reinsurance group currently purchases a combination of per event excess of loss, per risk excess of loss, proportional retrocessional agreements and other structures that are available in the market.

Table of Contents

Such arrangements reduce the effect of individual or aggregate losses on, and in certain cases may also increase the underwriting capacity of, our reinsurance group. Our reinsurance group will continue to evaluate its retrocessional requirements based on its net appetite for risk. See note 7, "Reinsurance," of the notes accompanying our consolidated financial statements.

For catastrophe exposed reinsurance business, our reinsurance group seeks to limit the amount of exposure it assumes from any one reinsured and the amount of the aggregate exposure to catastrophe losses from a single event in any one geographic zone. 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. Claims management includes the receipt of initial loss reports, creation of claim files, determination of whether further investigation is required, establishment and adjustment of case reserves and payment of claims. Additionally, audits are conducted for both specific claims and overall claims procedures at the offices of selected ceding companies. Our reinsurance group makes use of outside consultants for claims work from time to time.

Mortgage Operations

Our mortgage group includes direct mortgage insurance in the United States primarily provided by Arch MI U.S. and through an affiliate of Arch MI U.S., Arch Mortgage Guaranty Company; mortgage reinsurance provided primarily by Arch Re Bermuda to mortgage insurers on both a proportional and non-proportional basis globally; direct mortgage insurance in Europe provided by Arch MI Europe; and various GSE credit risk-sharing products provided primarily by Arch Re Bermuda.

On January 30, 2014, we completed the acquisition of CMG Mortgage Insurance Company from its owners, PMI Mortgage Insurance Co., in Rehabilitation ("PMI") and CMFG Life Insurance Company ("CUNA Mutual") and acquired PMI's mortgage insurance platform and related assets. CMG Mortgage Insurance Company was renamed "Arch Mortgage Insurance Company" (Arch MI U.S.) and entered the U.S. mortgage insurance marketplace in 2014. Arch MI U.S., based in Walnut Creek, California, is licensed and operates in all 50 states, the District of Columbia and Puerto Rico. It has been approved as an eligible mortgage insurer by Fannie Mae and Freddie Mac, each a GSE, subject to maintaining certain ongoing requirements.

In addition, Arch Mortgage Guaranty Company, an affiliate of Arch MI U.S., offers direct mortgage insurance to U.S. mortgage lenders with respect to mortgages that lenders intend to retain in portfolio or include in non-agency securitizations. Arch Mortgage Guaranty Company is licensed in all states. Arch Mortgage Guaranty Company insures mortgages that are not intended to be sold to the GSEs, and it is therefore not approved by either GSE as an eligible mortgage insurer.

Arch MI Europe was licensed and authorized by the Central Bank of Ireland ("CBOI") in 2011 to operate on a pan-European basis under the European Freedom of Services Act. Arch MI Europe is headquartered in Dublin, Ireland. Arch Underwriters Europe Limited ("Arch Underwriters Europe"), an Ireland company, acts on behalf of Arch MI Europe and has branch offices in Italy, Switzerland and the U.K.

As of February 23, 2016, our mortgage group had approximately 350 employees.

Table of Contents

Strategy. The mortgage insurance market operates on its own distinct underwriting cycle, with demand driven mainly by the housing market and general economic conditions. As a result, the creation of the mortgage group provides us with a more diverse revenue stream. Our mortgage group's strategy is to capitalize on its financial capacity, the mortgage insurance technology platform of Arch MI U.S. and its experienced management and operational flexibility to offer mortgage insurance, reinsurance and other risk-sharing products in the United States and around the world. Our mortgage group's operating principles and goals are to:

Expand Arch MI U.S.'s business. Prior to its acquisition, Arch MI U.S. was the leading provider of mortgage insurance products and services to credit unions in the U.S. and was approved by the GSEs as an eligible mortgage insurer solely for credit union customers. Our mortgage group's strategy is to continue to broaden Arch MI U.S.'s customer base to national and regional banks and mortgage originators, while maintaining and increasing Arch MI U.S.'s share of the mortgage insurance credit union market.

Capitalize on profitable underwriting opportunities. Our mortgage group believes that its experienced management, analytics and underwriting teams are positioned to identify and evaluate business with attractive risk/reward characteristics.

Maintain a disciplined credit risk philosophy. Our mortgage group's credit risk philosophy is to generate underwriting profit through disciplined credit risk analysis and proper pricing. Our mortgage group believes that the key to this approach is adherence to uniform underwriting standards across all phases of the applicable housing and mortgage lending cycles.

Provide superior and innovative mortgage products and services. Our mortgage group believes that it can leverage our financial capacity, experience across insurance product lines, and its analytics and technology to provide innovative products and superior service. The mortgage group believes that its delivery of tailored products that meet the specific, evolving needs of its customers will be a key to the group's success.

Our mortgage group focuses on the following areas:

Direct mortgage insurance in the United States. Under their monoline insurance licenses, Arch MI U.S. and Arch Mortgage Guaranty Company may only offer private mortgage insurance covering first lien, one-to-four family residential mortgages. Nearly all of Arch MI U.S.'s mortgage insurance written provides first loss protection on loans originated by mortgage lenders and sold to the GSEs. Each GSE's Congressional charter generally prohibits it from purchasing a mortgage where the principal balance of the mortgage is in excess of 80% of the value of the property securing the mortgage unless the excess portion of the mortgage is protected against default by lender recourse, participation or by a qualified insurer. As a result, such "high loan-to-value mortgages" purchased by Fannie Mae or Freddie Mac generally are insured with private mortgage insurance.

Mortgage insurance protects the insured lender, investor or GSE against loss in the event of a borrower's default. If a borrower defaults on mortgage payments, private mortgage insurance reduces and may eliminate losses to the insured. Private mortgage insurance may also facilitate the sale of mortgage loans in the secondary mortgage market because of the credit enhancement it provides. Our primary U.S. mortgage insurance policies predominantly cover individual loans at the time the loan is originated. We also may enter into insurance transactions with lenders and investors, under which we insure a portfolio of loans at or after origination. In the future, Arch MI U.S. or Arch Mortgage Guaranty Company may offer mortgage insurance on a "pool" basis. Under pool insurance, the mortgage insurer provides coverage on a group of specified loans, typically for 100% of all contractual or policy-defined losses on every loan in the portfolio, subject to an agreed aggregate loss limit.

Direct mortgage insurance in Europe and other countries where we identify profitable underwriting opportunities. Since 2011, Arch MI Europe has offered mortgage insurance to European mortgage lenders. Arch MI Europe's mortgage insurance is primarily purchased by European mortgage lenders in order to reduce lenders' credit risk and regulatory capital requirements associated with the insured mortgages. In certain European countries, lenders purchase mortgage insurance to facilitate regulatory compliance with respect to high loan-to-value residential lending. Arch MI Europe offers mortgage insurance on both a "flow" basis to cover new originations and through structured transactions to cover one or more portfolios of previously originated residential loans.

Table of Contents

Reinsurance. Arch Re Bermuda provides quota share reinsurance covering U.S. and international mortgages. Such amounts include a quota share reinsurance agreement with PMI pursuant to which it agreed to provide 100% quota share indemnity reinsurance to PMI for all certificates of insurance that were issued by PMI from January 1, 2009 through December 31, 2011 that were not in default as of an agreed upon effective date. Other than this quota share, no PMI legacy mortgage insurance exposures were assumed.

Other credit risk-sharing products. In addition to providing traditional mortgage insurance and reinsurance, we offer various credit risk-sharing products to government agencies and mortgage lenders. The GSEs have reduced their exposure to mortgage risk and continue to shift more of it to the private sector, creating opportunities for insurers like Arch. In 2013, Arch Re Bermuda became the first (re)insurance company to participate in Freddie Mac's program to transfer certain credit risk in its single-family portfolio to the private sector.

Underwriting Philosophy. Our mortgage group believes in a disciplined, analytical approach to underwriting mortgage risks by utilizing proprietary and third party models to forecast delinquency and future home price movements with the goal of ensuring that premiums are adequate for the risk being insured. Experienced actuaries and statistical modelers are engaged in analytics to inform the underwriting process. As part of the underwriting process, our mortgage group typically assesses a variety of factors, including the:

ability and willingness of the mortgage borrower to pay its obligations under the mortgage loan being insured; characteristics of the mortgage loan being insured and value of the collateral securing the mortgage loan; financial strength, quality of operations and reputation of the lender originating the mortgage loan;

expected future home price movements which vary by geography;

projections of future loss frequency and severity; and

- adequacy of premium
- rates.

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

	Year Endec					
	2015		2014		2013	
MORTGAGE SEGMENT	Amount	% of Total	Amount	% of Total	Amount	% of Total
Net premiums written by client location						
United States	\$193,617	72	\$184,333	90	\$63,692	71
Other	73,876	28	20,504	10	25,878	29
Total	\$267,493	100	\$204,837	100	\$89,570	100
Net premiums written by underwriting location						
United States	\$125,317	47	\$98,809	48	\$ —	_
Other	142,176	53	106,028	52	89,570	100
Total	\$267,493	100	\$204,837	100	\$89,570	100

Marketing. Arch MI U.S. employs a sales force located throughout the U.S. to directly sell mortgage insurance products and services to its bank customers. Arch MI U.S. has entered into a distribution services agreement with CUNA Mutual (a former part owner of Arch MI U.S.) pursuant to which CUNA Mutual sales employees exclusively market Arch MI U.S. mortgage insurance products to credit union customers. In Europe and Bermuda, our products and services are distributed on a direct basis and through brokers. Each country represents a unique set of opportunities and challenges that require knowledge of market conditions and client needs to develop effective solutions.

Risk Management. Exposure to mortgage risk is monitored globally and managed through underwriting guidelines, reinsurance, concentration limits and limits on net probable loss resulting from a severe economic downturn in the housing market. 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." Our mortgage group

Table of Contents

has ceded a portion of its premium on a quota share basis through certain reinsurance agreements. Reinsurance arrangements do not relieve our mortgage group from its primary obligations to insured parties. 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 mortgage subsidiaries would be liable for such defaulted amounts.

Claims Management. With respect to our direct mortgage insurance business, the claims process generally begins with notification by the insured or servicer to us of a default on an insured loan. The insured is generally required to notify us of a default after the borrower becomes two consecutive monthly payments in default. Borrowers default for a variety of reasons, including a reduction of income, unemployment, divorce, illness, inability to manage credit, rising interest rate levels and declining home prices. Upon notice of a default, in certain cases we may coordinate with loan servicers to facilitate and enhance retention workouts on insured loans. Retention workouts include loan modifications and other loan repayment options, which may enable borrowers to cure mortgage defaults and retain ownership of their homes. If a retention workout is not viable for a borrower, our loss on a loan may be mitigated through a liquidation workout option, including a pre-foreclosure sale or a deed-in-lieu of foreclosure.

In the U.S., our master policies generally provide that within 60 days of the perfection of a primary insurance claim, we have the option of:

paying the insurance coverage percentage specified in the certificate of insurance multiplied by the loss amount; in the event the property is sold pursuant to an approved prearranged sale, paying the lesser of (i) 100% of the loss amount less the proceeds of sale of the property, or (ii) the specified coverage percentage multiplied by the loss amount; or

paying 100% of the loss amount in exchange for the insured's conveyance to us of good and marketable title to the property, with us then selling the property for our own account.

While we select the claim settlement option that best mitigates the amount of our claim payment, in the U.S. we generally pay the coverage percentage multiplied by the loss amount.

Other Operations

In 2014 we sponsored, along with Highbridge, Watford Re, a new property and casualty reinsurer for which we perform underwriting services and Highbridge manages the investments, each under a long term services agreement. Watford Re's strategy is to combine a diversified reinsurance business with a disciplined investment strategy comprised primarily of non-investment grade credit assets. Watford Re believes this combination will enable it to generate attractive risk-adjusted returns for its shareholders over the long term. Watford Re has its own management and board of directors and is responsible for the overall profitability of its results. John Rathgeber, previously Vice Chairman of Arch Worldwide Reinsurance Group, was named CEO of Watford Re. In addition, Marc Grandisson, President and COO of ACGL, and Nicolas Papadopoulo, CEO Reinsurance Group, were appointed as two of the five members of the board of directors of Watford Re. We invested \$100.0 million to acquire approximately 11% of Watford Re's common equity and a warrant to purchase additional common equity. We performed an analysis of Watford Re and concluded that Watford Re is a variable interest entity and that we are the primary beneficiary of Watford Re. As such, 100% of the results of Watford Re are included in our consolidated financial statements. Employees

As of February 23, 2016, ACGL and its subsidiaries employed approximately 2,030 full-time employees. Reserves

Reserve estimates are derived after extensive consultation with individual underwriters and claims professionals, actuarial analysis of the loss reserve development and comparison with industry benchmarks. Our reserves are established and reviewed by experienced internal actuaries. Generally, reserves are established without regard to whether we may subsequently contest the claim. We do not currently discount our loss reserves except for excess workers' compensation and employers' liability loss reserves in our insurance operations.

Table of Contents

Loss reserves represent estimates of what the insurer or reinsurer ultimately expects to pay on claims at a given time, based on facts and circumstances then known, and it is probable that the ultimate liability may exceed or be less than such estimates. Even actuarially sound methods can lead to subsequent adjustments to reserves that are both significant and irregular due to the nature of the risks written. Loss reserves are inherently subject to uncertainty. In establishing the reserves for losses and loss adjustment expenses, we have made various assumptions relating to the pricing of our reinsurance contracts and insurance policies and have also considered available historical industry experience and current industry conditions. The timing and amounts of actual claim payments related to recorded reserves vary based on many factors including large individual losses and changes in the legal environment, as well as general market conditions. The ultimate amount of the claim payments could differ materially from our estimated amounts. Certain lines of business written by us, such as excess casualty, have loss experience characterized as low frequency and high severity. This may result in significant variability in loss payment patterns and, therefore, may impact the related asset/liability investment management process in order to be in a position, if necessary, to make these payments. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies, Estimates and Recent Accounting Pronouncements—Reserves for Losses and Loss Adjustment Expenses."

Table of Contents

The table below represents the development of consolidated loss reserves as determined under accounting principles generally accepted in the United States of America ("GAAP") for 2005 through 2015:

Development of GAAP Reserves

Cumulative Redundancy (Deficiency)

(U.S. dollars in millions) Reserve for losses and loss adjustment	Year En 2005	ded Dece 2006	mber 31, 2007	2008	2009	2010	2011	2012	2013	2014	2015
expenses, net of reinsurance recoverables	\$4,063	\$4,911	\$5,483	\$5,938	\$6,214	\$6,395	\$6,638	\$7,104	\$7,076	\$7,258	\$7,296
Cumulative net paid losses as of:											
One year later	745	843	954	1,167	1,106	1,127	1,169	1,351	1,300	1,454	
Two years later	1,332	1,486	1,817	2,114	1,943	1,938	2,096	2,353	2,313		
Three years	s 1,688	2,040	2,308	2,768	2,561	2,613	2,845	3,118			
Four years later	1,993	2,375	2,755	3,222	3,070	3,128	3,363				
Five years later	2,249	2,680	3,023	3,596	3,469	3,491					
Six years later	2,447	2,867	3,254	3,871	3,761						
Seven year later	s _{2,603}	3,005	3,429	4,083							
Eight years later	2,684	3,123	3,577								
Nine years later	2,767	3,250									
Ten years later	2,842										
Net re-estimated reserve as of:											
One year later	3,986	4,726	5,173	5,749	6,067	6,110	6,416	6,840	6,749	6,973	
Two years later	3,809	4,387	4,959	5,620	5,826	5,927	6,160	6,540	6,479		
Three years	s 3,541	4,164	4,849	5,466	5,711	5,748	5,930	6,303			

Four voors		_									
Four years later	3,381	4,107	4,740	5,403	5,570	5,567	5,739				
Five years later	3,359	4,026	4,680	5,308	5,439	5,406					
Six years later	3,301	3,989	4,604	5,200	5,313						
Seven year later		3,944	4,508	5,112							
Eight years later	3,280	3,860	4,452								
Nine years later	3,237	3,816									
Ten years later	3,200										
Cumulative net redundancy	\$863	\$1,095	\$1,031	\$826	\$901	\$989	\$899	\$801	\$597	\$285	
Cumulative net redundancy as a percentage of net reserves Gross reserve for losses and	f e	622.3 %	618.8 %	613.9 %	614.5 %	615.5 %	613.5 %	%11.3 %	%8.4	63.9 %	
loss adjustment expenses	\$5,453	\$6,463	\$7,092	\$7,667	\$7,873	\$8,098	\$8,456	\$8,933	\$8,824	\$9,036 \$9,125	
Reinsurance recoverable Net reserve		(1,552)	(1,609)	(1,729)	(1,659)	(1,703)	(1,818)	(1,829)	(1,748)	(1,778) (1,829)	
for losses and loss adjustment expenses		\$4,911	\$5,483	\$5,938	\$6,214	\$6,395	\$6,638	\$7,104	\$7,076	\$7,258 \$7,296	
Gross re-estimated reserve	•	\$5,119	\$5,839	\$6,554	\$6,719	\$6,794	\$7,250	\$8,037	\$8,200	\$8,786	
Re-estimated reinsurance recoverable Net		(1,303)	(1,387)	(1,442)	(1,406)	(1,388)	(1,511)	(1,734)	(1,721)	(1,813)	
re-estimated	3,200	3,816	4,452	5,112	5,313	5,406	5,739	6,303	6,479	6,973	
reserve Gross re-estimated	\$971	\$1,344	\$1,253	\$1,113	\$1,154	\$1,304	\$1,206	\$896	\$624	\$250	

redundancy

The preceding table does not present accident or policy year development data and, instead, presents an analysis of the claim development of gross and net balance sheet reserves existing at each calendar year-end in subsequent calendar years. The top line of the table shows the reserves, net of reinsurance recoverables, at the balance sheet date for each of the indicated years. This represents the estimated amounts of net losses and loss adjustment expenses arising in all prior years that are unpaid at the balance sheet date, including incurred but not reported ("IBNR") reserves. The table also shows the re-estimated amount of the previously recorded reserves based on experience as of the end 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 in the estimates over all prior years. The table also

Table of Contents

shows the cumulative amounts paid as of successive years with respect to that reserve liability. In addition, the table reflects the claim development of the gross balance sheet reserves for ending reserves at December 31, 2005 through December 31, 2015.

The following table represents an analysis of consolidated losses and loss adjustment expenses and a reconciliation of the beginning and ending reserve for losses and loss adjustment expenses:

	Year Ended	D	ecember 31,			
	2015		2014		2013	
Reserve for losses and loss adjustment expenses at beginning of year	\$9,036,448		\$8,824,696		\$8,933,292	
Unpaid losses and loss adjustment expenses recoverable	1,778,303		1,748,250		1,829,070	
Net reserve for losses and loss adjustment expenses at beginning of year			7,076,446		7,104,222	
Net incurred losses and loss adjustment expenses relating to losses						
occurring in:						
Current year	2,336,026		2,246,152		1,943,466	
Prior years	(285,123)	(326,902)	(264,042)
Total net incurred losses and loss adjustment expenses	2,050,903		1,919,250		1,679,424	
Net losses and loss adjustment expense reserves of acquired business (1)262		120,671		_	
Foreign exchange (gains) losses	(143,653)	(160,486)	1,617	
Net paid losses and loss adjustment expenses relating to losses occurring	ng					
in:						
Current year	(454,179)	(347,270)	(288,114)
Prior years	(1,415,065)	(1,350,466)	(1,420,703)
Total net paid losses and loss adjustment expenses	(1,869,244)	(1,697,736)	(1,708,817)
Net reserve for losses and loss adjustment expenses at end of year	7,296,413		7,258,145		7,076,446	
Unpaid losses and loss adjustment expenses recoverable	1,828,837		1,778,303		1,748,250	
Reserve for losses and loss adjustment expenses at end of year	\$9,125,250		\$9,036,448		\$8,824,696	
(1)2014 amount relates to our acquisition of Arch MI U.S.						

Our initial reserving method to date has to a large extent been the expected loss method, which is commonly applied when limited loss experience exists. We select the initial expected loss and loss adjustment expense ratios based on information derived by our underwriters and actuaries during the initial pricing of the business, supplemented by industry data where appropriate. These ratios consider, among other things, rate changes and changes in terms and conditions that have been observed in the market. Any estimates and assumptions made as part of the reserving process could prove to be inaccurate due to several factors, including the fact that relatively limited historical information has been reported to us through December 31, 2015. We employ a number of different reserving methods depending on the segment, the line of business, the availability of historical loss experience and the stability of that loss experience. Over time, we have given additional weight to our historical loss experience in our reserving process due to the continuing maturation of our reserves, and the increased availability and credibility of the historical experience. For additional information regarding the key underlying movements in our losses and loss adjustment expenses by segment, see "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Unpaid and paid losses and loss adjustment expenses recoverable were approximately \$1.87 billion at December 31, 2015. We are subject to credit risk with respect to our reinsurance and retrocessions because the ceding of risk to reinsurers and retrocessionaires does not relieve us of our liability to the clients or companies we insure or reinsure. Our failure to establish adequate reinsurance or retrocessional arrangements or the failure of our existing reinsurance

or retrocessional arrangements to protect us from overly concentrated risk exposure could materially adversely affect our financial condition and results of operations. Although we monitor the financial condition of our reinsurers and retrocessionaires and attempt to place coverages only with substantial, financially sound carriers, we may not be successful in doing so.

Table of Contents

Investments

At December 31, 2015, total investable assets managed by Arch were \$14.64 billion, excluding the \$1.70 billion included in the 'other' segment (i.e., attributable to Watford Re). See "Management's Discussion and Analysis of Financial Condition and Results of Operations— Financial Condition, Liquidity and Capital Resources—Financial Condition—Investable Assets" and note 8, "Investment Information," of the notes accompanying our financial statements. The following table summarizes our invested assets:

	December 31,	2015	December 31,	2014
	Amount	% of Total	Amount	% of Total
Investable assets (1) (2):				
Fixed maturities available for sale, at fair value	\$10,459,353	71.4	\$10,750,770	73.6
Fixed maturities, at fair value (3)	367,780	2.5	377,053	2.6
Fixed maturities pledged under securities lending agreements, at fair value	373,304	2.5	50,802	0.3
Total fixed maturities	11,200,437	76.5	11,178,625	76.6
Short-term investments available for sale, at fair value	587,904	4.0	797,226	5.5
Cash	444,776	3.0	474,247	3.2
Equity securities available for sale, at fair value	618,405	4.2	658,182	4.5
Equity securities, at fair value (3)	798	_	_	
Equity securities pledged under securities lending agreements, at fair value	10,777	0.1	_	
Other investments available for sale, at fair value	300,476	2.1	296,224	2.0
Other investments, at fair value (3)	908,809	6.2	878,774	6.0
Investments accounted for using the equity method (4)	592,973	4.0	349,014	2.4
Securities transactions entered into but not settled at the balance sheet date	(20,524)	(0.1)	(32,802)	(0.2)
Total investable assets managed by Arch	\$14,644,831	100.0	\$14,599,490	100.0

(1) The table above excludes investable assets attributable to the 'other' segment. Such amounts are summarized as follows:

	December	December
(U.S. dollars in thousands)	31,	31,
	2015	2014
Investable assets in 'other' segment:		
Cash	\$108,550	\$11,455
Investments accounted for using the fair value option	1,617,107	1,169,226
Securities sold but not yet purchased	(30,583)	
Securities transactions entered into but not settled at the balance sheet date	1,033	(17,441)
Total investable assets included in 'other' segment	\$1,696,107	\$1,163,240

- (2) This table excludes the collateral received and reinvested and includes the fixed maturities and short-term investments pledged under securities lending agreements, at fair value.
 - Represents investments which are carried at fair value under the fair value option and reflected as "investments
- (3) accounted for using the fair value option" on our balance sheet. Changes in the carrying value of such investments are recorded in net realized gains or losses.
- (4) Changes in the carrying value of investment funds accounted for using the equity method are recorded as "equity in net income (loss) of investment funds accounted for using the equity method" rather than as an unrealized gain or

loss component of accumulated other comprehensive income.

Our current investment guidelines and approach stress preservation of capital, market liquidity and diversification of risk. Our investments are subject to market-wide risks and fluctuations, as well as to risks inherent in particular securities. While maintaining our emphasis on preservation of capital and liquidity, we expect our portfolio to become more diversified and, as a result, we may in the future expand into areas which are not part of our current investment strategy. Our fixed maturities, fixed maturities pledged under securities lending agreements and short-term investments had an average credit quality rating of "AA" from S&P and "Aa2" from Moody's Investors Service ("Moody's") at both December 31, 2015 and 2014. Our investment portfolio had an average effective duration of approximately 3.43 years and 3.34 years at December 31, 2015 and 2014, respectively. At December 31, 2015, 94.7% of our fixed maturities and fixed maturities pledged under securities lending agreements were rated investment grade, compared to 94.2% at December 31, 2014.

Table of Contents

The credit quality distribution of our fixed maturities and fixed maturities pledged under securities lending agreements are shown below:

	December 31.	, 2015	December 31, 2014			
Rating (1)	Fair Value	% of Total	Fair Value	% of Total		
U.S. government and government agencies (2)	\$3,060,869	27.3	\$2,245,489	20.1		
AAA	4,000,750	35.7	4,299,060	38.5		
AA	1,651,760	14.7	1,917,392	17.2		
A	1,431,138	12.8	1,739,922	15.6		
BBB	457,251	4.1	339,395	3.0		
BB	203,426	1.8	157,232	1.4		
В	138,770	1.2	184,869	1.7		
Lower than B	130,545	1.2	154,823	1.4		
Not rated	125,928	1.1	140,443	1.3		
Total	\$11,200,437	100.0	\$11,178,625	100.0		

For individual fixed maturities, S&P ratings are used. In the absence of an S&P rating, ratings from Moody's are used, followed by ratings from Fitch Ratings.

The benchmark return index is a customized combination of indices intended to approximate a target portfolio by asset mix and average credit quality while also matching the approximate estimated duration and currency mix of our insurance and reinsurance liabilities (see "Management's Discussion and Analysis of Financial Condition and Results of Operations—General—Financial Measures—Total Return on Investments"). The following table summarizes the pre-tax total return (before investment expenses) of investment managed by Arch compared to the benchmark return (both based in U.S. Dollars) against which we measured our portfolio during the periods:

	Portfolio (1)		Return	
Pre-tax total return (before investment expenses):				
Year Ended December 31, 2015	0.41	%	(0.38)%
Year Ended December 31, 2014	3.21	%	2.58	%
Year Ended December 31, 2013	1.28	%	0.85	%

Our investment expenses were approximately 0.35%, 0.28% and 0.26%, respectively, of average invested assets in 2015, 2014 and 2013.

Ratings

Our ability to underwrite business is affected by the quality of our claims paying ability and financial strength ratings as evaluated by independent agencies. Such ratings from third party internationally recognized statistical rating organizations or agencies are instrumental in establishing the competitive positions of companies in our industry. We believe that the primary users of such ratings include commercial and investment banks, policyholders, brokers, ceding companies and investors. Insurance ratings are also used by insurance and reinsurance intermediaries as an important means of assessing the financial strength and quality of insurers and reinsurers, and are often an important factor in the decision by an insured or intermediary of whether to place business with a particular insurance or reinsurance provider. Periodically, rating agencies evaluate us to confirm that we continue to meet their criteria for the ratings assigned to us by them. A.M. Best Company ("A.M. Best") maintains a letter scale rating system ranging from "A++" (Superior) to "F" (In Liquidation). Moody's maintains a letter scale rating from "Aaa" (Exceptional) to "NP" (Not Prime). S&P maintains a letter scale rating system ranging from "AAA" (Extremely Strong) to "R" (Under Regulatory Supervision). Fitch Ratings ("Fitch") maintains a letter scale rating system ranging from "AAA" (Exceptionally Strong) to "C" (Distressed).

Includes U.S. government-sponsored agency mortgage backed securities and agency commercial mortgage backed securities.

Our reinsurance subsidiaries, Arch Re U.S., Arch Re Bermuda and Arch Re Europe (S&P and Fitch only), and our principal insurance subsidiaries, Arch Insurance, Arch Specialty, Arch Indemnity (S&P, A.M. Best and Fitch only), Arch Insurance Company Europe and Arch Insurance Canada (S&P and A.M. Best only), each currently has a financial strength rating of "A+" (the second highest out of fifteen rating levels) with a stable outlook from A.M. Best, "A1" (the fifth highest out of 21 rating levels) with a stable outlook from Moody's, "A+" (the fifth highest out of 21 rating levels) with a stable outlook from S&P, and "A+" (the fifth highest out of 24 rating levels) with a stable outlook from Fitch. Gulf Re currently

Table of Contents

has a financial strength rating of "A-" (the fourth highest out of fifteen rating levels) with a stable outlook from A.M. Best. Arch Syndicate 2012 operates with the Lloyd's financial strength ratings of "A" (the third highest out of fifteen rating levels) with a stable outlook from A.M. Best, "A+" with a stable outlook from S&P and "A+" with a stable outlook from Fitch. Arch MI U.S., is rated "A-" (the seventh highest out of 21 rating levels) with a positive outlook by S&P and "Baa1" (the eighth highest out of 21 rating levels) by Moody's with a stable outlook while Arch Mortgage Guaranty Company is rated "A3" (the seventh highest out of 21 rating levels) by Moody's with a stable outlook. Arch MI Europe is rated "A+" (the fifth highest out of 21 rating levels) with a stable outlook from S&P.

ACGL has received counterparty (issuer) credit ratings of "A-" (seventh highest out of 21 rating levels) with a stable outlook from S&P and "A" (sixth highest out of 23 rating levels) with a stable outlook from Fitch. A counterparty credit rating provides an opinion on an issuer's overall capacity and willingness to meet its financial commitments as they become due, but is not specific to a particular financial obligation.

The financial strength ratings assigned by rating agencies to insurance and reinsurance companies represent independent opinions of financial strength and ability to meet policyholder obligations and are not directed toward the protection of investors, nor are they recommendations to buy, hold or sell any securities. We can offer no assurances that our ratings will remain at their current levels, or that our security will be accepted by brokers and our insureds and reinsureds. A ratings downgrade or the potential for such a downgrade, or failure to obtain a necessary rating, could adversely affect both our relationships with agents, brokers, wholesalers and other distributors of our existing products and services and new sales of our products and services. In addition, under certain of the reinsurance agreements assumed by our reinsurance operations, upon the occurrence of a ratings downgrade or other specified triggering event with respect to our reinsurance operations, such as a reduction in surplus by specified amounts during specified periods, our ceding company clients may be provided with certain rights, including, among other things, the right to terminate the subject reinsurance agreement and/or to require that our reinsurance operations post additional collateral. In the event of a ratings downgrade or other triggering event, the exercise of such contract rights by our clients could have a material adverse effect on our financial condition and results of operations, as well as our ongoing business and operations. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Financial Condition, Liquidity and Capital Resources—Liquidity and Capital Resources." Competition

The worldwide reinsurance and insurance businesses are highly competitive. We compete, and will continue to compete, with major U.S. and non-U.S. insurers and reinsurers, some of which have greater financial, marketing and management resources than we have and have had longer-term relationships with insureds and brokers than us. We compete with other insurers and reinsurers primarily on the basis of overall financial strength, ratings assigned by independent rating agencies, geographic scope of business, strength of client relationships, premiums charged, contract terms and conditions, products and services offered, speed of claims payment, reputation, employee experience, and qualifications and local presence.

In our insurance business, we compete with insurers that provide specialty property and casualty lines of insurance, including Alleghany Corporation, Allied World Assurance Company, Ltd., American International Group, Inc., AXIS Capital Holdings Limited, Berkshire Hathaway, Inc., Chubb Limited, CNA, Endurance Specialty Holdings Ltd., The Hartford Financial Services Group, Inc., HCC Insurance Holdings, Inc., Ironshore Inc., Liberty Mutual Insurance, Lloyd's, Markel Insurance Company, RLI Corp., The Travelers Companies, W.R. Berkley Corp., XL Group plc and Zurich Insurance Group. In our reinsurance business, we compete with reinsurers that provide property and casualty lines of reinsurance, including Alleghany Corporation, Argo International Holdings, Ltd., AXIS Capital Holdings Limited, Berkshire Hathaway, Inc., Chubb Limited, Endurance Specialty Holdings Ltd., Everest Re Group Ltd., Hannover Rückversicherung AG, Lloyd's, Markel Global Reinsurance, Munich Re Group, PartnerRe Ltd., RenaissanceRe Holdings Ltd., SCOR Global P&C, SCOR Global Life, Swiss Reinsurance Company, Third Point Reinsurance Ltd., Validus Holdings Ltd. and XL Group plc.

In our U.S. mortgage business, we compete with six active U.S. mortgage insurers, which include the mortgage insurance subsidiaries of Essent Group Ltd., Genworth Financial Inc., MGIC Investment Corporation, NMI Holdings Inc., Radian Group Inc. and United Guaranty Corporation. The private mortgage insurance industry is highly competitive. Private mortgage insurers generally compete on the basis of underwriting guidelines, pricing, terms and

conditions, financial strength, product and service offerings, customer relationships, reputation, the strength of management, technology, and innovation in the delivery and servicing of insurance products. Arch MI U.S. and other private mortgage

Table of Contents

insurers compete with federal and state government agencies that sponsor their own mortgage insurance programs. The private mortgage insurers' principal government competitor is the Federal Housing Administration ("FHA") and, to a lesser degree, the U.S. Department of Veterans Affairs ("VA"). The mortgage insurance industry's business has been limited as a result of competition with the FHA, which substantially increased its market share beginning in 2008. In early 2015, the FHA reduced annual premium rates associated with its mortgage insurance program. Future changes to the FHA program may impact the demand for private mortgage insurance.

Arch MI U.S. and other private mortgage insurers increasingly compete with multi-line reinsurers and capital markets alternatives to private mortgage insurance. In 2015, the GSEs expanded their respective mortgage credit risk transfer (CRT) programs which generally did not include the purchase of private mortgage insurance from U.S. private mortgage insurers. Rather, these transactions led to increased opportunities for multiline property casualty reinsurance groups including, among others, PartnerRe Ltd., Transatlantic Reinsurance Company, Everest Re Group Ltd. and RenaissanceRe Holdings Ltd. along with capital markets participants. In April 2015, the GSEs published comprehensive, revised requirements for mortgage insurers to become and remain a GSE qualified mortgage insurer. These Private Mortgage Insurer Eligibility Requirements, or "PMIERs," have increased business opportunities for reinsurers as various primary mortgage insurers use reinsurance as a form of capital relief. This has attracted additional reinsurers into the market and we are seeing increased competition as a result.

For other U.S. risk sharing products and non-U.S. mortgage insurance opportunities, we have also seen increased competition from well capitalized and highly rated multiline reinsurers. It is our expectation that the depth and capacity of competitors from this segment will continue to increase over the next several years as more credit risk is borne by private capital.

Enterprise Risk Management

Enterprise Risk Management ("ERM") is a key element in our philosophy, strategy and culture. We employ an ERM framework that includes underwriting, reserving, investment, credit and operational risks. Risk appetite and exposure limits are set by our executive management team, reviewed with our board of directors and board level committees and routinely discussed with business unit management. These limits are articulated in our risk appetite statement, which details risk appetite, tolerances and limits for each major risk category, and are integrated into our operating guidelines. Exposures are aggregated and monitored periodically by our corporate risk management team. The reporting, review and approval of risk management information is integrated into our annual planning process, capital modeling and allocation, reinsurance purchasing strategy and reviewed at insurance business reviews, reinsurance underwriting meetings and board level committees. 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."

Regulation

Bermuda Insurance Regulation

The Insurance Act 1978 of Bermuda and Related Rules and Regulations ("Insurance Act"). Arch Re Bermuda is subject to the Insurance Act, which provides that no person shall carry on any insurance business in or from within Bermuda unless registered as an insurer under the Insurance Act by the Bermuda Monetary Authority (the "BMA"), which is responsible for the day-to-day supervision of insurers. Under the Insurance Act, insurance business includes reinsurance business. We believe that we are in compliance with all applicable regulations under the Insurance Act. The Insurance Act imposes solvency and liquidity standards and auditing and reporting requirements on Bermuda insurance companies and grants to the BMA powers to supervise, investigate and intervene in the affairs of insurance companies. Certain significant aspects of the Bermuda insurance regulatory framework are set forth below. Classification of Insurers. The Insurance Act distinguishes between insurers carrying on long-term business, insurers carrying on general business and insurers carrying on special purpose business. There are six general business classifications (Classes 1, 2, 3, 3A, 3B and 4), five long-term business classifications (Classes A, B, C, D and E) and one classification of special purpose insurer.

Table of Contents

As Arch Re Bermuda carries on both long-term and general business, it is required to be registered as both a long-term and as a general business insurer under the Insurance Act. Accordingly, Arch Re Bermuda is registered as a Class 4 general business insurer and as a Class C long-term insurer. Class 4 insurers are regarded as large commercial underwriters and are subject to the strictest regulation. Class C insurers are regarded as small commercial underwriters and are subject to less stringent regulation.

Minimum Paid-Up Share Capital. Arch Re Bermuda is required to maintain fully paid-up share capital of \$1.25 million.

Annual Financial Statements, Annual Statutory Financial Return and Annual Capital and Solvency Return. Arch Re Bermuda must prepare annual statutory financial statements as prescribed in the Insurance Act with respect to both its general business and its long-term business. The statutory financial statements are distinct from the annual GAAP basis financial statements referred to below. The statutory financial return for a Class 4 insurer shall include a report of the approved independent auditor on the statutory financial statement of such insurer, solvency certificates, the statutory financial statements for the general business, the opinion of the loss reserve specialist and a schedule of reinsurance ceded. The statutory financial return for a Class C insurer shall include a report of the approved independent auditor on the statutory financial statements of such insurer, the statutory financial statements related to the long-term business, a declaration of the statutory ratios, the long-term business solvency certificate and a certificate from the approved actuary. Arch Re Bermuda is also required to file audited GAAP basis annual financial statements, which must be available to the public. In addition, Arch Re Bermuda is required to file a capital and solvency return in respect of its general business and long-term business. The capital and solvency return includes its relevant regulatory risk-based capital model, a schedule of fixed income investments by ratings categories, a schedule of net reserves for losses and loss expense provisions by line of business, a schedule of premiums written by line of business, a schedule of risk management and a schedule of fixed income securities, a schedule of commercial insurer's solvency self assessment, a schedule of catastrophe risk return, a schedule of loss triangles or reconciliation of net loss reserves and a schedule of eligible capital. In addition, Arch Re Bermuda will also be required to prepare and submit to the BMA financial statements which have been prepared in accordance with GAAP or IFRS ("GAAP financial statements"). In lieu of GAAP financial statements, Arch Re Bermuda may submit condensed general purpose financial statements prepared in accordance with any insurance accounts rules. Arch Re Bermuda will, at the time of filing its statutory financial statements, also be required to deliver to the BMA a declaration of compliance, in such form and with such content as may be prescribed by the BMA.

Public Disclosures. Pursuant to recent amendments to the Insurance Act, all commercial insurers are required to prepare and file with the BMA, and also publish on their website, a financial condition report.

Minimum Solvency Margins. Prior to January 1, 2016, Arch Re Bermuda, as a Class 4 insurer, had to ensure that the value of its general business assets exceeded the amount of its general business liabilities by an amount greater than the prescribed minimum solvency margin (and enhanced capital requirement pertaining to its general business). Accordingly, Arch Re Bermuda was required to maintain a minimum solvency margin equal to the greatest of (i) \$100 million, (ii) 50% of net premiums written (being gross premiums written less any premiums ceded by Arch Re Bermuda, but Arch Re Bermuda may not deduct more than 25% of gross premiums when computing net premiums written), (iii) 15% of net discounted aggregate losses and loss expense provisions and other insurance reserves and (iv) 25% of its enhanced capital requirement. Also, prior to January 1, 2016, Arch Re Bermuda was required, with respect to its long-term business, to maintain a minimum solvency margin equal to the greater of \$500,000 or 1.5% of its assets. For the purpose of this calculation, assets are defined as the total assets pertaining to its long-term business reported on the balance sheet in the relevant year less the amounts held in a segregated account. The BMA is in the process of revising the provisions of the Insurance Act relating to minimum solvency margins pertaining to both general and long-term business, but it is anticipated that there will be no material changes.

Enhanced Capital Requirement. As a Class 4 insurer, Arch Re Bermuda is required to maintain available statutory economic capital and surplus pertaining to its general business at a level equal to or in excess of its enhanced capital requirement which is established by reference to either the Bermuda Solvency Capital Requirement model ("BSCR") or an approved internal capital model. The BSCR is a risk-based capital model which provides a method for determining an insurer's capital requirements (statutory capital and surplus) by taking into account the risk characteristics of

different aspects of the insurer's business. The BSCR model is a risk-based capital model which provides a method for determining an insurer's capital requirements (statutory capital and surplus) by taking into account the risk characteristics of different aspects of the insurer's business. While not specifically referred to in the Insurance Act, the BMA has also established a

Table of Contents

target capital level for each Class 4 insurer equal to 120% of its enhanced capital requirement. While a Class 4 insurer is not currently required to maintain its statutory capital and surplus at this level, the target capital level serves as an early warning tool for the BMA, and failure to maintain statutory capital at least equal to the target capital level will likely result in increased regulatory oversight. As a Class C insurer, Arch Re Bermuda is also required to maintain available statutory economic capital and surplus in respect of its long-term business at a level equal to or in excess of its long-term enhanced capital requirement which is established by reference to either the Class C BSCR model or an approved internal capital model.

Eligible Capital. To enable the BMA to better assess the quality of the insurer's capital resources, as a Class 4 insurer, Arch Re Bermuda is required to disclose the makeup of its capital in accordance with a 3-tiered eligible capital system. Under this system, all of the insurer's capital instruments will be classified as either basic or ancillary capital, which in turn will be classified into one of three tiers based on their "loss absorbency" characteristics. Highest quality capital will be classified Tier 1 Capital, lesser quality capital will be classified as either Tier 2 Capital or Tier 3 Capital. A minimum threshold of Tier 1 and maximum thresholds of Tier 2 and Tier 3 Capital used to support Arch Re Bermuda's minimum solvency margin and enhanced capital requirement are specified under the rules. Tier 1, Tier 2 and Tier 3 Capital may, until January 1, 2024, include capital instruments that do not satisfy the requirement that the instrument be non-redeemable or settled only with the issuance of an instrument of equal or higher quality upon a breach, or if it would cause a breach, of the enhanced capital requirement. Where the BMA approved the use of certain instruments for capital purposes prior to the implementation of the eligible capital rules, the BMA's consent must be obtained if such instruments are to remain eligible for use in satisfying the minimum solvency margin pertaining to its general business and its enhanced capital requirement.

Minimum Liquidity Ratio. Prior to January 1, 2016, Arch Re Bermuda was required to maintain a minimum liquidity ratio for general business equal to the value of its relevant assets at not less than 75% of the amount of its relevant liabilities. Relevant assets include cash and time deposits, quoted investments, unquoted bonds and debentures, first liens on real estate, investment income due and accrued, accounts and premiums receivable and reinsurance balances receivable. The relevant liabilities are total general business insurance reserves and total other liabilities less deferred income tax and sundry liabilities (by interpretation, those not specifically defined) and letters of credit and guarantees. The BMA is in the process of revising the provisions of the Insurance Act relating to minimum solvency margins applicable to commercial insurers carrying on general business, but it is anticipated that there will be no material changes.

Restrictions on Dividends and Distributions. Arch Re Bermuda is prohibited from declaring or paying any dividends during any financial year if it is in breach of its enhanced capital requirement or its general business or long-term solvency margins or its minimum liquidity ratio or if the declaration or payment of such dividends would cause such a breach. If it has failed to meet its minimum solvency margins or minimum liquidity ratio on the last day of any financial year, Arch Re Bermuda will be prohibited, without the approval of the BMA, from declaring or paying any dividends during the next financial year. In addition, Arch Re Bermuda is prohibited from declaring or paying in any financial year dividends of more than 25% of its total statutory capital and surplus (as shown on its previous financial year's statutory balance sheet) unless it files (at least seven days before payment of such dividends) with the BMA an affidavit stating that it will continue to meet the required margins.

Reduction of Capital. Without the approval of the BMA, Arch Re Bermuda is prohibited from reducing by 15% or more its total statutory capital as set out in its previous year's financial statements and any application for such approval must include an affidavit stating that it will continue to meet the required margins.

Long-Term Business Fund. An insurer carrying on long-term business is required to keep its accounts in respect of its long-term business separate from any accounts kept in respect of any other business. All receipts of its long-term business form part of its long-term business fund. No payment may be made directly or indirectly from an insurer's long-term business fund for any purpose other than a purpose related to the insurer's long-term business, unless such payment can be made out of any surplus certified by the insurer's approved actuary to be available for distribution otherwise than to policyholders. Arch Re Bermuda may not declare or pay a dividend to any person other than a policyholder unless the value of the assets in its long-term business fund, as certified by its approved actuary, exceeds the extent (as so certified) of the liabilities of the insurer's long-term business. In addition, the amount of such dividend

shall not exceed the aggregate of that excess and any other funds properly available for payment of dividends, being funds arising out of business of the insurer other than its long-term business.

Restrictions on Transfer of Business and Winding-Up. As a long-term insurer, Arch Re Bermuda may only transfer

Table of Contents

of the registered insurer.

long-term business, other than long-term business that is reinsurance business, with the sanction of the applicable Bermuda court. A long-term insurer may only be wound-up or liquidated by order of the applicable Bermuda court. Fit and Proper Controllers. The BMA maintains supervision over the controllers of all registered insurers in Bermuda. A controller includes: the managing director of the registered insurer or its parent company; the chief executive of the registered insurer or of its parent company; a shareholder controller; and any person in accordance with whose directions or instructions the directors of the registered insurer or of its parent company are accustomed to act. The definition of shareholder controller is set out in the Insurance Act, but generally refers to (i) a shareholder who holds 10% or more of the shares carrying rights to vote at a shareholders' meeting of the registered insurer or its parent company, or (ii) a shareholder who is entitled to exercise 10% or more of the voting power at any shareholders' meeting of such registered insurer or its parent company, or (iii) a shareholder who is able to exercise significant influence over the management of the registered insurer or its parent company by virtue of its shareholding or its entitlement to exercise, or control the exercise of, the voting power at any shareholders' meeting. Where the shares of the shareholder of a registered insurer, or the shares of its parent company, are traded on a recognized stock exchange, and such shareholder becomes a 10%, 20%, 33% or 50% shareholder controller of the insurer, that shareholder shall, within 45 days, notify the BMA in writing that such shareholder has become such a controller. Similarly, if such shareholder controller reduces or disposes of its shareholding and such would result in its interest falling below any of the prescribed thresholds, then that shareholder controller must, within 45 days, notify the BMA of such disposal. The BMA may file a notice of objection to any shareholder who has become a controller of any description where it appears that such shareholder is, or is no longer, a fit and proper shareholder to be a controller

Insurance Code of Conduct. Arch Re Bermuda is subject to the Insurance Code of Conduct (the "Insurance Code"), which establishes duties and standards which must be complied with to ensure it implements sound corporate governance, risk management and internal controls. Failure to comply with the requirements under the Insurance Code will be a factor taken into account by the BMA in determining whether an insurer is conducting its business in a sound and prudent manner as prescribed by the Insurance Act. Failure to comply with the requirements of the Insurance Code could result in the BMA exercising its powers of intervention and will be a factor in calculating the operational risk charge applicable in accordance with that insurer's risk based capital model.

Group Supervision. The BMA acts as group supervisor of our group of insurance and reinsurance companies ("Group") and has designated Arch Re Bermuda as the designated insurer ("Designated Insurer"). Pursuant to its powers under the Insurance Act, the BMA maintains a register of particulars for the Group detailing, among other things, the names and addresses of the Designated Insurer; each member company of the Group falling within the scope of supervision; the principal representative of the Group in Bermuda; other competent authorities supervising other member companies of the Group; and the Group auditors. The Designated Insurer must notify the BMA of any changes to the above details entered on the register of the Group.

As Group supervisor, the BMA performs a number of supervisory functions including: coordinating the gathering and dissemination of information which is of importance for the supervisory task of other competent authorities; carrying out a supervisory review and assessment of the Group; carrying out an assessment of the Group's compliance with the rules on solvency, risk concentration, intra-Group transactions and good governance procedures; planning and coordinating, with other competent authorities, supervisory activities in respect of the Group, both as a going concern and in emergency situations; coordinating any enforcement action that may need to be taken against the Group or any of its members; and planning and coordinating meetings of colleges of supervisors (consisting of insurance regulators) in order to facilitate the carrying out of the functions described above.

In carrying out its functions, the BMA makes rules for assessing the financial situation and the solvency position of the Group and/or its members and regulating intra-Group transactions, risk concentration, governance procedures, risk management and regulatory reporting and disclosure.

Group Solvency and Group Supervision. The current supervision and solvency rules (together, "Group Rules") apply to our Group so long as the BMA remains our Group supervisor. Through the Group Rules, the BMA may take action which affects ACGL. A summary of the Group Rules is set forth below.

Table of Contents

Approved Group Actuary. The Group is required to appoint an individual approved by the BMA to be the Group Actuary. The Group Actuary must provide an opinion on the Group's technical provisions as recorded in the Group statutory economic balance sheet;

Annual Group Financial Statements. The Group is required to prepare and submit, on an annual basis, financial statements prepared in accordance with either IFRS or GAAP, together with statutory financial statements. The financial statements must be audited annually by the Group's approved auditor who is required to prepare an auditor's report thereon in accordance with generally accepted auditing standards. The statutory financial statements include a balance sheet, an income statement, a statement of capital and surplus, and notes thereto. The Designated Insurer is required to file with the BMA the audited Group financial statements and the statutory financial statements with the BMA within five months from the end of the relevant financial year (unless specifically extended); Annual Group Statutory Financial Return and Annual Group Capital and Solvency Return. The Group is required to prepare an annual Group statutory financial return and an annual Group capital and solvency return. The annual Group capital and solvency return must include an annual opinion of the Group Actuary. Both the annual Group statutory financial return and the annual Group capital and solvency return must be submitted to the BMA by the Designated Insurer within five months after its financial year end (unless specifically extended); Quarterly Group Financial Statements. The Designated Insurer is required to file quarterly financial returns for the Group with the BMA on or before the last day of the months May, August and November of each year; Public Disclosures. Pursuant to recent amendments to the Insurance Act, all Groups are required to prepare and file with the BMA, and also publish on their website, a financial condition report.

Group Solvency Self Assessment ("GSSA"). The Group Rules require the board of directors of the parent company of the Group (the "Parent Board") to establish solvency self assessment procedures that factor in all the foreseeable reasonably material risks. Such procedures should be carried out at least annually and assess the quality and quantity of the capital required to adequately cover the risks to which the Group is exposed. Such procedures must also be an integral part of the Group's risk management framework and be reviewed and evaluated on a regular basis by the Parent Board. In particular, the GSSA should, among other things, demonstrate consideration of the relationship between risk management, the quality and quantity of capital resources, the impact of risk mitigation techniques and diversification and correlation effects between material risks; a description of the Group's risk appetite; be forward-looking; include appropriate stress and scenario testing and appropriately reflect all assets and liabilities, material off-balance sheet arrangements, material intra group transactions, relevant managerial practices, systems and controls and a valuation basis that is aligned with the risk characteristics and business model of the Group; Group Minimum Solvency Margin ("Group MSM") and Group Enhanced Capital Requirement ("Group ECR"). The Group must ensure that the value of its total statutory Group capital and surplus exceeds the aggregate of (i) the amount of the aggregate minimum margins of solvency of each qualifying member of the Group controlled by the parent company, and (ii) the parent company's percentage shareholding in each member where it exercises significant influence over such member but does not control it, multiplied by the member's minimum solvency margin. A member is a qualifying member of the Group if it is subject to solvency requirements in the jurisdiction in which it is registered. Where the parent company exercises control in relation to any member of the group, the minimum margin of solvency of such member shall be its individual minimum solvency margin. Where the parent company exercises significant influence on any member of the Group, the minimum margin of solvency applicable to that member for purposes of calculating the Group MSM shall be an amount equal to the parent company's percentage shareholding in the member multiplied by that member's minimum margin of solvency. "Control" and "significant influence" shall be determined in accordance with either the IFRS or GAAP used to prepare the Group's IFRS or GAAP financial statements. The Group is required to maintain available group capital and surplus at a level equal to 50% of the Group ECR and this requirement will increase by increments of 10% in each of the following five years until 100% is required in 2018;

Group Eligible Capital. To enable the BMA to better assess the quality of the group's capital resources, the Designated Insurer is required to disclose the makeup of the Group's capital in accordance with a 3-tiered eligible capital system. Under the eligible capital requirements, all of the Group's capital instruments will be classified as either basic or ancillary capital which in turn will be classified into one of 3 tiers based on their "loss absorbency" characteristics.

Highest quality capital will be classified Tier 1 Capital, lesser quality capital will be classified as

Table of Contents

either Tier 2 Capital or Tier 3 Capital. A minimum threshold of Tier 1 and maximum thresholds of Tier 2 and Tier 3 Capital used to satisfy the Group MSM and Group ECR requirements are specified under the rules. Tier 1, Tier 2 and Tier 3 Capital may, until January 1 2024, include capital instruments that do not satisfy the requirement that the instrument be non-redeemable or settled only with the issuance of an instrument of equal or higher quality upon a breach, or if redemption would cause a breach, of the Group ECR;

Group Governance. The Group Rules require the Parent Board to establish and effectively implement corporate governance policies and procedures, which it must be periodically review to ensure they continue to support the overall organizational strategy of the group. In particular, the Parent Board must: ensure that operational and oversight responsibilities of the group are clearly defined and documented and that the reporting of material deficiencies and fraudulent activities are transparent and devoid of conflicts of interest; establish systems for identifying on a risk sensitive basis those policies and procedures that must be reviewed annually and those policies and procedures that must be reviewed at other regular intervals; establish a risk management and internal controls framework and ensure that it is assessed regularly and such assessment is reported to the Parent Board and the chief and senior executives; establish and maintain sound accounting and financial reporting procedures and practices for the group; and establish and keep under review group functions relating to actuarial, compliance, internal audit and risk management functions which must address certain specific requirements as set out in the Group Rules.

BMA's Powers of Intervention, Obtaining Information, Reports and Documents and Providing Information to other Regulatory Authorities. If the BMA deems it necessary to protect the interests of the policyholders or potential policyholders of an insurer or insurance group, it may appoint one or more competent persons to investigate and report on the nature, conduct or state of the insurer's or the insurance group's business, or any aspect thereof, or the ownership or control of the insurer or insurance group. If the person so appointed thinks it necessary for the purposes of his investigation, he may also investigate the business of any person who is or has been at any relevant time, a member of the insurance group or of a partnership of which the person being investigated is a member. In this regard, it shall be the duty of every person who is or was a controller, officer, employee, agent, banker, auditor, accountant, barrister and attorney or insurance manager to produce to the person appointed such documentation as he may reasonably require for purposes of his investigation, and to attend and answer questions relevant to the investigation and to otherwise provide such assistance as may be necessary in connection therewith.

Certain Other Bermuda Law Considerations

ACGL and Arch Re Bermuda are incorporated in Bermuda as "exempted companies." As a result, they are exempt from Bermuda laws restricting the percentage of share capital that may be held by non-Bermudians, but they may not participate in certain business transactions, including: the acquisition or holding of land in Bermuda (except that required for their business and held by way of lease or tenancy for terms of not more than 50 years) without the express authorization of the Bermuda legislature; the taking of mortgages on land in Bermuda to secure an amount in excess of \$50,000 without the consent of the Minister of Finance; the acquisition of any bonds or debentures secured by any land in Bermuda, other than certain types of Bermuda government securities; or the carrying on of business of any kind in Bermuda, except in furtherance of their business carried on outside Bermuda or under license granted by the Minister of Finance. While an insurer is permitted to reinsure risks undertaken by any company incorporated in Bermuda and permitted to engage in the insurance and reinsurance business, generally it is not permitted without a special license granted by the Minister of Finance to insure Bermuda domestic risks or risks of persons of, in or based in Bermuda.

ACGL and Arch Re Bermuda also need to comply with the provisions of The Bermuda Companies Act 1981, as amended (the "Companies Act") regulating the payment of dividends and making distributions from contributed surplus. A company shall not declare or pay a dividend, or make a distribution out of contributed surplus, if there are reasonable grounds for believing that: the company is, or would after the payment be, unable to pay its liabilities as they become due; or the realizable value of the company's assets would thereby be less than its liabilities. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Financial Condition, Liquidity and Capital Resources—Liquidity and Capital Resources" and note 22, "Statutory Information," of the notes accompanying our financial statements.

Under Bermuda law, only persons who are Bermudians, spouses of Bermudians, holders of a permanent resident's certificate, holders of a working resident's certificate or persons who are exempt pursuant to the Incentives for Job Makers Act 2011, as amended ("exempted persons") may engage in gainful occupation in Bermuda without an appropriate

Table of Contents

governmental work permit. Our success may depend in part upon the continued services of key employees in Bermuda. Certain of our current key employees are not exempted persons and, as such, require specific approval to work for us in Bermuda. A work permit may be granted or extended upon showing that, after proper public advertisement, no exempted person is available who meets the minimum standards reasonably required by the employer.

U.S. Insurance Regulation

General. In common with other insurers, our U.S. based subsidiaries are subject to extensive governmental regulation and supervision in the various states and jurisdictions in which they are domiciled and licensed and/or approved to conduct business. The laws and regulations of the state of domicile have the most significant impact on operations. This regulation and supervision is designed to protect policyholders rather than investors. Generally, regulatory authorities have broad regulatory powers over such matters as licenses, standards of solvency, premium rates, policy forms, marketing practices, claims practices, investments, security deposits, methods of accounting, form and content of financial statements, reserves and provisions for unearned premiums, unpaid losses and loss adjustment expenses, reinsurance, minimum capital and surplus requirements, dividends and other distributions to shareholders, periodic examinations and annual and other report filings. In addition, transactions among affiliates, including reinsurance agreements or arrangements, as well as certain third party transactions, require prior regulatory approval from, or prior notice to and no disapproval by, the applicable regulator under certain circumstances. Certain insurance regulatory requirements are highlighted below. In addition, regulatory authorities conduct periodic financial, claims and market conduct examinations. Arch Insurance Company Europe is also subject to certain governmental regulation and supervision in the states where it writes excess and surplus lines insurance.

In addition to regulation applicable generally to U.S. insurance and reinsurance companies, our U.S. mortgage insurance operations are affected by federal and state regulation relating to mortgage insurers, mortgage lenders, and the origination, purchase and sale of residential mortgages. The private mortgage insurance industry is, and likely will continue to be, subject to substantial federal and state regulation, which has increased in recent years as a result of the past deterioration of the housing and mortgage markets in the U.S. Increased federal or state regulatory scrutiny could lead to new legal precedents, new regulations, new practices, or regulatory actions or investigations, which could adversely affect our financial condition and operating results.

Credit for Reinsurance. Arch Re U.S. is subject to insurance regulation and supervision that is similar to the regulation of licensed primary insurers. However, except for certain mandated provisions that must be included in order for a ceding company to obtain credit for reinsurance ceded, the terms and conditions of reinsurance agreements generally are not subject to regulation by any governmental authority. This contrasts with admitted primary insurance policies and agreements, the rates and terms of which generally are regulated by state insurance regulators. As a practical matter, however, the rates charged by primary insurers do have an effect on the rates that can be charged by reinsurers. Certain provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") provide that only the state in which a primary insurer is domiciled may regulate the financial statement credit for reinsurance taken by that primary insurer; other states will no longer be able to impose their own credit for reinsurance laws on primary insurers that are only licensed in such other states.

A primary insurer ordinarily will enter into a reinsurance agreement only if it can obtain credit for the reinsurance ceded on its U.S. statutory-basis financial statements. In general, credit for reinsurance is allowed in the following circumstances: if the reinsurer is licensed in the state in which the primary insurer is domiciled; if the reinsurer is an "accredited" or otherwise approved reinsurer in the state in which the primary insurer is domiciled; in some instances, if the reinsurer (a) is domiciled in a state that is deemed to have substantially similar credit for reinsurance standards as the state in which the primary insurer is domiciled and (b) meets certain financial requirements; or if none of the above applies, to the extent that the reinsurance obligations of the reinsurer are collateralized appropriately, typically through the posting of a letter of credit for the benefit of the primary insurer or the deposit of assets into a trust fund established for the benefit of the primary insurer.

Some states have adopted provisions of the National Association of Insurance Commissioners ("NAIC") adopted amendments to its Credit for Reinsurance Model Law and Regulation (the "NAIC Credit for Reinsurance Model Act") that allow full credit to U.S. ceding insurers for reinsurance ceded to qualified non-U.S. reinsurers (called "certified")

reinsurers") based upon less than 100% collateralization. Under those provisions, collateral requirements may be reduced for international reinsurers meeting certain criteria as to financial strength and reliability that are domiciled in countries that

Table of Contents

are found to have strong systems of domestic insurance regulation. Applicants for "certified reinsurer" designation must agree to certain financial reporting, consent to jurisdiction and consent to provide collateral for the full amount of their assumed liabilities in specified circumstances. Arch Re Bermuda is approved in 19 states to post reduced collateral and is expected to be designated as a "certified reinsurer" in other U.S. states.

As a result of the requirements relating to the provision of credit for reinsurance, Arch Re U.S. and Arch Re Bermuda are indirectly subject to certain regulatory requirements imposed by jurisdictions in which ceding companies are domiciled.

Arch Re U.S. is licensed or is an accredited or otherwise approved reinsurer in 50 states and the District of Columbia and the provinces of Ontario and Quebec in Canada. Arch Insurance is an admitted insurer in 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and Guam. Arch Specialty is an approved excess and surplus lines insurer in 49 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands and an authorized insurer in one state. Arch Indemnity is an admitted insurer in 49 states and the District of Columbia. Arch E&S, which is not currently writing business, is an approved excess and surplus lines insurer in 47 states and the District of Columbia and an authorized insurer in one state. Arch Insurance Company Europe is eligible to write excess and surplus lines insurance in 50 states, the District of Columbia, the U.S. Virgin Islands, Guam, the Northern Mariana Islands and American Samoa by virtue of its listing on the NAIC International Insurers Department's Quarterly Listing of Alien Insurers pursuant to the Nonadmitted and Reinsurance Reform Act of 2010. Neither Arch Re Bermuda nor Arch Re Europe expects to become licensed, accredited or so approved in any U.S. jurisdiction.

Holding Company Acts. All states have enacted legislation that regulates insurance holding company systems. These regulations generally provide that each insurance company in the system is required to register with the insurance department of its state of domicile and furnish information concerning the operations of companies within the holding company system which may materially affect the operations, management or financial condition of the insurers within the system. All transactions within a holding company system affecting insurers must be fair and reasonable. Notice to the state insurance departments is required prior to the consummation of certain material transactions between an insurer and any entity in its holding company system. In addition, certain of such transactions cannot be consummated without the applicable insurance department's prior approval, or its failure to disapprove after receiving notice. The holding company acts also prohibit any person from directly or indirectly acquiring control of a U.S. insurance company unless that person has filed an application with specified information with the insurance company's domiciliary commissioner and has obtained the commissioner's prior approval. Under most states' statutes, including Delaware and Missouri (the states of domicile of Arch's U.S. insurance subsidiaries), acquiring 10% or more of the voting securities of an insurance company or its parent company is presumptively considered an acquisition of control of the insurance company, although such presumption may be rebutted. Accordingly, any person or entity that acquires, directly or indirectly, 10% or more of the voting securities of ACGL without the prior approval of the commissioner will be in violation of these laws and may be subject to injunctive action requiring the disposition or seizure of those securities by the commissioner or prohibiting the voting of those securities, or to other actions that may be taken by the commissioner. In 2010, the NAIC adopted amendments to the Insurance Holding Company System Regulatory Act and Regulation, which, among other changes, introduce the concept of "enterprise risk" within an insurance holding company system. If and when the amendments are adopted by a particular state, the amended Insurance Holding Company System Regulatory Act and Regulation would impose more extensive informational requirements on parents and other affiliates of licensed insurers or reinsurers with the purpose of protecting them from enterprise risk, including requiring an annual enterprise risk report by the ultimate controlling person identifying the material risks within the insurance holding company system that could pose enterprise risk to the licensed companies. The amended Insurance Holding Company System Regulatory Act also requires any controlling person of a U.S. insurance company seeking to divest its controlling interest in the insurance company to file with the commissioner a confidential notice of the proposed divestiture at least 30 days prior to the cessation of control; after receipt of the notice, the commissioner shall determine those instances in which the parties seeking to divest or to acquire a controlling interest will be required to file for or obtain approval of the transaction. The amended Insurance Holding Company System Regulatory Act and Regulation must be adopted by the individual states for the new requirements to apply to U.S. domestic insurers and reinsurers. To date, every state and the District of Columbia has enacted

legislation adopting the amended Insurance Holding Company System Regulatory Act in some form. Enterprise Risk. The NAIC has increased its focus on risks within an insurer's holding company system that may pose enterprise risk to the insurer. "Enterprise risk" is defined as any activity, circumstance, event or series of events involving one or more affiliates of an insurer that, if not remedied promptly, is likely to have a material adverse effect upon the financial condition or the liquidity of the insurer or its insurance holding company system as a whole. As noted above,

Table of Contents

in 2010, the NAIC adopted amendments to its Model Insurance Holding Company System Regulatory Act and Regulation, which include, among other amendments, a requirement for the ultimate controlling person to file an enterprise risk report annually. In 2012, the NAIC adopted the Risk Management and Own Risk and Solvency Assessment ("ORSA") Model Act, which requires domestic insurers to maintain a risk management framework and establishes a legal requirement for domestic insurers to conduct an ORSA in accordance with the NAIC's ORSA Guidance Manual. The ORSA Model Act provides that domestic insurers, or their insurance group, must regularly conduct an ORSA consistent with a process comparable to the ORSA Guidance Manual process. The ORSA Model Act also provides that, no more than once a year, an insurer's domiciliary regulator may request that an insurer submit an ORSA summary report, or any combination of reports that together contain the information described in the ORSA Guidance Manual, with respect to the insurer and/or the insurance group of which it is a member. If and when the ORSA Model Act is adopted by an individual state, the state may impose additional internal review and regulatory filing requirements on licensed insurers and their parent companies.

Regulation of Dividends and Other Payments from Insurance Subsidiaries. The ability of an insurer to pay dividends or make other distributions is subject to insurance regulatory limitations of the insurance company's state of domicile. Generally, such laws limit the payment of dividends or other distributions above a specified level. Dividends or other distributions in excess of such thresholds are "extraordinary" and are subject to prior regulatory approval. Such dividends or distributions may be subject to applicable withholding or other taxes. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Financial Condition, Liquidity and Capital Resources—Liquidity and Capital Resources" and note 22, "Statutory Information," of the notes accompanying our financial statements.

Insurance Regulatory Information System Ratios. The NAIC Insurance Regulatory Information System ("IRIS") was developed by a committee of state insurance regulators and is intended primarily to assist state insurance departments in executing their statutory mandates to oversee the financial condition of insurance companies operating in their respective states. IRIS identifies 13 industry ratios (referred to as "IRIS ratios") and specifies "usual values" for each ratio. Departure from the usual values of the IRIS ratios can lead to inquiries from individual state insurance commissioners as to certain aspects of an insurer's business. Certain of our U.S.-based subsidiaries generate IRIS ratios that are outside of the usual values. To date, none of these subsidiaries has received any notice of regulatory review regarding the IRIS ratios but there is no assurance that we may not be notified in the future.

Accreditation. The NAIC has instituted its Financial Regulation Accreditation Standards Program ("FRASP") in response to federal initiatives to regulate the business of insurance. FRASP provides a set of standards designed to establish effective state regulation of the financial condition of insurance companies. Under FRASP, a state must adopt certain laws and regulations, institute required regulatory practices and procedures, and have adequate personnel to enforce such items in order to become an "accredited" state. If a state is not accredited, other states may not accept certain financial examination reports of insurers prepared solely by the regulatory agency in such unaccredited state. The respective states in which our insurance and reinsurance subsidiaries are domiciled are accredited states. Risk-Based Capital Requirements. In order to enhance the regulation of insurer solvency, the NAIC adopted in December 1993 a formula and model law to implement risk-based capital requirements for property and casualty insurance companies. These risk-based capital requirements are designed to assess capital adequacy and to raise the level of protection that statutory surplus provides for policyholder obligations. The risk-based capital model for property and casualty insurance companies measures three major areas of risk facing property and casualty insurers: underwriting, which encompasses the risk of adverse loss developments and inadequate pricing; declines in asset values arising from credit risk; and declines in asset values arising from investment risks.

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

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

the ratio of surplus to risk-based capital requirement decreases. The four action levels include: insurer is required to submit a plan for corrective action; insurer is subject to examination, analysis and specific corrective action; regulators may place insurer under regulatory control; and regulators are required to place insurer under regulatory control.

Table of Contents

Each of our U.S. subsidiaries' surplus (as calculated for statutory purposes) is above the risk-based capital thresholds that would require either company or regulatory action.

Guaranty Funds and Assigned Risk Plans. Most states require all admitted insurance companies to participate in their respective guaranty funds which cover certain claims against insolvent insurers. Solvent insurers licensed in these states are required to cover the losses paid on behalf of insolvent insurers by the guaranty funds and are generally subject to annual assessments in the states by the guaranty funds to cover these losses. Participation in state-assigned risk plans may take the form of reinsuring a portion of a pool of policies or the direct issuance of policies to insureds. The calculation of an insurer's participation in these plans is usually based on the amount of premium for that type of coverage that was written by the insurer on a voluntary basis. Assigned risk pools tend to produce losses which result in assessments to insurers writing the same lines on a voluntary basis. Mortgage guaranty insurance, among other lines of business, is typically exempt from participation in guaranty funds and assigned risk plans.

Federal Regulation. Although state regulation is the dominant form of regulation for insurance and reinsurance business, the federal government in recent years has shown some concern over the adequacy of state regulation. It is not possible to predict the future impact of any potential federal regulations or other possible laws or regulations on our U.S. based subsidiaries' capital and operations, and such laws or regulations could materially adversely affect their business. In addition, a number of federal laws affect and apply to the insurance industry, including various privacy laws and the economic and trade sanctions implemented by the Office of Foreign Assets Control ("OFAC"). OFAC maintains and enforces economic sanctions against certain foreign countries and groups and prohibits U.S. persons from engaging in certain transactions with certain persons or entities. OFAC has imposed civil penalties on persons, including insurance and reinsurance companies, arising from violations of its economic sanctions program. Certain federal laws directly or indirectly impact mortgage insurers, including the Real Estate Settlement Procedures Act of 1974 ("RESPA"), the Homeowners Protection Act of 1998 ("HOPA"), the Equal Credit Opportunity Act, the Fair Housing Act, the Truth In Lending Act ("TILA"), the Fair Credit Reporting Act of 1970 ("FCRA"), and the Fair Debt Collection Practices Act. Among other things, these laws and their implementing regulations prohibit payments for referrals of settlement service business, require fairness and non-discrimination in granting or facilitating the granting of credit, govern the circumstances under which companies may obtain and use consumer credit information, define the manner in which companies may pursue collection activities, and require disclosures of the cost of credit and provide for other consumer protections.

The Dodd-Frank Wall Street Reform and Consumer Protection Act. The Dodd-Frank Act created the Federal Insurance Office ("FIO") within the Department of Treasury, which is not a federal regulator or supervisor of insurance, but monitors the insurance industry for systemic risk, administers the Terrorism Risk Insurance Program Reauthorization Act of 2015 ("TRIPRA"), consults with the states regarding insurance matters and develops federal policy on aspects of international insurance matters. In addition, FIO is authorized to assist the Treasury Secretary in negotiating "covered agreements" between the U.S. and one or more foreign governments or regulatory authorities that address insurance prudential measures. Where a state law is inconsistent with a "covered agreement" and provides less favorable treatment to foreign insurers than U.S. companies, the FIO Director may preempt conflicting state law. In 2013, the FIO issued two reports relating to the insurance industry, one on modernization of the insurance regulatory system and one on the impact of Part II of the Nonadmitted and Reinsurance Reform Act of 2010. In its December 2013 report on modernization of the insurance regulatory system, and again in its September 2015 Annual Report on the Insurance Industry, the FIO recommended the development of federal standards and oversight for mortgage insurers. In December 2014, the FIO issued a report on the vital role that the global reinsurance market plays in supporting insurance in the United States. The impact that these reports will have on the regulation of insurance, if any, is yet to be determined. The Dodd-Frank Act also created a uniform system for non-admitted insurance premium tax payments based on the home state of the policyholder and provides for single state regulation for financial solvency and credit for reinsurance as discussed above.

The Dodd-Frank Act established the Consumer Finance Protection Bureau ("CFPB") to regulate the offering and provision of consumer financial products and services under federal law, including residential mortgages. Pursuant to the Dodd-Frank Act, the CFPB is charged with rulemaking and enforcement with respect to enumerated consumer laws, including RESPA, TILA, HOPA, the Secure and Fair Enforcement for Mortgage Licensing Act ("SAFE Act") and

FCRA. The Dodd-Frank Act also granted to the CFPB certain supervisory powers with respect to "covered persons" and "service providers," as defined by the Act. The CFPB issued Civil Investigative Demands to several other mortgage insurers requesting information regarding their captive reinsurance relationships, and in 2013 the United States District Court for

Table of Contents

the Southern District of Florida approved consent orders issued by the CFPB against five other mortgage insurers relating to the CFPB's allegations that the mortgage insurers' captive reinsurance relationships violated RESPA's prohibition against giving or accepting anything of value for referrals of settlement service business related to a federally related mortgage loan.

In 2014, the CFPB issued final regulations governing a loan originator's determination that, at the time a loan is originated, the consumer has a reasonable ability to repay the loan ("ATR"). The Dodd-Frank Act provides for a statutory presumption that a borrower will have the ability to repay a loan if the loan has characteristics satisfying the definition of a qualified mortgage ("QM") contained in the CFPB's regulations. Under the CFPB's ATR regulations, a loan is deemed to be a QM loan if it meets certain requirements, including: a 30 year term or less; no negative amortization, interest only or balloon features; the total "points and fees" do not exceed certain thresholds, generally 3%; and the borrower's total debt-to-income ratio does not exceed 43%.

The QM definition provides a "safe harbor" for QM loans with annual percentage rates, or APRs, below the threshold of 150 basis points over the Average Prime Offer Rate and a "rebuttable presumption" of compliance with ATR requirements for QM loans with an APR above that threshold.

Under the ATR regulations, any loan that is eligible for purchase, guarantee, or insurance by a GSE, FHA, VA, Department of Agriculture, or the Rural Housing Service is deemed to be a QM loan. This QM category applies to GSE loans as long as the GSEs are in FHFA conservatorship and for federal agency loans until an agency issues its own QM rules, or January 10, 2021, whichever occurs first. The FHFA has directed the GSEs to limit purchases to loans that meet QM requirements, with the exception of the 43% borrower total debt-to-income ratio limitation. To the extent that government agencies adopt their own definitions of a qualified mortgage and those definitions are more favorable to lenders than those applicable to the market in which private mortgage insurers participate, our business may be adversely affected.

Because of the QM evidentiary standard that gives presumption of compliance, we believe that most newly-originated mortgages are QMs. Our operating results could be adversely impacted if the QM regulations reduce the size of the origination market, reduce the willingness of lenders to extend low down payment credit, favor alternatives to private mortgage insurance such as government mortgage insurance programs, or change the mix of mortgage insurance business in ways that may be unfavorable to us.

The Dodd-Frank Act generally requires an issuer of an asset-backed security or initiator of an asset-backed transaction (a "securitizer") to retain at least 5% of the risk associated with securitized mortgage loans. This requirement does not apply to lenders that originate loans that are sold to the GSEs while they are in conservatorship, to qualified residential mortgages ("QRM"), or to loans insured or guaranteed by FHA or certain other federal agencies. Federal risk-retention rules generally define a QRM as a mortgage meeting the requirements of a QM loan. As the risk retention rules treat all QM loans as QRMs, low down payment loans with private mortgage insurance that do not meet the requirements of the QM rule can only be securitized with a risk retention requirement, which may deter their origination and adversely affect our business.

This risk-retention requirement also does not apply to a mortgage loan that is a qualified residential mortgage ("QRM"), or that is insured or guaranteed by FHA or certain other federal agencies. In October 2014, federal regulators issued a risk-retention rule that generally defines a QRM as a mortgage meeting the requirements of a QM. As the risk retention rule treats all QM loans as QRMs, low down payment loans with private mortgage insurance that do not meet the requirements of the QM rule can only be securitized with a risk retention requirement, which may deter their origination and adversely affect our business.

The Homeowners Protection Act of 1998. HOPA provides for the automatic termination, or cancellation upon a borrower's request, of private mortgage insurance upon satisfaction of certain conditions and requires that lenders give borrowers certain disclosures with regard to these provisions at the time the loan is originated. These provisions apply to borrower-paid mortgage insurance for purchase money, refinance and construction loans secured by the borrower's principal dwelling. FHA and VA loans are not covered by HOPA. Under HOPA, automatic termination of mortgage insurance generally occurs when the mortgage is first scheduled to reach a loan-to-value of 78% of the home's original value, assuming that the borrower is current on the required mortgage payments. A borrower who has a "good payment history," as defined by HOPA, may generally request cancellation of mortgage insurance when the loan-to-value is first

scheduled to reach 80% of the home's original value or when actual payments reduce the loan balance to 80% of the home's

Table of Contents

original value. In August 2015, the CFPB issued a compliance bulletin summarizing HOPA's mortgage insurance cancellation and termination requirements and advising that in prior supervisory examinations the CFPB identified violations by mortgage loan servicers of certain provisions of HOPA, including termination and cancellation requirements.

Real Estate Settlement Procedures Act of 1974. Subject to limited exceptions, RESPA prohibits persons from giving or accepting anything of value in connection with the referral of a settlement service. Mortgage insurance generally has been considered to be a "settlement service" for purposes of RESPA. RESPA authorizes the CFPB, the Department of Justice, state attorneys general and state insurance commissioners to bring civil enforcement actions, and also provides for criminal penalties and private rights of action. In the past, a number of lawsuits have challenged the actions of private mortgage insurers under RESPA, alleging that the insurers violated the referral fee prohibition by entering into captive reinsurance arrangements or providing products or services to mortgage lenders at improperly reduced prices in return for the referral of mortgage insurance, including the provision of contract underwriting services. In addition to these private lawsuits, in 2013, the United States District Court for the Southern District of Florida approved consent orders issued by the CFPB against five other private mortgage insurers relating to captive reinsurance. Under the settlements, the mortgage insurers will end the challenged practices, pay monetary penalties, and be subject to monitoring by the CFPB and required to make reports to the CFPB in order to ensure their compliance with the provisions of the orders.

In June 2015, the Director of the CFPB issued a decision in a contested CFPB administrative proceeding, In re PHH Corp. The Director of the CFPB affirmed an administrative law judge's conclusion that PHH Corp. had violated RESPA in connection with its captive reinsurance arrangements with mortgage insurers (including Arch MI's predecessor, CMG Mortgage Insurance Company). The Director of the CFPB required PHH to pay \$109 million in disgorgement, rather than the \$6 million recommended by the administrative law judge. The Director of the CFPB's decision sets forth the CFPB's current views on numerous RESPA interpretation issues and takes expansive views of what constitutes a RESPA violation and how to calculate disgorgement under the statute. Commentators have noted, among other things, that the Director of the CFPB's decision gave little weight to the section within the RESPA statute that provides that the payment of reasonable compensation for services actually furnished shall not be considered a violation. In July 2015, PHH appealed the Director of the CFPB's decision to the D.C. Circuit Court of Appeals. In August 2015, the Court of Appeals granted PHH's motion to stay the Director of the CFPB's disgorgement order, stating only that PHH had "satisfied the stringent standards required in granting a stay pending appeal," which include a likelihood of success on the merits. In October 2015, four mortgage industry trade groups (including the mortgage insurance industry's trade group, U.S. Mortgage Insurers) filed an amicus brief with the Court in support of PHH's appeale.

TILA-RESPA Integrated Disclosure ("TRID") Rule. In November 2013, the CFPB issued a final rule amending the TILA and RESPA regulations (Regulations Z and X, respectively) to integrate several required notices and disclosures to mortgage loans applicants. In July 2015, the CFPB issued an amended final rule establishing October 3, 2015 as the effective date for implementation of the new forms and the associated rules. The TRID rule consolidates four existing disclosures required by TILA and RESPA, the appraisal notice required by the Equal Credit Opportunity Act, and the servicing notice required by RESPA into two forms: a Loan Estimate that must be delivered or placed in the mail no later than the third business day after receiving the consumer's application, and a Closing Disclosure that must be provided to the consumer at least three business days prior to loan consummation. Mortgage insurers do not have any obligations to provide notices or disclosures to loan applicants under the TRID rule. However, following the October 3, 2015 effective date, mortgage loan originators are continuing to work thorough issues in implementing the new disclosures, including, in some instances, the proper way to disclose mortgage insurance premiums on the new forms. Secure and Fair Enforcement for Mortgage Licensing Act. The SAFE Act was enacted in 2008 to enhance consumer protection and reduce fraud by encouraging states to establish minimum standards for the licensing and registration of state-licensed mortgage loan originators. The SAFE Act also requires the establishment of a nationwide mortgage licensing system and registry for the residential mortgage industry. Administration and enforcement of the SAFE Act lies with the CFPB. Arch Fulfillment Operations Inc. ("AFOI"), an entity engaged in the business of providing contract underwriting services to residential lenders, has obtained certain mortgage lender licenses in order to comply with

state specific SAFE Act requirements.

Fair Credit Reporting Act. The FCRA imposes restrictions on the permissible use of credit report information. FCRA has been interpreted by the FTC staff and federal courts to require mortgage insurance companies to provide "adverse action" notices to consumers in the event an application for mortgage insurance is declined or offered at a premium rate higher than the lowest premium rate available for the loan program applied for based in whole or in part on the consumer's

Table of Contents

credit report. Arch MI U.S. provides such notices. Although Arch MI U.S. has not been involved, there has been class action litigation over FCRA adverse action notices involving the mortgage industry, including court-approved settlements.

Terrorism Risk Insurance Program Reauthorization Act of 2015. The Terrorism Risk Insurance Act of 2002 was amended and extended again by TRIPRA through December 31, 2020. TRIPRA provides a federal backstop for insurance related losses resulting from certain acts of terrorism on U.S. soil or against certain U.S. air carriers, vessels or foreign missions. Under TRIPRA, all U.S. based property and casualty insurers are required to make terrorism insurance coverage available in specified commercial property and casualty insurance lines. Under TRIPRA, the federal government will pay 85% of covered losses after (i) aggregate industry insured losses resulting from the act of terrorism exceeds a statutorily prescribed program trigger, and (ii) an insurer's losses exceed a deductible determined by a statutorily prescribed formula, up to a combined annual aggregate limit for the federal government and all insurers of \$100 billion. The program trigger for calendar year 2015 is \$100 million and will increase by \$20 million per year until it becomes \$200 million in 2020. Beginning January 1, 2016, the 85% federal share will decrease by 1% per year until it becomes 80% in 2020. If an act (or acts) of terrorism result in covered losses exceeding the \$100 billion annual limit, insurers with losses exceeding their deductibles will not be responsible for additional losses. An insurer's deductible for each year is based on the insurer's (together with those of its affiliates) direct commercial earned premiums for property and casualty insurance, excluding certain lines of business such as commercial auto, surety, professional liability and earthquake lines of business, for the prior calendar year multiplied by a specified percentage. The specified percentage for 2015 through 2020 is 20%.

Our U.S.-based property and casualty insurers, Arch Insurance, Arch Specialty, Arch E&S and Arch Indemnity, are subject to TRIPRA. TRIPRA specifically excludes reinsurance business and, accordingly, does not apply to our reinsurance operations. Our insurance group's deductible for 2015 was approximately \$303.5 million (i.e., 20.0% of direct earned premiums). Based on 2015 direct commercial earned premiums, our insurance group's deductible for 2016 will be approximately \$322.5 million (i.e., 20.0% of such direct earned premiums).

The Gramm-Leach-Bliley Act. The Gramm-Leach-Bliley Act of 1999 ("GLBA"), which implements fundamental changes in the regulation of the financial services industry in the United States, was enacted on November 12, 1999. The GLBA permits mergers that combine commercial banks, insurers and securities firms under one holding company, a "financial holding company." Bank holding companies and other entities that qualify and elect to be treated as financial holding companies may engage in activities, and acquire companies engaged in activities, that are "financial" in nature or "incidental" or "complementary" to such financial activities. Such financial activities include acting as principal, agent or broker in the underwriting and sale of life, property, casualty and other forms of insurance and annuities.

Until the passage of the GLBA, the Glass-Steagall Act of 1933 had limited the ability of banks to engage in securities-related businesses, and the Bank Holding Company Act of 1956 had restricted banks from being affiliated with insurers. Since passage of the GLBA, among other things, bank holding companies may acquire insurers, and insurance holding companies may acquire banks. The ability of banks to affiliate with insurers may affect our U.S. subsidiaries' product lines by substantially increasing the number, size and financial strength of potential competitors. The GLBA also imposes privacy requirements on financial institutions, including obligations to protect and safeguard consumers' nonpublic personal information and records, and limitations on the re-use of such information. Federal regulatory agencies have issued Interagency Guidelines Establishing Information Security Standards, or "Security Guidelines," and interagency regulations regarding financial privacy, or "Privacy Rule," implementing sections of GLBA. The Security Guidelines establish standards relating to administrative, technical, and physical safeguards to ensure the security, confidentiality, integrity, and the proper disposal of consumer information. The Privacy Rule limits a financial institution's disclosure of nonpublic personal information to unaffiliated third parties unless certain notice requirements are met and the consumer does not elect to prevent or "opt out" of the disclosure. The Privacy Rule also requires that privacy notices provided to customers and consumers describe the financial institutions' policies and practices to protect the confidentiality and security of the information. Many states have enacted legislation implementing GLBA and establishing information security regulation. Many states have enacted privacy and data security laws which impose compliance obligations beyond GLBA, including obligations to protect social security

numbers and provide notification in the event that a security breach results in a reasonable belief that unauthorized persons may have obtained access to consumer nonpublic information.

GSE Qualified Mortgage Insurer Requirements. Pursuant to their charters, the GSEs purchase low down payment loans insured by MIs that they determine to be qualified. Fannie Mae and Freddie Mac have each published comprehensive requirements to become and remain a qualified mortgage insurer. In April 2015, the GSEs published comprehensive,

Table of Contents

revised requirements, known as the Private Mortgage Insurer Eligibility Requirements or "PMIERs." The PMIERs became effective December 31, 2015 and apply to Arch MI U.S., which is a GSE-approved mortgage insurer. They do not apply to Arch Mortgage Guaranty Company, which is not GSE-approved. In addition to extensive requirements relating to the operation of our mortgage insurance business, the PMIERs include revised financial requirements for mortgage insurers. These financial requirements require a mortgage insurer's available assets, which generally include only the most liquid assets of an insurer, to meet or exceed "minimum required assets" as of each quarter end. Minimum required assets are calculated from PMIERs tables with several risk dimensions (including origination year, original loan-to-value and original credit score of performing loans, and the delinquency status of non-performing loans) and are subject to a minimum amount.

No later than March 1, 2016, mortgage insurers must certify to the GSEs that they meet all of the requirements of the PMIERs or identify specific requirements that they do not meet. If a mortgage insurer is unable to meet the financial requirements of the PMIERs, it must submit by March 31, 2016 a transition plan to the GSEs for their review and approval. Mortgage insurers that have not met the financial requirements of the PMIERs by June 30, 2017 will be subject to remediation actions by the GSEs.

The amount of assets required to satisfy the revised financial requirements of the PMIERs at any point in time will be affected by many factors, including macro-economic conditions, the size and composition of Arch MI U.S.'s mortgage insurance portfolio at the point in time, and the amount of risk ceded to reinsurers that may be deducted by Arch MI U.S. in its calculation of "minimum required assets." Arch MI U.S. satisfied the PMIERs' financial requirements as of December 31, 2015.

Under the PMIERs, Arch MI U.S. is deemed to be a "newly-approved insurer." As a result of this status, until January 2017, Arch MI U.S. is subject to additional PMIER requirements, including: Arch MI U.S. is prohibited from paying dividends to affiliates or making any investment, contribution or loan to any affiliate; Arch MI U.S. must obtain prior written approval from each GSE before entering into any reinsurance agreement, or risk novation or commutation transaction, providing any kind of mortgage insurance beyond primary first lien or providing capital support, assumption of liability or a guarantee of another company's indebtedness; and Arch MI U.S. must provide Freddie Mac with notice of its entering into any transaction involving mortgage insurance other than on an "individual loan 'flow' basis, e.g., pool insurance, bulk primary transactions, 'structured' or 'negotiated' transactions;" or any material change in its business plan.

State Insurance Regulation of Mortgage Insurers. Arch MI U.S. is subject to detailed regulation both by its domiciliary and primary regulator, the Wisconsin Office of the Commissioner of Insurance ("Wisconsin OCI") and by state insurance departments in each state in which it is licensed. As mandated by state insurance laws, mortgage insurers are generally mono-line companies restricted to writing a single type of insurance business, such as mortgage insurance business. Arch MI U.S. is subject to Wisconsin statutory requirements as to payment of dividends. The maximum amount of dividends that Arch MI U.S. may pay in any 12-month period without regulatory approval by the Wisconsin OCI is the lesser of adjusted statutory net income or 10% of statutory policyholders' surplus as of the preceding calendar year end. Adjusted statutory net income is defined for this purpose to be the greater of: (i) net income for the calendar year preceding the date of the dividend, minus realized capital gains for that calendar year; or (ii) aggregate net income for the 3 calendar years preceding the date of the dividend, less realized capital gains for those calendar years and less dividends paid or credited and distributions made within the first 2 of the preceding 3 calendar years.

Generally, Wisconsin law precludes any dividend before giving at least 30 days notice to the Wisconsin OCI and prohibits paying any dividend unless it is fair and reasonable to do so. In addition to Wisconsin, the GSEs and other states limit or restrict Arch MI U.S.'s ability to pay stockholder dividends.

Mortgage insurance companies licensed in Wisconsin are required to establish contingency loss reserves for purposes of statutory accounting in an amount equal to at least 50% of net earned premiums. These amounts generally cannot be withdrawn for a period of 10 years. However, with prior regulatory approval, a mortgage insurance company may make early withdrawals from the contingency reserve when incurred losses exceed 35% of net premiums earned in a calendar year.

Under Wisconsin law, as well as that of 15 other states, a mortgage insurer must maintain a minimum amount of statutory capital relative to its risk in force in order for the mortgage insurer to continue to write new business. While formulations of minimum capital vary in certain jurisdictions, the most common measure applied allows for a maximum risk-to-capital ratio of 25 to 1. Wisconsin requires a mortgage insurer to maintain a "minimum policyholder position"

Table of Contents

calculated in accordance with regulations. Policyholders' position consists primarily of statutory policyholders' surplus plus the statutory contingency reserve. While the statutory contingency reserve is reported as a liability on the statutory balance sheet, for risk-to-capital ratio calculations, it is included as capital for purposes of statutory capital. The NAIC has established a working group to make recommendations to the NAIC's Financial Condition Committee regarding changes to the NAIC's Mortgage Guaranty Insurance Model Act. The NAIC working group has released several drafts that include proposed changes to minimum statutory capital requirements. If the NAIC revises the Mortgage Guaranty Insurance Model Act, some state legislatures are likely to enact and implement part or all of the revised provisions.

Mortgage insurance premium rates are also subject to review and approval by state regulators. Any increase or decrease in premium rates must be justified, generally on the basis of the insurer's loss and default experience, expenses and future trend analysis. Arch MI U.S. has approved premium rates for credit union and mortgage banking originated mortgage loans in all 50 states.

Legislative and Regulatory Proposals. From time to time various regulatory and legislative changes have been proposed in the insurance and reinsurance industry. Among the proposals that have been considered are the possible introduction of federal regulation in addition to, or in lieu of, the current system of state regulation of insurers and the NAIC. In addition, there are a variety of proposals being considered by various state legislatures. Two ongoing areas of work at the NAIC are model rules relating to corporate governance and consideration of enhanced methods of group supervision.

Since the GSEs were placed into the conservatorship of FHFA in 2008, there has been debate regarding the roles of the GSEs, the federal government and private capital in the U.S. housing finance system. The federal government currently plays a dominant role in the U.S. housing finance system through the GSEs and the FHA, VA and Ginnie Mae. There is broad policy consensus on the need for private capital to play a larger role and government credit risk to be reduced. However, to date there has been a lack of consensus with regard to the specific changes necessary to return a larger role for private capital and reduce the role of government. The size, complexity and centrality of the GSEs to the current housing finance system and the importance of housing to the economy make the transition to any new housing finance system difficult.

GSE and secondary market reform proposals put forward since 2008 include the nearly complete privatization and elimination of the role of the GSEs, recapitalization of the GSEs, and a number of alternatives that combine a federal role with private capital, some of which eliminate the GSEs and others of which envision an on-going role for the GSEs. In 2011, the U.S. Department of the Treasury released a proposal to reform the U.S. housing finance market that included the substantial reduction of government's footprint in housing finance. In 2013, the Obama Administration issued a set of core principles for housing finance reform that was intended to ensure widespread access to 30-year fixed rate mortgages while phasing out the role of the GSEs in the housing finance system. In January 2015, the Obama Administration called for Congress to "wind down" the GSEs.

Several reform proposals have been considered by Congress. In 2013, the House Financial Services Committee passed H.R. 2767, "The Protecting American Taxpayers and Homeowners Act of 2013" (the "PATH Act"), a comprehensive secondary market reform plan that included a very limited risk-bearing role for government and the winding down of the GSEs. In 2014, the Senate Banking Committee passed S. 1217, "The Housing Finance Reform and Taxpayer Protection Act of 2014" (the "Reform Bill"). The Reform Bill would have created a general structure for comprehensive reform and transition, including the wind down of the GSEs and the creation of a new entity, the Federal Mortgage Insurance Corporation, or "FMIC." Under the Reform Bill, private investors in single-family covered securities would have been required to hold a 10% first loss position before FMIC, in exchange for a fee, would insure the payment of principal and interest on the covered securities. While the bill explicitly provided a role for mortgage insurance on low down-payment loans, it did not recognize the loss protection provided by mortgage insurance toward the 10% first loss requirement.

In 2015, neither Congress nor the Obama Administration took comprehensive action with respect to GSE reform. Accordingly, the prospects for passage of housing finance and GSE reform legislation remain uncertain. New federal legislation could reduce the level of private mortgage insurance coverage used by the GSEs as credit enhancement, eliminate the GSE charter requirement altogether or otherwise alter or eliminate the role of the GSEs, and thereby

materially affect Arch MI U.S.'s ability to compete and the demand for its products.

Table of Contents

As the regulator and conservator of the GSEs, FHFA has the authority to establish the priorities of the GSEs and to control and direct their operations. FHFA has made changes to the business and operations of the GSEs, in part under the direction of annual FHFA-developed strategic plans or scorecards for the conservatorship of the GSEs. The 2015 strategic plan called for the contraction of the role of the GSEs and expansion of the role of private capital through a number of actions, including shrinking the portfolios of the GSEs and the expanded use of credit risk sharing with private market participants. FHFA's 2016 scorecard continues these priorities.

Arch MI U.S. competes with the single-family mortgage insurance programs of FHA, which is part of HUD. In January 2015, FHA reduced the annual mortgage insurance premium it charges from 1.35% of the loan amount to 0.85%. This premium reduction made private mortgage insurance less competitive with the FHA for borrowers with certain credit characteristics. In July 2013, the House Financial Services Committee passed the PATH Act, which contained extensive reforms to FHA, and the Senate Banking Committee passed "The FHA Solvency Act of 2013." Despite areas of similarity, there were significant differences between the House and Senate proposed reforms. The prospects for passage of FHA reform legislation are uncertain. If FHA reform were to raise FHA premiums, tighten FHA credit guidelines, make other changes which make lender use of the FHA less attractive, or implement credit risk sharing between the FHA and private mortgage insurers, these changes may be beneficial to Arch MI U.S. However, there can be no assurance that any FHA reform legislation will be enacted into law, and what provisions may be contained in any final legislation, if any.

We are unable to predict whether any of these proposed laws and regulations will be adopted, the form in which any such laws and regulations would be adopted, or the effect, if any, these developments would have on our operations and financial condition. See "—U.S. Insurance Regulation—General."

Basel III. In 1988, the Basel Committee on Banking Supervision developed the Basel Capital Accord ("Basel I"), which set out international benchmarks for assessing banks' capital adequacy requirements. In 2005, the Basel Committee issued an update to Basel I ("Basel II"), which, among other things, governs the capital treatment of mortgage insurance purchased by domestic and international banks in respect of their origination and securitization activities. In 2013, Federal banking agencies approved new capital regulations implementing in the United States the Basel III international agreement on capital standards ("Basel III"). These regulations include an "Advanced Approach" which is only applicable to the very largest banking organizations and other financial companies determined to be "systemically important." The final regulations also included a simpler framework for smaller banking companies called the "Standardized Approach." The Standardized Approach is generally applicable to banking companies with less than \$250 billion in assets. The Basel III regulations restrict the instruments that can count toward meeting the capital requirements, thereby placing greater emphasis on common equity and retained earnings.

The Advanced Approach framework utilizes models to determine the capital requirements for covered entities. Pursuant to these models, covered companies will determine for each type of mortgage held in portfolio such factors as the probability of default, the loss to the bank in the event of a default, and the bank's exposure at default. The data must be based on highly stressed economic conditions. The existence of mortgage insurance may be factored into these models, and may result in a lower capital requirement for certain classes of mortgage loans. However, the degree to which mortgage insurance will reduce capital requirements depends on the characteristics of the loans and regulatory approval of the methodology used by the banking companies. Therefore, the full extent to which mortgage insurance will reduce capital requirements under this approach is uncertain.

Under the Standardized Approach, the capital treatment of mortgage loans is essentially unchanged from Basel II. Prudently underwritten first mortgage loans will continue to generally receive a risk weight of 50%. The existence of mortgage insurance will compensate for an original loan-to-value ratio of less than 90%. If a mortgage is originated with a loan-to-value ratio that is greater than 90%, it will not be considered to be prudently underwritten unless the loan is protected by mortgage insurance or other credit support, such as readily marketable collateral.

In December 2014, the Basel Committee issued a new proposal to make further revisions in the Basel III capital rules. Among other things, the new proposal would have introduced a table of risk weights for residential mortgages ranging from 25% to 100% based on the loan-to-value ratio. The Basel Committee issued a revised proposed revision to the Standardized Approach in December 2015. Comments on the revised proposal are due March 11, 2016.

Under both the Advanced and Standardized Approaches, the risk weight for mortgage servicing assets held by banks is sharply increased, and mortgage servicing assets above certain levels must be deducted from capital. Since a significant percentage of the mortgages insured by the mortgage insurance industry are serviced by banks or bank-owned mortgage

Table of Contents

companies, these changes could cause shifts in the amounts of mortgages serviced by banks and bank affiliates or subsidiaries relative to non-banking organizations. It is difficult to predict the impact these shifts may have on the quality of the servicing of insured mortgages or the ultimate impact on the mortgage insurance industry. In addition to new capital standards, the Basel III international accord also calls upon the international banking regulators to impose minimum liquidity requirements on banking institutions. In September 2014, Federal banking agencies finalized a regulation implementing this new Basel III liquidity requirement by prescribing a "liquidity coverage ratio" or "LCR." The LCR will be phased-in over a two year period that began on January 1, 2015. The LCR requires covered banking organizations (those with \$50 billion or more in assets) to maintain sufficient amounts of high quality liquid assets to withstand a specified run on the institution during a period of severe economic stress. Mortgages and mortgage-related securities are not considered to be high quality liquid assets under this test. Therefore, covered banks may decide to reduce their mortgage loan portfolios in order to replace these assets with investments that meet the definition of high quality liquid assets. We cannot predict what, if any, effect this may have on the demand for mortgage insurance.

United Kingdom Insurance Regulation

General. The Financial Services Authority (the "FSA"), which on April 1, 2013 was replaced by the Prudential Regulation Authority ("PRA") and the Financial Conduct Authority ("FCA"), regulated insurance and reinsurance companies and firms carrying on insurance mediation activities operating in the U.K. under the Financial Services and Markets Act 2000 (the "FSMA"). In May 2004, Arch Insurance Company Europe was licensed and authorized by the FSA. It holds the relevant permissions for the classes of insurance business which it underwrites in the U.K. In 2009, AUAL was licensed and authorized by the FSA and the Lloyd's Franchise Board. AUAL holds the relevant permissions for the classes of insurance business which are underwritten in the U.K. by Arch Syndicate 2012. Arch Syndicate 2012 has one member, Arch Syndicate Investments Ltd. ("ASIL"). All U.K. companies are also subject to a range of statutory provisions, including the laws and regulations of the Companies Act 2006 (as amended) (the "U.K. Companies Act").

The objectives of the PRA are to promote the safety and soundness of all firms it supervises and to secure an appropriate degree of protection for policyholders. The objectives of the FCA are to ensure customers receive financial services and products that meet their needs, to promote sound financial systems and markets and to ensure that firms are stable and resilient with transparent pricing information and which compete effectively and have the interests of their customers and the integrity of the market at the heart of how they run their business. The PRA has responsibility for the prudential regulation of banks and insurers, while the FCA has responsibility for the conduct of business regulation in the wholesale and retail markets. The PRA and the FCA adopt separate methods of assessing regulated firms on a periodic basis. Arch Insurance Europe and AUAL are subject to periodic assessment by the PRA along with all regulated firms. Arch Insurance Company Europe and AUAL are subject to regulation by both the PRA and FCA.

Lloyd's Supervision. The operations of AUAL and related Arch Syndicate 2012 and its corporate member, ASIL, are subject to the byelaws and regulations made by (or on behalf of) the Council of Lloyd's, and requirements made under those byelaws. The Council of Lloyd's, established in 1982 by Lloyd's Act 1982, has overall responsibility and control of Lloyd's. Those byelaws, regulations and requirements provide a framework for the regulation of the Lloyd's market, including specifying conditions in relation to underwriting and claims operations of Lloyd's participants. Lloyd's is also subject to the provisions of the FSMA. Lloyd's is authorized by the PRA and regulated by the PRA and FCA. Those entities acting within the Lloyd's market are required to comply with the requirements of the FSMA and provisions of the PRA's or FCA's rules, although the PRA has delegated certain of its powers, including some of those relating to prudential requirements, to Lloyd's. ASIL, as a member of Lloyd's, is required to contribute 0.5% of Arch Syndicate 2012's premium income limit for each year of account to the Lloyd's central fund. The Lloyd's central fund is available if members of Lloyd's assets are not sufficient to meet claims for which the member is liable. As a member of Lloyd's, ASIL may also be required to contribute to the central fund by way of a supplement to a callable layer of up to 3% of Arch Syndicate 2012's premium income limit for the relevant year of account. In addition, AUAL, on behalf of Arch Syndicate 2012, is approved to underwrite excess and surplus lines insurance in most states in the U.S. through Lloyd's licenses. Such activities must be in compliance with the Lloyd's requirements.

Financial Resources. Arch Insurance Company Europe and AUAL (on behalf of itself, Arch Syndicate 2012 and ASIL) are each required to demonstrate the adequacy of its financial assets to the PRA. On a periodic basis, Arch Insurance Europe is required to provide the PRA and Lloyd's with its own risk-based assessment of its capital needs, taking into

Table of Contents

account comprehensive risk factors, including market, credit, operational, liquidity and group risks to generate a revised calculation of its expected liabilities which, in turn, enable the PRA and Lloyd's to provide individual capital guidance and requirements to Arch Insurance Europe. Arch Insurance Europe's surplus is above the risk-based capital threshold as determined by the PRA's individual capital assessment of Arch Insurance Europe. The PRA requires that Arch Insurance Europe maintain a margin of solvency calculation based on the classes of business for which it is authorized and within its premium income projections applied to its worldwide general business.

Financial Services Compensation Scheme. The Financial Services Compensation Scheme ("FSCS") is a scheme established under FSMA to compensate eligible policyholders of insurance companies who may become insolvent. The FSCS is funded by the levies that it has the power to impose on all insurers. Arch Insurance Europe could be required to pay levies to the FSCS.

Restrictions on Acquisition of Control. Under FSMA, the prior consent of the PRA or FCA, as applicable, is required, before any person can become a controller or increase its control over any regulated company, including Arch Insurance Company Europe and AUAL, or over the parent undertaking of any regulated company. Therefore, the PRA's or FCA's prior consent, as applicable, is required before any person can become a controller of ACGL. Prior consent is also required from Lloyd's before any person can become a controller or increase its control over a corporate member or a managing agent or a parent undertaking of a corporate member or managing agent. A controller is defined for these purposes as a person who holds (either alone or in concert with others) 10% or more of the shares or voting power in the relevant company or its parent undertaking.

Restrictions on Payment of Dividends. Under English law, all companies are restricted from declaring a dividend to their shareholders unless they have "profits available for distribution." The calculation as to whether a company has sufficient profits is based on its accumulated realized profits minus its accumulated realized losses. U.K. insurance regulatory laws do not prohibit the payment of dividends, but the PRA or FCA, as applicable, requires that insurance companies and insurance intermediaries maintain certain solvency margins and may restrict the payment of a dividend by Arch Insurance Company Europe, AUAL or ASIL. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Financial Condition, Liquidity and Capital Resources— Liquidity and Capital Resources" and note 22, "Statutory Information," of the notes accompanying our financial statements.

European Union Considerations. Through their respective authorizations in the U.K., a Member State of the European Union ("EU"), Arch Insurance Company Europe's and AUAL's authorizations are recognized throughout the European Economic Area ("EEA"), subject only to certain notification and application requirements. This authorization enables Arch Insurance Company Europe and AUAL to establish a branch in any other Member State of the EU, where such entity will be subject to the insurance regulations of each such Member State with respect to the conduct of its business in such Member State, but remain subject only to the financial and operational supervision by the PRA or FCA (as applicable). The framework for the establishment of branches in Member States of the EU other than the U.K. was generally set forth, and remains subject to, directives adopted by the Council, the legislative body of the EU, which directives are then implemented in each Member State. Arch Insurance Company Europe currently has branches in Germany, Italy, Spain and Sweden and may establish branches in other Member States of the EU in the future. Further, through its authorizations in an EU Member State, Arch Insurance Company Europe and AUAL have the freedom to provide insurance services anywhere in the EEA subject to compliance with certain rules governing such provision, including notification to the PRA or FCA, as applicable.

A new European solvency framework and prudential regime for insurers and reinsurers, under the Solvency II Directive 2009/138/EC ("Solvency II"), took effect in full on January 1, 2016. Arch Insurance Company Europe, AUAL and Syndicate 2012 are required to comply with Solvency II requirements. See "European Union Insurance and Reinsurance Regulation—Insurance and Reinsurance Regulatory Regime" below for additional details. Canada Insurance Regulation

Arch Insurance Canada and Arch Re Canada are subject to federal, as well as provincial and territorial, regulation in Canada. The Office of the Superintendent of Financial Institutions ("OSFI") is the federal regulatory body that, under the Insurance Companies Act (Canada), regulates federal Canadian and non-Canadian insurance/reinsurance companies operating in Canada. Arch Insurance Canada and Arch Re Canada are subject to regulation in the provinces and territories in which they underwrite insurance/reinsurance, and the primary goal of insurance/reinsurance

regulation at the provincial and territorial levels is to govern the market conduct of insurance/reinsurance companies. Arch Insurance Canada is

Table of Contents

licensed to carry on insurance business by OSFI and in each province and territory. Arch Re Canada is licensed to carry-on reinsurance business by OSFI and in the provinces of Ontario and Quebec.

Under the Insurance Companies Act (Canada), Arch Insurance Canada is required to maintain an adequate amount of capital in Canada, calculated in accordance with a test promulgated by OSFI called the Minimum Capital Test, and Arch Re Canada is required to maintain an adequate margin of assets over liabilities in Canada, calculated in accordance with a test promulgated by OSFI called the Branch Adequacy of Assets Test. OSFI has implemented a risk-based methodology for assessing insurance/reinsurance companies operating in Canada known as its "Supervisory Framework." In applying the Supervisory Framework, OSFI considers the inherent risks of the business and the quality of risk management for each significant activity of each operating entity. Under the Insurance Companies Act (Canada), approval of the Minister of Finance (Canada) is required in connection with certain acquisitions of shares of, or control of, Canadian insurance companies such as Arch Insurance Canada, and notice to and/or approval of OSFI is required in connection with the payment of dividends by or redemption of shares by Canadian insurance companies such as Arch Insurance Canada.

Ireland Insurance and Reinsurance Regulation

General. The Central Bank of Ireland ("CBOI") regulates insurance and reinsurance companies and intermediaries authorized in Ireland. Our three Irish operating subsidiaries are Arch Re Europe, Arch MI Europe and Arch Underwriters Europe. Arch Re Europe was licensed and authorized by the CBOI as a non-life reinsurer in October 2008 and as a life reinsurer in November 2009. Arch MI Europe was licensed and authorized by the CBOI as a non-life insurer in December 2011. Arch Underwriters Europe was registered by the CBOI as an insurance and reinsurance intermediary in July 2014. Arch Re Europe, Arch MI Europe and Arch Underwriters Europe are subject to the supervision of the CBOI and must comply with Irish insurance acts and regulations as well as with directions and guidance issued by the CBOI.

Arch Re Europe and Arch MI Europe are required to comply with Solvency II requirements. See "European Union Insurance and Reinsurance Regulation—Insurance and Reinsurance Regulatory Regime" below for additional details. As an intermediary, Arch Underwriters Europe is subject to a different regulatory regime and is not subject to solvency capital rules, but must comply with requirements such as to maintain professional indemnity insurance and to have directors that are fit and proper. Our Irish subsidiaries are also subject to the general body of Irish company laws and regulations including the provisions of the Companies Act 2014.

Financial Resources. Arch Re Europe and Arch MI Europe are required to meet economic risk-based solvency requirements imposed under Solvency II. Solvency II, together with European Commission "delegated acts" and guidance issued by the European Insurance and Occupational Pensions Authority ("EIOPA") sets out classification and eligibility requirements, including the features which capital must display in order to qualify as regulatory capital. Restrictions on Acquisitions. Under Irish law, the prior consent of the CBOI is required before any person can acquire or increase a qualifying holding in an Irish insurer or reinsurer, including Arch MI Europe and Arch Re Europe, or their parent undertakings. A qualifying holding is defined for these purposes as a direct or indirect holding that represents 10% or more of the capital of, or voting rights, in the undertaking or makes it possible to exercise a significant influence over the management of the undertaking.

Restrictions on Payment of Dividends. Under Irish company law, Arch Re Europe, Arch MI Europe and Arch Underwriters Europe are permitted to make distributions only out of profits available for distribution. A company's profits available for distribution are its accumulated, realized profits, so far as not previously utilized by distribution or capitalization, less its accumulated, realized losses, so far as not previously written off in a reduction or reorganization of capital duly made. Further, the CBOI has powers to intervene if a dividend payment were to lead to a breach of regulatory capital requirements. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Financial Condition, Liquidity and Capital Resources—Liquidity and Capital Resources" and note 22, "Statutory Information," of the notes accompanying our financial statements.

European Union Considerations. As Arch Re Europe, Arch MI Europe and Arch Underwriters Europe are authorized by the CBOI in Ireland, a Member State of the EU, those authorizations are recognized throughout the EEA. Subject only to certain notification and application requirements, Arch Re Europe, Arch MI Europe and Arch Underwriters Europe can provide services, or establish a branch, in any other Member State of the EEA. Although, in doing so, they

may be subject to the laws of such Member States with respect to the conduct of business in such Member State, company law registrations and other matters, they will remain subject to financial and operational supervision by the CBOI only. Arch Re

Table of Contents

Accident & Health ApS ("Arch Re Denmark") is an underwriting agency underwriting accident and health business for Arch Re Europe in Denmark. Arch Re Europe also has a branch in the U.K., which underwrites non-life reinsurance risk for Arch Re Europe. Finally, Arch Re Europe also has a branch outside the EEA, Arch Reinsurance Europe Designated Activity Company, Dublin (Ireland), Zurich Branch ("Arch Re Europe Swiss Branch").

As part of its application for registration, Arch Underwriters Europe requested the CBOI to make the necessary notifications to permit it to provide insurance and reinsurance intermediary services in all EEA Member States. In 2015, Arch Underwriters Europe established a branch in the U.K.

Switzerland Reinsurance Regulation

In December 2008, Arch Re Europe opened Arch Re Europe Swiss Branch as a branch office. As Arch Re Europe is domiciled outside of Switzerland and its activities are limited to reinsurance, the Arch Re Europe Swiss Branch in Switzerland is not required to be licensed by the Swiss insurance regulatory authorities.

In August 2014, Arch Underwriters Europe opened a branch office in Zurich ("Arch Underwriters Europe Swiss Branch") to render reinsurance advisory services to certain group companies. Arch Underwriters Europe Swiss Branch is registered with the commercial register of the Canton of Zurich. Since its activities are limited to advisory services for reinsurance matters, the Arch Underwriters Europe Swiss Branch is not required to be licensed by the Swiss insurance regulatory authorities.

European Union Insurance and Reinsurance Regulation

Insurance and Reinsurance Regulatory Regime. Solvency II took effect in full on January 1, 2016. Solvency II is a new regulatory regime which imposes economic risk-based solvency requirements across all EU Member States and consists of three pillars: Pillar I-quantitative capital requirements, based on a valuation of the entire balance sheet; Pillar II-qualitative regulatory review, which includes governance, internal controls, enterprise risk management and supervisory review process; and Pillar III-market discipline, which is accomplished through reporting of the insurer's financial condition to regulators and the public. Solvency II is supplemented by European Commission Delegated Regulation (EU) 2015/35 (the "Delegated Regulation"), other European Commission "delegated acts" and binding technical standards, and guidelines issued by EIOPA. The Delegated Regulation sets out more detailed requirements for individual insurance and reinsurance undertakings, as well as for groups, based on the overarching provisions of Solvency II, which together make up the core of the single prudential rulebook for insurance and reinsurance undertakings in the EU.

Reinsurers established in a Member State of the EU have the freedom to establish branches in and provide services to all EEA states. Arch Insurance Company Europe and AUAL, being established in the U.K. and authorized by the PRA and FCA, are able, subject to regulatory notifications and there being no objection from the relevant U.K. regulator, and the Member States concerned, to establish branches and provide insurance and reinsurance services in all EEA Member States. Arch Re Europe, being established in Ireland and authorized by the CBOI to write reinsurance, is able, subject to similar regulatory notifications and there being no objection from the CBOI and the Member States concerned, to establish branches and provide reinsurance services in other EEA states.

Solvency II does not prohibit EEA insurers from obtaining reinsurance from reinsurers licensed outside the EEA, such as Arch Re Bermuda. As such, and subject to the specific rules in particular Member States, Arch Re Bermuda may do business from Bermuda with insurers in EEA Member States, but it may not directly operate its reinsurance business within the EEA. Article 172 of Solvency II provides that reinsurance contracts concluded by insurance undertakings in the EEA with reinsurers having their head office in a country whose solvency regime has been determined to be equivalent to Solvency II shall be treated in the same manner as reinsurance contracts with undertakings in the EEA authorized under Solvency II. On November 26, 2015, the European Commission determined that the supervisory regime, including the solvency regime, in Bermuda is equivalent to that laid down in Solvency II, except in relation to captives and special purpose insurers. This decision is subject to the approval of the European Parliament and the Council of the EU who have up to three months to exercise their right of objection, with the possibility to extend this period for another period of three months. Following the expiry of the objection period, or indication of no objection, the decision will be published and enter into force with effect from January 1, 2016.

A European Commission Delegated Decision has already granted provisional equivalence to the solvency regimes of certain countries, including Bermuda (except for Bermuda's rules on captives), for a period of ten years, effective from

Table of Contents

January 2016. The finding of provisional equivalence enables EU insurers with subsidiaries in Bermuda to calculate the subsidiaries' capital using the solvency rules in Bermuda, subject to certain conditions. However, it does not require that reinsurance contracts concluded by insurers in the EEA with reinsurers having their head office in Bermuda be treated in the same manner as reinsurance contracts with EEA authorized reinsurers. If Bermuda is granted full equivalence, the provisional equivalence decision will be amended to no longer refer to Bermuda. Unless agreement is reached to accord Bermuda based reinsurers equal treatment on the basis of the equivalent nature of Bermuda regulation, each individual EEA Member State may impose conditions on reinsurance provided by Bermuda based reinsurers which could restrict their future provision of reinsurance to the EEA Member State concerned. A number of EEA Member States currently restrict the extent to which Bermudian reinsurers may promote their services in those Member States, and a few have certain prohibitions on the purchase of insurance from reinsurers not authorized in the EEA.

Dubai Reinsurance Regulation

In April 2015, the agreement for us to acquire complete ownership and effective control of Gulf Re was approved by the Dubai Financial Services Authority ("DFSA"). Gulf Re is a limited liability company incorporated in the Dubai International Financial Centre ("DIFC"), a free zone specializing in wholesale financial services. The DIFC is situated in the Emirate of Dubai in the United Arab Emirates. Gulf Re is licensed to "Carry out Contracts of (Re)insurance" and "Effect Contracts of (Re)insurance" in respect of general insurance lines. Gulf Re is overseen by the DFSA and is subject to the laws of the DIFC. Gulf Re is not subject to insurance or financial regulation by the United Arab Emirates. As a (re)insurer licensed in the DIFC (a wholesale financial services market), Gulf Re is authorized to insure direct risks situated in the DIFC, but can only reinsure risks situated in the rest of the United Arab Emirates. In respect of risks situated outside of the United Arab Emirates, Gulf Re is authorized to insure or reinsure risks provided that doing so is not in breach of local regulation.

TAX MATTERS

The following summary of the taxation of ACGL and the taxation of our shareholders is based upon current law and is for general information only. Legislative, judicial or administrative changes may be forthcoming that could affect this summary.

The following legal discussion (including and subject to the matters and qualifications set forth in such summary) of certain tax considerations (a) under "—Taxation of ACGL—Bermuda" and "—Taxation of Shareholders—Bermuda Taxation' based upon the advice of Conyers Dill & Pearman Limited, Hamilton, Bermuda and (b) under "—Taxation of ACGL—United States," "—Taxation of Shareholders—United States Taxation," "—Taxation of Our U.S. Shareholders" and "States Taxation of Non-U.S. Shareholders" is based upon the advice of Cahill Gordon & Reindel LLP, New York, New York (the advice of such firms does not include accounting matters, determinations or conclusions relating to the business or activities of ACGL). The summary is based upon current law and is for general information only. The tax treatment of a holder of our shares (common shares or series C non-cumulative preferred shares), or of a person treated as a holder of our shares for U.S. federal income, state, local or non-U.S. tax purposes, may vary depending on the holder's particular tax situation. Legislative, judicial or administrative changes or interpretations may be forthcoming that could be retroactive and could affect the tax consequences to us or to holders of our shares.

Table of Contents

Taxation of ACGL

Bermuda

Under current Bermuda law, ACGL is not subject to tax on income or profits, withholding, capital gains or capital transfers. ACGL has obtained from the Minister of Finance under the Exempted Undertakings Tax Protection Act 1966 an assurance that, in the event that Bermuda enacts legislation imposing tax computed on profits, income, any capital asset, gain or appreciation, or any tax in the nature of estate duty or inheritance, the imposition of any such tax shall not be applicable to ACGL or to any of our operations or our shares, debentures or other obligations until March 31, 2035. We could be subject to taxes in Bermuda after that date. This assurance will be subject to the proviso that it is not to be construed so as to prevent the application of any tax or duty to such persons as are ordinarily resident in Bermuda (we are not so currently affected) or to prevent the application of any tax payable in accordance with the provisions of the Land Tax Act 1967 or otherwise payable in relation to any property leased to us or our insurance subsidiary. We pay annual Bermuda government fees, and our Bermuda insurance and reinsurance subsidiary pays annual insurance license fees. In addition, all entities employing individuals in Bermuda are required to pay a payroll tax and other sundry taxes payable, directly or indirectly, to the Bermuda government. United States

ACGL and its non-U.S. subsidiaries intend to conduct their operations in a manner that will not cause them to be treated as engaged in a trade or business in the United States and, therefore, will not be required to pay U.S. federal income taxes (other than U.S. excise taxes on insurance and reinsurance premium and withholding taxes on dividends and certain other U.S. source investment income). However, because definitive identification of activities which constitute being engaged in a trade or business in the U.S. is not provided by the Internal Revenue Code of 1986, as amended (the "Code"), or regulations or court decisions, there can be no assurance that the U.S. Internal Revenue Service ("IRS") will not contend successfully that ACGL or its non-U.S. subsidiaries are or have been engaged in a trade or business in the United States. A foreign corporation deemed to be so engaged would be subject to U.S. income tax, as well as the branch profits tax, on its income, which is treated as effectively connected with the conduct of that trade or business unless the corporation is entitled to relief under the permanent establishment provisions of a tax treaty. Such income tax, if imposed, would be based on effectively connected income computed in a manner generally analogous to that applied to the income of a domestic corporation, except that deductions and credits generally are not permitted unless the foreign corporation has timely filed a U.S. federal income tax return in accordance with applicable regulations. Penalties may be assessed for failure to file tax returns. The 30% branch profits tax is imposed on net income after subtracting the regular corporate tax and making certain other adjustments. Under the income tax treaty between Bermuda and the United States (the "Treaty"), ACGL's Bermuda insurance subsidiaries will be subject to U.S. income tax on any insurance premium income found to be effectively connected with a U.S. trade or business only if that trade or business is conducted through a permanent establishment in the United States. No regulations interpreting the Treaty have been issued. While there can be no assurances, ACGL does not believe that any of its Bermuda insurance subsidiaries has a permanent establishment in the United States. Such subsidiaries would not be entitled to the benefits of the Treaty if (i) 50% or less of ACGL's shares were beneficially owned, directly or indirectly, by Bermuda residents or U.S. citizens or residents, or (ii) any such subsidiary's income were used in substantial part to make disproportionate distributions to, or to meet certain liabilities to, persons who are not Bermuda residents or U.S. citizens or residents. While there can be no assurances, ACGL believes that its Bermuda insurance subsidiaries are eligible for Treaty benefits.

The Treaty clearly applies to premium income, but may be construed as not protecting investment income. If ACGL's Bermuda insurance subsidiaries were considered to be engaged in a U.S. trade or business and were entitled to the benefits of the Treaty in general, but the Treaty were not found to protect investment income, a portion of such subsidiaries' investment income could be subject to U.S. federal income tax.

Non-U.S. insurance companies carrying on an insurance business within the United States have a certain minimum amount of effectively connected net investment income, determined in accordance with a formula that depends, in part, on the amount of U.S. risk insured or reinsured by such companies. If any of ACGL's non-U.S. insurance subsidiaries is considered to be engaged in the conduct of an insurance business in the United States, a significant portion of such company's investment income could be subject to U.S. income tax.

Table of Contents

Non-U.S. corporations not engaged in a trade or business in the United States are nonetheless subject to U.S. income tax on certain "fixed or determinable annual or periodic gains, profits and income" derived from sources within the United States as enumerated in Section 881(a) of the Code (such as dividends and certain interest on investments), subject to exemption under the Code or reduction by applicable treaties.

The United States also imposes an excise tax on insurance and reinsurance premiums paid to non-U.S. insurers or reinsurers with respect to risks located in the United States. The rates of tax, unless reduced by an applicable U.S. tax treaty, are 4% for non-life insurance premiums and 1% for life insurance and all reinsurance premiums. United Kingdom

Our U.K. subsidiaries are companies incorporated and have their central management and control in the U.K., and are therefore resident in the U.K. for corporation tax purposes. As a result, they will be subject to U.K. corporation tax on their respective worldwide profits. Arch Re Europe U.K. Branch will be subject to U.K. corporation tax on the profits (both income profits and chargeable gains) attributable to the branch. The main rate of U.K. corporation tax for the financial year starting April 1, 2015 is 20% on profits. It has been announced that the U.K. corporation tax rate for the financial year starting April 1, 2016 will be 20% on profits. Canada

In January 2005, Arch Insurance received its federal license to commence underwriting in Canada and began writing business in the first quarter of 2005 through its branch operation. Effective January 1, 2013, the branch operation was domesticated into Arch Insurance Canada, a Canadian federal insurance company subsidiary of Arch Insurance. Arch Re U.S., through a branch, commenced underwriting reinsurance in Canada in January 2015. Arch Insurance Canada is taxed on its worldwide income. Arch Re U.S. is taxed on its net business income earned in Canada. The general federal corporate income tax rate in Canada is currently 15%. Provincial and territorial corporate income tax rates are added to the general federal corporate income tax rate and generally vary between 11% and 16%. Ireland

Arch Re Europe was licensed and authorized by the CBOI as a non-life reinsurer in October 2008 and as a life reinsurer in November 2009. Arch MI Europe was licensed and authorized by the CBOI as a non-life insurer in 2011. Arch Underwriters Europe Limited was registered by the CBOI as an insurance and reinsurance intermediary in July 2014. Each of Arch Re Europe, Arch MI Europe and Arch Underwriters Europe is incorporated and resident in Ireland for corporation tax purposes and will be subject to Irish corporate tax on its worldwide profits, including the profits of Arch Re Europe Swiss Branch and its U.K. branch and Arch Underwriters Europe Swiss Branch. Any creditable foreign tax (i.e., Swiss or U.K.) payable will be creditable against Arch Re Europe's Irish corporate tax liability on the results of Arch Re Europe's Swiss and U.K. branches with the same principle applied to Arch Underwriters Europe Swiss Branch. The current rate of Irish corporation tax applicable to such profits is 12.5%. Switzerland

Arch Re Europe Swiss Branch and Arch Underwriters Europe Swiss Branch are subject to Swiss corporation tax on the profit which is allocated to the branch. The effective tax rate is approximately 21.12% for Swiss federal, cantonal and communal corporation taxes on the profit. The effective tax rate of the annual cantonal and communal capital taxes on the equity which is allocated to Arch Re Europe Swiss Branch and Arch Underwriters Europe Swiss Branch is approximately 0.17%.

Denmark

Arch Re Denmark, established as a subsidiary of Arch Re Bermuda, is subject to Danish corporation taxes on its profits at a rate of 25% for 2013 and the preceding years. The corporate tax rate was reduced to 24.5% for 2014, to 23.5% for 2015 and to 22% for 2016 and onwards.

Table of Contents

Taxation of Shareholders

The following summary sets forth certain United States federal income tax considerations related to the purchase, ownership and disposition of our common shares and our series C non-cumulative preferred shares ("preferred shares"). Unless otherwise stated, this summary deals only with shareholders ("U.S. Holders") that are United States Persons (as defined below) who hold their common shares and preferred shares as capital assets and as beneficial owners. The following discussion is only a general summary of the United States federal income tax matters described herein and does not purport to address all of the United States federal income tax consequences that may be relevant to a particular shareholder in light of such shareholder's specific circumstances. In addition, the following summary does not describe the United States federal income tax consequences that may be relevant to certain types of shareholders, such as banks, insurance companies, regulated investment companies, real estate investment trusts, financial asset securitization investment trusts, dealers in securities or traders that adopt a mark-to-market method of tax accounting, tax exempt organizations, expatriates or persons who hold the common shares or preferred shares as part of a hedging or conversion transaction or as part of a straddle, who may be subject to special rules or treatment under the Code. This discussion is based upon the Code, the Treasury regulations promulgated there under and any relevant administrative rulings or pronouncements or judicial decisions, all as in effect on the date of this annual report and as currently interpreted, and does not take into account possible changes in such tax laws or interpretations thereof, which may apply retroactively. This discussion does not include any description of the tax laws of any state or local governments within the United States, or of any foreign government, that may be applicable to our common shares or preferred shares or the shareholders. Persons considering making an investment in the common shares or preferred shares should consult their own tax advisors concerning the application of the United States federal tax laws to their particular situations as well as any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction prior to making such investment.

If a partnership holds our common shares or preferred shares, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our common shares or preferred shares, you should consult your tax advisor.

For purposes of this discussion, the term "United States Person" means:

- a citizen or resident of the United States,
- a corporation or entity treated as a corporation created or organized in or under the laws of the United States, any state thereof, or the District of Columbia,
- an estate the income of which is subject to United States federal income taxation regardless of its source, a trust if either (x) a court within the United States is able to exercise primary supervision over the administration of such trust and one or more United States persons have the authority to control all substantial decisions of such trust or (y) the trust has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes or

any other person or entity that is treated for U.S. federal income tax purposes as if it were one of the foregoing. Bermuda Taxation

Currently, there is no Bermuda withholding tax on dividends paid by us.