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Arch
Capital Group Ltd.

2006 ANNUAL REPORT

Dollars in millions, except per share amounts

	2006	2005	Change
Book value per share at year-end	$ 43.97	$ 33.82	30%
After-tax operating income*	$ 734.5	$ 284.2	158%
Per share	$ 9.63	$ 3.80	153%
Operating return on equity	25.6%	12.0%	
Net income	$ 692.6	$ 256.5	170%
Per share	$ 9.08	$ 3.43	165%
Combined ratio	85.4%	95.8%	
Gross premiums written	$4,282.4	$4,014.8	7%
Net premiums written	$3,017.4	$3,138.8	(4%)
Net investment income	$ 380.2	$ 232.9	63%

All per share amounts are on a diluted basis

To Our Shareholders:

Arch Capital reached a milestone in 2006: our fifth full year of operation since the repositioning of the Company with an infusion of capital in late 2001. New property and casualty insurance companies are generally considered startups until they have five years of operating experience.

We have completed this initial phase of our development with a growing record of accomplishment. Five years ago, we said we wanted to "to build a new market leader and an enduring insurance and reinsurance franchise." We have made excellent progress toward that goal, capped off by our best year in 2006. Although we are still relatively young, we are already one of the world's premier insurance and reinsurance groups.

Five Years of Strong Performance

During the past five years we have:

- Put together an exceptional staff;
- Become a major global underwriter serving institutional and corporate clients in North America, Europe and other regions;
- Built a profitable, diversified book of business;
- Increased the book value of Arch common stock from $18.28 per diluted share at the end of 2001 to $43.97 at the end of 2006—a 21% compound annual growth rate;
- Increased our after-tax operating income from $1.59 per diluted share in 2002 to $9.63 per diluted share in 2006;
- Delivered a 21.3% average annual return to shareholders through increases in the market price of the common stock, outperforming the 6.2% annual return of the S&P 500 Index over the 2002-2006 period; and
- Managed our capital effectively while developing an increasingly strong balance sheet, which is essential to our ability to serve customers and provide favorable returns to shareholders.

* Operating income is a non-GAAP measure of financial performance. The reconciliation of GAAP and definition of operating income can be found in the Company's Current Report on Form 8-K furnished to the SEC on February 13, 2007, which contains the Company's earnings press release and is available on the Company's Web site.

These achievements attest to the validity of our strategies and the skills of our people in implementing those strategies. From the beginning, we have emphasized underwriting discipline, product diversification and prudent enterprise risk management as cornerstones of our philosophy. While many insurers say they are disciplined underwriters, we do not only say it, we practice it religiously. We have repeatedly proved our commitment by adjusting to changes in market conditions, writing business that offers the highest potential risk-adjusted returns and turning down business that is not adequately priced. We target business with an anticipated minimum 15% return on equity (ROE).

Insurance is a long-term enterprise in which we receive payment today for assuming risks that can be difficult to quantify and will, in many cases, manifest themselves over an extended period. By being disciplined in our underwriting and maintaining adequate loss reserves, we seek to create value for shareholders not only in the near term but also over time.

2006: Our Best Year

Our approach paid off in 2006 with a superb year. We benefited from sharply lower storm-related losses compared with those in 2005, which had witnessed the most severe Atlantic hurricane season on record. However, a lower rate of catastrophe-related losses was only part of the story. Our non-catastrophe business also contributed significantly to 2006 results.

In evaluating the Company's financial performance, we pay special attention to growth of book value per share, which creates long-term value for shareholders, and ROE, which measures the generation of earnings and the efficient use of capital and fuels book value per share growth. We did extremely well in 2006 by both benchmarks. Book value increased 30% in 2006 to $43.97 per diluted share at year-end, while after-tax operating income return on average equity was 25.6% for the year.

Other measures of performance also were highly positive. After-tax operating income available to common stockholders more than doubled to $734.5 million, or $9.63 per diluted share. Our earnings in 2006 were nearly as great as the entire capital contribution the Company received in late 2001. Our GAAP combined ratio improved to 85.4% in 2006 from 95.8% in 2005 due in part to the absence of major hurricane-related losses. Reserve development was better than anticipated for the fourth consecutive year, giving us confidence in the adequacy of our loss reserves.

Record Cash Flow and Investment Income

Cash flow provided by operating activities was a record $1.61 billion in 2006, driving the growth of the Company's investment portfolio and indicating we have not yet reached a "steady state" from an investment leverage standpoint. Investable assets increased 31% during 2006 to $9.1 billion at year-end, while the ratio of investable assets to common shareholders' equity was 2.78 to 1 at the end of 2006.

Net investment income increased to $380.2 million in 2006, a gain of 63% over 2005. Net investment income has more than quadrupled since 2003 and, on a normalized basis, accounted for more than half the Company's after-tax operating income in 2006 for the first time. The portfolio is comprised primarily of high-quality fixed-income securities, including U.S. Government, corporate and mortgage-backed securities, with essentially no investments in hedge funds or private equity funds. The portfolio's pre-tax yield rose to 4.71% in 2006 from 3.68% in 2005. This increase resulted from higher interest rate levels rather than from any reduction in investment quality. In fact, the portfolio had an average Standard & Poor's quality rating of "AAA" at December 31, 2006, up from "AA+" a year earlier. Its average effective duration was 3.2 years at the end of 2006 compared with 3.3 years at the end of 2005. The portfolio's very high quality and relatively short duration reflect our current view of risk-reward relationships in the financial markets. We will consider allocating a portion of assets to other investments as financial market considerations change, opportunities arise and the portfolio continues to grow in size.

Capitalizing on Changing Market Opportunities

Arch writes specialty lines of insurance and reinsurance in Bermuda, the United States, Europe and Canada through wholly owned subsidiaries. These lines require significant capital and a high level of expertise but offer the potential for superior financial rewards. We constantly seek to identify the best opportunities in each of our lines and, in the appropriate circumstances, expand into new lines that fit within our strategic principles.

The past year saw price erosion in many of our lines. After having peaked in 2005, rates on some lines declined by as much as 8% in 2006. Pricing remains attractive in many areas, even on lines for which rates have fallen. However, we trimmed our participation in 2006 in those areas that do not currently meet our ROE objectives. Consequently, we wrote less business on a net basis in 2006 than in 2005 while maintaining strong profitability, as premium growth in our insurance business was offset by proactive cutbacks in our reinsurance business. Reinsurance treaties typically run for 12 months, requiring that we make a commitment for the policies for that period. Accordingly, we take a forward-looking approach and reduce our participation in areas where the market outlook warrants action.

Net premiums written were $3.02 billion in 2006, down from $3.14 billion in 2005. Our business mix in 2006 was 55% insurance and 45% reinsurance based on net premiums written, compared with 47% insurance and 53% reinsurance in 2005.

The comparability of financial results from year to year is affected to some degree by our quota-share reinsurance treaty with Flatiron Reinsurance Ltd., a "sidecar" formed by outside investors. Under the treaty, Flatiron is assuming a 45% quota share of certain property and marine lines written by our Arch Reinsurance Ltd. (Bermuda) subsidiary in 2006 and 2007. Our net premiums written for 2006 do not include $273 million of reinsurance premiums ceded to Flatiron. The treaty enables us to leverage our infrastructure and generate additional business that is ceded to Flatiron and, in doing so, to increase our potential returns while staying within our risk management limits. We receive a fee for generating this business and a profit commission based on underwriting results. The arrangement contributed $0.35 per diluted share to the Company's after-tax operating income in 2006.

We shifted capital during the year to those insurance and reinsurance lines that we judged to offer the best risk-adjusted returns. We wrote more property, marine and aviation, professional liability, and construction insurance in 2006 and less casualty business. Competition in casualty-related reinsurance increased, and pricing pressure was the greatest on larger casualty accounts. In response, we reduced our participation in contracts where the underlying book of business is dominated by Fortune 1000-type accounts. Concurrently, we continued to shift to smaller and mid-sized casualty reinsurance accounts where pricing remained favorable.

In another example of our reallocation of capital, we wrote less property and property catastrophe business on a pro rata basis and emphasized excess of loss contracts, where we believe risk-adjusted returns are highly attractive at this time. Although this change led to less written premiums for these lines, it should enhance our profitability and returns per aggregate unit of catastrophe exposure committed.

As of early 2007, the most attractive area from a pricing viewpoint remains catastrophe-related business, with wind-exposed areas leading the way. Geographically, the one exception is Florida, where the state government expanded its role in personal lines coverages in January 2007 by freezing rates and ordering insurers not to cancel policies. In addition, it cut rates for customers of a state-run insurer and offered inexpensive catastrophe reinsurance through a state-managed catastrophe fund. The impact will be relatively small for Arch since we participate in only a limited number of reinsurance contracts directly affected by the legislation. While low-priced state insurance will provide short-term cost savings for Florida homeowners, we believe that offering insurance at subsidized rates—as the state is doing—is not economically viable in the long term. We are monitoring the situation and will respond to opportunities as they arise.

Expanding Our Markets

Flatiron is just one example of our approach to new opportunities. In 2006, we invested $50 million to acquire a small equity position in a newly formed Bermuda-based reinsurer, Aeolus Ltd. Aeolus specializes in fully collateralized property catastrophe protection for insurers and reinsurers on both an ultimate net loss and industry loss warranty basis, an area that we believe is best served by specialty firms. Our investment allows us to participate in this market through people we know well, respect and trust.

In January 2007, we entered a new line of business when we agreed to write excess workers' compensation and employers' liability insurance produced by a managing general agent, Wexford Underwriting Managers, Inc. Wexford, which produced $74 million of business in 2006 for its predecessor carrier, primarily serves not-for-profit clients, a market with specialty characteristics that fit our strategic principles. Most importantly, Wexford's professionals share the Arch culture of teamwork and underwriting discipline. We expect to acquire Wexford on January 1, 2008, subject to the satisfaction of customary closing conditions.

In fall 2006, our Arch Reinsurance Ltd. subsidiary opened a branch in Zurich, Switzerland. The new office further extends our commitment to the Continental Europe reinsurance market and is focused on regional business that complements the existing relationships of Arch Re in Bermuda. Helmut Söhler, who has extensive experience in various insurance lines in Europe, joined us as president and chief executive officer of the branch.

Our European insurance subsidiary, Arch Insurance Company (Europe) Ltd., formed in 2004, and our Toronto branch, opened in 2005, continued to perform well. Arch Europe generated approximately 15% of our insurance gross premiums written in 2006, mainly in property, executive assurance and professional liability lines of business.

All told, 70% of our combined insurance and reinsurance net premiums written in 2006 were generated from clients in the United States, 18% in Europe and 12% in other markets as we continued to build our non-U.S. business.

Capital Management

We are committed to the prudent and efficient management of the capital Arch shareholders have entrusted to us. In our view, efficient capital management means maintaining a strong balance sheet, maximizing ROE, controlling risk and returning capital to shareholders if we cannot use it effectively in the business. In March 2007, the Company's Board of Directors authorized management to invest up to $1 billion in Arch common shares through a share repurchase program. Repurchases may be effected from time to time in open market or privately negotiated transactions through February 2009.

In the first half of 2006, we added balance to our capital structure by raising funds through two offerings of non-cumulative preferred shares totaling $325 million. At year-end, common shareholders' equity accounted for 83.9% of the Company's capital, preferred stock 8.4% and debt 7.7%. This relatively low level of debt and hybrid securities provides us with substantial financial flexibility to prudently manage our capital under a variety of market conditions going forward.

In December 2006, A.M. Best Company upgraded the financial strength rating of our Arch Reinsurance Ltd. (Bermuda) subsidiary and its reinsured affiliates to "A" ("Excellent") from "A-" ("Excellent") and upgraded the issuer credit rating of Arch Capital to "bbb" from "bbb-". "These rating upgrades," Best wrote, "reflect Arch's excellent capitalization, strong operating performance since its inception and robust risk management system.... The combination of Arch's risk management characteristics, operational controls and diversified business profile have created an organization capable of effectively responding to changes in the market cycle." In February 2007, Standard & Poor's Ratings Services revised its outlook on Arch and its operating units to positive from stable. "The outlook revision," S&P wrote, "reflects Arch's success in building a strong and well diversified business franchise since its relaunch in 2001 as well as its strong operating performance in recent years."

Arch People

Knowledgeable, motivated people are difference makers in the insurance and reinsurance businesses. We seek to attract and retain exceptional individuals by maintaining a work environment that is intellectually stimulating and by emphasizing a strong link between compensation and performance. Our people subscribe to the Arch underwriting philosophy and embrace our commitment to ethical conduct, which is essential to staying power and success in any business. We not only recruit experienced individuals, but also have an internal training program for new hires seeking careers in underwriting and other disciplines. The initial graduates of this program continue to advance within the Company and assume underwriting responsibility, expanding our team of skilled professionals who are instilled in the Arch culture of risk-adjusted returns.

In 2006, Mark Lyons was named president and chief operating officer of Arch Insurance Group (U.S.). Mark joined us in 2002 as senior vice president and became executive vice president of group operations and chief actuary in 2003. Mark is respected not only for his intellect, knowledge and expertise, but also for the example he sets with his work ethic. In his new role, he is responsible for each of the underwriting units of our U.S.-based insurance operations.

In September, Jeffrey Goldstein was appointed to the Arch Capital board of directors. Jeffrey is managing director of Hellman & Friedman LLC, a private equity investment firm based in San Francisco. Previously he was chief financial officer of the World Bank. In joining the Arch board, he replaced David Tunnell as a designee of funds affiliated with Hellman & Friedman. We welcome Jeffrey and thank David for his many contributions to Arch during the past four years.

Summary and Outlook

Five years ago, we announced our intention to build a premier insurance and reinsurance company unencumbered by significant pre-2002 risks a company dedicated to serving the needs of clients and maximizing returns for shareholders. We have made excellent progress. We have assembled an extremely capable staff; we have maintained a sound balance sheet; we have established strong distributor relationships; we have written a diversified book of profitable business; we have built an investment portfolio that provides a growing source of earnings; we have expanded globally; and we have generated favorable returns for investors. Equally important, we demonstrated again in 2006 that we are serious in our commitment to being disciplined underwriters and that we will not write business where prices are inadequate.

We now face a more challenging environment in light of increasing competition in some lines of business. In facing this challenge, we will continue to apply the same principles of underwriting discipline and the same focus on risk-adjusted returns that have served us so well in our startup phase.

As always, our success in the coming year will be based on our ability to meet the needs of our distributors and clients. We thank them for their loyalty and support. We also thank our employees, who are the very heart of the Company. Their hard work, ideas and initiative drive our results. And we thank you, our investors, for your support of Arch Capital through your ownership of our stock.

Paul B. Ingrey
Chairman

Constantine "Dinos" Iordanou
President and Chief Executive Officer

March 26, 2007

Corporate Information

ARCH CAPITAL GROUP LTD.

Directors and Officers

Paul B. Ingrey [3,6]
Chairman

Constantine Iordanou [3,4]
Director
President and Chief Executive Officer

John D. Vollaro
Executive Vice President, Chief Financial Officer and Treasurer

Marc Grandisson
Chairman and Chief Executive Officer of Arch Worldwide Reinsurance Group

Ralph E. Jones III
Chairman and Chief Executive Officer of Arch Worldwide Insurance Group

W. Preston Hutchings
Senior Vice President and Chief Investment Officer

Wolfe "Bill" H. Bragin [1]
Director
Former Vice President and Managing Director of GE Asset Management

John L. Bunce, Jr. [2,3,4]
Director
Managing Director of Hellman & Friedman LLC

Sean D. Carney [4,6]
Director
Managing Director of Warburg Pincus LLC

Jeffrey A. Goldstein [6]
Director
Managing Director of Hellman & Friedman LLC

Kewsong Lee [2,3,4,5]
Director
Member and Managing Director of Warburg Pincus LLC and a General Partner of Warburg Pincus & Co.

James J. Meenaghan [1,2,4]
Director
Former Chairman, President and Chief Executive Officer of Home Insurance Companies

John M. Pasquesi [4,5,6]
Vice Chairman

Robert F. Works [1,2,5]
Director
Former Managing Director of Jones Lang LaSalle

1 Audit Committee
2 Compensation Committee
3 Executive Committee
4 Finance and Investment Committee
5 Nominating Committee
6 Underwriting Oversight Committee

SHAREHOLDER INFORMATION

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Market Information

The common shares of Arch Capital Group Ltd. are traded over-the-counter (NASDAQ National Market) under the symbol ACGL

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