

**ARCH REINSURANCE LTD. AND SUBSIDIARIES**

**(a wholly-owned subsidiary of Arch Capital Group Ltd.)**

**Consolidated Financial Statements**

**December 31, 2008 and 2007**

## INDEX TO FINANCIAL STATEMENTS

<b>Arch Reinsurance Ltd. and Subsidiaries</b>	<u>Pages</u>
Report of Independent Auditors.....	2
Consolidated Balance Sheets at December 31, 2008 and 2007 .....	3
Consolidated Statements of Income for the years ended December 31, 2008 and 2007 .....	4
Consolidated Statements of Changes in Shareholder's Equity for the years ended December 31, 2008 and 2007 .....	5
Consolidated Statements of Comprehensive Income for the years ended December 31, 2008 and 2007 .....	6
Consolidated Statements of Cash Flows for the years ended December 31, 2008 and 2007 .....	7
Notes to Consolidated Financial Statements.....	8

## Report of Independent Auditors

To the Board of Directors and Shareholder of  
Arch Reinsurance Ltd.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, changes in shareholder's equity, comprehensive income, and cash flows present fairly, in all material respects, the financial position of Arch Reinsurance Ltd. and its subsidiaries (collectively the "Company"), a wholly-owned subsidiary of Arch Capital Group Ltd., at December 31, 2008 and December 31, 2007, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

*PricewaterhouseCoopers LLP*

July 28, 2009

**ARCH REINSURANCE LTD. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
(U.S. dollars in thousands, except share data)

	December 31,	
	2008	2007
<b>Assets</b>		
Investments:		
Fixed maturities available for sale, at market value (amortized cost: 2008, \$8,308,558; 2007, \$7,028,560).....	\$8,115,767	\$7,129,146
Short-term investments available for sale, at market value (amortized cost: 2008, \$468,875; 2007, \$667,984).....	470,373	666,758
Investment of funds received under securities lending agreements, at market value (amortized cost: 2008, \$750,330; 2007, \$1,503,723).....	730,194	1,503,723
Other investments (cost: 2008, \$125,858; 2007, \$323,950).....	109,601	353,694
Investment funds accounted for using the equity method .....	301,027	235,975
<b>Total investments</b> .....	<b>9,726,962</b>	<b>9,889,296</b>
Cash.....	230,856	219,254
Accrued investment income .....	77,988	73,798
Investment in joint venture (cost: 2008, \$100,000) .....	98,341	—
Fixed maturities and short-term investments pledged under securities lending agreements, at market value .....	728,065	1,463,045
Premiums receivable .....	660,575	762,821
Unpaid losses and loss adjustment expenses recoverable.....	1,860,674	1,731,491
Paid losses and loss adjustment expenses recoverable .....	63,883	132,860
Prepaid reinsurance premiums.....	320,501	496,520
Deferred income tax assets, net .....	59,223	56,533
Deferred acquisition costs, net.....	295,192	290,059
Receivable for securities sold .....	105,072	17,261
Other assets.....	339,221	416,962
<b>Total Assets</b> .....	<b>\$14,566,553</b>	<b>\$15,549,900</b>
<b>Liabilities</b>		
Reserve for losses and loss adjustment expenses .....	\$7,798,496	\$7,214,324
Unearned premiums.....	1,543,476	1,781,939
Reinsurance balances payable .....	153,082	319,363
Securities lending collateral.....	753,528	1,503,723
Payable for securities purchased.....	123,309	23,155
Other liabilities .....	399,233	432,487
<b>Total Liabilities</b> .....	<b>10,771,124</b>	<b>11,274,991</b>
<b>Commitments and Contingencies</b>		
<b>Shareholder's Equity</b>		
Common shares (\$1.00 par value, 2,625,000 shares authorized, issued: 2008, 2,560,423; 2007, 1,250,000).....	2,560	1,250
Additional paid-in capital .....	2,203,440	2,085,153
Retained earnings .....	1,845,420	2,033,423
Accumulated other comprehensive income (loss), net of deferred income tax .....	(255,991)	155,083
<b>Total Shareholder's Equity</b> .....	<b>3,795,429</b>	<b>4,274,909</b>
<b>Total Liabilities and Shareholder's Equity</b> .....	<b>\$14,566,553</b>	<b>\$15,549,900</b>

See Notes to Consolidated Financial Statements

**ARCH REINSURANCE LTD. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF INCOME**  
(U.S. dollars in thousands)

	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Revenues</b>		
Net premiums written.....	\$2,805,726	\$2,901,936
Decrease in unearned premiums .....	39,728	42,714
Net premiums earned .....	2,845,454	2,944,650
Net investment income.....	467,231	461,812
Net realized gains (losses).....	(186,353)	27,837
Fee income .....	1,261	4,267
Equity in net income (loss) of investment funds accounted for using the equity method.....	(178,608)	(171)
Other income.....	12,282	9,048
<b>Total Revenues</b> .....	<b>2,961,267</b>	<b>3,447,443</b>
<b>Expenses</b>		
Losses and loss adjustment expenses .....	1,848,744	1,644,169
Acquisition expenses.....	490,509	480,531
Other operating expenses .....	366,670	356,340
Net foreign exchange (gains) losses .....	(96,585)	36,569
<b>Total Expenses</b> .....	<b>2,609,338</b>	<b>2,517,609</b>
<b>Income Before Income Taxes</b> .....	<b>351,929</b>	<b>929,834</b>
Income tax expense .....	12,882	14,921
<b>Net Income</b> .....	<b>\$339,047</b>	<b>\$914,913</b>

See Notes to Consolidated Financial Statements

**ARCH REINSURANCE LTD. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY**  
(U.S. dollars in thousands)

	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Common Shares</b>		
Balance at beginning of year.....	\$1,250	\$1,250
Common shares issued to parent.....	1,310	—
<b>Balance at end of year.....</b>	<b>2,560</b>	<b>1,250</b>
<b>Additional Paid-in Capital</b>		
Balance at beginning of year.....	2,085,153	1,973,436
Common shares issued to parent.....	99,940	—
Contribution from parent .....	—	99,669
Amortization of share-based compensation .....	20,570	14,055
Other .....	(2,223)	(2,007)
<b>Balance at end of year.....</b>	<b>2,203,440</b>	<b>2,085,153</b>
<b>Retained Earnings</b>		
Balance at beginning of year.....	2,033,423	1,718,449
Adjustment to adopt SFAS No. 155, "Accounting for Certain Hybrid Financial Instruments—an amendment of FASB Statements No. 133 and 140".....	—	2,111
Balance at beginning of year, as adjusted .....	2,033,423	1,720,560
Dividends paid to parent .....	(527,050)	(602,050)
Net income.....	339,047	914,913
<b>Balance at end of year.....</b>	<b>1,845,420</b>	<b>2,033,423</b>
<b>Accumulated Other Comprehensive Income (Loss)</b>		
Balance at beginning of year.....	155,083	52,425
Adjustment to adopt SFAS No. 155, "Accounting for Certain Hybrid Financial Instruments—an amendment of FASB Statements No. 133 and 140".....	—	(2,111)
Balance at beginning of year, as adjusted .....	155,083	50,314
Contribution from parent .....	—	6,635
Change in unrealized appreciation in value of investments, net of deferred income tax .....	(375,534)	92,389
Foreign currency translation adjustments, net of deferred income tax.....	(35,540)	5,745
<b>Balance at end of year.....</b>	<b>(255,991)</b>	<b>155,083</b>
<b>Total Shareholder's Equity .....</b>	<b>\$3,795,429</b>	<b>\$4,274,909</b>

See Notes to Consolidated Financial Statements

**ARCH REINSURANCE LTD. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
(U.S. dollars in thousands)

	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Comprehensive Income</b>		
Net income.....	\$339,047	\$914,913
Other comprehensive income (loss), net of deferred income tax		
Unrealized appreciation (decline) in value of investments:		
Unrealized holding gains (losses) arising during year .....	(583,751)	134,211
Reclassification of net realized (gains) losses, net of income taxes, included in net income.....	208,217	(41,822)
Foreign currency translation adjustments.....	(35,540)	5,745
Other comprehensive income (loss) .....	(411,074)	98,134
<b>Comprehensive Income (Loss)</b> .....	<b>(\$72,027)</b>	<b>\$1,013,047</b>

See Notes to Consolidated Financial Statements

**ARCH REINSURANCE LTD. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(U.S. dollars in thousands)

	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Operating Activities</b>		
Net income .....	\$339,047	\$914,913
Adjustments to reconcile net income to net cash provided by operating activities:		
Net realized (gains) losses .....	191,166	(27,608)
Equity in net (income) loss of investment funds accounted for using the equity method and other income .....	166,610	(8,877)
Share-based compensation .....	16,517	6,331
Changes in:		
Reserve for losses and loss adjustment expenses, net of unpaid losses and loss adjustment expenses recoverable .....	658,501	569,490
Unearned premiums, net of prepaid reinsurance premiums .....	(42,029)	(36,775)
Premiums receivable .....	8,031	24,414
Deferred acquisition costs, net .....	(9,626)	997
Reinsurance balances payable .....	(153,882)	(3,933)
Other liabilities.....	(88,932)	17,486
Other items, net .....	90,973	7,999
<b>Net Cash Provided By Operating Activities</b> .....	<b>1,176,376</b>	<b>1,464,437</b>
<b>Investing Activities</b>		
Purchases of fixed maturity investments .....	(17,678,701)	(20,445,578)
Proceeds from sales of fixed maturity investments .....	16,439,424	18,910,045
Proceeds from redemptions and maturities of fixed maturity investments.....	582,342	644,047
Purchases of other investments.....	(480,417)	(542,615)
Proceeds from sales of other investments.....	460,178	204,026
Investment in joint venture.....	(100,000)	—
Net sales (purchases) of short-term investments .....	67,807	309,114
Change in investment of securities lending collateral .....	750,195	(612,347)
Purchases of furniture, equipment and other assets .....	(9,669)	(27,929)
<b>Net Cash Provided By (Used For) Investing Activities</b> .....	<b>31,159</b>	<b>(1,561,237)</b>
<b>Financing Activities</b>		
Change in securities lending collateral .....	(750,195)	612,347
Excess tax benefits from share-based compensation.....	2,161	4,776
Advance from parent (see Note 6), .....	100,000	—
Dividends paid to parent.....	(527,050)	(602,050)
<b>Net Cash Provided By (Used For) Financing Activities</b> .....	<b>(1,175,084)</b>	<b>15,073</b>
Effects of exchange rate changes on foreign currency cash .....	(20,849)	3,661
Increase (decrease) in cash .....	11,602	(78,066)
Cash beginning of year.....	219,254	297,320
<b>Cash end of year</b> .....	<b>\$230,856</b>	<b>\$219,254</b>
Income taxes paid, net .....	\$10,854	\$3,549

See Notes to Consolidated Financial Statements

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**1. Organization**

Arch Reinsurance Ltd. (the “Company”) is a Bermuda limited liability company which provides insurance and reinsurance on a worldwide basis. The Company was incorporated in May 2001 in Bermuda and is a wholly owned subsidiary of Arch Capital Group Ltd. (“ACGL”), a Bermuda exempted public limited liability company. The Company is licensed as a Class 4 insurer under the Insurance Act 1978 of Bermuda and is licensed to underwrite both general and long-term business on an insurance and reinsurance basis.

In October 2001, ACGL launched an underwriting initiative to meet current and future demand in the global insurance and reinsurance markets that included the recruitment of new management teams and an equity capital infusion of \$763 million, of which \$508 million was contributed to the Company. During 2002 to 2008, additional capital contributions were made to the Company by ACGL following capital raising activities. On December 31, 2002, ACGL contributed 86.6% of its investment in Arch Capital Group (U.S.) Inc. (“Arch-U.S.”) and its subsidiaries to the Company, with the remaining 13.4% of Arch-U.S. and its subsidiaries contributed to the Company on December 30, 2005. During 2008, the Company formed Arch Underwriting at Lloyd’s Ltd, a United Kingdom Company, and Arch Syndicate Investments Ltd (formerly Arch at Lloyd’s Investments Limited), a United Kingdom Company. In addition, during 2008, the Company formed Arch Financial Holdings Europe I Limited, an Ireland Company, and its subsidiaries, including Arch Reinsurance Europe Underwriting Limited (“Arch Re Europe”). On December 31, 2008, ACGL contributed 100% of its investment in Arch Insurance Company (Europe) Limited (“Arch Insurance Europe”), a United Kingdom company, and its subsidiary, Arch Europe Insurance Services Limited, a United Kingdom company, to Arch Re Europe. The transaction was accounted for using the pooling method and is reflected in the financial statements for all periods presented (see Note 2). During 2008 and 2007, the Company paid \$527.1 and \$602.1 million, respectively, of dividends to ACGL which were used to fund ACGL’s share repurchase program and other corporate purposes.

**2. Business Combination**

As discussed in Note 1 above, on December 31, 2008, ACGL contributed 100% of its investment in Arch Insurance Europe to the Company. Prior to this time, Arch Insurance Europe and the Company were sister companies, organized as direct subsidiaries of ACGL. As the entities were under common control prior to the contribution, the transaction was accounted for using the pooling method in accordance with SFAS No. 141, “Business Combinations”, and, as such, the accompanying financial statements and notes to the consolidated financial statements include the operations of Arch Insurance Europe for all years presented as if the transaction occurred on January 1, 2007. The Consolidated Statement of Changes in Shareholder’s Equity for the year ended December 31, 2007 reflects the total \$106.3 million contribution of Arch Insurance Europe’s shareholder’s equity on January 1, 2007, with \$99.7 million recorded as “Additional Paid-in Capital” and \$6.6 million recorded in “Accumulated Other Comprehensive Income (Loss)”.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following tables present the consolidation of select balance sheet amounts of Arch Reinsurance Ltd. and Arch Insurance Europe, along with the necessary elimination entries for intercompany transactions between Arch Reinsurance Ltd. and Arch Insurance Europe, at December 31, 2008 and 2007, respectively:

**December 31, 2008:**

(U.S. dollars in thousands)	<b>Arch Reinsurance Ltd.</b>	<b>Arch Insurance Europe</b>	<b>Eliminations</b>	<b>Consolidated</b>
<b>Total Assets</b> .....	\$14,020,503	\$1,081,867	(\$535,817)	\$14,566,553
<b>Total Liabilities</b> .....	\$10,308,754	\$998,187	(\$535,817)	\$10,771,124
<b>Total Shareholder's Equity</b> .....	3,711,749	83,680	—	3,795,429
<b>Total Liabilities and Shareholder's Equity</b> .....	\$14,020,503	\$1,081,867	(\$535,817)	\$14,566,553

**December 31, 2007:**

(U.S. dollars in thousands)	<b>Arch Reinsurance Ltd.</b>	<b>Arch Insurance Europe</b>	<b>Eliminations</b>	<b>Consolidated</b>
<b>Total Assets</b> .....	\$15,034,174	\$955,879	(\$440,153)	\$15,549,900
<b>Total Liabilities</b> .....	\$10,874,407	\$840,737	(\$440,153)	\$11,274,991
<b>Total Shareholder's Equity</b> .....	4,159,767	115,142	—	4,274,909
<b>Total Liabilities and Shareholder's Equity</b> .....	\$15,034,174	\$955,879	(\$440,153)	\$15,549,900

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following tables present the consolidation of select income statement amounts of Arch Reinsurance Ltd. and Arch Insurance Europe for the years ended December 31, 2008 and 2007, respectively:

**Year Ended December 31, 2008:**

(U.S. dollars in thousands)	<u>Arch Reinsurance Ltd.</u>	<u>Arch Insurance Europe</u>	<u>Consolidated</u>
<b>Total Revenues (1)</b> .....	\$2,901,616	\$59,651	\$2,961,267
<b>Total Expenses (2)</b> .....	\$2,548,047	\$61,291	\$2,609,338
<b>Net Income (Loss)</b> .....	\$341,171	(\$2,124)	\$339,047

- (1) Arch Reinsurance Ltd.'s total revenues include \$290.4 million of premiums earned assumed through transactions with Arch Insurance Europe. Arch Insurance Europe's total revenues are net of the \$290.4 million of ceded premiums earned through transactions with Arch Reinsurance Ltd. The impact of these transactions eliminate when the revenues of the two entities are combined to arrive at the consolidated total revenues.
- (2) Arch Reinsurance Ltd.'s total expenses include \$218.0 million of losses and loss adjustment expenses and \$84.7 million of acquisition expenses assumed through transactions with Arch Insurance Europe. Arch Insurance Europe's total expenses are net of the \$218.0 million of losses and loss adjustment expenses and \$84.7 million of acquisition expenses ceded through transactions with Arch Reinsurance Ltd. The impact of these transactions eliminate when the expenses of the two entities are combined to arrive at the consolidated total expenses.

**Year Ended December 31, 2007:**

(U.S. dollars in thousands)	<u>Arch Reinsurance Ltd.</u>	<u>Arch Insurance Europe</u>	<u>Consolidated</u>
<b>Total Revenues (1)</b> .....	\$3,392,678	\$54,765	\$3,447,443
<b>Total Expenses (2)</b> .....	\$2,468,917	\$48,692	\$2,517,609
<b>Net Income</b> .....	\$910,427	\$4,486	\$914,913

- (1) Arch Reinsurance Ltd.'s total revenues include \$267.3 million of premiums earned assumed through transactions with Arch Insurance Europe. Arch Insurance Europe's total revenues are net of the \$267.3 million of ceded premiums earned through transactions with Arch Reinsurance Ltd. The impact of these transactions eliminate when the revenues of the two entities are combined to arrive at the consolidated total revenues.
- (2) Arch Reinsurance Ltd.'s total expenses include \$169.3 million of losses and loss adjustment expenses and \$76.6 million of acquisition expenses assumed through transactions with Arch Insurance Europe. Arch Insurance Europe's total expenses are net of the \$169.3 million of losses and loss adjustment expenses and \$76.6 million of acquisition expenses ceded through transactions with Arch Reinsurance Ltd. The impact of these transactions eliminate when the expenses of the two entities are combined to arrive at the consolidated total expenses.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**3. Significant Accounting Policies**

*(a) Basis of Presentation*

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). Results of operations include the accounts of the Company, Arch Financial Holdings Europe I Limited and its subsidiaries, which include Arch Re Europe and Arch Insurance Europe, its Lloyd’s subsidiaries, and Arch-U.S. and its subsidiaries, which include Arch Reinsurance Company (“Arch Re U.S.”), Arch Insurance Company, Arch Specialty Insurance Company, Arch Excess & Surplus Insurance Company and Arch Indemnity Insurance Company (formerly known as Western Diversified Casualty Insurance Company). All significant intercompany transactions and balances have been eliminated in consolidation. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates and assumptions.

*(b) Premium Revenues and Related Expenses*

Insurance premiums written are generally recorded at the policy inception and are primarily earned on a pro rata basis over the terms of the policies for all products, usually 12 months. Premiums written include estimates in the Company’s programs, aviation, construction and surety and collateral protection business and for participation in involuntary pools. Such premium estimates are derived from multiple sources which include the historical experience of the underlying business, similar business and available industry information. Unearned premium reserves represent the portion of premiums written that relates to the unexpired terms of in-force insurance policies.

Reinsurance premiums written include amounts reported by brokers and ceding companies, supplemented by the Company’s own estimates of premiums where reports have not been received or in cases where the amounts reported by brokers and ceding companies are adjusted to reflect management’s best judgments and expectations. Premium estimates are derived from multiple sources which include the Company’s underwriters, the historical experience of the underlying business, similar business and available industry information. Premiums written are recorded based on the type of contracts the Company writes. Premiums on the Company’s excess of loss and pro rata reinsurance contracts are estimated when the business is underwritten. For excess of loss contracts, the minimum premium, as defined in the contract, is generally recorded as an estimate of premiums written as of the inception date of the treaty. Estimates of premiums written under pro rata contracts are recorded in the period in which the underlying risks are expected to incept and are based on information provided by the brokers and the ceding companies. For multi-year reinsurance treaties which are payable in annual installments, generally, only the initial annual installment is included as premiums written at policy inception due to the ability of the reinsured to commute or cancel coverage during the term of the policy. The remaining annual installments are included as premiums written at each successive anniversary date within the multi-year term.

Reinstatement premiums for the Company’s insurance and reinsurance operations are recognized at the time a loss event occurs, where coverage limits for the remaining life of the contract are reinstated under pre-defined contract terms. Reinstatement premiums, if obligatory, are fully earned when recognized. The accrual of reinstatement premiums is based on an estimate of losses and loss adjustment expenses, which reflects management’s judgment.

Premium estimates are reviewed by management at least quarterly. Such review includes a comparison of actual reported premiums to expected ultimate premiums along with a review of the aging and collection of

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

premium estimates. Based on management's review, the appropriateness of the premium estimates is evaluated, and any adjustment to these estimates is recorded in the period in which it becomes known. Adjustments to premium estimates could be material and such adjustments could directly and significantly impact earnings favorably or unfavorably in the period they are determined because the estimated premium may be fully or substantially earned. A significant portion of amounts included as premiums receivable, which represent estimated premiums written, net of commissions, are not currently due based on the terms of the underlying contracts.

Reinsurance premiums assumed, irrespective of the class of business, are generally earned on a pro rata basis over the terms of the underlying policies or reinsurance contracts. Contracts and policies written on a "losses occurring" basis cover claims that may occur during the term of the contract or policy, which is typically 12 months. Accordingly, the premium is earned evenly over the term. Contracts which are written on a "risks attaching" basis cover claims which attach to the underlying insurance policies written during the terms of such contracts. Premiums earned on such contracts usually extend beyond the original term of the reinsurance contract, typically resulting in recognition of premiums earned over a 24-month period.

Certain of the Company's reinsurance contracts include provisions that adjust premiums or acquisition expenses based upon the experience under the contracts. Premiums written and earned, as well as related acquisition expenses, are recorded based upon the projected experience under such contracts.

The Company also writes certain business that is intended to provide insurers with risk management solutions that complement traditional reinsurance. Under these contracts, the Company assumes a measured amount of insurance risk in exchange for an anticipated margin, which is typically lower than on traditional reinsurance contracts. The terms and conditions of these contracts may include additional or return premiums based on loss experience, loss corridors, sublimits and caps. Examples of such business include aggregate stop-loss coverages, financial quota share coverages and multi-year retrospectively rated excess of loss coverages. If these contracts are deemed to transfer risk, they are accounted for as reinsurance.

Acquisition expenses and other expenses that vary with, and are directly related to, the acquisition of business related to the Company's underwriting operations are deferred and amortized over the period in which the related premiums are earned. Acquisition expenses, net of ceding commissions received from unaffiliated reinsurers, consist principally of commissions, brokerage and taxes paid to obtain the Company's business. Other operating expenses also include expenses that vary with, and are directly related to, the acquisition of business. Deferred acquisition costs, which are based on the related unearned premiums, are carried at their estimated realizable value and take into account anticipated losses and loss adjustment expenses, based on historical and current experience, and anticipated investment income. A premium deficiency occurs if the sum of anticipated losses and loss adjustment expenses, unamortized acquisition costs and maintenance costs and anticipated investment income exceed unearned premiums. A premium deficiency is recorded by charging any unamortized acquisition costs to expense to the extent required in order to eliminate the deficiency. If the premium deficiency exceeds unamortized acquisition costs then a liability is accrued for the excess deficiency. No significant premium deficiency charges were recorded by the Company during 2008 or 2007.

***(c) Deposit Accounting***

Certain assumed reinsurance contracts, which pursuant to Statement of Financial Accounting Standards No. 113 ("SFAS No. 113"), "Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts," issued by the Financial Accounting Standards Board ("FASB"), are deemed not to transfer insurance risk, are accounted for using the deposit method of accounting as prescribed in Statement of Position 98-7 ("SOP 98-7"), "Deposit Accounting: Accounting for Insurance and Reinsurance Contracts That Do Not Transfer Insurance Risk." However, it is possible that the Company could incur financial losses on such contracts. Management exercises significant judgment in the assumptions used in determining whether assumed contracts should be accounted for as reinsurance contracts under SFAS No. 113 or deposit insurance contracts under SOP

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

98-7. Under SOP 98-7, for those contracts that contain an element of underwriting risk, the estimated profit margin is deferred and amortized over the contract period and such amount is included in the Company's underwriting results. When the estimated profit margin is explicit, the margin is reflected as fee income and any adverse financial results on such contracts are reflected as incurred losses. When the estimated profit margin is implicit, the margin is reflected as an offset to paid losses and any adverse financial results on such contracts are reflected as incurred losses. For those contracts that do not transfer an element of underwriting risk, the projected profit is reflected in earnings over the estimated settlement period using the interest method and such profit is included in investment income. Additional judgments are required when applying the accounting guidance set forth in SOP 98-7 with respect to the revenue recognition criteria for contracts deemed not to transfer insurance risk. Deposit accounting liabilities, which totaled \$39.8 million and \$43.5 million, respectively, at December 31, 2008 and 2007, are included in "Other liabilities" on the Company's balance sheet.

***(d) Retroactive Accounting***

Retroactive reinsurance reimburses a ceding company for liabilities incurred as a result of past insurable events covered by the underlying policies reinsured. In certain instances, reinsurance contracts cover losses both on a prospective basis and on a retroactive basis and, accordingly, the Company bifurcates the prospective and retrospective elements of these reinsurance contracts and accounts for each element separately. Underwriting income generated in connection with retroactive reinsurance contracts is deferred and amortized into income over the settlement period while losses are charged to income immediately. Subsequent changes in estimated or actual cash flows under such retroactive reinsurance contracts are accounted for by adjusting the previously deferred amount to the balance that would have existed had the revised estimate been available at the inception of the reinsurance transaction, with a corresponding charge or credit to income.

***(e) Reinsurance Ceded***

In the normal course of business, the Company purchases reinsurance to increase capacity and to limit the impact of individual losses and events on its underwriting results by reinsuring certain levels of risk with other insurance enterprises or reinsurers. The Company uses pro rata, excess of loss and facultative reinsurance contracts. Reinsurance ceding commissions are recognized as income on a pro rata basis over the period of risk. The portion of such commissions that will be earned in the future is deferred and reported as a reduction to acquisition costs. The accompanying consolidated statement of income reflects premiums and losses and loss adjustment expenses and acquisition costs, net of reinsurance ceded (see Note 4). Ceded unearned premiums are reported as prepaid reinsurance premiums and estimated amounts of reinsurance recoverable on unpaid losses are reported as unpaid losses and loss adjustment expenses recoverable. Reinsurance premiums ceded and unpaid losses and loss adjustment expenses recoverable are estimated in a manner consistent with that of the original policies issued and the terms of the reinsurance contracts. To the extent that any reinsurer does not meet its obligations under reinsurance agreements, the Company must discharge the liability.

***(f) Cash***

Cash includes cash equivalents, which are investments with original maturities of three months or less that are not managed by external or internal investment advisors.

***(g) Investments***

The Company currently classifies all of its fixed maturity investments and short-term investments as "available for sale" and, accordingly, they are carried at estimated market value. The market value of fixed maturity securities is generally determined from quotations received from nationally recognized pricing services, or when such prices are not available, by reference to broker or underwriter bid indications. Short-term investments comprise securities due to mature within one year of the date of issue. Short-term investments include certain cash equivalents which are part of investment portfolios under the management of external and internal investment managers.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company participates in a securities lending program as a mechanism for generating additional interest income on its fixed income portfolio. Under the security lending agreements, certain of its fixed income portfolio securities are loaned to third parties, primarily major brokerage firms, for short periods of time through a lending agent. Such securities have been reclassified as “Fixed maturities and short-term investments pledged under securities lending agreements, at market value.” The Company maintains control over the securities it lends, retains the earnings and cash flows associated with the loaned securities and receives a fee from the borrower for the temporary use of the securities. Collateral received, primarily in the form of cash, is required at a rate of 102% of the market value of the loaned securities (or 105% of the market value of the loaned securities when the collateral and loaned securities are denominated in non-U.S. currencies) including accrued investment income and is monitored and maintained by the lending agent. Such collateral is reinvested and is reflected as “Investment of funds received under securities lending agreements, at market value.”

The Company’s investment portfolio includes certain funds that invest in fixed maturity securities which, due to their ownership structure, are accounted for by the Company using the equity method. In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on the Company’s proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). Such investments are generally recorded on a one month lag with some investments reported for on a three month lag. Changes in the carrying value of such investments are recorded in net income as “Equity in net income (loss) of investment funds accounted for using the equity method” while changes in the carrying value of the Company’s other fixed income investments are recorded as an unrealized gain or loss component of accumulated other comprehensive income in shareholder’s equity. As such, fluctuations in the carrying value of the investment funds accounted for using the equity method may increase the volatility of the Company’s reported results of operations.

Other investments include (i) mutual funds which invest in fixed maturity securities and (ii) privately held securities and other which include the Company’s investment in Aeolus LP (see Note 10). Investments in equity securities are carried at estimated market value in accordance with SFAS No. 115, “Accounting for Certain Investments in Debt and Equity Securities” (“SFAS No. 115”). The estimated market value of investments in privately held securities, other than those carried under the equity method, are initially valued based upon transaction price and then adjusted upwards or downwards from the transaction price to reflect expected exit values.

In accordance with SFAS No. 115, FASB Staff Position Nos. FAS 115-1 and FAS 124-1, “The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments” and Securities and Exchange Commission Staff Accounting Bulletin No. 59, “Other-Than-Temporary Impairment of Certain Investments in Debt and Equity Securities,” the Company reviews its investments each quarter to determine whether a decline in market value below the amortized cost basis is other-than-temporary. The Company’s process for identifying declines in the market value of investments that are other-than-temporary involves consideration of several factors. These factors include (i) the length of the time and the extent to which the market value has been below amortized cost, (ii) an analysis of the liquidity, business prospects and overall financial condition of the issuer and (iii) the Company’s intent and ability to hold the investment for a sufficient period of time to allow for any anticipated recovery in market value. Where the Company’s analysis of the above factors results in the conclusion that declines in market values are other-than-temporary, the cost basis of the securities is written down to market value and the write-down is reflected as a realized loss. In periods subsequent to the recognition of an other-than-temporary impairment on fixed maturities (other than credit-related impairments), the Company accounts for such securities as if they had been purchased on the measurement date of the other-than-temporary impairment. The discount or reduced premium recorded for the fixed maturities, based on the new cost basis, is accreted or amortized over the remaining life of the fixed maturities into net investment income, as discussed below.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Under SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS No. 133"), as amended on January 1, 2001, all derivative financial instruments, including embedded derivative instruments, are required to be recognized as either assets or liabilities in the consolidated balance sheets and measured at market value. The accounting for gains and losses associated with changes in the market value of a derivative and the effect on the consolidated financial statements depends on whether it has been designated and qualifies as part of a hedging relationship and whether the hedge is highly effective in achieving offsetting changes in the market value of the asset or liability hedged. The Company's investment strategy allows for the use of derivative instruments. Derivative instruments may be used to enhance investment performance, replicate investment positions or manage market exposures and duration risk that would be allowed under the Company's investment guidelines if implemented in other ways. Pursuant to SFAS No. 133, these instruments, which have no hedging designation, are recognized as assets and liabilities in the Company's balance sheet at market value and changes in market value are included in net realized gains and losses in its results of operations.

Net investment income includes interest and dividend income together with amortization of market premiums and discounts and is net of investment management and custody fees. Anticipated prepayments and expected maturities are used in applying the interest method for certain investments such as mortgage and other asset-backed securities. When actual prepayments differ significantly from anticipated prepayments, the effective yield is recalculated to reflect actual payments to date and anticipated future payments. The net investment in such securities is adjusted to the amount that would have existed had the new effective yield been applied since the acquisition of the security. Such adjustments, if any, are included in net investment income when determined. Equity in net income (loss) of investment funds accounted for using the equity method includes changes in the market value of certain alternative investments accounted for under the equity method.

Investment gains or losses realized on the sale of investments are determined on a first-in, first-out basis and are reflected in net income. Unrealized appreciation or decline in the value of securities, which are carried at market value, is excluded from net income and recorded as a separate component of other comprehensive income, net of applicable deferred income tax.

***(h) Reserves for Losses and Loss Adjustment Expenses***

The reserve for losses and loss adjustment expenses consists of estimates of unpaid reported losses and loss adjustment expenses and estimates for losses incurred but not reported. The reserve for unpaid reported losses and loss adjustment expenses, established by management based on reports from ceding companies and claims from insureds, excludes estimates of amounts due from insureds related to losses under high deductible policies, and represents the estimated ultimate cost of events or conditions that have been reported to or specifically identified by the Company. Such reserves are supplemented by management's estimates of reserves for losses incurred for which reports or claims have not been received. Since the Company has limited historical experience upon which to base such estimates, the estimates are primarily determined based upon industry experience, information used in pricing contracts and policies and management's judgment. The Company's reserving method, to a large extent, has been the expected loss method, which is commonly applied when limited loss experience exists. The Company selects the initial expected loss and loss adjustment expense ratios based on information derived by its underwriters and actuaries during the initial pricing of the business, supplemented by industry data where appropriate. Such ratios consider, among other things, rate changes and changes in terms and conditions that have been observed in the market. These estimates are reviewed regularly and, as experience develops and new information becomes known, the reserves are adjusted as necessary. Such adjustments, if any, are reflected in income in the period in which they are determined. As actual loss information has been reported, the Company has developed its own loss experience and its reserving methods include other actuarial techniques. Over time, such techniques will be given more weight in its reserving process based on the continuing maturation of the Company's reserves. Inherent in the estimates of ultimate losses and loss adjustment expenses are expected trends in claims severity and frequency and other factors which may vary significantly as claims are settled. Accordingly, ultimate losses and loss adjustment expenses may differ materially from the amounts recorded in the accompanying consolidated financial statements. Losses and loss

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

adjustment expenses are recorded on an undiscounted basis, except for excess workers' compensation and employers' liability business written by the Company's insurance operations.

***(i) Foreign Exchange***

Assets and liabilities of foreign operations whose functional currency is not the U.S. Dollar are translated at the prevailing exchange rates at each balance sheet date. Revenues and expenses of such foreign operations are translated at average exchange rates during the year. The net effect of the translation adjustments for foreign operations, net of applicable deferred income taxes, is included in accumulated other comprehensive income. Monetary assets and liabilities, such as premiums receivable and the reserve for losses and loss adjustment expenses, denominated in foreign currencies are revalued at the exchange rate in effect at the balance sheet date with the resulting foreign exchange gains and losses included in net income. Accounts that are classified as non-monetary, such as deferred acquisition costs and the unearned premium reserves, are not revalued. In the case of foreign currency denominated fixed maturity securities which are classified as "available for sale," the change in exchange rates between the local currency and the Company's functional currency at each balance sheet date is included in unrealized appreciation or decline in value of securities, a component of accumulated other comprehensive income.

***(j) Income Taxes***

Deferred income taxes reflect the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and amounts used for income tax purposes. A valuation allowance is recorded if it is more likely than not that some or all of a deferred tax asset may not be realized. The Company considers future taxable income and feasible tax planning strategies in assessing the need for a valuation allowance. In the event the Company determines that it will not be able to realize all or part of its deferred income tax assets in the future, an adjustment to the deferred income tax assets would be charged to income in the period in which such determination is made. In addition, if the Company subsequently assesses that the valuation allowance is no longer needed, a benefit would be recorded to income in the period in which such determination is made.

The Company recognizes a tax benefit where it concludes that it is more likely than not that the tax benefit will be sustained on audit by the taxing authority based solely on the technical merits of the associated tax position. If the recognition threshold is met, the Company recognizes a tax benefit measured at the largest amount of the tax benefit that, in the Company's judgment, is greater than 50% likely to be realized. The Company records interest and penalties related to unrecognized tax benefits in the provision for income taxes.

***(k) Share-Based Compensation***

Certain of the Company's employees participate in ACGL's long-term incentive and share award plans. The expenses incurred under such plans are included in the Company's results of operations.

***Stock Options***

Effective January 1, 2006, the Company adopted the fair value method of accounting for share-based compensation arrangements in accordance with FASB Statement No. 123 (revised 2004), "Share-Based Payment" ("SFAS No. 123(R)"), using the modified prospective method of transition. Under the fair value method of accounting, compensation expense is estimated based on the fair value of the award at the grant date and is recognized in net income over the requisite service period. Such compensation cost is reduced by assumed forfeitures and adjusted based on actual forfeitures until vesting. For awards granted to retirement-eligible employees where no service is required for the employee to retain the award, the grant date fair value is immediately recognized as compensation cost at the grant date because the employee is able to retain the award without continuing to provide service. For employees near retirement eligibility, attribution of compensation cost is over the period from the grant date to the retirement eligibility date.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Under the modified prospective approach, the fair value based method described in SFAS No. 123(R) is applied to new awards granted after January 1, 2006. Additionally, compensation expense for unvested stock options that are outstanding as of January 1, 2006 will be recognized in net income as the requisite service is rendered based on the grant date fair value of those options as previously calculated under pro forma disclosures under SFAS No. 123, "Accounting for Stock-Based Compensation" ("SFAS No. 123"), as amended by SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure." Therefore, under the modified prospective method, compensation expense is recognized beginning with the effective date of adoption of SFAS No.123(R) for all stock option awards (i) granted after the effective date of adoption and (ii) granted prior to the effective date of adoption and that remain unvested on the date of adoption.

The share-based compensation expense associated with stock options that have graded vesting features and vest based on service conditions only (i) granted after the effective date of adoption is calculated on a straight-line basis over the requisite service periods of the related options and (ii) granted prior to the effective date of adoption and that remain unvested as of the date of adoption is calculated on a graded-vesting basis as prescribed under FASB Interpretation No. 28, "Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans—an interpretation of APB Opinions No. 15 and 25," over the remaining requisite service periods of the related options. These charges had no impact on the Company's cash flows or total shareholder's equity.

*Restricted Common Shares and Restricted Units*

As discussed above, effective January 1, 2006, the Company adopted the fair value method of accounting for share-based compensation arrangements in accordance with SFAS No. 123(R), which governs the accounting for share-based compensation. Under the fair value method of accounting pursuant to SFAS No. 123(R), the fair value for restricted shares and units is measured by the grant-date price of the Company's shares. No value is attributed to awards that employees forfeit because they fail to satisfy vesting conditions. As such, the number of shares granted is reduced by assumed forfeitures and adjusted based on actual forfeitures until vesting. Such expense is amortized over the requisite service period of the related awards, which is generally the vesting period unless the employee is retirement-eligible.

The share-based compensation expense associated with restricted share and unit awards that have graded vesting features and vest based on service conditions only (i) granted after the effective date of adoption is calculated on a straight-line basis over the requisite service periods of the related awards and (ii) granted prior to the effective date of adoption and that remain unvested as of the date of adoption is calculated on a graded-vesting basis over the remaining requisite service periods of the related awards. These charges had no impact on the Company's cash flows or total shareholder's equity. See Note 12 for information relating to the Company's restricted share and unit awards.

*(1) Goodwill and Intangible Assets*

The goodwill and intangible assets of acquired businesses, which totaled \$27.4 million and \$28.5 million, respectively, at December 31, 2008 and 2007, is included in "Other assets" in the Company's balance sheet and represents the difference between the purchase price and the fair value of the net tangible assets of the acquired businesses. The Company assesses whether goodwill and intangible assets are impaired by comparing the fair value of each reporting unit to its carrying value, including goodwill and intangible assets. The Company estimates the fair value of each reporting unit by using various methods, including a review of the estimated discounted cash flows expected to be generated by the reporting unit in the future. Such methods include a number of assumptions, including the uncertainty regarding future results and the discount rates used. If the reporting unit's fair value is greater than its carrying value, goodwill and intangible assets are not impaired. Impairment occurs when the implied fair value of a reporting unit's goodwill and intangible assets is less than its carrying value. The implied fair value of goodwill and intangible assets is determined by deducting the fair value of a reporting unit's identifiable assets and liabilities from the fair value of the reporting unit as a whole.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company conducts its impairment test annually. Additional impairment assessments may be performed on an interim basis if the Company encounters events or changes in circumstances indicating that more likely than not the carrying value of goodwill and intangible assets has been impaired.

***(m) Guaranty Fund and Other Related Assessments***

Liabilities for guaranty fund and other related assessments in the Company's insurance and reinsurance operations are accrued when the Company receives notice that an amount is payable, or earlier if a reasonable estimate of the assessment can be made.

***(n) Reclassifications***

The Company has reclassified the presentation of certain prior year information to conform to the current presentation. Such reclassifications had no effect on the Company's net income, shareholder's equity or cash flows.

***(o) Recent Accounting Pronouncements***

In December 2007, the FASB issued Statement No. 141(R), "Business Combinations" ("SFAS No. 141R"). SFAS No. 141R replaces SFAS No. 141 and provides greater consistency in the accounting and financial reporting of business combinations. SFAS No. 141R requires the acquiring entity in a business combination to recognize all assets acquired and liabilities assumed in the transaction, establishes the acquisition date fair value as the measurement objective for all assets acquired and liabilities assumed, establishes principles and requirements for how an acquirer recognizes and measures any non-controlling interest in the acquiree and the goodwill acquired, and requires the acquirer to disclose the nature and financial effect of the business combination. Among other changes, SFAS No. 141R also requires that "negative goodwill" be recognized in earnings as a gain attributable to the acquisition, that acquisition-related costs are to be recognized separately from the acquisition and expensed as incurred and that any deferred tax benefits resulted in a business combination are recognized in income from continuing operations in the period of the combination. SFAS No. 141R is effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. The Company does not expect that the adoption of SFAS No. 141R will have a material impact on its consolidated financial position and results of operations.

In December 2007, the FASB issued Statement No. 160, "Noncontrolling Interests in Consolidated Financial Statements – An amendment of ARB No. 51" ("SFAS No. 160"). SFAS No. 160 amends ARB No. 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It clarifies that a noncontrolling interest in a subsidiary, which is sometimes referred to as minority interest, is an ownership interest in the consolidated entity that should be reported as equity in the consolidated financial statements. Among other requirements, this statement requires consolidated net income to be reported at amounts that include the amounts attributable to both the parent and the noncontrolling interest. It also requires disclosure, on the face of the consolidated income statement, of the amounts of consolidated net income attributable to the parent and to the noncontrolling interest. This Statement is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. Earlier adoption is prohibited. The Company does not expect that the adoption of SFAS No. 160 will have a material impact on its consolidated results of operations and financial position.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities" ("SFAS No. 161"). SFAS No. 161 is intended to improve financial reporting about derivative instruments and hedging activities by requiring enhanced disclosures to enable investors to better understand their effects on an entity's financial position, financial performance, and cash flows. The new standard also improves transparency about the location and amounts of derivative instruments in an entity's financial

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

statements; how derivative instruments and related hedged items are accounted for under Statement 133; and how derivative instruments and related hedged items affect its financial position, financial performance, and cash flows. SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. The Company does not expect that the adoption of SFAS No. 161 will have a material impact on its disclosures.

In January 2009, the FASB issued FSP 99-20-1, "Amendments to the Impairment Guidance of EITF Issue No. 99-20" ("FSP 99-20-1"). FSP 99-20-1 amends the impairment guidance in EITF Issue No.99-20, "Recognition of Interest Income and Impairment on Purchased Beneficial Interests and Beneficial Interests That Continue to Be Held by a Transferor in Securitized Financial Assets," to achieve more consistent determination of whether an other-than-temporary impairment has occurred. FSP 99-20-1 also retains and emphasizes the objective of an other than-temporary impairment assessment and the related disclosure requirements in FASB SFAS No. 115 and other related guidance. The FSP was effective for the Company for the 2008 fourth quarter. The adoption did not have a material impact on the Company's consolidated financial position and results of operations.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**4. Reinsurance**

In the normal course of business, the Company's insurance subsidiaries cede a substantial portion of their premium through pro rata, excess of loss and facultative reinsurance agreements. The Company's reinsurance subsidiaries participate in "common account" retrocessional arrangements for certain pro rata treaties. Such arrangements reduce the effect of individual or aggregate losses to all companies participating on such treaties, including the reinsurers, such as the Company's reinsurance subsidiaries, and the ceding company. In addition, the Company's reinsurance subsidiaries may purchase retrocessional coverage as part of their risk management program. 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, the Company's insurance or reinsurance subsidiaries would be liable for such defaulted amounts (see Note 11). The effects of reinsurance on the Company's written and earned premiums and losses and loss adjustment expenses with unaffiliated reinsurers were as follows:

(U.S. dollars in thousands)	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Premiums Written</b>		
Direct.....	\$2,385,807	\$2,564,902
Assumed.....	1,283,269	1,575,241
Ceded .....	(863,350)	(1,238,207)
Net.....	<u>\$2,805,726</u>	<u>\$2,901,936</u>
<b>Premiums Earned</b>		
Direct.....	2,479,271	\$2,570,316
Assumed.....	1,402,478	1,622,656
Ceded .....	(1,036,295)	(1,248,322)
Net.....	<u>\$2,845,454</u>	<u>\$2,944,650</u>
<b>Losses and Loss Adjustment Expenses</b>		
Direct.....	\$1,717,158	\$1,428,610
Assumed.....	836,000	759,578
Ceded .....	(704,414)	(544,019)
Net.....	<u>\$1,848,744</u>	<u>\$1,644,169</u>

The Company monitors the financial condition of its reinsurers and attempts to place coverages only with substantial, financially sound carriers. At December 31, 2008, approximately 82.3% of the Company's reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.92 billion were due from carriers which had an A.M. Best rating of "A-" or better and the largest reinsurance recoverables from any one carrier was less than 6.6% of the Company's total shareholder's equity. At December 31, 2007, approximately 82.6% of the Company's reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.86 billion were due from carriers which had an A.M. Best rating of "A-" or better, and the largest reinsurance recoverable from any one carrier was less than 5.0%, of the Company's total shareholder's equity.

On December 29, 2005, the Company entered into a quota share reinsurance treaty with Flatiron Re Ltd. ("Flatiron"), a Bermuda reinsurance company, pursuant to which Flatiron assumed a 45% quota share (the "Treaty") of certain lines of property and marine business underwritten by the Company for unaffiliated third parties for the 2006 and 2007 underwriting years (January 1, 2006 to December 31, 2007). Effective June 28, 2006, the parties amended the Treaty to increase the percentage ceded to Flatiron from 45% to 70% of all covered business bound by the Company from (and including) June 28, 2006 until (and including) August 15, 2006 provided such business did not incept beyond September 30, 2006. The ceding percentage for all business

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

bound outside of this period continued to be 45%. On December 31, 2007, the Treaty expired by its terms. At December 31, 2008, \$18.3 million of premiums ceded to Flatiron were unearned.

Flatiron is required to contribute funds into a trust for the benefit of the Company (the "Trust"). Effective June 28, 2006, the parties amended the Treaty to provide that, through the earning of all written premium, the amount required to be on deposit in the Trust, together with certain other amounts, will be an amount equal to a calculated amount estimated to cover ceded losses arising from in excess of two 1-in-250 year events for the applicable forward twelve-month period (the "Requisite Funded Amount"). If the actual amounts on deposit in the Trust, together with certain other amounts (the "Funded Amount"), do not at least equal the Requisite Funded Amount, the Company will, among other things, recapture unearned premium reserves and reassume losses that would have been ceded in respect of such unearned premiums. No assurances can be given that actual losses will not exceed the Requisite Funded Amount or that Flatiron will make, or will have the ability to make, the required contributions into the Trust.

The Company pays to Flatiron a reinsurance premium in the amount of the ceded percentage of the original gross written premium on the business reinsured less a ceding commission, which includes a reimbursement of direct acquisition expenses as well as a commission to Arch Re Bermuda for generating the business. The Treaty also provides for a profit commission to the Company based on the underwriting results for the 2006 and 2007 underwriting years on a cumulative basis. For 2008, \$24.7 million of premiums written, \$151.4 million of premiums earned and \$48.6 million of losses and loss adjustment expenses were ceded to Flatiron by the Company, compared to \$311.4 million of premiums written, \$282.2 million of premiums earned and \$100.4 million of losses and loss adjustment expenses for 2007. Reinsurance recoverables from Flatiron, which is not rated by A.M. Best, were \$148.7 million at December 31, 2008, compared to \$152.6 million at December 31, 2007. As noted above, Flatiron is required to contribute funds into a trust for the benefit of Arch Re Bermuda. The recoverable from Flatiron was fully collateralized through such trust at December 31, 2008 and 2007.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**5. Reserve for Losses and Loss Adjustment Expenses**

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

(U.S. dollars in thousands)	<b>December 31,</b>	
	<b>2008</b>	<b>2007</b>
Reserve for losses and loss adjustment expenses at beginning of year .....	\$7,214,324	\$6,566,599
Unpaid losses and loss adjustment expenses recoverable .....	1,731,491	1,655,715
Net reserve for losses and loss adjustment expenses at beginning of year.....	5,482,833	4,910,884
Increase (decrease) in net losses and loss adjustment expenses incurred relating to losses occurring in:		
Current year .....	2,158,914	1,829,534
Prior years.....	(310,170)	(185,364)
Total net incurred losses and loss adjustment expenses.....	1,848,744	1,644,170
Exchange rate effects .....	(133,881)	45,192
Less net losses and loss adjustment expenses paid relating to losses occurring in:		
Current year .....	305,513	274,102
Prior years.....	954,361	843,311
Total net paid losses and loss adjustment expenses .....	1,259,874	1,117,413
Net reserve for losses and loss adjustment expenses at end of year.....	5,937,822	5,482,833
Unpaid losses and loss adjustment expenses recoverable .....	1,860,674	1,731,491
Reserve for losses and loss adjustment expenses at end of year .....	\$7,798,496	\$7,214,324

During 2008, the Company recorded a redundancy on net reserves recorded in prior years of approximately \$310.2 million, which consisted of \$231.2 million from the reinsurance segment and \$79.0 million from the insurance segment. Of the net favorable development in the reinsurance segment, \$126.1 million came from property and other short-tail lines, and \$105.1 million came from casualty and other long-tail business. The development resulted from better than anticipated loss emergence. The net favorable development was partially offset by an increase in acquisition expenses of \$11.1 million primarily resulting from profit commissions related to such favorable development. In addition, in its reserving process in 2002 and 2003, the reinsurance segment recognized that there is a possibility that the assumptions made could prove to be inaccurate due to several factors primarily related to the start up nature of its operations. Due to the availability of additional data, and based on reserve analyses, it was determined that it was no longer necessary to continue to include such factors in 2004 or subsequent periods. Based on the level of claims activity reported to date, the reinsurance segment reduced the amount of reserves it had recorded in 2002 and 2003 by \$2.7 million in 2008. Except as discussed above, the estimated favorable development in the reinsurance segment's prior year reserves did not reflect any significant changes in the key assumptions it made to estimate these reserves at December 31, 2007. As a result of giving partial weighting to its own experience, the insurance segment reduced loss selections for some lines, in particular those written on a claims-made basis and for which it now believes it has a reasonable level of credible data. The insurance segment's net favorable development of \$79.0 million was primarily due to reductions in reserves in medium-tailed and long-tailed lines of business resulting from such changes. The net favorable development was partially offset by an increase in acquisition expenses of \$15.9 million, primarily due to sliding scale arrangements on certain policies.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

During 2007, the Company recorded a redundancy on net reserves recorded in prior years of approximately \$185.4 million, which consisted of \$172.7 million from the reinsurance segment and \$12.7 million from the insurance segment. Of the net favorable development in the reinsurance segment, \$110.6 million came from short-tail lines, and \$62.1 million came from longer-tail lines. The development resulted from better than anticipated loss emergence. The net favorable development was partially offset by an increase in acquisition expenses of \$18.5 million. As noted above, in its reserving process in 2002 and 2003, the reinsurance segment recognized that there is a possibility that the assumptions made could prove to be inaccurate due to several factors primarily related to the start up nature of its operations. Due to the availability of additional data, and based on reserve analyses, it was determined that it was no longer necessary to continue to include such factors in 2004 or subsequent periods. Following reserve reviews, and based on the level of claims activity reported to date, the reinsurance segment reduced the amount of reserves it had recorded in 2002 and 2003 by \$10.6 million in 2007. As a result of giving partial weighting to its own experience, the insurance segment reduced loss selections for some lines, in particular those written on a claims-made basis and for which it now has a reasonable level of credible data. The insurance segment's net favorable development of \$12.7 million was primarily due to reductions in reserves in medium-tailed and long-tailed lines of business resulting from such changes, partially offset by adverse development of \$33.3 million from short-tail lines which primarily resulted from higher than expected claims development. The net favorable development was partially offset by an increase in acquisition expenses of \$9.5 million, primarily due to sliding scale arrangements on certain policies.

**6. Investment in Joint Venture**

During 2008, the Company received an advance of \$100 million from ACGL, which it subsequently repaid by the issuance of 60,423 shares of common stock to ACGL at \$1 par value per share. The Company used the funds obtained from ACGL to provide \$100.0 million of funding to Gulf Reinsurance Limited ("Gulf Re"), a newly formed reinsurer based in the Dubai International Financial Centre, pursuant to the joint venture agreement with Gulf Investment Corporation GSC ("GIC"). The initial total capital of the joint venture consists of \$200.0 million, plus an additional \$200.0 million to be funded equally by the Company and GIC depending on the joint venture's business needs. Under the agreement, each of the Company and GIC owns 50% of Gulf Re, which has commenced underwriting activities. Gulf Re will initially target the six member states of the Gulf Cooperation Council, which include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. The joint venture will write a broad range of property and casualty reinsurance, including aviation, energy, commercial transportation, marine, engineered risks and property, on both a treaty and facultative basis.

Gulf Re reported \$204.3 million of total assets, \$7.7 million of total liabilities and \$196.7 million of shareholders' equity at September 30, 2008. For the nine months ended September 30, 2008, Gulf Re reported total revenues of \$3.6 million and a net loss of \$1.8 million. The Company accounts for its investment in Gulf Re, shown as "Investment in joint venture," using the equity method and records its equity in the operating results of Gulf Re in "Other income" on a quarter lag basis.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**7. Investment Information**

The Company's invested assets were as follows:

(U.S. dollars in thousands)	December 31,	
	2008	2007
Fixed maturities available for sale, at market value .....	\$8,115,767	\$7,129,146
Fixed maturities pledged under securities lending agreements, at market value (1) .....	626,501	1,462,826
Total fixed maturities .....	8,742,268	8,591,972
Short-term investments available for sale, at market value .....	470,373	666,758
Short-term investments pledged under securities lending agreements, at market value (1) .....	101,564	219
Other investments.....	109,601	353,694
Investment funds accounted for using the equity method .....	301,027	235,975
Total investments .....	9,724,833	9,848,618
Securities transactions entered into but not settled at the balance sheet date ....	(18,237)	(5,894)
Total investments, net of securities transactions .....	\$9,706,596	\$9,842,724

- (1) In securities lending transactions, the Company receives collateral in excess of the market value of the fixed maturities and short-term investments pledged under securities lending agreements. For purposes of this table, the Company has excluded the collateral received at December 31, 2008 and 2007 of \$730.2 million and \$1.5 billion, respectively, which is reflected as "investment of funds received under securities lending agreements, at market value" and included the \$728.1 million and \$1.46 billion, respectively, of "fixed maturities and short-term investments pledged under securities lending agreements, at market value."

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

***Fixed Maturities and Fixed Maturities Pledged Under Securities Lending Agreements***

The following table summarizes the Company's fixed maturities and fixed maturities pledged under securities lending agreements:

(U.S. dollars in thousands)	<u>Estimated Market Value</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Amortized Cost</u>
<b>December 31, 2008:</b>				
Corporate bonds .....	\$2,018,471	\$51,108	(\$98,963)	\$2,066,326
Mortgage backed securities .....	1,581,736	23,306	(125,759)	1,684,189
U.S. government and government agencies .....	1,458,345	77,372	(14,159)	1,395,132
Commercial mortgage backed securities.....	1,219,737	16,128	(68,212)	1,271,821
Asset backed securities .....	970,041	1,121	(70,762)	1,039,682
Municipal bonds.....	965,966	26,815	(1,730)	940,881
Non-U.S. government securities .....	527,972	33,690	(31,884)	526,166
Total.....	<u>\$8,742,268</u>	<u>\$229,540</u>	<u>(\$411,469)</u>	<u>\$8,924,197</u>
<b>December 31, 2007:</b>				
Corporate bonds .....	\$2,452,429	\$40,297	(\$10,993)	\$2,423,125
Mortgage backed securities .....	1,234,596	14,211	(4,087)	1,224,472
U.S. government and government agencies .....	1,156,669	21,456	(447)	1,135,660
Commercial mortgage backed securities.....	1,315,680	17,339	(558)	1,298,899
Asset backed securities .....	1,008,030	9,508	(4,030)	1,002,552
Municipal bonds.....	990,325	13,213	(195)	977,307
Non-U.S. government securities .....	434,243	28,032	(3,056)	409,267
Total.....	<u>\$8,591,972</u>	<u>\$144,056</u>	<u>(\$23,366)</u>	<u>\$8,471,282</u>

In February 2006, the FASB issued SFAS No. 155, "Accounting for Certain Hybrid Financial Instruments – an amendment of FASB Statements No. 133 and 140" ("SFAS No. 155"). Upon adopting SFAS No. 155 on January 1, 2007, the Company applied the "fair value option" to certain hybrid securities which are included in the Company's fixed maturities and records changes in market value of such securities as realized gains or losses. The fair market values of such securities at December 31, 2008 were approximately \$51.1 million and the Company recorded a realized loss of \$5.4 million on such securities for 2008.

The contractual maturities of the Company's fixed maturities and fixed maturities pledged under securities lending agreements are shown below. Expected maturities, which are management's best estimates, will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

(U.S. dollars in thousands)	<u>December 31, 2008</u>		<u>December 31, 2007</u>	
<u>Maturity</u>	<u>Estimated Market Value</u>	<u>Amortized Cost</u>	<u>Estimated Market Value</u>	<u>Amortized Cost</u>
Due in one year or less .....	\$172,850	\$168,877	\$146,538	\$143,127
Due after one year through five years .....	2,447,101	2,448,589	2,363,259	2,327,061
Due after five years through 10 years .....	1,725,299	1,685,239	1,747,677	1,711,860
Due after 10 years .....	625,504	625,800	776,192	763,311
	4,970,754	4,928,505	5,033,666	4,945,359
Mortgage backed securities .....	1,581,736	1,684,189	1,234,596	1,224,472
Commercial mortgage backed securities.....	1,219,737	1,271,821	1,315,680	1,298,899
Asset backed securities .....	970,041	1,039,682	1,008,030	1,002,552
Total.....	<u>\$8,742,268</u>	<u>\$8,924,197</u>	<u>\$8,591,972</u>	<u>\$8,471,282</u>

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company had gross unrealized losses on its fixed maturities of \$411.5 million at December 31, 2008. At December 31, 2008, on a lot level basis, approximately 2,357 security lots out of a total of approximately 3,898 security lots were in an unrealized loss position and the largest single unrealized loss from a single lot in the Company's fixed maturity portfolio was \$6.1 million. The Company had gross unrealized losses on its fixed maturities of \$23.4 million at December 31, 2007. At December 31, 2007, on a lot level basis, approximately 1,381 security lots out of a total of approximately 3,883 security lots were in an unrealized loss position and the largest single unrealized loss from a single lot in the Company's fixed maturity portfolio was \$0.5 million.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table provides an analysis of the length of time each of those fixed maturities, fixed maturities pledged under securities lending agreements, equity securities and short-term investments with an unrealized loss has been in a continual unrealized loss position. The information below indicates the potential effect upon future income in the event management later concludes that such declines are considered other-than-temporary.

	Less than 12 Months		12 Months or More		Total	
	Estimated Market Value	Gross Unrealized Losses	Estimated Market Value	Gross Unrealized Losses	Estimated Market Value	Gross Unrealized Losses
(U.S. dollars in thousands)						
<b>December 31, 2008:</b>						
Fixed maturities and fixed maturities pledged under securities lending agreements:						
Corporate bonds.....	\$869,868	(\$89,430)	\$30,608	(\$9,533)	\$900,476	(\$98,963)
Mortgage backed securities .....	417,373	(105,154)	23,295	(20,605)	440,668	(125,759)
U.S. government and government agencies.....	356,719	(14,159)	—	—	356,719	(14,159)
Commercial mortgage backed securities .....	714,497	(68,210)	52	(2)	714,549	(68,212)
Asset backed securities .....	888,908	(63,845)	26,185	(6,917)	915,093	(70,762)
Municipal bonds .....	93,072	(1,730)	—	—	93,072	(1,730)
Non-U.S. government securities.....	223,314	(31,882)	142	(2)	223,456	(31,884)
Total.....	3,563,751	(374,410)	80,282	(37,059)	3,644,033	(411,469)
Other investments .....	20,510	(3,649)	13,715	(20,919)	34,225	(24,568)
Short-term investments .....	33,080	(2,535)	—	—	33,080	(2,535)
Total.....	\$3,617,341	(\$380,594)	\$93,997	(\$57,978)	\$3,711,338	(\$438,572)
<b>December 31, 2007:</b>						
Fixed maturities and fixed maturities pledged under securities lending agreements:						
Corporate bonds.....	\$357,672	(\$10,275)	\$26,455	(\$718)	\$384,127	(\$10,993)
Mortgage backed securities .....	185,118	(3,804)	7,126	(283)	192,244	(4,087)
U.S. government and government agencies.....	206,710	(447)	—	—	206,710	(447)
Commercial mortgage backed securities .....	66,401	(381)	33,827	(177)	100,228	(558)
Asset backed securities .....	183,412	(3,845)	11,221	(185)	194,633	(4,030)
Municipal bonds .....	22,908	(171)	10,988	(24)	33,896	(195)
Non-U.S. government securities.....	154,261	(1,987)	42,925	(1,069)	197,186	(3,056)
Total.....	1,176,482	(20,910)	132,542	(2,456)	1,309,024	(23,366)
Other investments .....	200,484	(5,342)	—	—	200,484	(5,342)
Short-term investments .....	140,709	(2,955)	—	—	140,709	(2,955)
Total.....	\$1,517,675	(\$29,207)	\$132,542	(\$2,456)	\$1,650,217	(\$31,663)

Of the \$411.5 million of gross unrealized losses on the Company's fixed maturities at December 31, 2008, \$374.4 million, or 91% of the total gross unrealized losses, were on fixed maturities which were in an unrealized loss position for less than 12 months. In addition, approximately two thirds of the gross unrealized losses were on fixed maturities where market value was less than 30% below amortized cost while over 93% were on fixed maturities where market value was less than 50% below cost. The Company believes that the gross unrealized

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

losses on its fixed maturities at December 31, 2008 were primarily due to the widening of credit spreads and changes in the interest rate environment that occurred in the second half of 2008. At December 31, 2008, the Company had the ability and intent to hold these fixed maturities until recovery.

The Company reviews its investment portfolio each quarter to determine if declines in value are other-than-temporary. The Company's process for identifying declines in the market value of investments that are other-than-temporary involves consideration of several factors. These factors include (i) the time period in which there has been a significant decline in value, (ii) the liquidity, business prospects and overall financial condition of the issuer, (iii) the significance of the decline and (iv) the Company's intent and ability to hold the investment for a sufficient period of time for the value to recover. When the analysis of the above factors results in the Company's conclusion that declines in market values are other-than-temporary, the cost of the securities is written down to market value and the reduction in value is reflected as a realized loss. In periods subsequent to the recognition of an other-than-temporary impairment on fixed maturities, the Company accounts for such securities as if they had been purchased on the measurement date of the other-than-temporary impairment and the provision for other-than-temporary impairment (reflected as a discount or reduced premium based on the new cost basis) is amortized into net investment income over the remaining life of the fixed maturities, or until such securities are sold.

During 2008, the Company identified approximately 597 fixed maturity securities with a market value of \$422.4 million which were considered to be other-than-temporarily impaired. The cost of such securities was written down to market value and the Company recognized a realized loss of \$155.3 million. During 2007, the Company identified approximately 272 fixed maturity securities with a market value of \$606.8 million which were considered to be other-than-temporarily impaired. The cost of such securities was written down to market value and the Company recognized a realized loss of \$28.1 million.

### ***Securities Lending Agreements***

During 2005, the Company began a securities lending program under which certain of its fixed income portfolio securities are loaned to third parties, primarily major brokerage firms, for short periods of time through a lending agent. Such securities have been reclassified as "Fixed maturities and short-term investments pledged under securities lending agreements." The Company maintains legal control over the securities it lends, retains the earnings and cash flows associated with the loaned securities and receives a fee from the borrower for the temporary use of the securities. Collateral received, primarily in the form of cash, is required at a rate of 102% of the market value of the loaned securities (or 105% of the market value of the loaned securities when the collateral and loaned securities are denominated in non-U.S. currencies) including accrued investment income and is monitored and maintained by the lending agent. Such collateral is reinvested and is reflected as "Investment of funds received under securities lending agreements, at market value." At December 31, 2008, the market value and amortized cost of fixed maturities and short-term investments pledged under securities lending agreements were \$728.1 million and \$717.2 million, respectively. At December 31, 2007, the market value and amortized cost of fixed maturities and short-term investments pledged under securities lending agreements were \$1.46 billion and \$1.44 billion, respectively.

At December 31, 2008, the market value and amortized cost of the reinvested collateral, shown as "Investment of funds received under securities lending agreements," totaled \$730.2 million and \$750.3 million, respectively, compared to \$1.50 billion at December 31, 2007. At December 31, 2008, the reinvested collateral included sub-prime securities with a market value of \$56.1 million and an average credit quality of "AA+."

### ***Investment-Related Derivatives***

The Company's investment strategy allows for the use of derivative securities. Derivative instruments may be used to enhance investment performance, replicate investment positions or manage market exposures and duration risk that would be allowed under the Company's investment guidelines if implemented in other ways.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The market values of those derivatives are based on quoted market prices. At December 31, 2008 and 2007, the notional value of the net long position for equity futures was nil and \$91.2 million, respectively. At December 31, 2008, the notional value of the net long position for Treasury note futures was \$556.3 million, compared to \$61.7 million at December 31, 2007. At December 31, 2008, the notional value of the net long position for U.K. and German government futures was approximately \$363.3 million (at December 31, 2008 foreign currency rates). For 2008, the Company recorded \$20.1 million of net realized gains related to changes in the market value of all futures contracts, compared to \$2.0 million of net realized losses for 2007.

***Other Investments***

The following table details the Company's other investments:

(U.S. dollars in thousands)	December 31, 2008		December 31, 2007	
	Estimated Market Value	Cost	Estimated Market Value	Cost
Fixed income mutual funds .....	\$39,858	\$63,618	\$194,090	\$198,244
International equity index funds.....	—	—	92,056	68,270
Privately held securities and other.....	69,743	62,240	67,548	57,436
Total.....	\$109,601	\$125,858	\$353,694	\$323,950

Other investments include: (i) mutual funds which invest in fixed maturity securities and (ii) privately held securities and other which include the Company's investment in Aeolus LP (see Note 10). During 2008, the Company sold its investments in international equity index funds and reduced its ownership in one fixed income mutual fund. In addition, the Company identified two fixed income mutual funds with a market value of \$27.9 million which were considered to be other-than-temporarily impaired. The cost of such funds was written down to market value and the Company recognized a realized loss of \$25.8 million. During 2007, the Company identified one fixed income mutual fund with a market value of \$48.6 million which was considered to be other-than-temporarily impaired. The cost of such fund was written down to market value and the Company recognized a realized loss of \$2.1 million.

***Investment Funds Accounted for Using the Equity Method***

The Company's investment portfolio includes certain funds that invest in fixed maturity securities which, due to their ownership structure, are accounted for by the Company using the equity method. In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on the Company's proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). Such investments are generally recorded on a one month lag with some investments reported for on a three month lag. Changes in the carrying value of such investments are recorded in net income as "Equity in net income (loss) of investment funds accounted for using the equity method" while changes in the carrying value of the Company's other fixed income investments are recorded as an unrealized gain or loss component of accumulated other comprehensive income in shareholder's equity. As such, fluctuations in the carrying value of the investment funds accounted for using the equity method may increase the volatility of the Company's reported results of operations. Investment funds accounted for using the equity method totaled \$301.0 million at December 31, 2008, compared to \$236.0 million at December 31, 2007. The Company's investment commitments relating to investment funds accounted for using the equity method totaled approximately \$8.3 million at December 31, 2008.

For 2008, the Company recorded \$178.6 million of equity in net loss of investment funds accounted for using the equity method, compared to \$0.2 million for 2007. As noted above, the Company records such investments on a one month or three month lag. The 2008 amount primarily related to the Company's investments in U.S. and Euro-denominated bank loan funds and resulted from the extreme volatility in the

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

capital and credit markets during September to November 2008 as the market values of the secured loans underlying the holdings in such funds declined significantly.

Three of the Company's investment funds accounted for using the equity method contributed \$145.0 million of the total equity in net loss for 2008. A summary of financial information for these three funds in total as of September 30, 2008 and 2007 and for the nine months ended September 30, 2008 and 2007 is as follows:

(U.S. dollars in thousands)	<b>September 30,</b>	
	<b>2008</b>	<b>2007</b>
Invested assets.....	\$2,206,408	\$103,099
Total assets.....	2,206,759	103,099
Total liabilities.....	459	—
Net assets.....	<u>\$2,206,300</u>	<u>\$103,099</u>

(U.S. dollars in thousands)	<b>Nine Months Ended September 30,</b>	
	<b>2008</b>	<b>2007</b>
Total revenues.....	(\$284,448)	(\$13,383)
Total expenses.....	5,274	450
Net income (loss).....	<u>(\$289,722)</u>	<u>(\$13,833)</u>

The Company's investments in the three funds totaled \$229.7 million at September 30, 2008. During the 2008 fourth quarter, the Company made a subsequent investment of \$54.0 million in one fund. The carrying value of the Company's investment in the three funds decreased to \$177.5 million at December 31, 2008.

***Restricted Assets***

The Company is required to maintain assets on deposit, which primarily consist of fixed maturities, with various regulatory authorities to support its insurance and reinsurance operations. The assets on deposit are available to settle insurance and reinsurance liabilities to third parties. The Company also has investments in segregated portfolios primarily to provide collateral or guarantees for letters of credit to third parties.

The following table details the value of restricted assets:

(U.S. dollars in thousands)	<b>December 31,</b>	
	<b>2008</b>	<b>2007</b>
Assets used for collateral or guarantees.....	\$804,934	\$736,938
Deposits with U.S. regulatory authorities.....	264,988	251,586
Trust funds.....	153,182	133,238
Deposits with non-U.S. regulatory authorities.....	57,336	46,789
Total restricted assets.....	<u>\$1,280,440</u>	<u>\$1,168,551</u>

In addition, the Company maintains assets in trust accounts as collateral for insurance and reinsurance transactions with affiliated companies. At December 31, 2008 and 2007, such amounts approximated \$4.02 billion and \$3.79 billion, respectively.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

***Net Investment Income***

The components of net investment income were derived from the following sources:

(U.S. dollars in thousands)	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
Fixed maturities .....	\$437,197	\$407,454
Short-term investments .....	20,458	40,534
Other (1) .....	23,372	27,433
Gross investment income .....	481,027	475,421
Investment expenses .....	(13,796)	(13,609)
Net investment income .....	<u>\$467,231</u>	<u>\$461,812</u>

(1) Primarily consists of interest income on operating cash accounts, other investments and securities lending transactions.

***Net Realized Gains (Losses)***

Net realized gains (losses) were as follows:

(U.S. dollars in thousands)	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
Fixed maturities .....	(\$173,333)	\$38,307
Other investments .....	(35,829)	847
Other (1) .....	22,809	(11,317)
Net realized gains (losses) .....	<u>(\$186,353)</u>	<u>\$27,837</u>

(1) Includes net realized gains or losses from derivatives, futures contracts and other items.

Proceeds from the sales of fixed maturities during 2008 and 2007 were \$16.44 billion and \$18.91 billion, respectively. Gross gains of \$249.8 million and \$133.1 million were realized on those transactions during 2008 and 2007, respectively. Gross losses of \$423.1 million and \$94.8 million were realized during 2008 and 2007, respectively. The net realized losses on fixed maturities of \$173.3 million in 2008 and net realized gains of \$38.3 million in 2007 included provisions of \$155.3 million and \$28.1 million, respectively, for declines in the market value of investments held in the Company's available for sale portfolio which were considered to be other-than-temporary, as described above. In addition, net realized losses on other investments in 2008 and 2007 included provisions of \$25.8 million and \$2.1 million, respectively, for declines in the market value of other investments which were considered to be other-than-temporary, as described above.

***Fair Value***

Effective January 1, 2008, the Company adopted and implemented SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities – Including an Amendment of FASB Statement No. 115" ("SFAS No. 159"), which provides a fair value option to measure many financial instruments and certain other assets and liabilities at fair value on an instrument-by-instrument basis. The Company did not apply the fair value option on any financial assets or financial liabilities during 2008.

In addition, effective January 1, 2008, the Company adopted and implemented SFAS No. 157, "Fair Value Measurements" ("SFAS No. 157"), which addresses how companies should measure fair value when they are required to use a fair value measure for recognition or disclosure purposes under GAAP and provides a common definition of fair value to be used throughout GAAP. SFAS No. 157 defines fair value as the price that would be

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

received to sell an asset or paid to transfer a liability in an orderly fashion between market participants at the measurement date.

In October 2008, the FASB issued FSP No. FAS 157-3, “Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active” (“FSP FAS 157-3”), with an immediate effective date, including prior periods for which financial statements have not been issued. FSP FAS 157-3 amends SFAS No. 157 to clarify the application of fair value in inactive markets and allows for the use of management’s internal assumptions about future cash flows with appropriately risk-adjusted discount rates when relevant observable market data does not exist. The objective of SFAS No. 157 has not changed and continues to be the determination of the price that would be received in an orderly transaction that is not a forced liquidation or distressed sale at the measurement date. The adoption of FSP FAS 157-3 had no impact on the Company’s consolidated financial position and results of operations.

SFAS No. 157 establishes a three-level valuation hierarchy for the disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The level in the hierarchy within which a given fair value measurement falls is determined based on the lowest level input that is significant to the measurement (Level 1 being the highest priority and Level 3 being the lowest priority).

The three levels are defined as follows:

- Level 1: Inputs to the valuation methodology are observable inputs that reflect quoted prices (unadjusted) for *identical* assets or liabilities in *active markets*
- Level 2: Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument
- Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement

Following is a description of the valuation methodologies used for securities measured at fair value, as well as the general classification of such securities pursuant to the valuation hierarchy.

The Company uses quoted values and other data provided by nationally recognized independent pricing sources as inputs into its process for determining fair values of its fixed maturity investments. To validate the techniques or models used by pricing sources, the Company’s review process includes, but is not limited to: (i) quantitative analysis (*e.g.*, comparing the quarterly return for each managed portfolio to its target benchmark, with significant differences identified and investigated); (ii) a review of the average number of prices obtained in the pricing process and the range of resulting market values; (iii) initial and ongoing evaluation of methodologies used by outside parties to calculate fair value including a review of deep dive reports on selected securities which indicated the use of observable inputs in the pricing process; (iv) comparing the fair value estimates to its knowledge of the current market; and (v) back-testing, which includes randomly selecting purchased or sold securities and comparing the executed prices to the fair value estimates from the pricing service. Based on the above review, the Company will challenge any prices for a security or portfolio which are considered not to be representative of fair value.

The independent pricing sources obtain market quotations and actual transaction prices for securities that have quoted prices in active markets. Each source has its own proprietary method for determining the fair value of securities that are not actively traded. In general, these methods involve the use of “matrix pricing” in which the independent pricing source uses observable market inputs including, but not limited to, investment yields, credit risks and spreads, benchmarking of like securities, broker-dealer quotes, reported trades and sector

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

groupings to determine a reasonable fair market value. In addition, pricing vendors use model processes, such as an Option Adjusted Spread model, to develop prepayment and interest rate scenarios. The Option Adjusted Spread model is commonly used to estimate fair value for securities such as mortgage backed and asset backed securities. In certain circumstances, when fair market values are unavailable from these independent pricing sources, quotes are obtained directly from broker-dealers who are active in the corresponding markets. Such quotes are subject to the validation procedures noted above.

The Company reviews its securities measured at fair value and discusses the proper classification of such investments with investment advisors and others. Upon adoption of SFAS No. 157 and at December 31, 2008, the Company determined that Level 1 securities included highly liquid, recent issue U.S. Treasuries and certain of its short-term investments held in highly liquid money market-type funds where it believes that quoted prices are available in an active market.

Where the Company believes that quoted market prices are not available or that the market is not active, fair values are estimated by using quoted prices of securities with similar characteristics, pricing models or matrix pricing and are generally classified as Level 2 securities. The Company determined that Level 2 securities included corporate bonds, mortgage backed securities, municipal bonds, asset backed securities, certain U.S. government and government agencies, non-U.S. government securities, certain short-term securities and certain other investments.

Following further review of the inputs used in the pricing process, the Company determined that three Euro-denominated corporate bonds which invest in underlying portfolios of fixed income securities for which there is a low level of transparency around inputs to the valuation process should be classified within Level 3 of the valuation hierarchy. In addition, the Company determined that two mutual funds, included in other investments, which invest in underlying portfolios of fixed income securities for which there is a low level of transparency around inputs to the valuation process should be classified within Level 3 of the valuation hierarchy. As such, the Company transferred \$136.8 million of corporate bonds and \$31.6 million of other investments in to Level 3 during the 2008 fourth quarter. In addition, Level 3 securities include a small number of premium-tax bonds.

The following table presents the Company's financial assets and liabilities measured at fair value by SFAS No. 157 hierarchy at December 31, 2008:

	<b>December 31, 2008</b>	<b>Fair Value Measurement Using:</b>		
		<b>Quoted Prices in Active Markets for Identical Assets (Level 1)</b>	<b>Significant Other Observable Inputs (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
Fixed maturities (1), (3) .....	\$8,742,268	\$241,442	\$8,358,255	\$142,571
Short-term investments (1).....	571,937	465,291	106,646	—
Other investments (2).....	36,913	—	(3,426)	40,339
Total .....	<u>\$9,351,118</u>	<u>\$706,733</u>	<u>\$8,461,475</u>	<u>\$182,910</u>

- (1) In securities lending transactions, the Company receives collateral in excess of the fair value of the fixed maturities and short-term investments pledged under securities lending agreements. For purposes of this table, the Company has excluded the investment of collateral received of \$730.2 million which is reflected as "investment of funds received under securities lending agreements, at market value" and included the \$728.1 million of "fixed maturities and short-term investments pledged under securities lending agreements, at market value."
- (2) Excludes the Company's investment in Aeolus LP, which is accounted for using the equity method.
- (3) Consists of (i) three corporate bonds which invest in underlying portfolios of fixed income securities for which there is a low level of transparency around inputs and (ii) a small number of premium-tax bonds.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents a reconciliation of the beginning and ending balances for all investments measured at fair value on a recurring basis using Level 3 inputs for 2008:

	<b>Fair Value Measurements Using: Significant Unobservable Inputs (Level 3)</b>		
	<b>Fixed Maturities</b>	<b>Other Investments</b>	<b>Total</b>
<b>Year Ended December 31, 2008:</b>			
Beginning balance at January 1, 2008.....	\$3,752	\$11,504	\$15,256
Total gains or (losses) (realized/unrealized)			
Included in earnings (1) .....	(780)	757	(23)
Included in other comprehensive income .....	—	(2,660)	(2,660)
Purchases, issuances and settlements .....	2,803	(829)	1,974
Transfers in and/or out of Level 3 .....	136,796	31,567	168,363
Ending balance at December 31, 2008.....	<u>\$142,571</u>	<u>\$40,339</u>	<u>\$182,910</u>

- (1) Losses on fixed maturities were recorded as a component of net investment income while gains on other investments were recorded in net realized gains.

The amount of total losses for 2008 included in earnings attributable to the change in unrealized gains or losses relating to assets still held at December 31, 2008 was de minimis.

## 8. Other Comprehensive Income (Loss)

Following are the related tax effects allocated to each component of other comprehensive income (loss):

(U.S. dollars in thousands)	<b>Before Tax Amount</b>	<b>Tax Expense (Benefit)</b>	<b>Net of Tax Amount</b>
<b>Year Ended December 31, 2008</b>			
Unrealized appreciation (decline) in value of investments:			
Unrealized holding losses arising during year .....	(\$569,930)	\$13,821	(\$583,751)
Less reclassification of net realized losses included in net income.....	(203,163)	5,054	(208,217)
Foreign currency translation adjustments .....	(38,079)	(2,539)	(35,540)
Other comprehensive income (loss) .....	<u>(\$404,846)</u>	<u>\$6,228</u>	<u>(\$411,074)</u>
<b>Year Ended December 31, 2007</b>			
Unrealized appreciation (decline) in value of investments:			
Unrealized holding gains arising during year .....	\$142,536	\$8,325	\$134,211
Less reclassification of net realized gains included in net income.....	39,878	(1,944)	41,822
Foreign currency translation adjustments .....	7,522	1,777	5,745
Other comprehensive income (loss) .....	<u>\$110,180</u>	<u>\$12,046</u>	<u>\$98,134</u>

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**9. Income Taxes**

The Company is incorporated under the laws of Bermuda and, under current Bermuda law, is not obligated to pay any taxes in Bermuda based upon income or capital gains. The Company has received a written undertaking from the Minister of Finance in Bermuda under the Exempted Undertakings Tax Protection Act 1966 that, in the event that any legislation is enacted in Bermuda imposing any tax computed on profits, income, gain or appreciation on any capital asset, or any tax in the nature of estate duty or inheritance tax, such tax will not be applicable to ACGL or any of its operations until March 28, 2016. This undertaking does not, however, prevent the imposition of taxes on any person ordinarily resident in Bermuda or any company in respect of its ownership of real property or leasehold interests in Bermuda.

The Company and its non-U.S. subsidiaries will be subject to U.S. federal income tax only to the extent that they derive U.S. source income that is subject to U.S. withholding tax or income that is effectively connected with the conduct of a trade or business within the U.S. and is not exempt from U.S. tax under an applicable income tax treaty with the U.S.. The Company and its non-U.S. subsidiaries will be subject to a withholding tax on dividends from U.S. investments and interest from certain U.S. payors (subject to reduction by any applicable income tax treaty). The Company 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 there is uncertainty as to the activities which constitute being engaged in a trade or business within the United States, there can be no assurances that the U.S. Internal Revenue Service will not contend successfully that the Company or its non-U.S. subsidiaries are engaged in a trade or business in the United States. If the Company or any of its non-U.S. subsidiaries were subject to U.S. income tax, ACGL's shareholder's equity and earnings could be materially adversely affected. The Company has subsidiaries and branches that operate in various jurisdictions around the world that are subject to tax in the jurisdictions in which they operate. The significant jurisdictions in which the Company's subsidiaries and branches are subject to tax are the United States, United Kingdom, Ireland, Canada, Switzerland, Germany and Denmark.

The components of income taxes attributable to operations were as follows:

(U.S. dollars in thousands)	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Current expense:</b>		
U.S. Federal .....	\$15,782	\$12,633
U.S. State .....	638	598
Non-U.S. ....	5,631	6,886
	22,051	20,117
<b>Deferred benefit:</b>		
U.S. Federal.....	(7,288)	(2,178)
Non-U.S. ....	(1,881)	(3,018)
	(9,169)	(5,196)
Income tax expense .....	\$12,882	\$14,921

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The expected tax provision computed on pre-tax income at the weighted average tax rate has been calculated as the sum of the pre-tax income in each jurisdiction multiplied by that jurisdiction's applicable statutory tax rate. A reconciliation of the difference between the provision for income taxes and the expected tax provision at the weighted average tax rate follows:

(U.S. dollars in thousands)	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
Expected income tax expense computed on pre-tax income at weighted average income tax rate .....	\$19,365	\$25,419
Addition (reduction) in income tax expense (benefit) resulting from:		
Valuation allowance .....	—	(1,358)
Tax-exempt investment income .....	(11,403)	(9,703)
Meals and entertainment .....	632	495
State taxes, net of U.S. federal tax benefit .....	415	386
U.S. operations' foreign taxes, net of U.S. federal tax benefit .....	2,133	—
Reorganization of foreign branch .....	589	—
Prior year adjustment .....	229	(649)
Other .....	922	331
Income tax expense .....	\$12,882	\$14,921

The Company has net operating loss carryforwards in its U.S. operating subsidiaries totaling \$7.4 million at December 31, 2008. Such net operating losses are currently available to offset future taxable income of the subsidiaries. Under applicable law, the U.S. net operating loss carryforwards expire between 2018 and 2020. The Company also has a foreign tax credit carryforward of \$1.5 million which will expire December 31, 2017 and an alternative minimum tax ("AMT") credit carryforward in the amount of \$1.5 million which can be carried forward without expiration.

On November 20, 2001, ACGL underwent an ownership change for U.S. federal income tax purposes as a result of the investment led by investment funds associated with Warburg Pincus LLC ("Warburg Pincus") and Hellman and Friedman LLC ("Hellman & Friedman"). As a result of this ownership change, limitations have been imposed upon the utilization by the Company's U.S. operating subsidiaries of existing net operating losses. Utilization by such subsidiaries of the net operating losses and certain of the AMT credit carryforward is limited to approximately \$5.1 million per year in accordance with Section 382 of the Internal Revenue Code of 1986 as amended (the "Code").

The Company's Swiss branch has a net operating loss carryforward of \$11.5 million which is available to offset income of the Swiss branch until it expires between 2013 and 2015. The Company's Danish subsidiary has a net operating loss carryforward of \$2.1 million which can be carried forward without expiration.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Deferred income tax assets and liabilities reflect temporary differences based on enacted tax rates between the carrying amounts of assets and liabilities for financial reporting and income tax purposes. Significant components of the Company's deferred income tax assets and liabilities were as follows:

(U.S. dollars in thousands)	<b>December 31,</b>	
	<b>2008</b>	<b>2007</b>
Deferred income tax assets:		
Net operating loss .....	\$4,495	\$5,058
Deferred ceding commission .....	9,969	9,534
AMT credit carryforward .....	1,549	959
Discounting of net loss reserves .....	33,607	28,553
Net unearned premium reserve .....	13,742	13,805
Compensation liabilities .....	19,759	17,620
Capital loss carryforward .....	120	283
Other than temporary impairment on securities .....	899	2,523
Foreign tax credit carryforward .....	1,494	—
Net unrealized foreign exchange losses .....	561	—
Other, net .....	3,297	—
Total deferred tax assets .....	89,492	78,335
Deferred income tax liabilities:		
Depreciation and amortization .....	(2,230)	(1,896)
Deferred acquisition costs, net .....	(3,142)	(3,104)
Deposit accounting liability .....	(5,315)	(5,008)
Foreign transaction exchange gains .....	(419)	(1,299)
Net unrealized foreign exchange gains .....	—	(1,977)
Net unrealized appreciation of investments .....	(16,662)	(7,744)
Other, net .....	(2,501)	(774)
Total deferred tax liabilities .....	(30,269)	(21,802)
Net deferred income tax asset .....	\$59,223	\$56,533

In September 2006, the FASB issued FASB Interpretation No. 48 ("FIN No. 48"), "Accounting for Uncertainty in Income Taxes," an interpretation of SFAS No. 109, "Accounting for Income Taxes." FIN No. 48 prescribes a "more likely than not" threshold for the financial statement recognition of a tax position taken or expected to be taken in a tax return, assuming the relevant tax authority has full knowledge of all relevant information. The amount recognized represents the largest amount of tax benefit that is greater than 50% likely of being ultimately realized. A liability is recognized for any benefit claimed, or expected to be claimed, in a tax return in excess of the benefit recorded in the financial statements, along with any interest and penalty (if applicable) on the excess. The Company recognizes interest and penalties relating to unrecognized tax benefits in the provision for income taxes.

The Company adopted the provisions of FIN No. 48 on January 1, 2007. As prescribed, the cumulative effects of applying FIN 48 is reported as an adjustment to the opening balance of retained earnings. As a result of the adoption on January 1, 2007, the Company's retained earnings remained unchanged. As of December 31, 2008 and 2007, the Company's total unrecognized tax benefits, including interest and penalties, were zero.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company or its subsidiaries or branches files income tax returns in the U.S. federal jurisdiction and various state, local and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state, local, or non-U.S. income tax examination for years before 2005. During 2008, the U.S. Internal Revenue Service closed its examination of the Company's U.S. income tax returns for the 2004 tax year with no change.

In addition to unrecognized tax benefits, the Company provides a valuation allowance to reduce certain deferred tax assets to an amount which management expects to more likely than not be realized. As of December 31, 2008 and 2007, the Company's valuation allowance was zero.

The Company paid income taxes totaling \$10.9 million and \$3.5 million for 2008 and 2007, respectively. As of December 31, 2008, the Company's current income tax recoverable (included in "Other assets") was \$0.1 million.

***Federal Excise Taxes***

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 four percent for non-life insurance premiums and one percent for life insurance and all reinsurance premiums. The Company incurs federal excise taxes on certain of its reinsurance transactions, including amounts ceded through intercompany transactions. For 2008 and 2007 the Company paid approximately \$13.1 million and \$14.5 million, respectively, of federal excise taxes. Such amounts are reflected as acquisition expenses in the Company's consolidated statement of income.

**10. Transactions with Related Parties**

During 2006, the Company invested \$50.0 million in Aeolus LP ("Aeolus"), which operates as an unrated reinsurance platform that provides property catastrophe protection to insurers and reinsurers on both an ultimate net loss and industry loss warranty basis. In return for its investment, included in "Other investments" on the Company's balance sheet, the Company received an approximately 4.9% preferred interest in Aeolus and a pro rata share of certain founders' interests. The Company made its investment in Aeolus on the same economic terms as a fund affiliated with Warburg Pincus, which has invested \$350 million in Aeolus. Funds affiliated with Warburg Pincus owned 6.6% of ACGL's outstanding voting shares as of December 31, 2008. In addition, one of the founders of Aeolus is Peter Appel, former President and CEO and a former director of ACGL.

During 2008 the Company incurred \$10.5 million in administrative and support service fees paid to Arch Capital Services Inc. ("ACSI"), a wholly-owned subsidiary of ACGL, compared to \$8.4 million incurred during 2007. Such fees are incurred pursuant to the terms of specific administrative and support service agreements between subsidiaries of the Company and ACSI and are included in "Other Operating Expenses" in the consolidated statements of income. In addition, during 2008, the Company incurred approximately \$3.6 million in investment service fees paid to Arch Investment Management Ltd. ("AIM"), a wholly-owned subsidiary of ACGL, compared to \$3.5 million incurred during 2007. Such fees are incurred pursuant to the terms of specific investment service agreements between subsidiaries of the Company and AIM and "Net Investment Income" in the consolidated statements of income is net of these fees.

**11. Commitments and Contingencies**

***Concentrations of Credit Risk***

The creditworthiness of a counterparty is evaluated by the Company, taking into account credit ratings assigned by independent agencies. The credit approval process involves an assessment of factors, including,

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

among others, the counterparty, country and industry credit exposure limits. Collateral may be required, at the discretion of the Company, on certain transactions based on the creditworthiness of the counterparty.

The areas where significant concentrations of credit risk may exist include unpaid losses and loss adjustment expenses recoverable, prepaid reinsurance premiums and paid losses and loss adjustment expenses recoverable net of reinsurance balances payable (collectively “reinsurance recoverables”), investments and cash and cash equivalent balances. The Company’s reinsurance recoverables at December 31, 2008 and 2007 amounted to \$2.09 billion and \$2.04 billion, respectively, and primarily resulted from reinsurance arrangements entered into in the course of its operations. A credit exposure exists with respect to reinsurance recoverables as they may become uncollectible. The Company manages its credit risk in its reinsurance relationships by transacting with reinsurers that it considers financially sound and, if necessary, the Company may hold collateral in the form of funds, trust accounts and/or irrevocable letters of credit. This collateral can be drawn on for amounts that remain unpaid beyond specified time periods on an individual reinsurer basis.

In addition, the Company underwrites a significant amount of its business through brokers and a credit risk exists should any of these brokers be unable to fulfill their contractual obligations with respect to the payments of insurance and reinsurance balances owed to the Company. During 2008, approximately 17.0% and 15.3% of the Company’s consolidated gross written premiums were generated from or placed by Marsh & McLennan Companies and its subsidiaries and AON Corporation and its subsidiaries, respectively, compared to approximately 19.6% and 16.4% for 2007, respectively. No other broker and no one insured or reinsured accounted for more than 10% of gross premiums written for 2008 and 2007.

The Company’s available for sale investment portfolio is managed in accordance with guidelines that have been tailored to meet specific investment strategies, including standards of diversification, which limit the allowable holdings of any single issue. There were no investments in any entity in excess of 10% of the Company’s shareholder’s equity at December 31, 2008 other than investments issued or guaranteed by the United States government or its agencies. The Company’s unfunded investment commitments relating to investment funds accounted for using the equity method totaled approximately \$8.3 million at December 31, 2008.

***Variable Interest Entities***

The Company concluded that, under FASB Interpretation No. 46R (“FIN 46R”), “Consolidation of Variable Interest Entities,” that it is required to consolidate the assets, liabilities and results of operations (if any) of a certain managing general agency in which one of its subsidiaries has an investment. Such agency ceased producing business in 1999 and is currently running-off its operations. Based on current information, there are no assets or liabilities of such agency required to be reflected on the face of the Company’s consolidated financial statements that are not, or have not been previously, otherwise reflected therein.

On December 29, 2005, the Company entered into a quota share reinsurance treaty with Flatiron, a Bermuda reinsurance company, pursuant to which Flatiron is assuming a 45% quota share (the “Treaty”) of certain lines of property and marine business underwritten by the Company for unaffiliated third parties for the 2006 and 2007 underwriting years (January 1, 2006 to December 31, 2007). On December 31, 2007, the Treaty expired by its terms. As a result of the terms of the Treaty, the Company has determined that Flatiron is a variable interest entity. However, the Company is not the primary beneficiary of Flatiron and, as such, the Company is not required to consolidate the assets, liabilities and results of operations of Flatiron per FIN 46R. See Note 4.

***Letter of Credit and Revolving Credit Facilities***

As of December 31, 2008, ACGL had a \$300 million unsecured revolving loan and letter of credit facility and a \$1.0 billion secured letter of credit facility (the “Credit Agreement”). The \$300 million unsecured

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

revolving loan is also available for the issuance of unsecured letters of credit up to \$100 million for Arch Re U.S. Borrowings of revolving loans may be made by ACGL and Arch Re U.S. at a variable rate based on LIBOR or an alternative base rate at their option. Secured letters of credit are available for issuance on behalf of the Company's insurance and reinsurance subsidiaries. Issuance of letters of credit and borrowings under the Credit Agreement are subject to compliance with certain covenants and conditions, including absence of a material adverse change. These covenants require, among other things, that ACGL maintain a debt to total capital ratio of not greater than 0.35 to 1 and shareholders' equity in excess of \$1.95 billion plus 25% of future aggregate net income for each quarterly period (not including any future net losses) beginning after June 30, 2006 and 25% of future aggregate proceeds from the issuance of common or preferred equity and that the Company's principal insurance and reinsurance subsidiaries maintain at least a "B++" rating from A.M. Best. In addition, certain of the Company's subsidiaries which are party to the Credit Agreement are required to maintain minimum shareholder's equity levels. ACGL was in compliance with all covenants contained in the Credit Agreement at December 31, 2008. The Credit Agreement expires on August 30, 2011.

Including the secured letter of credit portion of the Credit Agreement and another letter of credit facility (together, the "LOC Facilities"), ACGL has access to letter of credit facilities for up to a total of \$1.45 billion. The principal purpose of the LOC Facilities is to issue, as required, evergreen standby letters of credit in favor of primary insurance or reinsurance counterparties with which the Company has entered into reinsurance arrangements to ensure that such counterparties are permitted to take credit for reinsurance obtained from the Company's reinsurance subsidiaries in United States jurisdictions where such subsidiaries are not licensed or otherwise admitted as an insurer, as required under insurance regulations in the United States, and to comply with requirements of Lloyd's of London in connection with qualifying quota share and other arrangements. The amount of letters of credit issued is driven by, among other things, the timing and payment of catastrophe losses, loss development of existing reserves, the payment pattern of such reserves, the further expansion of the Company's business and the loss experience of such business. When issued, certain letters of credit are secured by a portion of the Company's investment portfolio. In addition, the LOC Facilities also require the maintenance of certain covenants, which ACGL was in compliance with at December 31, 2008. At such date, the Company had approximately \$599.9 million in outstanding letters of credit under the LOC Facilities, which were secured by investments totaling \$697.6 million. In May 2008, ACGL borrowed \$100.0 million under the Credit Agreement at an ACGL-selected variable interest rate that is based on 1 month, 3 month or 6 month reset option terms and their corresponding term LIBOR rates plus 27.5 basis points. The proceeds from such borrowings, which are repayable in August 2011, were advanced to the Company and used to fund the investment in Gulf Re (see Note 6).

***Leases and Purchase Obligations***

At December 31, 2008, the future minimum rental commitments, exclusive of escalation clauses and maintenance costs and net of rental income, for all of the Company's operating leases with remaining non-cancelable terms in excess of one year are as follows:

(U.S. dollars in thousands)

2009.....	\$14,813
2010.....	13,962
2011.....	13,646
2012.....	11,948
2013.....	11,245
Thereafter.....	51,160
Total.....	<u><u>\$116,774</u></u>

All of these leases are for the rental of office space, with expiration terms that range from 2010 to 2024. Rental expense, net of income from subleases, was approximately \$16.6 million and \$13.9 million for 2008 and 2007, respectively.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company has also entered into certain agreements which commit the Company to purchase goods or services, primarily related to software and computerized systems. Such purchase obligations were approximately \$28.5 million and \$22.0 million at December 31, 2008 and 2007, respectively.

***Employment and Other Arrangements***

At December 31, 2008, the Company has entered into an employment agreement with one of its executive officers for a period extending to December 31, 2009. Such employment arrangements provide for compensation in the form of base salary, annual bonus, share-based awards, participation in the Company's employee benefit programs and the reimbursements of expenses.

***WTM Re Transaction and Related Contingencies***

On May 5, 2000, the prior reinsurance operations of Arch Re U.S. were sold pursuant to an agreement entered into as of January 10, 2000 with White Mountains Reinsurance Company of America, formerly known as Folksamerica Reinsurance Company, and a related holding company (collectively, "WTM Re"). WTM Re assumed Arch Re U.S.'s liabilities under the reinsurance agreements transferred in the asset sale and Arch Re U.S. transferred to WTM Re assets estimated in an aggregate amount equal in book value to the book value of the liabilities assumed. The WTM Re transaction was structured as a transfer and assumption agreement (and not reinsurance) and, accordingly, the loss reserves (and any related reinsurance recoverables) relating to the transferred business are not included as assets or liabilities on the Company's balance sheet. WTM Re assumed Arch Re U.S.'s rights and obligations under the reinsurance agreements transferred in the asset sale. The reinsureds under such agreements were notified that WTM Re had assumed Arch Re U.S.'s obligations and that, unless the reinsureds object to the assumption, Arch Re U.S. will be released from its obligations to those reinsureds. None of such reinsureds objected to the assumption. However, Arch Re U.S. will continue to be liable under those reinsurance agreements if the notice is found not to be an effective release by the reinsureds. WTM Re has agreed to indemnify Arch Re U.S. for any losses arising out of the reinsurance agreements transferred to WTM Re in the asset sale. However, in the event that WTM Re refuses or is unable to perform its obligations to Arch Re U.S., Arch Re U.S. may incur losses relating to the reinsurance agreements transferred in the asset sale. WTM Re's A.M. Best rating was "A-" (Excellent) at December 31, 2008.

Under the terms of the agreement, in 2000, the Company had also purchased reinsurance protection covering the Company's transferred aviation business to reduce the net financial loss to WTM Re on any large commercial airline catastrophe to \$5.4 million, net of reinstatement premiums. Although the Company believes that any such net financial loss will not exceed \$5.4 million, the Company has agreed to reimburse WTM Re if a loss is incurred that exceeds \$5.4 million for aviation losses under certain circumstances prior to May 5, 2003. The Company also made representations and warranties to WTM Re about the Company and the business transferred to WTM Re for which the Company retains exposure for certain periods, and made certain other agreements. In addition, the Company retained its tax and employee benefit liabilities and other liabilities not assumed by WTM Re, including all liabilities not arising under reinsurance agreements transferred to WTM Re in the asset sale and all liabilities (other than liabilities arising under reinsurance agreements) arising out of or relating to a certain managing underwriting agency. Although WTM Re has not asserted that any amount is currently due under any of the indemnities provided by the Company under the asset purchase agreement, WTM Re has previously indicated a potential indemnity claim under the agreement in the event of the occurrence of certain future events. Based on all available information, the Company has denied the validity of any such potential claim.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 12. Share Capital

### *Authorized and Issued*

The authorized share capital of the Company consists of 2,625,000 and 1,250,000 common shares, par value of \$1.00 per share, at December 31, 2008 and 2007, respectively. The issued share capital of the Company consists of 2,560,423 and 1,250,000 common shares, par value of \$1.00 per share at December 31, 2008 and 2007, respectively. Common shares of 1,310,423 were issued in 2008 to ACGL.

### *Long Term Incentive and Share Award Plans*

Certain of the Company's employees participate in ACGL's long-term incentive and share award plans. The expenses incurred under such plans are included in the Company's results of operations.

On May 11, 2007, following shareholder approval, ACGL adopted the 2007 Employee Share Purchase Plan (the "ESPP"). The purpose of the ESPP is to give employees of ACGL and its subsidiaries an opportunity to purchase common shares through payroll deductions, thereby encouraging employees to share in the economic growth and success of ACGL and its subsidiaries. The ESPP is designed to qualify as an "employee share purchase plan" under Section 423 of the Code. A total of 750,000 common shares are reserved for issuance under the plan. The ESPP provides for consecutive six-month offering periods (or other periods of not more than 27 months as determined by the compensation committee) under which participating employees can elect to have up to 20% of their total compensation withheld and applied to the purchase of common shares of the Company at the end of the period. Unless otherwise determined by the compensation committee before an offering period commences, (1) the purchase price will be 85% of the fair market value of the common shares at the beginning of the offering period; and (2) the maximum number of common shares that may be purchased by an employee in any offering period is 3,000 shares. In addition, applicable Code limitations specify, in general, that a participant's right to purchase stock under the plan cannot accumulate at a rate in excess of \$25,000 (based on the value at the beginning of the applicable offering periods) per calendar year.

On May 11, 2007, following shareholder approval, ACGL adopted the 2007 Long Term Incentive and Share Award Plan (the "2007 Plan"). The 2007 Plan is intended to provide for competitive compensation opportunities, to encourage long-term service, to recognize individual contributions and reward achievement of performance goals and to promote the creation of long-term value for shareholders by aligning the interests of such persons with those of shareholders. The 2007 Plan will provide for the grant to eligible employees and directors stock options, stock appreciation rights, restricted shares, restricted share units payable in common shares or cash, share awards in lieu of cash awards, dividend equivalents and other share-based awards. The 2007 Plan also will provide ACGL's non-employee directors with the opportunity to receive the annual retainer fee for Board service in common shares.

Following shareholder approval on May 11, 2007, the 2005 Long Term Incentive and Share Award Plan (the "2005 Plan"), whose terms are substantially similar to the 2007 Plan, was merged into the 2007 Plan. As of the effective date, the 1,533,527 remaining shares available for issuance under the 2005 Plan were transferred into the 2007 Plan. No additional grants will be made thereafter under the 2005 Plan.

Grants which were outstanding at May 11, 2007 under the 2005 Plan will continue in accordance with their original terms (subject to such amendments as the compensation committee determines appropriate, consistent with the terms of the 2005 Plan), and the shares with respect to such outstanding grants will be issued or transferred under the 2007 Plan. The number of common shares reserved for issuance under the 2007 Plan, subject to anti-dilution adjustments in the event of certain changes in our capital structure, is equal to the sum of (i) 2,500,000 and (ii) the number of common shares subject to outstanding grants under the 2005 Plan as of the effective date as well as common shares remaining available for issuance under the 2005 Plan but not subject to

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

previously exercised or vested grants as of the effective date, except that no more than 2,000,000 common shares may be issued as incentive stock options under Section 422 of the Code. At December 31, 2008, approximately 2,785,079 shares are available for grant under the 2007 Plan.

In June 2002, following shareholder approval, ACGL adopted the 2002 Long Term Incentive and Share Award Plan (the "2002 Plan"). An aggregate of 3,165,830 Common Shares has been reserved for issuance under the 2002 Plan. The 2002 Plan provides for the grant to eligible employees and directors of stock options, stock appreciation rights, restricted shares, restricted share units payable in Common Shares or cash, share awards in lieu of cash awards, dividend equivalents and other share-based awards. The 2002 Plan provides ACGL's non-employee directors with the opportunity to receive their annual retainer fee for service as a director in Common Shares. As of December 31, 2008, approximately 18,584 shares are available for grant under the 2002 Plan.

With respect to certain subsidiaries, ACGL may withhold, or require a participant to remit to ACGL, an amount sufficient to satisfy any federal, state or local withholding tax requirements associated with awards under ACGL's share award plans. This includes the authority to withhold or receive shares or other property and to make cash payments in respect thereof.

***Stock Options***

ACGL generally issues stock options to the Company's officers, with exercise prices equal to the fair market values of ACGL's common shares on the grant dates. Such grants generally vest over a three year period with one-third vesting on the first, second and third anniversaries of the grant date. Option awards have a 10 year contractual life. Refer to Note 3(k) for details related to the Company's accounting for stock options.

As required by the provisions of SFAS No. 123(R), the Company recorded after-tax share-based compensation expense of \$4.8 million related to stock option awards for the year ended December 31, 2008, net of a tax benefit of \$2.0 million, compared to \$4.2 million related to stock option awards for the year ended December 31, 2007, net of a tax benefit of \$1.6 million. As of December 31, 2008, there was approximately \$5.4 million of unrecognized compensation cost related to nonvested stock options. Such cost is expected to be recognized over a weighted average period of 1.32 years.

For purposes of disclosure in the foregoing table and for purposes of determining estimated market value under SFAS No. 123(R), the Company has computed the estimated market values of share-based compensation related to stock options using the Black-Scholes option valuation model and has applied the assumptions set forth in the following table. As described above, stock options generally vest over a three year period with one-third vesting on the first, second and third anniversaries of the grant date. For options granted during 2006 and 2007, the expected life assumption was based on the vesting period, the ten year contractual term of the option awards, the historical share option exercise experience, peer data and guidance from the Securities and Exchange Commission as contained in Staff Accounting Bulletin No. 107 permitting the initial application of a "simplified" method for options granted, which is based on the average of the vesting term and the contractual term of the option. For options granted during 2008, the expected life assumption was based on an expected term analysis which incorporated the Company's historical share option exercise experience. The Company based its estimate of expected volatility for options granted during 2008 on daily historical trading data of its common shares from September 20, 2002, the date marking the completion of the Company's transition as a worldwide insurance and reinsurance company. For options granted during 2007 and 2006, the Company based its volatility estimate under the same method used for 2008, using the period from September 20, 2002 through the last day of the applicable period.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	<b>Years Ended December 31,</b>	
	<b>2008</b>	<b>2007</b>
Dividend yield.....	0.0%	0.0%
Expected volatility .....	20.4%	19.6%
Risk free interest rate .....	3.4%	5.0%
Expected option life .....	5.7 years	6.0 years

The Black-Scholes option pricing model requires the input of highly subjective assumptions. Because ACGL's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate in management's opinion, the existing models may not provide a reliable single measure of the fair value of its employee stock options. In addition, management will continue to assess the assumptions and methodologies used to calculate estimated fair value of share-based compensation. Circumstances may change and additional data may become available over time, which result in changes to these assumptions and methodologies, and which could materially impact the Company's fair value determination.

A summary of option activity under ACGL's Long term Incentive and Share Award Plans during the year ended December 31, 2008 related to the Company is presented below:

	<b>Year Ended December 31, 2008</b>	
	<b>Number of Options</b>	<b>Weighted Average Exercise Price</b>
Outstanding, beginning of year .....	2,459,125	\$39.14
Granted.....	235,850	\$69.32
Exercised.....	(412,232)	\$37.63
Forfeited or expired.....	(55,475)	\$64.43
Outstanding, end of period.....	2,227,268	\$41.99
Exercisable, end of period.....	1,664,033	\$34.29

The weighted average grant-date fair value of options granted during the years ended December 31, 2008 and 2007 was \$19.07 and \$22.38, respectively. The aggregate intrinsic value of options exercised during the years ended December 31, 2008 and 2007 was approximately \$13.2 million and \$16.0 million, respectively, and represents the difference between the exercise price of the option and the closing market price of ACGL's common shares on the exercise dates. The aggregate intrinsic value of outstanding and exercisable stock options issued to the Company's employees at December 31, 2008 was \$62.7 million and \$59.6 million, respectively.

***Restricted Common Shares and Restricted Units***

ACGL also issues restricted share awards to the Company's officers, for which the fair value is equal to the fair market values of ACGL's common shares on the grant dates. Compensation equal to the fair market value of the shares at the measurement date is amortized and charged to income over the vesting period. Restricted share and unit awards generally vest over a three year period with one-third vesting on the first, second and third anniversaries of the grant date. Refer to Note 3(k) for details related to the Company's accounting for restricted share and unit awards.

The Company recorded \$9.3 million of share-based compensation expense, net of a tax benefit of \$3.8 million, related to restricted share awards for the year ended December 31, 2008 as required by the provisions of SFAS No.123(R), compared to \$5.6 million, net of a tax benefit of \$2.1 million, for the year ended December 31, 2007. As of December 31, 2008, there were \$6.0 million and \$11.2 million, respectively, of

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

unrecognized compensation costs related to unvested restricted share and unit awards which are expected to be recognized over a weighted average period of 1.12 years and 2.19 years, respectively.

A summary of restricted share activity under ACGL's Long Term Incentive and Share Award Plans for 2008 related to the Company is presented below:

	<b>Restricted Common Shares</b>	<b>Restricted Unit Awards</b>
<b>Non-Vested Shares:</b>		
Unvested balance, beginning of year .....	317,959	98,785
Awarded .....	4,131	233,950
Released .....	(125,431)	(10,357)
Forfeited .....	(9,076)	(25,749)
Unvested balance, end of year.....	187,583	296,629
<b>Weighted Average Grant Date Fair Value:</b>		
Unvested balance, beginning of year .....	\$65.48	
Awarded .....	\$66.87	
Released .....	\$64.34	
Forfeited .....	\$ 68.18	
Unvested balance, end of year.....	\$ 66.14	

During the years ended December 31, 2008 and 2007, ACGL granted an aggregate of 238,081 and 253,678 restricted share and restricted unit awards, respectively, to the Company's officers with weighted average grant date fair values of \$69.21 and \$69.59, respectively. During the years ended December 31, 2008 and 2007, the aggregate fair value of restricted shares and units that vested was \$9.4 million and \$7.9 million, respectively. The aggregate intrinsic value of restricted units outstanding and exercisable at December 31, 2008 was \$20.8 million and \$4.7 million, respectively.

### 13. Retirement Plans

For purposes of providing employees with retirement benefits, the Company maintains defined contribution retirement plans. Contributions are based on the participants' eligible compensation. For 2008 and 2007, the Company expensed approximately \$16.0 million and \$14.3 million, respectively, related to these retirement plans.

### 14. Statutory Information

#### *Bermuda*

Under The Insurance Act 1978, as Amended, and Related Regulations of Bermuda (the "Insurance Act"), the Company is registered as a Class 4 insurer and is required to annually prepare and file statutory financial statements and a statutory financial return with the Bermuda Monetary Authority ("BMA"). The Insurance Act also requires the Company to maintain minimum share capital of \$1.0 million, to meet minimum liquidity ratios and a minimum solvency margin equal to the greatest of (A) \$100 million, (B) 50% of net premiums written (being gross premiums written less any premiums ceded by the Company, but the Company may not deduct more than 25% of gross premiums when computing net premiums written), and (C) 15% of reserves for losses and loss adjustment expenses and other insurance reserves. At December 31, 2008 and 2007, such requirements were met.

Effective for 2008, the Company is also required to file a new risk based capital model called the Bermuda Statutory Capital Requirement ("BSCR") model that measures risks and determines enhanced capital

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

requirements and a target capital level (defined as 120% of the enhanced capital requirements). In addition, all Class 4 Bermuda insurers must prepare and file with the BMA audited GAAP basis annual financial statements, which must be made publicly available. Declarations of dividends from retained earnings and distributions from additional paid-in-capital are subject to these requirements being met. For all applicable periods presented herein, the Company satisfied these requirements.

At December 31, 2008 and 2007, as determined under Bermuda law, the Company had statutory capital of \$2.21 billion and \$2.0 billion, respectively, and statutory capital and surplus of \$3.36 billion and \$3.73 billion, respectively. Such amounts include interests in U.S. insurance and reinsurance subsidiaries. The Company recorded statutory net income of \$349.8 million and \$909.1 million for 2008 and 2007, respectively. The primary difference between net income and capital and surplus presented under Bermuda statutory accounting principles and net income and shareholder's equity presented in accordance with U.S. GAAP relates to deferred acquisition costs.

The Bermuda Companies Act 1981 (the "Companies Act") limits the Company's ability to pay dividends and distributions to shareholders if there are reasonable grounds for believing that: (a) the Company is, or would after the payment be, unable to pay its liabilities as they become due; or (b) the realizable value of the Company's assets would thereby be less than the aggregate of its liabilities and its issued share capital and share premium accounts. Under the Insurance Act, the Company is restricted with respect to the payment of dividends. The Company 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 Bermuda Monetary Authority an affidavit stating that it will continue to meet the required margins. In addition, the Company is prohibited, without prior approval of the Bermuda Monetary Authority, from reducing by 15% or more its total statutory capital, as set out in its previous year's statutory financial statements. Accordingly, the Company can pay approximately \$834 million to ACGL during 2009 without providing an affidavit to the Bermuda Monetary Authority, as discussed above.

### *Ireland*

The Company's Ireland subsidiary, Arch Re Europe, was licensed and authorized by the Irish Financial Services Regulatory Authority ("IFSRA") as a non-life reinsurer in October 2008. Irish authorized reinsurers, such as Arch Re Europe, are also subject to the general body of Irish laws and regulations including the provisions of the Companies Acts 1963-2006. Arch Re Europe must file and submit its annual audited financial statements and related reports to the Registrar of Companies ("Registrar") under the Companies Acts 1963-2006 together with an annual return of certain core corporate information. Changes to core corporate information during the year must also be notified to the Registrar. These requirements are in addition to the regulatory returns required to be filed annually with IFSRA. Arch Re Europe is required to maintain reserves, particularly in respect of underwriting liabilities and a solvency margin as provided for in the European Communities (Reinsurance) Regulations, 2006, related guidance and the European Communities Insurance Accounts Regulations, 1996. Assets constituting statutory reserves must comply with certain principles including obligations to secure sufficiency, liquidity, security, quality, profitability and currency matching of investments. Statutory reserves must be actuarially certified annually.

Under Irish company law, Arch Re Europe is 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, IFSRA has powers to intervene if a dividend payment were to lead to a breach of regulatory capital requirements.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*United States*

The Company's U.S. insurance and reinsurance subsidiaries file financial statements prepared in accordance with statutory accounting practices prescribed or permitted by insurance regulators. Statutory net income and statutory surplus, as reported to the insurance regulatory authorities, differ in certain respects from the amounts prepared in accordance with GAAP. The main differences between statutory net income and GAAP net income relate to deferred acquisition costs and deferred income taxes. In addition to deferred acquisition costs and deferred income tax assets, other differences between statutory surplus and GAAP shareholder's equity are unrealized appreciation or decline in value of investments and non-admitted assets.

Combined statutory surplus of the Company's U.S. insurance and reinsurance subsidiaries was \$766.0 million and \$719.0 million at December 31, 2008 and 2007, respectively. The Company's U.S. insurance and reinsurance subsidiaries had combined statutory net income of \$46.2 million and \$42.2 million for 2008 and 2007, respectively.

The Company's U.S. insurance and reinsurance subsidiaries are subject to insurance laws and regulations in the jurisdictions in which they operate. The ability of the Company's regulated insurance subsidiaries to pay dividends or make distributions is dependent on their ability to meet applicable regulatory standards. These regulations include restrictions that limit the amount of dividends or other distributions, such as loans or cash advances, available to shareholders without prior approval of the insurance regulatory authorities. Dividends or distributions, if any, made by the Company's U.S. regulated insurance and reinsurance subsidiaries to non-insurance affiliates would result in an increase in available capital at Arch-U.S., the Company's U.S. holding company, which is owned by Arch Re Europe and a related holding company, which are subsidiaries of the Company.

*United Kingdom*

The Company's U.K. subsidiary, Arch Insurance Europe, was licensed and authorized by the Financial Services Authority ("FSA") to underwrite all classes of general insurance in the U.K. in May 2004. Arch Insurance Europe must file annual audited financial statements in accordance with United Kingdom Generally Accepted Accounting Principles ("U.K. GAAP") with Companies House under the Companies Act 1985 (as amended). In addition, Arch Europe is required to file regulatory returns with the FSA, which regulates insurance and reinsurance companies operating from the U.K. The financial statements required to be submitted to Companies House form the basis for the regulatory return required to be submitted to the FSA. The FSA's capital adequacy and solvency regulations require a margin of capital to be determined by the Company's own individual capital assessment ("ICA") to value capital adequacy. The model the company uses to determine the capital requirement is reviewed and approved by the FSA who then issue an individual capital guidance ("ICG"). For Arch Insurance Europe, the ICG is the same as its own ICA.

Under U.K. law, all U.K. 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 FSA requires that insurance companies maintain certain solvency margins and may restrict the payment of a dividend by Arch Insurance Europe. Dividends or distributions, if any, made by Arch Insurance Europe would result in an increase in available capital at Arch Re Europe, a subsidiary of the Company. Shareholder's equity of Arch Insurance Europe under U.K. GAAP at December 31, 2008 was £58.2 million, or approximately \$83.7 million, compared to £58.6 million, or approximately \$117.1 million, at December 31, 2007.

ARCH REINSURANCE LTD. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**15. Legal Proceedings**

The Company, in common with the insurance industry in general, is subject to litigation and arbitration in the normal course of its business. As of December 31, 2008, the Company was not a party to any material litigation or arbitration other than as a part of the ordinary course of business in relation to claims and reinsurance recoverable matters, none of which is expected by management to have a significant adverse effect on the Company's results of operations and financial condition and liquidity.