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**The Financial Statement Effects of Proposed Changes  
to the Accounting for Deferred Acquisition Costs in the Insurance Industry**

**EXECUTIVE SUMMARY**

The FASB is currently evaluating proposed changes to the manner in which insurance companies account for, and currently capitalize, the costs of selling and initiating insurance contracts. Our study examines the potential effects of such proposed changes on total assets, shareholders' equity, financial leverage and pre-tax income. We include a total of 28 companies with market caps in excess of \$3 billion in our sample and use information provided in their 2008 and 2007 10-K annual filings to the SEC.

We find that as a result of capitalization, companies hold on average 4.41% of total assets and 32.65% of shareholders' equity in the form of deferred acquisition costs. If the firms in our sample were forced to write-off their deferred acquisition costs, the accompanying reduction in shareholders' equity would increase their average ratio of liabilities to shareholders' equity, a common balance sheet measure of financial leverage, from 9.88 to 63.91. Such an increase in leverage could potentially hurt their credit ratings and put pressure on the firms to raise equity. We also find that pre-tax income would be impacted by the proposed changes. Depending on amounts capitalized relative to amounts amortized, some firms would see declines in pre-tax income of 20% or more, while others would see similar increases. Investors and accounting regulators, including the FASB and the IASB, will want to take note of these findings.

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## **Georgia Tech Financial Analysis Lab**

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### **Georgia Tech Financial Analysis Lab**

The Georgia Tech Financial Analysis Lab conducts unbiased research on issues of financial reporting and analysis. Unbiased information is vital to effective investment decision-making. Accordingly, we think that independent research organizations, such as our own, have an important role to play in providing information to market participants.

Because our Lab is housed within a university, all of our research reports have an educational quality, as they are designed to impart knowledge and understanding to those who read them. Our focus is on issues that we believe will be of interest to a large segment of stock market participants. Depending on the issue, we may focus our attention on individual companies, groups of companies, or on large segments of the market at large.

A recurring theme in our work is the identification of reporting practices that give investors a misleading signal, whether positive or negative, of corporate earning power. We define earning power as the ability to generate a sustainable stream of earnings that is backed by cash flow. Accordingly, our research may look into reporting practices that affect either earnings or cash flow, or both. At times, our research may look at stock prices generally, though from a fundamental and not technical point of view.

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**Companies Named in This Report**

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| Ace Ltd.                       | 8, 9, 11, 12         |
| Aetna Inc.                     | 6                    |
| Aflac Inc.                     | 6, 8, 9, 10, 11, 12  |
| Allstate Corp.                 | 8, 9, 11, 12         |
| American International Group   | 8, 9, 10, 11, 12     |
| Arch Capital Group Ltd.        | 8, 9, 11, 12         |
| Assurant Inc.                  | 8, 9, 10, 11, 12     |
| Axis Capital Holdings Ltd.     | 8, 9, 11, 12         |
| Berkley Corp.                  | 8, 9, 11, 12         |
| Chubb Corp.                    | 8, 9, 11, 12         |
| Cigna Corp.                    | 8, 9, 11, 12         |
| Cincinnati Financial Corp.     | 8, 9, 11, 12         |
| CNA Financial Corp.            | 5, 8, 9, 11, 12      |
| Everest Re Group Ltd.          | 8, 9, 10, 11, 12     |
| Genworth Financial Ltd.        | 8, 9, 10, 11, 12     |
| Hartford Financial Services    | 8, 9, 10, 11, 12     |
| Humana Inc.                    | 5, 6                 |
| Lincoln National Corp.         | 8, 9, 10, 11, 12, 13 |
| Loews Corp.                    | 8, 9, 11, 12         |
| Markel Corp.                   | 8, 9, 11, 12         |
| MetLife Inc.                   | 6, 8, 9, 11, 12      |
| PartnerRe Ltd.                 | 8, 9, 10, 11, 12     |
| Principal Financial Group Ltd. | 4, 8, 9, 10, 11, 12  |
| Progressive Corp. – Ohio       | 8, 9, 11, 12         |
| Prudential Financial Inc.      | 6, 8, 9, 10, 11, 12  |
| RenaissanceRe Holdings Ltd.    | 8, 9, 10, 11, 12     |
| Torchmark Corp.                | 4, 8, 9, 10, 11, 12  |
| Transatlantic Holdings Inc.    | 8, 9, 10, 11, 12     |
| Travelers Cos. Inc.            | 8, 9, 11, 12         |
| UnitedHealth Group Inc.        | 6, 7                 |
| WellPoint Inc.                 | 6, 7                 |
| XL Capital Ltd.                | 8, 9, 11, 12         |

## The Financial Statement Effects of Proposed Changes to the Accounting for Deferred Acquisition Costs in the Insurance Industry

### Introduction

In this study, we examine the potential effects of proposed changes to the manner in which insurance companies account for the costs of selling and initiating insurance contracts. The potential effects are broad, and include impacts to total assets, shareholders' equity, and pre-tax income.

Under various Statements of Financial Accounting Standards (SFAS), insurers capitalize certain policy initiation costs into an asset account commonly referred to as deferred acquisition costs (DAC). These are expenses related to the selling and initiating of new policies, and may include underwriting costs, commissions paid, and other salary expenses related to the acquisition of new business. These costs are then amortized over the estimated life of the policy in relation to premiums earned. Depending on the nature of the contract, i.e. short duration versus long duration, the life of the policy and therefore the amortization period may range from one to thirty years in certain instances.<sup>1</sup> In order to better grasp the magnitude of the effects of DAC, insurance companies included in our sample often held DAC asset balances in excess of \$1 billion and routinely capitalized and amortized amounts in excess of this number. For example, Torchmark Corp.'s 2008 net DAC balance represented roughly 25% of total assets and 98% of shareholders' equity. The net change in the 2008 DAC balance (amount capitalized in excess of amount amortized) represented 22% of pre-tax income. Principal Financial Group's 2008 net DAC balance represented 109% of shareholders' equity.

Current GAAP for the treatment of DAC comes primarily from three SFAS's – SFAS No. 60 *Accounting and Reporting by Insurance Enterprises*, SFAS No. 97 *Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments*, and SFAS No. 120 *Accounting and Reporting by Mutual Life Insurance Enterprises and by Insurance Enterprises for Certain Long-Duration Participating Contracts*. SFAS 60 says:

“Acquisition costs are those costs that vary with and are primarily related to the acquisition of new and renewal insurance contracts. Commissions and other costs (for example, salaries of certain employees involved in the underwriting and policy issue functions, and medical and inspection fees) that are primarily related to insurance contracts issued or renewed during the period in which the costs are incurred shall be considered acquisition costs.”<sup>2</sup>

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<sup>1</sup> As an example see Lincoln National Corp. Form 10-K, Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 172.

<sup>2</sup> Statement of Financial Accounting Standards No. 60, *Accounting and Reporting by Insurance Enterprises*. (Norwalk, CT: FASB, June 1982), p. 11.

As for the treatment of these costs, SFAS 60 goes on to say:

“Acquisition costs shall be capitalized and charged to expense in proportion to premium revenue recognized. To associate acquisition costs with related premium revenue, acquisition costs shall be allocated by groupings of insurance contracts consistent with the enterprise’s manner of acquiring, servicing, and measuring the profitability of its insurance contracts. Unamortized acquisition costs shall be classified as an asset.”

SFAS 60 establishes the bulk of the accounting for DAC, while SFAS 97 establishes certain standards for long duration contracts that were not addressed by SFAS 60, and SFAS 120 extends the requirements of SFAS 60 and 90 to mutual life insurance enterprises.

Insurers included in our sample followed these standards and addressed them in the footnotes to their annual filings. For example, Humana Inc. disclosed:

“Life insurance, annuities, health and other supplemental policies sold to individuals are accounted for as long-duration insurance products under the provisions of SFAS No. 60, *Accounting and Reporting by Insurance Enterprises*, or SFAS 60, because they are expected to remain in force for an extended period beyond one year due to contractual and regulatory requirements. As a result, we defer policy acquisition costs and amortize them over the estimated life of the policies in proportion to premiums earned. Deferred acquisition costs are reviewed annually to determine if they are recoverable from future income.”<sup>1</sup>

CNA Insurance disclosed:

“Acquisition costs include commissions, premium taxes and certain underwriting and policy issuance costs which vary with and are related primarily to the acquisition of business. Such costs related to property and casualty business are deferred and amortized ratably over the period the related premiums are earned. Deferred acquisition costs related to accident and health insurance are amortized over the premium-paying period of the related policies using assumptions consistent with those used for computing future policy benefit reserves for such contracts. Assumptions as to anticipated premiums are made at the date of policy issuance or acquisition and are consistently applied during the lives of the contracts. Deviations from estimated experience are included in results of operations when they occur. For these contracts, the amortization period is typically the estimated life of the policy.”<sup>2</sup>

The basis for this paper comes from a May 18, 2009 meeting of the FASB where the Board expressed the unanimous view that all insurance acquisition costs should be expensed when

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<sup>1</sup> Humana Inc. Form 10-K, Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 73.

<sup>2</sup> CNA Financial Corp. Form 10-K, Annual Report to the Securities and Exchange Commission, December 31, 2008, p. 73.

incurred. The issue of insurance acquisition costs was further addressed during a joint meeting of the FASB and IASB held on July 23, 2009.<sup>1</sup> It was determined that both the FASB and IASB hold similar views on the need to expense acquisition costs when incurred. However, they do hold differing views on the treatment of revenue. Contrary to the views of the FASB, the IASB believes that a portion of a policy's revenue should be recognized at inception, but should be limited to incremental contract costs, e.g. the costs of selling, underwriting, and initiating policies. The FASB's position is that revenue should not be recognized up-front but rather as it is earned over the policy period.

Regarding the timing of the proposal, both the IASB and the FASB are working together on this and other issues relating to insurance contracts and are continuing to hold joint Board meetings. The IASB wants to be able to issue an exposure draft by the end of 2009. Ideally, a common view would be established and agreed upon by the time of the draft.<sup>2</sup>

The purpose of this study is to determine the effects of the proposed changes on the financial statements, in particular, total assets, shareholders' equity, financial leverage and pre-tax income, of a wide sample of insurance companies consisting of life insurance, title insurance, property and liability, and mutual life insurance enterprises.

## Design

We obtained our sample of insurance companies by screening the EDGAR database for all insurers with a market capitalization in excess of \$3 Billion and including only those that are US GAAP filers. We included the following Standard Industrial Classification (SIC) codes in our search: 6311 (Life Insurance), 6321 (Accident & Health Insurance & Medical Service Plans), 6324 (Hospital & Medical Service Plans), 6331 (Fire, Marine & Casualty Insurance), 6351 (Surety Insurance), 6361 (Title Insurance), and 6399 (Insurance Carriers, Nec).

Initially, several companies in the group gave no indication of DAC, i.e. there was no evidence on the balance sheet, income statement, and/or discussion in the footnotes. These companies were Aetna Inc., Humana, UnitedHealth Group, and WellPoint Inc. Interestingly, Humana discloses a policy of capitalization of acquisition costs. However, we could not find separate disclosure of the amounts capitalized. It appears that Aetna Inc., UnitedHealth Group, and WellPoint Inc. all abide by a current policy of expensing policy acquisition costs as incurred.

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<sup>1</sup> Minutes of the July 23, 2009, Joint Board Meeting: Insurance Contracts. Date: August 5, 2009.

<sup>2</sup> An August 20<sup>th</sup>, 2009 article by Jonathan Weil on Bloomberg.com, *Insurers' Biggest Writedowns May Be Yet to Come*, summarized the proposed changes and the possible effects they would have on a company's financial statements. The author discusses a subset of six insurance companies, including MetLife Inc., Prudential Financial Inc., and Aflac Inc. and the effects that both the current and proposed policies may have on the balance sheet, i.e. assets and shareholders' equity. <http://www.bloomberg.com/apps/news?pid=20601039&sid=a8itsmbfm9qc>. The Financial Statement Effects of Proposed Changes to the Accounting for Deferred Acquisition Costs in the Insurance Industry. January 2010. (c) 2010 by the College of Management, Georgia Institute of Technology, Atlanta, GA 30332-0520.

Ultimately, we were left with a sample of 28 companies from which to conduct our analysis. For each company, we sought to collect several figures from both the balance sheet (2008 and 2007) and income statement (2008, 2007, and 2006). From the balance sheet, these figures were DAC net, total assets, and total shareholders' equity. Related to the income statement, these figures were the amount capitalized, the amount amortized, and pre-tax income. It should be noted that DAC amounts capitalized and amortized were often obtained from supporting footnotes to the financial statements or from the cash flow statement. Additionally, several companies chose to disclose the amount of DAC amortized but not capitalized. This forced us to infer the amount capitalized using the beginning and ending balance in DAC, net unexplained by the amount of such costs amortized. Regardless of the method used to obtain amounts capitalized and amortized, we chose to focus on the net DAC balance given on the balance sheet and the change in this net balance as a measure of the effects on pre-tax income of capitalization net of amortization.

Regarding the income statement, our objective was to analyze the effects that a policy of DAC capitalization has on pre-tax income compared to a policy of expensing these costs as incurred. To do so, we adjusted reported pre-tax income for the net change in capitalization over amortization. This net change best reflects the effects of capitalizing DAC versus expensing DAC due to the fact that capitalization raises pre-tax income by deferring the related costs, while amortization lowers pre-tax income by writing off these costs over the life of the policy. Our focus with the income statement was to determine the significance of capitalization on pre-tax earnings. We were able to adjust reported pre-tax income and determine the overall percentage change in this figure arising from a policy of non-capitalization.

Regarding the balance sheet, our objective was to gain an understanding of the effects of DAC capitalization on total assets, shareholders' equity and financial leverage. In doing so, we were able to determine the significance of these capitalized costs as they relate to the balance sheet, and how both asset and equity accounts would be impacted if these costs were not capitalized. Put simply, without a policy of DAC capitalization, total assets would be reduced by the capitalized amount, and shareholders' equity would also be reduced due to the increased expense associated with non-capitalization. It should be noted that when analyzing DAC relative to shareholders' equity, we measured DAC net of income tax effects.

## **Results**

### ***Income Statement***

The adjustments made to pre-tax income are provided in Table 1. In Table 1A, we present data for 2008; Table 1B contains data for 2007. The items presented include reported pre-tax income, net change in DAC, adjusted pre-tax income, and percentage (%) change in pre-tax income. All amounts are in millions.

**Table 1A: The Effects on Pre-Tax Income of Capitalization of Deferred Acquisition Costs, Net of Amortization (2008). (Amounts in \$ Millions).**

| Company Name                 | Reported Pre-tax Income | Inc (Dec) in DAC, net | Adjusted Pre-tax Income | % change |
|------------------------------|-------------------------|-----------------------|-------------------------|----------|
| ACE LTD                      | 1,567                   | 93                    | 1,474                   | -5.93%   |
| AFLAC INC                    | 1,914                   | 461                   | 1,453                   | -24.09%  |
| ALLSTATE CORP                | (3,025)                 | (44)                  | (2,981)                 | 1.45%    |
| AMERICAN INTERNATIONAL GROUP | (108,761)               | 2,306                 | (111,067)               | -2.12%   |
| ARCH CAPITAL GROUP LTD       | 305                     | 5                     | 299                     | -1.69%   |
| ASSURANT INC                 | 563                     | (245)                 | 808                     | 43.44%   |
| AXIS CAPITAL HOLDINGS LTD    | 407                     | (4)                   | 411                     | 0.91%    |
| BERKLEY (WR) CORP            | 326                     | (60)                  | 387                     | 18.52%   |
| CHUBB CORP                   | 2,407                   | 17                    | 2,390                   | -0.71%   |
| CIGNA CORP                   | 378                     | (27)                  | 405                     | 7.14%    |
| CINCINNATI FINANCIAL CORP    | 540                     | 17                    | 523                     | -3.15%   |
| CNA FINANCIAL CORP           | (562)                   | (36)                  | (526)                   | 6.41%    |
| EVEREST RE GROUP LTD         | (84)                    | (45)                  | (39)                    | 53.31%   |
| GENWORTH FINANCIAL INC       | (942)                   | 409                   | (1,351)                 | -43.42%  |
| HARTFORD FINANCIAL SERVICES  | (4,591)                 | (596)                 | (3,995)                 | 12.98%   |
| LINCOLN NATIONAL CORP        | (25)                    | 11                    | (36)                    | -44.00%  |
| LOEWS CORP                   | 587                     | (36)                  | 623                     | 6.13%    |
| MARKEL CORP                  | (161)                   | (19)                  | (142)                   | 11.51%   |
| METLIFE INC                  | 5,090                   | 143                   | 4,947                   | -2.81%   |
| PARTNERRE LTD                | 62                      | (25)                  | 87                      | 39.93%   |
| PRINCIPAL FINANCIAL GRP INC  | 453.6                   | 307                   | 147                     | -67.59%  |
| PROGRESSIVE CORP-OHIO        | (222.3)                 | 12                    | (235)                   | -5.53%   |
| PRUDENTIAL FINANCIAL INC     | (1118)                  | 879                   | (1,997)                 | -78.62%  |
| RENAISSANCERE HOLDINGS LTD   | 85                      | (22)                  | 107                     | 26.33%   |
| TORCHMARK CORP               | 661                     | 157                   | 504                     | -23.71%  |
| TRANSATLANTIC HOLDINGS INC   | 3                       | (8)                   | 12                      | 262.83%  |
| TRAVELERS COS INC            | 3,716                   | (35)                  | 3,751                   | 0.94%    |
| XL CAPITAL LTD               | (873)                   | (43)                  | (830)                   | 4.97%    |
|                              |                         |                       | <b>Average</b>          | 6.91%    |

Note: Pre-tax income for RenaissanceRE Holdings LTD is before minority interests.



**Table 1B: The Effects on Pre-Tax Income of Capitalization of Deferred Acquisition Costs, Net of Amortization (2007). (Amounts in \$ Millions).**

| Company Name                 | Reported Pre-tax Income | Inc (Dec) in DAC, net | Adjusted Pre-tax Income | % change       |
|------------------------------|-------------------------|-----------------------|-------------------------|----------------|
| ACE LTD                      | 3,153                   | 44                    | 3,109                   | -1.40%         |
| AFLAC INC                    | 2,499                   | 454                   | 2,045                   | -18.17%        |
| ALLSTATE CORP                | 6,653                   | 45                    | 6,608                   | -0.68%         |
| AMERICAN INTERNATIONAL GROUP | 8,943                   | 3,909                 | 5,034                   | -43.71%        |
| ARCH CAPITAL GROUP LTD       | 874                     | (1)                   | 874                     | 0.11%          |
| ASSURANT INC                 | 1,011                   | 504                   | 507                     | -49.85%        |
| AXIS CAPITAL HOLDINGS LTD    | 1,134                   | 25                    | 1,109                   | -2.21%         |
| BERKLEY (WR) CORP            | 1,092                   | (34)                  | 1,126                   | 3.11%          |
| CHUBB CORP                   | 3,937                   | 52                    | 3,885                   | -1.32%         |
| CIGNA CORP                   | 1,631                   | 109                   | 1,522                   | -6.68%         |
| CINCINNATI FINANCIAL CORP    | 1,192                   | 9                     | 1,183                   | -0.76%         |
| CNA FINANCIAL CORP           | 1,222                   | (29)                  | 1,251                   | 2.37%          |
| EVEREST RE GROUP LTD         | 1,028                   | 11                    | 1,017                   | -1.11%         |
| GENWORTH FINANCIAL INC       | 1606                    | 704                   | 902                     | -43.84%        |
| HARTFORD FINANCIAL SERVICES  | 4,005                   | 1,205                 | 2,800                   | -30.09%        |
| LINCOLN NATIONAL CORP        | 1,874                   | 401                   | 1,473                   | -21.40%        |
| LOEWS CORP                   | 3,195                   | (29)                  | 3,224                   | 0.91%          |
| MARKEL CORP                  | 572                     | (16)                  | 588                     | 2.82%          |
| METLIFE INC                  | 5,762                   | 1,298                 | 4,464                   | -22.53%        |
| PARTNERRE LTD                | 883                     | 99                    | 783                     | -11.23%        |
| PRINCIPAL FINANCIAL GRP INC  | 1,048.20                | 249                   | 799                     | -23.74%        |
| PROGRESSIVE CORP-OHIO        | 1693                    | 15                    | 1,678                   | -0.87%         |
| PRUDENTIAL FINANCIAL INC     | 4686                    | 1,254                 | 3,432                   | -26.76%        |
| RENAISSANCERE HOLDINGS LTD   | 758                     | (3)                   | 761                     | 0.36%          |
| TORCHMARK CORP               | 797                     | 179                   | 618                     | -22.49%        |
| TRANSATLANTIC HOLDINGS INC   | 596                     | 17                    | 579                     | -2.84%         |
| TRAVELERS COS INC            | 6,216                   | 194                   | 6,022                   | -3.12%         |
| XL CAPITAL LTD               | 1,594                   | (113)                 | 1,707                   | 7.11%          |
|                              |                         |                       | <b>Average</b>          | <b>-11.36%</b> |

Note: Pre-tax income for RenaissanceRE Holdings LTD is before minority interests.

In reviewing the results, it can be seen that the average percentage change in pre-tax income is not very telling. Importantly, however, across the sample companies, changes in pre-tax income are wide ranging and run in both directions, depending on whether capitalization exceeded amortization or vice versa. Additionally, 2008 figures are somewhat complicated by the fact that many companies reported a pre-tax loss due to recent economic conditions. However, there are still obvious signs of the effects of the proposed changes to DAC reporting.

Specifically, for 2008, the following companies had substantial decreases in adjusted pre-tax income:

Aflac Inc. (-24.09 %)  
Genworth Financial Inc. (-43.42 %)  
Lincoln National Corp. (-44.00 %)  
Principal Financial Group Inc. (-67.59 %)  
Prudential Financial Inc. (-78.62 %)

For 2008, the following companies had substantial increases in adjusted pre-tax income:

Assurant Inc. (43.44 %)  
Everest Re Group LTD (53.31 %)  
PartnerRe LTD (39.93 %)  
RenaissanceRe Holdings LTD (26.33 %)  
Transatlantic Holdings Inc. (262.83 %)

### ***Balance Sheet***

The analysis related to the balance sheet can be seen in Table 2. In the Table, we present 2008 balance sheet data including DAC, net, total assets, and total shareholders' equity. Additionally, we calculated and included in the Table, DAC as a percentage of both total assets and shareholders' equity, after tax-effecting DAC using the 35% federal tax rate. These calculations provide us with a measure of significance of these costs relative to the balance sheet.

The following companies reported DAC as a percentage of total assets greater than ten percent:

Aflac Inc. (10.38 %)  
Assurant Inc. (10.81 %)  
Torchmark Corp. (24.69 %)

Additionally, the following companies reported DAC (net of 35 % tax rate) as a percentage of shareholders' equity greater than fifty percent:

Aflac Inc. (80.65 %)  
American International Group (56.46 %)  
Genworth Financial Inc. (56.70 %)  
Hartford Financial Services (92.91 %)  
Lincoln National Corp. (97.26 %)  
Principal Financial Group Inc. (109.17 %)  
Prudential Financial Inc. (73.25 %)  
Torchmark Corp. (97.66 %)

**Table 2: The Effects on Total Assets and Shareholders' Equity of Capitalized Deferred Acquisition Costs, net of Accumulated Amortization (2008). (Amounts in \$ Millions).**

| Company Name                 | DAC, net | Total Assets | Shareholder's Equity (SE) | DAC as % of Total Assets | DAC as % of SE (net of tax) |
|------------------------------|----------|--------------|---------------------------|--------------------------|-----------------------------|
| ACE LTD                      | 1,214    | 72,057       | 14,446                    | 1.68%                    | 5.46%                       |
| AFLAC INC                    | 8,237    | 79,331       | 6,639                     | 10.38%                   | 80.65%                      |
| ALLSTATE CORP                | 8,542    | 134,798      | 12,641                    | 6.34%                    | 43.92%                      |
| AMERICAN INTERNATIONAL GROUP | 45,782   | 860,418      | 52,710                    | 5.32%                    | 56.46%                      |
| ARCH CAPITAL GROUP LTD       | 295      | 14,617       | 3,433                     | 2.02%                    | 5.59%                       |
| ASSURANT INC                 | 2,651    | 24,515       | 3,710                     | 10.81%                   | 46.45%                      |
| AXIS CAPITAL HOLDINGS LTD    | 273      | 14,283       | 4,461                     | 1.91%                    | 3.98%                       |
| BERKLEY (WR) CORP            | 395      | 16,121       | 3,046                     | 2.45%                    | 8.42%                       |
| CHUBB CORP                   | 1,532    | 48,429       | 13,432                    | 3.16%                    | 7.41%                       |
| CIGNA CORP                   | 789      | 41,406       | 3,592                     | 1.91%                    | 14.28%                      |
| CINCINNATI FINANCIAL CORP    | 509      | 13,369       | 4,182                     | 3.81%                    | 7.91%                       |
| CNA FINANCIAL CORP           | 1,125    | 51,688       | 6,877                     | 2.18%                    | 10.63%                      |
| EVEREST RE GROUP LTD         | 355      | 16,847       | 4,960                     | 2.11%                    | 4.65%                       |
| GENWORTH FINANCIAL INC       | 7,786    | 107,389      | 8,926                     | 7.25%                    | 56.70%                      |
| HARTFORD FINANCIAL SERVICES  | 13,248   | 287,583      | 9,268                     | 4.61%                    | 92.91%                      |
| LINCOLN NATIONAL CORP        | 11,936   | 163,136      | 7,977                     | 7.32%                    | 97.26%                      |
| LOEWS CORP                   | 1,125    | 69,857       | 13,126                    | 1.61%                    | 5.57%                       |
| MARKEL CORP                  | 184      | 9,478        | 2,181                     | 1.94%                    | 5.48%                       |
| METLIFE INC                  | 16,653   | 501,678      | 23,734                    | 3.32%                    | 45.61%                      |
| PARTNERRE LTD                | 617      | 16,279       | 4,199                     | 3.79%                    | 9.55%                       |
| PRINCIPAL FINANCIAL GRP INC  | 4,153.0  | 128,182.40   | 2,472.80                  | 3.24%                    | 109.17%                     |
| PROGRESSIVE CORP-OHIO        | 414      | 18250.5      | 4,215.30                  | 2.27%                    | 6.38%                       |
| PRUDENTIAL FINANCIAL INC     | 15,126   | 445,011      | 13,422                    | 3.40%                    | 73.25%                      |
| RENAISSANCERE HOLDINGS LTD   | 82       | 7,984        | 3,033                     | 1.03%                    | 1.76%                       |
| TORCHMARK CORP               | 3,340    | 13,529       | 2,223                     | 24.69%                   | 97.66%                      |
| TRANSATLANTIC HOLDINGS INC   | 240      | 13,377       | 3,198                     | 1.79%                    | 4.87%                       |
| TRAVELERS COS INC            | 1,774    | 109,751      | 25,319                    | 1.62%                    | 4.55%                       |
| XL CAPITAL LTD               | 714      | 45,682       | 6,115                     | 1.56%                    | 7.58%                       |
|                              |          |              |                           | <b>Average</b>           | <b>Average</b>              |
|                              |          |              |                           | 4.41%                    | 32.65%                      |

### *Effects on Financial Leverage*

One final aspect we wanted to consider was the impact on financial leverage of a policy of DAC capitalization. We began our analysis by calculating an initial leverage ratio consisting of liabilities to shareholders' equity (as reported on the 2008 balance sheet). Reported liabilities were calculated by subtracting reported shareholders' equity from reported total assets. We then calculated a revised shareholders' equity figure by subtracting the DAC balance (net of taxes using a 35% rate) from the reported shareholders' equity figure. This allowed us to calculate a

revised leverage ratio that eliminates the effects of DAC capitalization. These calculations can be found in Table 3.

**Table 3: The Effects of Capitalization of Deferred Acquisition Costs on Financial Leverage (2008). (Amounts in \$ Millions).**

| Company Name                 | DAC, net | Shareholder's Equity (SE) | Revised SE | Total Liabilities | Total Liab./SE | Total Liab./Revised SE |
|------------------------------|----------|---------------------------|------------|-------------------|----------------|------------------------|
| ACE LTD                      | 1,214    | 14,446                    | 13,657     | 57,611            | 3.99           | 4.22                   |
| AFLAC INC                    | 8,237    | 6,639                     | 1,285      | 72,692            | 10.95          | 56.57                  |
| ALLSTATE CORP                | 8,542    | 12,641                    | 7,089      | 122,157           | 9.66           | 17.23                  |
| AMERICAN INTERNATIONAL GROUP | 45,782   | 52,710                    | 22,952     | 807,708           | 15.32          | 35.19                  |
| ARCH CAPITAL GROUP LTD       | 295      | 3,433                     | 3,241      | 11,184            | 3.26           | 3.45                   |
| ASSURANT INC                 | 2,651    | 3,710                     | 1,987      | 20,805            | 5.61           | 10.47                  |
| AXIS CAPITAL HOLDINGS LTD    | 273      | 4,461                     | 4,284      | 9,822             | 2.20           | 2.29                   |
| BERKLEY (WR) CORP            | 395      | 3,046                     | 2,790      | 13,075            | 4.29           | 4.69                   |
| CHUBB CORP                   | 1,532    | 13,432                    | 12,436     | 34,997            | 2.61           | 2.81                   |
| CIGNA CORP                   | 789      | 3,592                     | 3,079      | 37,814            | 10.53          | 12.28                  |
| CINCINNATI FINANCIAL CORP    | 509      | 4,182                     | 3,851      | 9,187             | 2.20           | 2.39                   |
| CNA FINANCIAL CORP           | 1,125    | 6,877                     | 6,146      | 44,811            | 6.52           | 7.29                   |
| EVEREST RE GROUP LTD         | 355      | 4,960                     | 4,730      | 11,886            | 2.40           | 2.51                   |
| GENWORTH FINANCIAL INC       | 7,786    | 8,926                     | 3,865      | 98,463            | 11.03          | 25.47                  |
| HARTFORD FINANCIAL SERVICES  | 13,248   | 9,268                     | 657        | 278,315           | 30.03          | 423.74                 |
| LINCOLN NATIONAL CORP        | 11,936   | 7,977                     | 219        | 155,159           | 19.45          | 709.78                 |
| LOEWS CORP                   | 1,125    | 13,126                    | 12,395     | 56,731            | 4.32           | 4.58                   |
| MARKEL CORP                  | 184      | 2,181                     | 2,061      | 7,297             | 3.35           | 3.54                   |
| METLIFE INC                  | 16,653   | 23,734                    | 12,910     | 477,944           | 20.14          | 37.02                  |
| PARTNERRE LTD                | 617      | 4,199                     | 3,798      | 12,080            | 2.88           | 3.18                   |
| PRINCIPAL FINANCIAL GRP INC  | 4,153.0  | 2,472.80                  | (227)      | 125,710           | 50.84          | -                      |
| PROGRESSIVE CORP-OHIO        | 414      | 4,215.30                  | 3,946      | 14,035            | 3.33           | 3.56                   |
| PRUDENTIAL FINANCIAL INC     | 15,126   | 13,422                    | 3,590      | 431,589           | 32.16          | 120.22                 |
| RENAISSANCERE HOLDINGS LTD   | 82       | 3,033                     | 2,980      | 4,951             | 1.63           | 1.66                   |
| TORCHMARK CORP               | 3,340    | 2,223                     | 52         | 11,306            | 5.09           | 217.49                 |
| TRANSATLANTIC HOLDINGS INC   | 240      | 3,198                     | 3,042      | 10,179            | 3.18           | 3.35                   |
| TRAVELERS COS INC            | 1,774    | 25,319                    | 24,166     | 84,432            | 3.33           | 3.49                   |
| XL CAPITAL LTD               | 714      | 6,115                     | 5,651      | 39,567            | 6.47           | 7.00                   |
|                              |          |                           |            |                   | <b>Average</b> | <b>Average</b>         |
|                              |          |                           |            |                   | 9.88           | 63.91                  |

Simply by looking at the average leverage ratio for the 28 companies sampled, it is easy to see the impact that capitalization of DAC has on shareholders' equity and therefore leverage. The average leverage ratio increases from 9.88 to 63.91 (excluding negative leverage measures) once DAC is removed from shareholders' equity. Furthermore, Principal Financial Group had an initial leverage ratio of 50.84, which was the highest in the sample. However, once revised, their

ratio actually became negative, while at 709.78, Lincoln National Corp.'s revised ratio was especially high.

This increase in leverage is not without implication. Primarily, the credit ratings for these insurance companies could be at risk. Additionally, increased leverage may bring about violations of various debt covenants and potentially increase the cost of debt financing. Therefore, the proposed changes to the manner in which insurance companies treat acquisition costs may actually have an effect on the way insurers finance their operations.

## Conclusion

In conclusion, our study examined the potential effects of proposed changes to the manner in which insurance companies account for the costs of selling and initiating insurance contracts. We included a total of 28 companies in our sample and used information given in both the 2008 and 2007 10-K filings. For each company, we collected the following information: total assets, total shareholders' equity, DAC, net, pre-tax income, amount of DAC amortized, and amount of DAC capitalized.

After obtaining these figures, we calculated DAC, net both as a percentage of total assets and, once tax-effected, as a percentage of total shareholders' equity. To look at the effects DAC has on the income statement, we adjusted reported pre-tax income for the net change in capitalization over amortization.

Our findings were in line with our expectations going into the study. We found that as a result of capitalization, companies held a high percentage of total assets on their balance sheets in the form of deferred acquisition costs. On average, DAC amounted to 4.41% of total assets. However, it should be noted that three companies held over ten percent of their total assets in the form of DAC.

As a percentage of shareholders' equity, DAC was on average 32.65%, including five companies with over eighty percent. We also calculated a revised figure of shareholders' equity that subtracted the net DAC balance, net of tax. This allowed us to also calculate a new leverage ratio based on the revised figure, which showed the significant effects of a policy of cost capitalization. As a result of this adjustment, we found that financial leverage, measured as total liabilities to shareholders' equity, increased on average for our sample from 9.88 to 63.91.

Regarding the income statement, we calculated an adjusted pre-tax income figure to determine the effects of capitalization on pre-tax earnings. We found there were both substantial increases and decreases to pre-tax income, several of which were greater than twenty percent, depending on whether, in any one year, the companies capitalized more or less policy acquisition costs than they amortized.

Investors will want to be apprised of these findings as the FASB, in conjunction with its work with the IASB, proceeds to a final statement on the expensing of policy acquisition costs. While any standard change will have no effect on operating or free cash flow, the effects on earnings,

shareholders' equity, and measures of financial leverage could be significant. To maintain their credit ratings, some insurers may be under increased pressure to raise equity.

The FASB and IASB will also want to take note of these findings. While their decisions should not be swayed by the potential financial statement effects of their rulings, the Boards may want to extend the effective dates of any new standards to give impacted companies ample time to adjust.