

Financial Statement Disclosure: The Needs and Practices related to Financial Risk

**Robert Frasca, FSA and Gordon Tucker
Ernst & Young LLP**

November 1, 2005

Acknowledgment: The authors gratefully acknowledge the contributions of the following individuals to the development of this report: Charles Darkoh, Mark Freedman, Samuel Keller, Ian Manktelow, Monica Monson, and Joseph Weiss.

This report was prepared on commission by the Society of Actuaries. The opinions expressed and conclusions reached by the authors are their own and do not represent any official position or opinion of the Society of Actuaries or its members or Ernst & Young LLP.

The discussion and examples presented in this paper are for educational purposes. They are not to be viewed as an authoritative statement by the Society of Actuaries or Ernst & Young LLP on the quality and/or appropriateness of an individual company's disclosure practices or an indicator of "better" practice from one company relative to another.

Financial Statement Disclosure: The Needs and Practices Related to Financial Risk

Executive Summary

This paper considers the question of whether or not the growth in the size of financial statements witnessed over the last several years has yielded an increase in the quality of disclosure around issues of financial risk and to what extent this disclosure is satisfying the perceived needs of readers of the financial statements, as represented by the investment analyst community. The question is addressed by presenting the results of research consisting of (1) the review and analysis of the disclosures addressing issues of financial risk contained within financial statements issued from 1999 to 2004 by 25 major insurance companies operating in the US and (2) the interviewing of 5 insurance industry analysts to understand their perceptions of what is good and bad about financial disclosure practices of life insurance companies.

From the research conducted, the authors conclude:

- The quality of financial statement disclosure around financial risk, as measured by the amount of quantitative, forward-looking disclosure presented, has improved notably in the last five years;
- Although disclosure requirements have increased over the years, prescriptive disclosure has not eliminated the differences in the quality and extent of disclosure offered by companies; significant variation across companies is still observed;
- Disclosure practices differ in depth and quality not only among companies, but between risks within a company as well; some financial risks, like the risk of asset default, are disclosed more completely by companies than other risks, like mortality risk;
- Improvements in disclosure appear to react to precipitating events (i.e., after the risk comes to fruition) rather than in anticipation of them.

In addition, from the interviews with analysts and the review of disclosure practices observed in the 10-K and related filings of life insurance companies, the authors offers areas where companies might consider refining their disclosure practices in order to satisfy the audiences of their financial statements more fully. These include:

- Presentation and analysis of results at a less aggregated level than is commonly seen today;
- Widespread adoption of source-of-gain analysis within the income statement;

- Introduction of probability-based measures of risk in order to communicate risk exposures in a language more conducive to such communication than US GAAP;
- The introduction of more robust sensitivity tests around key risk elements;
- More uniform reporting of risk exposures and sensitivities across companies.

The paper concludes with a discussion, contained in an appendix, of four accounting bases (US GAAP, Canadian GAAP, European Embedded Value, and International Financial Reporting Standards), their relative merits with respect to the communication of financial risk, and how aspects of the accounting bases shape the needs for accompanying financial statement disclosure. A separate appendix includes a detailed listing of many of the prescribed disclosure requirements related to financial risk under each accounting basis.

Table of Contents

Introduction.....	4
Section 1 – Financial Statement Disclosure Practices in the US.....	7
Section 2 - What the Readers Want to See.....	32
Conclusions.....	41
Selected Bibliography.....	43
Appendix 1.....	44
Appendix 2.....	52
Appendix 3.....	61

Introduction

Over the years, the function of public financial statements has evolved and expanded. Originally viewed simply as an accounting exercise required to document a company's financial results for the year, the financial statement serves a much broader role today. The Form 10-K, the Annual Report filed by domestic US companies with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934, for example, has become a repository of current information about a company ranging from the income statement and balance sheet to extensive discussions around the general business environment and management actions. The Annual Reports of Canadian life insurance companies, filed under the auspices of the Office of the Superintendent of Financial Institutions ("OSFI") in Canada, have similarly increased in the breadth of items covered.

This general expansion in the size and scope of the financial statements has coincided with a general expansion in the size of the audience to whom the statements are directed. For a life insurance company in the US, for example, the audience beyond the SEC was traditionally a relatively small universe of investment professionals. Regulators, rating agencies, policyholders and others typically focused more on statutory financial statements to assess solvency and claims paying ability. Even those who read the 10-K expected less of it at the time. With less focus on insider-trading and the timely dissemination of information to the public, companies did not feel the same pressure to ensure complete and full disclosure within the financial statements as they do today. We can speculate that this expansion in the size of the audience for financial statements is a proximate cause for the increased size and scope of the statements; there are more people who care about statements prepared under Generally Accepted Accounting Principles ("GAAP") now, and they come with a diverse range of backgrounds and interests.

Beyond the increase in the size of the audience, there are other factors that we can suggest as contributors in the development of financial statements over the years. One may be an increase in the perceived complexity of the life insurance business. Whether because life insurance companies have genuinely become more complicated, or because people are just now recognizing an underlying complexity that has been around all along, the perception in the market is that the insurance business is inherently complex and, consequently, inherently risky. As a result, additional metrics and disclosures are necessary to enable readers of the financial statements to understand the life insurance business and its risks properly.

Another reason for increased pressure on the size and scope of financial statements is a cumulative reflection of the reactions to various crises that have been associated with the industry in the past. Exposure to equities, asset defaults, illiquidity, disintermediation and policy guarantees are just a few items in a long list of issues (i.e., risks that came to fruition) that have impacted life insurance companies in recent years, prompting calls for

increased disclosure that remains embedded in subsequent financial statements¹, even as the issue fades from the public's view.

But whatever the cause (and the list goes on), the result is clear: financial statements are larger and cover more issues today than they did in the past. It is virtually impossible to find a company for which the 10-K issued at year end 2004 is not substantially larger than the one issued in 1999 (and for which the one issued in 1999 is not substantially larger than the one issued in 1994, for that matter). For many companies, the Management Discussion and Analysis ("MD&A") section has doubled or tripled in size over the last ten years, reflecting an increased demand for fuller disclosure around a range of financial issues.

But for all the increase in demand and resulting increase in size in financial statements, some fundamental questions remain. Do public financial statements provide the meaningful information around financial risk that the readers of the statements demand? Are statements more useful today than they were, say, five years ago? Is disclosure comparable across companies or do practices vary widely? Are there clear areas for improvement for companies to consider in the future?

What follows in this paper is an attempt, if not to provide definitive answers to these questions, then at least to stimulate discussion around the issues.

While the topic could cover financial statement disclosure around a whole range of items that impact life insurance companies and their financial performance, this report considers a single topic: financial risk. Similarly, while insurance companies disclose information through a whole range of media, this report focuses on the primary formal conduit of public financial information in the US: the 10-K filing (or the 20-F or 40-F filing for companies not domiciled in the US). As a result, this paper primarily addresses financial statements filed under US GAAP, though observations related to other accounting bases and to non-US jurisdictions are included for contextual purposes also.

In order to assess how well financial statement disclosures present useful information around risk, two criteria are considered. The first considers how meaningful the information presented is in an absolute sense (i.e., does the information presented about financial risk provide meaningful information with which to assess the financial performance – past, current or future – of the life insurance company?). In this context, relevant quantitative measures are *per se* deemed to be more meaningful than qualitative information.

The second considers whether or not the information satisfies the demands of the intended primary audience of the financial statements which, in the interest of simplicity, is defined to be the investment analyst community as reasonable proxies for the investment community as a whole (i.e., current or potential investors in the insurance

¹ EITF 03-1 (credit risk) and SOP 03-1 (equity market risk from product guarantees) are two recent examples of requirements that have added to the size and scope of financial statements in response to specific industry issues.

company). While the two criteria are likely to be identical in many cases, there may be subtle differences in others.

Finally, though this paper reflects the results of a substantial amount of research, primarily comprised of reading and comparing financial statements from a wide array of life insurance companies published over the last five years, the conclusions reached herein should not be considered “scientific” in the truest sense of the word. By its nature, the analysis is subjective. What one reader of a financial statement considers to be meaningful information could be considered useless to another. For this reason, the results in this report are perhaps best viewed in a relative and directional context to stimulate discussion on the topic as opposed to providing absolute answers of whether current financial disclosure practices are “good” or “bad.” This latter judgment is ultimately left to the reader.

This paper is divided into two main sections. The first section contains a synopsis of disclosure practices as observed by companies filing financial statements with the SEC from 1999 to 2004. It is organized by financial risk (e.g., “equity market decline” and “credit risk”) and discusses varying practices among companies and over time used to communicate the impacts of these financial risks. Additional observations and comments are provided by the authors.

The second section considers the question of how well the disclosure practices around financial risks satisfy the demands of the financial statement audience. It contains the results of interviews with insurance industry analysts and of reviews of the existing literature on the topic of what is expected of financial statements and how well it is delivered. Additional observations and comments are provided by the authors. It concludes with a series of issues that companies might consider in enhancing their financial statement disclosures in the future.

More detailed information is contained in appendices. Appendix 1 provides a more global view of financial statement disclosures. Specifically, it compares and evaluates the strengths and weaknesses of disclosures in four financial reporting frameworks (US GAAP, Canadian GAAP, embedded value and International Financial Reporting Standards (“IFRS”)) in communicating the elements of financial risk within the balance sheet and income statement numbers themselves, then considers how these strengths and weaknesses shape the need for additional financial statement disclosure. Appendix 2 lists the prescribed disclosure requirements under each of these four frameworks. Finally, Appendix 3 provides more extended examples of company disclosures under US GAAP, complementing the discussion in the first section noted above.

Section 1 – Financial Statement Disclosure Practices in the US

In preparing the observations that follow, we selected 25 life insurance companies that file statements with the SEC and reviewed their 10-K filings (or 20-F or 40-F as the case may be for foreign filers) for the years from 1999 to 2004 inclusive. The companies were selected to represent a mix of medium and large companies, US domestics and non-US companies with all four of the major audit firms represented. The companies and the primary forms reviewed are listed below. In reading Section 1, the term “companies” is limited to only the 25 companies included in this study and does not have a broader meaning of the life insurance industry.

AEGON 20-F	AIG 10-K	Allianz 20-F	Allmerica 10-K	Allstate 10-K
American Express 10-K	AmerUS 10-K	AXA 10-K	CIGNA 10-K	GE Financial (Genworth) 10-K
Great West Life & Annuity 10-K	Hartford Life 10-K	ING 20-F	Jefferson-Pilot 10-K	John Hancock 10-K
Lincoln National 10-K	Manulife 20-F	Metlife 10-K	Nationwide 10-K	Phoenix 10-K
Protective Life 10-K	Prudential 10-K	Sun Life 20-F	UnumProvident 10-K	Zurich Annual Report

Because of mergers and demutualizations, not all companies filed statements for all of those years. We supplemented our sample with 10-Q filings as well as Annual Reports and other communications for the non-US companies.

We performed our study by examining the disclosure practices as they relate to specific areas of risk. We performed a subjective analysis to assess how useful the information around that risk is to the user of the financial statements. In performing this assessment, our yardstick was the extent to which companies provide meaningful, quantitative information that convey both the extent of the risk to the company and the potential impact on the future financial performance of the company. We compared practices across companies and across time periods to get a sense of how practices have changed over time and how they differ from one company to the next.

In performing our study, we came to several broad conclusions:

- The volume and quality of disclosure around financial risk have increased notably in the last five years.

- The quality of disclosure is uneven. It varies from company to company and from risk to risk.
- The extent of the disclosure around a particular risk is not necessarily commensurate with the size of the economic risk to the enterprise. This may be due to the increase in prescriptive disclosure requirements.
- Accounting pronouncements improve the comparability of reporting across companies, but not as completely as one might expect.
- Disclosure practices improve with respect to risk in reaction to (rather than in anticipation of) economic losses in the industry caused by the risk.

Risk from Equity Market Decline

This risk covers a broad range of potential items but can be dissected into three main categories:

1. Primary effect. The full economic impact is absorbed directly by the company, as when assets are owned as a part of the company general account or surplus.
2. Secondary effect. The economic impact is not a dollar-for-dollar reflection of a decline in share prices (as under a primary effect) but is derived directly from it. One example of this is the loss of revenue from items that are directly related to assets under management, such as asset charges on equity-based separate accounts.
3. Tertiary effect. This includes all other financial statement items that relate to equity share prices. One example is the deferred acquisition cost (“DAC”) asset established under variable annuity contracts, which is amortized in proportion to estimated gross profits which, in turn, are a function of asset charge revenue and share prices.

Risks from guarantees on equity market performance, while clearly related to the risk of market declines, are covered separately in this report.

A review of the disclosure practices of companies over the last five years indicates that the quantity of disclosure around this risk has increased markedly. This coincides with the precipitous stock market declines witnessed from 2000 to 2002. Of 25 companies’ statements reviewed at year end 2000, 12 had no meaningful disclosure around equity market risk and only 4 had any quantified measurement around equity risk as it applies to both asset-based revenue and company equity holdings. In 2004, 80% of companies reviewed had some level of meaningful, quantified disclosure around equity market risk.

Those companies that have substantial exposure to equities in their general accounts have traditionally had the most disclosure with respect to equity risk, at least insofar as it

manifests itself through a primary effect. For example, the 2004 10-K for AXA contains a chart showing the fair values of public and private equity investments at the current and prior year ends as well as the impact of a 10% drop in equity values:

The investment portfolios also have direct holdings of public and private equity securities. In 2003 prior to the implementation of SOP 03-1, the General Account was exposed to equity price risk from the excess of Separate Accounts assets over Separate Accounts liabilities. In 2004, such amounts are included in General Account assets. The following table shows the potential exposure from those equity security investments, measured in terms of fair value, to an immediate 10% drop in equity prices from those prevailing at December 31, 2004 and 2003:

<i>EQUITY PRICE RISK EXPOSURE</i>				
<i>(IN MILLIONS)</i>				
<i>DECEMBER 31, 2004</i>			<i>December 31, 2003</i>	
<i>FAIR</i>	<i>BALANCE AFTER</i>		<i>Fair</i>	<i>Balance After</i>
<i>VALUE</i>	<i>-10% EQUITY</i>		<i>Value</i>	<i>-10% Equity</i>
<i>PRICE CHANGE</i>			<i>Price Change</i>	<i>Price Change</i>

<i>Insurance Group:</i>				
<i>Continuing operations.....</i>	\$ 229.7	\$ 206.7	\$ 13.5	\$ 12.2
<i>Other Discontinued Operations.....</i>	.3	.2	.5	.5
<i>Excess of Separate Accounts assets</i>				
<i>over Separate Accounts</i>				
<i>liabilities.....</i>	-	-	137.5	123.8

This same chart, virtually unchanged except for the numbers, is contained in the 2000 10-K as well. The company's form of disclosure has not changed even as the exposure from this risk has declined from being significant in 2000 to the point where it is virtually zero in 2004. Similar charts are found in many of the 2000 10-K filings contained in our sample (e.g., Allianz, CIGNA, Jefferson-Pilot, Lincoln National) with comparable, quantified disclosure included in 2004 as well.

With respect to more encompassing measures of equity market risk (ones that include the impact on fee revenue and DAC amortization), increases in the breadth of disclosure has been more obvious. While in 2000 virtually all companies included a qualitative discussion of their exposure to the risk from declining equity markets, few included a forward-looking sensitivity test of the quantitative impact on net income. In this respect, the non-US domestics and those with substantial overseas operations appear to have been ahead of the pack. This situation changed after the stock market crash of 2000-2002 with most companies providing at least some quantitative indication of the impact on income of adverse market movements.

The 1999 10-K filing of Nationwide is representative of the level of disclosure at that time:

Asset fees calculated as a percentage of the separate account assets are a significant source of revenue to the Company. At December 31, 1999, 88% of separate account assets were invested in equity mutual funds. Gains and losses in the equity markets will result in corresponding increases and decreases in the Company's separate account assets and the reported asset fee revenue. In addition, a decrease in separate account assets may decrease the Company's expectations of future profit margins which may require the Company to accelerate the amortization of deferred policy acquisition costs.

By 2004, Nationwide's 10-K disclosure had been expanded to include an indication of the impact on earnings:

Asset fees calculated as a percentage of the separate account assets are a significant source of revenue to the Company. As of December 31, 2004, approximately 82% of separate account assets were invested in equity mutual funds. Gains and losses in the equity markets result in corresponding increases and decreases in the Company's separate account assets and the reported asset fee revenue. In addition, a decrease in separate account assets may decrease the Company's expectations of future profit margins due to a decrease in asset fee revenue and/or an increase in GMDB claims, which may require the Company to accelerate the amortization of DAC. The Company's long-term assumption for net separate account returns is 8% annual growth, earned evenly throughout the year. If equity markets were unchanged throughout a given year, the Company estimates that its net income per diluted share, calculated using current weighted average diluted shares outstanding, would be approximately \$0.05 to \$0.10 less than had the Company's long-term assumption for net separate account returns been realized. This analysis assumes no other factors change and that an unlocking of DAC assumptions for individual variable annuities would not be required. However, as it does each quarter, the Company would evaluate its DAC balance and underlying assumptions to determine whether unlocking is appropriate. The Company can provide no assurance that the experience of flat equity market returns would not result in changes to other factors affecting profitability, including the possibility of unlocking of DAC assumptions for individual variable annuities.

The disclosure goes on to discuss the related exposure to guaranteed minimum benefits in variable annuity products.

This expansion (the addition of the implications to net income of a decline in equity markets) is observed in many companies' statements in the period from 2000 to 2004 with most adding such disclosure by 2002, when the effects of the crash in equity share prices were being felt broadly. In 2000, only 9 of 25 companies provided any quantitative measure of the impact of a future drop in equity markets on the financial

statements. In 2004, 20 of 25 companies provided such an analysis. Most show the impact of a 10% decline in equities, but what is included and how it is presented varies widely. Some companies only consider the impact on company-owned equities. Others include fee income and GMDB impact. Often, it is difficult to tell what is included and what is not, or if the story is complete. Many aggregate all the impacts together, so it is hard to tell the source. Of course, for some companies the exposure to equity risk remains minimal, so robust disclosure would not appear to be necessary.

Whereas most companies consider sensitivity related to a 10% decline in their own asset values, Allstate relates its projected sensitivities to equity market movements to a decline in a standard benchmark, the S&P 500 Index. This is useful because it enables the reader to relate the sensitivity on a comparable basis to similar measures at other companies. Of course, this requires that other companies report sensitivities in relation to a similar, universal benchmark. Unfortunately, this is not yet the case, so the comparison of sensitivities across companies remains inexact at best.

At December 31, 2004, our portfolio of equity investments had a beta of approximately 0.85, compared to a beta of approximately 0.84 at December 31, 2003. Beta represents a widely used methodology to describe, quantitatively, an investment's market risk characteristics relative to the Standard & Poor's 500 Composite Price Index ("S&P 500"). Based on the beta analysis, we estimate that if the S&P 500 decreases by 10%, the fair value of our equity investments will decrease by approximately 8.5%. Likewise, we estimate that if the S&P 500 increases by 10%, the fair value of our equity investments will increase by approximately 8.5%. Based upon the information and assumptions we used to calculate beta at December 31, 2004, we estimate that an immediate decrease in the S&P 500 of 10% would decrease the net fair value of our equity investments identified above by approximately \$569 million, compared to \$478 million at December 31, 2003.

The disclosure goes on to identify the impact on fee revenue and guaranteed benefit expense of a 10% decline in the companies' equity-based separate accounts (though here the metric is company specific). Lincoln Financial, by contrast, provides a similar disclosure with respect to the sensitivity of fee revenue (and DAC amortization, for that matter) to 1% changes in benchmark indices. .

*There will continue to be an impact to earnings from the affects of equity market movements on account values and assets under management and the related fees on those assets. The table below presents our estimate of the annual after-tax impact on fees, after the associated DAC amortization, from a 1% change in the equity markets. *

<i>Segment</i>	<i>Relevant Measure</i>	<i>Annual Effect on Fees per 1% (in millions)</i>
<i>Lincoln Retirement</i>	<i>Average daily change in the S&P 500</i>	<i>\$2.0</i>
<i>Investment Management</i>	<i>Blend of market indices</i>	<i>\$0.6</i>
<i>Lincoln UK</i>	<i>Average daily change in the FTSE 100</i>	<i>\$0.2</i>

Observations and Comment: Overall, the quality of financial statement disclosure with respect to the risk of equity market declines has improved over the last several years. The improvement is apparent in those companies that provide forward-looking sensitivity tests on equity market performance and project the impact on both the balance sheet and the income statement. More companies consider the secondary (fee revenue) and tertiary (DAC amortization) effects in addition to the direct effects on general account holdings than had in the past as well. But the results are spotty. Practices differ from company to company at the expense of uniformity and comparability. Room for improvement remains.

In particular, it is unclear in many companies' disclosures around sensitivities to equity market movements precisely what components of exposure have been considered. All companies providing such sensitivities include the impact on assets held in the general account. But the impact on related items (e.g., DAC assets, guaranteed benefit liabilities) may or may not be included and when they are, they are often contained in separate sections of the statement. Ensuring that all effects of equity market movements are considered and reported in a single place and making clear in the disclosure precisely what these effects are would improve the value of the disclosure from both a stand-alone and a comparability perspective. Improvement would also result if all companies included the projected impact on income, in addition to shareholder equity or surplus, as some companies now do.

Notably absent from disclosure practices in our review are any probability-based sensitivity analyses. Though many companies have the tools with which to model equity market risk stochastically, sensitivities to equity market risk are uniformly communicated in terms of a single scenario impact (usually a 10% decline in equity values). Certainly, there are good reasons why this single scenario disclosure makes sense. It is far easier to calculate than multi-scenario measures and many readers of the financial statement will find such single point measures easier to understand.

However, several companies allude to their use of earnings-at-risk and other stochastically-based measurement techniques in disclosing their equity risk management techniques. Value-at-risk disclosures are made by a few companies (e.g., Prudential, with respect to currency risk and Allianz and ING with respect to banking operations), though not with respect to equity market movements and insurance liabilities. Perhaps,

as stochastic-based measures of risk become more entrenched in supporting management decisions and within other measurement bases (like embedded value) disclosure practices will expand to include stochastically-based measures of equity risk as well.

Risk from Benefit Guarantees

An issue closely related to the risk of equity market declines is the risk of benefit guarantees, in particular minimum benefit guarantees on variable products. These guarantees include guaranteed minimum death benefits (“GMDB”), guaranteed minimum income benefits (“GMIB”), guaranteed minimum withdrawal benefits (“GMWB”) and guaranteed minimum accumulation benefits (“GMAB”) often found on variable annuity contracts. These benefits (GMDB in particular) generated a lot of publicity in 2000-2002 as companies found their exposure to guaranteed benefits rising with the declines in stock prices.

In response to negative market publicity and the rising economic risks on their balance sheets, companies began disclosing their exposure to GMDB and other guaranteed benefit risk. Whereas in 2000, virtually no quantitative disclosure of the exposure to guaranteed benefits can be found in our 25 company sample, by 2002 most companies with exposure to such risks were disclosing qualitative and in most cases quantitative information to inform the reader of the nature of the risk. This increase in disclosure coincided with the stock market decline of 2000-2002 meaning that the risk, in a sense, had come to fruition by the time companies started disclosing it quantitatively.

As with other disclosure items, the nature of the disclosure was shaped by the accounting treatment of the item on the financial statements. Under US GAAP prior to 2004, many companies felt there was no mechanism for establishing a liability for a GMDB prior to death. Recognizing that an economic risk existed nonetheless, many companies established *ad hoc* liabilities under a wide variety of methods. Those companies that established such liabilities typically disclosed the method for establishing them and the financial statement impact. By contrast, companies that chose not to establish a liability, using what they felt was a literal interpretation of GAAP, would usually rely on qualitative indicators of the risk. Disclosure of useful metrics, like the net-amount-at-risk, began to appear for the most part in 2002. The result was a hodgepodge of methods for recording the liability on the financial statements and an equally diverse array of disclosure practices to accompany them.

This all changed with the adoption of the AICPA’s Statement of Position (“SOP”) 03-1. At year end 2004, companies began reporting liabilities for GMDBs and GMIBs under the guidance of SOP 03-1 and complying with the extensive disclosure requirements as well. The result is that most companies have very similar disclosure with respect to their exposure to GMDB and GMIB risk covering everything from the nature of the benefits offered, the composition of the underlying separate accounts, the net-amounts-at-risk, the assumptions used to calculate the liabilities and a range of related items. So a company like John Hancock, with a small GMDB exposure relative to its size and a company like

Allmerica, with a relatively large exposure, have virtually the same wording and structure of disclosure to GMDB covering several pages of the 10-K.

That is not to say that differences across companies do not exist. John Hancock and Nationwide, for example, follow the sample disclosure format of SOP 03-1 almost verbatim. Hartford presents the same information, though it is packaged slightly differently. All three of these companies include explicit detail of various assumptions, including investment returns and volatilities as well as the number of scenarios used in the calculations. Hartford's 2004 10-K disclosure of assumptions is representative of this group:

U.S. GMDB:

- *250 stochastically generated investment performance scenarios*
- *Returns, representing the Company's long-term assumptions, varied by asset class with a low of 3% for cash, a high of 11% for aggressive equities, and a weighted average of 9%.*
- *Volatilities also varied by asset class with a low of 1% for cash, a high of 15% for aggressive equities, and a weighted average of 12%*
- *80% of the 1983 GAM mortality table was used for mortality assumptions*
- *Lapse rates by calendar year vary from a low of 8% to a high of 14%, with an average of 12%*
- *Discount rate of 7.5%*

Others, like MetLife and AEGON, include much of the same information with respect to descriptions of the guarantees and quantification of the reserve developments (e.g., reserve rollforwards, net amounts-at-risk by guarantee type, separate account asset composition), but include less detail on assumptions. MetLife's 2004 10-K disclosure related to assumptions is representative:

The Company establishes liabilities for minimum death and income benefit guarantees relating to certain annuity contracts and secondary and paid up guarantees relating to certain life policies. Annuity guaranteed death benefit liabilities are determined by estimating the expected value of death benefits in excess of the projected account balance and recognizing the excess ratably over the accumulation period based on total expected assessments. The Company regularly evaluates estimates used and adjusts the additional liability balance, with a related charge or credit to benefit expense, if actual experience or other evidence suggests that earlier assumptions should be revised. The assumptions used in estimating the liabilities are consistent with those used for amortizing DAC, including the mean reversion assumption. The assumptions of investment performance and volatility are consistent with the historical experience of the Standard & Poor's 500

The reader can find the investment performance assumptions elsewhere in the 10-K, but the volatilities used are not explicitly disclosed.

Conversely, CIGNA's 2004 10-K includes disclosure beyond the sample provided in SOP 03-1. In addition to spelling out the key assumptions and their values, the company includes an exhibit showing the sensitivity of net income to each of these assumptions.

If a 10% unfavorable change were to occur for the following assumptions, the approximate after-tax decrease in net income would be as follows:

- *Mortality – \$70 million*
- *Volatility – \$50 million*
- *Lapse – \$35 million*
- *Interest rates:*
- *Mean investment performance – \$45 million*
- *Discount rate – \$35 million*
- *Future partial surrenders – \$5 million*

This level of disclosure is beyond what is observed on any other company's 10-K and is likely a consequence of the considerable amount of GMDB and GMIB reinsurance assumed by the company.

Because they are typically accounted for under FASB Statement No 133, the disclosure around GMABs and GMWBs is different from that observed for GMIBs and GMDBs. Though there were too few companies with material blocks of these benefits at December 31, 2004 to make credible conclusions about disclosure practices (this situation is expected to change as the popularity of GMWBs has been increasing), the indications are that both FASB Statement No 133 and SOP 03-1 requirements are being applied. For example, Hartford's 2004 10-K includes qualitative and quantitative disclosure related to its GMWB feature, separately identified, along with other derivatives following the requirements of FASB Statement No 133. It also includes discussion of its GMWB and related metrics (e.g., benefit description, benefits paid, fair value of the embedded derivative) alongside disclosure for other guaranteed benefits under SOP 03-1 guidance. Nationwide has a similar dual-disclosure approach for its GMAB benefit in its 2004 10-K, though it aggregates some of its disclosure under FASB Statement No 133 with other derivatives.

However, when it comes to disclosing specific assumptions used to calculate the fair value of the GMAB and GMWB features, both companies practices are reflective of FASB Statement No 133 treatment under which the valuation method is often disclosed but specific valuation assumptions rarely are. Compare, for example, the Hartford

description of its practices and assumptions with respect to valuing GMWB benefits with the detailed description of assumptions for GMDB valuation quoted earlier (both quotes are taken from the same section of the company's 2004 10-K).

The GMWB represents an embedded derivative liability in the variable annuity contract that is required to be reported separately from the host variable annuity contract. It is carried at fair value and reported in other policyholder funds. The fair value of the GMWB obligations are calculated based on actuarial assumptions related to the projected cash flows, including benefits and related contract charges, over the lives of the contracts, incorporating expectations concerning policyholder behavior. Because of the dynamic and complex nature of these cash flows, stochastic techniques under a variety of market return scenarios and other best estimate assumptions are used. Estimating cash flows involves numerous estimates and subjective judgments including those regarding expected market rates of return, market volatility, correlations of market returns and discount rates.

This disclosure is reflective of FASB Statement No 133 practice regarding information related to derivatives and it is likely that similar disclosure will be provided by other companies as their GMWB business grows. It points to an interesting difference between disclosure practices under SOP 03-1 (where the guidance provides sample disclosure that includes explicit identification of assumptions) and under FASB Statement No 133 (where disclosure of specific valuation assumptions is not suggested). In fact, a review of a subset of our selected companies did not reveal one company that disclosed any of the assumptions used to value any of its derivatives accounted under FASB Statement No 133, though many companies provided such detail with respect to their liabilities accounted under SOP 03-1. The one possible exception: all companies we reviewed included explicit disclosure of assumptions (include risk-free rates and volatilities) used to value stock compensation plans. Though the concepts are similar, this practice apparently arises from guidance contained in FASB Statement No 123 rather than FASB Statement No 133.

Observations and Comment: Though company disclosure practices vary at the margins, SOP 03-1 has resulted in a consistency of disclosure that undoubtedly enhances the comparability of the exposure to GMDB and GMIB risk from company to company. However, some might argue that prescribing extensive disclosure for companies that might have relatively small exposure could be misleading to the reader of the financial statements who would see the amount of space in the 10-K not commensurate with the risk to the economic well-being of the entity. The result, ironically, is that the disclosure around GMDB and other minimum guarantee risk is far more extensive in most companies than the disclosure around the potential loss of fee-based revenue under equity market declines, while this latter risk has a far greater impact on the economic value of most insurance companies than does GMDB.

Furthermore, while companies are making efforts to present the economic risks to which they are subject in a coherent fashion, organized from a business perspective, the prescriptive nature of disclosure under SOP 03-1 and FASB Statement No 133 serves to thwart this objective. By complying with the different disclosure standards set by various accounting pronouncements, similar risks are disclosed differently, hindering the reader's ability to assess the various contract guarantees consistently.

So, while the ability to compare certain risks (GMDB and GMIB) across companies on a consistent basis is a clear benefit of the SOP 03-1 mandate, the ability to form a balanced opinion of the relative magnitudes of risks can be compromised when disclosure requirements become too prescriptive.

Still, on balance, one would have to conclude that the quantity of information and the comparability of presentation across companies render the disclosure requirements under SOP 03-1 a net positive in the direction of more meaningful financial statement disclosure. Exhibits showing the development of guaranteed benefit liabilities and incurred claims enable the reader to assess the contribution of guaranteed benefit features to earnings. Disclosure of separate account asset composition and net amounts-at-risk provide insight into risk exposure and the potential impact on future earnings. Detailed disclosure of valuation assumptions assists the reader in making consistent comparisons across companies of the exposure to guaranteed benefits. Also, when compared with the disclosure requirements currently contemplated under European Embedded Value ("EEV") and IFRS, the extensive disclosure around method and assumptions prescribed under SOP 03-1 would appear to be consistent with the direction being taken by these emerging standards.

Credit Risk

Perhaps because it has been recognized and visible for so long in the eyes of the investment and analyst community, credit risk has been covered in some quantitative detail within 10-K and related disclosures for some time. However, the detail of such disclosures has increased markedly over the last five years as has the consistency in the format of presentation across companies. Much of this change is undoubtedly due to the adoption of EITF 03-1 by the FASB in 2003. Still, despite the existence of this guidance, differences exist among companies' disclosure practices around credit risk.

To understand the general trend in disclosure practices around credit risk over the last several years, consider the differences in disclosure as reflected in the 10-K filings of Great West Life & Annuity. In 2000, the company reported summaries of assets by asset class and FAS 115 designation (held-to-maturity or available-for-sale) including carrying values and current fair values. It included tables showing the balances of impaired loans (and the income they generated) and loan loss allowances for the last three years as well as general commentary on the management of credit risk, including a statement on the targeted percent of investment grade quality for new fixed income investments.

By 2004, this disclosure had been expanded to include details of the company's impairment valuation process and an analysis of securities with unrealized losses:

At December 31, 2004 and 2003, there were 480 and 556 securities respectively, that had been in a loss position for less than twelve months with carrying values of \$2,265,617 and \$2,238,936, respectively, and unrealized losses of \$33,199 and \$109,663, respectively. At December 31, 2004 and 2003 less than 1% were rated non-investment grade. The losses on these securities are primarily attributable to changes in market interest rates and changes in credit spreads since the securities were acquired.

At December 31, 2004 and 2003, there were 410 and 123 securities, respectively, that had been in a continuous loss position for twelve months or longer with carrying values of \$1,219,545 and \$625,439, respectively, and unrealized losses of \$48,280 and \$59,629, respectively. The Company's impairment exposure is not concentrated in any one industry. At December 31, 2004, there are 14 airline industry securities on which \$9,820 of impairment write-downs was recognized during 2004. For the years ended December 31, 2004 and 2003, mortgage-backed and asset-backed securities represent \$14,029, or 29% and \$28,046, or 47% of the unrealized losses, respectively. While the Company is in an unrealized loss position on these securities, payments continue to be made under their original terms. At December 31, 2004, the Company has no information to cause it to believe that any of these investments are other than temporarily impaired.

The difference in the direction of the discussion is indicative of the changes implemented by many companies. Also common to many companies' disclosure is the apparent melding of credit risk with temporary impairments caused by interest rate movements. Many companies have argued that the guidance of EITF 03-1 produces misleading disclosure because these two issues are treated simultaneously. It is difficult for the reader to distinguish between the one, which has real economic implications for the company and the other, which may not. At the time of the writing of this report, the FASB was considering the issuance of FSP 115-1 which could address this issue, so practices in the future may change.

Still, many companies now provide additional disclosure around various elements of credit risk that few companies had provided previously and EITF 03-1 appears to have been the motivating force. For example, in 2000, of the 25 companies in our sample, only a handful (four or less in all cases) were providing any meaningful, quantitative disclosure with respect to each of the following issues:

- Unrealized losses by industry sector
- Details of distressed holdings/writedowns
- Impairment criteria

- Aging analysis of unrealized losses

By 2004, over half of the companies in our sample were providing this information. In addition, about one-third of the companies in 2004 were reporting detail on default losses by issuer and unrealized losses by maturity whereas none provided this information in 2000.

With respect to concentration risk, five companies had been providing information on significant holdings in 2000 and six reported the geographic distribution of mortgages and mortgage-backed securities whereas half the companies reported this information in 2004. Several companies included a discussion of exposure to the credit quality of reinsurers and some quantitative disclosure of their exposure to each. Manulife's 2004 disclosure is indicative of the level of disclosure provided by those companies that disclose information around asset concentration:

The Company's exposure to credit risk is managed through risk management policies and procedures with emphasis on the quality of the investment portfolio together with maintenance of issuer, industry and geographic diversification standards. As at December 31, 2004, 94% of bonds (2003 - 96%) were rated at investment grade "BBB" or higher, and 63% (2003 - 79%) were rated "A" or higher. Government bonds represented 24% (2003 - 41%) of the bond portfolio. The Company's highest exposure to a single non-government issuer was \$431 (2003 - \$399). Mortgages and real estate are diversified geographically and by property type. The Company's largest concentration of mortgages and real estate was in Ontario, Canada, with \$7,166 (2003 - \$4,930) of the total portfolio. Income-producing commercial office properties were the largest concentration in the real estate portfolio with \$3,401 (2003 - \$3,050). As at December 31, 2004, 96% (2003 - 96%) of the stock portfolio was comprised of publicly listed corporations. The largest single issuer represented 2% (2003 - 6%) of the portfolio. The Company's exposure to loss on derivatives is limited to the extent that default by counterparties to these contracts results in the loss of any gains that may have accrued. All contracts are held with counterparties rated "A" or higher. As at December 31, 2004, 74% (2003 - 58%) of the exposed amount was with counterparties rated "AA" or higher. The largest single counterparty exposure as at December 31, 2004 was \$137 (2003 - \$88).

For the most part, this summarized level of information represents the quantitative information that the financial statements provide with respect to credit disclosure. A few companies go a step further to provide detail of exposure by issuer. For example, Jefferson-Pilot provides a list of the top ten bond holdings by issuer and the top ten below investment grade bond holdings by issuer.

The preceding discussion gives the impression that disclosure practices around credit risk have improved, and this is undoubtedly the case for many companies. However, our

review indicates that a minority of companies still provide uneven disclosure with respect to unrealized losses, despite the introduction of EITF 03-1. This could be because unrealized losses in these companies portfolios are immaterial, but whether or not this is the cause is unclear. For example, at year end 2003, nine of the 25 companies in our sample were providing disclosure of impairment criteria and impaired asset aging, two of the hallmark requirements under EITF 03-1, at a level of detail notably below that provided by other companies. Of these, several increased their disclosure in 2004, but differences in practice remain.

Observations and Comment: Although many companies provided useful commentary, both qualitative and quantitative, on credit risk in the past, the number of companies providing such information and the amount of detail provided have both increased. EITF 03-1 appears to have motivated this change. Still, differences in practice are observed with some companies not providing the same disclosures that other companies feel are required under EITF 03-1. Resistance to some of the requirements under EITF 03-1 among companies has been strong and the FASB has taken notice of the issue, with additional guidance in the form of FSP 115-1 possibly forthcoming as a result. Many reasons may be posited for this resistance. These include:

- The view, noted earlier, that the prescribed disclosure distorts the risk profile of the company by failing to convey the distinction between credit-driven losses on the one hand and interest rate-driven or spread-driven losses on the other
- The view that the unrealized losses are immaterial and do not require disclosure
- The desire to keep sensitive information on asset quality and investment philosophy from competitors

There may be other reasons as well. But whatever the reason, the fact remains that disclosure practices around credit risk, at least within the 10-K and similar US filings, has become more standardized, though inconsistencies across companies persist. Also, while EITF 03-1 has clearly resulted in companies disclosing more information than before, it has raised the question of whether the required disclosure is doing more harm than good by obscuring a risk issue (credit quality) with a timing issue (unrealized losses from interest rate movements). On balance, our conclusion is that the disclosure is better than it was five years ago, but that followers of the industry could benefit from additional improvements, including more consistency in practice, in the future.

Interest Rate Risk

Interest rate risk includes the risk that asset and liability cash flows are mismatched resulting in losses if interest rates move adversely as well as the risk that minimum interest rate guarantees cannot be supported. It received a lot of attention back in the 1980s and early 1990s when a number of high-profile companies recorded substantial losses because of mismatched portfolios. More recently, low interest rates are leading industry analysts to question whether 3% and 4% interest rate floors, common in many

products, could exceed asset earned rates resulting in financial losses. As a result, the industry has been conscious of the investment and analyst community's sensitivity to this issue and has provided quantitative disclosure with respect to it for some time. Still, increased disclosure has been observed over the last five years.

For example, in 2000, approximately two-thirds of the companies reviewed included meaningful, quantitative disclosure with respect to asset-liability management practices and the potential exposure to the company from interest rate movements. In 2004, the number of companies providing such disclosure was virtually unchanged. The types of disclosure and sensitivities provided were largely unchanged as well, though for companies using derivatives to manage interest rate risk, the disclosure around those derivatives has increased. The most common sensitivity test provided by companies is the impact of a parallel rise or fall of 1% in the yield curve.

Within the universe of companies that provide such a sensitivity test, the range of the information provided can vary. Some companies provide a one-sided sensitivity test whereby the impact of a yield curve shift on recorded asset values alone is included. Others provide an economic value approach that considers the change in the fair value of the assets and liabilities together from a yield curve shift. Admittedly, this is a more difficult analysis to perform, in part because the crediting rates and dividend processes applied to insurance liabilities make it difficult to pinpoint the change in the value of the liability occurring as a result of a change in interest rates. Still, some companies provide a more complete picture than others.

Virtually all companies that go through the exercise of providing disclosure with respect to interest rate sensitivities at least acknowledge the interaction between the asset and the liability side of the balance sheet, even if the quantitative disclosure is an asset-only approach. Phoenix's 2004 10-K disclosure leans in this direction:

One of the key measures we use to quantify this interest rate exposure is duration, as a measure of the sensitivity of the fair value of assets and liabilities to changes in interest rates. For example, if interest rates increase by 100 basis points, or 1%, the fair value of an asset with a duration of five years is expected to decrease by 5%. We believe that as of December 31, 2004, our asset and liability portfolio durations were well matched, especially for our largest and most interest-sensitive segments. Since our insurance products have variable interest rates (which expose us to the risk of interest rate fluctuations), we regularly undertake a sensitivity analysis that calculates liability durations under various cash flow scenarios...

...The table below shows the estimated interest rate sensitivity of our fixed income financial instruments measured in terms of fair value. Given that our asset and liability portfolio durations were well matched for the periods indicated, we would expect market value gains or losses in assets to be largely offset by corresponding changes in liabilities.

The table goes on to show the changes in fair value for cash, available-for-sale debt securities and mortgage loans from a 1% rise or fall in interest rates. A similar table gives the results for derivatives as well. Though recognition is made of the interaction between assets and liabilities, no quantification of the liability side is provided.

Allstate's disclosure goes a step further by bringing in the liability side.

At December 31, 2004, the difference between our asset and liability duration was approximately 0.84, compared to a 0.99 gap at December 31, 2003. A positive duration gap indicates that the fair value of our assets is more sensitive to interest rate movements than the fair value of our liabilities. ...Based upon the information and assumptions we use in this duration calculation, and interest rates in effect at December 31, 2004, we estimate that a 100 basis point immediate, parallel increase in interest rates ("rate shock") would decrease the net fair value of the assets and liabilities by approximately \$1.79 billion, compared to \$1.77 billion at December 31, 2003. Additionally, there are \$7.32 billion of assets supporting life insurance products such as traditional and interest-sensitive life that are not financial instruments and as a result have not been included in the above estimate. This amount has increased from the \$6.20 billion reported at December 31, 2003 due to increases in policies in force. Based on assumptions described above, in the event of a 100 basis point immediate increase in interest rates, these assets would decrease in value by \$427 million, compared to a decrease of \$278 million at December 31, 2003.

This is representative of the quantitative disclosure that companies would afford to asset/liability matching aspects of interest rate risk. Whereas companies have added additional descriptive disclosure with respect to asset/liability management processes and the use of derivatives, the design of sensitivity tests has not changed much in the last five years. For example, quantitative disclosure about risk from non-parallel yield curve shifts is virtually non-existent. Many companies disclose their management practices, and the fact that they consider their exposure to partial or key-rate durations, but few give any insight into their current exposure and sensitivity to non-parallel shifts. Protective Life's disclosure is illustrative of this practice.

Additionally, the Company's asset/liability management programs and procedures incorporate assumptions about the relationship between short-term and long-term interest rates (i.e., the slope of the yield curve) and relationships between risk-adjusted and risk-free interest rates, market liquidity, and other factors. The effectiveness of the Company's asset/liability management programs and procedures may be negatively affected whenever actual results differ from these assumptions.

In general terms, the Company's results are improved when the yield

curve is positively sloped (i.e., when long-term interest rates are higher than short-term interest rates), and will be adversely affected by a flat or negatively sloped curve.

Though no quantitative information is provided, the company at least discloses what type of non-parallel yield curve shift is most detrimental. Even at this relatively simple level, sensitivity disclosure around non-parallel interest rate movements is absent from most companies' disclosure. Sun Life's 2004 10-K takes this disclosure one-step further. This additional disclosure is apparently a carryover reflecting Canadian disclosure practices.

For the Company's actuarial liabilities, an immediate 1% parallel increase in interest rates at December 31, 2004 across the entire yield curve, assuming the Company was unable to take any investment action to mitigate the impact of this change, would result in an estimated increase in net income of \$36. Conversely, an immediate 1% parallel decrease in interest rates, again assuming no other investment action, would result in an estimated decrease in net income of \$134.

Among the different lines of insurance business, annuities are one of the most sensitive to changes in interest rates. Asset and liability cash flows by year for this business are set out in the table below. The negative cumulative gap for Canada and the United Kingdom is due to liability cash flows extending out farther in the future than asset cash flows. In the United States, the overall shorter nature of the liability cash flows leads to a positive cash flow gap. On a duration basis, the Company's various annuity portfolios of assets and liabilities are considered well matched.

	2004					
	Under 1 year	1 to 5 years	Over 5 to 10 years	Over 10 years		Total
CANADA						
Assets	\$ 3,642	\$ 8,351	\$ 3,723	\$ 8,176		\$ 23,892
Liabilities	3,347	8,633	3,879	8,965		24,824
Cash flow gap	\$ 295	\$ (282)	\$ (156)	\$ (789)		\$ (932)
UNITED STATES						
Assets	\$ 2,695	\$ 10,116	\$ 9,401	\$ 4,524		\$ 26,736
Liabilities	3,310	11,116	6,916	3,337		24,679
Cash flow gap	\$ (615)	\$ (1,000)	\$ 2,485	\$ 1,187		\$ 2,057
UNITED KINGDOM						
Assets	\$ 334	\$ 940	\$ 1,293	\$ 4,857		\$ 7,424
Liabilities	238	1,084	1,329	5,101		7,752
Cash flow gap	\$ 96	\$ (144)	\$ (36)	\$ (244)		\$ (328)

Although disclosure around asset/liability management risk has not changed greatly in the last several years, disclosure around another interest risk item, the risk from minimum crediting rate guarantees, has increased markedly. Undoubtedly, this is largely a reflection of a declining interest rate environment where the risk from such guarantees is now more than just an insignificant possibility in a hypothetical doomsday scenario. In 2000, no companies in our study group included quantitative information of the impact of declining interest rates with direct reference to minimum interest rate guarantees. Seven companies provided such disclosure in 2004. Most companies with any sort of spread-

based product include a discussion of interest spreads as well, though only a handful disclose quantitative measures by product line.

The detail in which exposures to the risk of guaranteed minimum interest rates are disclosed covers a wide range of practice among companies making such disclosure. Virtually all companies with spread-based products include a qualitative discussion of the nature of the risk. The level of quantitative detail can be fairly simple, as in the case of Genworth's 2004 10-K filing:

At least once each month, we set an interest crediting rate for newly issued fixed SPDAs and additional deposits. We maintain the initial crediting rate for a minimum period of one year or the guarantee period, whichever is longer. Thereafter, we may adjust the crediting rate no more frequently than once per year for any given deposit. In 2004, we introduced a product that has flexible pricing features. Most of our recently issued annuity contracts have minimum guaranteed crediting rates between 1.5% and 3.0%.

An additional layer of detail is provided by some companies, indicating the relationship of current credited rates to minimum interest rate guarantees. Jefferson-Pilot provides the following:

As is typical in the industry, our life and annuity products contain minimum rate guarantees regarding interest we credit. For interest sensitive life products, our minimum rates range from 3.0% to 9.0%, with an approximate weighted average of 4.1%. For annuity products, our minimum rates range from 1.5% to 6.0%, with an approximate weighted average of 3.3%.

... As discussed previously, as of year end our crediting rates on blocks of business that are on an annual reset basis were approximately 31 basis points and 10 basis points on average in excess of minimum guaranteed rates for Individual Products and AIP.

The company includes sensitivity tests on earnings of yield curve shifts as well.

Others give an indication of exposure with associated dollar amounts. Nationwide, for example, provides account values and current average credited rates for fixed annuities in each of four categories. The following is an excerpt from a table in the 2004 Form 10-K:

<i>(in millions)</i>	<i>Account value</i>	<i>Wtd. avg. crediting rate</i>
<i>Minimum interest rate of 3.50% or greater</i>	\$ —	N/A
<i>Minimum interest rate of 3.00% to 3.49%</i>	3,163.2	5.02%
<i>Minimum interest rate lower than 3.00%</i>	1,077.0	3.12%
<i>MVA with no minimum interest rate guarantee</i>	—	N/A
<i>Total deferred individual fixed annuities</i>	\$ 4,240.2	4.54%

This enables the reader to render a more complete judgment with respect to how imminent any risk from minimum interest rate guarantees might be.

Lincoln National takes it a step further, summarizing account values by how close the credited rates are to the minimum guarantees in increments of 0.10% for contracts where the guarantees are within 1.00% of the credited rates and in 0.50% increments thereafter.

<i>Excess of Crediting Rates over Contract Minimums</i>	<i>Retirement Segment Account Values</i>	<i>Life Segment Account Values</i>	<i>Total Account Values</i>	<i>Percent of Total Account Values</i>
<i>As of December 31, 2004</i>				
		<i>(In millions)</i>		
<i>CD and On-Benefit type annuities</i>	\$ 5,908	\$ —	\$ 5,908	17.67%
<i>Discretionary rate setting products*</i>				
<i>No difference up to .1%</i>	12,853	3,438	16,291	48.74%
<i>.11% to .20%</i>	125	729	854	2.55%
<i>.21% to .30%</i>	109	1,415	1,524	4.56%
<i>.31% to .40%</i>	164	39	203	0.61%
<i>.41% to .50%</i>	209	1,287	1,496	4.48%
<i>.51% to .60%</i>	829	2,488	3,317	9.92%
<i>.61% to .70%</i>	866	748	1,614	4.83%
<i>.71% to .80%</i>	74	648	722	2.16%
<i>.81% to .90%</i>	86	139	225	0.67%
<i>.91% to 1.0%</i>	22	336	358	1.07%
<i>1.01% to 1.50%</i>	155	199	354	1.06%
<i>1.51% to 2.00%</i>	58	140	198	0.59%
<i>2.01% to 2.50%</i>	24	240	264	0.79%
<i>2.51% to 3.00%</i>	7	15	22	0.07%
<i>3.01% and above</i>	31	—	31	0.09%
<i>3.01% and above</i>	46	—	46	0.14%
<i>Total Discretionary rate setting products</i>	15,658	11,861	27,519	82.33%
<i>Grand Total— Account Values</i>	\$ 21,566	\$ 11,861	\$ 33,427	100.00%

Such detailed disclosure as illustrated by Nationwide and Lincoln National may not be appropriate for a company with little spread-based business. But they do demonstrate the completeness of disclosure that can be provided with respect to risk when desired. As is discussed later in this report, this type of disclosure is clearly valued by the analyst and investment community.

In addition to disclosure of risk from minimum interest rate guarantees and declining interest rates in general, companies provide disclosure related to the risk from rising interest rates. For the most part, this is limited to the quantification of the impact of a 1% rise in interest rates (discussed earlier), a paragraph or two describing the areas in which rising interest rates pose a risk and, if applicable, a description of hedging activities the company has entered in order to mitigate the risk. Protective Life's 2004 10-K disclosure is typical:

The higher interest rates that have traditionally accompanied inflation could also affect the Company's operations. Policy loans increase as policy loan interest rates become relatively more attractive. As interest rates increase, disintermediation of stable value and annuity account balances and individual life policy cash values may increase. The market value of the Company's fixed-rate, long-term investments may decrease, the Company may be unable to implement fully the interest rate reset and call provisions of its mortgage loans, and the Company's ability to make attractive mortgage loans, including participating mortgage loans, may decrease. In addition, participating mortgage loan income may decrease. The difference between the interest rate earned on investments and the interest rate credited to life insurance and investment products may also be adversely affected by rising interest rates.

Observations and Comment: Disclosure related to interest rate risk has increased since 1999, though most of the increase is concentrated in the discussion around low interest rate environments and minimum interest rate guarantees. This is not surprising, given that the risk of loss from being unable to lower credited interest rates below the guaranteed floor was a far more remote possibility in 1999 than it was in 2004. In fact, it would be reasonable to argue that disclosure practices around minimum interest rate guarantees have increased in relation to the significance of the risk, as is appropriate. Why clutter the 1999 financial statements with extensive discussion about risks that were remote at the time? Viewed in this light, those companies that disclosed nothing about the risk from minimum interest rate guarantees in 1999 but include an extensive, quantitative discussion now should not necessarily be considered as having improved their practices in the last five years, but rather continued to devote the appropriate level of disclosure to the risk – at least insofar as that particular risk is concerned.

With respect to the risk from asset-liability mismatch, many companies could be complimented for having provided quantified disclosure around this risk for many years, but at the same time criticized for not having improved the disclosure as the measurement and management techniques around this risk have improved. Quantitative disclosure

around exposure to non-parallel shifts in the yield curve (as opposed to management practices for managing the risk) is practically non-existent. The same is true of stochastically-based measures, including value-at-risk, which, while prevalent in disclosures related to banking activities, have not been adapted, at least for disclosure purposes, into similar types of businesses in the insurance industry.

Improvement could be realized by increasing disclosure practices with respect to the commonly observed sensitivity test of a parallel yield curve shift as well. Some companies continue to quantify the effect of such a shift on recorded asset values alone. This is of limited value (1) because it fails to consider the corresponding change in the value of liabilities and (2) because it fails to consider the economic impact on assets recorded at amortized cost. In addition, some companies consider income statement implications of yield curve shifts in addition to the balance sheet impact, sometimes even distinguishing the impact between immediate shifts and gradual shifts. Having all companies disclose (1) both asset and liability impacts to (2) both the balance sheet and income statement (3) on a consistent basis (i.e., ensuring that all implications of the shift are included, including the implications on mortgages, bonds held-to-maturity, rate crediting practices, etc.) would improve comparability, and hence usefulness, of the commonly quoted yield curve shift sensitivity.

Finally, it is easy to understand why disclosure around the risks of declining interest rates have improved in recent years as rates have hit historic lows and minimum interest rate guarantees have come into play. However, one might argue that the time when disclosure around risk is most valuable is before the event occurs, not after. In this regard, now might be the time to consider the risk of rising interest rates on insurance companies as an item worth discussing in the financial statements. A review of the statements reveals very little mention of this risk and virtually no quantitative disclosure, with the exception of the parallel yield curve shift mentioned earlier. It is altogether possible that this reflects the fact that rising interest rates pose no material risk to insurance companies. Alternatively, it could be that disclosure around risk is still a reactive exercise to issues that are currently in the public consciousness.

Insurance Risk

Ironically, of the major risks facing life insurance companies the one which probably gets the least visibility or discussion with respect to disclosure practices is traditional insurance risk. Naturally, all companies in our 25 company sample discuss insurance risk in their financial statement disclosures and most go to great lengths to describe how they manage it. All companies discuss mortality and/or morbidity experience in analyzing earnings realized in the reporting period. But few companies provide forward-looking quantitative measures or sensitivity tests to give the reader an appreciation of the financial exposure to this fundamental risk.

This comment notwithstanding, the quality and level of disclosure has improved over time. In 2000, out of 25 companies reviewed, only 7 had disclosure containing any degree of quantification around insurance risk, and often this disclosure contained little

more than per life retention limits and loss ratios on group life business. Half of the companies reviewed had some form of quantitative disclosure included in 2004.

For example, ING's 1999 20-F includes only general commentary on practices related to managing insurance risk and does not disclose retention limits, stating only that they "are established by risk category and determined by the business units in consultation with NN Re along the guidelines of Actuarial & Risk Control." In the 2004 20-F, the disclosure had been expanded to the following:

With respect to life business the risk tolerance for events affecting multiple lives is not limited. While life-insurance risks are considered to be naturally diversifiable by virtue of each life being a separate risk, group contracts may result in significant exposures. For new group contracts underwriting guidelines have been revised, particularly for concentrations of risk by city and/or building. ING made its own assessment and believes that the potential loss from a significant mortality event occurring in the normal course of our business will not exceed an amount higher than approximately 12% of the Groups after-tax earnings. This translates into a pre-tax benchmark of EUR 750 million. ING Group's maximum risk retention per insured life is set at EUR 22 million.

Most companies provide disclosure around their uses of reinsurance. This is useful information, but rarely do they put it into a quantitative context to alert the reader to how much the company would suffer if mortality rates increased by a certain percent. MetLife's disclosure is typical:

MetLife currently reinsures up to 90% of the mortality risk for all new individual life insurance policies that it writes through its various insurance companies. This practice was initiated for different products starting at various points in time between 1992 and 2000. MetLife evaluates its reinsurance programs routinely and may increase or decrease its retention at any time. The Company retains up to \$25 million on single life policies and up to \$30 million on survivorship policies and reinsures in excess of the Company's retention limits. The Company reinsures a portion of mortality risk on its universal life policies.

MetLife reinsures its business through a diversified group of reinsurers. Placement of reinsurance is done primarily on an automatic basis and also on a facultative basis for risks with specific characteristics.

Some companies add detail around the reinsurers to which they have ceded the risk, adding an element of credit risk disclosure to the mix. CIGNA adds a quantitative sense of its exposure to reinsurer credit risk in its 2004 10-K by disclosing the impact to net income of a 10% reduction in net reinsurance recoverables.

In terms of quantitative disclosure concerning the possible impact of mortality risk, most companies provide no sensitivity tests. An example of one that does provide such information is AEGON. The following disclosure is taken from the 2000 20-F filing.

As a consequence of the insurance and savings features in our products, the AEGON Group is exposed to mortality and longevity risk. On a regular basis we perform sensitivity analysis, which quantify the effect of mortality and longevity developments on our portfolios and technical provisions. If life expectancy would increase by one year, compared to our existing reserving basis, the positive effect on the technical provisions would be less than 0.5%. This implies that the AEGON Group has a well-balanced portfolio, in terms of mortality and longevity. Therefore, changes to mortality and longevity developments are not a current concern relative to our strong reserving basis.

By 2004, AEGON had expanded this disclosure to include sensitivity tests that show the approximate impacts on net income and shareholders' equity of the following:

*Lapses increase 20%
Mortality increases 10%
Mortality decreases 10%
Expenses increase 10%*

This type of information puts the discussion around mortality risk management into a quantitative economic context.

Though only a few companies in our sample have a significant exposure to products with morbidity risk, our observations around disclosure practices are similar to those made relative to mortality risk. Companies disclose key metrics with respect to the reporting period performance as impacted by the risk, but add little quantitative insight into how a deterioration in experience would manifest itself in the future economic status of the company. UnumProvident, for example, provides a discussion on its uses of reinsurance to manage risk in its disability income line as well as the following disclosure on earnings results for its long-term care business.

Premium income increased during 2004 compared to 2003 primarily due to new sales growth in previous periods. New annualized sales for long-term care were \$38.2 million, \$70.9 million, and \$87.2 million for 2004, 2003, and 2002, respectively. Changes in the product offering during 2003 have decreased the 2004 growth in individual long-term care sales relative to historical trends. This is expected to continue and will result in a slower rate of growth in premium income. Net investment income increased due to the continued growth in invested assets supporting this line of business. Persistency in this line of business remains high and stable. Shown below are financial results and key performance indicators for long-term care. Long-term Care Operating Results: Benefit ratio:

2004- 88.8%, 2003 – 84.7%, 2002 – 89.2%, *Operating expense ratio*
2004- 12.6%, 2003 – 16.6%, 2002 – 20.3%, *Before-tax Operating*
Income Ratio (% of Premium Income) 2004- 10.2%, 2003 – 10.5%, 2002
– 6.90%, *Persistency - U.S. Group Long-term Care* 2004- 92.8%, 2003
– 92.7%, 2002 – 92.6%, *Persistency - U.S. Individual Long-term Care*
2004- 96.7%, 2003 – 96.1%, 2002 – 96.5%.

While this is useful information, there is little disclosure to address the current exposure to morbidity risk (or related elements, like the impact of deviations from expectation in lapse experience) to help the reader to assess the potential risk in a quantitative manner.

Although it is relatively brief, CIGNA's 2004 10-K does include such a sensitivity test:

A 1% increase in the assumed medical cost trend would reduce net income by approximately \$30 million after-tax annually.

Observations and Comment: Although disclosure practices around traditional insurance risk (mortality and morbidity) have increased in the last five years, it is probably the one risk of those considered in this report that has seen the least improvement in terms of providing quantitative information that allows the reader to analyze risk.

Companies do a good job of identifying gains or losses associated with insurance risk as reflected in the income statement, so a reader could infer the risk exposure by reviewing the fluctuation in earnings caused by insurance risk elements over a number of reporting periods. In addition, companies are increasing their disclosure practices around risk mitigation efforts, including quantitative disclosure around the uses of reinsurance (primarily disclosure of retention limits) to help the reader assess the insurance risk that remains. But these disclosures only give an indirect sense at best of the extent of the risk exposure. With a very few exceptions, quantitative disclosure of insurance risk (in the form of sensitivity tests around mortality rates or retained net-amount-at-risk measures, for example) are absent.

The irony that insurance risk is perhaps the least visible of major life insurance company risks within financial statement disclosure is difficult to escape. Whether the level of focus paid in the statements is appropriate can only be made on a case-by-case basis considering how material the risk is relative to other financial risks. Unfortunately, the level of disclosure currently presented by many companies makes this a difficult assessment to make. Interestingly, of those companies reporting embedded value results (either within regulatory filings or separately on their company websites), only half included sensitivity tests around insurance related items (mortality and morbidity) whereas all tested sensitivity to interest rate movements (see Appendix 1). It appears that insurance companies consider exposures to financial market risks to require more robust disclosure than exposures to traditional insurance risks.

One possible reason for the lack of disclosure around sensitivities to insurance risk is that US GAAP does not provide a convenient mechanism with which to communicate the risk. Whereas Canadian GAAP or embedded value can capitalize the effect of a given percentage point change in a mortality assumption and communicate it in a single number, US GAAP has no such balance sheet mechanism, so the results will emerge only slowly in year-by-year income statement effects. Perhaps this is why one would be more likely to find disclosure of the sensitivity of the DAC asset to changes in mortality assumptions rather than the impact on financial condition that such a deterioration would directly contribute; the DAC asset impact, though of secondary order, can be grasped in a single number whereas the direct, long-term earnings impact cannot. This thought around the relationship between disclosure practices and accounting basis is explored more fully in Appendix 1.

The preceding paragraph notwithstanding, there are things companies could pursue to rectify the sense that insurance risk disclosure suffers, relative to other risks, from a lack of a commonly used means of communicating quantitatively the exposure to the risk. Companies could consider adopting a common sensitivity test, like the impact on earnings or embedded value of a 1% fluctuation in mortality rates. As noted earlier, this type of test is already employed by a handful of companies. Better yet, stochastically based measures, perhaps indicating the income fluctuation expected from a 90th percentile mortality event, for example, would reflect the company's risk profile better by reflecting the natural risk mitigation that size and diversification afford. Similar comments apply for morbidity risk. For example, companies could disclose what happens to income if the loss ratio increases by one percent. These types of insights would benefit the reader of the statement, but they are missing from most company disclosures today.

Section 2 - What the Readers Want to See

In the preceding section of this report, we considered the disclosures made by life insurance companies in their financial statements regarding various types of financial risks. By reviewing actual disclosure statements, primarily in the form 10-K filings, we observed examples of quantitative disclosure that convey information around financial risk and identified areas where additional quantitative disclosure might be suggested.

In the second section of this report, we turn our attention to a more subjective question: how well do insurance company financial statements serve the needs of their intended audience? In order to answer this question, we reviewed recently published articles addressing the topic² and interviewed five analysts that cover the life insurance industry in the US and Canada.

The overriding theme of the results of this review is that insurance company disclosure is more useful and complete than it was as recently as five years ago, but that room for improvement remains. Insurance accounting, in the prevailing view, remains governed by arcane rules that render it difficult for even the experienced reader of financial statements to understand. When compared with other industries, even other financial industries, insurance company accounting is seen as opaque and unintuitive. As a result, industry analysts have come to rely upon and to demand additional, clarifying disclosure in order to get an accurate picture of life insurance company financial positions. This sense comes through in interviews with industry analysts and, by inference, from the array of new disclosure requirements formally adopted by the FASB and informally “required” on a case-by-case basis by the SEC. Yet insurance company analysts continue to suggest that insurance company stock price multiples lag the rest of the market due at least in part to a failure of the industry to provide adequate financial statement disclosure. This suggests that further improvement in disclosure practices is necessary.

This is not to say that the insurance industry can be so readily identified as an indistinguishable whole characterized by a single set of disclosure practices. In fact, the insurance industry analysts we interviewed are quick to point out that disclosure practices vary widely from company to company with some viewed as being very good and others criticized as being quite poor. Analysts could readily identify which companies provided “best-in-class” disclosure around specific issues and what in particular they liked about the disclosures presented.

Ultimately, we believe that these reactions of analysts (and other audiences) will lead to better, more uniform disclosure across companies (1) because there appears to be at least a subliminal view that better disclosure justifies a better share price and (2) because analyst demands and regulatory dictates are the only means of overcoming the fear of being punished by the market for being the first to disclose a risk issue. There is evidence that this sort of peer pressure among companies is driving more uniform

² A list of relevant articles is included at the end of this report.

disclosure; our review of financial statements identified numerous cases of different companies using virtually identical wording and metrics to address a risk issue, apparently indicating the desire to include disclosure up to (though perhaps not beyond) the prevailing level of the competition.

In addition to complimenting several instances of good disclosure practices exercised at certain companies, insurance industry analysts have positive things to say with respect to other forms of company communication. One analyst specifically noted the timeliness with which companies issue press releases addressing specific issues affecting them and others agreed that such prompt disclosure is valuable in keeping the market apprised of company developments.

Without exception, the insurance industry analysts we interviewed identified quarterly earnings calls as their primary source of timely, actionable information. These calls are typically conducted about one month after the close of the quarter and concurrent with the release of the financial statements and are accompanied by a supplemental package of information distributed to analysts in advance. They provide the opportunity to review financial results and to assess the impact of emerging trends and events on the future financial performance of insurance companies. Management discussion of results and the question and answer opportunities enable analysts to assess issues, including those associated with financial risk, that a review of the numbers alone might not reveal. The analysts we interviewed described the formal publication of the 10-K or 10-Q filing as anti-climactic; it merely affirms and expands on information already disclosed in the earnings calls and, by the time they are filed with the SEC, all of the information contained within the financial statements has already been reflected in the market's assessment of the company. In the vernacular of the insurance industry analysts, the quarterly earnings calls and the financial statements appear to be virtually synonymous.

Furthermore, the insurance industry analysts agree almost unanimously that the quantity and the quality of information disclosed in 10-K and other public filings has improved over the last five years, though at least one believes that the improvement has not kept pace with the increased complexity of the business. This is a natural conclusion to draw from the sheer growth in the size of financial statements noted earlier. It could be argued that this growth in size should not be equated to a growth in quality and that disclosure of additional information, if not material or relevant to the organization at hand, is actually detrimental to the goal of providing meaningful financial statements. Our review of company filings submitted in 2004 would confirm this point, with a considerable amount of material repeated almost verbatim several times in different places, adding bulk but no content in our view. However, the insurance industry analysts we interviewed did not mention this as a source of frustration. The dominant sentiment is that financial statement disclosure has gotten better, as evidenced by this increase in size.

While the observation that financial statement information has improved over the last five years is decidedly non-controversial among the analysts we interviewed, the reasons why it has improved may prove to be more telling. In the view of insurance industry analysts, the reasons for the improvement are summarized as follows:

- An increase in required disclosures, as promulgated by the FASB, the AICPA, and others;
- Pressure exerted by the SEC to increase the disclosure around areas of key sensitivities;
- Demands of insurance industry analysts and the investment community to provide more meaningful disclosure around risk and the sources of earnings;
- Pressure from companies' external auditors to increase footnote disclosures and management discussion around sensitive statement items.

There is certainly truth to the fact that each of these items has contributed to the growth and improvement in insurance company disclosure. Which has been the most significant is open to debate and may be of some interest. What is perhaps more interesting, however, is what is not included on the list. Namely, the industry analysts we interviewed do not mention *internal* company initiatives as being a significant force contributing to the improvement in financial statement disclosure. Though the identified sources may differ, industry observers almost exclusively point to external pressures as driving the change in disclosure practices realized over the last several years.

Whether or not this impression is true is only of secondary interest. The more interesting point is to speculate on what this might say about the perceptions both within the insurance industry and between the industry and those who follow it. At least, it would seem to reveal a lingering distrust on the part of the analyst community with how forthcoming the industry is with financial information in general and with disclosure around risk in particular. If the perception is that the only way to get meaningful improvements in disclosure is through external pressures, then what does that say about the investment community's confidence in the completeness of the information it has? What else might be behind the closet door?

On the other hand, insurance companies clearly would not want to perpetuate an impression of being unforthcoming with information when they know that their share prices may be punished if analysts can't get comfort around the numbers disclosed. Starting with this axiom, we can speculate on four possible conclusions:

- Companies have something to hide, so less information, while detrimental to share price, is better than full disclosure. This is the cynical view and, while there is no hard evidence to support it and substantial empirical evidence to the contrary, this perception undoubtedly lingers somewhere beneath the surface for some industry observers.
- Companies believe that they are providing all the information they can and that their disclosure is as complete and meaningful as it feasibly can be given the practical constraints of cost and timeliness. This may well be true, but the

diversity in practice between companies as well as the additional information that typically comes forth upon promulgation of a new disclosure requirement seem to suggest otherwise. From their constant demands for additional disclosure as well as their observation that the quality of disclosure practices varies widely from company to company, it does not appear that insurance analysts believe this conclusion.

- Companies filter information and present it in a format that addresses the high-level issues while eliminating the details. Under this view, companies diligently comply with requirements when they are spelled out by edict (and evidence suggests that they do), but provide less complete disclosure when given the latitude to do so. This “less is more” attitude could betray management’s belief in its own inherent opacity: complete disclosure is too difficult for the reader of the financial statement to understand, so we’ll minimize it to ensure that it’s not misinterpreted. This philosophy, unfortunately, would appear to reinforce the market’s perception that the complete story is not being told.
- Complete, quantitative disclosure involves the disclosure of confidential information that could benefit competitors to the detriment of the company or could, in the extreme, hurt the company’s position in litigation cases. Under this rationale, companies are willing to endure the displeasure of analysts and other audiences of their financial statements in order to protect their competitive advantage. Based on our experience working with insurance companies, we believe that this concern is shared by many companies and that it does contribute to the practices adopted but that it is not a major reason for any disconnect between what the insurance analysts want to see and what the companies actually disclose.

Whatever the reason and whether or not it is true in fact, the result appears unchanged: life insurance industry analysts feel that they are not getting a complete picture of the risks and financial performance of all the companies they follow and that the only way to improve the situation is by application of external pressure. The tacit implication from the discussions with the analysts is that if disclosure improves, share prices could follow.

With these general observations as background, insurance industry analysts have specific areas where they would like to see improvement in financial statement disclosure. While the details vary from person to person, two items appear consistently on analysts wish lists: (1) a desire for greater transparency of earnings and (2) increased forward-looking disclosure to yield insight into the nature of and exposure to risk. This first item, the desire for greater transparency of earnings, can be further summarized into two categories: “source-of-earnings” and “disaggregation.”

Source-of-Earnings: Several analysts feel that financial statement disclosure would improve markedly with a more widespread introduction of enhanced “source of earnings” reporting. These analysts state that by decomposing net income into its components, companies shed light on what is generating profits and losses for the company, enabling

analysts to assess better what the future prospects are for the company. Analysts point to Canada where OSFI recently began requiring the routine disclosure of source-of-earnings within the Annual Reports of insurance companies. This is viewed favorably within the analyst and investor community.

While the analysts' stated interest in expanded source-of-earnings reporting seems simple enough, it is worth considering specifically what it is about such reporting that the analysts find attractive. Formalized source-of-earnings reporting, as practiced in Canada, provides earnings attribution at a very high level. Sun Life, for example, in its 2004 Annual Report, presents net income as composed of six recurring items³: (i) expected profit on in-force business, (ii) impact of new business, (iii) experience gains and losses, (iv) assumption changes, (v) earnings on surplus and (vi) income taxes. Manulife uses the same categories, but adds earnings from segregated fund guarantees as an additional defined category.

While analysts praise this presentation as an example of best-practice disclosure, this information is not nearly at the detailed level of disclosure that the analysts state that they want (see the section on "disaggregation" which follows). Admittedly, it provides insight into whether earnings are coming from products or surplus, old business or new, and this is very valuable information. But, aside from additional commentary that the companies may choose to provide, it does not identify the specific products or product sources (e.g., mortality, expenses, interest spread) that generate earnings. Such detailed quantification is presented sporadically within 10-K filings in the US (e.g., it is not unusual to find the quantified gain attributed to mortality experience in the reporting period) but typically not in any sort of comprehensive fashion. Therefore, while analysts search for additional, detailed disclosure into the drivers of earnings, they still appreciate the high level breakdown that provides macro-level identification of the sources of income. In addition, we surmise that analysts value a comprehensive source-of-earnings (i.e., a source-of-earnings that identifies individual pieces that add up to the reported whole) because it demonstrates management's ability to articulate how it makes money (albeit at a high level), thus leaving the impression of a business that is well-understood by management.

Disaggregation: The preceding observations notwithstanding, companies are widely criticized by insurance industry analysts for presenting financial results at too high a level of aggregation. While reporting rules require companies to report GAAP financial results at the "business segment" level, many find this level of aggregation too high to enable a meaningful assessment of what has generated earnings in the past and how that may impact a company's ability to generate earnings in the future.

For example, companies might report aggregate financial results for all life products together. Traditional whole life insurance, level term life and universal life may be grouped in one business segment even though the dynamics of these businesses are very different. A potential investor is left questioning whether earnings are coming from the in force whole life or the newly issued term, whether interest margins on the universal

³ Major non-recurring items may be identified separately.

life are obscuring mortality losses on the term, whether new business pays for its own expenses or is being subsidized by the in force block, etc.

The fact that this general impression exists is difficult to dispute. Each analyst whom we interviewed mentioned it as a concern. How valid it is as a criticism of industry practice is more debatable. Life insurance companies might argue that the level of aggregation used in financial reporting mirrors the level at which the company manages its business. If this is the case, then it is debatable whether a more granular level of reporting would be more meaningful. Once financial reporting becomes disconnected from the way in which the business is actually managed, potentially arbitrary elements (like expense and investment income allocation methods) enter the equation, presenting distortions that could render the results misleading.

Companies could also argue that, in most cases, their product line disclosure is at a more detailed level than required, and that supplementary information contained in their financial statements provides the necessary color to enable the reader to understand what is driving earnings. Our review of company disclosures confirms that there is truth to this observation, though there still exists a gap between what the analysts would like to see and what companies are now providing.

Consider the annuity business, for example. The fixed annuity business and the variable annuity business have several fundamentally different drivers of profitability, though they share common attributes with respect to design, marketing, administration and expenses. Both have been the subject of considerable attention within the analyst community of late, variable annuities in the context of guaranteed minimum benefits and exposure to equity market declines, fixed annuities in the context of minimum interest rate guarantees and spread compression. Analysts are interested in understanding the dynamics of these two sub-businesses separately. The way different insurance companies portray these two businesses is telling.

A review of the 2004 10-K and 20-F filings of fourteen companies⁴ that have significant blocks of both variable annuity and fixed annuity business shows only one company that reported net income for each on its own. The rest report them aggregated, usually with other lines of business as well. In some cases, fixed annuities are reported with the financial results of one line of business, variable annuities with another.

This is not to say that there is no information provided with respect to the variable and fixed annuity businesses as separate generators of profit. Every company discusses the differences between the fixed and variable businesses, the different risks to which they are subject, and the factors that will determine whether financial results are favorable or unfavorable for each on its own. However, the extent of such additional disclosure and how well it provides the reader with quantitative insight into profitability and financial risk vary widely from company to company.

⁴ AEGON, AIG (2003 statement), Allianz, Allstate, American Express, AXA, Genworth, Hartford, ING, John Hancock, Lincoln, MetLife, Nationwide and Prudential

On the one hand, some companies describe differences between the two types of annuity businesses, discuss the different factors to profitability, and leave it at that. Most will add a discussion around each of these factors (equity market performance, earned and credited interest rates, for example) and how they contributed in the reporting period to earnings either better or worse than plan. Some companies include useful quantitative measures, like a comparison of interest rate spread (in basis points) between reporting periods, providing further insight into the source of results. Some will add forward-looking measures, like the sensitivity to projected earnings or to surplus of a decline in interest rates or a decline in equity markets. Finally, though in all cases falling short of full-blown income statements broken down between fixed and variable annuities, a few companies provide quantitative disclosure of key line items (e.g., asset-based fees on variable annuities, interest credited and interest earned on fixed annuities) to highlight the earnings coming from each.

Thus, though industry analysts may lament a lack of clarity resulting from the over-aggregation of results, it is not as if the industry has ignored this complaint. And while some differences in the quality and detail of the responses can be assessed in absolute terms (i.e., some companies are clearly disclosing more useful information than others), other differences are more attributable to choices the companies make in terms of how they manage their businesses.

As an example, consider the 2004 10-K filings of Allstate and Prudential. Both companies write both fixed and variable annuities and, while neither presents separate net income numbers for these businesses individually, both present information to give the reader additional insight into how each contributes separately to earnings and the differences in their elements of risk. However, the two companies have decidedly different ways of packaging the information that appear to indicate differences (structurally and economically) in how they manage the business.

Allstate, on the one hand, takes a source-of-earnings approach, grouping products and analyzing earnings in the context of the financial attributes that give rise to them. Thus, “investment margin” (as distinguished from “benefit margin,” for example) is analyzed as an elemental building block of earnings, constructed from various product sources (including not only fixed annuities but payout annuities, spread-based institutional products and interest sensitive life, among others). The earnings component, interest spread, is the focus; the products that give rise to it are secondary.

This presentation contrasts the format adopted by Prudential in its 10-K. Here, the product appears as the dominant building block. Earnings for the individual annuity segment are shown (split out from the individual insurance segment in which they reside) with supplementary information providing some detail around interest spread and asset-based charges. Distinct account value developments are provided for fixed and variable annuities, but this distinction is secondary. Here, it’s the product line that is the fundamental driver of earnings around which the financial statement disclosure is built.

The point of this example is not to decide which form of presentation and level of aggregation is more meaningful. Different observers might have different opinions as to which they prefer. In fact, both presentations contain much of the same information. The point, rather, is the simple fact that they are different. This difference undoubtedly complicates the job of analysts for whom comparability between companies is lost in the various aggregation practices assumed by those companies. However, without reading too much into the anecdotal example of Allstate and Prudential given above, the various choices that companies take in presenting this information may yield insight into how companies manage their businesses. That, one might argue, is useful information by itself.

Forward-Looking Disclosure and Risk: While the issue of earnings transparency appears to be the primary concern of insurance industry analysts, forward-looking disclosure that provides quantitative insight into risk and the potential financial impact on the company of adverse events is nearly as important a wish of analysts⁵. Disclosure of this type brings the financial statement beyond its traditional role of describing what has happened in the past into a relatively new role of explicitly considering what might happen in the future.

Few would argue that an assessment of the past (income statement) and present (balance sheet) does not continue to be the primary purpose, and indeed the sole *responsibility*, of financial statements. However, readers of the financial statements typically use them not because they have an academic interest in what has happened in the past. Readers of the financial statements use them to gain insight into what might happen in the future. Wouldn't it be nice if financial statements short-cut the process and provided some forward-looking insight themselves?

This issue relates directly to the question of how good a job financial statements do at alerting the reader to the potential risks embedded in a company. By providing insight into potential future outcomes, the financial statement can quantify risk. This can take the form of something as simple as a sensitivity test on an economic driver (e.g., "what happens if the yield curve drops by 1% over the next year?") to statistical measures of the distribution of potential future outcomes (earnings, surplus) under some assumed set of economic parameters.

Many companies now routinely provide sensitivity tests on certain elements, but the scope of such tests is uneven. Disclosures of sensitivity to interest or equity market movements are quite common, but they are typically one-dimensional and relatively simplistic. As we saw in the first section of this report, the sensitivities of other key drivers of earnings, like mortality or morbidity experience, are less likely to be disclosed. Statistical measures associated with an underlying range of potential results are virtually unheard of for statements reported under US GAAP, though there seems to be some

⁵ This issue has attracted the attention of the SEC and the FASB as well. In financial reporting release FR-60, issued in 2001, the SEC encouraged the disclosure of sensitivities to changes in major assumptions. For its part, the FASB is undertaking a "Conceptual Framework" project which is considering, among other things, the disclosure of information with "predictive value."

interest in providing such measures under economic value reporting frameworks, particularly in Europe.

Thus, while useful and certainly appreciated when they are provided, sensitivity tests and other forward-looking disclosures are fairly limited. As a result, the assessment of risk embedded in the balance sheet is largely a qualitative exercise supplemented by snippets of quantitative analysis that are interesting in isolation, but rarely comprehensive. Insurance company analysts would like such additional quantitative indications of risk, in order to complement the balance sheet and to provide a more complete snapshot of the company's financial standing.

Conclusions

In this paper, we have attempted to provide an assessment of the variety of financial statement disclosure practices, with a focus on disclosure around financial risk, how they have evolved over time and the various forces that will continue to force this evolution. We have attempted to do so by considering the quality of information (generally defined as quantitative analysis) as well as the comments and criticisms of insurance industry analysts. To repeat an observation made at the start, assessing the quality of financial statement disclosure is a subjective exercise dependent upon the use to which the reader is putting the statement. Though one clear conclusion of our research is that statement disclosure has gotten broader, more consistent and generally “better” in the last five years than it had been previously, there remain several areas where further change might be suggested. These areas are summarized below.

Aggregation: This issue appears to be the primary source of frustration for most insurance industry analysts. Companies might consider providing quantitative disclosure at the major product level in order to give additional insight into the drivers of earnings.

Source-of-Earnings: Whether at the macro level or at the detail level within products, any quantification of the sources of earnings is appreciated by the investment analyst community and, presumably, by other readers of the financial statements as well. “Complete” quantification (i.e., quantification of sources that add up to reported earnings) is particularly valuable because it portrays a comprehensive disclosure of earnings, even if at a relatively high level, and demonstrates management’s ability to verbalize quantitatively how it makes money.

Alternative Measures: US GAAP is not conducive to portraying in a single number the impact on the financial statements of certain financial risks. For example, the impact of equity market returns falling short of company expectations has a relatively modest effect on any particular period’s income statement (composed of a revenue effect and, potentially, a capitalized DAC effect) and little immediate balance sheet impact. However, the implications to the long-term financial health of the enterprise could be quite significant. Companies might consider selectively reporting supplementary measurements as a means of communicating more effectively the risks and sensitivities to important economic drivers.

Sensitivity Tests: Disclosure practices around financial statement sensitivities to key assumptions could be improved. In particular, companies should consider disclosing sensitivities to all key drivers of earnings (not just equity performance and interest rate movements, as is currently common). The use of alternative measures, as discussed above, could facilitate movement in this direction. Companies should be sure to clarify in disclosure statements precisely what effects are being quantified in such sensitivity tests (e.g., does a sensitivity test of equity market movements consider some or all of the following: company owned equities, asset-based fee revenue, SOP 03-1 and fair value liabilities, DAC assets, new business levels, etc.)

Comparability of Assumptions: Companies should consider disclosing all key assumptions used in calculating numbers presented on their financial statements where such disclosure would aid comparison across companies. While such disclosure is now required for some numbers on the financial statements (e.g., the liability for insurance benefit features under SOP 03-1) for others (e.g., fair value calculations under FASB Statement No 133) it is not. More complete disclosure of assumptions would be in line with the direction being taken by the International Accounting Standards Board (“IASB”) in the development of IFRS. In addition, companies should consider the use of sensitivity tests that enhance comparability across companies. For example, it is easier to compare across companies if sensitivities to market movements are quantified in relation to movement in an industry benchmark, like the S&P 500 Index, than to movement in the company’s own variable sub-accounts (which may be more or less volatile than the competition’s).

Probability-Based Measures: Although undoubtedly representing a new level of complexity of life insurance company disclosure, companies should consider the introduction of probability-based measures to illustrate financial risk issues. To date, most companies have relied on simple sensitivity tests to quantify its risks, but they give far less insight into complex issues like non-parallel interest rate movements and equity market volatility than could be portrayed using risk metrics calculated using stochastic methods. Companies certainly have developed the tools recently to calculate meaningful measures of risk; it may now be appropriate to start disclosing such measures routinely. Value-at-risk or percentile measures of projected earnings are two items that might be considered. In so doing, life insurance companies would be adopting and adapting probabilistic-based practices, examples of which are already common in bank and property-casualty company disclosures.

Standardization: Standardization of disclosure practices in the form of prescriptive regulatory pronouncements can be criticized on several grounds. By forcing companies to disclose specific information about certain items, it can hinder their ability to portray those elements that make them unique, running the risk that extensive disclosure around immaterial items will cloud the readers judgment of what is important to the company. A “bulking up” of the financial statements is an inevitable consequence as well. Still, on balance, we believe that these drawbacks are more than offset by the enhanced comparability across companies that prescriptive disclosure yields. In addition, without prescribed disclosure standards, companies that disclose useful, but sensitive, information may be penalized when others choose not to be as forthcoming. We believe that standardized disclosure practices on selected, major issues improves the overall quality and comparability of financial statement disclosure.

Selected Bibliography

- *Add one more risk to those faced by life insurers*, Eric Berg, *The Actuary*, Vol 37, No.9, November 2003
- *Investors' Public Access to Information in the US Life Insurance Industry*, Moody's Investors Service, Berg, Fliegelman, Pieck, Bo, Reigel, February 2004
- *Life Insurers Indicate the Need for Improved Disclosure and Increased Transparency of Financial Statements, According to New Tillinghast CFO Survey*, Tillinghast-Towers Perrin Press Release, July 10, 2002
- *The Insurance Industry, Fair Value Accounting and Systemic Financial Stability*, Gerd Häusler, International Monetary Fund, June 13, 2003
- *How Do the Analysts View Your Insurance Company*, David J. Weinsier, 2004 SOA Annual Meeting, October 25, 2004
- *A Message From Robert E. Broatch, EVP & CFO*, Guardian Life Website, 2004
- *Editorial Note on Disclosure of Actuarial Information by Life Insurance Companies*, Committee on the Role of the Appointed / Valuation Actuary, Canadian Institute of Actuaries, January 1998
- *Use of Embedded Values at United States and European Insurance Companies*, Milliman Global, Murray, Bennett, Headey, Affleck, Bauer, Rayner, October 2001

Appendix 1

Comparison of Accounting Bases

The shape of financial statement disclosure is one that is driven by many factors, including the demands of regulators, analysts, rating agencies, auditors and the ways in which companies perceive themselves and choose to portray themselves to the outside world. As a result, disclosure practices vary considerably from company to company within jurisdictions and even more so as the universe is widened to consider financial reporting practices in other countries. While some of this difference can be attributed simply to jurisdictional differences and differences in business culture, a large part of the differences in disclosure practice may be driven by differences in the accounting bases on which the statements are prepared.

The form and extent of financial statement disclosure should be a function of the financial reporting basis on which the statements are prepared. The relative quality of information presented can only be considered in the context of the reporting basis applied. Disclosure around the selection of assumptions for calculating reserves, for example, should be considerably more robust for a financial reporting system like Canadian GAAP, where the assumptions can be unlocked from period to period and where they have a significant impact on reported results, than for other systems, like US GAAP, where changes in assumptions can only be reflected in certain situations and where the financial statement impact is usually not large.

In fact, a review of some of the more visible financial reporting systems indicates a variety of disclosure practices. This range of practices, presumably, is the result of varying needs underlying the systems themselves.

The following section provides a broad overview of four financial reporting systems and the quality of the information around financial risk that are inherent within them. With an understanding of how full a picture the numbers themselves contain, an assessment of the disclosure practices associated with them can be made. The underlying point is that each system takes a very different approach to financial reporting and, as a result, conveys information differently within the numbers on the financial statements. These differences in turn generate the need for different types of financial statement disclosure to enable the reader to interpret the numbers in the statement correctly. The quality assessment of interpreting disclosure from company to company and from jurisdiction to jurisdiction becomes not how much information is provided, but rather how well the information complements the numbers under the accounting basis provided.

In addition, Appendix 2 summarizes some of the disclosure requirements under the various accounting bases along with the source of the applicable guidance⁶. This is not

⁶ All references for embedded value relate back to what will be referred to as the “CFO Forum” within this report. A group of European insurance company CFOs formed for the purpose of lobbying the IASB in its development of international insurance standards. Once their work was completed for Phase I (rules

intended to be an exhaustive list but merely an indicator of the types of requirements that exist with a specific focus on those items that relate to financial risk. As such, it is organized by financial risk.

For some requirements, no reference is indicated in the document. This indicates a disclosure for which no initiating guidance is readily apparent but which has become a *de facto* required disclosure nonetheless because it is so commonly included under the applicable financial statements.

US GAAP

Any attempt to classify US GAAP under a definitive, categorical heading is bound to elicit cries of objection from accountants. For every claim that it is “rules-based” or that it abides by the “matching principle,” counter-examples abound that leave the reader questioning how to define it comprehensively. Whatever its original underpinning, US GAAP is now a mixture of accounting philosophies rolled into a unified, though sometimes internally inconsistent, whole that defies neat description. It is this diverse quality of the basis as it now exists that requires fairly extensive financial statement disclosure in order to bridge the gaps and inconsistencies that a more unified basis of accounting might not require.

With respect to insurance, there are some broad observations that can be applied concerning how well US GAAP conveys elements of financial risk that, in turn, suggest the disclosure needs. The traces of the matching principle found throughout US GAAP under which expenses are amortized in relation to the revenues to which they give rise serve to mitigate the financial statement impact of events that might have substantial long-term impacts on the value of the company. This mitigation can obscure the magnitude of the financial risks.

Consider, for example, SOP 03-1. It defines a method for establishing liabilities to cover certain contract benefits (e.g., guaranteed minimum death benefits under variable annuities) that recognizes the cost of such benefits over the revenues generated by the underlying contract. This mechanism, patterned after the DAC amortization method under FASB Statement No 97, dramatically alters the recognition of the cost of the benefits away from the period in which the precipitating event occurs and spreads it over the life of the contract.

In addition, although SOP 03-1 is generally addressed on a stochastic-based calculation, the economic assumptions (e.g., average future equity growth rates and volatility) are usually not market consistent, but based on a company’s long-term view. This also spreads part of the cost of the benefit into the future instead of recognizing it all at once in a market consistent manner.

applicable for 2005), the group turned its attention to standardizing embedded value methodology and disclosure. The result of this effort is called European Embedded Value (“EEV”).

Without full and immediate recognition of the economic impact of an event, additional disclosure is needed to give the reader of the financial statement a more complete sense both of what has transpired (i.e., supplementary information to the income statement) and of the risk that remains (i.e., supplementary information to the balance sheet). SOP 03-1 does this by requiring pages of additional information on the benefit covered, the risk exposure and the methods and assumptions used to calculate the associated liability. This information is necessary in order to give complete disclosure around the item and to supplement where the numbers do not tell the whole story.

This contrasts interestingly with the treatment of other contract benefits. Guaranteed minimum accumulation benefits, close cousins to the guaranteed minimum death benefits mentioned above, are considered to be embedded derivatives under US GAAP and are consequently valued by application of FASB Statement No 133. They are recorded at fair value on the balance sheet with changes in the fair value of the benefit flowing through the income statement in the period during which the change in fair value occurs. As contrasted with SOP 03-1 treatment, the change in economic value arising from a change in stock market prices is fully and immediately reflected under FASB Statement No 133 treatment, both because of the method used as well as the commonly understood interpretation that assumptions must be market consistent. Extensive disclosure around the methods and assumptions used to value the benefits are not required under FASB Statement No 133 as they are under SOP 03-1 as the numbers in the former give a much more complete disclosure of risk on their own than do the numbers in the latter.

This is not to say that descriptive verbiage around the nature of the benefit and related elements would not be beneficial in the case of an accumulation benefit. Indeed many companies provide additional, voluntary disclosure with respect to these benefits and others valued under FASB Statement No 133 to provide the reader with a clearer picture of what is giving rise to the financial statement results. The point, however, is that such additional disclosure is not as necessary as it is for SOP 03-1 because the numbers themselves portray the risk and results more completely. On the other hand, since the three drivers of the FASB Statement No 133 liability are (1) how much the benefit feature is in the money, (2) the level of risk free rates, and (3) the implied volatility, an ideal disclosure would provide these assumptions as well as sensitivity tests for the movements in these items.

Behind this dichotomous treatment of relatively similar benefits, and the differences in disclosure requirements to which they give rise, is a fundamental conflict between two apparent objectives in US GAAP: (1) the desire to eliminate the volatility in financial results caused by random fluctuations that do not reflect a lasting change in the underlying economic value of the business, and (2) the desire to reflect the current fair or market value of the enterprise.

These competing objectives manifest themselves in the treatment of investments. FASB Statement No 115 defines several ways of classifying and valuing fixed income and equity investments reflecting how fair value concepts and the matching principle collide

to generate a litany of valuation rules and disclosure requirements to match. Thus, assets are classified in one of three categories and recorded at either amortized cost or fair value on the balance sheet with changes in fair value flowing through the income statement (or not) depending on the classification. The result is confusing at a minimum and generates a requirement that asset fair values be disclosed in those cases where they are not recorded as such anyway.

Similarly, EITF 03-1 defines disclosure requirements for assets with other-than-temporary impairments. At the time of the writing of this report, the FASB was considering the issuance of clarifying guidance in the form of FSP 115-1 which could effect the application of the EITF. Still, the EITF demonstrates that there is a recognition under US GAAP that fair value is a more complete reflection of true economics than amortized cost and therefore that the latter requires additional disclosure in order to portray an accurate picture to the reader. Yet the movement towards disclosures of the fair value of an insurer's liabilities has been limited to certain financial instruments, as defined by FASB Statement No 107.

Other risks typically associated with the life insurance business are only incompletely reflected in US GAAP numbers as well. An increase in perceived insurance risk (increased mortality for life insurance, for example) is typically not reflected at all in either the income statement or the balance sheet under traditional insurance products until such time as additional claims arise. This is attributable to the lock-in of assumptions applied in the valuation of typical long-duration products under FASB Statement No 60. Though there is some current period reflection of future mortality expectation under universal life contracts through the DAC mechanism under FASB Statement No 97, the impact on the financial statements is far from a complete reflection of the economic impact. Here, one would think that additional disclosure requirements would abound though, interestingly, they do not. Absent voluntary illuminating comments on the part of the company, the reader is left with an incomplete picture of the risk and how it affects the underlying economics of the company.

Ultimately, this incompleteness is the impression of US GAAP as it relates to the reflection of risk in the numerical presentation of the financial statements. The cost-based, matching-principle legacy upon which its underlying principles rest are too pervasive to overcome. Despite substantial tinkering, it is ill-suited to convey the implications of financial risk and changes in financial risk within its framework, leaving that job to an array of additional disclosure requirements to tell the reader of the financial statements the story around risk that the numbers themselves cannot.

The FASB appears to recognize this drawback of US GAAP and is pursuing various initiatives to address the issues. One example is the "Conceptual Framework" project, which is intended to address the need for improved financial reporting. Another example is the "Revenue Recognition" project, which is addressing the issue of the amount of revenue to be recognized when a premium is received. Finally, the FASB and the IASB are intending for their standards to converge and the two are working together on a new accounting standard.

Canadian GAAP

When compared with US GAAP, Canadian GAAP is more responsive to changes in the economic and risk environment and quicker to reflect these changes directly through the income statement. Consequently, some find it to be more illuminating than US GAAP as a financial reporting basis insofar as it reflects financial risk within the reported numbers. This perception is largely driven by the liability valuation methods employed under Canadian GAAP, particularly the Canadian Asset Liability Method (“CALM”).

This method, which is characterized by the use of multiple interest rate scenario valuation and actuarial assumptions that change each reporting period in response to changing expectations and volatility, serves to reflect the financial impacts of risk immediately in the contract liabilities. When contrasted with US GAAP reserve rules, the differences are substantial.

Take, for example, the reserves recorded for fixed deferred annuities. Under US GAAP, contract liabilities are set equal to the account value with no reflection of the potential or realized effects of interest rate movements on the value of credited rate guarantees. Aside from the partial impact on the amortization of DAC, much of the impact of declining earned rates is not capitalized under US GAAP, even as interest spread evaporates and erodes the economic value of the enterprise. Only over time do these losses emerge, long after the economic damage is done.

By contrast, CALM reflects immediately the impact of adverse interest rate movements, incorporating them in contract reserves as the movement emerges. The financial statements, as a result, are far more sensitive to changes in the underlying economics of the business and reflect the risk of the product more fully within the reported numbers. This lessens the need for certain disclosures around financial risk exposures (exposures to embedded guarantees, for example) relative to US GAAP, where the numbers are less sensitive to these exposures.

This is not to say that Canadian GAAP reporting is all encompassing and therefore requires no additional disclosure. It’s just that the disclosure needs are different than for US GAAP. For while some insurance company analysts compliment Canadian GAAP as a basis of insurance reporting better suited to modern products than US GAAP, they are also quick to point out the primary drawbacks of the basis including:

- The perceived subjectivity in the setting of assumptions and the establishment of provisions for adverse deviations (“PfADs”) that render the basis susceptible to earnings manipulation
- Smoothing of realized capital gains
- For product features that are considered embedded derivatives and are therefore fair valued under US GAAP, the economic assumptions are generally not market consistent

It is here that the issue of financial statement disclosure arises most critically. For just as under US GAAP additional disclosure is needed to fill the gaps in what the numbers don't tell, so too under Canadian GAAP is additional disclosure most necessary where the drawbacks of the financial reporting system are most evident. To counteract the perceived subjectivity, and consequent lack of comparability that can hinder Canadian GAAP, companies disclose changes in assumptions and the financial impact of such changes in their financial statements. The quantification and disclosure of PfADs is similarly routine. At the instigation of OSFI, the trend is to provide this information at a detailed level, addressing the recurring complaint of industry analysts that aggregation often eliminates the insight that detailed disclosure can provide.

Still, Canadian GAAP reporting retains a taint of subjectivity that is difficult to overcome. At least partially in response to this criticism, Canadian companies are adopting additional disclosure practices to illuminate their financial statements further. Source of earnings analysis, widely praised by insurance analysts, is on its way to becoming standardized practice for Canadian companies. In addition, most Canadian companies are reporting on embedded value as a further means of enhancing disclosure. While not necessarily published within the financial statements, this information can often be found on company websites for readers interested in the information. US companies appear to be making some progress in this direction as well, supplementing financial statement information with other reporting metrics that are more suited to communicating financial risk than US GAAP, but the Canadian companies appear to be ahead in this regard.

Embedded Value

As with financial statements filed in the US, Canadian disclosure practice is a function of the reporting basis on which the statements are prepared and often is driven by the perceived deficiencies of the basis. This observation can be expanded as we consider embedded value.

Though not a defined accounting basis *per se*, embedded value reporting is prevalent in Europe and the UK and, as mentioned earlier, is common within Canadian companies as well. Though less visible in the US, a number of large insurance companies have recently started disclosing embedded value numbers in financial statements and quarterly analyst calls.

If US GAAP can be characterized as the prime example of an income statement-based accounting system, embedded value, by contrast, is clearly defined by the balance sheet. Liability values are calculated as the discounted value of projected distributable earnings with changes in assumptions reflected immediately and fully in each reporting period. As such, embedded value capitalizes the effects of all economic movements thereby providing an effective reflection of the impact of financial risk. Under European Economic Value ("EEV"), embedded value concepts are expanded and modernized to encompass economic valuation of options and guarantees. This renders the liability side of the balance sheet fully responsive to elements of risk. However, EEV should not be

thought of as identical to fair value, because it does not demand the use of market consistent assumptions. This situation is evolving in Europe, as companies are starting to explore economic capital and market consistent methods for all assets and liabilities.

In many regards, embedded value is similar to Canadian GAAP in both its balance sheet focus and its somewhat uneven treatment of the assets when compared with the treatment of liabilities. Under Canadian GAAP, asset values reflect a mixture of fair value and amortized cost concepts while under embedded value, assets backing free surplus (total statutory surplus in excess of required surplus) are typically recorded at fair value while other assets may refer to the local statutory carrying values.

The similarities do not end there. For both Canadian GAAP and embedded value, the major element of subjectivity is the same, and it centers on the selection of assumptions used in the valuation of the business. As a result, the additional disclosure needed to illuminate embedded value numbers is similar to the additional disclosure needed under Canadian GAAP, and it all relates to assumptions.

Interestingly, embedded value elicits the widest range of opinions from the insurance industry analysts we interviewed. Some find it to be extremely useful while others believe that the subjectivity involved in the setting of assumptions make it impossible to use embedded value as a basis of comparison across companies. These analysts see the value only in its ability to convey differences within a given company across reporting periods. While these complaints are similar to those heard with respect to Canadian GAAP, they appear louder with respect to embedded value, perhaps because the basis is subject to less formal guidelines than “real” accounting bases.

In apparent recognition of this criticism, the CFO Forum suggests extensive disclosure around the assumptions used in EEV calculations. All material assumptions are to be disclosed as well as sensitivity tests on the most important ones to give the reader a sense of the impact that they have on the financial statements. In addition, valuation methods employed for contractual options and guarantees are disclosed as are the relevant parameters used in the valuation. The goal of the additional disclosure, it would appear, is to convey as much information as possible about the weakest link in the reporting basis – the subjectivity around assumption setting – and thereby aid the reader in interpreting the meaning of the EEV numbers.

A review of EEV disclosure practices of five large European insurers⁷ shows that the mandate appears to be working, at least insofar as it promotes consistency of disclosure across companies. For while the assumptions themselves may differ from company to company, all companies disclose the material assumptions and sensitivities as well as change analysis tracing the development of EEV from one period to the next. This disclosure is not common to the companies reporting embedded value results in Canada. However, it is noticeably more consistent across companies than is commonly observed of companies reporting assumptions and related sensitivities under US GAAP.

⁷ AGF, AEGON, AXA, ING and ZFS

International Financial Reporting Standards

To round out the review of disclosure needs and requirements around various accounting bases, it is worth considering the emerging requirements of IFRS, as they appear to be developing for the reporting of insurance and other financial instruments.

The IASB has been leaning towards a fair value system for a long time. An early attempt with financial instruments, excluding insurance, failed because of heavy opposition from a very strong banking lobby. Ultimately, the rules developed for assets and derivatives (and embedded derivatives) are contained in International Accounting Standard (“IAS”) 39 and are quite similar to the US GAAP rules contained in FASB Statement No 115 and FASB Statement No 133.

Then, in 2001, the IASB attempted to require fair value for insurance contracts when it exposed a Draft Statement of Principles, only to be met with opposition from insurers.

As a result of insurance industry lobbying, the IASB found a compromise for insurance company reporting for 2005. IFRS 4 allows for current insurance accounting, subject to a few adjustments, to remain for approximately 90% to 95% of the liabilities on European insurers’ balance sheets (IAS 39 contains the rules for investment contracts). But, the IASB stated its true feelings again in IFRS 4 that its tentative conclusion for a long-term solution (Phase II) was a fair value approach to insurance.

This stated intention started another round of lobbying, causing the IASB to rethink the future direction for insurance. The IASB has promised to work on Phase II issues with an insurance working group that includes global representation of preparers, users, actuaries, auditors, and regulators. Based on input from this group, IASB will next publicly expose a document of preliminary views with a FASB wrap-around, as US GAAP is intending to converge with IASB. IASB will consider public comments and ultimately issue a Phase II exposure draft. After due process, this will evolve into a final standard.

Although the IASB was willing to compromise in terms of standards in Phase I, they wanted to go as far as they could with disclosures, so that Phase II would just require minor changes as a direct result of different accounting standards. Consequently, IFRS disclosure standards are stronger than those in most other accounting systems.

For example, for bonds, IAS 32 requires disclosure of a sensitivity analysis for assumptions that are not supported by observable market prices or rates. Additional description of the nature of the risks and guarantees is required as well.

IFRS will require additional disclosure on items where the numbers themselves cannot convey the risk. So, for example, companies will be required to disclose asset concentrations to enable the reader to get a sense of credit risk that the financial statement numbers cannot provide. Again, the value of disclosure is in providing that information which supplements or explains what the numbers cannot fully convey themselves.

Appendix 2

This appendix contains disclosure requirements around financial risk under four financial reporting bases. It is not intended to be an exhaustive list of requirements but rather includes some of the most common and visible reporting requirements. For some requirements, no reference is indicated in the document. This indicates a disclosure for which no initiating guidance is readily apparent but which has become a *de facto* required disclosure nonetheless because it is so commonly included under the applicable financial statements.

Required Disclosures for US GAAP

Equity Market Decline:

- Derivative activities for hedging purposes (FAS 133, ¶44)
- Discussion of other-than-temporary impairments and the company's policy for recognizing impairments (EITF Issue 03-1, ¶21(b))
- Other-than-temporary impairments by duration (less than and greater than one year) (EITF Issue 03-1, ¶21(b))
- Gross unrealized losses (FAS 115, ¶19)

Interest Rate Decline:

- Derivative activities for hedging purposes (FAS 133, ¶44)
- Information about contractual maturities by duration groupings (FAS 115, ¶20 as amended by FAS 133, ¶534f)
- Unrealized loss information (EITF Issue 03-1, ¶21(a))

Rising Interest Rates

- Derivative activities for hedging purposes (FAS 133, ¶44)
- Information about contractual maturities by duration groupings (FAS 115, ¶20 as amended by FAS 133, ¶534f)
- Unrealized loss information (EITF Issue 03-1, ¶21(a))
- Discussion of other-than-temporary impairments and the company's policy for recognizing impairments (EITF Issue 03-1, ¶21(b))
- Other-than-temporary impairments by duration (less than and greater than one year) (EITF Issue 03-1, ¶21(b))
- Gross unrealized losses (FAS 115, ¶19)

Credit Risk (asset default)

- Disclosure of significant concentrations of credit risk, including information leading to the concentration, maximum amount of potential loss, collateral support, netting agreements that would mitigate risk (FAS 107, ¶15A)
- Companies are required to disclose aggregate fair value for their available-for-sale and held-to-maturity securities (FAS 115, ¶19, as amended by FAS 133, ¶534e and FAS 119)

- Other-than-temporary impairments by duration (less than and greater than one year) (EITF Issue 03-1, ¶21(b))
- Disclosure of impairment of the securities including nature of the security, cause of impairment, severity and duration of impairments. Discussion of other-than-temporary impairments and the company's policy for recognizing impairments (EITF Issue 03-1, ¶21(b))
- Concentrations of credit risk associated with reinsurance receivables (FAS 113, ¶28 as amended by FAS 133)

Insurance Risk/Lapse Risk:

- Impact of FAS 97 unlocking
- SA liability balances subject to various types of benefits (MGDB, etc), amount of add'l liability for those benefits, NAR (SOP 03-1)

Regulatory Risk

- Disclosure of statutory surplus. (FAS 60, ¶60)
- Potential impact on statutory surplus of permitted practices (SOP 94-5, ¶8, as amended by SOP 01-5)

Liquidity

- Item 303 of Reg S-K requires disclosure of liquidity and capital resources in the MD& A section

New Business

- The MD&A typically contains a description of the business, including significant new products

Other risks

- SOP 94-6 requires disclosure of risks and uncertainties
- Item 305 of Reg S-K requires disclosure of market risks
- Risks are subject to disclosure if the company was aware that the item had a material impact on the company's financial statements
- Many companies comply with additional requirements imposed by the SEC, external auditors or other accounting firms, competitive pressure, or other factors resulting in a *de facto* disclosure requirement

Embedded Guarantees:

- SOP 03-1 disclosures including amount of balances subject to the guarantees and exposure (SOP 03-1, ¶38)
- FAS 133 disclosures, including the objectives, strategies, and value of embedded derivative instruments (FAS 133)

Litigation

- Disclosure of any potential material gain contingencies, accrued loss contingencies (that are probable and estimable) (FAS 5)

Accounting:

- Disclosure of recently adopted accounting pronouncements and their impacts on the financial statements (SAB 74)
- Disclosure of all significant accounting policies (FR 60)

Required Disclosures for Canadian GAAP

Equity Market Decline:

- Uses and risks associated with financial instruments used for hedging (AcG-8)

Interest Rate Decline:

- Uses and risks associated with financial instruments used for hedging (AcG-8)
- Impact of changes in interest rates (AcG-8)
- Information about contract maturities (CICA 4210)

Rising Interest Rates

- Uses and risks associated with financial instruments used for hedging (AcG-8)
- Impact of changes in interest rates (AcG-8)
- Information about contract maturities (CICA 4210)

Credit Risk (asset default)

- Significant assumptions made in determining the fair value of financial instruments, the total amount and financial statement classification of the change in fair value of financial instruments recognized in income for the period, and the total amount and financial statement classification of deferred or unrecognized gains and losses on financial instruments (AcG-8)
- Amounts of write-downs and deferred realized gains and losses (CICA 4210)
- Section 3860 requires information to be disclosed concerning the exposure of financial assets to credit risk. In addition to allowances for impairment applied as direct reductions to the carrying value of financial assets, life insurance enterprises provide for future credit losses in projections of investment income incorporated into the computation of actuarial liabilities. When disclosing the extent of exposure to credit risk, a life insurance enterprise should also disclose the extent to which expected future investment yields have been reduced by provisions for credit losses and the amount of any additional provisions for cyclical credit losses included in the computation of actuarial liabilities. (AcG-8)
- Significant concentrations of reinsurance (AcG-8)
- Fair value of invested assets (AcG-9)

Insurance Risk/Lapse Risk:

- Nature and significance of reinsurance entered into over the period (CICA 4210)
- Disclosure of balances and descriptions of products by segment (AcG-8)
- Disclosure of balances by geographic region (AcG-8)
- Nature and extent of measurement uncertainty incl. major factors, sources, margin for adverse deviation, reasons for differing from experience (AcG-8)
- Changes in liability balances resulting from changes in assumptions (AcG-8)

Other risks:

- Consideration should be given to disclosure of other risks to which the company may be exposed if those items would have a material financial statement impact

- Sources of earnings must be disclosed
- A rollforward of actuarial liabilities is typically done. It is probably not written requirement, but because all companies do it and it is expected, it has become a de facto requirement

Liquidity:

- Required to disclose ability to generate cash flows, capital deficiencies, capital trends, capital commitments in MD&A
- Types of investment supporting each major line of business (AcG-8)

ALM:

- Types of investment supporting each major line of business (AcG-8)
- Asset-liability duration gap analysis

Embedded Guarantees:

- No explicit disclosure requirements exist around embedded guarantees, but disclosure may result from the implicit requirements around disclosing the nature of liability amounts and the requirements around derivatives

Accounting:

- Likely effect of adoption of new accounting policies on the financial statements
- The quantification of basis changes (i.e., changes in valuation assumptions) is generally provided in aggregate (though there is some indication that OSFI wants the quantification at the individual change level)

Required Disclosures for IFRS

The financial statement disclosure requirements identified below for IFRS come primarily from IFRS 4 (for insurance liabilities) and IAS 32 (for investment contracts). Recently, IFRS 7 was adopted which clarifies and expands on the requirements in IAS 32, replacing it as the standard governing disclosure for financial instruments. Where appropriate, the additional disclosure required under IFRS 7 is included below.

Equity Market Decline:

- The impact on profit or loss and equity of reasonably possible changes in the relevant risk variable (prices of equity instruments)
- Methods and assumptions used in performing sensitivities
- Alternatively, a sensitivity test that reflects the interdependencies between risks may be used
- An insurer should disclose information about exposures to or market risk under embedded derivatives in insurance contracts.

Interest Rate Movement:

- For each class of financial assets and financial liabilities, an entity shall disclose information about its exposure to interest rate risk, including:
 - (a) contractual repricing or maturity dates, whichever dates are earlier; and
 - (b) effective interest rates, when applicable.
- An entity provides information about its exposure to the effects of future changes in the prevailing level of interest rates. Parallel and non-parallel shifts in the yield curve may be considered.
- The impact on profit or loss and equity of reasonably possible changes in the relevant risk variable (interest rate levels). The effects might be shown separately for interest income/expense, other line items of profit or loss, and equity.

Credit Risk (asset default):

- For each class of financial assets and other credit exposures, an entity shall disclose information about its exposure to credit risk, including:
 - (a) the amount that best represents its maximum credit risk exposure at the balance sheet date, without taking account of the fair value of any collateral, in the event of other parties failing to perform their obligations under financial instruments; and
 - (b) significant concentrations of credit risk.
- Disclosure of concentrations of credit risk includes a description of the shared characteristic that identifies each concentration and the amount of the maximum credit risk exposure associated with all financial assets sharing that characteristic.
- Information about credit quality of assets that are neither past due nor impaired. This might include a breakdown of assets by ratings class (internally developed or with reference to an external rating agency) along with a description/analysis of the criteria used to assign the ratings classes

- Aging and other analysis on assets that are past due and/or impaired

Insurance Risk/Lapse Risk:

- In reporting quantitative information about insurance risk, an insurer might disclose the methods used, the strengths and the limitation of those methods, the assumptions made, and the effect of reinsurance, policyholders' participation and other mitigating elements.
- Estimated timing
- Information about the estimated timing of the net cash inflows and outflows from recognized insurance liabilities, and reinsurance assets. The information would need to distinguish items falling due within one year from items falling due later. In addition, an insurer might disclose summary of information about items falling due after one year (such as the estimated weighted average maturity)
- Disclose the average discount rate or interest rate implicit in the measurement of insurance liabilities for each period
- Need to disclose concentrations of insurance risk such as:
 - o when an insurance contract covers low-frequency, high severity risks
 - o single incidents that expose an insurer to risk under several types of insurance contract
 - o exposure to unexpected changes in trends, for example, unexpected changes in mortality or in policyholder behavior
 - o exposure to possible major changes in financial market conditions that could cause options held by policyholders to come into the money
 - o significant litigation or legislative risks that could cause a large single loss
 - o correlations and interdependencies between different risks
 - o significant non-linearities, such as stop-loss or excess of loss features
 - o geographical and sartorial concentrations
- Sensitivity analysis
- A summary narrative description of how the amount could change if policyholders exercised lapse or surrender options in different ways.
- The required sensitivity disclosure does not refer directly to the cash flow but instead focuses on summary indicators, namely profit or loss and equity

Regulatory Risk:

- The Board will consider possible disclosures in various areas that IFRS 4 does not address (Capital and solvency requirements)

Liquidity:

- A maturity analysis analyzing the maturity of liability and asset cash flows.
- A description of how the company plans to manage the liquidity risk applied within the maturity analysis.

ALM:

- An insurer might disclose asset and liabilities management techniques. See above for estimated timing

Anti-selection:

- An insurer might disclose, for example:
 - (a) its policies for accepting insurance risks, including selection and approval of risks to be insured, use of limits and use of options and avoiding undue concentrations of risks; the underwriting strategy to ensure that there are appropriate risk classification and premium levels. These disclosures might include a combination of narrative descriptions and specific quantified data.
 - (b) The methods it uses to assess and monitor insurance risk exposures both for individual types of risks insured and overall such as internal risk measurement models, sensitivity analyses, scenario analyses, and stress testing, and how it integrates them into its operating activities. Useful disclosure might include a summary description of the approach used, associated assumptions and parameters (including confidence intervals, computation frequencies and historical observation periods) and strengths and limitations of the approach

Existing products:

- IFRS requires an insurer to disclose those terms and conditions of insurance contracts that have a material effect on the amount, timing and uncertainty of future cash flows arising from insurance contracts.
- An insurer might disclose the more significant of the following for each broad class of insurance liabilities, and reinsurance assets held:
 - o the nature of the risk covered, with a brief summary description of the class
 - o a summary of significant guarantees, and of the levels at which guarantees of market prices or interest rates are likely to materially alter the insurer's cash flow
 - o the basis for determining investment returns credited to policyholders
 - o the general nature of participation features

Other:

- With respect to financial instruments, a disclosure of the exposures to risk and how they arose, the means of managing those risks, and any changes from the exposures and management means from the prior reporting period.

Required Disclosures for EEV

General:

- Disclosure of sufficient sensitivity analysis to allow an informed analyst to make valid comparisons on different assumptions sets. Scenarios should include disclosure of the changes in cash flows directly affected by the changing assumptions.
- Analysis of return on EV: Reconciliation of opening and closing values. The opening and closing EVs together with a breakdown of the change in EV over the period including experience variances and assumption changes.

Equity Market Decline:

- Disclosure of the principal economic assumptions, the investment assumptions on all major asset classes including any assumption of future change in investment mix.
- Allowance must be made in the EV for the potential impact on future shareholder cash flows of all financial options and guarantees based on stochastic techniques.

Disclosure:

- o The nature of, and techniques used to value, financial options and guarantees;
- o The amount of, and reason for, any alteration to the allowance for financial options and guarantees made in the cost of required capital.

Interest Rate Movement: See Equity Market Decline.

Credit Risk (asset default):

- The assumed investment return should allow for any credit risk on investments.

Regulatory Risk:

- The EV should allow for the cost for holding the required capital. The level of required capital should be at least the level of solvency capital at which the supervisor is empowered to take action. It may include amounts required to meet internal objectives or required to obtain a targeted credit rating.

Liquidity:

- The treatment of credit risk on investments such as corporate bonds, since the published yields on such bonds are generally viewed as containing margins for both credit and liquidity risks

New Product Sales:

- Disclosure of the definition of new business and any changes in the definition and the impact of such changes on the value of new business.

Appendix 3

This appendix contains detailed examples of disclosure practices from 2004 10-K and 20-F filings of several companies around several financial risk issues. They are included in extended format to give the reader a sense of the differences in practice observed in the industry. The reader is encouraged not to interpret longer or more detailed disclosure as necessarily an indicator of “better” practice from one company relative to another. Differences in materiality can justify differences in the level of disclosure. Rather, the different practices are shown without regard to specific company circumstances so should be interpreted purely to observe differences in practice as opposed to making quality judgments.

For the most part, disclosure quoted in this section is kept in large segments in order to keep the commentary in context of the surrounding text, even where that surrounding text may not relate to the issue being illustrated. Where there is a break in the text, it is indicated by a dashed line (“-----”).

Risk from Equity Declines

The following shows the disclosure practices related to the risk from declines in equity prices at four companies (Allstate, AEGON, MetLife, and Phoenix). They have all been taken verbatim from self-contained sections in the companies’ 2004 10-K and 20-F filings devoted to discussion around equity risk and sensitivities to that risk. Items related to other risks may be included as well, depending on the disclosure practice of the company. For example, Phoenix includes its disclosure related to guaranteed benefits under SOP 03-1 in this section whereas the other companies include this information elsewhere in the 10-K. The focus of the comparison here is around forward-looking disclosure of sensitivities around equity market declines; any disclosure related to other issues should be ignored for purposes of this comparison.

Allstate

Equity price risk is the risk that we will incur losses due to adverse changes in the general levels of the equity markets. At December 31, 2004, we held approximately \$4.88 billion in common stocks and \$1.82 billion in other securities with equity risk (including primarily convertible securities, limited partnership funds and non-redeemable preferred securities), compared to approximately \$4.42 billion in common stocks and \$1.30 billion in other equity investments at December 31, 2003. Approximately 99.8% and 65.8% of these totals, respectively, represented assets of the Property-Liability operations at December 31, 2004, compared to approximately 99.0% and 58.8%, respectively, at December 31, 2003.

At December 31, 2004, our portfolio of equity investments had a beta of approximately 0.85, compared to a beta of approximately 0.84 at December 31, 2003. Beta represents a widely used methodology to describe, quantitatively, an investment’s market risk

characteristics relative to the Standard & Poor's 500 Composite Price Index ("S&P 500"). Based on the beta analysis, we estimate that if the S&P 500 decreases by 10%, the fair value of our equity investments will decrease by approximately 8.5%. Likewise, we estimate that if the S&P 500 increases by 10%, the fair value of our equity investments will increase by approximately 8.5%. Based upon the information and assumptions we used to calculate beta at December 31, 2004, we estimate that an immediate decrease in the S&P 500 of 10% would decrease the net fair value of our equity investments identified above by approximately \$569 million, compared to \$478 million at December 31, 2003. The selection of a 10% immediate decrease in the S&P 500 should not be construed as our prediction of future market events, but only as an illustration of the potential effect of such an event.

The beta of our equity investments was determined by comparing the monthly total returns of the equity investments to monthly total returns of the S&P 500 over a three-year historical period. Since beta is historically based, projecting future price volatility using this method involves an inherent assumption that historical volatility and correlation relationships between stocks will not change in the future. Therefore, the illustrations noted above may not reflect our actual experience if future volatility and correlation relationships differ from the historical relationships.

At December 31, 2004 and 2003, we had separate accounts assets related to variable annuity and variable life contracts with account values totaling \$14.38 billion and \$13.43 billion, respectively. We earn contract charges as a percentage of these account values. In the event of an immediate decline of 10% in the account values due to equity market declines, we would have earned approximately \$24 million and \$21 million less in fee income at December 31, 2004 and December 31, 2003, respectively.

Variable annuity contracts sold by Allstate Financial have a GMDB and customers may choose to purchase an enhanced GMDB, guaranteed minimum income benefits ("GMIB") prior to 2004, a TrueReturnSM guaranteed minimum accumulation benefit ("GMAB") beginning in 2004, and beginning in 2005, a SureIncomeSM guaranteed minimum withdrawal benefit ("GMWB"). These guarantees subject us to additional equity market risk because the beneficiary or contractholder may receive a benefit that is greater than their corresponding account value. GMDBs are payable upon death. GMIBs may be exercised on or after the tenth-year anniversary (not prior to 2008) of the contract if the contractholder elects to receive a defined stream of payments ("annuitize"). GMABs are credited to the contractholder account on a contract anniversary date that is pre-determined by the contractholder, between the eighth and twentieth year after contract issue (not prior to 2012). GMABs guarantee an account value of up to 2.5 times (or 250%) of the amount deposited in the contract, depending on the amount of time the contract is in force and adherence to certain fund allocation requirements. GMWBs will be payable if the contractholder elects to take partial withdrawals. GMWBs guarantee that the contractholder can take annual partial withdrawals up to 8% of the amount deposited in the contract until their withdrawals total the initial deposit.

In January 2004, we established reserves for GMDBs and GMIBs in conjunction with the

adoption of SOP 03-1. Because of this change in accounting, guarantee payments will be recognized over future periods rather than expensed as paid. For more details see Notes 2 and 8 of the consolidated financial statements.

At December 31, 2004 and 2003, the guaranteed value of the death benefits in excess of account values was estimated to be \$1.80 billion and \$2.46 billion, respectively, net of reinsurance. The decrease in this estimate between periods is attributable to improved equity markets during 2004 and customer surrenders of contracts with in-the-money GMDBs. In both periods, approximately two-thirds of this exposure is related to the return of deposits guarantee, while the remaining one-third is attributable to a death benefit guarantee greater than the original deposits. In addition to reinsurance for a portion of these benefits, we entered into various derivative instruments beginning in 2003 to offset the risk of future death claims on substantially all new business issued on or after January 1, 2003. A similar program for GMABs was established in 2004 and a similar program for GMWBs will be established in 2005.

In the event of an immediate decline in account values of 10% due to equity market declines, payments for guaranteed death benefits at December 31, 2004 would increase by an estimated \$15 million in 2005. These payments would be charged against the related reserve rather than directly to earnings as paid. Contributions to the reserve for GMDBs would be reduced by approximately \$1 million in 2005 in the event of an immediate 10% decline in account values. For discussion of the accounting treatment, see Note 2 of the consolidated financial statements. The selection of a 10% immediate decrease should not be construed as our prediction of future market events, but only as an example to illustrate the potential effect on earnings and cash flow of equity market declines as a result of this guarantee. Also, our actual payment experience in the future may not be consistent with the assumptions used in the model.

GMIB contracts that we sold provide the contractholder with the right to annuitize based on the highest account value at any anniversary date or on a guaranteed earnings rate based on the initial account value over the specified period. The guaranteed income benefit feature was first offered in our variably annuity products beginning in 1998, with guaranteed benefits available for election by contractholders ten years after issue. Accordingly, the earliest date at which benefits would become payable is 2008. In the event of an immediate decline of 10% in contractholders' account values as of December 31, 2004 due to equity market declines, contributions to the reserve would be reduced by a nominal amount in 2005. For discussion of the accounting treatment, see Note 2 of the consolidated financial statements. The selection of a 10% immediate decrease should not be construed as our prediction of future market events, but only as an example to illustrate the potential effect on earnings and cash flow of equity market declines as a result of this guarantee.

In the event of an immediate decline of 10% in GMAB contractholders' account values as of December 31, 2004, due to equity market declines, there would be no net impact on our earnings because these benefits are fully hedged, however the reserve for GMABs would be increased by approximately \$5 million.

In addition to our GMDB, GMIB and GMAB equity risk, at December 31, 2004 and 2003 we had approximately \$2.02 billion and \$1.55 billion, respectively, in equity-indexed annuity liabilities that provide customers with interest crediting rates based on the performance of the S&P 500. We hedge the equity risk associated with these liabilities through the purchase and sale of equity-indexed options and futures, swap futures, and eurodollar futures, maintaining risk within specified value-at-risk limits.

Allstate Financial also is exposed to equity risk in DAC. Fluctuations in the value of the variable annuity and life contract account values due to the equity market affect DAC amortization, because the expected fee income and guaranteed benefits payable are components of the EGP for variable annuity and life contracts. For a more detailed discussion of DAC, see Note 2 of the consolidated financial statements and the Application of Critical Accounting Policies section of the MD&A.

AEGON

iv. Equity Market and Other Investment Risk

Fluctuations in the equity, real estate and capital markets have adversely affected AEGON's profitability, capital position and sales of equity related products in the past and may continue to do so. Exposure to equity, real estate and capital markets exists in both assets and liabilities. Asset exposure exists through direct equity investment, where AEGON bears all or most of the volatility in returns and investment performance risk. Significant terrorist actions, as well as general economic conditions, have led to and may continue to result in significant decreases in the value of AEGON's equity investments.

Liability exposure is present in equity-linked products whereby policyholder funds are invested in equities at the discretion of the policyholder, where most of the risk remains with the policyholder. Examples of these products include variable annuities, variable universal life, unit-linked products and mutual funds. AEGON typically earns a fee on the asset balance in these products and therefore has a risk related to the investment performance. In addition, some of this business has minimum return or accumulation guarantees, which are often life contingent or contingent upon policyholder persistency. AEGON is at risk if equity market returns do not exceed these guarantee levels and may need to set up additional reserves to fund these future guaranteed benefits. AEGON is also at risk if returns are not sufficient to allow amortization of deferred policyholder acquisition costs. It is possible under certain circumstances that AEGON would need to accelerate amortization of DPAC and to establish additional provisions for minimum guaranteed benefits, which would reduce net income and shareholders' equity. Volatile or poor market conditions may also significantly reduce the popularity of some of AEGON's savings and investment products, which could lead to lower sales and net income. AEGON's general account equity holdings are shown below:

TABLE 8*Equity, real estate and non-fixed income exposure in general account assets*

	AEGON Americas	AEGON The Netherlands	AEGON UK	Other Countries	Total
	(in USD)	(in EUR)	(in GBP)	(in EUR)	(in EUR)
<i>(amounts in millions)</i>					
Assets					
<i>Equity funds</i>	\$ 546	\$ 317	\$ 41	\$ 3	\$ 779
<i>Common shares¹</i>	629	2,541	15	30	3,054
<i>Preferred shares</i>	709	779		9	1,309
<i>Real estate</i>	783	1,675		50	2,300
<i>Hedge funds</i>	1,481	223			1,310
<i>Credit investment strategies</i>	306				225
Total equity, real estate and other non-fixed income exposure	\$ 4,455	\$ 5,534	\$ 56	\$ 92	\$ 8,977

1 Of the Netherlands common shares, EUR 643 million are invested in a property company and therefore internally viewed as real estate exposure. For the purpose of the sensitivities below this exposure is included in the real estate section.

The general account equity, real estate and other non-fixed income portfolio of AEGON USA and AEGON The Netherlands accounted for 98% of the total general account equity, real estate and other non-fixed income portfolio of the AEGON Group. Of AEGON's country units, AEGON The Netherlands holds the largest amount of equities, both in absolute terms and expressed as a percentage of total general account investments. The largest part of the equity portfolio of AEGON The Netherlands consists of a diversified portfolio of global equities and 5% equity holdings in Dutch companies, which include non-redeemable preferred shares.

The table below sets forth the year-end closing levels of certain major indices.

	2000	2001	Year-End 2002	2003	2004
<i>S&P 500</i>	\$ 1,320	\$ 1,148	\$ 880	\$ 1,112	\$ 1,212
<i>Nasdaq</i>	2,471	1,950	1,336	2,003	2,175
<i>FTSE 100</i>	6,222	5,217	3,940	4,477	4,814
<i>AEX</i>	638	507	323	338	348

AEGON's shareholders' equity is directly exposed to movements in the equity and real estate markets. Starting in 2004, we discontinued the indirect income method and instead recognizes realized gains and losses on equities and real estate in income, which may

lead to increased sensitivity of net income to movements in equity and real estate markets. In addition, net income is sensitive to the fees earned on equity investments held for the account of policyholders as well as the amortization of deferred policy acquisition costs and provisioning for minimum product guarantees.

Sensitivity analysis of net income and shareholders' equity to equity and real estate markets is presented in the table below.1,2,3

	<i>Estimated Approximate Effects on Net Income</i>	<i>Estimated Approximate Effects on Shareholders' Equity</i>
<i>Immediate change in:</i>		
<i>Equity increase 10%</i>	<i>EUR 126 million</i>	<i>EUR 371 million</i>
<i>Equity decrease 10%</i>	<i>EUR (96) million</i>	<i>EUR (341) million</i>
<i>Equity decrease 20%</i>	<i>EUR (287) million</i>	<i>EUR (693) million</i>
<i>Real estate increase 10%</i>	<i>EUR 0 million</i>	<i>EUR 176 million</i>
<i>Real estate decrease 10%</i>	<i>EUR (15) million</i>	<i>EUR (176) million</i>
<i>Real estate decrease 20%</i>	<i>EUR (43) million</i>	<i>EUR (352) million</i>

1. *The accounting basis used for this table is DAP. The effects should not be used as a guide in providing directional and approximate magnitude impact on net income and shareholders' equity in 2005 since starting January 1, 2005 AEGON adopted IFRS, which differs in significant respects from DAP in its treatment of the consequences of certain events, including interest rate changes, equity market changes and relative currency rate movements.*
2. *Basic assumptions: no correlation between markets and risks; unchanged conditions for all other assets and liabilities; limited management actions taken. All changes are relative to net income and shareholders' equity. Effects do not tend to be linear and therefore cannot be extrapolated for larger increases or decreases. The approximate effects on shareholders' equity exclude the effects on net income, which is presented above separately.*
3. *The effect of movements in equity and real estate markets is reflected as a one-time increase or decrease of worldwide equity and real estate markets on December 31, 2004.*

The sensitivity of shareholders' equity and net income to changes in equity and real estate markets reflects changes in the market value of AEGON's portfolio, changes in DPAC amortization, contributions to pension plans for AEGON's employees and the strengthening of the guaranteed minimum benefits, when applicable. The main reason for the non-linearity of results is that more severe scenarios can cause accelerated DPAC amortization and guaranteed minimum benefits provisioning, while moderate scenarios may not.

RISK MEASUREMENT; SENSITIVITY ANALYSIS

The Company measures market risk related to its holdings of invested assets and other financial instruments, including certain market risk sensitive insurance contracts, based on changes in interest rates, equity prices and currency exchange rates, utilizing a sensitivity analysis. This analysis estimates the potential changes in fair value, cash flows and earnings based on a hypothetical 10% change (increase or decrease) in interest rates, equity prices and currency exchange rates. The Company believes that a 10% change (increase or decrease) in these market rates and prices is reasonably possible in the near-term. In performing this analysis, the Company used market rates at December 31, 2004 to re-price its invested assets and other financial instruments. The sensitivity analysis separately calculated each of MetLife's market risk exposures (interest rate, equity price and foreign currency exchange rate) related to its non-trading invested assets and other financial instruments. The Company does not maintain a trading portfolio.

The sensitivity analysis performed included the market risk sensitive holdings described above. The Company modeled the impact of changes in market rates and prices on the fair values of its invested assets, earnings and cash flows as follows:

Fair values. The Company bases its potential change in fair values on an immediate change (increase or decrease) in:

- the net present values of its interest rate sensitive exposures resulting from a 10% change (increase or decrease) in interest rates;*
- the U.S. dollar equivalent balances of the Company's currency exposures due to a 10% change (increase or decrease) in currency exchange rates; and*
- the market value of its equity positions due to a 10% change (increase or decrease) in equity prices.*

Earnings and cash flows. MetLife calculates the potential change in earnings and cash flows on the change in its earnings and cash flows over a one-year period based on an immediate 10% change (increase or decrease) in market rates and equity prices. The following factors were incorporated into the earnings and cash flows sensitivity analyses:

- the reinvestment of fixed maturity securities;*
- the reinvestment of payments and prepayments of principal related to mortgage-backed securities;*
- the re-estimation of prepayment rates on mortgage-backed securities for each*

10% change (increase or decrease) in the interest rates; and

- *the expected turnover (sales) of fixed maturities and equity securities, including the reinvestment of the resulting proceeds.*

The sensitivity analysis is an estimate and should not be viewed as predictive of the Company's future financial performance. The Company cannot assure that its actual losses in any particular year will not exceed the amounts indicated in the table below. Limitations related to this sensitivity analysis include:

- *the market risk information is limited by the assumptions and parameters established in creating the related sensitivity analysis, including the impact of prepayment rates on mortgages;*
- *for derivatives which qualify as hedges, the impact on reported earnings may be materially different from the change in market values;*
- *the analysis excludes other significant real estate holdings and liabilities pursuant to insurance contracts; and*
- *the model assumes that the composition of assets and liabilities remains unchanged throughout the year.*

Accordingly, the Company uses such models as tools and not substitutes for the experience and judgment of its corporate risk and asset/liability management personnel.

Based on its analysis of the impact of a 10% change (increase or decrease) in market rates and prices, MetLife has determined that such a change could have a material adverse effect on the fair value of its interest rate sensitive invested assets. The equity and foreign currency portfolios do not expose the Company to material market risk.

The table below illustrates the potential loss in fair value of the Company's interest rate sensitive financial instruments at December 31, 2004. In addition, the potential loss with respect to the fair value of currency exchange rates and the Company's equity price sensitive positions at December 31, 2004 is set forth in the table below.

The potential loss in fair value for each market risk exposure of the Company's portfolio, all of which is non-trading, as of the period indicated was:

	December 31, 2004
	<u>(Dollars In Millions)</u>
<i>Interest rate risk</i>	\$ 3,650
<i>Equity price risk</i>	167
<i>Foreign currency exchange rate risk</i>	601

Phoenix

Equity Risk Management

Equity risk is the risk that we will incur economic losses due to adverse changes in equity prices. Our exposure to changes in equity prices primarily results from our commitment to fund our variable annuity and variable life products, as well as from our holdings of common stocks, mutual funds and other equities. We manage our insurance liability risks on an integrated basis with other risks through our liability and risk management and capital and other asset allocation strategies. We also manage equity price risk through industry and issuer diversification and asset allocation techniques. We held \$391.6 million in equity securities, including \$87.3 million in trading equity securities, on our balance sheet as of December 31, 2004. A 10% decline or increase in the relevant equity price would have decreased or increased, respectively, the value of these assets by approximately \$39.2 million as of December 31, 2004.

Certain annuity products sold by our Life Companies contain guaranteed minimum death benefits. The guaranteed minimum death benefit feature provides annuity contract holders with a guarantee that the benefit received at death will be no less than a prescribed amount. This minimum amount is based on the net deposits paid into the contract, the net deposits accumulated at a specified rate, the highest historical account value on a contract anniversary, or more typically, the greatest of these values. To the extent that the guaranteed minimum death benefit is higher than the current account value at the time of death, the company incurs a cost. This typically results in an increase in annuity policy benefits in periods of declining financial markets and in periods of stable financial markets following a decline. As of December 31, 2004 and 2003, the difference between the guaranteed minimum death benefit and the current account value (net amount at risk) for all existing contracts was \$123.5 and \$183.1 million, respectively. This is our exposure to loss should all of our contractholders have died on either December 31, 2004 or December 31, 2003.

	<u>2004</u>	<u>2003</u>
	<i>(\$ amounts in millions)</i>	
<i>Guaranteed Minimum Death Benefit Exposure:</i>		
<i>Net amount at risk on minimum guaranteed death benefits (before reinsurance)</i>	\$ 441.1	\$ 616.9
<i>Net amount at risk reinsured</i>	<u>(317.6)</u>	<u>(433.8)</u>
<i>Net amount at risk on minimum guaranteed death benefits (after reinsurance)</i>	<u>\$ 123.5</u>	<u>\$ 183.1</u>
 <i>Weighted-average age of contractholder</i>	 61	 61

	<i>Year Ended December 31</i>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	<i>(\$ amounts in millions)</i>		
<i>Payments Related to Guaranteed Minimum Death Benefits Net of Reinsurance Recoveries:</i>			
<i>Death claims payments before reinsurance</i>	\$ 5.4	\$ 7.7	\$ 8.6
<i>Reinsurance recoveries</i>	<u>(3.0)</u>	<u>(5.1)</u>	<u>(6.4)</u>
<i>Net death claims payments</i>	<u>\$ 2.4</u>	<u>\$ 2.6</u>	<u>\$ 2.2</u>

We establish a reserve for guaranteed minimum death benefits using a methodology consistent with the AICPA SOP No. 03-01, Accounting and Reporting by Insurance Enterprises for Certain Non-traditional Long Duration Contracts and for Separate Accounts. This reserve is determined using the net amount at risk taking into account estimates for mortality, equity market returns, and voluntary terminations under a wide range of scenarios at December 31, 2004 and 2003.

	<i>As of December 31</i>	
	<u>2004</u>	<u>2003</u>
	<i>(\$ amounts in millions)</i>	
<i>Reserves Related to Guaranteed Minimum Death Benefits, Net of Reinsurance Recoverables:</i>		
<i>Statutory reserve (after reinsurance)</i>	\$ 15.0	\$ 17.3
<i>GAAP reserve (after reinsurance)</i>	9.1	7.6

We also provide reserves for guaranteed minimum income benefits and guaranteed payout annuity floor benefits. The statutory reserves for these totaled \$2.3 million and \$2.0 million at December 31, 2004 and 2003, respectively. The GAAP reserves for these totaled \$1.6 million and \$0.4 million at December 31, 2004 and 2003, respectively.

	<i>As of December 31</i>		
	<i>-10%</i>		<i>+ 10%</i>
	<i>Equity</i>	<i>Carrying</i>	<i>Equity</i>
	<i>Market</i>	<i>Value</i>	<i>Market</i>
	<i>(\$ amounts in millions)</i>		
<i>Interest Rate Sensitivity of Deferred Policy</i>			
<i>Acquisition Cost Asset and Guaranteed</i>			
<i>Minimum Death Benefit Liability:</i>			
<i>Deferred policy acquisition costs (variable annuities)</i>	\$ 283.0	\$ 286.0	\$ 289.3
<i>Deferred policy acquisition costs (variable universal life)</i>	325.2	326.4	327.0
<i>Guaranteed minimum death benefit liability (variable annuities)</i>	12.1	9.1	7.1

See Note 3 to our consolidated financial statements in this Form 10-K for more information regarding deferred policy acquisition costs.

Certain annuity products sold by our Life Companies contain guaranteed minimum living benefits. These include guaranteed minimum accumulation and income benefits. We have established a hedging program for managing the risk associated with our new guaranteed minimum accumulation benefit feature. As of December 31, 2004, sales of that benefit had not yet created a significant enough exposure to meet our requirement for executing a derivative transaction under that hedge program. We continue to analyze and refine our strategies for managing risk exposures associated with all our separate account guarantees.

We sponsor defined benefit pension plans for our employees. For GAAP accounting purposes, we assumed an 8.5% long-term rate of return on plan assets in the most recent valuations, performed as of September 30, 2004, May 31, 2004 and January 1, 2004. To the extent there are deviations in actual returns, there will be changes in our projected expense and funding requirements. As of December 31, 2004, the projected benefit obligation for our defined benefit plans was in excess of plan assets by \$237.2 million. We expect to contribute \$43.3 million to the employee pension plan through 2009, including \$6.5 million during 2005. As of May 31, 2004 we revalued our employee benefit assets and liabilities in connection with the sale of our retail affiliated broker-dealer operations. As a result of the revaluation, we recognized a net curtailment gain of \$6.8 million (\$4.4 million after taxes). In addition, as of September 30, 2004 we revalued our employee benefit assets and liabilities in connection with employee terminations associated with the information technology services agreement EDS. As a result of this revaluation, we recognized an additional net curtailment gain of \$1.6 million (\$1.1 million after taxes) for the year ended December 31, 2004. For the estimated 2004 contribution, quarterly payments of \$2.5 million each were made to the pension plan in April, July and October 2004. In September 2004, we made a payment of \$1.6 million, related to the 2003 minimum contribution. See Note 11 to our consolidated financial

statements in this Form 10-K for more information on our employee benefit plans.

Risk from Benefit Guarantees

The following shows the disclosure practices from 2004 10-K filings related to the risk from benefit guarantees at three companies (CIGNA, John Hancock, and Prudential). The primary source of disclosure here is provided in recognition of SOP 03-1. As with other examples in this appendix, it is important to recognize that differences in the relative materiality of the companies' benefit guarantees may explain differences in disclosure. Also, because CIGNA's exposure to guaranteed benefits is from its activities as a reinsurer, some of its disclosures may be expected to differ from those of a direct writer.

CIGNA

The table that follows presents information about CIGNA's most critical accounting estimates, as well as the effects of hypothetical changes in the material assumptions used to develop each estimate.

<i>Balance Sheet Caption/Nature of Critical Estimate Item</i>	<i>Assumptions / Approach Used</i>	<i>Effect if Different Assumptions Used</i>
<p><i>Future policy benefits – Guaranteed minimum death benefits</i></p> <p><i>These liabilities are estimates of the present value of net amounts expected to be paid, less the present value of net future premiums expected to be received. The amounts to be paid represent the excess of the guaranteed death benefit over the values of contractholders' accounts. The death benefit coverage in force at December 31, 2004 (representing the amount payable if all contractholders had died as of that date) was approximately \$9.0 billion.</i></p>	<p><i>Management estimates these liabilities based on assumptions regarding lapse, partial surrender, mortality, interest rates (mean investment performance and discount rate), volatility and other considerations. These assumptions are based on CIGNA's experience and future expectations. CIGNA monitors actual experience to update these liability estimates as necessary.</i></p> <p><i>Lapse refers to the full surrender of an annuity prior to a contractholder's death.</i></p> <p><i>Partial surrender refers to the fact that most</i></p>	<p><i>If a 10% unfavorable change were to occur for the following assumptions, the approximate after-tax decrease in net income would be as follows:</i></p> <ul style="list-style-type: none"> <i>• Mortality – \$70 million</i> <i>• Volatility – \$50 million</i> <i>• Lapse – \$35 million</i> <i>• Interest rates:</i> <ul style="list-style-type: none"> <i>• Mean investment performance – \$45 million</i> <i>• Discount rate – \$35 million</i> <i>• Future partial</i>

CIGNA had liabilities for future policy benefits for these contracts of approximately \$1.0 billion as of December 31, 2004 and \$1.2 billion as of December 31, 2003.

contractholders have the ability to withdraw substantially all of their mutual fund investments while retaining any available death benefit coverage in effect at the time of the withdrawal. Equity market declines could expose CIGNA to higher rates of partial surrender, the effect of which is not covered by the program to substantially reduce equity market risks.

Interest rates include both (a) the mean investment performance assumption considering CIGNA's program to reduce equity market exposures using futures and forward contracts, and (b) the liability discount rate assumption.

Volatility refers to market volatility that affects the costs of the program adopted by CIGNA to reduce equity market risks associated with these liabilities.

CIGNA completed a review of liabilities in 2003 and recognized an after-tax charge of \$286 million (\$441 million pre-tax) relating to both actual and projected future partial surrenders, as well as updates to other assumptions such as mortality.

surrenders – \$5 million

Management believes the current assumptions and other considerations used to estimate these liabilities are appropriate. However, if actual experience differs from the assumptions and other considerations (including lapse, partial surrender, mortality, interest rates and volatility) used in estimating these liabilities, the resulting changes could have a material adverse effect on CIGNA's consolidated results of operations, and in certain situations, could have a material adverse effect on CIGNA's financial condition.

The amounts would be reflected in the Run-off Reinsurance segment.

In addition, CIGNA recorded a \$720 million after-tax charge (\$1.1 billion pre-tax) in 2002 in connection with stock market declines and implementation of a risk reduction program for these liabilities.

[See Note 6](#) to the Financial Statements for additional information.

Other Matters

Guaranteed minimum death benefit contracts. CIGNA's reinsurance operations, which were discontinued in 2000 and are now an inactive business in run-off mode, reinsured a guaranteed minimum death benefit under certain variable annuities issued by other insurance companies. These variable annuities are essentially investments in mutual funds combined with a death benefit. CIGNA has equity market exposures as a result of this product.

The majority of CIGNA's exposure arises under annuities that guarantee that the benefit received at death will be no less than the highest historical account value of the related mutual fund investments on a contractholder's anniversary date. Under this type of death benefit, CIGNA is liable to the extent the highest historical anniversary account value exceeds the fair value of the related mutual fund investments at the time of a contractholder's death. Other annuity designs that CIGNA reinsured guarantee that the benefit received at death will be:

- the contractholder's account value as of the last anniversary date (anniversary reset); or*
- no less than net deposits paid into the contract accumulated at a specified rate or net deposits paid into the contract.*

In periods of declining equity markets and in periods of flat equity markets following a decline, CIGNA's liabilities for these guaranteed minimum death benefits increase. Similarly, in periods of rising equity markets, CIGNA's liabilities for these guaranteed minimum death benefits decrease. Beginning in 2002, with the implementation of the program to reduce equity market exposure discussed below, the favorable/unfavorable effects of the equity market on the reserve are largely offset in other revenues as a result of the related gains or losses.

Activity in future policy benefit reserves for these guaranteed minimum death benefit contracts was as follows:

	2004	2003	2002
	(in millions)		
Balance at January 1	\$ 1,182	\$ 1,427	\$ 305
Less: Reinsurance recoverable	52	66	17
Add: Incurred benefits	(28)	53	1,273
Less: Paid benefits	144	284	200
Add: Reinsurance recoverable	30	52	66
Balance at December 31	<u>\$ 988</u>	<u>\$ 1,182</u>	<u>\$ 1,427</u>

Benefits paid and incurred are net of ceded amounts. Incurred benefits reflect the favorable/unfavorable impact of a rising/falling equity market on the liability. As discussed above, losses/gains have been recorded in other revenues as a result of the program. In addition, incurred benefits in 2003 and 2002 reflect the impact of the reserve actions discussed below.

The determination of liabilities for guaranteed minimum death benefits requires CIGNA to make critical accounting estimates. CIGNA describes the assumptions used to develop the reserves for these death benefits, and provides the effects of hypothetical changes in those assumptions on [page 22](#) . [See Note 6](#) to the Financial Statements for additional information about these assumptions.

Guaranteed minimum income benefit contracts. CIGNA's reinsurance operations, which were discontinued in 2000 and are now an inactive business in run-off mode, reinsured variable annuity contracts that provide annuitants with certain guarantees related to minimum income benefits. When annuitants elect to receive these minimum income benefits, CIGNA may be required to make payments based on changes in underlying mutual fund values and interest rates. See page 8 for additional information on critical accounting estimates for these contracts.

CIGNA is required to disclose the maximum potential undiscounted future payments for guarantees related to minimum income benefits using hypothetical worse-case assumptions defined as follows:

- No annuitants surrendered their accounts; and
- All annuitants lived to elect their benefit; and
- All annuitants elected to receive their benefit on the earliest available date (beginning in 2005 through 2014); and

- *All underlying mutual fund investment values remained at the December 31, 2004, value of \$3.4 billion, with no future returns.*

The maximum potential undiscounted payment that CIGNA would make under those assumptions would aggregate to \$1.7 billion before reinsurance recoveries. CIGNA believes the likelihood of such payment is remote. CIGNA has purchased reinsurance from third parties which covers 55% of the exposures on these contracts. CIGNA expects the amount of actual payments to be significantly less than this hypothetical undiscounted aggregate amount.

As of December 31, 2004, CIGNA had liabilities of \$71 million related to these contracts and net amounts recoverable from reinsurers of \$39 million. CIGNA had an additional liability of \$41 million associated with the cost of reinsurance as of December 31, 2004.

As of December 31, 2003, CIGNA had liabilities of \$74 million related to these contracts and amounts recoverable from reinsurers of \$51 million. CIGNA also had an additional liability of \$40 million associated with the cost of reinsurance as of December 31, 2003.

[See Note 7\(H\)](#) to the Financial Statements for further information.

Note 6 – Guaranteed Minimum Death Benefit Contracts

CIGNA’s reinsurance operations, which were discontinued in 2000 and are now an inactive business in run-off mode, reinsured a guaranteed minimum death benefit under certain variable annuities issued by other insurance companies. These variable annuities are essentially investments in mutual funds combined with a death benefit. CIGNA has equity market exposures as a result of this product.

The majority of CIGNA’s exposure arises under annuities that guarantee that the benefit received at death will be no less than the highest historical account value of the related mutual fund investments on a contractholder’s anniversary date. Under this type of death benefit, CIGNA is liable to the extent the highest historical anniversary account value exceeds the fair value of the related mutual fund investments at the time of contractholder’s death. Other annuity designs that CIGNA reinsured guarantee that the benefit received at death will be:

- *the contractholder’s account value as of the last anniversary date (anniversary reset); or*
- *no less than net deposits paid into the contract accumulated at a specified rate or net deposits paid into the contract.*

In periods of declining equity markets and in periods of flat equity markets following a decline, CIGNA’s liabilities for these guaranteed minimum death benefits increase. Similarly, in periods of rising equity markets, CIGNA’s liabilities for these guaranteed minimum death benefits decrease. Beginning in 2002, with the implementation of the

program to reduce equity market exposures discussed below, the favorable/unfavorable effects of the equity market on the reserve are largely offset in other revenues as a result of the related gains or losses.

Activity in future policy benefit reserves for these guaranteed minimum death benefit contracts was as follows:

	2004	2003	2002
	(in millions)		
Balance at January 1	\$ 1,182	\$ 1,427	\$ 305
Less: Reinsurance recoverable	52	66	17
Add: Incurred benefits	(28)	53	1,273
Less: Paid benefits	144	284	200
Add: Reinsurance recoverable	30	52	66
Balance at December 31	<u>\$ 988</u>	<u>\$ 1,182</u>	<u>\$ 1,427</u>

Benefits paid and incurred are net of ceded amounts.

Management estimates reserves for variable annuity death benefit exposures based on assumptions regarding lapse, partial surrender, mortality, interest rates (mean investment performance and discount rate), volatility and other considerations. These estimates are based on CIGNA's experience and future expectations. CIGNA monitors actual experience to update these reserve estimates as necessary.

Lapse refers to the full surrender of an annuity prior to a contractholder's death. Partial surrender refers to the fact that most contractholders have the ability to withdraw substantially all of their mutual fund investments while retaining the death benefit coverage in effect at the time of the withdrawal. Mean investment performance and volatility refer to the market return and market volatility respectively that affects the costs of the program adopted by CIGNA to reduce equity market risks associated with these liabilities.

CIGNA regularly evaluates the assumptions used in establishing reserves and changes its estimates if actual experience or other evidence suggests that earlier assumptions should be revised. If actual experience differs from the assumptions and other considerations used in estimating these reserves, the resulting change could have a material adverse effect on CIGNA's consolidated results of operations, and in certain situations, could have a material adverse effect on CIGNA's financial condition. [See page 22](#) for the effects of hypothetical changes in those assumptions.

The following provides information about CIGNA's reserving methodology and assumptions for guaranteed minimum death benefits for December 31, 2004.

- The reserves represent estimates of the present value of net amounts expected to be paid, less the present value of net future premiums. Included in net

amounts expected to be paid is the excess of the guaranteed death benefits over the values of the contractholders' accounts (based on underlying equity and bond mutual fund investments).

- The reserves include an estimate for partial surrenders that essentially lock in the death benefit for a particular policy based on annual election rates that vary from 0-14% depending on the net amount at risk for each policy.
- The mean investment performance assumption is 5% considering CIGNA's program to reduce equity market exposures using futures and forward contracts (described below).
- The volatility assumption is 15-30%, varying by equity fund type; 3-8%, varying by bond fund type; and 1% for money market funds.
- The mortality assumption is 70-75% of the 1994 Group Annuity Mortality table, with 1% annual improvement beginning January 1, 2000.
- The lapse rate assumption is 0-15%, depending on contract type, policy duration and the ratio of the net amount at risk to account value.

The table below presents the account value, net amount at risk and average attained age of underlying contractholders for guarantees in the event of death, by type of benefit as of December 31. The net amount at risk is the death benefit coverage in force or the amount that CIGNA would have to pay if all contractholders had died as of the specified date, and represents the excess of the guaranteed benefit amount over the fair value of the underlying mutual fund investments.

	<u>2004</u>	<u>2003</u>
	<i>(dollars in millions)</i>	
<i>Highest anniversary annuity value</i>		
<i>Account value</i>	\$ 38,249	\$ 41,497
<i>Net amount at risk</i>	7,725	10,951
<i>Average attained age of contractholders</i>	65	65
<i>Anniversary value reset</i>		
<i>Account value</i>	3,147	4,474
<i>Net amount at risk</i>	178	309
<i>Average attained age of contractholders</i>	60	59
<i>Other</i>		
<i>Account value</i>	4,306	6,530
<i>Net amount at risk</i>	1,080	1,660
<i>Average attained age of contractholders</i>	64	64
<i>Total</i>		
<i>Account value</i>	45,702	52,501
<i>Net amount at risk</i>	8,983	12,920
<i>Average attained age of contractholders (weighted by exposure)</i>	65	64
<i>Number of contractholders</i>	<u>\$1.2 million</u>	<u>\$1.4 million</u>

C. Guaranteed Minimum Income Benefit Contracts

CIGNA's reinsurance operations, which were discontinued in 2000 and are now an inactive business in run-off mode, reinsured variable annuity contracts that provide annuitants with certain guarantees related to minimum income benefits. When annuitants elect to receive these minimum income benefits, CIGNA may be required to make payments based on changes in underlying mutual fund values and interest rates.

CIGNA estimates the fair value of the assets and liabilities associated with these contracts using assumptions as to market returns and volatility of the underlying equity and bond mutual fund investments, interest rates, mortality, lapse, credit risk and annuity election rates.

Interest rates include both (a) the liability discount rate assumption and (b) the projected interest rates used to calculate the reinsured income benefit at the time of annuitization. Lapse refers to the full surrender of an annuity prior to annuitization of the policy. Credit risk refers to the ability of these reinsurers to pay (see below). Annuity election rates refer to the proportion of annuitants who elect to receive their income benefit as an annuity.

CIGNA regularly evaluates the assumptions used in establishing these assets and liabilities and changes its estimates if actual experience or other evidence suggests that earlier assumptions should be revised. If actual experience differs from the assumptions and other considerations used in estimating these assets and liabilities, the resulting change could have a material adverse effect on CIGNA's consolidated results of operations, and in certain situations, could have a material adverse effect on CIGNA's financial condition. [See page 22](#) for the effects of hypothetical changes in those assumptions.

The following provides information about the assumptions used in calculating the assets and liabilities for guaranteed minimum income benefits:

- These liabilities represent estimates of the present value of net amounts expected to be paid, less the present value of net future premiums expected to be received. Included in net amounts expected to be paid is the excess of the expected value of the income benefits over the values of the annuitant's accounts at the time of annuitization. The assets associated with these contracts represent receivables in connection with reinsurance that CIGNA has purchased from third parties (see below)*
- The market return assumption is 9-12% varying by equity fund type; 6-9% varying by bond fund type; and 5-6% for money market funds.*

- *The volatility assumption is 14-24%, varying by equity fund type; 6-7%, varying by bond fund type; and 2-3% for money market funds.*
- *The discount rate is 5.75%.*
- *The projected interest rate used to calculate the reinsured income benefits at the time of annuitization varies by economic scenario, reflects interest rates as of the valuation date, and has a long term mean rate of 5-6% and a standard deviation of 12-13%.*
- *The mortality assumption is 75% of the 1994 Group Annuity Mortality table, with 1% annual improvement beginning January 1, 2000.*
- *The lapse rate assumption is 2-15%, depending on policy duration.*
- *The annuity election rate assumption is that no more than 5% of the policies eligible to annuitize their variable annuity contracts will do so each year.*

CIGNA is required to disclose the maximum potential undiscounted future payments for guarantees related to minimum income benefits using hypothetical worse-case assumptions, defined as follows:

- *No annuitants surrendered their accounts; and*
- *All annuitants lived to elect their benefit; and*
- *All annuitants elected to receive their benefit on the earliest available date (beginning in 2005 through 2014); and*
- *All underlying mutual fund investment values remained at the December 31, 2004 value of \$3.4 billion, with no future returns.*

The maximum potential undiscounted payments that CIGNA would make under those assumptions would aggregate to \$1.7 billion before reinsurance recoveries. CIGNA believes the likelihood of such payment is remote and CIGNA expects the amount of actual payments to be significantly less than this hypothetical undiscounted aggregate amount. CIGNA has purchased reinsurance from third parties which covers 55% of the exposures on these contracts.

As of December 31, 2004, CIGNA had liabilities of \$71 million related to these contracts and net amounts recoverable from reinsurers of \$39 million. CIGNA had an additional liability of \$41 million associated with the cost of reinsurance as of December 31, 2004. As of December 31, 2003, CIGNA had liabilities of \$74 million related to these contracts and amounts recoverable from reinsurers of \$51 million. CIGNA also had an additional liability of \$40 million associated with the cost of reinsurance as of December 31, 2003.

Management believes the current assumptions used to estimate these liabilities are appropriate. See Note 7(H) to the Financial Statements for further information.

John Hancock

At December 31, 2004 and December 31, 2003, the Company had the following variable life contracts with guarantees. For guarantees of amounts in the event of death, the net amount at risk is defined as the excess of the initial sum insured over the current sum insured for fixed premium variable life contracts, and, for other variable life contracts, is equal to the sum insured when the account value is assumed to be zero and the policy is still in force.

	December 31	
	2004	2003
	(in millions, except for age)	
<i>Life contracts with guaranteed benefits in the event of death:</i>		
Account value	\$ 6,899.0	\$ 6,249.4
Net amount at risk related to deposits	117.5	106.2
Average attained age of contractholders	44	46

The variable annuity contracts are issued through separate accounts and the Company contractually guarantees to the contract holder either (a) return of no less than total deposits made to the contract less any partial withdrawals, (b) total deposits made to the contract less any partial withdrawals plus a minimum return, (c) the highest contract value on a specified anniversary date minus any withdrawals following the contract anniversary or (d) a combination benefit of (b) and (c) above. Most business issued after May 2003 has a proportional partial withdrawal benefit instead of a dollar-for-dollar relationship. These variable annuity contract guarantees include benefits that are payable in the event of death or annuitization, or at specified dates during the accumulation period.

At December 31, 2004 and December 31, 2003, the Company had the following variable contracts with guarantees. The Company's variable annuity contracts with guarantees may offer more than one type of guarantee in each contract; therefore, the amounts listed are not mutually exclusive. For guarantees of amounts in the event of death, the net amount at risk is defined as the current guaranteed minimum death benefit in excess of the current account balance at the balance sheet date. For guarantees of amounts at annuitization, the net amount at risk is defined as the present value of the minimum guaranteed annuity payments available to the contract holder determined in accordance with the terms of the contract in excess of the current account balance. For guarantees of accumulation balances, the net amount at risk is defined as the guaranteed minimum accumulation balance minus the current account balance.

	<i>December 31</i>	
	<i>2004</i>	<i>2003</i>
	<i>(in millions, except for ages and percents)</i>	
<i>Return of net deposits in the event of death:</i>		
Account value	\$ 3,273.7	\$ 6,776.9
Net amount at risk	121.5	359.9
Average attained age of contractholders	64	58
 <i>Return of net deposits plus a minimum return in the event of death:</i>		
Account value	985.2	1,051.7
Net amount at risk	212.9	230.7
Average attained age of contractholders	65	63
Guaranteed minimum return rate	5%	5%
 <i>Accumulation at specified date:</i>		
Account value	--	636.0
Net amount at risk	--	20.3
Average attained age of contractholders	--	55
Range of guaranteed minimum return rates	--	--
 <i>At annuitization:</i>		
Account value	212.0	169.4
Net amount at risk	21.0	--
Average attained age of contractholders	59	57
Range of guaranteed minimum return rates	4-5%	4-5%
 <i>Highest specified anniversary account value minus withdrawals post anniversary in the event of death:</i>		
Account value	1,177.0	3,959.3
Net amount at risk	139.2	566.2
Average attained age of contractholders	63	59

Account balances of variable contracts with guarantees were invested in variable separate accounts in various mutual funds which included foreign and domestic equities and bonds as shown below:

	<u>2004</u>	<u>2003</u>
	<i>(in millions)</i>	
Type of Fund		
<i>Domestic Equity - Growth Funds</i>	\$ 3,031.6	\$ 3,409.0
<i>Domestic Bond Funds</i>	2,211.2	2,737.9
<i>Domestic Equity - Growth & Income Funds</i>	2,348.1	2,341.2
<i>Balanced Investment Funds</i>	2,103.5	2,840.5
<i>Domestic Equity - Value Funds</i>	1,097.8	865.0
<i>Canadian Equity Funds</i>	--	1,555.3
<i>International Equity Funds</i>	902.9	853.2
<i>International Bond Funds</i>	119.4	107.3
<i>Hedge Funds</i>	31.8	22.7
Total	<u>\$ 11,846.3</u>	<u>\$ 14,732.1</u>

The following table summarizes the liabilities for guarantees on variable contracts reflected in the general account:

	Guaranteed Minimum Death Benefit (GMDB)	Guaranteed Minimum Income Benefit (GMIB)	Totals
	<i>(in millions)</i>		
<i>Balance at January 1, 2004</i>	\$ 32.9	\$ 1.0	\$ 33.9
<i>Incurred guarantee benefits</i>	5.1	0.0	5.1
<i>Fair value adjustment at Manulife acquisition</i>	7.9	0.6	8.5
<i>Paid guarantee benefits</i>	(8.7)	0.0	(8.7)
Balance at December 31, 2004	<u>\$ 37.2</u>	<u>\$ 1.6</u>	<u>\$ 38.8</u>

The GMDB liability is determined each period end by estimating the expected value of death benefits in excess of the projected account balance and recognizing the excess ratably over the accumulation period based on total expected assessments. The Company regularly evaluates estimates used and adjusts the additional liability balance, with a related charge or credit to benefit expense, if actual experience or other evidence suggests that earlier assumptions should be revised. The following assumptions and methodology were used to determine the GMDB liability at December 31, 2004.

- Data used included 200 and 1,000 (for annuity and life contracts, respectively) stochastically generated investment performance scenarios.
- Volatility assumptions depended on mix of investments by contract type and ranged between 13.8% (life products) and 19% (annuity products).
- Life products used purchase GAAP mortality, lapse, mean investment performance, and discount rate assumptions included in the related deferred

acquisition cost (DAC) and value of business acquired (VOBA) models which varied by product.

- *Mean investment performance assumption for annuity contracts was 8.67%.*
- *Annuity mortality was assumed to be 100% of the Annuity 2000 Table for the Life Company annuities and 100% of the a-83 Basic Table for Maritime annuities.*
- *Annuity lapse rates vary by contract type and duration and range from 1% to 20%.*
- *Annuity discount rate was 6.5%.*

The guaranteed minimum income benefit (GMIB) liability represents the expected value of the annuitization benefits in excess of the projected account balance at the date of annuitization, recognizing the excess ratably over the accumulation period based on total expected assessments. The Company regularly evaluates estimates used and adjusts the additional liability balance, with a related charge or credit to benefit expense, if actual experience or other evidence suggests that earlier assumptions should be revised. The guaranteed minimum accumulation benefit (GMAB) liability is determined each period end by calculating the highest investment value occurring ten or more years prior to each contract's maturity, applying the guaranteed rates of 75% or 100% depending upon the type of contract and adjusting the results proportionately for any new deposits or withdrawals within the final ten years to maturity.

Prudential

8. CERTAIN NONTRADITIONAL LONG-DURATION CONTRACTS

The Company issues traditional variable annuity contracts through its separate accounts for which investment income and investment gains and losses accrue directly to, and investment risk is borne by, the contractholder. The Company also issues variable annuity contracts with general and separate account options where the Company contractually guarantees to the contractholder a return of no less than (a) total deposits made to the contract less any partial withdrawals ("return of net deposits"), (b) total deposits made to the contract less any partial withdrawals plus a minimum return ("minimum return"), or (c) the highest contract value on a specified anniversary date minus any withdrawals following the contract anniversary ("anniversary contract value"). These guarantees include benefits that are payable in the event of death, annuitization or at specified dates during the accumulation period.

The Company also issues annuity contracts with market value adjusted investment options ("MVAs"), which provide for a return of principal plus a fixed rate of return if held to maturity, or, alternatively, a "market adjusted value" if surrendered prior to

maturity. The market value adjustment may result in a gain or loss to the Company, depending on crediting rates or an indexed rate at surrender, as applicable.

In addition, the Company issues variable life, variable universal life and universal life contracts where the Company contractually guarantees to the contractholder a death benefit even when there is insufficient value to cover monthly mortality and expense charges, whereas otherwise the contract would typically lapse (“no lapse guarantee”). Variable life and variable universal life contracts are offered with general and separate account options.

The assets supporting the variable portion of both traditional variable annuities and certain variable contracts with guarantees are carried at fair value and reported as “Separate account assets” with an equivalent amount reported as “Separate account liabilities.” Amounts assessed against the contractholders for mortality, administration, and other services are included within revenue in “Policy charges and fee income” and changes in liabilities for minimum guarantees are generally included in “Policyholders’ benefits.” In 2004 there were no gains or losses on transfers of assets from the general account to a separate account.

For those guarantees of benefits that are payable in the event of death, the net amount at risk is generally defined as the current guaranteed minimum death benefit in excess of the current account balance at the balance sheet date. For guarantees of benefits that are payable at annuitization, the net amount at risk is generally defined as the present value of the minimum guaranteed annuity payments available to the contractholder determined in accordance with the terms of the contract in excess of the current account balance. For guarantees of accumulation balances, the net amount at risk is generally defined as the guaranteed minimum accumulation balance minus the current account balance. The Company’s contracts with guarantees may offer more than one type of guarantee in each contract; therefore, the amounts listed may not be mutually exclusive. As of December 31, 2004, the Company had the following guarantees associated with these contracts, by product and guarantee type:

	<i>In the Event of Death</i>	<i>At Annuitization/ Accumulation</i>
	<i>(dollars in millions)</i>	
<i>Variable Annuity Contracts</i>		
<i>Return of net deposits</i>		
<i>Account value</i>	\$ 30,097	\$ N/A
<i>Net amount at risk</i>	2,789	N/A
<i>Average attained age of contractholders</i>	62 years	N/A
<i>Minimum return or anniversary contract value</i>		
<i>Account value</i>	15,816	8,672
<i>Net amount at risk</i>	1,649	3
<i>Average attained age of contractholders</i>	65 years	59 years
<i>Average period remaining until earliest expected annuitization</i>	N/A	6 years

	<i>Unadjusted Value</i>	<i>Adjusted Value</i>
<i>Market value adjusted annuities</i>		
<i>Account value</i>	\$ 1,680	\$ 1,753
		<i>December 31, 2004</i>
		<i>In the Event of</i>
		<i>Death</i>
		<u>(dollars in millions)</u>
<i>Variable Life, Variable Universal Life and Universal Life</i>		
<i>Contracts</i>		
<i>No lapse guarantees</i>		
<i>Separate account value</i>	\$ 1,651	
<i>General account value</i>		2,292
<i>Net amount at risk</i>		59,923
<i>Average attained age of contractholders</i>		39 years

Account balances of variable annuity contracts with guarantees were invested in separate account investment options as follows:

	<i>December 31, 2004</i>
	<u>(in millions)</u>
<i>Equity funds</i>	\$ 27,714
<i>Bond funds</i>	6,173
<i>Balanced funds</i>	2,737
<i>Money market funds</i>	1,777
<i>Other</i>	2,266
<i>Total</i>	<u>\$ 40,667</u>

In addition to the amounts invested in separate account investment options above, \$5,246 million of account balances of variable annuity contracts with guarantees, inclusive of contracts with MVA features, were invested in general account investment options.

Liabilities For Guarantee Benefits

The table below summarizes the changes in general account liabilities for guarantees on variable contracts. The liabilities for guaranteed minimum death benefits (“GMDB”) and guaranteed minimum income benefits (“GMIB”) are included in “Future policy benefits” and the related changes in the liabilities are included in “Policyholders’ benefits.” Guaranteed minimum withdrawal benefits (“GMWB”) and guaranteed return option (“GRO”) features are considered to be derivatives under SFAS No. 133, and changes in the fair value of the derivative are recognized through “Realized investment

gains (losses), net.” At December 31, 2004, there were no liabilities recorded related to these derivatives.

	<i>Guaranteed Minimum Death Benefit (GMDB)</i>	<i>Guaranteed Minimum Income Benefit (GMIB)</i>	<i>Guaranteed Return Option/Minimum Withdrawal Benefit (GRO / GMWB)</i>	<i>Total</i>
	(in millions)			
Balance at January 1, 2004	\$ 70	\$ 2	\$ –	\$ 72
Incurred guarantee benefits	86	6	–	92
Paid guarantee benefits	(68)	–	–	(68)
Balance at December 31, 2004	\$ 88	\$ 8	\$ –	\$ 96

The GMDB liability is determined each period end by estimating the accumulated value of a percentage of the total assessments to date less the accumulated value of the death benefits in excess of the account balance. The percentage of assessments used is chosen such that, at issue (or, in the case of American Skandia contracts, at the acquisition date), the present value of expected death benefits in excess of the projected account balance and the percentage of the present value of total expected assessments over the lifetime of the contracts are equal. The Company regularly evaluates the estimates used and adjusts the GMDB liability balance, with a related charge or credit to earnings, if actual experience or other evidence suggests that earlier assumptions should be revised. The GMIB liability was determined at December 31, 2004 by estimating the accumulated value of a percentage of the total assessments to date less the accumulated value of the projected income benefits in excess of the account balance.

The present value of death benefits in excess of the projected account balance and the present value of total expected assessments for GMDB’s were determined over a reasonable range of stochastically generated scenarios. For variable annuities and variable universal life, 5,000 scenarios were stochastically generated and, from these, 200 scenarios were selected using a sampling technique. For variable life, various scenarios covering a reasonable range were weighted based on a statistical lognormal model. For universal life, 10,000 scenarios were stochastically generated and, from these, 100 were selected.

The GRO features predominantly provide for a guaranteed return of initial account value over a contractually defined period equal to seven years. One other variation of the GRO feature has an additional optional benefit that will provide for a base guarantee of account value seven years after the benefit is effective and every anniversary date thereafter and, if elected, an enhanced guarantee equal to the account value seven years after the effective date of any “step-up” and every anniversary date thereafter. All guaranteed amounts include any additional purchase payments and credits less withdrawals. Significant or prolonged declines in the value of any variable investment options a customer may choose as part of their GRO benefit may result in all or a substantial portion of their account values being allocated to fixed investment allocations, in conjunction with the Company’s automatic rebalancing program

associated with this feature.

The GMWB features provide the contractholder with a guaranteed remaining balance if the account value is reduced to zero through a combination of market declines and withdrawals. The guaranteed remaining balance is generally equal to the protected value under the contract, which is initially established as the greater of the account value or cumulative premiums when withdrawals commence, less cumulative withdrawals. The contractholder also has the option, after a specified time period, to reset the guaranteed remaining balance to the then-current account value, if greater.

Credit Risk

The following shows the disclosure practices related to credit risk at three companies (Jefferson-Pilot, Sun Life, and Protective Life). The disclosures come from 2004 10-K filings. EITF 03-1 is a significant source of the practices observed.

Jefferson-Pilot

Credit Risk Management

Our internal guidelines require an average quality of an S&P or equivalent rating of “A” or higher for the entire bond portfolio. At December 31, 2004, the average quality rating of our bond portfolio was “A”, which equates to a rating of 1 from the National Association of Insurance Commissioners’ Securities Valuation Office (SVO). We monitor the overall credit quality of our portfolio within internal investment guidelines. This table describes our debt security portfolio by credit rating.

<i>SVO Rating</i>	<i>S&P or Equivalent Designation</i>	<i>Amortized Cost</i>	<i>Fair Value</i>	<i>Carrying Value</i>	<i>% of Carrying Value</i>
1	AAA	\$ 2,762	\$ 2,869	\$ 2,865	13.0%
1	AA	1,990	2,097	2,085	9.4
1	A	7,183	7,591	7,527	34.1
2	BBB	7,991	8,372	8,311	37.6
3	BB	800	834	832	3.8
4	B	377	390	390	1.8
5	CCC and lower	61	64	62	0.2
6	In or near default	21	22	22	0.1
	<i>Total</i>	\$ 21,185	\$ 22,239	\$ 22,094	100.0%

Limiting our bond exposure to any one creditor is another way we manage credit risk. The following table lists our ten largest exposures to an individual creditor in our bond portfolio as of December 31, 2004. As noted above, the carrying values in the following tables are stated at fair value for AFS securities and amortized cost for HTM securities.

<i>Creditor</i>	<i>Sector</i>	<i>Carrying Value</i>
<i>Wachovia</i>	<i>Financial Institutions</i>	\$ 161
<i>JP Morgan Chase</i>	<i>Financial Institutions</i>	142
<i>Weingarten Realty Investors</i>	<i>Financial Institutions</i>	105
<i>Goldman Sachs Group</i>	<i>Financial Institutions</i>	104
<i>Cargill Incorporated</i>	<i>Consumer, Noncyclical</i>	99
<i>Citigroup Incorporated</i>	<i>Financial Institutions</i>	97
<i>Burlington Northern Santa Fe</i>	<i>Transportation</i>	96
<i>United Health Group Inc</i>	<i>Consumer, Noncyclical</i>	95
<i>US Bancorp</i>	<i>Financial Institutions</i>	94
<i>Anheuser-Busch Companies</i>	<i>Consumer, Noncyclical</i>	93

We monitor those securities that are rated below investment grade as to individual exposures and in comparison to the entire portfolio, as an additional credit risk management strategy.

The following table shows the ten largest below investment grade debt security exposures by individual issuer at December 31, 2004. Investment grade bonds of issuers listed below are not included in these values. The gross unrealized gain or loss shown below is calculated as the difference between the fair value of the securities and their carrying values.

<i>Creditor</i>	<i>Sector</i>	<i>Amortized Cost</i>	<i>Carrying Value</i>	<i>Gross Unrealized Gain/(Loss)</i>
<i>Ahold, Royal</i>	<i>Consumer, Noncyclical</i>	\$ 46	\$ 50	\$ 4
<i>El Paso Corp</i>	<i>Utilities</i>	48	49	1
<i>Nova Chem Ltd/ Nova Chem</i>	<i>Basic Materials</i>	37	37	–
<i>Rite Aid Corp</i>	<i>Consumer, Cyclical</i>	33	34	1
<i>Thomas & Betts Co</i>	<i>Technology</i>	31	32	1
<i>Intl Telecom Satellite US</i>	<i>Communications</i>	30	30	–
<i>Qwest Communications Intl</i>	<i>Communications</i>	28	29	1
<i>Homer City Funding LLC</i>	<i>Utilities</i>	25	28	3
<i>Williams Cos Inc</i>	<i>Utilities</i>	26	28	2
<i>Allied Waste N America</i>	<i>Capital Goods</i>	27	24	(3)

At December 31, 2004 and 2003, below investment grade bonds were \$1,299 or 5.9% and \$1,452 or 7.1% of the carrying value of the bond portfolio, reflecting sales and upgrades of below investment grade bonds that occurred in 2004.

As noted above, credit risk is inherent in our bond portfolio. We manage this risk through a structured approach in which we assess the effects of the changing economic landscape. We devote a significant amount of effort of both highly specialized, well-trained internal resources and external experts in our approach to managing credit risk.

Impairment Review

In identifying “potentially distressed securities”, we first screen for all securities that have a fair value to amortized cost ratio of less than 80%. However, as part of this identification process, management must make assumptions and judgments using the following information:

- *current fair value of the security compared to amortized cost*
- *length of time the fair value was below amortized cost*
- *industry factors or conditions related to a geographic area that are negatively affecting the security*
- *industry factors or conditions related to a geographic area that are negatively affecting the security*
- *downgrades by a rating agency*
- *past due interest or principal payments or other violation of covenants*
- *deterioration of the overall financial condition of the specific issuer*

In analyzing securities for other-than-temporary impairments, we then pay special attention to securities that have been potentially distressed for a period greater than six months. We assume that, absent reliable contradictory evidence, a security that is potentially distressed for a continuous period greater than twelve months has incurred an other-than-temporary impairment. Such reliable contradictory evidence might include, among other factors, a liquidation analysis performed by our investment professionals and consultants, improving financial performance or valuation of underlying assets specifically pledged to support the credit.

When we identify a security as potentially impaired, we add it to our potentially distressed security list and determine if the impairment is other-than-temporary. Various committees comprised of senior management and investment analysts intensively review the potentially distressed security list to determine if a security is deemed to be other than temporarily impaired. In this review, we consider the following criteria:

- *fundamental analysis of the liquidity and financial condition of the specific issuer*
- *underlying valuation of assets specifically pledged to support the credit*
- *time period in which the fair value has been significantly below amortized cost*
- *industry sector or geographic area applicable to the specific issuer*
- *our ability and intent to retain the investment for a sufficient time to recover its value*

When this intensive review determines that the decline is other-than-temporary based on management’s judgment, the security is written down to fair value through a charge to realized investment gains and losses. We adjust the amortized cost for both AFS and HTM securities that have experienced other-than-temporary impairments to reflect fair value at the time of the impairment. We consider factors that lead to an other-than-temporary impairment of a particular security in order to determine whether these conditions have impacted other similar securities.

We monitor unrealized losses through further analysis according to maturity date, credit quality, individual creditor exposure and the length of time the individual security has continuously been in an unrealized loss position.

The following table shows the maturity date distribution of our debt securities in an unrealized loss position at December 31, 2004. The fair values of these securities could fluctuate over the respective periods to maturity or any sale.

	<u>Amortized</u> Cost	<u>Fair Value</u>	<u>Gross</u> <u>Unrealized</u> Losses	<u>Carrying Value</u>
Due in one year or less	\$ 21	\$ 19	\$ (2)	\$ 19
Due after one year through five years	772	765	(7)	766
Due after five years through ten years	1,805	1,773	(32)	1,779
Due after ten years through twenty years	961	943	(18)	945
Due after twenty years	107	105	(2)	105
Amounts not due at a single maturity date	250	245	(5)	245
Subtotal	3,916	3,850	(66)	3,859
Redeemable preferred stocks	4	4	-	4
Total	\$ 3,920	\$ 3,854	\$(66)	\$ 3,863

The following table shows the credit quality of our debt securities with unrealized losses at December 31, 2004:

<u>SVO</u> <u>Rating</u>	<u>S&P or Equivalent</u> <u>Designation</u>	<u>Amortized</u> <u>Cost</u>	<u>Fair</u> <u>Value</u>	<u>% of</u> <u>Fair</u> <u>Value</u>	<u>Gross</u> <u>Unrealized</u> <u>Losses</u>	<u>% of Gross</u> <u>Unrealized</u> <u>Losses</u>	<u>Carrying</u> <u>Value</u>
1	AAA/AA/A	\$ 2,103	\$ 2,074	53.8%	\$ (29)	43.9%	\$ 2,077
2	BBB	1,548	1,523	39.5	(25)	37.9	1,527
3	BB	134	127	3.3	(7)	10.6	128
4	B	127	123	3.2	(4)	6.1	124
5	CCC and lower	7	6	0.2	(1)	1.5	6
6	In or near default	1	1	0.0	-	0.0	1
	Total	\$ 3,920	\$ 3,854	100.0%	\$ (66)	100.0%	\$ 3,863

No individual creditor has an unrealized loss of \$10 or greater at December 31, 2004.

The following table shows the length of time that individual debt securities have been in a continuous unrealized loss position.

	<u>Fair</u> <u>Value</u>	<u>Gross</u> <u>Unrealized</u> <u>Losses</u>	<u>% of</u> <u>Gross</u> <u>Unrealized</u> <u>Losses</u>	<u>Carrying</u> <u>Value</u>
More than 1 year	\$ 828	\$ (29)	43.9%	\$ 834
6 months – 1 year	1,787	(27)	40.9	1,790
Less than 6 months	1,239	(10)	15.2	1,239
Total	\$ 3,854	\$ (66)	100.0%	\$ 3,863

Information about unrealized gains and losses is subject to rapidly changing conditions. Securities with unrealized gains and losses will fluctuate, as will those securities that we have identified as potentially distressed. We consider all of the factors discussed earlier when we determine if an unrealized loss is other-than-temporary, including our ability and intent to hold the security until the value recovers. However, we may subsequently identify securities for which we no longer have a positive intent and ability to hold until forecasted recovery. This determination may be made due to a change in facts and circumstances regarding the specific investments. At such time, we will write down the security to fair value to recognize any unrealized losses.

Realized Losses — Write Downs and Sales

Realized losses are comprised of both write downs on other-than-temporary impairments and actual sales of securities.

In 2004 we had other-than-temporary impairments on securities of \$60 as compared to \$95 for 2003. The individual impairments in excess of \$10, how they were measured, the circumstances giving rise to the losses, and the impact those circumstances have on other material investments we held at the time are as follows:

2004

- *\$10.1 write down on debt of a commercial cable equipment company, due to a likely bankruptcy filing following an adverse judicial ruling on a summary judgment motion. The value of assets may not exceed the cost of a bankruptcy filing or the costs of winding down the operations. This had no impact on other holdings in our portfolio.*
- *\$17.5 write down on debt of a national passenger airline, due to high labor costs, increasing fuel prices, intense competition from low cost carriers, an inability to access capital, and the lack of demand for older aircraft. We have been actively managing all of our exposures to the passenger airline industry, although this had no impact on other holdings in our portfolio.*

2003

- *\$16.6 write down on debt of Dairy Holdings (a subsidiary of Parmalat). This issuer defaulted on this security and subsequently filed for bankruptcy protection. This is the only exposure we had to Parmalat. This security was sold for its written down value in 2003. This had no impact on other holdings in our portfolio.*
- *\$16.6 write down related to airline equipment trusts that were secured by passenger aircraft. Given the overall softness in the U.S. passenger airline industry, these securities became other than temporarily impaired. We sold these bonds at their book value after this write down. We have been actively managing all of our exposures to the passenger airline industry, although this had no impact on other holdings in our portfolio.*
- *\$15.0 write down of US Generating. This was an investment in a project finance security in the power generating industry. The lessee of this facility filed bankruptcy and rejected this lease. As a result, the investment became other than temporarily impaired. This had no impact on other holdings in our portfolio.*
- *\$11.0 write down on preferred stock of a financial marketing firm. The circumstances surrounding this other-than-temporary impairment do not impact any other securities in our portfolio.*

In 2004 we incurred losses of \$40.0 on sales of securities. There were no individually material losses on sales of securities in 2004. After consideration of all available evidence, none of these disposals previously met the criteria for other-than-temporary impairment. The Company will continue to manage its AFS portfolio in a manner that is consistent with the available-for-sale classification.

Sun Life

Impairment of Long-Lived Assets: The Company adopted Impairment of Long-Lived Assets, CICA Handbook Section 3063, on January 1, 2004. Under this standard, the impairment test of long-lived assets is a two-step process with the first step determining when an impairment is recognized and the second step measuring the amount of the impairment. To test for and measure impairment, assets are grouped at the lowest level for which identifiable cash flows are largely independent. An impairment loss is recognized when the carrying amount of an asset to be held and used exceeds the sum of the undiscounted cash flows expected from its use and eventual disposition. An impairment loss is measured as the amount by which the asset's carrying amount exceeds its fair value. An asset classified as held for sale is measured at the lower of its carrying amount or fair value less cost to sell. This change in accounting policy did not have a material impact on these consolidated financial statements.

A) FAIR VALUE OF INVESTED ASSETS

The carrying values and fair values of the Company's invested assets are shown in the following table.

	2004			2003		
	Carrying Value	Fair Value	Carrying Yield %	Value	Fair Value	Yield %
ASSETS						
Bonds	\$ 64,496	\$ 68,556	6.22	\$ 66,090	\$ 70,092	5.98
Mortgages	13,862	14,576	6.80	13,601	14,381	7.00
Stocks	3,463	3,376	10.33	3,473	3,102	7.48
Real estate	3,148	3,421	9.12	3,067	3,287	8.89
Policy loans	2,936	2,936	6.50	3,003	3,003	6.99
Cash, cash equivalents and short-term securities	5,966	5,966	n/a	4,972	4,973	n/a
Other invested assets	3,046	3,967	n/a	2,970	3,414	n/a
Total invested assets	\$ 96,917	\$ 102,798	6.12	\$ 97,176	\$ 102,252	5.79

The fair value of publicly traded bonds is determined using quoted market prices. For non-publicly traded bonds, fair value is determined using a discounted cash flow approach that includes provisions for credit risk and assumes that the securities will be held to maturity. Fair value of mortgages is determined by discounting the expected future cash flows using current market interest rates for mortgages with similar credit risks and terms to maturity. Fair value of stocks is based on quoted market prices, usually the last trade values. Fair value of real estate is determined by reference to sales of comparable properties in the marketplace and the net present value of the expected future cash flows, discounted using current interest rates. Due to their nature, the fair values of policy loans and cash and cash equivalents are assumed to be equal to their carrying values. The fair values of short-term securities are based on market yields. The fair values of other invested assets are determined by reference to market prices for similar investments. Other invested assets in the table above includes the Company's investment in CI Funds with a carrying value of \$1,014 and a fair value of \$1,805 (\$987 and \$1,407, respectively, in 2003). Yield is calculated based on total net investment income divided by the total of the average carrying value of invested assets, which includes accrued investment income net of deferred net realized gains.

B) INVESTMENT POLICIES

It is the Company's policy to diversify all investment portfolios. The Company's mortgage loans, stocks and real estate investments are diversified by type and location and, for mortgage loans, by borrower. Interest rate risk, which is the potential for loss due to interest rate fluctuations, is discussed in Note 12.

Credit risk is the risk of financial loss resulting from the failure of debtors to make payments of interest or principal when due. The Company controls this risk through detailed credit and underwriting policies, as well as through setting counterparty exposure limits. The Company maintains policies which set limits, based on consolidated equity, to the credit exposure for investments in any single issuer and in any associated group of issuers. Exceptions exist for investments in securities which are issued or guaranteed by either the Government of Canada, United States or United Kingdom and issuers for which the Board has granted specific approval. Mortgage loans are collateralized by the related property and generally do not exceed 75% of the value of the property at the time the original loan is made.

C) INVESTED ASSETS BY TYPE

i) BONDS

The carrying value and fair value of bonds by rating are shown in the table below.

	2004		2003	
	Carrying Value	Fair Value	Carrying Value	Fair Value
<i>Bonds by credit rating:</i>				
AAA	\$ 16,895	\$ 17,549	\$ 18,714	\$ 19,499
AA	8,714	9,492	7,915	8,438
A	19,187	20,701	18,952	20,393
BBB	17,695	18,662	17,980	19,080
BB & lower	2,005	2,152	2,529	2,682
<i>Total bonds</i>	<u>\$ 64,496</u>	<u>\$ 68,556</u>	<u>\$ 66,090</u>	<u>\$ 70,092</u>

Investment grade bonds are those rated BBB and above. The Company's bond portfolio has 96.9% (96.2% in 2003) invested in investment grade bonds based on carrying value.

Gross unrealized gains (losses) on bonds are shown in the tables below. Gross unrealized gains and losses are not brought into income or included in the carrying value on the consolidated balance sheets.

	2004			
	Gross Amortized Cost	Gross Unrealized Gains	Estimated Unrealized Losses	Fair value
<i>Issued or guaranteed by:</i>				
Canadian federal government	\$ 5,601	\$ 218	\$ -	\$ 5,819
Canadian provincial and municipal governments	5,716	742	-	6,458
U.S. Treasury and other U.S. agencies	1,224	52	(4)	1,272
Other foreign governments	2,805	179	(21)	2,963
Corporate	40,351	2,845	(85)	43,111
Asset-backed securities	8,799	221	(87)	8,933
<i>Total bonds</i>	<u>\$ 64,496</u>	<u>\$ 4,257</u>	<u>\$ (197)</u>	<u>\$ 68,556</u>

	2003			
	Gross Amortized Cost	Gross Unrealized Gains	Estimated Unrealized (Losses)	Fair Value
<i>Issued or guaranteed by:</i>				
Canadian federal government	\$ 6,209	\$ 161	\$ (1)	\$ 6,369
Canadian provincial and municipal governments	5,106	588	(3)	5,691
U.S. Treasury and other U.S. agencies	1,143	44	(13)	1,174
Other foreign governments	3,437	196	(32)	3,601
Corporate	40,604	3,118	(151)	43,571
Asset-backed securities	9,591	208	(113)	9,686
<i>Total bonds</i>	<u>\$ 66,090</u>	<u>\$ 4,315</u>	<u>\$ (313)</u>	<u>\$ 70,092</u>

The carrying value of bonds by issuer country is as follows:

	2004		2003	
Canada	\$	25,556	\$	25,708
United States		27,857		29,036
United Kingdom		6,989		7,465
Other		4,094		3,881
Total bonds	\$	64,496	\$	66,090

The contractual maturities of bonds as at December 31 are shown in the table below. Bonds that are not due at a single maturity date are included in the table in the year of final maturity. Asset-backed securities that are not due at a single maturity date are shown separately. Actual maturities could differ from contractual maturities because of the borrower's right to call or right to prepay obligations, with or without prepayment penalties.

	2004		2003	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Due in one year or less	\$ 3,770	\$ 3,801	\$ 3,449	\$ 3,487
Due in years two through five	12,789	13,206	15,366	16,011
Due in years six through ten	14,671	15,566	14,318	15,269
Due after ten years	24,467	27,050	23,366	25,639
Asset-backed securities	8,799	8,933	9,591	9,686
Total bonds	\$ 64,496	\$ 68,556	\$ 66,090	\$ 70,092

v) *Emerging Issues Task Force (EITF) 03-01 - The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments:*

The EITF has reached consensus on EITF 03-1, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments*, as it applies to investments accounted for under Statement of Financial Accounting Standards No. 115 (SFAS 115), *Accounting for Certain Investments in Debt and Equity Securities*, and cost method investments accounted for under Accounting Principles Board Opinions No. 18, *The Equity Method of Accounting for Investments in Common Stock (APB 18)*. The FASB ratified this consensus and subsequently issued a Staff Position, FSP EITF 03-1-1, to defer indefinitely the effective date for recognition and impairment guidance under the EITF, but not the qualitative disclosure requirements on unrealized loss positions for all marketable equity securities, debt securities and cost method investments for which an other than temporary impairment has not been recognized.

The following table shows the Company's investments' gross unrealized losses and fair value, aggregated by investment category and length of time that individual available for sale securities have been in a continuous unrealized loss position, at December 31, 2004.

Description of securities	Less than 12 months		12 months or more		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Debt securities	\$ 6,386	\$ (87)	\$ 2,049	\$ (157)	\$ 8,435	\$ (244)
Common stock	140	(27)	308	(13)	448	(40)
Total temporarily impaired	\$ 6,526	\$ (114)	\$ 2,357	\$ (170)	\$ 8,883	\$ (284)

Protective Life

Risk Management and Impairment Review

The Company monitors the overall credit quality of the Company's portfolio within general guidelines. The following table shows the Company's available for sale fixed maturities by credit rating at December 31, 2004.

Percent of Value	S&P or Equivalent Designation	Market Value	Market
(in thousands)			
35.6%	AAA	\$ 4,983,896	
	AA	872,185	6.2
	A	3,109,075	22.2
	BBB	4,067,784	29.1
	<i>Investment grade</i>	13,032,940	93.1
	BB	698,321	5.0
	B	248,627	1.8
	CCC or lower	18,920	0.1
	In or near default	101	0.0
	<i>Below investment grade</i>	965,969	6.9
	<i>Redeemable preferred stock</i>	3,593	0.0
100.0%	Total	\$ 14,002,502	

Not included in the table above are \$398.9 million of investment grade and \$11.2 million of less than investment grade fixed maturities classified by the Company as trading securities.

Limiting bond exposure to any creditor group is another way the Company manages credit risk. The following table summarizes the Company's ten largest fixed maturity exposures to an individual creditor group as of December 31, 2004.

<u>Creditor</u>	<u>Market Value</u> (in millions)
Wachovia	\$ 80.9
Citigroup	80.1
FPL Group	77.3
Dominion	76.8
Duke Energy	75.6
BellSouth	74.4
Cox Communications	74.2
Union Pacific	73.8
Merrill Lynch	73.4
Berkshire Hathaway	72.1

The Company's management considers a number of factors when determining the impairment status of individual securities. These include the economic condition of various industry segments and geographic locations and other areas of identified risks. Although it is possible for the impairment of one investment to affect other investments, the Company engages in ongoing risk management to safeguard against and limit any further risk to its investment portfolio. Special attention is given to correlative risks within specific industries, related parties and business markets.

The Company generally considers a number of factors in determining whether the impairment is other than temporary. These include, but are not limited to: 1) actions taken by rating agencies, 2) default by the issuer, 3) the significance of the decline, 4) the intent and ability of the Company to hold the investment until recovery, 5) the time period during which the decline has occurred, 6) an economic analysis of the issuer's industry, and 7) the financial strength, liquidity, and recoverability of the issuer. Management performs a security by security review each quarter in evaluating the need for any other-than-temporary impairments. Although no set formula is used in this process, the investment performance, collateral position and continued viability of the issuer are significant measures considered.

The Company generally considers a number of factors relating to the issuer in determining the financial strength, liquidity, and recoverability of an issuer. These include but are not limited to: available collateral, tangible and intangible assets that might be available to repay debt, operating cash flows, financial ratios, access to capital markets, quality of management, market position, exposure to litigation or product warranties, and the effect of general economic conditions on the issuer. Once management has determined that a particular investment has suffered an other-than-temporary impairment, the asset is written down to its estimated fair value.

There are certain risks and uncertainties associated with determining whether declines in market values are other than temporary. These include significant changes in general

economic conditions and business markets, trends in certain industry segments, interest rate fluctuations, rating agency actions, changes in significant accounting estimates and assumptions, commission of fraud and legislative actions. The Company continuously monitors these factors as they relate to the investment portfolio in determining the status of each investment. Provided below are additional facts concerning the potential effect upon the Company's earnings should circumstances lead management to conclude that some of the current declines in market value are other than temporary.

Unrealized Gains and Losses

The information presented below relates to investments at a certain point in time and is not necessarily indicative of the status of the portfolio at any time after December 31, 2004, the balance sheet date. Information about unrealized gains and losses is subject to rapidly changing conditions, including volatility of financial markets and changes in interest rates. As indicated above, the Company's management considers a number of factors in determining if an unrealized loss is other-than-temporary, including its ability and intent to hold the security until recovery. Furthermore, since the timing of recognizing realized gains and losses is largely based on management's decisions as to the timing and selection of investments to be sold, the tables and information provided below should be considered within the context of the overall unrealized gain (loss) position of the portfolio. At December 31, 2004, the Company had an overall pretax net unrealized gain of \$700.1 million.

For traded and private fixed maturity and equity securities held by the Company that are in an unrealized loss position at December 31, 2004, the estimated market value, amortized cost, unrealized loss and total time period that the security has been in an unrealized loss position are presented in the table below.

	Estimated Market Value	% Market Value	Amortized Cost	% Amortized Cost	Unrealized Loss	% Unrealized Loss
(in thousands)						
<=90 days	\$1,283,554	59.4%	\$1,293,509	58.5%	\$ (9,955)	19.2%
>90 days but <=180 days	57,082	2.6	62,029	2.8	(4,946)	9.6
>180 days but <= 270 days	346,083	16.0	353,030	16.0	(6,947)	13.4
>270 days but <= 1 year	116,581	5.4	118,812	5.4	(2,231)	4.3
>1 year but <= 2 years	299,794	13.9	310,320	14.0	(10,526)	20.3
>2 years but <= 3 years	339	0.0	568	0.0	(229)	0.4
>3 years but <= 4 years	22,386	1.1	25,387	1.1	(3,001)	5.8
>4 years but <= 5 years	259	0.0	411	0.0	(152)	0.3
>5 years	34,333	1.6	48,176	2.2	(13,844)	26.7
Total	\$2,160,411	100.0%	\$2,212,242	100.0%	\$ (51,831)	100.0%

At December 31, 2004, securities with a market value of \$29.2 million and \$16.5 million of unrealized losses were issued in Company-sponsored commercial mortgage loan securitizations, including \$12.8 million of unrealized losses greater than five years. The Company does not consider these unrealized positions to be other than temporary

because the underlying mortgage loans continue to perform consistently with the Company's original expectations.

The Company has no material concentrations of issuers or guarantors of fixed maturity securities. The industry segment composition of all securities in an unrealized loss position held by the Company at December 31, 2004, is presented in the following table.

	Estimated Market Value	% Market Value	Amortized Cost	% Amortized Cost	Unrealized Loss	% Unrealized Loss
(in thousands)						
Agency mortgages	\$ 724,792	33.6%	\$ 728,875	32.9%	\$ (4,083)	7.9%
Banking	128,935	6.0	130,435	5.9	(1,500)	2.9
Basic industrial	68,785	3.2	71,027	3.2	(2,242)	4.3
Brokerage	52,505	2.4	53,002	2.4	(497)	1.0
Communications	73,254	3.4	75,907	3.4	(2,653)	5.1
Consumer-cyclical	43,813	2.0	44,490	2.0	(677)	1.3
Consumer-noncyclical	50,980	2.4	52,545	2.4	(1,565)	3.0
Electric	270,567	12.5	280,627	12.7	(10,060)	19.4
Energy	66,987	3.1	69,454	3.1	(2,467)	4.8
Finance companies	23,328	1.1	23,617	1.1	(289)	0.6
Insurance	102,710	4.8	105,137	4.8	(2,427)	4.7
Municipal agencies	72	0.0	72	0.0	(0)	0.0
Natural gas	114,441	5.3	116,696	5.3	(2,255)	4.3
Non-agency mortgages	277,212	12.8	291,369	13.2	(14,157)	27.3
Other finance	37,728	1.7	42,558	1.9	(4,830)	9.3
Other industrial	34,513	1.6	34,781	1.6	(268)	0.5
Other utility	21	0.0	44	0.0	(23)	0.0
Real estate	50	0.0	50	0.0	(0)	0.0
Technology	11,199	0.5	11,480	0.5	(281)	0.6
Transportation	53,857	2.5	55,147	2.5	(1,290)	2.5
U.S. Government	24,662	1.1	24,929	1.1	(267)	0.5
Total	\$2,160,411	100.0%	\$2,212,242	100.0%	\$ (51,831)	100.0%

The range of maturity dates for securities in an unrealized loss position at December 31, 2004 varies, with 10.6% maturing in less than 5 years, 23.9% maturing between 5 and 10 years, and 65.5% maturing after 10 years. The following table shows the credit rating of securities in an unrealized loss position at December 31, 2004.

S&P or Equivalent Designation	Estimated Market Value	% Market Value	Amortized Cost	% Amortized Cost	Unrealized Loss	% Unrealized Loss
(in thousands)						
AAA/AA/A	\$ 1,524,183	70.6%	\$ 1,544,480	69.8%	\$ (20,297)	39.1%
BBB	519,326	24.0	531,230	24.0	(11,904)	23.0
Investment grade	2,043,509	94.6	2,075,710	93.8	(32,201)	62.1
BB	31,739	1.5	32,918	1.5	(1,179)	2.3
B	70,804	3.3	78,906	3.6	(8,102)	15.6
CCC or lower	14,359	0.6	24,708	1.1	(10,349)	20.0
Below investment grade	116,902	5.4	136,532	6.2	(19,630)	37.9
Total	\$2,160,411	100.0%	\$2,212,242	100.0%	\$ (51,831)	100.0%

At December 31, 2004, securities in an unrealized loss position that were rated as below investment grade represented 5.4% of the total market value and 37.9% of the total unrealized loss. Unrealized losses related to below investment grade securities that had been in an unrealized loss position for more than twelve months were \$15.9 million. Securities in an unrealized loss position rated less than investment grade were 0.6% of invested assets. The Company generally purchases its investments with the intent to hold to maturity. The Company does not expect these investments to adversely affect its liquidity or ability to maintain proper matching of assets and liabilities.

The following table shows the estimated market value, amortized cost, unrealized loss and total time period that the security has been in an unrealized loss position for all below investment grade securities.

	Estimated Market Value	% Market Value	Amortized Cost	% Amortized Cost	Unrealized Loss	% Unrealized Loss
(in thousands)						
<= 90 days	\$ 11,071	9.5%	\$ 11,261	8.2%	\$ (190)	1.0%
>90 days but <= 180 days	1,442	1.2	1,781	1.3	(339)	1.7
>180 days but <= 270 days	39,883	34.1	42,625	31.2	(2,742)	14.0
>270 days but <= 1 year	11,936	10.2	12,399	9.1	(463)	2.3
>1 year but <= 2 years	597	0.5	661	0.5	(64)	0.3
>2 years but <= 3 years	186	0.2	251	0.2	(65)	0.3
>3 years but <= 4 years	22,109	18.9	25,051	18.4	(2,942)	15.0
>4 years but <= 5 years	14	0.0	45	0.0	(31)	0.2
>5 years	29,664	25.4	42,458	31.1	(12,794)	65.2
Total	\$ 116,902	100.0%	\$ 136,532	100.0%	\$ (19,630)	100.0%

At December 31, 2004, below investment grade securities with a market value of \$24.7 million and \$11.8 million of unrealized losses were issued in Company-sponsored commercial mortgage loan securitizations, including securities in an unrealized loss position greater than five years with a market value of \$24.6 million and \$11.8 million of unrealized losses. The Company does not consider these unrealized positions to be other than temporary, because the underlying mortgage loans continue to perform consistently with the Company's original expectations securities.

Available for sale debt securities have generally been identified as temporarily impaired if their amortized cost as at December 31, 2004, was greater than their fair value, resulting in an unrealized loss. Unrealized gains and losses in respect of investments designated as trading have been included in net income and have been excluded from the above table.

Unrealized losses are largely due to interest rate fluctuations and/or depressed fair values in sectors which have experienced unusually strong negative market reactions. In connection with the Company's asset/liability management practices, and based on a review of these investment holdings, it is believed that the contractual terms of these debt

securities will be met and/or the Company can hold these investments until recovery in value.

A total of 889 debt securities were in an unrealized loss position at December 31, 2004, of which 642 were in a continuous loss position for less than 12 months and 247 positions for more than 12 months or more. Of the 889 debt securities, unrealized losses less than 12 months included 529 positions with an aggregate fair value of \$3,644 (128 positions with an aggregate fair value of \$428 for 12 months or more) having unrealized losses of less than one hundred thousand dollars per individual holding. A total of 86 common stock positions were in a loss position at December 31, 2004, of which 48 were in a continuous loss position for less than 12 months and 38 positions for more than 12 months or more. Of the 86 common stock positions, unrealized losses less than 12 months included 27 positions with an aggregate fair value of \$44 (21 positions with an aggregate fair value of \$4 for 12 months or more) having unrealized losses of less than one hundred thousand dollars per individual holding.

Risk from Interest Rate Guarantees

The following shows the disclosure practices related to the risk from guaranteed minimum interest crediting rates at three companies (Genworth, Jefferson-Pilot, and Lincoln National). As with other examples in this appendix, it is important to recognize that differences in the relative materiality of the companies' guarantees may explain differences in disclosure.

Genworth

We credit interest on policyholder account balances at a rate determined by us, but not less than a contractually guaranteed minimum. Our in-force universal life insurance policies generally have minimum guaranteed crediting rates ranging from 3.0% to 6.0% for the life of the policy.

At least once each month, we set an interest crediting rate for newly issued fixed SPDAs and additional deposits. We maintain the initial crediting rate for a minimum period of one year or the guarantee period, whichever is longer. Thereafter, we may adjust the crediting rate no more frequently than once per year for any given deposit. In 2004, we introduced a product that has flexible pricing features. Most of our recently issued annuity contracts have minimum guaranteed crediting rates between 1.5% and 3.0%.

General conditions and trends affecting our businesses

Interest rate fluctuations. Fluctuations in market interest rates may have a significant effect on our sales of insurance and investment products and our margins on these

products. Interest rates are highly sensitive to many factors, including governmental monetary policies, domestic and international economic and political conditions and other factors beyond our control. In our Retirement Income and Investments and Protection segments, low market interest rates may reduce the spreads between the amounts we credit to policyholders and contractholders and the yield we earn on the investments that support these obligations. In response to the unusually low interest rates that have prevailed during the last several years, we have reduced the guaranteed minimum crediting rates on newly issued fixed annuity contracts and have reduced crediting rates on in-force contracts where permitted to do so. These actions have helped mitigate the adverse impact of low interest rates on our spreads and profitability on these products. A gradual increase in interest rates generally would have a favorable effect on the profitability of these products. However, rapidly rising interest rates also could result in reduced persistency in our spread-based retail products as contractholders shift assets into higher yielding investments.

In our Protection segment, the pricing and expected future profitability of our term life and long-term care insurance products are based in part on expected investment returns. Over time, term life and long-term care insurance products generally produce positive cash flows as customers pay periodic premiums, which we invest as we receive them. Low interest rates may reduce our ability to achieve our targeted investment margins and may adversely affect the profitability of our term life and long-term care insurance products. The impact of interest rate fluctuations on our universal life insurance products is similar to their impact on spread-based products in our Retirement Income and Investments segment.

Jefferson-Pilot

In a falling interest rate environment, the risk of prepayment on some fixed income securities increases and funds prepaid are then reinvested at lower yields. We limit this risk by concentrating the fixed income portfolio mainly on non-callable securities, by purchasing securities that provide for “make-whole” type prepayment fees. Falling interest rates can also impact demand for our products, as interest-bearing investments with no surrender charges and higher average returns from equity markets may become more attractive to new and existing customers. Conversely, in a rising interest rate environment, competitive pressures may make it difficult for us to sustain spreads between rates we credit on interest-sensitive products and our portfolio earnings rates, thereby prompting withdrawals by policyholders. We manage these risks by adjusting our interest crediting rates with due regard to the yield of our investment portfolio, minimum rate guarantees and pricing assumptions and by prudently managing interest rate risk of assets and liabilities.

While a modest interest rate increase would initially be unfavorable to our earnings, due to the near-term impact on our cost of borrowing, such an increase would be favorable to our earnings over a longer timeframe as higher investment yields would be incorporated

into our investment portfolio and our interest spreads. Conversely, a sustained period of flat to declining new money rates would reduce reported earnings due to the effect of minimum rate guarantees and the possible impact of increased lapsation in our insurance products.

As is typical in the industry, our life and annuity products contain minimum rate guarantees regarding interest we credit. For interest sensitive life products, our minimum rates range from 3.0% to 9.0%, with an approximate weighted average of 4.1%. For annuity products, our minimum rates range from 1.5% to 6.0%, with an approximate weighted average of 3.3%.

The following table shows our estimate of the impact that various hypothetical interest rate scenarios would have on our earnings for a single year, based on the assumptions in our model. We believe that, based upon historically low current interest rates, a symmetrical change in interest rates is not reasonably possible. Our model shows the effect on income with an increase of up to 300 basis points and a decrease of 100 basis points. We believe that the 300 basis point increase or 100 basis point decrease, graded pro-rata over four quarters, reflects reasonably possible near term changes in interest rates as of December 31, 2004. We have also provided the estimated earnings impact for a single year assuming the interest rate changes occur instantaneously. The incremental loss for a year derives primarily from differences in the yield curves and in the sensitivities they introduce to our model.

These estimated impacts are incremental to potential earnings impacts from trends and/or environmental factors already in existence, such as a reduction in the level of prepayments on mortgage-backed securities or the increased lapsation in our annuity business. The model assumes that changes in our crediting rates will occur correspondingly with increases or declines in investment yields, subject to the impact of minimum rate guarantees. As discussed previously, as of year end our crediting rates on blocks of business that are on an annual reset basis were approximately 31 basis points and 10 basis points on average in excess of minimum guaranteed rates for Individual Products and AIP.

The table reflects the effect of the interest rate scenarios on one year's reportable segment results, excluding the impact of potential unlockings that are illustrated in a sensitivity analysis within the Critical Accounting Policies and Estimates section. A spike in interest rates of 300 basis points that lasts for three years would produce a significantly larger estimated loss in the second and third years, as policyholders would potentially seek more attractive rates elsewhere. Correspondingly, a 100 basis point decrease would cause a significantly larger estimated loss in the second and third years, as minimum rate guarantees would prohibit us from lowering crediting rates on most products.

<i>Change in Interest Rate</i>	<i>Estimated Incremental Single Year Gain/(Loss) Based on:</i>	
	<i>Graded Quarterly Shift</i>	<i>Instantaneous Shift</i>
+300 basis points	\$ (8)	\$ (16)
+200 basis points	(5)	(9)
+100 basis points	(3)	(3)
- 100 basis points	3	3

Generally, an increase in interest rates will benefit our earnings in the insurance portfolio, yet increase our interest expense on floating rate debt. Conversely, a decrease in interest rates will decrease earnings from the insurance portfolio as minimum rate guarantees have more of an effect and/or competitive conditions would not permit us to reduce crediting rates, while we would benefit from the decline in interest expense on our floating rate debt.

The incremental income or loss for shifts in excess of those shown does not have a linear relationship to the values shown above. The incremental loss resulting from a higher change in interest rates would be proportionally greater due to the optionality of our interest-sensitive assets and liabilities. Similarly, the effect of minimum rate guarantees in our interest-sensitive liabilities would compound the negative impact on the incremental gain (loss), resulting from a greater decrease in interest rates. A significant change in the slope of the yield curve could also affect our results. For example, competing products such as bank CDs could become relatively more attractive than our longer duration annuities under an inverted yield curve, resulting in higher policyholder withdrawals.

Lincoln National

Interest Rate Risk—Falling Rates. *The spreads on our fixed annuity and interest-sensitive whole life, universal life and fixed portion of variable universal life insurance policies, are at risk if interest rates decline and remain low for a period of time, which has generally been the case in recent years. For instance, the five-year Treasury yield stood at 6.3% at the end of 1999, it declined through 2002 to 2.7% at the end of 2002 and then rose modestly to 3.6% at the end of 2004. Should interest rates remain at current levels that are significantly lower than those existing prior to the declines of recent years, the average earned rate of return on our annuity and universal life insurance investment portfolios will continue to decline. Relative to the book yield at December 31, 2003, the book yield at December 31, 2004 on annuity investment portfolios declined from 6.2% to 6.1%, while the book yield on universal life insurance portfolios declined from 6.6% to 6.4%. Declining portfolio yields may cause the spreads between investment portfolio yields and the interest rate credited to policyholders to deteriorate, as our ability to manage spreads can become limited by minimum guaranteed rates on annuity and*

universal life insurance policies. Minimum guaranteed rates on annuity and universal life insurance policies generally range from 1.5% to 5.0%, with an average guaranteed rate of approximately 4%. The following table provides detail on the percentage differences between the current interest rates being credited to policyholders and the respective minimum guaranteed policy rate, broken out by policyholder account values reported within the Retirement and Life segments at December 31, 2004.

<i>Excess of Crediting Rates over Contract Minimums As of December 31, 2004</i>	<i>Retirement</i>		<i>Total</i>	<i>Percent of Total</i>
	<i>Segment Account Values</i>	<i>Life Segment Account Values</i>		
<i>CD and On-Benefit type annuities</i>	\$5,908	\$–	\$5,908	17.67%
<i>Discretionary rate setting products*</i>				
<i>No difference</i>	12,853	3,438	16,291	48.74%
<i>up to .1%</i>	125	729	854	2.55%
<i>.11% to .20%</i>	109	1,415	1,524	4.56%
<i>.21% to .30%</i>	164	39	203	0.61%
<i>.31% to .40%</i>	209	1,287	1,496	4.48%
<i>.41% to .50%</i>	829	2,488	3,317	9.92%
<i>.51% to .60%</i>	866	748	1,614	4.83%
<i>.61% to .70%</i>	74	648	722	2.16%
<i>.71% to .80%</i>	86	139	225	0.67%
<i>.81% to .90%</i>	22	336	358	1.07%
<i>.91% to 1.0%</i>	155	199	354	1.06%
<i>1.01% to 1.50%</i>	58	140	198	0.59%
<i>1.51% to 2.00%</i>	24	240	264	0.79%
<i>2.01% to 2.50%</i>	7	15	22	0.07%
<i>2.51% to 3.00%</i>	31	–	31	0.09%
<i>3.01% and above</i>	46	–	46	0.14%
<i>Total Discretionary rate setting products</i>	15,658	11,861	27,519	82.33%
<i>Grand Total—Account Values</i>	\$21,566	\$11,861	\$33,427	100.00%

* For purposes of this table, contracts currently within new money rate bands are grouped according to the corresponding portfolio rate band in which they will fall upon their first anniversary.

The maturity structure and call provisions of the related portfolios are structured to afford protection against erosion of investment portfolio yields during periods of declining interest rates. We devote extensive effort to evaluating the risks associated with falling interest rates by simulating asset and liability cash flows for a wide range of interest rate scenarios. We seek to manage these exposures by maintaining a suitable maturity structure and by limiting our exposure to call risk in each respective investment portfolio.

We believe that the portfolios supporting our accumulation and investment oriented insurance products have a prudent degree of call protection individually and on a consolidated basis. For instance, as of December 31, 2004, the mortgage-backed securities (“MBS”) and asset-backed securities (“ABS”) portion represented a total of \$6.4 billion or 19% of the \$34.5 billion of general account assets supporting such

products. Of this portfolio, 11% of general account assets or \$3.7 billion is subject to residential prepayment risk from investments made in Collateralized Mortgage Obligations (“CMOs”), mortgage pass-throughs, manufactured housing and home equity loans. As of December 31, 2003, the MBS and ABS portion of the portfolio represented a total of \$5.5 billion or 16% of the \$33.4 billion of general account assets supporting such products. Our MBS portfolio has equal to or slightly less prepayment risk than the MBS pass-through market in general, primarily due to holding more seasoned securities in the portfolio.

Mortality Risk

The following shows the disclosure practices related to mortality risk from the 2004 10-K and 20-F Filings of three companies (Manulife, MetLife, and AEGON). Unlike some other risks, disclosure around mortality risk is difficult to isolate in a contained section of the financial statement. Therefore, items from various sections that relate to mortality risk are included. It is worth noting that many companies have virtually no disclosure related to the extent of mortality risk.

Manulife

Best estimate reserve assumptions. In the computation of actuarial liabilities, best estimate reserve assumptions are made. Assumptions are made for the valuation term of the liabilities and include assumptions with respect to mortality and morbidity, investment returns, rates of policy termination, operating expenses and certain taxes. Actuarial assumptions may be subject to change in the future. Actual experience is monitored regularly to ensure that the assumptions remain appropriate. Assumptions are discussed in more detail in the following table:

	<i>Nature of factor and assumption methodology</i>	<i>Risk management</i>
<i>Mortality and morbidity</i>	<i>Mortality relates to the occurrence of death. Mortality assumptions are based on past and emerging Company and industry experience. Assumptions are differentiated by sex, underwriting class and policy type. Morbidity relates to the occurrence of accidents and sickness. Morbidity assumptions are based on Company and industry experience.</i>	<i>The Company establishes appropriate underwriting standards to determine the insurability of applicants. Claim trends are monitored on an ongoing basis. Exposure to large claims is managed by establishing policy retention limits, which vary by market and geographic location. Policies in excess of the limits are reinsured with other companies. Mortality is monitored monthly and 2004 experience was favourable when compared with the Company’s assumptions. Morbidity is also monitored monthly and 2004 experience was favourable when compared with the Company’s assumptions.</i>

Reinsurance risk In the normal course of business, the Company limits the amount of loss on any one policy by reinsuring certain levels of risk with other insurers. In addition, the Company accepts reinsurance from other reinsurers. Reinsurance ceded does not discharge the Company's liability as the primary insurer. Failure of reinsurers to honour their obligations could result in losses to the Company; consequently, allowances are established for amounts deemed uncollectible. In order to minimize losses from reinsurer insolvency, the Company monitors the concentration of credit risk both geographically and with any one reinsurer. In addition, the Company selects reinsurers with high credit ratings.

The effect of reinsurance on premium income was as follows:

<i>For the years ended December 31</i>	<u>2004</u>	<u>2003</u>
<i>Direct premium income</i>	\$ 16,284	\$ 10,398
<i>Reinsurance assumed</i>	1,318	788
<i>Reinsurance ceded</i>	<u>(1,315)</u>	<u>(646)</u>
<i>Total premium income</i>	<u>\$ 16,287</u>	<u>\$ 10,540</u>

MetLife

INDIVIDUAL

MetLife currently reinsures up to 90% of the mortality risk for all new individual life insurance policies that it writes through its various insurance companies. This practice was initiated for different products starting at various points in time between 1992 and 2000. MetLife evaluates its reinsurance programs routinely and may increase or decrease its retention at any time. The Company retains up to \$25 million on single life policies and up to \$30 million on survivorship policies and reinsures in excess of the Company's retention limits. The Company reinsures a portion of mortality risk on its universal life policies.

MetLife reinsures its business through a diversified group of reinsurers. Placement of reinsurance is done primarily on an automatic basis and also on a facultative basis for risks with specific characteristics.

In addition to reinsuring mortality risk, MetLife reinsures other risks and specific coverages. The Company routinely reinsures certain classes of risks in order to limit its exposure to particular travel, vocation and lifestyle hazards. MetLife's retention limits per life vary by franchise and according to the characteristics of the particular risks. MetLife also reinsures certain guarantees in connection with benefit features offered under some of its individual variable annuities.

Underwriting results in the Institutional and Individual segments in the year ended December 31, 2004 were less favorable compared to the 2003 period. Underwriting results are significantly influenced by mortality and morbidity trends, claim experience and the reinsurance activity related to certain blocks of business, and, as a result, can fluctuate from period to period. Underwriting results in the Auto & Home segment were favorable in 2004 as the combined ratio declined to 90.4%, excluding catastrophes, from 97.1% in the prior year period. This result is largely due to continued improvement in both auto and homeowner claim frequencies, lower auto severities and an increase in average earned premiums.

Underwriting results varied in 2003. The group life mortality ratio continues to be favorable at 92%. The Individual life mortality ratio was also solid at 88%, which includes the impact of several large claims in the variable and universal product line, some of which had lower levels of reinsurance. Group disability's morbidity ratio increased to 98.5%, from 97.9% in the prior year but is still within management's expected range. The Auto & Home combined ratio, which is a measure of both the loss and loss adjustment expense ratio, as well as the expense ratio, remained favorable at 97.1% excluding catastrophes. The Company's International segment increased its loss recognition reserve in Taiwan as a result of low interest rates relative to product guarantees. This action resulted in a \$19 million charge, net of income taxes.

Total expenses increased by \$817 million, or 7%, to \$12,740 million for the year ended December 31, 2003 from \$11,923 million for the comparable 2002 period. Policyholder-related expenses increased \$564 million primarily as a function of the growth in business. The increase in expenses is offset by favorable underwriting results in the term life insurance, dental, long-term care, and retirement & savings products. The term life mortality incurred loss ratio, which represents actual life claims as a percentage of assumed claims incurred used in the determination of future policy benefits, was 92% for 2003 as compared to 93.6% in 2002. Underwriting results declined in disability as the morbidity incurred loss ratio, which represents actual disability claims as a percentage of assumed claims incurred used in the determination of future policy benefits, increased to 98.5% in 2003 from 97.9% in the prior year. The 2003 ratio was within management's expected range. In addition, the 2002 period includes a \$28 million release of a previously established liability for disability insurance-related losses from the September 11, 2001 tragedies. Other expenses increased by \$253 million over the prior year period. Group insurance and retirement & savings expenses increased \$115 million primarily due to an increase in non-deferrable expenses associated with the aforementioned revenue growth, \$77 million from an increase in pension and postretirement benefit expense, and a \$33 million increase in expenses associated with office closures and other consolidations. In addition, the prior year period includes a \$30 million reduction of a previously established liability for the Company's 2001 business realignment initiatives.

5. REINSURANCE

The Company's life insurance operations participate in reinsurance activities in order to limit losses, minimize exposure to large risks, and to provide additional capacity for future growth. The Company currently reinsures up to 90% of the mortality risk for all new individual life insurance policies that it writes through its various franchises. This practice was initiated by different franchises for different products starting at various points in time between 1992 and 2000. The Company retains up to \$25 million on single life policies and \$30 million on survivorship policies and reinsures 100% of amounts in excess of the Company's retention limits. The Company reinsures a portion of the mortality risk on its universal life policies. The Company reinsures its business through a diversified group of reinsurers. Placement of reinsurance is done primarily on an automatic basis and also on a facultative basis for risks of specific characteristics. The Company is contingently liable with respect to ceded reinsurance should any reinsurer be unable to meet its obligations under these agreements.

In addition to reinsuring mortality risk, the Company reinsures other risks and specific coverages. The Company routinely reinsures certain classes of risks in order to limit its exposure to particular travel, avocation and lifestyle hazards. The Company has exposure to catastrophes, which are an inherent risk of the property and casualty business and could contribute to significant fluctuations in the Company's results of operations. The Company uses excess of loss and quota share reinsurance arrangements to limit its maximum loss, provide greater diversification of risk and minimize exposure to larger risks.

The Company has also protected itself through the purchase of combination risk coverage. This reinsurance coverage pools risks from several lines of business and includes individual and group life claims in excess of \$2 million per policy, as well as excess property and casualty losses, among others.

In the Reinsurance Segment, Reinsurance Group of America, Incorporated ("RGA"), retains a maximum of \$6 million of coverage per individual life with respect to its assumed reinsurance business.

See Note 10 for information regarding certain excess of loss reinsurance agreements providing coverage for risks associated primarily with sales practices claims.

The amounts in the consolidated statements of income are presented net of reinsurance ceded. The effects of reinsurance were as follows:

	Years ended December 31		
	2004	2003	2002
	(dollars in millions)		
<i>Direct premiums</i>	\$ 20,237	\$ 19,396	\$ 18,439
<i>Reinsurance assumed</i>	4,492	3,706	2,993
<i>Reinsurance ceded</i>	(2,413)	(2,429)	(2,335)
<i>Net premiums</i>	<u>\$ 22,316</u>	<u>\$ 20,673</u>	<u>\$ 19,077</u>
<i>Reinsurance recoveries netted against policyholder benefits</i>	<u>\$ 2,046</u>	<u>\$ 2,417</u>	<u>\$ 2,886</u>

Reinsurance recoverables, included in premiums and other receivables, were \$3,965 million and \$4,014 million at December 31, 2004 and 2003, respectively, including \$1,302 million and \$1,341 million, respectively, relating to reinsurance of long-term guaranteed interest contracts and structured settlement lump sum contracts accounted for as a financing transaction. Reinsurance and ceded commissions payables, included in other liabilities, were \$78 million and \$106 million at December 31, 2004 and 2003, respectively.

AEGON

Traditional Life Traditional life income before realized gains and losses on shares and real estate of USD 649 million increased 4% compared to 2003. Lower additions to the default provision of USD 114 million during 2004 and improved product spreads and business growth have contributed to the increase. In addition, results in 2003 included the impact of accelerated DPAC amortization of USD 28 million. These improvements were partially offset by a non-recurring reserve increase in the reinsurance business of USD 80 million, consisting primarily of a change in the methodology for computing incurred but not reported claims and for the conversion to a new reserve system. The model and system changes reflect the ability to compute reserves on more specific information from ceding companies. Mortality experience continues to be favorable relative to pricing expectations when measured over a longer horizon. Other items impacting the 2004 results included USD 13 million of higher mortality costs, USD 16 million of higher additions to the technical provisions related to the adoption of SOP 03-01 and USD 14 million of lower employee pension plan income.

Income before realized gains and losses on shares and real estate for traditional life of EUR 197 million was 39% above 2002. Results were positively influenced by EUR 20 million of higher direct investment income and a EUR 40 million release of a provision for profit sharing. The lower results were mainly due to a change in the assumptions for mortality and longevity, which had a negative impact of EUR 93 million. Furthermore, lower expense loadings (EUR 20 million) due to lower production and higher expenses

due to increased employee pension related costs had a negative impact on income before tax. Commissions and expenses include, both in 2002 and 2003, accelerated amortization of DPAC due to high lapse rates resulting from a change in the law relating to tax driven savings products.

v. Underwriting Risk

Our earnings depend significantly upon the extent to which actual claims experience is consistent with the assumptions used in setting the prices for products and establishing the technical provisions and liabilities for claims. To the extent that actual claims experience is less favorable than the underlying assumptions used in establishing such liabilities, income would be reduced. Furthermore, if these higher claims were part of a trend, we may be required to increase liabilities, which may reduce income. In addition, certain acquisition costs related to the sale of new policies and the purchase of policies already in force have been recorded as assets on the balance sheet and are being amortized into income over time. If the assumptions relating to the future profitability of these policies (such as future claims, investment income and expenses) are not realized, the amortization of these costs could be accelerated and may even require write-offs due to unrecoverability. This could have a material adverse effect on AEGON's business, results of operations and financial condition.

Sources of underwriting risk include policy lapses, policy claims such as mortality, and expenses. In general, AEGON is at risk if policy lapses increase as sometimes AEGON is unable to fully recover up front expenses in selling a product despite the presence of commission recoveries or surrender charges and fees. For mortality risk, AEGON sells certain types of policies that are at risk if mortality increases, such as term insurance, and sells certain types of policies that are at risk if mortality decreases such as annuity products. AEGON is also at risk if expenses are higher than assumed by management.

We actively monitor and manages our underwriting risk by each underwriting risk type. Attribution analysis is performed on earnings and reserve movements in order to understand the source of any material variation in actual results from what was expected. AEGON's units also perform experience studies for underwriting risk assumptions, comparing AEGON's experience to industry experience as well as combining AEGON's experience and industry experience based on the depth of the history of each source to AEGON's underwriting assumptions. Where policy charges are flexible in products, AEGON uses these analyses as the basis for modifying these charges, maintaining a balance between policyholder and shareholder interests. We also have the ability to reduce expense levels thus mitigating unfavorable expense variation.

Sensitivity analysis of net income and shareholders' equity to various underwriting risks is shown in the table below.1,2,3

TABLE 111

<i>Underwriting risk</i>	<i>Estimated approximate effects sensitivity on net income</i>	<i>Estimated approximate effects on shareholders' equity</i>
<i>Lapses increase 20%</i>	<i>EUR (62) million</i>	<i>EUR (62) million</i>
<i>Mortality increases 10%</i>	<i>EUR (58) million</i>	<i>EUR (58) million</i>
<i>Mortality decreases 10%</i>	<i>EUR 59 million</i>	<i>EUR 59 million</i>
<i>Expenses increase 10%</i>	<i>EUR (95) million</i>	<i>EUR (95) million</i>

1. *The accounting basis used for this table is DAP. The effects should not be used as a guide in providing directional and approximate magnitude impact on net income and shareholders' equity in 2005 since starting January 1, 2005 AEGON adopted IFRS, which differs in significant respects from DAP in its treatment of the consequences of certain events, including interest rate changes, equity market changes and relative currency rate movements.*
2. *Basic assumptions: no correlation between markets and risks; unchanged conditions for all other assets and liabilities; limited management actions taken. All changes are relative to net income and shareholders' equity. Effects do not tend to be linear and therefore cannot be extrapolated for larger increases or decreases.*
3. *The mortality sensitivities assume that mortality increases or decreases for all products regardless of whether one product produces a gain or loss on the directional change.*