



2008 ERM Symposium:
Risk and Return in the Age of Turbulence

Scott M. Polakoff
Senior Deputy Director and Chief Operating Officer

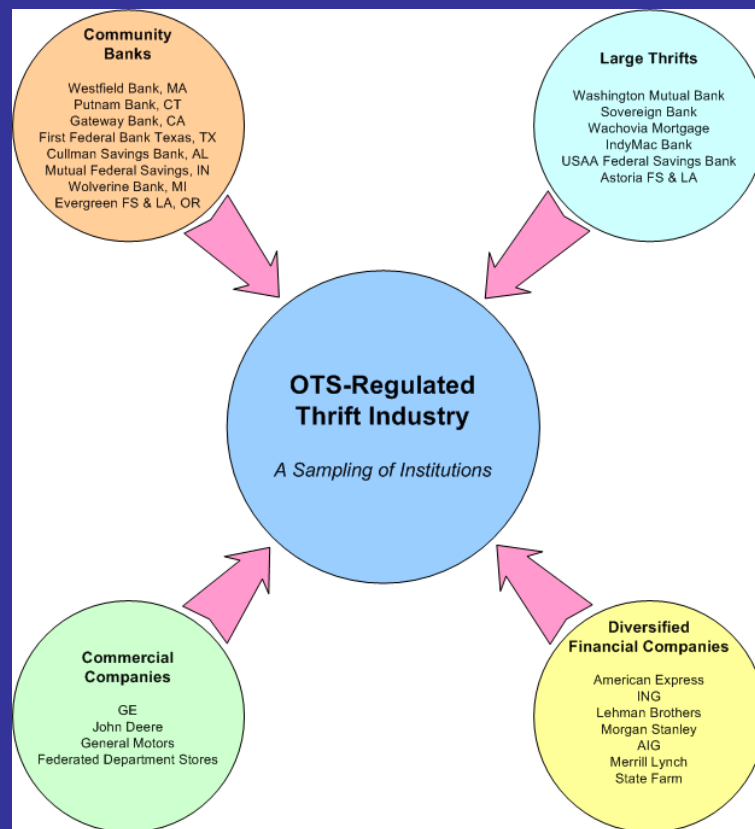


The Office of Thrift Supervision: *Facts and Figures*

- *The Office of Thrift Supervision was founded in 1989*
- *The OTS supervises a national thrift industry that is built on the bedrock of the American dream of homeownership.*
- *At the end of fiscal 2007, OTS-regulated thrifts had originated about 30 percent of the nation's single family mortgages.*
- *The OTS, which receives no Congressional appropriations, has a workforce of more than 1,000 employees, an increase of nearly 15 percent since 2005.*



The Office of Thrift Supervision: *Facts and Figures*

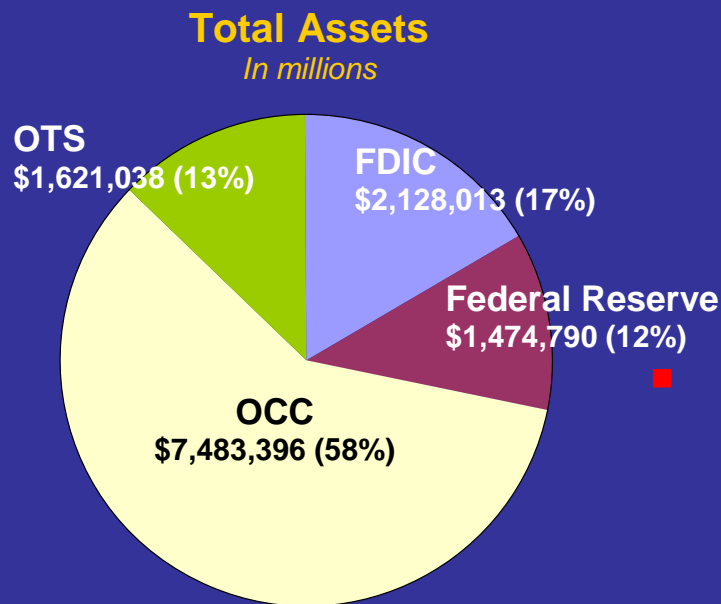


- *The thrift industry has broad diversification in size, complexity and business strategy. The industry contains community banks that serve cities, towns and rural areas across the nation, as well as nationwide lending leaders, full-service investment banks and complex conglomerates with worldwide reach.*
- *Holding companies supervised by the OTS are players in a global financial services marketplace, operating in more than 100 countries. At the end of the fiscal 2007, OTS supervised 470 holding company enterprises with about \$8.5 trillion in consolidated total assets.*



The Office of Thrift Supervision

Facts and Figures



- *The OTS is thriving. Assets under OTS supervision have grown by more than 55 percent in the last five years. At the end of fiscal 2007, the OTS supervised about 830 saving associations with total assets of about \$1.6 trillion—near an all-time high.*
- *The OTS-regulated thrift industry is facing challenges that confront the entire financial services industry: a slow housing market and generally unfavorable economic conditions. However, the thrift industry has solid capital—a source of strength during challenging times. At the end of calendar 2007, equity capital was 9.5 percent of assets and nearly 99 percent of all thrifts exceeded "well-capitalized" regulatory standards.*



The Office of Thrift Supervision: *Facts and Figures*

- The federal thrift charter is a vibrant, sophisticated model for running a retail financial services business. Three unique advantages of the charter foster this diversification:
 - ◆ **Preemption** – *The charter operates under a comprehensive framework of federal regulations that supersede state and local laws on lending and deposit taking activities. This provides a uniform national standard for lending and deposit taking, thereby reducing regulatory burden and increasing the efficiency of operations at thrift institution.*
 - ◆ **Branching** – *Federal thrifts enjoy the distinctive ability to establish branches nationwide, seamlessly and without restriction, under a single charter and a single regulator.*
 - ◆ **Single Supervisor** – *Savings and loan holding companies, and their thrift subsidiaries and affiliates, operate under the consolidated supervision of a single federal regulator, the OTS.*



The Office of Thrift Supervision

A Supervisory Approach to Risk Management

- Our fundamental supervisory approach to risk management is “principles based”
 - ◆ We do not dictate what kind of risk and exposure reports management should be producing and that the board should be reviewing. In fact, given the diversity of firms we regulate, such an approach would be inappropriate.
 - ◆ Instead, we expect each firm to develop a process that is commensurate with its size, complexity and the markets in which it operates. This places the burden on the firm to “prove” to us that the processes and procedures put into operation effectively identify, measure and control risk
 - ◆ In cases where a firm uses modeling technologies to produce reports, we look at the firm’s process for validating inputs, outputs and methodology. We take a critical look at model risk governance and how model risk is controlled throughout the enterprise



The Office of Thrift Supervision

A Supervisory Approach to Risk Management

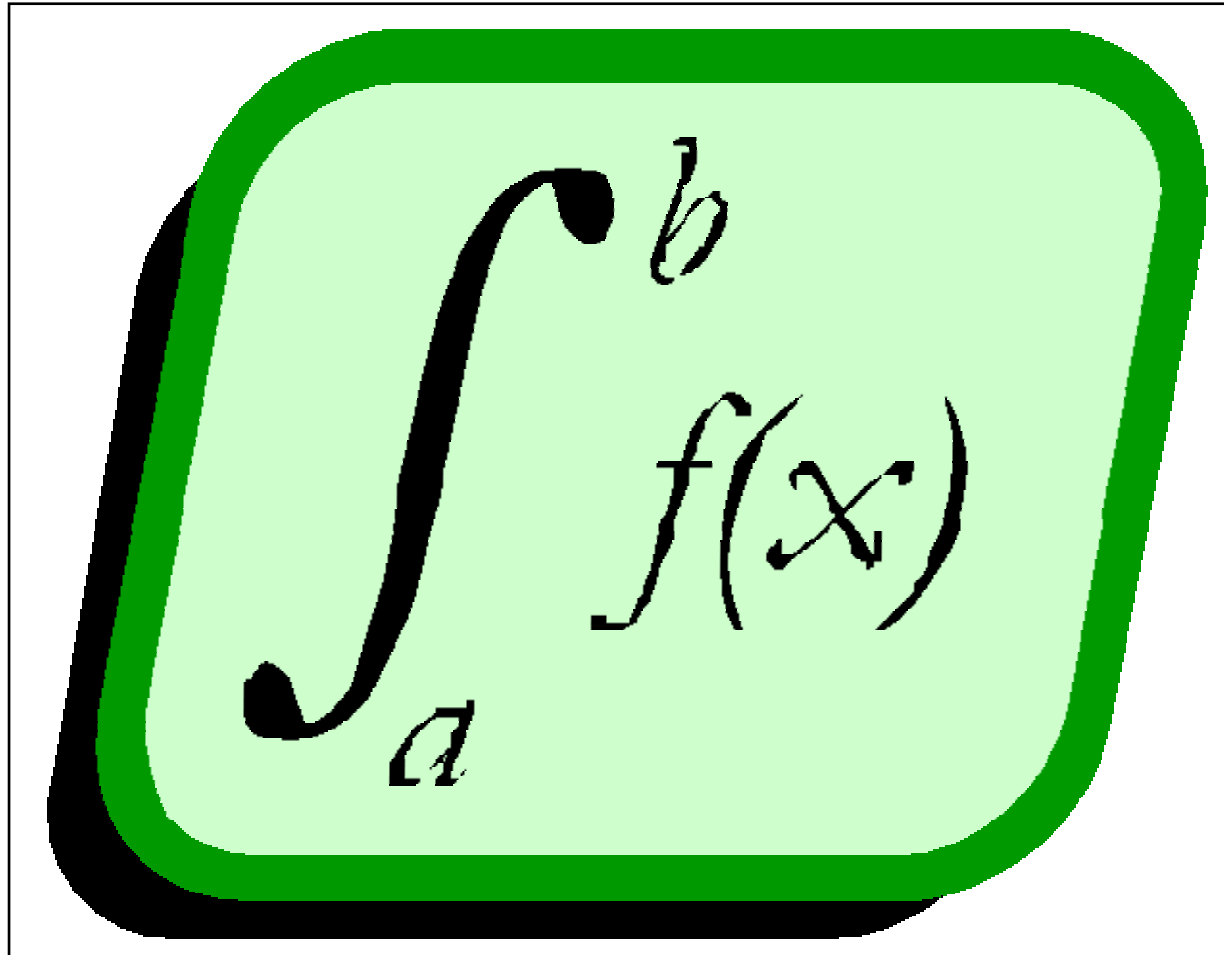
- Given the proliferation of models (ALM, VaR, Portfolio Credit, Economic Capital), the coming of Basel II and the growing complexity of financial instruments, the regulators must beef up their own modeling capabilities and the way we view risk. In particular, we must improve our capability to:
 - ◆ Review the adequacy of these internal models and the quality of the input data.
 - ◆ *Clearly, the quality, granularity and timeliness of data is a key concern. Many of the models used rely on very simplifying assumptions without a “look through” to contractual cash flows. Agency ratings are mapped to average losses on corporate bonds, not the actual risk characteristics of the underlying collateral. This is unacceptable and, in hindsight, we should have known better.*
 - ◆ Independently determine the value and risk sensitivities of these complex instruments
 - ◆ Conduct our own analysis on these instruments (i.e., “trust but verify”)
 - ◆ Identify and monitor systemic risk in the industry through enhanced data collection and analysis



The Office of Thrift Supervision *Observations*

- Breakdown of the asset-backed commercial paper market
- Liquidity planning and the importance of having access to the Federal Home Loan Bank systems
- The problems with bond ratings and credit scores
- The responsibility of equity analysts
- Complex instruments – were the risks properly understood?
- Reputational risk and going beyond the contractual obligations
- Negative Equity Certificates
- Updating the Liquidity Guidance

Risk Control Framework



Risk Management Is Comprehensive

Attribute	Features
Capital Allocation for Investments	<ul style="list-style-type: none"> ➤ Stand on its own or within firm
Portfolio Optimization	<ul style="list-style-type: none"> ➤ Risk Management is not risk minimization.
Risk Budgeting- Level of Risk	<ul style="list-style-type: none"> ➤ Portfolio Performance under Scenarios ➤ Generalized and Specific Scenarios
Feedback Mechanisms	<ul style="list-style-type: none"> ➤ Risk Reporting and Decomposition ➤ Learning from Experience
Professional Business	<ul style="list-style-type: none"> ➤ Operational Controls in Place ➤ Vertical and Horizontal Structure ➤ How employees are paid
Investor Information	<ul style="list-style-type: none"> ➤ Investor Risk Disclosure ➤ Investor Information Process
Capital Structure	<ul style="list-style-type: none"> ➤ Investor Mix ➤ Counterparty Relations

Capital allocation model

- Portfolio theory (VaR)
 - Correlation structure changes
- Changes in opportunity set
 - Discount rate is not constant
- Adjustment costs
 - Investments are not “putty;” they are “clay.”
- Each investment strategy must be allocated capital to withstand chaotic events. (Contingent capital).
 - Trading model
 - Investor model
- Negative Convexity
 - The value of flexibility

Optimization Tools

- Optimization model is not global
- Risk management is not risk minimization
- Level of risk is decided by hedge-fund/bank/corporation
- Depends on costs of adjustment
- Risk Budget constraints.
- Adjustment cost constraints.
- Concentration constraints.

Plan for crisis, scenario analysis

- Reduce risk if unbalanced – stress risks
- Hedge tails, pro-active approach
- Tradeoff between balance, insurance and reduction of level of risk (reserves)
 - Three tools for flexibility
- Goldilocks and the three bears.
 - Stop loss rules
 - Scaling technology
 - Negative convexity

Feedback system

- Vertical and Horizontal Structures.
 - Trust but Verify
- Learning and measurement
- Calibrate models
- Lack of information in a chaotic environment
- Factor exposures or convergence
- Structure strategies in different ways
- Data-mining revealed through results

Reporting system for risks

- Internal
 - Relevant technology to summarize risks for traders/management
 - Operational risks
- Investors
 - Transparency (full information no value)
 - Conforming v.s. truth

Firm structure/compensation

- Moral hazard
 - Trader model
 - Investor model
- Hubris (master-of-universe)
- Agency problems
 - Banking profits
 - Reporting
 - Option to come back (Japan)
 - Model risk (Buffet/derivative failures)
- Structure of operating the firm.
 - Brain power; Memory; Risk-sharing; Perturbation

Capital structure issues

- Financing
- Investors
 - Permanent capital
 - Overnight capital
 - Contingent capital with dynamic opportunity set
 - Flexibility

Setting Risk Appetite

2008 ERM Symposium Strategic Risk—Making Models Relevant in Executive Decisions

Charlie Shamieh

Executive Director, Enterprise Risk Management, AIG, Inc.

Chicago, April 16, 2008

It should be noted that this presentation and the remarks made by AIG representatives may contain projections concerning financial information and statements concerning future economic performance and events, plans and objectives relating to management, operations, products and services, and assumptions underlying these projections and statements. It is possible that AIG's actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these projections and statements. Factors that could cause AIG's actual results to differ, possibly materially, from those in the specific projections and statements are discussed in Item 1A. Risk Factors of AIG's Annual Report on Form 10-K for the year ended December 31, 2007. AIG is not under any obligation (and expressly disclaims any such obligations) to update or alter its projections and other statements whether as a result of new information, future events or otherwise.

This presentation may also contain certain non-GAAP financial measures. The reconciliation of such measures to the comparable GAAP figures are included in the Fourth Quarter 2007 Financial Supplement available in the Investor Information Section of AIG's corporate website, www.aigcorporate.com.

Credit Risk Management

Market Risk Management

Gen Ins. Risk Management

Life Ins. Risk Management

Op. Risk Management

Liquidity Risk Management

- Each of the ERM functions focuses on systematic (non-diversifiable) risks
- Combination of centralized and decentralized processes that fit the business model
- Regional ERM hubs in North America, Asia and Europe
- Mature risk governance structure since early 1990's
- ERM does not compensate for, but rather builds on, profit center RM
- Extensive use of "stress scenarios" that cut through all risk types (e.g. Pandemics)

AIG's corporate philosophy has always encouraged full profit center accountability for risk management – ERM has built on this unique risk culture

ERM's "Enterprise" - Wide Focus

ERM's efforts "connect the dots" between each of the businesses' silo risk management processes to maximize economic value for shareholders

Within & Between Segments

- ERM's focus has been on activities of an "aggregation" nature – e.g. economic capital, stress testing/catastrophic scenarios, consistent economic-based performance measurement, concentration risk management, reinsurance & risk mitigation (e.g. hedging) strategies, emerging risk management, etc.

"Pyramid" Risk Governance Structures

- Commencing with the Board and its Committees (e.g. Finance and Audit); cascading down to the four business segments, the regional/management subdivisions, the functional risk management committees (e.g. loss reserves) and the legal entity/profit center risk committees

Three Pillar Approach

- ERM's Pillar 1 capital requirement approach is centered around the ECM and quantification of risk capital
- ERM's Pillar 2 supervisory review approach is guided by stress testing and the active dialogue with regulators and rating agencies
- ERM's Pillar 3 market discipline approach is demonstrated by regular risk based disclosures in the Form 10-K and 10-Q supplements and the enhanced disclosures to investors through the AIG website (e.g. sub-prime presentation and ECM Initiative update)

Enterprise Risk Management

- Credit Risk
- Market Risk
- Insurance Risk
- Economic Capital
- Operational Risk
- SOX
- CSFT

Senior Management Committees

- Credit Risk
- Cross-Border Exposure
- Country Rating Review
- Financial Risk
- Foreign Exchange
- Derivatives
- L&RS RM
- General Insurance RM
- CEO Approval Process
- Capital Management
- Economic Capital
- ORM Forums
- CSFT/ TRC

Board of Directors

Finance Committee

&

Audit Committee

AIG's strategic risk management framework is used for:

1. More integrated limit system for asset, liability and the inter-relationship of assets/liabilities (ALM) risk across legal entities;
 - Includes quantitative limits for equities, real estate, alternative investments, credit risky assets and overall ALM risk
2. Strategic Asset Allocation - development of the “benchmark” portfolios taking account of economic, statutory and rating agency requirements
3. Hedging financial exposures and Reinsurance purchasing/retention strategies
4. Capital budgeting/planning – e.g., marginal impact of new business/product proposals

A clear articulation of risk appetite and risk tolerances assists in communication with rating agencies, investors/analysts and regulators

AIG Strategic Risk Criteria

Strategic risk criteria are the financial and operating measures that are fundamental to the setting of shareholder value creation targets.

Strategic risk criteria are developed along three dimensions:

- 1. Financial Strength and Rating Target:** Financial strength criterion focuses on the extreme tail portion of the economic P/L distribution. Financial strength is often the focus of policyholders, regulators and rating agencies.
- 2. GAAP and Stat Earnings-at-Risk:** Analysts and investors often place a premium on earnings stability and superior earnings growth. Statutory earnings are also critical for understanding dividend and profit sharing potential. Risk appetite is articulated in terms of earnings volatility. Earnings volatility focuses on shorter return periods.
- 3. Economic Earnings-at-Risk:** Economic earnings differ from GAAP earnings in two key respects: (1) assets and liabilities are marked-to-market/model and hence may be more volatile; (2) focus on long-term value creation. Economic earnings volatility focuses on the “body” as opposed to the tail of the economic P/L distribution.

Major financial/operating decisions are analyzed in terms of strategic risk criteria.



Strategic Risk Tolerances (1/3)

Strategic risk tolerances are the limits we place on each of the strategic risk criteria and applied at the AIG Group level:

1. **Financial Strength and Rating Target:** AIG should have enough financial resources to maintain a strong AA rating, taking into account the deal/transaction pipeline. The required capital is the greatest of (1) internal economic capital model results, (2) rating agency requirements, and (3) regulatory requirements.
2. **GAAP and Stat Earnings-at-Risk:** The appetite for GAAP and Stat earnings volatility can be expressed as a probability (return period) limit for a chosen GAAP/Stat earnings outcome. For example, one, or a combination of the following, metrics is used to measure appetite for GAAP/Stat earnings volatility
 - The probability of achieving a specific level of annual GAAP earnings growth;
 - The probability of achieving a RoE that exceeds AIG's cost of capital;
 - The probability of achieving a positive Stat earnings threshold commensurate with planned dividends

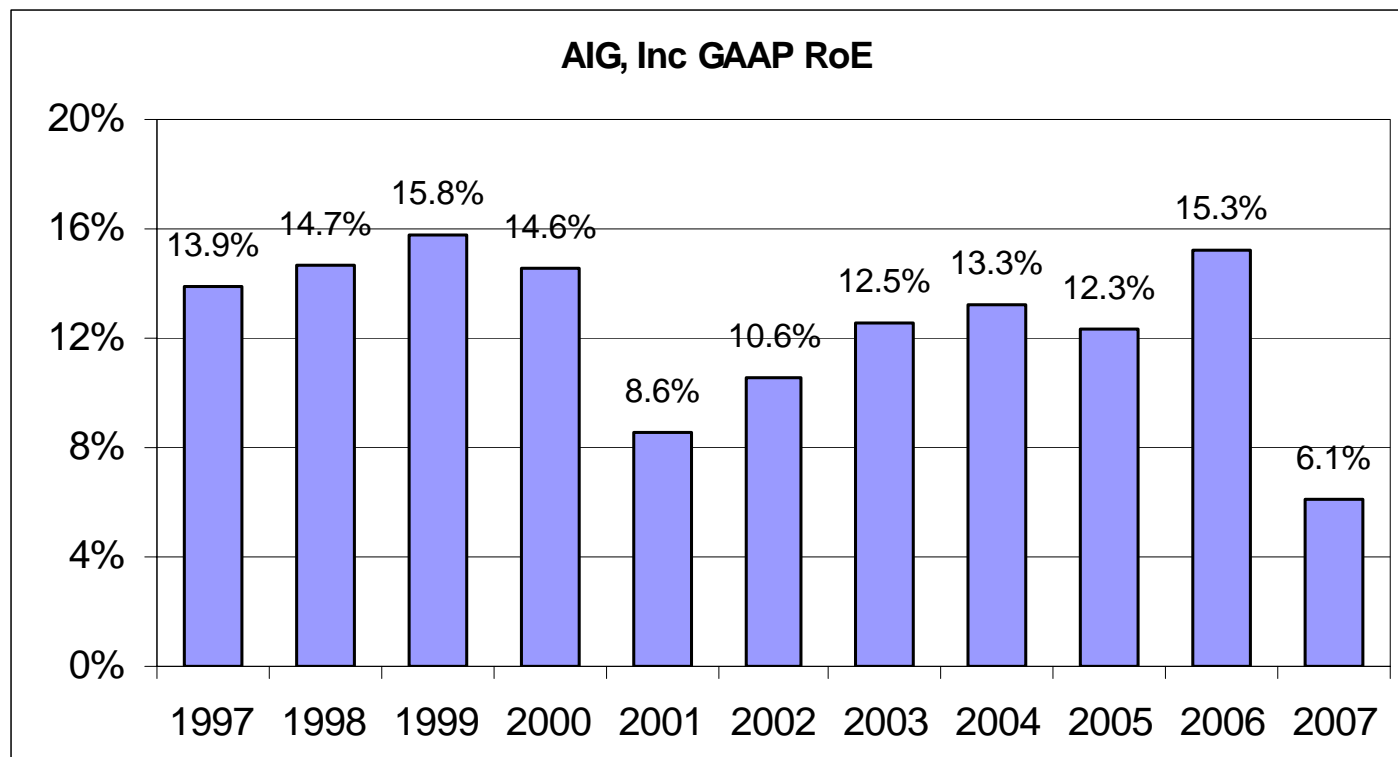
Strategic risk tolerances are the limits we place on each of the strategic risk criteria and applied at the AIG Group level:

3. **Economic Earnings-at-Risk:** Economic earnings are more volatile than GAAP/Stat earnings, and therefore could be afforded a higher volatility tolerance. For example, one, or a combination of the following, is used to measure appetite for economic earnings volatility
 - The probability of achieving positive annual economic earnings
 - The probability of achieving positive annual economic earnings growth
 - The probability of achieving positive Economic Value Added



Strategic Risk Tolerances (3/3)

AIG's historical performance and senior management targets are used to calibrate the tolerances.



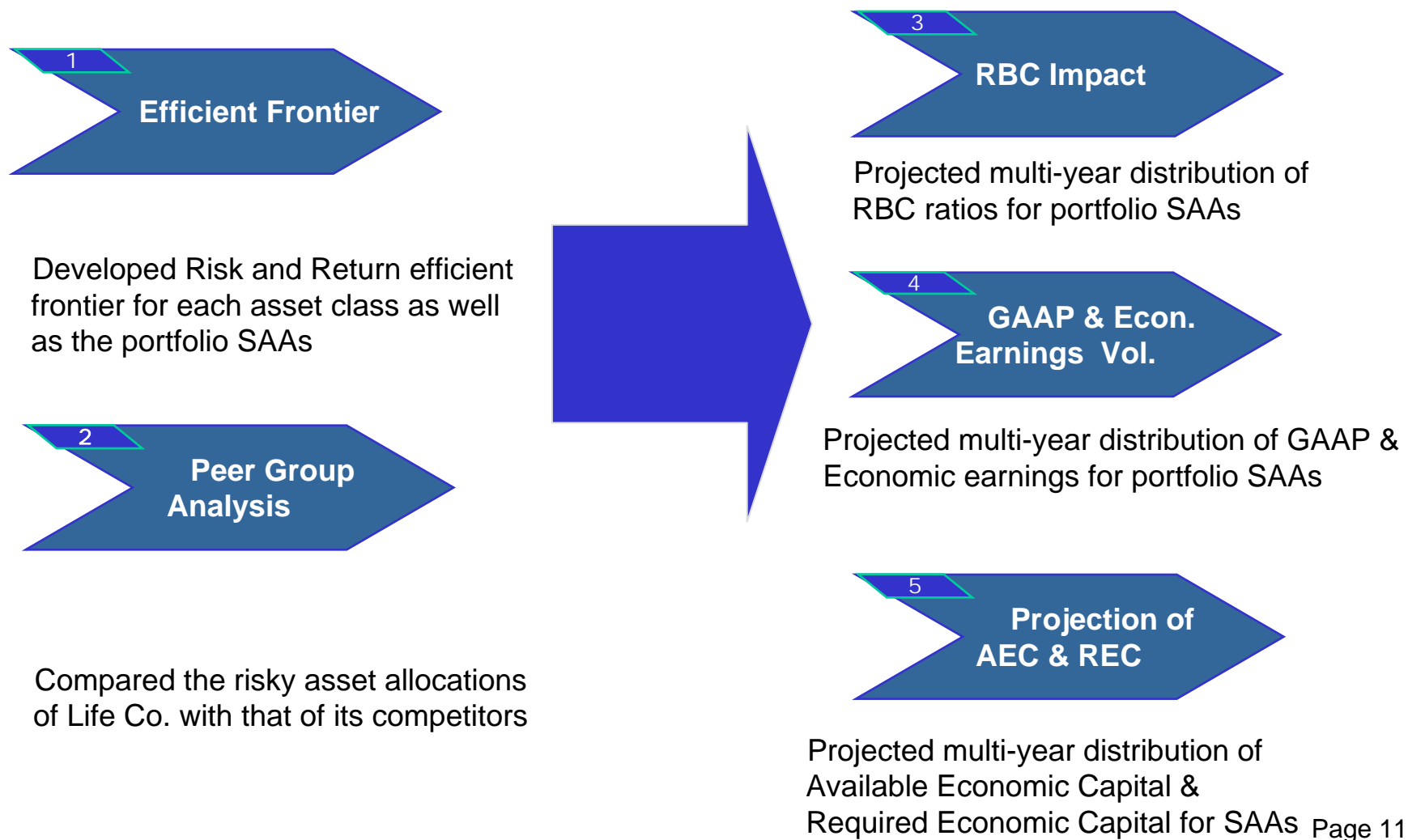
Source: AIG (Note : Financial data prior to year 2000 has not been restated)

In addition to the core strategic risk criteria, AIG imposes supplementary criteria and tolerances to limit our accumulations/concentrations of non-diversifiable risk.

The main categories of supplementary risk criteria are:

1. **Catastrophic Exposures:** Examples: Florida Hurricane, Tokyo Earthquake, Global pandemic, NY terrorism attack etc.
2. **Macroeconomic Exposures:** Examples: aggregate exposure to a severe US recession or stagflation; sustained deflationary environment in Asia; etc
3. **Credit Exposures:** Examples - concentrations by :sovereigns; cross border, industry sector, obligor risk rating, single name, residential and commercial mortgages
4. **Financial Markets Exposures:** Examples: strategic asset-liability positions in emerging markets; FX, rates and equity exposures
5. **Liquidity Risk:** Assessed by applying a series of “stress scenarios” for managing group wide liquidity levels
6. **Operational Risk:** Assessed by applying tolerances to risks which could subject the organization to operational, regulatory, reputational or legal costs

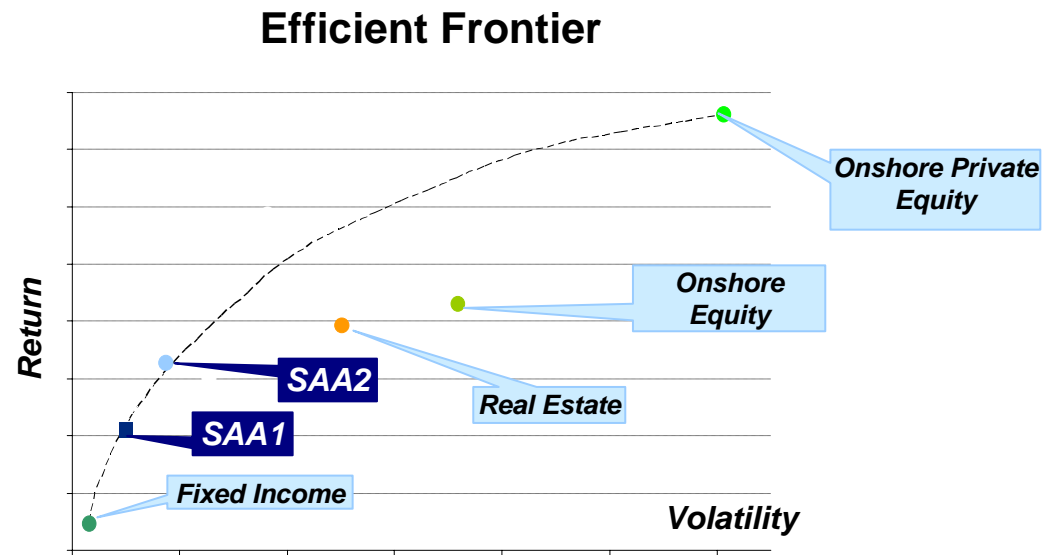
We evaluated alternative Strategic Asset Allocations (SAA) using our SRM framework, incorporating RBC requirements and GAAP earnings projections.





SAA: Efficient Frontier and Peer Group Analysis

We evaluated the risk and return trade off for the portfolio SAAs and compared the asset allocation with that of its competitors



Peer Group Analysis

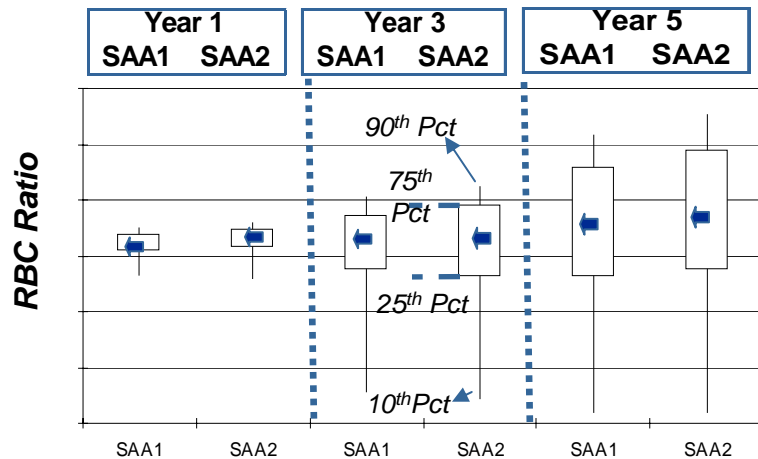
	BU	Company A	Company B
Fixed Income	70.0%	65.0%	80.0%
Onshore Listed Equity	14.0%	10.0%	10.0%
Onshore Private Equity	1.0%	2.0%	0.0%
Real Estate	15.0%	23.0%	5.0%
Total	100.0%	100.0%	100.0%



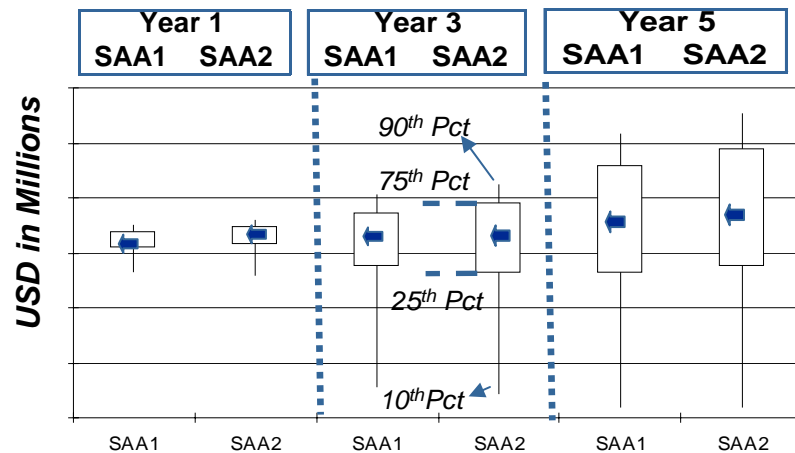
Integrated SAA Model: RBC, GAAP and EC

An integrated model enables a holistic approach to evaluate alternative SAAs, incorporating EC, RBC requirements and GAAP earnings volatility

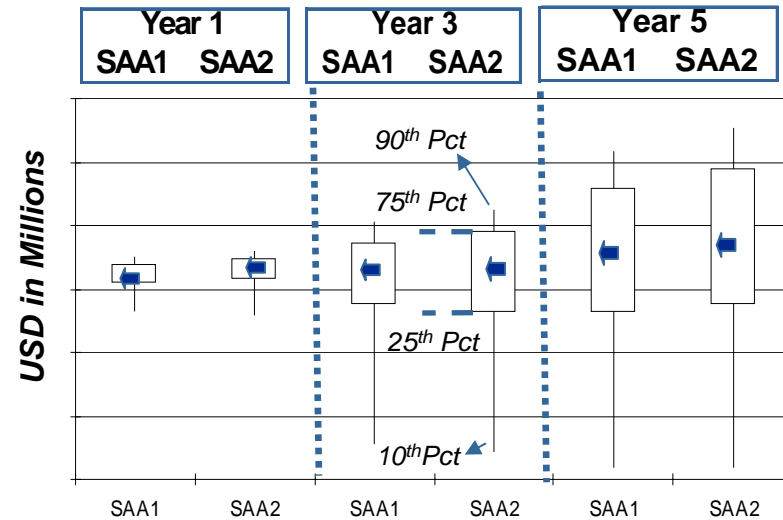
Projected RBC Ratios



Projected GAAP Earnings



Projected Available Economic Capital



The top and bottom of each box are the 75th and 25th percentiles, respectively
The top and bottom of each line are the 90th and 10th percentiles, respectively



AIG's Use of Economic Performance Measures

“Commencing in 2008, the economic value added for each of AIG’s business segments will be considered as an element, alongside other existing measures, in the evaluation of senior management performance.”

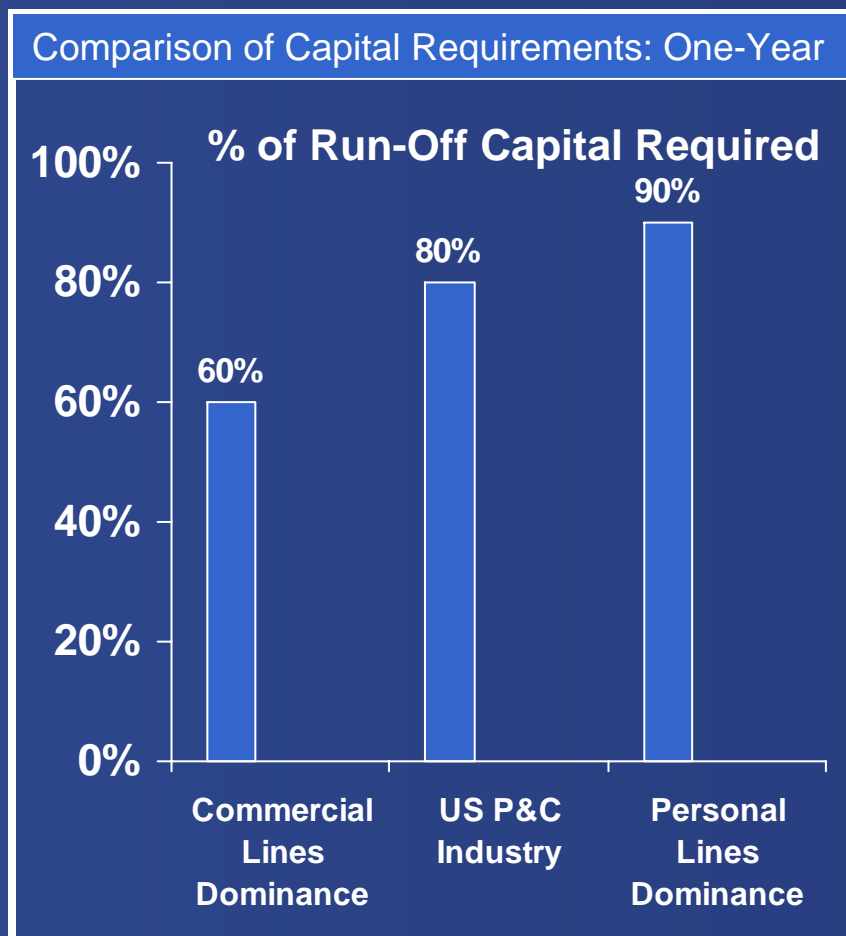
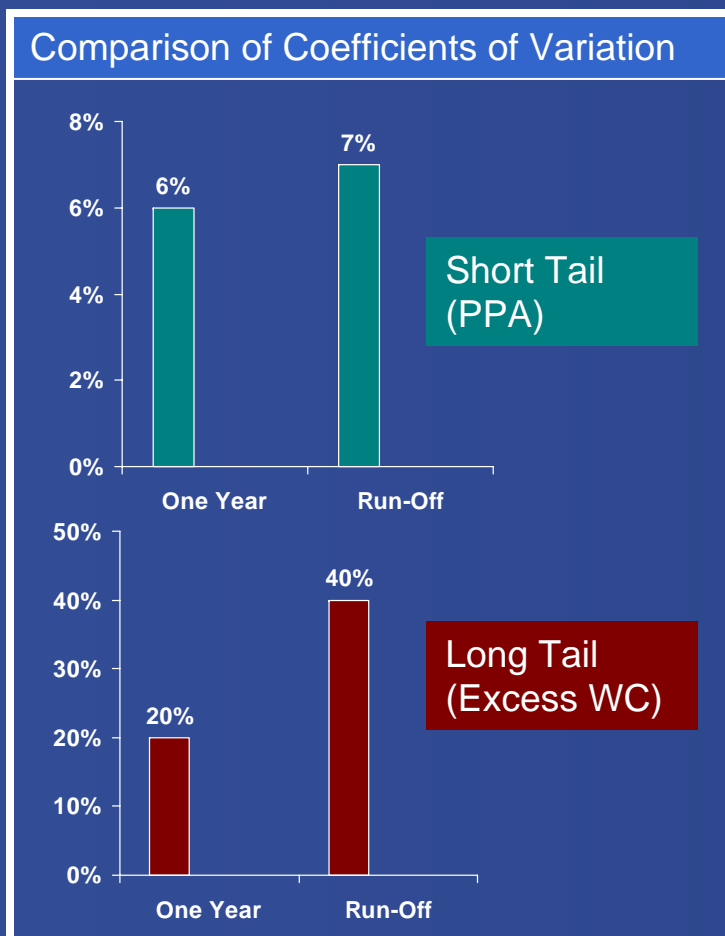
- AIG Investor Relations Website, February 2008

Assessment of Financial Strength of P&C Insurers - Reserve Risk Required Capital : One-Year vs. Run-Off

Does use of a common (e.g. 5, 10, 30 year) projection period, result in an apples-to-apples comparison of financial strength of P&C insurers with vastly different run-off profiles?

Source : AIG Analysis of Schedule P Data as at Dec, 31, 2006

- ILLUSTRATION -



Risk Aggregation – Three Step Approach

AIG's ECM uses a three step approach for ensuring that "accumulations" of risk are robustly estimated

Hybrid Approach in ECM

- Within risk types, aggregation is performed using consistent scenarios (e.g. the different components of market risk)
- Between risk types, risks are aggregated using a correlation matrix / copula approach to reflect the impact of "stress correlations" and increased interconnectedness of risks
- Some of the aggregations (e.g. between market and credit) are increasingly being performed using a consistent scenario approach

Capital Mobility

- Insurance operations are regulated along legal entities by different jurisdictions with varying minimum risk based capital (RBC) requirements
- Restrictions on dividend payments to the parent and other capital flow constraints and tax considerations give rise to a further "fungibility haircut" to determine realizable diversification benefits

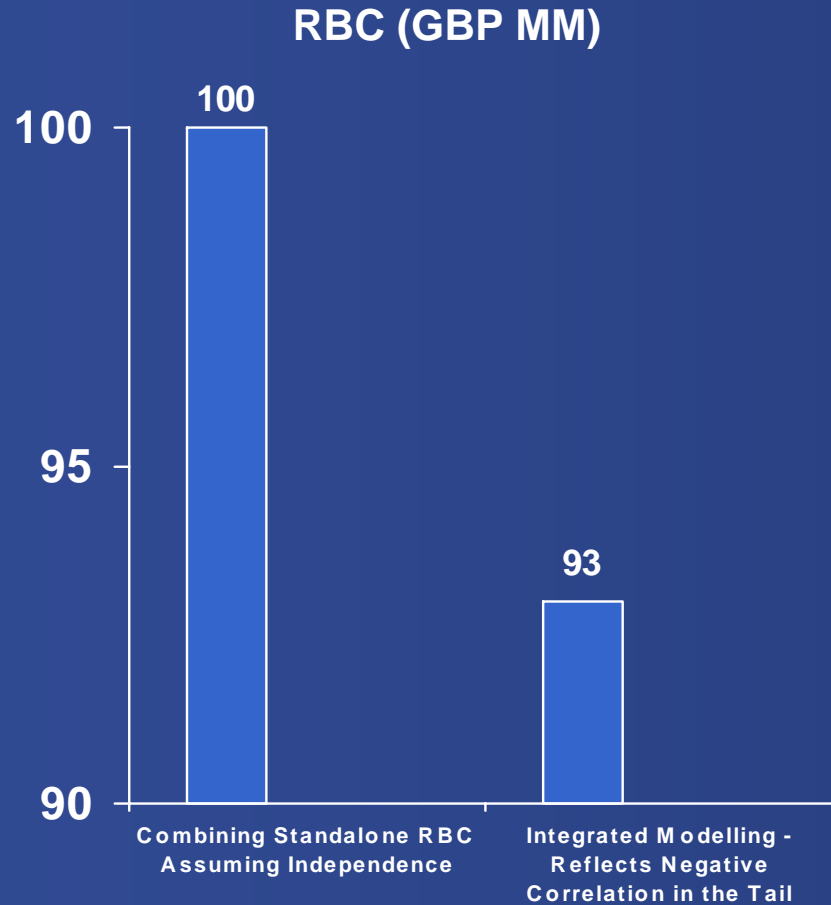
Stress Testing

- Bottom up "stress tests" (e.g. effect of a severe pandemic) are performed by simple addition of risk type effect, following detailed assessment of each category of loss (e.g. mortality, credit, interest rate and business interruption losses for pandemics)
- Provides a "reality check" on assumed modeled dependencies

Economic Capital – the Importance of Integrated Modeling

Case Study : UK Annuity Book with Credit Risky Cash flow Matching Strategy (Credit Composition = Globox Index)

Extreme Mortality & Interest Scenarios derived from Low Interest Rate Scenarios
– Negatively Correlated with Extreme Credit Loss Scenarios (High Interest Scenarios)



Source:

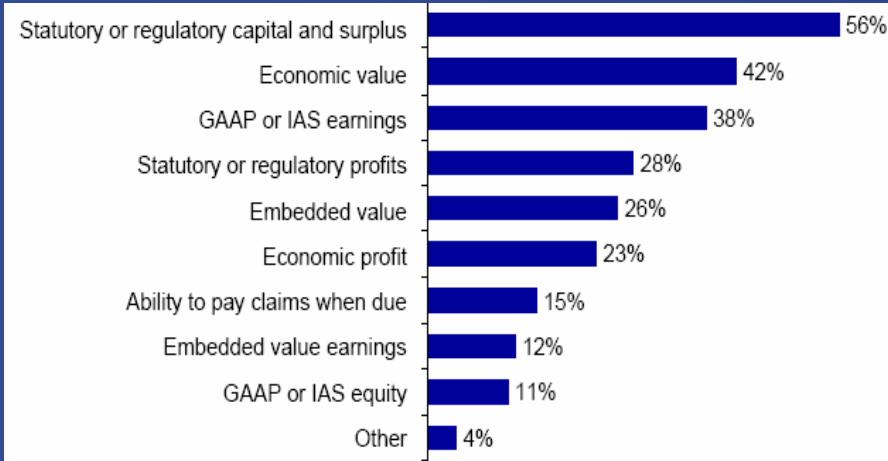
Barrie & Hibbert, February 2007, "Annuity Risk Management : One-Year VAR Decomposition – A Case Study"

Dominance of Regulatory Risk Measures Across Global Insurance Industry

Although two thirds of large insurers have economic capital models, fewer companies have truly embedded these in business applications.

Aggregate Survey Results

When measuring risk, what are the principal financial measures on which the impact of the risk is assessed?
(Select up to 3)



Key Regional Differences

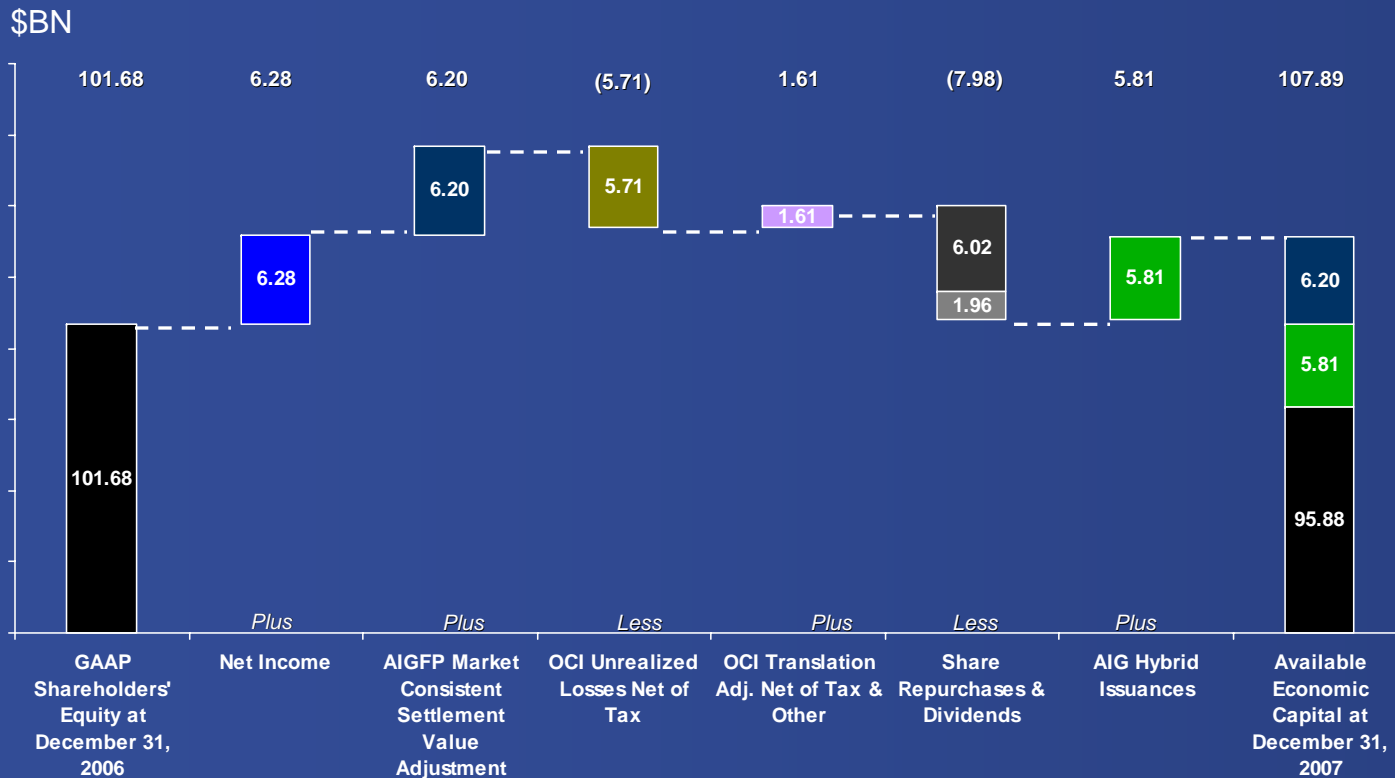
- Most frequently cited financial measures on which the impact of risk is assessed are statutory or regulatory capital and surplus (56%) and economic/embedded value
 - Use of regulatory capital and surplus is most frequently cited by participants in North America (70%) and the U.K. (67%)
 - Life insurers and multi-line companies in North America (75% in each case) were more likely than their European counterparts (58% and 31%, respectively) to focus on statutory or regulatory capital and surplus
 - Results were approximately the same for P&C companies in North America (62%) versus Europe (60%)

Source : Tillinghast, ERM Survey, September 2006

AIG Disclosures (1 of 3)

Change in Available Economic Capital

Year End 2006 to Year End 2007



- Dividends and Share Repurchases (\$8.0 BN) exceeded Hybrid Issuances (\$5.8 billion)
- The AIGFP market consistent settlement value adjustment (\$6.2 BN) was largely offset by OCI unrealized losses (\$5.7 billion)

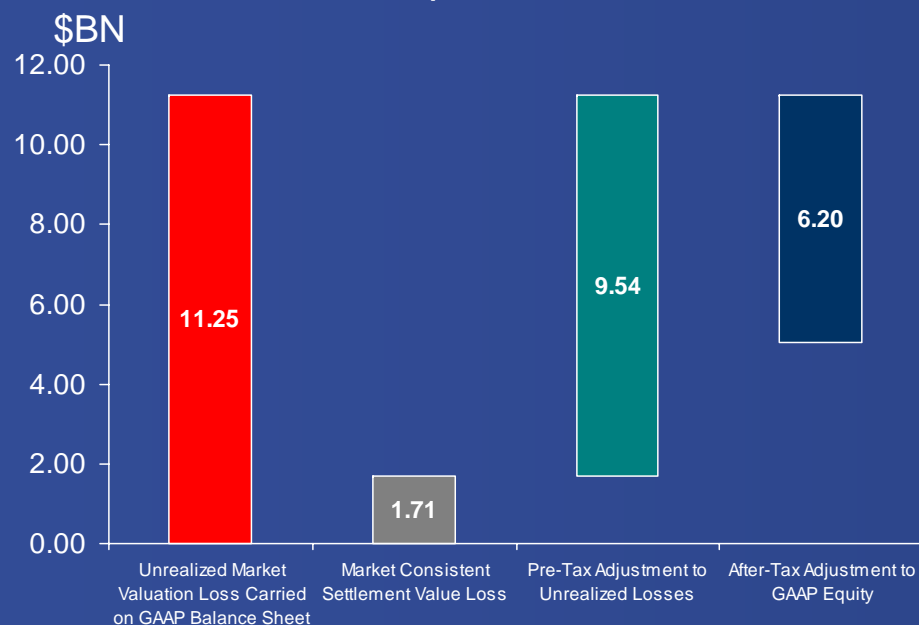
During 2007, AIG's conservative estimate of Available Economic Capital increased by \$6.2 billion (i.e. \$107.9 less \$101.7 billion).

Source: AIG Investor Relations Website, February 2008

AIG Disclosures (2 of 3)

Adjustments Made to Unrealized GAAP Market Valuation Loss to Determine Available Economic Capital Under AIG's ECM

Market Consistent Settlement Value Adjustment to Determine Available Economic Capital (December 31, 2007)



- At June 30, 2007 AIG used GAAP equity as a conservative proxy for Available Economic Capital
- For December 31, 2007:
 - AIG will use Market Consistent Embedded Value* as its estimate of Available Economic Capital for the Life & Retirement Services segment
 - For the General Insurance segment, a consistent approach will be used
 - These valuation approaches are consistent with the market consistent settlement value approach AIG has applied to FP's Super Senior credit derivative portfolio of Multi-Sector CDOs

* Currently being independently reviewed and certified by Towers Perrin.

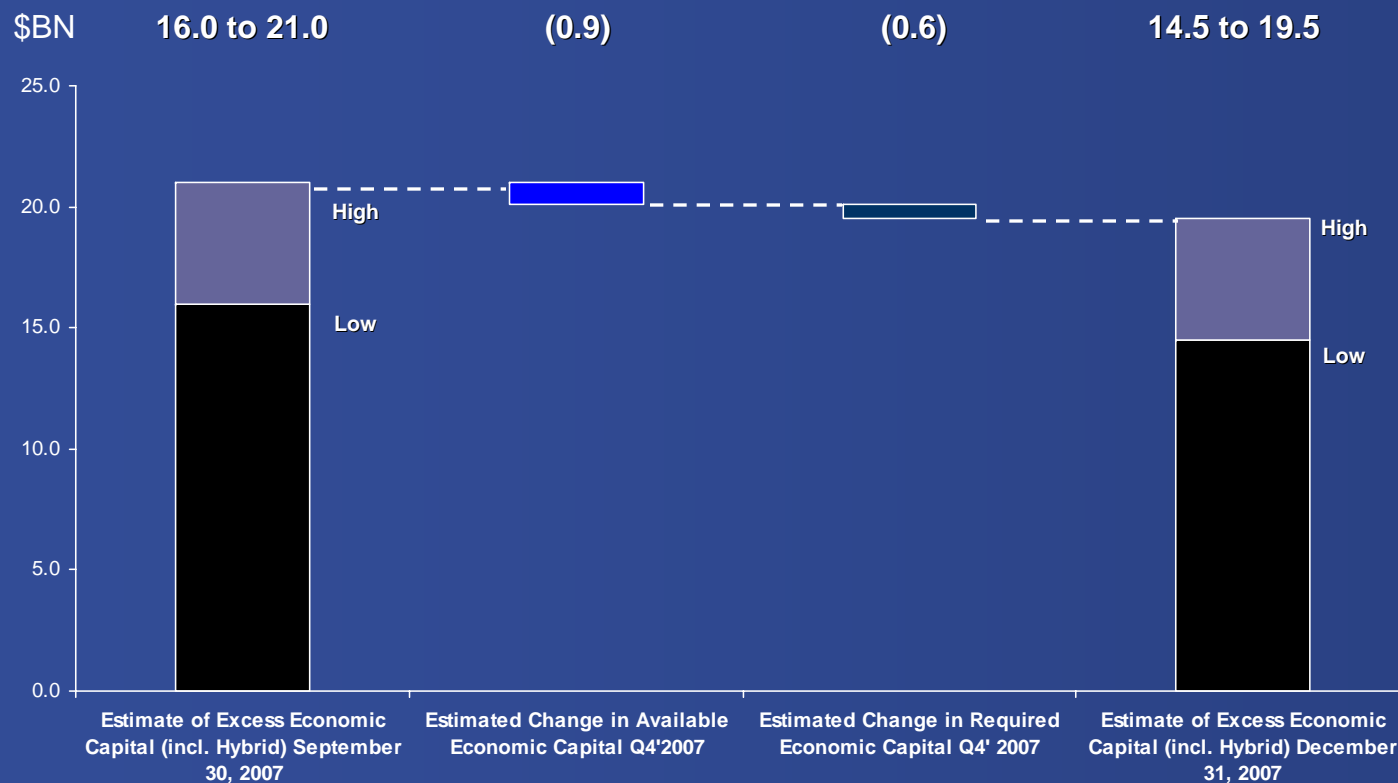
For the purposes of determining Available Economic Capital, AIG believes it is reasonable to make a positive market consistent settlement value adjustment of \$6.2 billion in respect of the AIGFP Unrealized Loss to its GAAP Reported Total Shareholders' Equity as at December 31, 2007.

Source: AIG Investor Relations Website, February 2008

AIG Disclosures (3 of 3)

Change in Conservative Estimate of Excess Capital

September 30, 2007 to December 31, 2007



- Estimated Available Economic Capital was reduced by \$0.9 billion in Q4'07, driven by Net Income, Share Repurchases and OCI Unrealized Losses
- Estimated Required Economic Capital increased marginally by \$0.6 billion in Q4'07

AIG's conservative estimate of excess capital has reduced slightly by \$1.5 billion over Q4'07 to a range of \$14.5 to \$19.5 billion as at December 31, 2007¹. This estimate is based on a roll-forward of the September 30, 2007 disclosure and will be "refreshed" consequent to the full model valuation update at December 31, 2007².

1. Before allowance for an additional \$1 billion that was required to be advanced in January 2008 for share repurchases pursuant to commitments that existed at December 31, 2007.
2. The full model valuation update will use the published results of AIG as at December 31, 2007, as inputs and is therefore expected to be available in May 2008.

Source: AIG Investor Relations Website, February 2008

AIG's Use of Economic Performance Measures

- *“Commencing in 2008, the economic value added for each of AIG’s business segments will be considered as an element, alongside other existing measures, in the evaluation of senior management performance.”*
- AIG Investor Relations Website, February 2008