

Snapshot

The Changing Financial Services Landscape: The Life Insurance Company Perspective

On January 27 and 28, 2000, the Wharton Financial Institutions Center held its winter Life Insurance Forum meeting at the new Inn at Penn.

Eric Speer, principal at Tillinghast-Towers Perrin, led the dinner discussion on Thursday evening. Speer reviewed highlights from Tillinghast's soon to be published CEO survey which examines strategic issues and challenges facing the financial services industry across four sectors: life insurance, property/casualty, banking, and investment management. His remarks focused on the insurance industry results, interpreted against the broader context of the financial services industry as a whole. His presentation served to stimulate dinner conversation and set the stage for the next day's presentations.

The Friday meeting began with David Cummins, Wharton professor of insurance and risk management, who introduced and distributed copies of the recently published book, "Changes in the Life Insurance Industry: Efficiency, Technology, and Risk Management," co-edited with Anthony Santomero, director of the Financial Institutions Center. Cummins moderated discussions

with authors of selected chapters from the book, highlighting featured content and results.

This discussion served to frame the day's meeting, with many of the topics outgrowths of earlier research addressed in the new publication. Larry "Chip" Hunter, assistant professor of management, reviewed his research into the implications of differentiated marketing strategies for HR practices. Lorin Hitt, assistant professor of operations and information management, the author of the book's chapter on technology, discussed a current project examining the relationships between organizational practices, information technology, and productivity in the life insurance industry.

The afternoon discussion turned to the retirement asset market: Rachel Croson, assistant professor of operations and information management, and Gavan Fitzsimons, assistant professor of marketing, have been working with Mike Keller, vice president of individual markets at the Principal Life Insurance Company, on issues associated with the asset decumulation phase of retirement. Croson and Fitzsimons are currently designing a survey that will identify psychological biases



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and look at how these biases affect consumer's post-retirement investment spending decisions.

Olivia Mitchell, professor of insurance and risk management, ended the day with a review of current research on post-retirement financial strategies, including the role of annuities in both the U.S. and non-U.S. markets. She also extended an invitation to the group to attend the upcoming May 1 and 2 conference on "Innovations in Managing the Risks of Retirement" being presented by Wharton's Pension Research Council and co-sponsored by the Financial Institutions Center.

What follows is a brief "snapshot" summary highlighting the meeting's discussions. Relevant academic papers and other material related to the Life Insurance forum are available at the Center's web site:

<http://fic.wharton.upenn.edu/fic>

What's on the Minds of CEOs?

Eric Speer, Principal Tillinghast Towers Perrin

Eric Speer led a discussion on Thursday evening by reviewing highlights from Tillinghast's annual survey of CEOs, which will upon publication be mailed out to members of the Life Insurance Forum. The survey, completed in 1999, targets 1,000 North American CEOs in four financial services industry sectors: property/casualty and life insurance, banking, and investment management. The survey examines CEO assessments of the key strategic issues and challenges facing firms across these sectors.

Speer noted that distribution effectiveness and productivity emerged in the survey as the primary strategic concerns across all sectors. Confidence about their ability to respond to these strategic issues varied by sector, but the respondents generally cited technology as the major limiting

capability. The CEOs surveyed identified investment management and brokerage firms as best positioned to meet the distribution challenge, with Citigroup and Charles Schwab topping the list of firms mentioned across all sectors.

When compared to their peers in other sectors, life insurance CEOs were more likely to state that they did not feel well prepared to deal with their top strategic issues. Life insurance CEOs cited a variety of significant distribution challenges, the most prevalent being the challenge of meeting changing customer demands and expectations, the management of human resources issues such as recruiting, training and retaining salespeople, and the management of information technology.

Over 80% of life insurance CEOs anticipated significant changes in the industry's competitive structure, such as strategic alliances, joint ventures, mergers, and acquisitions.

Clearly, these concerns are shared by all firms in the financial services industry - but the strategies for addressing these issues will be different for each firm. The Financial Institutions Center's Life Insurance Forum has focused on looking at these challenges from a life insurance perspective, and Eric Speer's comments served as a basis for continued discussion over dinner and set the stage for the next day's presentations.

Changes in the Life Insurance Industry: Efficiency, Technology, and Risk Management

David Cummins Professor of Insurance and Risk Management in Moore College President of Liberty Mutual Insurance Company and *Jonathan Harton* is Managing Director of Insurance Practice at *Peter Burns* Managing Director, Financial Institutions Center *David Abel* Professor of Insurance and Risk Management

David Cummins began the Friday meeting by introducing the Center's newest publication which he co-edited with Anthony Santomero, Director of the Financial Institutions Center. The book, "Changes in the Life Insurance Industry: Efficiency, Technology and Risk Management," is the first to analyze the determinants of firm performance in the life insurance industry by identifying "best practices" employed by leading insurers in today's changing business environment. The book draws upon recent research initiatives as well as a multiyear industry study and data from a comprehensive survey conducted by the Financial Institutions Center. The survey, carried out in 1998-2000, examined life insurance management practices and strategic choices in distribution systems, information technology, mergers and acquisitions, human resources and financial strategies. Cummins and the Center's Managing Director, Peter Burns, then led a discussion in which authors of selected chapters outlined their work in the book and highlighted specific research results.

Jim Moore began the session by introducing structure and content of the survey instrument, the topic of chapter two in the book. The survey's purpose was two-fold: To discover what insurers saw as the key questions and issues facing them in the changing industry environment, and to find out which management practices in place at the time were the most successful. 70 firms responded to the survey, representing approximately 70% of the industry by assets and

28% by premiums. While the life industry is a heterogeneous group as a whole, several prominent themes did emerge from the survey. Like the Tillinghast CEO survey mentioned above, technology was named frequently as a significant concern. The survey results also clearly emphasized respondents' views that a dramatic change in the way in which life insurance products are distributed will be required. The survey also highlighted insurers' awareness of the need to move from product-driven to more customer-driven strategies, a change that was also seen as having important implications for corporate culture. Survey respondents also emphasized their concerns about managing cost structures and improving productivity.

What are the efficiency and productivity drivers of firm level success? In chapters 3, 4, and 5, David Cummins examines the relative cost efficiency of firms within the industry, using of benchmarking frontier efficiency methodology known as DEA, which Cummins pioneered in earlier work. Cummins' results demonstrate that efficiency scores were relatively lower for life companies when compared to other financial services sectors such as banking and property-liability insurers. Moreover, the scores were widely dispersed across the life insurance industry, usually an indication of protected markets - a situation that is rapidly changing with the entry of non-traditional competitors such as banks, and mutual fund companies. Cummins then described how the research cross-correlated efficiency scores with firm-specific information obtained through the survey to determine the drivers of relative efficiency. For example, he noted that the relatively inefficient firms could significantly improve their operating performance by adjusting distribution systems and employing technology more efficiently - in fact, distribution and technology were the two key differentiating factors for firm efficiency. Cummins also examined firms that were active mergers and acquisitions participants to see if relative

inefficiency was related to consolidation efforts. Among other findings, the data suggest that mergers and led to improved efficiency for acquirers and the industry as a whole.

Peter Burns, Managing Director of the Center, gave an overview of the human resources chapter written by Peter Cappelli, professor of management and director of the Center for Human Resources, and Clint Chadwick, a former student, now at the University of Illinois at Urbana-Champaign. Burns noted the survey respondents were generally unable to link strategic goals and human resource management practices. The lack of strategic direction in human resource management was illustrated in the sometimes-inconsistent application of compensation and other human resource practices.

David Abbel, professor of Insurance and Risk Management and Finance, concluded this session with a review of his contributions to the book's chapters on risk management and asset/liability valuations. In addition to the specific findings from the book, Abbel described his work with the industry in dealing with valuation challenges. For a number of years, he has been exploring a variety of approaches in developing a method for uniform valuation of assets and liabilities. Firm assets are already marked to market, but it has proven more difficult to do the same for the liability side of the balance sheet. With a uniform valuation method, a firm can more effectively quantify risk, particularly if the liabilities are valued using models that feature the same drivers of uncertainty as those used on the asset side of the economic balance sheet - a technique which would have enabled some of the firms which Abbel observed as an expert witness to avoid failure. Much of his work in this area has been adopted by the industry and is now incorporated in licensing exams.

These and other topics are covered in detail in

the book, *Changes in the Life Insurance Industry: Efficiency Technology and its Management*, edited by J. David Cummins and Anthony M. Santomero. This book can be ordered through Kluwer Academic Publishers, 781-871-0000, or through most online booksellers.

Strategic Segmentation and Human Resources Management

Larry Chip Hunter Assistant Professor of Management

The changing nature of customer needs and expectations has made it all the more important for firms in the financial services industry to find ways to hire and retain trainable, qualified employees. Life insurance firms face especially stiff competition today, as firms outside their sector begin to move in on their territory. In responding to these challenges it is critical that human resources departments be used not just as a way of "filling seats," but strategically, for competitive advantage. Drawing on his research in the financial services sector including retail banking and call center operations, Chip Hunter described the implications of differentiated marketing strategies for human resources management practices.

Hunter's previous work in telephone call centers documented the effect that specific skill sets in technology, social interaction and product knowledge had on service quality and performance. Hunter found that firms, when determining the appropriate skill levels that will lead to desired performance goals, must take into account the needs of the customer to whom the potential employee will be. To illustrate, Hunter contrasted high value and mass-market customer segments.

For the mass-market segment with a service environment characterized by high volume and

relatively low customer profitability, managers are faced with particular challenges and choices. These service positions which represent relatively low wage jobs tend to attract employees with lower skills and are characterized by high turnover - making investments in training difficult to justify. But managers do have some possible solutions: providing internal or external career paths, providing workers with a variety of tasks and opportunities for growth and training, and perhaps giving them control over some parts of the process - all methods which have been demonstrated to lower turnover and provide the opportunity for greater skill training. A manager could also choose to go in the other direction, acknowledging and accepting high turnover. In this case, he might invest in technology to "script" employee behavior more thoroughly. And lastly, managers can choose to outsource these customer service functions to firms that focus on investing in the technology and management practices necessary to successfully operate in this environment.

At the higher end of service, managers face a different set of challenges. Here they need to develop higher levels of service capability. Many of the same strategies can be employed to develop employee skill levels and to better manage turnover. But to serve this segment they also need to use information systems effectively: Hunter has found that, at this level, it is generally not a good idea to limit employees access to information. Information systems and technology are best employed to facilitate the development of knowledge workers in these high-value customer segments.

Hunter's ongoing research examines the effectiveness of different management approaches in human resources, and the ways in which a firm can shift its human resource culture from its traditional focus on compliance, to a role that is more actively strategic. Over the next two years, his research team will be exploring these issues

through a series of on-site interviews and surveys across several industries and multiple customer segments.

Emerging Issues in Technology Management for Life Insurers

Lorin Hitt Assistant Professor of Operations and Information Management

For all the heterogeneity exhibited by life insurance companies in the Wharton Financial Institutions Center survey, it was clear that one concern cut across all firms: the need to develop uses for technology that would be effective and provide the firm with competitive advantage. The Tillinghast survey similarly emphasized that technology was seen by financial services CEOs as a major challenge as they strive to meet strategic objectives.

What, then, is the relationship between organizational practices, information technology, and productivity? Drawing on his previous work in a variety of industries, Lorin Hitt will evaluate the life insurance industry's use of information technology to better understand how different approaches for identifying, evaluating and implementing IT projects affect the value of these investments and the value that IT contributes to the enterprise as a whole.

Hitt has begun to do this by conducting preliminary interviews with a pilot site, the results of which he summarized for the group. At his pilot site, Hitt found that IT development in the firm was usually driven by marketing and actuarial departments for the purpose of product enhancement. Evaluation of IT opportunities tended to lean towards the quantitative, measuring sales volume and returns or cost savings while overlooking more qualitative measurements. Hitt also looked at the way the projects themselves were managed. IT resources

tended to be bought as customized packages, a practice that could leave the firm vulnerable to outsourcing risks such as opportunistic re-negotiation by the contractor. Ex-post evaluation of IT projects, when they occur, tend to focus on expense targets, while again missing the qualitative benefits IT investments provide. Hitt found that generally, e-commerce was still at an exploratory stage - investments tending to focus on producer support functions.

Hitt plans to examine these issues in detail by conducting a series of interviews with a larger sample of participating firms, with the goal of identifying general management practices used to make IT decisions. He will also examine the specific processes involved in firms' recent product development and e-commerce projects. Hitt will then compare practices across firms for similar investments, and also compare general IT management approaches with the best practices in other industries, to better understand how these specific investments have added value to the firm. The end product of this research will compare practices against other companies as well as against best practices as defined by management literature.

Hitt will be contacting participating firms in the next month to schedule interviews with a variety of people in the organization, including senior IT executives as well as senior executives responsible for sales and distribution, product design and marketing. Information shared in the interview will of course be held in strict confidence. If you have any questions or would like further information about this project, please contact Peter Burns, at 218 8- , or Lorin Hitt, at 218 8-770.

The Decumulation Decision Process: Identifying Psychological Biases and their Impact on Post-Retirement Spending

Rachel Croson Assistant Professor of Operations and Information Management
Gavan Fitzsimons Assistant Professor of Marketing
Senior Vice President Individual Annuities
Principal Life Insurance Company

Mike Keller began this session by framing the topic from the life insurance company perspective. A look at the near future shows that 20% of the population will soon be over 65. This demographic group controls a significant proportion of assets, at a time when the structure of post-retirement income management has shifted from annuitized flows, in the form of defined benefit plans and social security, to defined contribution arrangements. Consumers are faced with increasingly difficult choices as they try to manage their capital stock, while at the same time navigating through an increasingly complex range of tax, health care and other financial issues. It is imperative for life insurance firms to understand the deciding factors people consider as they spend down their income, so that they may develop and market solutions more effectively.

Rachel Croson and Gavan Fitzsimons, to this end, have drawn upon their backgrounds in economics, psychology and marketing to design a survey that will test hypotheses about factors affecting consumers' decumulation decisions. The survey will compare respondents' preferences with the economic literature on consumer saving and spending decisions, and will search for psychological biases that affect consumers' financial decisions. The survey will also test the impact of marketing on consumer intentions. The results of the survey will then be used to derive implications for product design, pricing, and customer financial planning.

Croson and Fitzsimons presented the survey design to the group for comments and suggestions for implementation. They are now working on transforming the outline into a set of questions, which they will pilot and then implement, with the help of forum participants.

Developments in Retirement Decumulation

Olivia Mitchell Professor of Insurance and Risk Management

Olivia Mitchell's current research examines post-retirement financial strategies, both in the US and abroad. She has been focusing especially on the role of the life annuity - a product that should have special appeal today, when retirement plans are shifting from defined benefit to defined contributions schemes. An annuity offers retirees the opportunity to insure against outliving their assets, by pooling mortality experiences across the group of annuity purchasers.

The use of inflation protected annuities has proven to be a popular vehicle in a number of markets outside the U.S. but has been slow to develop in this country. Mitchell led a discussion with the group to explore some of the reasons for this situation, including the effect of the long-running bull market for equities.

In her ongoing research, Mitchell will be examining a range of developments in the annuity product markets with the goal of better understanding the role of this product in the broader context of retirement saving and spending. This will include an analysis of the drivers of annuity demand, and the interaction of social security, pension, and other assets with the annuity market. She will also examine annuity product characteristics and premiums, rollover patterns, and whether investment term structure

and annuitant survival patterns vary by product type. Mitchell will work with the industry group to define specific elements for this research program and solicit assistance in data gathering. If you would be interested in discussing this area in more detail, please contact Peter Burns, or Olivia Mitchell at 215 883-0221.

The Forum Going Forward

Olivia Mitchell and Peter Burns

Finally, Olivia Mitchell and Peter Burns led a discussion with the group on the direction for the forum going forward. While it was generally that the range of projects and capabilities represented by the Wharton faculty was of broad interest, it was also agreed that the forum should focus more directly on the retirement asset market. There are currently several new initiatives in this area and others will be added.

With this discussion in mind, Olivia Mitchell, director of Wharton's Pension Research counsel, confirmed that forum members are invited to attend the Council's May 1 and 2 conference on "Innovations in Managing the Risks of Retirement." This year's conference is being co-sponsored by the Financial Institutions Center and will explore a range of product and market strategies dealing with retirement assets. The preliminary agenda was distributed and more information will follow. If you have any questions about this upcoming event, please contact Peter Burns or Olivia

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