The Newsletter of the Society of Actuaries



Vol. 33, No. 2 February 1999

Actuary

M&A: SHAPING THE FUTURE

'Biggest by a mile' Megamergers' 1998 peaks signal trends for actuaries

by Jacqueline Bitowt SOA Public Relations Specialist

Mong the thousands of words written about 1998's supermergers, perhaps this phrase from *Fortune's* Jan. 11 issue describes the year best: "biggest by a mile, according to any dollar-volume measure, against any other year, adjusted for anything, as a percentage of whatever you want."



Known in the headlines as "the year of the megamerger," 1998 brought deals totaling well over \$1 trillion. (*The Economist's* aggregate price tag was \$2.4 trillion in its Jan. 9 issue). And now-famous deals made the "mega" list individually, with the top spot going to Exxon and Mobil at \$86 billion; Travelers Group and Citicorp ranked second at \$73 billion. *Fortune* noted in its Jan. 11 story that eight of history's 10 biggest deals, and all seven of the largest, were made last year.

From helping negotiate deals to facing concerns about employment, actuaries are among those affected by the merger environment. Three executives, including one actuary, with a central view of "merger mania" addressed the topic in interviews for this article:

- Terry Lennon, executive vice president, Metropolitan Life Insurance Company, who launched MetLife's mergers and acquisition (M&A) department in 1994
- Salim Manzar, FSA, vice president and officer in charge of MetLife's M&A department
- Larry Mayewski, senior vice president of the insurance rating organization A.M. Best Co.
 Why now?

What has pushed the merger machine into high gear? And why this point in time?

"A number of factors have fueled the acceleration of M&A activity," said Lennon at MetLife. "One is the need to drive down per-policy expense rates by increasing critical mass and eliminating redundant operations. A second is to add competencies or products to one's business portfolio. Another is the desire to find companies with complementary products and services so that you can cross-sell to each other's customers. The more products and services a customer has with a company, the more valuable that customer is."

Adding complementary capabilities to serve a growing market drove MetLife to merge with The New England Life Insurance Company in 1996. Lennon said, "The New England *(continued on page 3)*

Inside this issue

Shaping the future

Actuar

The Newsletter of the Society of Actuaries Vol. 33, No. 2 • February 1999



2

Robert D. Shapiro Editor responsible for this issue

Editor William C. Cutlip, FSA wcutlip@compuserve.com Associate Editors Janet M. Carstens, FSA carstej@towers.com Robert J. McKay, FSA rjmckay@hewitt.com Robert D. Shapiro, FSA shapiro@netstream.net Marc Twinney, FSA **Assistant Editors** Selig Ehrlich, FSA sehrlich@travelers.com Craig S. Kalman, ASA craig@kalman.net **Puzzle Editors** Louise Thiessen, FSA thiessen@v-wave.com Stephen Kinsky, FSA skinskv236@iuno.com Gregory Dreher gregory_dreher@phl.com> Society Staff Contacts 847/706-3500 Jacqueline Bitowt Public Relations Specialist jbitowt@soa.org Kelly Mayo Public Relations Coordinator *kmayo@soa.org* Cecilia Green, APR **Director of Public Relations** cgreen@soa.org Linda M. Delgadillo, CAE Managing Director, Marketing & Membership Services Idelgadillo@soa.org The Actuary welcomes articles and letters. Send correspondence to:

The Actuary Society of Actuaries 475 North Martingale Road, Suite 800 Schaumburg, IL 60173-2226 Web site: www.soa.org

The Actuary is published monthly (except July and August). Howard J. Bolnick, FSA, President Bradley M. Smith, FSA, Director of Publications

Nonmember subscriptions: students, \$10; others, \$25. Send subscriptions to: Society of Actuaries, P.O. Box 95668, Chicago, IL 60694.



Copyright © 1999,

Society of Actuaries. The Society of Actuaries is not responsible for statements made or opinions expressed herein. All contributions are subject to editing. Submissions must be signed.

Printed on recycled paper in the U.S.A.

EDITORIAL

M&A's bigger purpose

by Robert D. Shapiro

ergers and acquisitions (M&A) are major forces driving change in the life insurance industry. Virtually every company board and management committee agenda lists M&A as a key topic. The financial press is filled with details of life company sales, mergers, alliances, and restructurings.

Even as M&A drives life industry consolidation, it is both reflecting and influencing fundamental changes in the broader financial services industry. The relentless development of technology, enlightenment of consumers, and pressure from competitors both old and new are forcing every insurer, bank, stockbroker, and fund manager to rethink their business. As each institution clarifies its vision, it must refocus what it does, how it operates, and what it needs to succeed. This often leads to (1) divestitures of obsolete businesses, (2) acquisitions of new products, distributors, and/or capabilities, and (3) alliances and/or restructurings to enable progress.

Hence, M&A is much more than a force acting on our industry. It is a reflection and a tool of fundamental, persistent change that all life insurers, and the organizations associated with them, must understand and address. To illustrate M&A's role in the life industry's reincarnation, consider these recent groundbreaking transactions that reach beyond the many basic consolidation deals:

- The past and intended future restructurings of top mutuals, including The Equitable, MONY, Prudential, John Hancock and Metropolitan Life
- The recent sale of leading stockbased U.S. insurers to even larger global entities, such as First Colony (to GE), SunAmerica (to AIG), and Equitable of Iowa (to ING)
- Cross industry transactions such as Citicorp/Travelers and NML/Russell

- Lincoln National's divestiture of its health and property-casualty businesses and its acquisitions of Cigna's and Aetna's life businesses
- The reshaping of all major industry segments including health care (e.g., the acquisition of Healthsource by Cigna Healthcare), reinsurance (e.g., the acquisition of General Re by Berkshire Hathaway), service (e.g., the acquisition of NDP by Fiserv), and distribution (e.g., the acquisition of TUG by Bysis) This issue of *The Actuary* examines

this M&A phenomenon in greater depth, featuring articles by Charles Carroll ("Health insurance: a balanced market with twists and turns") and Peter Mattingly ("Seven habits: Highly successful buyers and sellers follow these rules ") and, in the cover story ("'Biggest by a mile'") interviews with Larry Mayewski of A.M. Best and Terry Lennon and Salim Manzar of MetLife. The message that emerges is clear: M&A is having a profound impact on customers, agents, managers, regulators, and other stakeholders, creating permanent change in long-term industry dynamics.

What does all of this mean to actuaries? Many of us work as (or aspire to be) managers or advisors to insurance companies, health care organizations, or related industries. As such, we often have critical roles in defining and implementing M&A transactions.

As we provide guidance in merger situations, we have a window into possible changing roles and opportunities for actuaries. Many of The Actuary's readers have experiences in providing such guidance, and the insights gained can be helpful to others. We hope you will share these experiences with us in future issues of The Actuary.

Forward comments to Robert Shapiro at shapiro@netstream.net.

'Biggest by a mile' (continued from page 1)

had built a solid reputation with affluent individuals and small business owners, while MetLife had built its business primarily in the middleincome market. In the flight to quality in the mid-'90s, MetLife's share of the upper income and small business market increased considerably. As a result, we had to decide between building or buying the structure to properly serve these markets in which The New England had the structure and expertise."

"In contrast," Lennon noted, "MetLife's acquisition of Banker's Trust's 401(k) business in 1997 added a competency to our business portfolio, in this case an administrative platform for large, complex 401(k) products."

Lennon sees another force giving rise to mergers. "Manufacturers and other companies have less control over pricing products and services than they once had," he said. He noted as an example that a security can be traded for as little as \$9.95 today, while the lowest cost was at least 10 times that a few years ago. "Consumers are just not willing to pay more for products and services that are viewed as commodities. So consumers are unwittingly driving the merger environment in their quest for more competitive prices. Improvement in technology has increased capacity in many industries, allowing companies to drop prices as critical mass is obtained. Near term, consumers will benefit. Long term, however, it is harder to predict. There is some evidence that banking services are more expensive, if not more profitable, despite dramatic consolidation."

Fortune summed it up neatly: "Dozens of industries still carry heavy overcapacity; stocks are still strong; capital is still abundant and cheap," said the Jan. 11 article in predicting another gigantic wave of mergers this year. In "How to Merge: After the deal," in *The Economist's* Jan. 9 issue, the reporter pointed to two reasons why the big-ticket prices of 1998 won't hinder further mergers: fewer hostile takeovers and the replacement of stock swaps for cash. "In the 1980s, a quarter of all deals in America were hostile; this time, almost all have been agreed." Also, "where cash was once king, equity rules today...who can say which company is the more overvalued?"



Ego: the dark motivator A number of observers see a less rational driver: the minds of executives overly focused on the power and glory of deal-making.

"We believe a number of insurance company deals resulted from the principals being caught up in the merger frenzy doing a deal just to do a deal," said Mayewski at A.M. Best. "This doesn't mean some of those mergers and acquisitions won't lead to economic success or that some companies involved won't be better off. It just leads the rating agencies to take a 'wait-and-see' attitude with some of these deals rather than jumping on the bandwagon."

Another Jan. 9 story in *The Economist,* "How to Make Mergers Work," shined a more detailed light on the topic. "However wrapped up in sonorous stuff about synergy, plenty of mergers begin with sheer executive boredom," the editors said. Running a company, especially in a mature market, "can be dull" compared to the wild attention paid by investment bankers and the media when a merger is pursued. The editors also said many executives were overly influenced by "the fear of looking foolish or being left behind. All too many boards are carried away by a terror that they will be bought before they can buy." Roll up the sleeves As the pre-deal excitement fades, company leaders face the massive chore of making one company out of two, noted several observers.

Looking at the massive Travelers/ Citicorp merger, Mayewski mentioned several post-deal considerations:

- Company leaders need "to meld two distinct cultures."
- Can managers properly execute cross-selling? "The deal has clout, size — but you still have to execute."
- Consumers will remain price conscious. "Customers will seek value, and that consideration could outweigh their desire to do business with one company or enterprise."

The article "How to Merge: After the deal" in the Jan. 9 *Economist* discussed elements of post-merger challenges. These massive functions include melding two giant companies' information technology systems, dealing with antitrust issues, and blending corporate cultures. While "culture" is often called a "soft issue," its impact is great and complex, the article said, noting intangible assets such as webs of relationships with suppliers and the difficulties of merging companies from different countries.

Forecasting success Mayewski said recent studies have shown 60-70% of mergers and acquisitions are considered failures when measured by an organization's performance relative to stockholder expectations or peer company results.

With observers everywhere predicting more deals, what will financial experts look for in megamergers of the future? Mayewski outlined the issues evaluated by A.M. Best in assessing deals:

a) Is there an economic and/or strategic fit?

(continued on page 4)

'Biggest by a mile' (continued from page 3)

- b) Does management have a strategy to deal with cultural and operational conflicts?
- c) Are there objective goals and clear timelines?
- d) Have areas of integration (synergies) been identified?
- e) Have expense savings been identified and quantified?
- f) Are top executives and managers communicating well? The people issues are often overlooked. All individuals involved should know what the deal's goals are. It's the people who make the deal successful.
- g) Does the deal address an important business issue?
- h) Does the deal's success hinge solely on the creation of synergies?
- Will the new mega-company add value to its customers and, ultimately, its shareholders? In successful transactions, adding value is critical. Some transactions look successful through accounting procedures, but long-term, will true economic value be created? Cross-selling, a business issue raised

in many mergers, is vital yet difficult to



attain. Best's raters, said Mayewski, "have seen very few successful stories with cross-selling." Commenting on the Travelers/Citicorp merger, he said, "They'll clearly have to sell more products, ratchet up their cross-selling for the deal to be successful, to justify the cost of the transaction." Said Manzar at MetLife of the same merger, "Never before have we seen this level of commitment to the cross-sell opportunity, but having said that, the jury is still out on whether the effort will succeed. It's an interesting transaction to keep an eye on."

Deals often are heralded as beneficial for stockholders and policyholders. Mayewski and others believe that isn't always the case, but it should be the focus, and the focus should be long term. About insurer deals, he said, "We believe that strengthening the organization overall — doing the right thing — will benefit stockholders and policyholders. We believe the interests of stockholders, policyholders, and distribution all have to be in line." Changing the world Industries with a strong impact on actuaries — banking and insurance are seeing changes as a result of mergers, observers said. The biggest, of course, is that the industries themselves are merging as banks and insurers merge with one another.

"The transformation of the financial services industry is signaled by transactions on the scale of Travelers/Citicorp," Mayewski said. "Banks and insurers are all fighting for the same customer long term, and many companies are seeking a currency and capital to increase their financial flexibility to be better positioned to do deals." Like Lennon, Mayewski sees consumers driving many of the changes in the financial industry. "Banks and insurers recognize that the consumer, long term, will call the shots on product and distribution and how much advice they'll want. If a consumer wants to work through a broker, then having brokerage service will help. If the consumer wants advice through the traditional agent channel, then having that is important. So companies believe they have to offer a broad array of services through a larger number of distribution points." Lennon said much the same thing in discussing one of two principal reasons behind the increase in M&A initiatives: "acquiring

businesses with complementary products and services" (the other reason is expense savings).

But megamergers raise questions well beyond individual industries.

Said Mayewski, "When you look at Travelers/Citicorp, clearly it's a watershed transaction. These enormous deals will force Washington to face the changes in the financial services environment, the whole regulatory structure, and this will have an impact on all financial services companies, not just insurers and banks."

In a Jan. 25 Business Week article, "Megamergers are a clear and present danger," Yale School of Management Dean Jeffrey E. Garten goes even farther. He noted, "The big problem with these gigantic mergers is the growing imbalance between public and private power in our society." Megacompanies won't support local areas' education, arts, or research, but the companies' sheer size will allow them heavy influence on public programs, both domestic (such as social security programs) and international, as well as on environmental practices."

The art of the deal needs actuarial skills Megamergers' impact may be immense and hard to manage, but that level of difficulty may be second only to that of valuing a mega-deal in the first place, experts say. A story from June 25, 1998, posted on CNN's Web site in January quoted a spokesperson from the Financial Accounting Standards Board: "...deal-value computing is 'not really an accounting issue' but rather one best left to the companies and their financial advisers to hammer out." The spokesperson also said of due dilligence, "It's an art. There are no rules about what to do."

All three executives interviewed for this story agree that actuaries should be one of the crucial professionals at the negotiating table.

Manzar at MetLife said, "In negotiation, actuaries have a distinct advantage in assessing the implications of a change to the structure of a transaction or how a change in price will impact the overall value of a deal. Actuaries develop, underwrite, and price products and services and, therefore, understand the risks and values inherent in the business." Lennon, the executive officer who promoted actuary Manzar to the top M&A post at MetLife, obviously agrees. "The life insurance business is more complex than most people realize," he noted. "Just one example — the relationship between the left and right sides of a life insurance company's balance sheet is unique. Actuaries understand this relationship and its intricacies. A successful M&A transaction depends on a real understanding of these types of relationships and the assumptions used to determine value and price."

While many actuaries aren't ready to sit at a negotiating table, most experts agree they could develop the capabilities they need more easily than other professionals. Actuaries need to be more proactive, Mayewski said. "They should play an increased role in checks and balances. 'Are we comfortable with the values, the assumptions embedded in the pricing?' And, if not, they must step up to the table and speak out when the long-term economic value is not there."

Said Mayewski, "What M&A all comes down to is quantification of value. Who better than actuaries to play a key role in reviewing the underlying assumptions of a deal?" Insurance transactions especially require actuaries' knowledge, he said. "They're in the best position to review the underlying value of business assumptions and model their performance under different scenarios."

Said Manzar, "The actuarial education program should be viewed as providing a set of tools and insights to becoming a better all-around business person. These tools and insights are an advantage; they give us an edge others don't have. "Actuaries seldom reap all the benefits their edge provides. They do things like modeling, which is important, but technical. I feel actuaries have more to offer than technical competency and should take the next step. In the M&A field, for example, our training is ideal for devising creative solutions in structuring the deal and being the lead business person (not technician) at the negotiating table."

Noted Lennon, "The opportunity for the actuary is to use his or her technical knowledge to become a better business person. To understand the financial implications of what the other side is proposing is tremendously valuable in negotiation. When actuaries combine business sense with their technical skills and knowledge, they truly have an advantage."

Terry Lennon and Salim Manzar can be reached by e-mail at *tlennon@metlife.com* and *smanzar@metlife.com* respectively. Larry Mayewski's e-mail address is *mayewsl@ambest.com*.

Academy actuary steps in for U.S. president at Social Security event

by Kelly Mayo SOA Public Relations Coordinator

hat does the White House do when they need a replacement for U.S. President Bill Clinton? They call Ron Gebhardtsbauer, senior pension fellow for the American Academy of Actuaries.

Gebhardtsbauer had been invited to speak at the high-profile White House Conference on Social Security last December. The conference would bring together leading lawmakers and Social Security experts to discuss the future of the nation's largest retirement income program.

The evening before the conference, the White House placed a call to

Gebhardtsbauer's home. It seemed that Clinton, who was to be a central figure all morning, would have to leave right after his opening speech to attend the funeral of U.S. Sen. Albert Gore, father of Vice President Al Gore. The White House asked Gebhardtsbauer if he could fill in for the president and moderate the morning session. "It didn't take me long to say 'Yes!'" recalled Gebhardtsbauer.

At the conference, Gebhardtsbauer moderated a one-and-a-half-hour discussion that was carried live on the nationwide C-SPAN 2 network. "I've done a lot of public speaking over the past two years at Town Hall forums, so I wasn't nervous at all. I introduced the session and the speakers and asked them their first questions. Then I walked into the audience, which consisted of about 250 people, and got to play 'Phil Donahue,'" said Gebhardtsbauer.

Attendees at the event included actuaries Robert J. Myers, former chief actuary of the U.S. Social Security Administration, and Stephen Kellison, public trustee of the Social Security Trust Funds; former presidential candidate Jesse Jackson; AFL-CIO chief John Sweeney; National Organization for Women President Patricia Ireland; and 40 members of the U.S. Congress.

M&A: SHAPING THE FUTURE

Health insurers Balanced market has twists and turns, nonetheless

by Charles Carroll

ost experts in insurance mergers and acquisitions (M&A) would characterize the recent market as one where an oversupply of buyers has led to extraordinarily high prices for target companies relative to intrinsic value. But a fairly active segment within the broader market exhibits totally different dynamics. This segment is characterized by primarily strategically driven (as opposed to financially driven) transactions, rational pricing, and a relatively balanced supply of buyers and sellers. Deal flow may not be as extensive as in other segments, but a steady stream of transactions occurs.

This segment is the group health/ managed care business. While it is difficult to accurately track the activity in this M&A sector, a partial list of well-known deals of recent years shows a high level of activity (see chart below). The chart does not even include the significant number of Blue Cross Blue Shield mergers.

What is driving activity in this sector? Probably the easiest thing to understand is why companies want to sell and get out of the business particularly traditional insurers, such as MassMutual and John Hancock. For most of these sellers, the motivations are obvious. They are concluding that managed care or the group health business is not a good place to deploy their capital. For many of these companies, this business has been characterized by a pronounced cyclical pattern in which substantial losses are followed by periods of respectable, but unimpressive, gains. This pattern was temporarily broken in the early '90s, when there was a decided slowing of medical care inflation, attributed by some to the dynamics of the national debate surrounding the health care proposals by U.S. President Bill Clinton's administration. The result was a more extended period of positive underwriting results than was typical of the normal cycle.

| Recent Health Industry Mergers | |
|--|-------------------|
| Target | Acquirer |
| Provident Life & Accident's group health business | HealthSource |
| Metra/Health | United Healthcare |
| MassMutual's group health business | Wellpoint |
| John Hancock's group health business | Wellpoint |
| Emphasys | Humana |
| BCBS of Georgia | Wellpoint |
| NYLCare Health Plans, Inc. | Aetna |
| Anthem Health and Life Ins. Co. | Great West Life |
| Prudential's group health business | Aetna |
| Anthem Health and Life Ins. Co. | Great West Life |

That era has come to an abrupt halt as medical inflation has accelerated and competition has run rampant. The introduction of risk-based capital and the rating agencies' generally negative attitudes toward the health insurance business have undoubtedly contributed to the move to divest. Companies in which group health or managed care is not the predominant business are rapidly concluding that it simply does not make economic sense to continue operating in this rapidly changing and dynamic market. (Correspondingly, companies such as Aetna and CIGNA, for whom managed care is the dominant business, are shedding their individual life and annuity businesses. So much for synergy.) Although many of these deals are quite fully priced, achieving maximum value in dollar terms is not the primary objective for most sellers. Instead, the seller is seeking a graceful exit from the business that is, the company's reputation is protected, clients are not disadvantaged, and employee disruption is minimized.

Another critical element in the decision-making process for many sellers is a realistic assessment of their chances for success. Ten years ago, many analysts predicted that size would be a critical factor for health insurers' success; only a handful of giants would survive, possibly including CIGNA, Aetna, Prudential, and Metropolitan. However, the last 10 years have shown that geographic concentration is a much more significant determinant of success than pure size. In a managed care setting, controlling costs by effectively negotiating with providers and managing the behavior of covered individuals through incentives became the

critical value-added components, as opposed to administrative efficiency and marketing power. Influence over providers is only possible when the financial intermediary — whether an insurance company or an HMO controls a significant share of the potential health care consumers in a given location. Size, critical mass, and efficiency are clearly still important, but they are just as clearly not sufficient to ensure success. This can be seen by contrasting the experience of some traditional nationwide insurers, some with very large revenue bases, with that of some strong local HMOs, particularly in states and regions where managed care achieved rapid acceptance, such as California. Many nationwide insurance companies could be characterized as having a market presence that was "an inch deep and a mile wide" — covering millions of lives spread over a large number of regions but having no dominance in any market. The last several years have proved that health care is a local, not a national, business. Being close to the market and knowing the dynamics of the area's providers offer a distinct competitive advantage. In fact, in addition to many successful HMOs, some smaller insurers have prospered because they have concentrated on a limited geographic area they know well, while their larger competitors have languished.

Blue Cross Blue Shield plans are perhaps the classic example of health care intermediaries that are tied closely to their local markets. For this reason, many of these plans retain substantial inherent value (note the recent purchase of the Georgia plan by Wellpoint), even though many of these plans have been slow to react to the changes in the business. Many Blues are beginning to show a resurgence in strength, aided and abetted by the mergers of the past 10 years.

Geographic focus also explains another phenomenon in the managed

care M&A market. As local dominance becomes ever more important, the survivors are increasingly deciding to divest their operations in communities and regions were they cannot realistically achieve a top rank.

With such powerful motivating factors for sellers, what do buyers find attractive about these deals? Obviously, the price can be very reasonable. In many cases, the

price named in the deal's announcement does not fully capture the attractiveness of the deal; the seller may make several important concessions to the buyer.

But price alone is almost never a sufficient reason for entering into a deal. Many other features are attractive to buyers. One, which has tended to be overplayed by some observers, is the opportunity to migrate the covered lives of the acquired business from indemnity coverage to more "advanced" managed care options preferred-provided organizations, point of service plans, or HMOs. Since many buyers are public companies, and a key measuring rod for the analysts covering their stock is growth in HMO lives, substantial value can be created if even a small percentage of the acquired lives can be migrated. Unfortunately, experience has shown that it can be very difficult to migrate indemnity lives to managed care.

Another factor motivating buyers has been the desire to acquire expertise in marketing and underwriting plans that offer more choices for employees, such as point-of-service plans, where employees have the option to go outside the network of approved

providers and obtain care under typical indemnity terms. Many managed care companies have limited experience with indemnity coverage. An asset that comes with the acquisition of an insurance company's group health business is systems to handle indemnity coverage. Another is employees with skill and experience in handling the unique challenges involved, such as antiselection. Such skills become increasingly important as HMOs and other managed care players attempt to increase their penetration of the smaller employer market, which is still dominated by indemnity plans.

Actuaries can expect to play pivotal roles in the continuing round of health care M&A activity that is

expected

over the next few years. Although the use of actuarial appraisals to set prices is much less common than in life insurance and annuity deals, actuaries are well equipped to assess the strategic issues involved from both the seller's and the buyer's standpoint. Actuaries can also add substantial value in performing due diligence, particularly in the areas of reserves and pricing. In any event, health care actuaries can expect to experience a significant amount of turbulence in their career paths as the industry restructures. Some may pity those condemned to live in such "interesting times," but for those open to the opportunities unfolding, the future is bright.

Charles Carroll manages insurance and managed care M&A advisory services as a partner of Ernst & Young LLP, New York. He can be reached by e-mail at *charles.carroll@ey.com.*

M&A: SHAPING THE FUTURE

Seven habits Highly successful buyers and sellers follow these rules

by Peter W. Mattingly

ctuaries are often intimately involved in insurance company merger and acquisition (M&A) activity. Actuaries are vital to the process because they have the key elements of knowledge to understand whether the numbers being raised really make sense. For actuaries working in M&A, this article offers a framework in which to view and perhaps improve their companies' level of success.

Although the number of mergers and acquisitions is at an all-time high, some companies seem to be much more successful than others at closing transactions. There are buyers who complete one deal after another without apparent effort, while other prospective buyers search and search but never close a deal. And some sellers quickly complete transactions at premium prices, while others seem to be on the market forever as one deal after another falls through.

Companies failing in today's M&A market tend to assume that lack of success is the result of bad breaks, lousy timing, an excessively tough negotiator on the other side, or similar factors. In reality, success in the M&A marketplace comes to those players who discipline themselves to develop certain habits in their M&A process. Two for both

Two habits apply to both successful buyers and sellers: one, make deals a high priority of senior management, and two, put a dedicated team in place.

1. Make deals a high priority of senior management. Each transaction, whether for a buyer or a seller, requires

a series of strategic decisions and the marshalling and coordinating of a range of corporate resources — legal, accounting, actuarial, financial, and others. This process simply cannot occur efficiently in an organization unless senior management is actively involved. Delegation to subordinates

with instructions to surface deals once they reach the critical stage does not work. There are too many opportunities for delay and indecision both anathema to the deal process. In companies with a history of successful transactions or a seller that successfully completed a deal, chances are very high that a CEO was intimately involved in the M&A process. 2. Put a dedicated team in place. Even

with senior manage-

ment attention, it is necessary to dedicate a small group of managers and outside advisors to the M&A process. Completing the transaction must be one of the group's most important priorities, if not the only one. Too often, promising transactions get derailed because a key participant cannot devote enough time and attention to get the job done. 5 more for buyers In addition to the above, five other characteristics are exhibited by successful buyers in approaching the M&A process. Such buyers:

- Set clear strategic objectives.
- Focus on the big picture.
- Define financial criteria.
- Respond rapidly to acquisition opportunities.

• Secure financing in advance.

3. Set clear strategic objectives. A number of buyers, believe it or not, don't have a clear concept of why they are looking for a deal or what type of company they want to acquire. This makes it tough to find anything, or worse, easy to find something that will greatly destroy value. Successful buyers spend time defining the type of company they wish to acquire. When they see that type of company, they pursue it aggressively and quickly discard others.

4. Focus on the big picture. Successful buyers first determine whether targets meet their strategic criteria. Detailed due diligence, such as examining tax returns or reviewing audit papers, is left until after the acquisition team has reviewed major strategic issues such as marketing compatibility. This big-picture focus can and should be taken only by one to three senior executives examining high-level material and meeting with their counterparts in the target organization.

5. Define financial criteria. Successful buyers establish in advance the financial criteria for target companies. These may include predetermined return on investment, return on equity, or EPS dilution, among other factors. If prospective candidates fall outside their parameters, the buyers move on, recognizing that even companies meeting strategic business criteria also must produce acceptable financial returns.

6. Respond rapidly to acquisition opportunities. The M&A process today is extremely competitive. Successful buyers respond promptly to all opportunities. They want to focus on good prospects immediately and to save time by quickly eliminating prospects that don't meet their criteria. Such a pattern of response also has the advantage of encouraging intermediaries to bring deals to the buyer's attention.

7. Secure financing in advance. Highly successful buyers know they must have acquisition financing in hand before approaching sellers. Few sellers want to negotiate with a buyer who may not have the funds to close a deal. Moreover, the buyer who finds the rare seller willing to wait for financing runs the risk that the offer will be topped or that financing will not be found on acceptable terms.

5 more for sellers

In addition to making a deal a high priority of senior management and establishing a dedicated transaction team, successful sellers consistently follow five other patterns of behavior. These sellers:

- Identify strengths and weaknesses.
- Establish a price.
- Define a sales process.
- Make necessary data available.
- Realize that competition from potential buyers is healthy.

3. Identify strengths and weaknesses. Successful sellers are realistic about what they are selling. They understand their company's weaknesses as well as strengths. Because they have this perspective, they can make a balanced judgment on purchase proposals.

4. Establish a price. Successful sellers set a price that is acceptable to them and then take it when it's offered. M&A history is filled with bad examples on this score. These include sellers who never set a price objective and so didn't know a fair deal when it came along and, worse yet, sellers who held out for that extra 10% they never got.

5. Define the process. Depending on market conditions and the seller's circumstances, either private discussions with a small number of carefully screened prospects or an auction process may be appropriate. Successful sellers make this determination in advance and instruct the transaction team accordingly.

6. Make necessary data available. Every company has data that it wants kept confidential. Successful sellers know that prospective buyers must have certain key financial data. Before the process starts, competent sellers identify this material and have it ready for serious prospective purchasers.

7. Realize that competition is healthy. Buyers who believe that they are the only game in town cannot resist negotiating more aggressively. While sellers need not auction their companies to the highest bidder, successful sellers know that buyers will move more quickly, and bid a little higher, if they fear that a competitor is lurking in the wings.

It's not luck

If your company has successfully completed transactions, much of the above is obvious. How else would one do it? On the other hand, if M&A success always seems just out of reach, then it will be worthwhile to add these habits to your M&A processes. Success in today's M&A market is not due to luck but to adopting patterns of behavior that have proven successful time and again.

Peter Mattingly is managing director, P.W. Mattingly & Co. Inc., a financial advisory firm in New York. He can be reached by e-mail at *mattinglyco@msn.com.*

34th ARC will encourage academics and practitioners to share ideas

"Building Bridges Between Theory and Practice" will be the theme of the 34th Actuarial Research Conference (ARC), Aug. 8-11.

The annual conference provides an opportunity for academics and practitioners to meet and discuss actuarial problems and their solutions. Jointly hosted this year by Drake University and The Principal Financial Group, the ARC will be held at Drake in Des Moines, Iowa.

The theme signals the 1999 conference's focus on enhancing relationships between academics and practitioners. In keeping with the theme:

- The conference will be held in an easily accessible downtown setting.
- Sessions will be organized by topic.
- Single-day registrations will be available.
- Breakout sessions will be scheduled to increase opportunities for interaction.

Presentations on all topics of interest to actuaries are welcome. They will be published in the conference proceedings, *Actuarial Research Clearing House 2000.1.*

To be assured of a program slot, presenters must submit a title and

abstract to Stuart Klugman or Sarah Christiansen by June 15. For more information, contact Klugman at Drake University, 2507 University Avenue, Des Moines, IA 50311 (phone: 515/271-4097, e-mail: *Stuart.Klugman@drake.edu*) or Christiansen at The Principal Financial Group, 711 High Street, Des Moines IA 50392-0650 (phone: 515/247-7441, e-mail: *christiansen.sarah@principal.com*). Information is also available on the Web at *www.drake.edu/cbpa/ARC/ arc99.html.*

SOA president visits region of growth

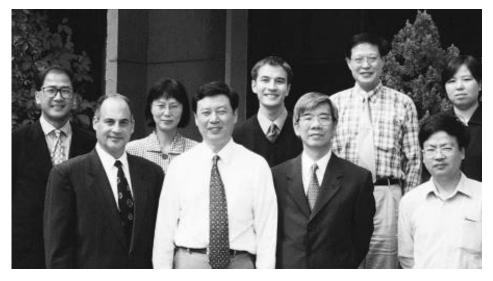
by Howard J. Bolnick 1998-99 SOA President

• he profession continues to grow in Asia with help from the Society of Actuaries. Last September, the SOA board voted to focus the SOA's efforts in Asia by renaming the Asia Committee the China Region Committee (CRC) and forming the Southeast Asia Committee (SEAC). Soon after, as president-elect, I made a visit, Sept. 23-28, 1998, to Beijing, Tianjin, Hong Kong, and Kuala Lumpur, where a delegation and I met with members of these committees to identify their needs and discuss strategies to accomplish their mandates. A secondary purpose was to learn more about China to help the SOA more effectively participate in International Actuarial Association (IAA) activities.

The first stop was Beijing, where the delegation presented the SOA's donation of study materials to the

Actuaries Association of China. Next, the delegation visited Renmin and Nankai Universities in Beijing and Tianjin, China, respectively. Both are SOA examination and reference centers. The reference center project was established last year by the China Region Committee to provide selected Chinese universities that house actuarial science programs with the same SOA-published materials used by universities in North America. The purpose of the visits was to gain a better understanding of the Chinese actuarial education system and also to meet with the faculty of the long-standing SOA-Nankai actuarial science program.

Hong Kong was the next stop. I gave a luncheon presentation on the globalization of the actuarial profession to the 80 people attending the first seminar sponsored by the Asia Committee, "The Impact of the Asian Financial Crisis on



At Nankai University for the book donation ceremony were (front, L to R) Howard Bolnick; Hou Zixin, Nankai University president; Dominic Lee, coordinator of Nankai's FSA program; Jiang Shengzhong, associate professor and vice dean, Nankai's Risk Management and Insurance Department; (back, L to R) K.C. Chan, CRC chair; Annie Lee, wife of Dominic Lee; Patrick Cichy, SOA coordinator of Asian services; Wu Hong Bao, Nankai's deputy director, office for International Academic Exchanges; and Li Xiufang, ASA, Nankai associate professor and SOA liaison.

the Insurance Industry." The full-day seminar offered perspectives on the crisis from presenters from Indonesia, the Philippines, Hong Kong, Taiwan, Japan, Singapore, and Australia.

The following day began with a meeting with the IAA China Task Force to discuss how the international actuarial community can coordinate activities in China. Next was a morning planning session with the CRC to discuss the needs of members in the greater China region. The CRC's plans involve activities and support that go beyond the SOA's funding capability, so committee members are working to establish an appropriate vehicle, under SOA board control, by which they can solicit funds from corporate sponsors and international organizations.

During the last leg of the trip, SOA Asian services coordinator Patrick Cichy and I visited Kuala Lumpur to meet with SEAC Chair Hassan Kamil and members of the Actuarial Society of Malaysia and the Malaysian Insurance Institute. The SEAC has identified actuarial exam review classes as the region's greatest need and is working with the International Policy Committee to explore various solutions. I gave a presentation on professionalism to a packed room of actuaries and students from the National University of Malaysia and the Mara Institute of Technology, Selangor, Malaysia.

Both greater China and Southeast Asia continue to be areas of great growth for SOA membership, and the SOA must be aware of their needs. The GCC and SEAC are working hard to develop the actuarial profession in Asia, which will help provide more opportunities for the professional growth of SOA members there.

Howard Bolnick can be reached by e-mail at *hbolnick@nwu.edu*.

Committees bring new focus to China, Southeast Asia

by Patrick Cichy SOA Coordinator of Asian Services

To help focus members' efforts in Asia, the Board voted in September to rename the Asia Committee the China Region Committee (CRC) and to form the Southeast Asia Committee (SEAC). The CRC will manage SOA activities in the People's Republic of China, Hong Kong, and Taiwan, while the SEAC will concentrate efforts in Malaysia, Singapore, Indonesia, Thailand, and the Philippines, both with the support of the SOA Representative Office in Hong Kong.

The two committees share the same mandates but are responsible for their respective regions. Their mandates are:

- 1) To represent the Society of Actuaries in promoting actuarial education
- To provide services to members for developing educational programs, research, and other professional support

3) To build the image and awareness of the profession in greater China and Southeast Asia, including the formation or support of national organizations whose work will complement the Society's educational and research activities in coordination with the International Actuarial Association The CRC is comprised of K.C.

Chan (chair), Shu-Yen Liu (vice chair), David Allen, Clement Cheung, Estella Chiu, Danny Chung, Stuart Leckie, Dominic Lee, Wilbur Lo, Won How Lo, Edward Sin, and Pauline Teoh. Zhenghuai Li is continuing to serve as an advisor on Chinese actuarial matters.

The SEAC is chaired by Hassan Kamil and is comprised of Mabini Juan (Philippines), Danny Quant (Malaysia), Saloon Tham (Indonesia), and Andrew Shaw (Thailand). In addition, Cheng Hock Chi is serving as advisor on actuarial matters in Singapore and Maizon Omar in Malaysia.

New: online support Two online services have been added by the CRC and SEAC — the Virtual Tutorial Center and Asia News. The tutorial center allows a panel of experts in Asia to answer questions directly on various actuarial topics related to the Asia region. Asia News, an electronic newsletter, provides actuarial news of the region as well as committee updates. Both can be found at the Asia Homepage link on the SOA's Web site (www.soa.org).

For more information on these committees, contact Patrick Cichy at the SOA Representative Office in Hong Kong (phone: 852/2199-1110, fax: 852/2730-5356, email: *patrickcichy@compuserve.com.*)

Teach and travel in Malaysia

The Southeast Asia Committee is looking for qualified individuals to teach review courses in March and September 1999. These sessions will focus on Courses 100 to 165 and, ideally, will be intensive courses lasting two weeks. All teaching will be done in English. Compensation is negotiable, but funding is very limited. For more information, contact Patrick Cichy at the SOA Representative Office in Hong Kong (phone: 852/2199-1110, fax: 852/2730-5356, e-mail: *patrickcichy* @compuserve.com).

Upcoming meetings and seminars

| March 24-26 | The Annuity Conference | |
|-------------|---|--|
| March (TBA) | Estimation of Pension Liabilities and Costs | |
| March 18-19 | Fair Value of Insurance | |
| April (TBA) | Adventures in Quantitative Risk Management | |
| May 23 | Bancassurance | |
| May 24-25 | SOA Spring Meeting (Life, Finance) | |
| June 16-18 | SOA Spring Meeting (Pension, Health) | |
| | | |

Hilton Palacio Del Rio, San Antonio, Texas Chicago and New York New York University Phoenix Atlanta Atlanta Seattle

For updates on all seminars, watch future SOA mailings. Seminar information will also be posted on the Web site (*www.soa.org*) under *Meetings/Seminars*.

Bennett, Cuomo, Schwarzkopf to be 50th year's annual meeting keynoters

"point/counterpoint" discussion by Bill Bennett and Mario Cuomo and a closing presentation by retired U.S. Army General H. Norman Schwarzkopf will be among the highlights of the 1999 SOA annual meeting, celebrating the Society's 50th anniversary, Oct. 17-20, San Francisco.

Bennett and Cuomo, known for widely different views on society and politics, will share the podium at the meeting's general session on Oct. 17. Schwartzkopf, respected leader of U.S. forces in the 1990-91 Desert Storm conflict, will address a second general session ending the meeting on Oct. 20.

Bennett was 1989-90 anti-drug watchdog in U.S. President George Bush's administration after serving U.S. President Ronald Reagan as 1985-88 secretary of education and 1981-85 chair of the National Endowment for the Humanities. He currently serves as a Heritage Foundation fellow. He has written or edited 10 books,

including *The Book of Virtues,* which became a PBS series, and most recently *The Death of Outrage: Bill Clinton and the Assault on American Ideals, a New York Times* best-seller.

Cuomo served as New York's 52nd governor for 12 years beginning in 1982. His term brought extensive economic initiatives and widespread

50 years ago...

- National Security Act Amendments make the U.S. Air Force a military department of the Department of Defense.
- Wesley Anthony Brown is the first African-American to graduate from the U.S. Naval Academy.
- Home seekers can buy a





William J. Bennett

Mario Cuomo

programs to fight drugs, homelessness, AIDS, and crime. His keynote address at the 1984 Democratic convention helped define the progressive political landscape for more than a decade. After leaving office, Cuomo returned to his earlier career as a lawyer, joining the New York firm Willkie, Farr, and Gallagher to practice national and international corporate law. He has remained vocal on current issues, and the most recent of his six books, *Reason to Believe*, describes challenges facing us today and suggests some workable solutions.

Bennett and Cuomo cochair Partnership for a Drug Free America, and both claim respect from the other's constituencies. The conservative *National Review* said of Cuomo after his Democratic convention speech, "even many conservatives have accorded this, their archenemy, a certain respect." Bennett currently cochairs a committee on culture and religion, sponsored by U.S. Sen. Joseph Lieberman (D-Conn.), and the National Commission on Civic Renewal.



H. Norman Schwarzkopf

Schwarzkopf served in command and staff posts in the United States, Europe, and the Pacific. He is renowned for his role

as commander in chief, U.S. Central Command, and commander of operations for Desert Shield and Desert Storm. In addition, he served two combat tours in Vietnam and was deputy commander of the joint task force leading U.S. forces in the Grenada student rescue operation. Since retiring in 1991, Schwarzkopf has written his best-selling autobiography, It Doesn't Take a Hero. and contributed to six critically acclaimed television specials, including NBC News programs on what's right with America and the Peabody Award-winning D-Day. He is active in environmental and charitable organizations, and he serves on the boards of the University of Richmond, Borg-Warner Security Corporation, Remington Arms Company, USA Networks, Inc., and Kuhlman Corporation.

Information on the 1999 SOA annual meeting is available from the SOA's Continuing Education Department (phone: 847/706-3545 and 847/706-3540; fax: 847/706-3599; e-mail: *sberg@soa.org* and *aweymouth@soa.org*).

two-bedroom house for \$10,000 or an apartment in New York for \$110 a month.

- George Orwell's *Nineteen Eighty-Four,* a novel depicting totalitarianism, is published.
- "Pyramid clubs" become the newest fad, convincing participants

to send each other money in hopes of receiving large amounts of money themselves.

- The first Emmy Awards from the National Academy of Television Arts and Sciences are announced.
- RCA introduces small 45 rpm LPs that require spindles.





on the lighter side

GeneratioNext: keeping up with the future

by Muzammil Waheed

n today's rapidly changing world, we actuaries must not only keep track of all the changes but also adapt ourselves to them. At the same time, we must realize that actuarial science, though highly technical and specialized in nature, is closely linked to our everyday life.

Human cloning, for example, is a subject that our predecessors did not have to worry about. Today's actuary may still ignore the topic, but the working environments and knowledge of tomorrow's actuary might be challenged — even threatened — by this latest development in genetics.

A person comes from the future, to which he traveled before his death, to claim his life insurance benefit in the present (after he died). What will the actuary do?

Let's scratch the surface of this problem. Scenario: Identical twins apply for insurance. They want shortterm life policies with greatly varying sums. Problem: There is no way of telling the two apart, so that when a claim occurs, it is hard to identify who died and who survived, or in the case of a hidden clone — in effect, a "third twin" — if any insured died at all. In fact, multiple clones might file many claims. Solution 1: Benefits should be provided to the first two clones to die only. Solution 2: Offer group term insurance to all clones, hidden or declared.

NASA scientists are confident that in about 20 years, we will be able to take our sweethearts to the moon for a vacation. Actuaries will have to measure the effect of zero gravity on mortality. If moon vacationers are covered by life insurance, should the premium rate be the same as on earth, higher, or lower? As we venture further into space, terms like "astro-actuary" may become common.

Here's another scenario: A person comes to a life insurance company immediately after his death saying that he has come from the future, to which he travelled before his death, to claim the benefit on his death in the present time. What will the actuary do? This situation isn't discussed in the current SOA E&E system.

One "future shock" problem is right around the corner: the millennium bug. If computer systems break down, demand for actuarial services might reach new heights as those areas of our work where the computer replaced us would need our expertise once more. On the other hand, it's terrifying to hear senior actuaries tell how a pension valuation was performed in precomputer times. Commutation factors may regain their popularity. Perhaps they should again be included in Course 150, just in case.

Speaking of the millennium, let's throw some light on the various beliefs about the ending of this one and what implications they might have for actuaries.

- Some people believe Jan. 1, 2000, will mark the end of the universe. If doomsday were less than a year away, actuaries would have to enter the unexplored territory of monthly, quarterly, or semi-annual term insurance. Some markets would even have to open doors for pure endowment insurance on a monthly, quarterly, or semi-annual basis. This would, however, mean that beneficiaries would have only a very short span of time to consume the money.
- Some suggest the earth will be subject to natural disasters of tremendous magnitude. Clearly, general and catastrophic policies have an edge on life insurance, so we might see a smaller demand for life actuaries and a heightened one for casualty actuaries.

And here's the ultimate actuarial challenge: Have we seriously considered the possibility that someone might discover or invent the secret of immortality? There would no longer be "qx"s, and all "px"s would equal 1. That might just be the end of life actuaries, and health and casualty actuaries would rule the world. **Muzammil Waheed, an actuarial student, is deputy manager, Akhtar & Hasan (Pvt) Ltd., Karachi, Pakistan. He can be reached by e-mail at** *dharct@super.net.pk***.**

Mail alert

The First Ballots for the 1999 SOA elections will be mailed to all Fellows on March 9. To be valid, ballots must be received by the Society office no later than April 9. Fellows who do not receive a First Ballot by March 19 should call Lois Chinnock at the SOA office (847/706-3524).

Transcripts on way

Examination candidates with credit for at least one SOA exam in 1998 will receive a transcript this month. The transcript will show the conversion **credits** they will have in the new education system taking effect next year. Active candidates with SOA credit who do not receive a transcript should contact *lhoward@soa.org.* PD requirement

Candidates who have earned SOA examination credit for a research paper will be credited with having fulfilled the project component of the professional development (PD) requirement. If the candidate with research paper credit does not have unassigned

Exam prep seminars offered for May '99 exams

The College of Insurance in New York is offering seminars for various May 1999 life and casualty actuarial examinations. Review courses will be offered for exams 100, 110, 120, 150, 200, 230, V-480, and F-480. Details are available from the college's Actuarial Science Department (phone: 212/815-9210).

Professor Sam Broverman of the University of Toronto is offering exam preparation seminars for Courses 120, 130, 135, 140, 141 (EA-1A), 150, 151, and 160. The seminars will be held in April and May in Chicago and New York. Information is available from Broverman (phone: 416/978-4453; e-mail: sam@utstat.toronto.edu) and through the Web (www.interlog.com\~actexam). elective credits toward PD, the project component will be satisfied; however, the candidate will then need to attain 50 units of PD credit from formal programs, with at least 25 units coming from SOA-approved programs.

Candidates with 15 or more unassigned elective credits being applied to satisfying the PD requirement will also have credit for the project. Because the project is viewed as being a very valuable experience, candidates are permitted, even encouraged, to complete a project even where they have sufficient PD units to exempt them from the requirement.

Reports are available on the SOA Web site (*www.soa.org*) for Courses 1-7 and several of the Course 8 specialties. Also on the site is an updated, more user-friendly version of the PD requirement, along with related documents (such as guidelines for advisors and frequently asked questions). Comments and questions on the advisor guidelines document are being elicited from fellows who may serve as PD advisors in the future. Any input or questions on the PD requirement may be sent to *pdcomments@soa.org.* FAC 2000

The order of precedence has been established for eligibility to attend the Fellowship Admissions Course (FAC) in 2000. First in line will be the candidates who, in November 1999, pass the last examinations needed under the current educational requirements (places won't be reserved for those who sign up but don't take an examination). Next in line will be candidates whose examination credits, when converted to credits for the new system on Jan. 1, 2000, will satisfy the pre-FAC requirements under the new system. And third are candidates who are hoping to complete the PD requirement through the filing and approval of a completed program. PD plans may be filed before Jan. 1, 2000, but will not be approved by the SOA until after that date. This sequence of priority ensures that candidates are given precedence according to when they actually satisfy the educational requirements.

CCA seeks speakers for 2000 EA meeting

The Conference of Consulting Actuaries (CCA) is scheduling speakers for the Enrolled Actuaries meeting in March 2000. The SOA is a cosponsor of the meeting.

Actuaries interested in conducting a session are invited to complete the form below and fax it to: Enrolled Actuaries Meeting, Conference of Consulting Actuaries, 847/419-9091. Questions should be directed to the CCA, 1110 W. Lake Cook Road, Suite 235, Buffalo Grove, IL 60089-1968.

Speaker Interest Form

| Na |
|----|
| Na |

Phone Number

Company

Address

Topics you are interested in speaking on:_____

A first: Redington competition open to all SOA members

To promote investment research, the SOA Investment Section sponsors the Redington Prize of \$1000 for the best paper on an investment-related topic. This year for the first time, the Investment Section is opening the competition to the entire SOA membership rather than the Section alone.

The prize is named for F. M. Redington, the eminent British Actuary who coined the term "immunization" in a 1952 paper that was published in the *Journal of* *the Institute of Actuaries.* The Section council has awarded three prizes since the award's inception.

A paper's author must be a member of the SOA. In papers with multiple authors, an SOA member must be a major contributor. Topics must be investment related, timely, and of substantial value to SOA members. Papers must have been published between July 1, 1995, and Dec. 31, 1997. A prize will be awarded only if the prize committee deems a submission of sufficient merit to justify an award.

Papers must be submitted by May 31, 1999, to the Redington Prize Committee chair: Luke Girard, Lincoln Investment Management, Inc., 200 East Berry Street, Fort Wayne, IN 46801-7814.

Questions should be directed to Lois Chinnock at the SOA office (phone: 847/706-3524; fax: 847/706-3599; e-mail: *lchinnock@soa.org*).

DEAR EDITOR

British member looks at U.S. Social Security The September 1998 issue of *The Actuary*, focusing on social security issues, was excellent. As an actuary working in social security outside the United States, it gave me considerable insights into the debate about reform of the American system and also raised issues that are universal in their application.

There are, however, three points that concern me.

The first is the widespread belief that reforming the social security program to include individual accounts would necessarily result in greater benefits because workers would choose to invest their contributions in high-performing equities. In September, I also read the SOA study note on cash balance plans. Here it was stated that "where employees have the choice over their investments they tend to be conservative, typically allocating as much as 80% of their account balances toward fixed-income investments" (paragraph 1c of the study note). So, would individuals voluntarily choose to invest their individual accounts in the stock market, or would they welcome a program that forced them to invest part of their savings in the stock market?

The second point is, what defined Social Security benefits would remain after some contributions had been redirected toward individual accounts? In the proposals to establish individual investment accounts for Social Security, the question of residual benefits is not clearly addressed. Since the effect of the individual accounts would tend to be neither progressive nor regressive, should the residual benefits be more progressive than at present, possibly even flat-rate? Would this indicate that Americans are quite happy to obtain comparatively low returns from this scheme because its main aim is income redistribution rather than personal saving?

The third point arises from Anna Rappaport's article. She addressed the fact that lump sum distributions from retirement plans do not meet the aim of providing income in retirement but cannot be avoided, particularly in defined contribution plans. In the United Kingdom, it is generally accepted that money put into pension plans must be mainly taken as pensions. This can be seen as a *quid pro quo* for the tax privileges that the money has received on being saved in the pension plan. Could this argument not be used in the United States? **Martin Lunnon**

IN MEMORIAM

Gene C. Moore FSA 1948, MAAA 1965

> Aubrey White FSA 1947

Kenneth A. C. Wheeler ASA 1951, FIA 1941

John R. Wilson FSA 1980, MAAA 1996, FCIA 1980