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Session 11PD
Trends in Actuarial Employment

Track: Actuary of the Future

Moderator: AYLEENE G. HARTMAN
Panelists: JOHN A. DEWAN
AIMEE KAYE†
CARL A. WESTMAN
Recorder: AYLEENE G. HARTMAN

Summary: The environment in which actuaries work continues to undergo significant change due to:

- *Mergers and acquisitions*
- *Demutualizations and the formation of mutual holding companies*
- *Integration within the financial services industry*

What are potential future actuarial job opportunities, given these recent activities? The panelists discuss recent trends in actuarial employment, including:

- *Telecommuting*
- *Actuarial consulting via the Internet*
- *Actuaries working in banks and other financial institutions*
- *Other opportunities such as reinsurance brokers, recruiters, and life agency employees*

Ms. Ayleene G. Hartman: I'm an actuary with Farmers New World Life Insurance Company. The environment in which we actuaries work continues to undergo significant changes. Recent activity in mergers and acquisitions (M&A), demutualizations, and financial services integration has caused change in the otherwise quiet work environment of actuaries. Actuaries have also shown their willingness to embrace recent trends in telecommuting, Internet consulting, alternate work arrangements, and, in my case, a recent cross-country move.

I'm very pleased to introduce our panel of speakers for this session: Aimee Kaye, Carl Westman, and John Dewan. Aimee will discuss recent trends in traditional actuarial employment. Carl and John will discuss their experiences as actuarial entrepreneurs and give advice to those who are thinking about nontraditional work.

Aimee is the president and founder of Actuarial Careers, Inc., an executive recruitment firm exclusively specializing in the advancement and placement of chief

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†Mr. Kaye, not a member of the sponsoring organizations, is President of Actuarial Careers Inc. in White Plains, N.Y.

actuaries, FSAs, ASAs, and pre-ASAs on a worldwide basis. Aimee has been placing actuaries exclusively since 1985 and has personally placed more than 400 actuaries throughout the world. Prior to actuarial recruiting Aimee was with two major public relations firms, Burston Marstellar and The Softness Group. Aimee received her Master's Degree from New York University in communications and her Bachelor of Science Degree in education from the University of Rhode Island. Aimee has been a featured speaker at numerous actuarial clubs and SOA meetings.

Ms. Aimee Kaye: I'm going to discuss the various trends in actuarial employment, beginning with those factors affecting opportunities; the hot areas of specialization, the geographic regions with the most opportunities for actuaries, how the actuarial exams affect employment opportunities—believe it or not—and how to enhance your own marketability to ensure that you'll have a rewarding career path.

Let's start with some of the industry factors affecting opportunities. They include all the demutualizations that mutual companies are experiencing, M&A, e-commerce, financial services integration, and, of course, supply and demand.

The first is demutualization. It is a fact with demutualization that fewer insurance companies have been going through that there has been, and will continue to be, a need for actuaries. Most of these openings are financial in nature because the reporting needs to be done pre- and post-conversion. Those of you in corporate areas and at some of these companies going through a stock conversion see all the extra work that needs to be done, especially during reporting time, working with rating agencies and with Wall Street. Watching the bottom line, profits, stock prices—all add to the responsibilities and opportunities for actuaries from the mutual company days to the present when companies are so stock-price conscious. Companies are looking for product lines and market niches to find opportunities they can capitalize on and use to grow their revenues to increase their bottom lines.

Another factor that demutualization has caused is the buy-or-be-bought syndrome, which lends itself to the next factor, which has increased opportunities for actuaries: M&A. Buy or be bought. The race begins once a company has demutualized and converts to a stock company. One or two events then occur. The company either sets out on a mission to look for blocks of businesses to grow revenues, or looks for entire companies to buy to increase its size, market share, and distribution. Companies also try to prevent the possibility of their being acquired: that is the second of the two events, buy or be bought.

Obviously, whenever an acquisition occurs, there are both opportunities for actuaries as well as duplication of actuarial jobs. Time and time again there is no guarantee that just because you are the acquirer your management team will remain on top. Sometimes it becomes a political game, and sometimes the stronger party prevails, and it could be the acquirer or it could be the acquired. Sometimes all positions are kept and modified to make the combined entity stronger, and sometimes the entities are kept separate, and slowly they cross-fertilize, integrate, and eventually eliminate duplicate positions.

Companies that have an acquisition strategy have an increasing number of opportunities for those with M&A experience. Positions range from due diligence and appraisal work to those who get involved with putting the deal together, including front-end strategies, all the way to those who have lots of deal-making experience, not just domestically but internationally as well. In the past actuaries were involved only in the appraisal and due-diligence process, but today with the increased activity and the importance of analyzing risk, actuaries are becoming more involved with the entire process, just like investment bankers and other finance professionals.

Other business-development opportunities include joint ventures. Companies try to enhance their business by forming alliances and joint ventures with other companies. They partner with another company with similar products or markets but varying distribution channels, trying to create or enhance synergies between the two insurance entities in order to make them stronger, and increasing their bottom line. More than ever companies are becoming obsessed with increasing revenues, all because of the new stock companies' status in today's competitive market. After all, Wall Street rewards those companies that prove their abilities to successfully grow their profits and sustain those growth rates.

Reinsurance has expanded from the traditional sense of reinsuring policies and blocks of business to being used to help companies fund acquisitions. Reinsurers are looking for people with skill sets similar to those of actuaries being recruited to fill M&A positions. Those who have experience in analyzing these blocks of business, purchase GAAP, modeling, and deal-making skills are in demand. Administrative reinsurance is becoming more of a trend as reinsurers acquire closed blocks of businesses. Those departments are expanding. They need an increasing number of actuaries to handle all the additional back-end reporting work necessary for these transactions.

Now let's talk about another factor affecting your career opportunities: risk management. The brand-new type of position leading the trends this year is risk management positions. What are they? Well, they're interesting. When you think back on what makes an actuary different from all other finance and accounting professionals, it is the actuary's ability to predict and calculate risk. The insurance industry was built on the basis of accepting risk and managing it for a profit. Why, now, are there all these so-called risk-manager positions when all along actuaries and other insurance professionals had been successfully managing risk?
The first reason is the competitiveness of the industry. Companies want to maximize their strategies to increase market share and corporate profits, but at the same time manage their risk and limit their downside. The second reason was illustrated recently by the troubles of both Unicover and General American. Their financial difficulties hit everybody in the industry. Companies have begun to redefine their approach to risk management. In many companies risk management is being carried out on a risk-by-risk basis or on a business-by-business basis with little or no analysis of how events in one area could impact the entire enterprise. Seeing what happened with General American hit everyone square in the face and demonstrated that there are shortcomings to this method.

A more holistic approach to risk management that takes into account how the effect of one risk in an area can reverberate through an entire organization was needed. The result: new risk manager opportunities at the corporate level and at various business units. Skills needed include a variety of investment backgrounds, asset/liability expertise, financial analysis, credit analysis, diverse experience with different product lines and their impact on the product, and other financial, corporate, and distribution experience.

Risk managers look at M&A and investment strategy in conjunction with product and distribution strategy, taking a macro-view into micro-details, as well as taking a closer look at various outcomes of investment and reinsurance deals, but it continues to go further and further. When you think about the management of risk, the opportunities are endless, especially if you are a sharp, dynamic actuary with a broad perspective.

Another industry trend affecting opportunities is e-commerce. We're just beginning to see e-commerce infiltrate into the insurance industry with an increasing need for actuarial talent. A very small percentage of actuaries work in their own company's on-line efforts, whether it's for their customers, retail or wholesale, or office-to-office business. We are in the very early stages of development, but this is a growth area. The Internet promises to transform the insurance industry over the next few years too. Movement is still slow, but we are seeing more being done in the business-to-business areas. Trying to work with distributors, agents, and regulators to shortcut processes by working right on-line is where the growth is right now.

In relation to the consumer side, insurers need to create on-line products that are designed differently, stripped down to their basics and priced at a discount. The playing field is wide open for on-line insurance sales. We should be seeing more opportunities for actuaries in their own companies or for those with experience to obtain jobs with other companies in the not too distant future. There are a few dot-com companies or e-commerce ventures that are independent or part of larger organizations. A few actuaries are with these new startups. Some are more successful than others. We will be seeing more of these opportunities in the future.

The next is financial services integration. In terms of opportunities I would have expected more opportunities to arise once Congress repealed the law that prohibited banks from selling insurance products. Citibank and Travelers seem to have the early lead out of the gate, but companies have been slow moving. However, there is a great need on the part of insurance carriers seeking product-marketing actuaries with bank, brokerage, and wire house experience. On the banking side consultants are the ones filling the roles of in-house actuaries, for the most part, helping the banks to start selling insurance to their customers. Soon we'll be seeing more opportunities with those same organizations as their businesses expand, thanks to the consultants.

The last factor affecting opportunities is supply and demand. There is a tremendous demand for ASAs. Let me preface this by saying that there is an overabundance of opportunities for the old system, 200-credit ASA, and the supply is very low. Why is the supply down? Well, let's look at some statistics. From 1990 to 1994 the number of new ASAs for those five years range from a high of 1,445 to a low of 902, and those are the ones who passed the 200 credits to get their ASA. In the middle of 1995 the requirements for Associateship status changed from the old 200-credit system to 300 credits, and this is why there were only 640 new ASAs in 1995. Now, think about these numbers. For the four years beginning in 1996–99 the number of new ASAs ranged from 10 in 1996 to 233 in 1999. That represents a tremendous decrease from the 900–1,400+ of the previous years. Of the new ASAs for 2000, 298 came in under the 300-credit system and 66 under the new six-course exam system.

Now let's put these two tables together, and you see how dramatically the SOA has limited the supply of new ASAs in the marketplace. This table includes Canadian ASAs too.

TABLE 1
COMPARISON OF NEW ASAS BY YEAR

1990	902		1996	10
1991	1,445		1997	112
1992	979		1998	223
1993	969		1999	233
1994	957		2000	364
1995	640	Transition Year		

If you are a hiring manager at any level, you probably have an opening or two for someone who has taken life contingencies up through 250 credits. Now you can see why you're not seeing the number of U.S. candidates that you did when you were recruiting in 1995 or earlier. You may ask, if the number of students are the same, have we raised the bar to obtain an ASA so high that we cannot create them? I'll go into this later. But right now the lack of supply has affected our country's demands for ASAs and pre-ASAs in every specialization and in every region of the country. Employers call us daily seeking ASAs and pre-ASAs.

Now let's take a look at opportunities and what's hot by specialization, and we'll touch on all the different opportunities in different areas. Let's start with pensions and investments.

The investment area is expanding beyond the traditional investment opportunities at investment banks, meaning those in the fixed income, equity, pensions, portfolio management, and insurance groups. Reinsurance companies are doing more investment-type transactions beyond financial reinsurance, such as structured transactions and securitizations, and investment banks are even setting up reinsurance-type companies and departments to compete with the reinsurance companies as well as to work with them doing more complicated investment, financial-oriented deals. Reinsurance actuaries with capital markets and structured transaction backgrounds are in demand and will continue to be in demand as more and more investment banks expand departments to capitalize on the growing trend of funding insurance deals.

The asset/liability expertise is still in demand and growing as more and more insurance companies, consulting firms, and reinsurers look to manage risks associated with all lines of insurance. As I said earlier, the risk management position is the most popular trend and the position type that a lot of companies are incorporating into their organizations. We are starting to see some activity with stable value products, but on the pension side the activity is with the pension-consulting firms. Every consulting firm in almost every city is looking for mid- and lower-level actuaries for their defined-benefit practices. There is also a growing need for investment consulting with defined-benefit plans.

Now let's move on to life and annuities. Those with variable life and variable annuity experience are in the most demand these days, with variable annuity product opportunities exceeding those with variable life. Just look at what's happening in the life area. The marketplace is aging. Savings for retirement are at the top of everybody's minds, especially as we get older, and variable annuities are a way for many to accumulate wealth for retirement because of tax-deferred growth, flexibility, and investment options, and there are no limits on how much you can buy. Those with experience in alternative distribution channels are also in demand as more insurance companies expand their distribution to banks, broker dealers, and wire houses.

Fixed product knowledge is also in demand with companies looking to joint venture more traditional life insurance coverages with other companies or to develop private label products to be sold through banks. Reinsurers are also providing their product development expertise to clients by instituting consulting units. Instead of charging an hourly rate, like our consulting firms, they add a reinsurance agreement on top of the products they develop as payment for their consulting services.

Now I'd like to discuss the hottest specialization by far, and this is in the financial arena. I've been recruiting actuaries since the mid-1980s, and I have never seen the market so skewed to the financial reporting and valuation sector. There are just so many opportunities for financial actuaries who have a strong GAAP background, statutory expertise, valuation experience, and asset/liability and modeling skills for traditional reporting positions, valuation positions, financial analysis and projection positions, and M&A positions. It seems that with all the demutualization activity, the M&A activity, and the risk-management analysis going on, companies are doubling the size of their financial and corporate actuarial staffs. Many companies with foreign parents have been doing embedded value calculations for years, and now domestic companies are doing the same.

Companies are analyzing their own businesses, dissecting their profits to understand what product lines are generating profits, and studying to whom they're selling and where. Some carriers are even providing this analysis to their sales force in order to maximize sales efforts. In addition, they're using this analysis and information to expand those product lines doing the most business and eliminating or selling those blocks of business that do not fit into their overall profit strategy. Financial actuaries are being used not just to report on what has already happened, but also to develop models to analyze what has happened, why it has happened, and where it has happened. Then they are projecting future growth and opportunities, developing strategic plans, and recommending future courses of action. The growth is phenomenal.

The growth we're seeing on the financial side hasn't been as kind to health care. The reason for this lack of growth is due to all the M&A activity that has gone on. In the eastern region alone there are few carriers left. Even within the Blues systems your options are fewer in terms of the number of different carriers to choose from, especially if you don't want to stay in your own company. There are still opportunities in health care, especially for those with managed-care experience.

An area that is expanding is long-term care. Just look at the number of presentations at this meeting alone devoted to long-term care. We'll be seeing more and more opportunities in this area as our population continues to age. I hate to say it, but my husband and I just bought long-term-care policies, and I don't think we're that old.

Work-site product opportunities are also expanding as companies grow their group benefit lines and begin to expand this avenue of distribution. Those already selling products in the work-site environment are expanding to capture this fertile market. Individual health and supplemental medical opportunities continue to be in demand, but the supply is low. And with all the activity going on in this area reinsurers continue to grow their group and special risk area. Even property and casualty companies are looking to capitalize on the A&H side.

Reinsurance is really growing. Not only is it growing domestically, but reinsurers also have been growing offshore, and their growth has been incredible. We're always hearing about new startups. Recently somebody called me up and said, "Aimee, did you hear about the four new startups in Bermuda?" The tax advantages there are extremely favorable, and profits are huge. XXX has also contributed to activity in reinsurance, in addition to the organic growth of reinsurers in traditional and non-insurance businesses. As I said before, M&A activity has become a part of the reinsurance companies' business as they assist their clients in funding their growth through reinsurance and structured transactions.

Administrative reinsurance is catching on with more carriers, building their business to add to their bottom line. Reinsurers are developing consulting groups to capture more of a direct life and annuity product market and competing head to head with the consulting firms. Reinsurers are expanding and developing more capital management and investment capabilities as they are relied upon to help their clients develop business solutions, however capital intensive they become. Reinsurers' capabilities have grown tremendously and continue to do so in all lines of business. I'll conclude this section on what's hot by specialization by mentioning that our world is getting smaller, and many of our insurance carriers in the U.S. have foreign parents. Those in the U.S. divisions, as well as those companies who are based in the U.S., are expanding their reaches internationally. I'll go into more detail on this shortly as I discuss where the jobs are by geographic concentration.

Let's talk about the U.S. by the number of actuarial positions in each part of the country (New England/Atlantic Seaboard, South, Midwest, and West). The opportunities do correlate to the number of insurance companies and consulting firms in these regions. It is no surprise that most of the jobs are located in the East, with the Midwest in second place, followed by the West. The southern part of the country has the least amount of opportunities. When your desire is to be in a certain state or a certain region, you have to take into account the number of insurance carriers and consulting firms in those areas. For those of you in the benefits consulting field, you'll have the most opportunities as most cities in the U.S. have more than one benefits consulting firm. This is not true on the life consulting side if you want to stay with an insurance carrier; this should not be a surprise to anyone.

On the international side there is a steady stream of opportunities in Asia~~,~~: Hong Kong, China, Japan, Korea, Indonesia, and India. Speaking different dialects of Chinese, such as Mandarin and Cantonese, is very helpful. There are growing numbers of opportunities for Japanese nationals to work in Japan, as well as Korean nationals to work in Korea. There seem to be more Chinese actuaries than Japanese or Korean actuaries. Those of Korean or Japanese descent are somewhat in more demand. The opportunities in India are growing, and if you've ever visited our Web site, you'll see a special section devoted to multilingual actuaries just for this reason. In South and Latin America the countries where opportunities are the most plentiful are Brazil, Mexico, and Argentina. Fluency in Spanish is very helpful, as well as Portuguese, in this region of the world. And, as I mentioned when I discussed the growth in reinsurance offshore, the Caribbean islands are where the opportunities are. Bermuda is hopping with so many reinsurance companies opening and staffing up their offshore operations to take advantage of the tax differences. The Cayman Islands have been a close second to Bermuda with the opportunities there. This is a region of the world to watch for continued growth. We are extremely active in both these areas and have made significant placements with companies headquartered in these regions.

Now let's discuss another major trend affecting actuarial opportunities, and that is the trend created by the SOA. Earlier I mentioned the decreasing supply of ASAs from the huge numbers in the early 1990s as compared to those in the last few years. Let's examine this a little bit more closely. The Society has made major changes in the ASA exam requirements. How many of you remember the time when all you needed was to complete 5 out of 10 exams? At that point in time you only needed to pass 50% of the exams.

Then the system changed to make it somewhat easier to get your ASA, and the Society changed the 10 exams to a credit system so you could sit for partial exams. This encouraged passing, and all you needed was to pass 200 credits out of 450 to attain your Associateship. Then it changed again mid-1995. It added an additional 100 credits, and you had to pass 300. And now, as of January 1, 2000, you need six out of eight exams plus professional development credits to become an ASA.

Let's compare the requirements. I mentioned that 5 out of 10 exams was 50%. It appears that the Society then wanted to encourage students to attain their ASA, so it changed the system to make it somewhat easier. With the 200-credit system all you needed was to pass 44% of the exams. Then in 1995 the SOA increased the credits needed; now you had to pass 66% of the exams. And now, beginning this year, you have to pass approximately 75% of the exams to get your ASA. I wonder what the effect will be as the difference between the ASA and the FSA becomes smaller. Will it mean less demand for ASAs, less demand for FSAs, or just fewer ASAs? Only time will tell. One thing for sure is that those who are getting discouraged getting their ASA are dropping out of the exam process, and, unfortunately, we're hearing about somebody doing that every week.

The dramatic change in the number of ASAs each year is a direct result of the Society's change in the exam requirements. Again I ask, what will this new exam system do to the number of new ASAs? Because of the exams one of the hottest areas in the actuarial employment trends is the vast numbers of pre-ASA and old ASA positions. When a client calls us to tell us of these openings it's usually in relation to the old ASA requirements with life contingencies more so than the new ASA with six exams. Those new ASAs are getting so close to achieving their FSA within a year that they want only FSA positions, and the hiring manager, too, would want only an old ASA, nobody close to the new ASA level. And so let's see what happens.

Now let's look at the FSAs. The number of new FSAs is increasing because of the 2000 conversion, and the numbers will remain high for the next few years while ASAs take advantage of the new requirements. In terms of where the opportunities are, new FSAs are always in demand as they are the lifeblood of any organization. Organizations try to staff up and get new people into their mix. The demand will always remain high. The opportunities for the more seasoned FSAs are always fewer than those for the new FSAs. With the diversity of the profession; the new reinsurance startups, new risk management positions, and M&As, there are more senior positions than there have been in years. But, there are also more senior people competing for them. This level is the most competitive for open positions.

How do you keep yourself marketable? I will conclude with just a few tips on how to keep yourself marketable so that as you climb the corporate ladder you remain the most sought after in your profession.

Stay hands-on. The easiest person to place is one who is hands-on with a lot of experience, no matter how many years of experience. That is what employers look for. You must also be a good team player with good communication and good people skills who can also manage projects and people. There is no room for pure managers anymore. They are a thing of the past, and they're a first group to be cut from any organization. Increasing your marketability in your own company or within your own profession is an entirely other presentation, but here are a few quick tips to remember as you look into the future. Be creative. Try to get experience in growing areas. Keep learning new areas, new technology, anything new. Just keep yourself current and fresh. Be aware of those around you and the growing needs of the world at large. Our population is getting older. What will our needs be? What are your needs today? And try to maintain a cutting edge posture. In short, be the best you can be. Become a star performer.

Ms. Hartman: Our next speaker is Carl Westman. Carl is an FSA, a member of the AAA, and a Chartered Financial Analyst. He is a graduate of Duke University. From 1989 to 1994 Carl worked in a broad range of product areas while an actuarial student at Aetna, including life, health, and pensions on both the individual and group sides. From 1994 to 1998 Carl worked for Provident Companies, now known as UNUM Provident Corporation, as a pricing and product development actuary for their group disability line of business. Carl left Provident in 1998 to spend more time with his young family and work part-time as an Internet-based consulting actuary. In 1999 he reserved the Internet domain name actuaryoncall.com and established a Web site to provide information about the consulting services he provides to individuals and businesses.

Mr. Carl A. Westman: I'll be discussing some aspects of leaving a corporate environment to strike out as an independent consulting actuary. What I do might best be described by the term actuarial teleconsulting, literally, actuarial consulting at a distance. How much you travel for assignments is really up to your own personal taste and situation. Another somewhat unusual aspect of what I do is that many of my clients have been individuals, not corporations. In what I have done there is a strong component of what is now called personal actuarial services.

Here are some topics that I hope to cover. How much of actuarial teleconsulting is truly on your own? The answer is that it depends, and it's somewhat up to you. To what extent is this type of work truly actuarial? How do you get started? And what are the opportunities and challenges? There are many, and we could have a whole session just on that point alone. Later I'll briefly discuss skill sets. What do you need to succeed as an independent consultant? What do we, as actuaries, need to work on? Finally, I'll offer some advice to those considering this field.

To what extent are you truly on your own? You can see that you will be on your own with respect to handling the overhead functions that in a corporate environment you generally don't have to worry about. Of course, you can contract out some of these functions, but either way you're responsible for them, and these are not trivial functions either. Without good marketing no one will know about you or your product, and your revenue stream will dry up or not even get started. Unless you outsource systems and administration, you will find that doing your own corporate taxes, handling computer hardware and software, arranging payroll, and invoicing are all drains on what would be your productive time. You need to price your services properly to be able to pay for all of this. A fellow I used to work for maintained that to cover all of the costs of overhead when you're on your own you should take your hourly salary in a corporation and at least triple it.

In another sense you should never truly be on your own. You should develop a network of colleagues with whom you can explore ideas and approaches to problems and perhaps develop ways to collaborate or peer review each other's work as necessary. Within a corporate environment it can actually be more difficult to find peer reviewers and collaborators. Your coworkers may be too busy to hear you out or your company may discourage contacts with external colleagues because of antitrust or confidentiality concerns. In either case it always helps to have some folks to call. I encourage you to develop a network of colleagues wherever you work.

When you consider the domain over which the SOA wishes to extend itself, there is really very little that is financial that has not been claimed to be in the bailiwick of actuaries. The new vision statement of the SOA calls for actuaries to be recognized as the leading professionals in the modeling and management of financial risk and contingent events. Well, that's pretty broad. The notion that a life insurance contract involves a contingent risk is pretty obvious to us, but a broader view, however, allows us to see other applications. For example, what is the fair asset value of an impaired commercial loan held by a bank? What is the expected financial impact of a surge in crude oil prices on automakers that cannot meet demand for more fuel-efficient vehicles? And here's one for John Dewan: What might be the financial impact of St. Louis Cardinal slugger Mark McGwire going on the disabled list? There could be lost ticket sales, reduced advertising revenue, and perhaps fewer sales of logoed apparel. You get the picture. Actuarial assignments are everywhere, and few people know about it. What we need are not goodwill ambassadors of the profession but evangelists going into the non-insurance world and selling people on the idea that actuarial analysis is what they need and what they really want.

I've received many different types of inquiries since going on my own: to review complex life insurance arrangements, buyouts, pension issues in divorce proceedings, retirement income planning, estate planning and trusts, etc.. They've come from people all over the U.S. and from outside the U.S., in countries such as Canada, Greece, and the U.S. territory of Guam. The topics tend to be broad, and fairly quickly actuaries can find themselves being asked about their expertise in many diverse areas. I'm not a pension actuary, but I do get a fair number of inquiries regarding pensions. Take heart, pension actuaries. Now, for the most part I've had to refer out pension work because I don't have the requisite qualifications to offer prescribed statements of actuarial opinion on pension matters. However, I have had a number of really interesting assignments, and no two are at all alike. This keeps things interesting for those of us who like challenges.

What's the best way to get started? Should you spend time developing a formal business plan complete with pro forma statements? I say no, not at all. When you are just starting out, your plans and opportunities and situations change so rapidly that it's a waste of time to try and codify the unknown. Now, sure, it's fine to sketch out some plans and some ideas, but keep yourself flexible. The first thing to do, if you're an aspiring actuarial teleconsultant, is to establish a Web presence through registering your own domain name. This is the name that comes between the www and the dot-com. Now, after registering your domain name you need a Web-hosting service. This service will give you access to the Web space that you'll need to post your pages, as well as access to the e-mail that's sent to addresses at that domain. Some consumer on-line services will provide you with Web space, but you may not get the www.yourdomain.com kind of look in your Web address. You may want to register your own domain name rather than rely upon that.

Don't hesitate to get at least one page posted to your domain with all of the contact information that you would include on a business card, plus maybe one or two sentences introducing yourself or your products and services, and saying what you do. This takes very little effort and is well worth taking care of early. The next thing that you should do is to register your site with major search engines. You need not pay for this if you don't mind doing it manually. There are, however, companies that will register your site everywhere for a fee.

Decide on whether you will incorporate, form a partnership or a limited liability company, or be a solo practitioner—and a disclaimer here. What follows is not legal advice, but it's just what I've learned or at least what I think I know about these issues. And the first of these is one common misconception that incorporation will protect your personal assets if you get sued. Now, in some cases that may be true, but as a professional you're liable for malpractice or negligence just like a doctor or lawyer, and hiding behind a corporation will not save you or your assets. Now, that said, following the Actuarial Standards of Practice should offer you a solid, affirmative defense in such circumstances.

One way to help you in the incorporation decision is to get a book on forming your own business. I frequently refer to one that's published by Oasis Press and authored by an Ernst & Young consultant. Alternatively, you can take the advice of a friend of mine who started his own export-import insurance brokerage. Just go to your local Secretary of State's office or to the state capital, tell them you want to start a business, and they'll give you all the forms you need and tell you what to do. Don't worry about reading up on all the different laws and taxes and filings that you have to do. For the most part the government will find you and will tell you what you have to send in when, for the most part.

It's smart to get some nice business cards, but not because they'll get you any business. You just don't want to be without them as you network with people. Get them and have them ready, and then network, network, network. Keep an employment planner and fill up all your downtime with networking of some type if you can.

What opportunities might there be in this field? First, I would say that the assignments you get are refreshingly complex. They're interesting, and they're somewhat ill defined. As a result, you can be really creative, and you won't get bored. The hours are often flexible, which has its obvious advantages. Also it gives you a broader understanding, of the people you work for and the people you work with, and that provides obvious benefits to your attitude and outlook.

There are a lot of challenges to actuarial teleconsulting. If you primarily serve individuals, you're looking at trying to fill your time with many very small assignments, and that can be quite difficult. It's just not something that comes to the average person's mind like the periodic need for accountants or lawyers. Moreover, the services an actuary might provide an individual are general like financial planning, and not the same sorts of things that only an actuary can do. We might do it best, but selling that advantage of our services is up to us.

Finding and expanding assignments are challenges. One way to find assignments is to develop a road show, and by that I mean that you should develop a presentation that usually indirectly creates an awareness of your services. You should volunteer to speak to any group that will listen to you. Develop contacts with members of the media. Help them complete their columns or their segments and perhaps get your name mentioned or your company's name mentioned in return. Another challenge is how to sell a client on extending an assignment's duration or scope while still delivering thoroughly on the promised work.

And, last, I would just note here that if you do all your taxes and filings yourself, you will find them to be a big time eater, and the complexities are legendary. If you have enough volume of business, you may wish to contract this out. Alternatively, you might want to organize your business in such a way as to minimize this sort of hassle. But, either way, taxes and filings are a challenge to your time and attention.

Let's talk about skill sets. As actuaries we like to think of ourselves as being highly skilled, and in many respects we are. Our professional and technical knowledge is our most important asset, and most of us are quite proficient with applying technological solutions in our work, and also, mentioning actuarial exams, any of us who have gone through the actuarial exams must have some good measure of persistence. However, actuaries are not necessarily gifted with the interpersonal skills that are seen in most successful salespeople. It usually takes some extra effort.

First, it helps to develop a flair for self-promotion. While marketing can often be contracted out, there is no real substitute for someone who believes in his or her product and loves to tell everyone about it. Another skill you need to have is public speaking. You should do it to inform your clients, to promote your services or product, and to network with people on whom you may need to call some day. Negotiation is another skill but may not come naturally to people attracted to the actuarial profession, but anybody can do it. Most of us need some practice in it to become proficient.

What advice would I give to somebody contemplating this field? First, don't jump into it without a backup plan or, preferably, a calendar filled with clients who are going to provide your cash flow. Be sure you are the type of person to embrace technological advances. For example, you should already be making extensive use of the Internet and e-mail. When we see enough bandwidth and technical standards for good Internet teleconferencing, you should strongly consider equipping yourself for that. Your clients may be interested in that as an option to more expensive and often inefficient travel.

As I've emphasized already, network and promote yourself. You can do this in person or electronically through the Internet with your Web site or listing yourself in a talent-auction marketplace. Another way to help increase awareness of your services is to form alliances with your colleagues. Perhaps you specialize in life insurance, and you have a friend who works in pensions. You could agree to refer cases to each other when an assignment requires the other's specialty expertise.

One thing that I've done recently is to set up a consulting actuary Web ring; this is a device that links Web sites of a similar topic. If you find one actuary's Web site on the Web ring, you can travel around to others on the ring.

Last, when considering going into actuarial teleconsulting you should give consideration to whether you wish to serve individuals or corporations or both. There are significant differences in the ease with which one can obtain and retain significant volumes of work. In addition, it's generally believed that corporate clients tend to be less litigious, and so that may influence the market that you target.

What would I tell young actuaries? Unless you have a reliable stream of corporate clients lined up, make sure you have a fallback position should things not pan out. If you're coming from an insurance company environment, you should consider joining a corporate consulting firm first. You could get a taste for consulting work while being under less direct pressure at least in the short run to secure clients. You can also hone your interpersonal skills there. Perhaps you just want to cut out some of your commute or you want to spend more time with your kids. You may want to try telecommuting or flex time with your current employer first. Such arrangements are gaining greater acceptance.

For actuarial students my advice is to wait to be a celebrity solo practitioner. Finish your exams but never to the detriment of your work responsibilities. Get to know your corporate culture early on and strive to be regarded as a can-do person. That said, never say never. Had Microsoft's Bill Gates not dropped out of Harvard, he might not be in the enviable position he is today.

Ms. Hartman: In 1987 John Dewan left a highly successful career in the insurance industry to pursue a lifelong dream to develop the timeliest and most comprehensive computer database in sports. The fulfillment of that dream is Sports Teams' Analysis and Tracking Systems, Inc., commonly known as STATS, Inc. STATS is the nation's top sports statistical analysis firm specializing in in-depth information for major sporting events. He has served as chief executive officer of the firm since 1989. John was named to the *Crain's Chicago Business* list of key technology players in Chicago for 1997 and the Technology 100, and he has been a finalist for the KPMG Illinois High Tech Award in 1997, 1998, and 1999. He is a noted sports expert whose "Stat of the Week" can be heard on WSCR–The Score, an all-sports radio station in Chicago. John co-authors the annual *STATS Baseball Scoreboard* and edits several of STATS's many other sports publications. Prior to the creation of STATS John was an actuary for Chicago-based Aon Corporation. He holds a Bachelor of Science in mathematics and computer science from Loyola University and is an FSA.

Mr. John A. Dewan: It was in 1987 that I left my actuarial career and began to pursue a different career that wound up being a dream come true. But before I get into that, let me tell you what happened that first year. We began the year by doing some work. It was the first year that I began working full time at STATS, and we had the opportunity of being able to work with NBC in supporting them in covering the National League Championship Series. Danny Cox was a pitcher for the

St. Louis Cardinals, and that was the year we began tracking in-depth information in baseball at a pitch-by-pitch level, collecting information on a computer as it was happening.

We had some information on Danny Cox, who, during the regular season that year, saw his first 70 pitches in a baseball game get hit for a .268 opponent batting average, and then after pitch 71 they skyrocketed. He got tired, and it jumped up to a .345 average. And Vince Scully happened to mention this on the air at pitch 70. What happened? 73rd pitch, line drive double; 74th pitch, long home run to left field; 78th pitch, sharp single to right; 81st pitch, line single to center; 82nd pitch, Vince Scully falls out of the booth. He was absolutely raving. He couldn't believe the stats. He mentioned it for three innings after that, and it was a great start for me to be on the air with something that we had put together.

Let me tell you about the dream. I was 15 years old, and I received a package in the mail, which was a tabletop baseball game called Stratomatic Baseball. This was a game that you played with dice; you rolled the dice to determine outcomes, and determining outcomes is what an actuary does. But I really got into this game, and I became known as Bowie Dewan. Bowie Kuhn was the commissioner of baseball at that time; I had set up some leagues around our neighborhood, and I became the commissioner of the Stratomatic Baseball leagues in our area at age 15. It really made me love numbers and love sports, and later on in high school I said that I wanted to become the statistician for my team, the Chicago White Sox. We had a career day, and I announced that at one of the classes there. Later on as I went to college and personal computers came into being, I thought, wouldn't it be cool to collect a computerized baseball database?

Basically what happened was I discovered the actuarial profession in college, and, you know, I love numbers. It was the absolutely perfect profession for me, and I began taking exams. I didn't love exams, but I still became an actuary. Then shortly after college I bought an Apple II computer, and my whole goal was to computerize the Stratomatic Baseball game, which I did. We had our leagues, and we used my computerized baseball game for many years thereafter.

Now, before I go on, I have to share with you another stat. The Michael Jordan effect, 1993. That was the year after we began to track basketball, and one of the things we tracked were fourth-quarter comebacks when you were down by 15 or more points entering the fourth quarter. Well, it just so happened that year that the Bulls won the NBA Championship by beating Portland in the deciding game after trailing by 15 entering the fourth quarter. How hard is that? That year, not counting the Bulls, the league record when entering the fourth quarter trailing by 15 or more was 1 win and 259 losses. The Bulls that year were 3 and 3. Thanks to Michael Jordan, they could make a comeback no matter how far behind they were in the game. Jordan left the Bulls the next year—0 and 8. And later he came back. The league record at that point was 0 and 168, excluding the Bulls, and the Bulls were already 1 and 1 in that situation. Michael Jordan had a tremendous effect there.

Let me talk a little bit about my first career. I started at an entry level at Combined Insurance, which is now Aon. My first title there was actuarial technician; my favorite title was when I got promoted to senior actuarial technician. People would ask me, "What is an actuarian? And what does a technician do? And what's so great about being senior at it?" I told them it was like being senior bottle washer, and it was fun. I really enjoyed what I did, and I finally got the exams over with in 1982. My wife says that I got into this career because I had nothing to do with my free time. I was the head of two actuarial departments in my career as an actuary. I went into research and development, and I really loved it.

They did a *USA Today* survey back then. I don't know if it's been done recently. The survey asked, What is the best profession in the world and in the country? And it was the actuarial profession. I can say that I agree with it completely. But what I learned as an actuary is all that I needed for the rest of my career, frankly. There's a book called *All You Need to Know You Learned in Kindergarten*. All I needed to know I learned as an actuary. I learned how to run a business. I learned how to manage people. I learned how to analyze profitability. I learned how to set aside money for the future, something that, as a small company, you've got to do. I learned about marketing, accounting, and the hiring process. All of it was there when I was an actuary, and all of it was what I needed when I went into my own business.

The decision that I had to make was a revelation when I read this book called *The Bill James Baseball Abstract*. Bill James was a well-known author in baseball who every year wrote the baseball abstract, and this book was really a book utilizing baseball numbers, what I did with insurance numbers. It was taking the numbers and looking at them every which way, upside down and backwards, and coming up with an analysis that said what they meant, and I was just absolutely flabbergasted by this book. It was like this could actually be done. You could actually do this with sports numbers.

And so my dream took hold. I actually put the book down. James had a phone number in the book. I called the number and got involved with an organization that he had set up called Project Score Sheet, which was an organization to really do what I had dreamed to do, which was collect a computerized database of play-by-play information in baseball. I got involved with that project, and it really became two full-time jobs. I was working my job as an actuary, and I was working the job as the director of Project Score Sheet. And I had a decision to make, which, of course, would involve a tremendous amount of risk, leaving the actuarial profession and going into my own position, going into my own company.

As I weighed this, an opportunity came along. I bought into this company called STATS, Inc. It was actually a small company with two clients at the time and no full-time people, and I bought into it. Actually I borrowed money from some actuarial friends of mine, and I got into it. I took the plunge. It was nice to know that the actuarial profession was always back there, and that there were people like Aimee out there who could always find a tremendously good position for me in case worse came to worse. That very first year, in 1987, I earned $11,000. That was actually less than I earned in my very first year as an actuarial student. Sometime during that year I realized one of the dreams that I had in high school, which was to be the statistician of the Chicago White Sox. I realized that dream because one of the clients of STATS, since day one, has always been the Chicago White Sox.

Let me tell you a little bit about my second career. Our goal was to collect as much data as possible. We started out with baseball, and I told you a little bit of how we got into basketball; we wanted to develop products that we wanted ourselves. We wanted to have a book, for example, that had all the information that we could possibly have for the last season at our fingertips. We came up with that book. We wanted to play fantasy games where you can own your own team, as if you were managing a team in baseball, but it doesn't cost $200 million. It costs you $20. We wanted that product. And that's really what we set out to do: just do things that we want to have ourselves. We said up-front that money was not the object. Our mission was not to get rich. Our mission was simply to have a good time and to make a living. I wasn't going to cut it on $11,000. I had to do better than that, though.

We started off in a bedroom office. STATS was a small company that didn't have any full-time employees. The first full-time employees were myself, my wife, Sue, who left her job as a systems programmer at Continental Bank, and one other person. The three of us started in a bedroom office in my home, and I could probably spend about 10 hours telling you about the rest of it, but I'll do it really quickly. We had to build a foundation, and we fortunately got involved with some major clients early on. *Sports Illustrated*, *USA Today*, ESPN, and the Associated Press were all clients very early on, and I mentioned Bill James, the author. He actually bought into this company and helped us develop quite a number of excellent products.

We grew as a company. There were a lot of changes that took place. We had some hard times. In 1994 there was a baseball strike, and it probably didn't affect the actuarial industry too much, but it sure affected ours. We had to put a hiring freeze on; we had to put a salary freeze on. We let people take time off without pay on a voluntary basis. We let employees buy stock so that we could raise capital, but I was proud to say that we never laid off anybody, and we were able to manage through that.

Another challenging time was when got sued by the National Basketball Association (NBA), and that was a real David versus Goliath story. The NBA wanted to say that they owned statistics in sports and owned the scores in sports, and we wanted to take exception with that because we felt if they won, we were out of business. We fought them tooth and nail. It cost a lot of money; a lot of lawyers were involved. We actually lost the first round and then won on appeal. That was a major ordeal for us, and we're better for it now.

Accelerated growth: We've been growing gangbusters. We now have more than 100 full-time employees. We actually have about 300–400 people cover games for us around the country in addition to those. We had to do things differently. We reorganized into smaller divisions, and we then began to get a lot of interest, especially among media and Internet companies, in purchasing our company, and earlier this year we were bought out by Fox Sports and Rupert Murdoch. I've never met Rupert, but he now owns our company and everyone's still the same. I'm still the CEO. All of our people are still there, and we're still having a good time.

My guiding principle as I've gone through this is striving for excellence. Do what you do, not because there's money in the end of it, but because you want the product to be as good as it can be, and that has always been a central focus. As I said before, money is not the primary motive. We did get lucky at the end and had a good situation, and many people at STATS who were involved from the beginning did well with the buyout, but most importantly, enjoy what you are doing. A huge portion of your waking time is spent at work. You've got to enjoy that. It's got to be fun, or you should be doing something else. And you are lucky because you're in the actuarial profession, and it's great fun. As I have always said, if you can be an actuary, you can be anything, because look at me. I was an actuary, and I went on to something that could never have been successful, and somehow we made it work.

From the Floor: John, you say you have 300–400 stringers for all sports?

Mr. Dewan: Yes.

From the Floor: In a basketball game, for example, what sort of stats are they taking? Baseball I understand, but basketball, what are they doing?

Mr. Dewan: We're keeping track of who takes the shots, not just who makes them, who takes the shots, and who gets the assist. It's who gets the rebounds, that sort of thing. Basketball is a very fast sport, so we need actually four people covering every game at the same time.

From the Floor: How many sports do you cover?

Mr. Dewan: We cover the Big Six: baseball, basketball, hockey, and football, college football, and college basketball—four pros and two amateurs. And then we also cover some peripheral sports at a lesser level like NASCAR and golf. Actually we just opened a subsidiary in Mexico for Mexican soccer.

From the Floor: I have a question for Carl. I just moved from a very large company to a small company, and one of the first things that strikes me is that in a big company you have access to state regulations, accounting rules, etc. Everything is really available in paper format throughout the company. And in a small company it just seems it's not that available. You either have to find it on the Internet or beg or borrow it. I just wanted to get your comments on that.

Mr. Westman: You do have a lot of resources in a large company, but the Internet has been a great equalizer among firms, among information sources. And, ironically, for all the bad press and reputation in this country that government gets, the government has been one of the prime users of the Internet in terms of getting information out to people who request it, and if you think about it, it's not surprising. You have a lot of clerical people, who handle requests for stuff all day, and they don't like doing it anymore than we like being on hold. The Internet is a great equalizer in that sense. You also can keep up contacts with the people you have at large companies if you need a specialized publication like *NILS*—I think it's National Insurance Legal Source or something like that—that gives you state-by-state insurance regulations; the subscriptions are very expensive. If you keep your contacts up, usually you can get access to whatever you need. But you're right. You're not necessarily just going to have things in hand. If you're based in New York City, there are great public resources there. There are public libraries. The insurance library, the College of Insurance, is in New York City, and that's a tremendous resource for any of you who may be based in New York and thinking of doing something like this.

From the Floor: Aimee, you talked about, as far as enhancing one's employment situation or picture, making yourself marketable and becoming well-trained in the areas that will be needed in the future, but, John, at the same time you talked about chasing your dream, and sometimes chasing your dream isn't always the same thing as making yourself marketable. I guess my question is really for John. Did you ever have any stress over what you were doing? Did you wonder if there was there going to be a great demand for this service that you were going to be providing?

Mr. Dewan: Well, I didn't expect there to be much of a demand for the service that I was providing. I was hoping that somehow I could make a living doing it. I thought that fans needed to get more information. I was very uncertain about it, but, as I said, I felt a tremendous good fortune that I was an actuary and had the backup plan that if I had trouble in this field, I could always go back to being an actuary, but, frankly, it never even came close.

Ms. Kaye: I just have one thing to add to that. You have to make sure your dreams are marketable or figure out a way to make them marketable.

From the Floor: A question for Carl. You have two credentials that would seem to be pretty hard to get. I'm curious: which one do you feel gives you the greatest advantage in getting new clients? Is it the CFA or FSA?

Mr. Westman: In getting new clients, among individuals most of my inquiries are insurance related; it is the FSA. However, as John alluded to, if a time came when I needed to jump back into the fray and seek something marketable—I won't lie to you—the CFA is more recognized nationally. There are more CFAs; there are more positions for them. It's better known. The FSA is nice, and the people who know what FSA means hold it in high regard, but there just aren't as many people as who are familiar with the CFA exams. It's a three-exam series; it's modestly challenging. It's not as challenging as the actuarial exams, in my opinion, but it's really interesting stuff. If you're interested in learning even just how to invest your own assets, it's worthwhile doing it just for that, and then, of course, it adds to your marketability, as Aimee can tell you.

From the Floor: Aimee, you had pointed out the dearth of ASAs in the last few years, primarily caused by the change in the definition of ASA, and you mentioned that some of these people are getting discouraged and dropping out. Where are they going? Are they staying in the profession, or are they moving into IT professions and other competing industries that demand the same skill sets?

Ms. Kaye: A lot of times we don't know, and it's usually the pre-ASAs who are dropping out. We heard about somebody going back to school to become an art major. Obviously there are pre-ASAs dropping out or unhappy with what they're currently doing, and they don't have recruiters or somebody else telling them that there are other things they can do. If they find that there's a company across the street that has a systems program or an IT program, or they look in the newspaper, and they say, "Oh, I can do that," they move into those areas.

It's not one area that they're moving into. Our economy today is very lucrative, and we're doing extremely well for those of you who are very technical and have the same skill sets as actuaries. There are a lot of different things you can do. A lot of people are going into dot-coms, IT companies, or any kind of data-related company. A lot of times when you sit for an actuarial exam, if you fail it, that might be the first time you've ever failed anything in your life. You get very discouraged, and if there's nobody pumping you up and telling you about all the things you can do as an actuary, you look at the most closely related fields, or anything else that has to do with math.

From the Floor: A couple of things that we've seen as well is that many more companies are asking for actuarial dropouts by name, meaning that you have some exams but you don't get to the designation. And yet you have the skill set, and they don't have to pay you for that. That's the first part. The second thing we're seeing a lot of is financial engineering. The actuaries are making more of a departure to that as well. I think it's a combination of those forces as well.

Ms. Hartman: I have a question for Aimee. With such a demand for ASAs and pre-ASAs, as an employer, how can I attract these ASAs to come to my company rather than to somebody else's company? What's making them come, besides throwing money at them?

Ms. Kaye: That has been a question that a number of clients have asked me. One client came up with an idea. It's hard to find the pre-ASAs, as everybody will attest, and I'm not sure, looking at the number of students who actually sat for exams, if there are too many pre-ASAs out there sitting for exams. I think the numbers have dropped off tremendously. But in order to attract actuaries at this level you have to be competitive salary-wise. You also have to be lucky about the area that you're located. One client was even thinking of offering stock options to people at the ASA level. I thought it was really ingenious, because I had not heard about that. Stock companies usually don't offer stock options to junior people. But it is one of the attractions to people going up. With startups, if they get stock in the company, and the company makes a go of it, they make a lot of money. If you're offering a junior person stock options, I think that's a way to go.

Mr. Dewan: I just wanted to add to that. When we started our company we gave out some stock options, but only to a limited number of people, and if I were to do it over again, I would give stock options to everybody. At the time I thought the stock options were pretty worthless, but I would make sure.

Ms. Kaye: If I may add to that, in some of the Bermuda startup companies that have stock, everybody in the company, even secretaries and administrative assistants, owns stock or has stock options, and it's a way to keep everybody involved and everybody pitching in. This is their company. And at this company that I'm talking about, since they opened up their doors, not one person has left.

Ms. Hartman: John, do you hire actuaries?

Mr. Dewan: I have to say I have a special place in my heart for actuaries. We do occasionally hire actuaries. We don't hire them for their actuarial skills, but I do feel that if anyone has passed any one of the actuarial exams, it actually says something important. We do have three or four actuaries on staff right now not doing actuarial work. We actually had a trend for a while where the lawyers were doing actuarial work, and the actuaries were doing legal work. That wasn't much fun.

From the Floor: Over the last 10 years I've spent a fair amount of time with an organization called SCORE, which is an acronym for the Service Corps of Retired Executives, which is sponsored by the Small Business Administration. I've counseled a lot of people starting new businesses, and a lot more who didn't get started. I admire both of you because you did have the vision, and even though you don't really admit to it, you did the planning, some of the fore-planning, that needed to be done in order to make a successful business. And lest people think that it just happens, I'd like for both of you to acknowledge that a little planning has to happen. You have to know what you're doing, and you really do have to enjoy what you're doing because you are going to be doing it for a long part of your life.

Mr. Dewan: Well, in the early years my wife and I would get up in the morning, go to work, work all day, and our big relaxation was coming home for dinner and spending a half hour with McDonalds on the table, and then going back to work until it was time to go to bed. It was a lot of long hours and a lot of work and absolutely did require some planning, but it was fun. I enjoyed it, and that was the important thing.

Mr. Westman: I'll acknowledge at least, coming up with the Web site and Web site design. If you visit my Web site, you won't see any fancy graphics or, you know, spinning logos and things like that, but I did try to lay it out in an informative way. That didn't just fall out of the sky; I'm working on revising it, but right now I'm having trouble finding the time to do that. Maybe I'll have to contract that out.