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MBA Versus FSA—Can Actuaries Compete In the Financial Services Market?

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Mr. William R. Horbatt: Our topic is MBA versus the FSA—Can Actuaries Compete in the Financial Services Market? I'd like to turn the session over to Dave Simpson.

Mr. David W. Simpson: The reason why I am here is that I am an actuarial recruiter. The rest of the people around me are, of course, actuaries. We will be addressing the topic, the MBA versus FSA, from a variety of angles. It's not going to be a debate, exactly, but each person is going to come forward with his or her ideas on the subject. Essentially we will be talking about whether actuaries can compete in the financial world as it's evolving right now, rather than compare it directly to the MBA. So, you will hear a variety of things. I'm going to ask the panelists to introduce themselves, and then they will each give a short talk that will give their opinion on the subject. First off, Alan Sheptin.

Mr. Alan Sheptin: I have a B.A. in Computer Math from the University of Pennsylvania. As soon as I got out of school, I went to a student program at Met

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Life. While I was in the program, I always debated whether or not to be an MBA; I was not really sure about the profession and the skill sets that I was getting from actuarial exams. My undergraduate background was heavily focused on liberal arts, not business-oriented course work. I continued through exams, however, attained an associateship while at Met Life, left a few months later, and went into consulting and a variety of other positions. There was something that was still gnawing at me—did I want to do the MBA? Was there something that was missing from my education compared to what I was getting from the Society exams? About five years ago, I started pursuing an MBA. I went, on a part-time basis, to Fordham University in New York City. When I finished the program in May 1996, I was still debating whether or not I should stay in the actuarial profession, or divorce myself from it and look into other areas. What I did find, in interviewing, was that the MBA provided a validation that being an actuary did not. If you look at the investment banks and the management consulting firms, they look at an MBA as a sign of having more credibility. It's something that someone who is not an actuary should understand. That'll be the focus of what I'll be talking about.

Mr. John (Jay) G. Giess: I'm in a somewhat similar situation as Al. I started working for William M. Mercer in Boston right out of school, and I wasn't sure if that was the career for me. After two years, I went back to Wharton to get an MBA. The reasons why I did that were, one, I wasn't sure if that was the career for me; two, I read *The Wall Street Journal* and saw how much money investment bankers were making. I don't think I've ever had a discussion about the MBA versus FSA without the high pay that investment bankers earn coming up. I also decided that going back to school was something I wanted to do. I finished up my ASA, actually, in the first semester while I was there, and came to a couple of realizations. First of all, the investment banking world was probably not for me, largely because of lifestyle issues. I talked to people who were in investment banking and there's a lot of stress in terms of the hours, the travel, and the impact the daily markets can have on your life. For example, a friend of mine who was in investment banking, was on a fishing trip in the Adirondacks. His beeper went off. At that moment, he had to pack up and fly to Oklahoma to work on a deal; it was expected of him. I decided that was not for me. The second thing I realized was that the actuarial world was a good fit. In fact, I went on to work for Mercer in San Francisco, and have recently returned to my hometown of Rochester, New York.

What did I discover out of all of this? I think that for individuals who are interested in the kinds of things that actuaries do—the financial modeling, and the financial projections, and—in general, the financial rewards and quality of

work are better in the actuarial world. The one possible exception, in terms of the way the MBA can provide some value, is if you want to become an investment banker. And I think that's more of a lifestyle choice. What can an MBA do to help you achieve that? First of all, let's just say that if you really want to become an investment banker, you have to go to 1 of the 20 schools in the top 10 if you want any value. What do you get out of that? You get networking opportunities and opportunities to interview. What the investment banks are not looking for, actually, is the technical training. I think if you follow the FSA program, particularly the investment track, your financial training is going to be better than the vast majority of MBAs, even at your top schools. Now, granted, you're going to learn some of the management terminology, but what the investment banks are buying, which is somewhat related to what Alan was saying, is, a) that you're showing that you're serious about wanting to pursue the MBA, the fact that you pursued this high-cost degree; and b) that the school did some of the screening for them particularly in the case of the better schools. In fact, in terms of the difficulty of the academics, the FSA was much more difficult than Wharton, hands down. For most people who are looking to get into the kinds of things that actuaries do, I think most of them will find that the FSA is the track to go. One possible exception—let's say you want to live in Fresno, California. I don't know if there are any actuarial jobs there, but if there aren't, you've wasted your time pursuing the FSA; maybe the MBA is for you if you really do need that flexibility in terms of where you live, and what you might want to do.

Mr. Horbatt: I'm currently a consulting actuary with KPMG Peat Marwick. I spent about the first half of my career working in company management, trying to work my way down the size of companies starting with Prudential, then Met. I skipped Equitable and instead worked in their building. I'm bringing a different perspective to this. I've been consulting now for the better part of half my career, more than ten years, and in this business, there's always a dynamic between the MBA consultants and the actuaries. The MBAs are always trying to typecast us actuaries as technical specialists. Yet, there still is a real need for us to be addressing the problems that companies are facing. What the actuary brings to that process is a discipline and a credibility, this *quid pro quo*. On the other side, the actuary isn't perceived as thinking new thoughts. We're not perceived as having the right buzzwords or taking, let us say, an impartial view of the industry. That's the conflict we're dealing with, how do we gain our credibility either as consultants or as part of management? And I'm hoping, as this discussion goes on, we will bring some of those issues to light.

Mr. Steven R. Linney: I'm at the University of Nebraska, Lincoln, in their actuarial science program. I come at it mainly from dealing with 20- to 22-year-old students, advising them on the future of the actuarial profession. Here's a brief summary of my history. Unlike the traditional actuarial science student, I went to graduate school in mathematics. I started in actuarial science in 1974 when the job market was disastrous for college professors. I'd always wanted to be a college professor, but there weren't any jobs, so I thought I should take these actuarial exams, which I passed. I found out I could get jobs that way. I got a job at a life insurance company, but always had planned to someday go back and be a professor again. I worked at my company for about 14 years and I never went the technical route. I was always on either an academic or a managerial route. This year is my 20th anniversary of finishing my FSA. About nine years ago, the position opened up at the University of Nebraska. I was lucky enough to get it, and I have really enjoyed it. We say that the number one job in the United States is being an actuary, but I say, no, being an actuarial professor is the number one job in the United States.

Ronnie, our Recorder, was one of my students. It's particularly rewarding to see people whom I have educated. I must have, now, 10 or 12 FSAs out there. When John Christensen asked me to be on this panel, I think he expected me to come at it from a more pro-FSA perspective. Now, these guys have an MBA; I don't. But I want to look at it somewhat from the anti-FSA viewpoint. I've been asking friends, myself, and others several questions, and the particular one that comes up is, is an FSA worth as much as it was 20 years ago, or 40 years ago, when I entered the profession? I talked to Bob Larson who was the first actuarial science professor at the University of Nebraska. He is known for being very outspoken. And his comment was, basically, how can anyone ask that question with a straight face, since it's obvious it is not worth as much? I'll stop with the question, what does it mean not to be worth as much? It certainly seems to senior management that the actuary is not worth as much. I have found that many senior managers or senior actuaries say, I'm not an actuary anymore. Personally, I struggle with that. I said to a friend yesterday, I come to these meetings and I don't know if I belong here anymore, yet there's another part of me that says I do. This is where I came from, having struggled with that for 20 years.

Mr. Simpson: I'm going to address it logically from the employment standpoint. I first want to say, which I didn't say in the introduction, that if anybody in the audience has anything to say, please go ahead and throw your two cents in also. From the employment standpoint, I definitely feel that actuaries can compete, although it's in more of a round-about manner. If you want to go to an

investment banking firm right now, unless you know somebody there, you'd better have an MBA. You need it, that's it, for the short term. Most of the financial engineering that we're seeing take place, however, involves the skills that actuaries have. As the noninsurance financial services organizations become more tightly aligned, whether it's a merger, like the Travelers, or other types of mergers, the actuaries are being recognized for what they can do. It's very common that in some investment banking circles, people are totally unaware of what an actuary is, apart from the traditional mortality-table knowledge. With the merger of these types of organizations, actuaries are coming to these people's minds for the first time, and we are seeing, albeit very slowly, that actuaries are being used in roles within these organizations that previously had been strictly for MBAs. I think that within the financial services industry, actuaries can definitely compete in terms of the education once people discover what skills actuaries actually possess. That's my overall point of view. Right now, the demand for actuaries in the financial services company is nothing close to the interest that actuaries have in these positions. It's been talked about for a long time by actuaries and I guess that's one of the reasons that people are debating whether to get an MBA. But the demand has not grown to a point where it's really strong yet. It's going very slowly, but ten years from now, it should be much easier for an actuary to move into what was previously considered an MBA-only role. That's my stance on it.

Panelist: Just one little comment. In terms of the financial discipline of the actuaries, will the actuaries ever have 20 schools in the top 10?

Mr. Simpson: Well, I think an FSA means something, whereas an MBA means so many different things. If someone says they have an MBA, that means very little to me. Whereas, if someone says they have an FSA, that means something very definite to me.

Mr. Linney: I would say that if you were just going to reach into a pot, you would probably want to reach into a pot of FSAs rather than a pot of MBAs.

Mr. Simpson: If you had to randomly select an individual FSA, definitely.

Mr. Linney: And you were talking about the need to be from a specific school?

Mr. Sheptin: Right. As Jay was saying, the top 20 business schools have really preselected a group of people who "qualify" in their eyes. If you look at the recruiting schedules at those schools, you will see the Goldman-Sachs, the Solomon Brothers, and the McKinseys really focusing on those places. If you

want to try to get into one of those places, it is much harder to penetrate as just an actuary. Having the MBA, as I said before, presupposes a common language between a managing director of Solomon Brothers or Goldman-Sachs and you. They understand where you come from and your skill set. They perceive the actuarial exams as really nothing more than a bunch of math exams. They don't understand that, yes, we have taken some basic course work in economics and we understand how a financial security program is designed. However, by the same token, how many people here, for instance, have ever taken courses in accounting, financial statement analysis, options and futures markets, or pure marketing? Has anyone here taken the exam in marketing of individual annuities? OK. Has anyone looked at the syllabus and the way the course is tested? I took marketing on the graduate level, and many of the courses in an MBA program are taught on what's called the Harvard Business School case method. Has anyone ever seen that, or is familiar with it? What you're doing is analyzing how a company has brought a product to market, the mistakes they have made, and how you would "solve the problem?" If you look at the way that the exams are structured, it's more of a regurgitation. If you were the actuary for XYZ company, what do you do to improve persistency? You go to your Kotler Marketing Management book, and look at the little box in chapter 14 on page 1 that tells you how to improve persistency.

Panelist: Yes, I was going to say, if you want to go into marketing, why would you take the actuarial exams?

Mr. Sheptin: Exactly, why would you do this? The way that we're tested on the actuarial exams is almost pure regurgitation. The way that you're tested in graduate school is case analysis group work.

Panelist: Coming back to the managers who don't want the mathematics or the numbers that actuaries can provide, why is it you think that those managers aren't asking for that?

Mr. Sheptin: First of all, they're not comfortable. I think that we're in an ivory tower. We're actuaries, all we know are numbers. We don't understand or know how to interpret the rest of the story. Another thing that's important in a graduate program is learning how to communicate. Before I came here, I did a survey of about 40 actuaries in my company. I was able to interview a number of them one-on-one, and I asked, what do you think actuaries lack in talent or in skill sets, and virtually all of them said communications skills. We know how to impart the numbers and say they make sense, but we can't go the next step and

put them into an attractive scenario, which is key in anything like management consulting or investment banking.

Mr. Geiss: Again, I would say, why couldn't you pick up those communication skills elsewhere? We had a couple of classes on communication, but it was not a big part of the program. Similarly, if your interest is management consulting, that's a whole different animal from actuarial work in the first place. Maybe you ought to consider what it is you want to do, at least in the initial part of your career. I think you mentioned that you were involved in management, and I think there are many actuaries at Mercer—our president's an actuary, as are many of the senior managers. But I think that's something you learn on the job. Whether they could go on to a business program or not would not have contributed that much to their ability to do that.

Panelist: One of the challenges I see is that the actuary likes to define things, to have models, if you will. But life is ambiguous. You take the CEO of a company, who's faced with many stress levels. There is no easy answer. That's a hurdle the actuary has to jump, but it's not a very difficult hurdle. I think it's an easier hurdle to jump than for a management consultant who's "worked at P&G," and gets to know the soft side of marketing. For him or her to get the discipline is harder, I think, than for us to loosen up our discipline.

Mr. Sheptin: I agree with you 100%; it's still the market perception. Virtually every actuary is pigeonholed into being able to do A, B, and C, but there are a good number of us who can do D, E, F, and G just as well as any MBA or lawyer. I think there's too much nomenclature. You're an actuary, you can do this; you're a consultant, you can do this; you're an MBA, you can do this.

Mr. Corbett: I have a question. This is sort of déjà vu for me, because it was almost the theme of my presidential address, nine years ago. I don't have comments as much as I'd like to have you address a specific area. I wasn't so concerned about actuaries not getting jobs with the investment bankers, as much as the fact that actuaries were losing out relative to 20 years before within the companies they were working. We were hearing that in both insurance companies and consulting firms, the actuary was relegated to the back room. You had client representatives out there talking to clients who were not necessarily actuaries, whereas, in years before, it would have always been the actuary who was doing it. I was noticing, in my own particular area, which has always been in the financial management side of insurance companies, that many of us, including myself, at a large company, were working for CPAs, which would have never been the case before. We were working for them for some

very good reasons. Their education in the issues that were important to life insurance companies in the 1980s and 1990s was better than ours. Mortality, which was what we were most trained in, became a nonfactor in life insurance company management. Financial management was far more important. At that time, I thought and still think, the best education for actuaries, at least going into the life insurance business, is a Bachelor of Commerce, which happens to be my degree, with the mathematics you need. You need very little university mathematics to become an actuary; you have to be very good at it, but you don't need many years of calculus. However, you do need accounting, marketing, and production. The 50th anniversary of the Society is coming up in two years, and they're interviewing all the former Presidents and asking them what were the hot buttons in your time? I was asked the question, has it changed? I answered, "I really don't know." I think the Society is doing some good things with the new education syllabus to try to broaden this out. I don't know whether we're getting a different type of student coming into the profession than we were before, or whether this is continuing. I wonder if you could address it within the businesses we've always been in, or if this trend is continuing, what can be done to reverse it?

Panelist: I think this addresses your question. The greatest area of growth in actuarial employment right now is within the traditional employers of actuaries, but in nontraditional roles. These are not necessarily radically nontraditional roles, but they are in regional positions, things of that nature in underwriting and claims, and strategic management. Everybody who's at a company that employs any number of actuaries has seen actuaries move into these other areas. Whether or not that's because of educational improvements, in my role, we can react. I don't know exactly why that is, but that's where we see the demand, and where, in the early 1990s when things were slowing down, the positions were just traditional positions. If an actuary left, a company would probably try to replace him or her. Right now, they're growth positions where companies are employing many more actuaries than they did previously, so I think that the trend in that regard is positive. Much of the reason I think that people are interested in whether or not they should pursue an MBA is not necessarily because they want to go to work for an investment banking firm, but because they want to do something nontraditional. And if that is, in fact, the case with you individually, there are many opportunities within the organizations that know what you can do, maybe not your own, but probably even your own, to work in a nontraditional position.

Panelist: Are you suggesting that they ought to get an MBA if they want to do that?

Panelist: No. They have no need to do that, in fact.

Panelist: If I could just respond, too. The first thing that I came to realize very quickly, as I was thinking about this question, is if you're talking about all of us baby boom FSAs who are out there now, the demand for us is totally different from the supply, versus the younger students, for whom the supply is much less than the demand. This is what I described as a pipeline problem. There's a tremendous need for young students coming into the profession, but what do you do with them in 20 or 25 years? I don't know if we know how to deal with that. If they did a career fair yesterday, it's what profession is the number one job, starting at \$32–45,000? At present the tremendous need, the demand, matches the supply, but where will these students go in 10, 20, or 30 years? So is the question, whether current FSAs want to expand someplace else, or is it new students want to choose between an FSA and an MBA?

Panelist: An interesting thing is that salary range that you just gave is about the same salary range as a starting accountant, and it's easier to become an accountant than it is to become an actuary.

Panelist: But not an actuarial student.

Panelist: But I'm saying, what an actuarial student has to do to become a full-fledged credentialed actuary is difficult. An accountant just has to work a lot of hours.

Mr. Sheptin: What I would recommend that everyone do is to call some of the top 20 business schools, such as Columbia, Wharton, and NYU. They provide a salary survey, every year, of what their new MBAs are earning, and where they're going. They're not going to tell you, per se, that John Doe is making \$68,000. But you can get an idea of the entering salaries of the investment bankers, management consultants, and commercial bankers, and what sort of range there is. Two years ago, I remember seeing Columbia's survey. Starting investment bankers were coming out of Columbia at a salary of \$80–90,000. Management strategic consultants were coming out at \$100–125,000. Figure that the average student comes in with 4 years of experience out of grad school, so at age 28, they are earning \$125,000. How many of these people at 28 are FSAs, and how many of them are making \$125,000? It's almost like the quick fix.

Panelist: You're understating the investment banker's salary, because that's just a salary.

Panelist: That's salary not including bonus and the bonus can easily equal that salary and then some.

From the Floor: I guess I personally don't care about the salary ranges; I just think that actuaries—I'm a pension actuary—have concentrated on the liabilities side, and the Chartered Financial Analysts (CFAs) concentrate on the asset side. Now you want to integrate the two, and work on asset/liability management. I'm trying to find out what asset/liability skills I need or what I can do to start being able to communicate better with the CFAs and the MBAs.

Panelist: What you're asking is, what can you do to put yourself in that position without starting school over again?

Panelist: Yes. That's a good question. Actually, part of it is luck, and part of it is learning on the job.

From the Floor: I guess I'm trying to say, I don't want to replace the CFA, I just want to be able to communicate with him or her. Where can I go to get some credentials, or to get a better education so I can communicate better with the CFA?

Panelist: You could get the CFA.

Panelist: Right. The CFA is a three-year process, and there's an exam every year. Has anyone here ever seen the CFA syllabus, or taken any of the CFA exams? The first exam, for any actuary, is a snap. Exams two and three tend to rely more on financial statement analysis, so they're essay-oriented. I'd say that they're a lot easier than taking actuarial exams, but probably harder than many of the other professional exams. It gives you, I think, some sort of parlance with the asset manager. You understand the liabilities, but you can talk about assets, too.

Mr. Geiss: I recently worked on an A/L study, and the liability side turned out to be a little more complicated than usual. There was a retiree medical fund, and there were three different funds. The asset people missed the boat initially, until we identified some of the issues that they had to deal with. In terms of knowledge, I think the assets and the liabilities are here, so it's much easier for you to learn the asset side than the other way around.

From the Floor: To go after that a little bit further, I recently made a career change from health actuarial work to property and casualty (P&C). I'm an ASA, and I decided to look into the actuarial exams on the casualty side. I didn't want

to go back as far as I had to in order to do that, so I started looking into an MBA. I started calling colleges to see if anyone would give credit towards an MBA if you had any actuarial exams. I was very shocked to find out that no one did. Yet if you had designations from Life Office Management Association (LOMA), and Chartered Property and Casualty Underwriter (CPCU), on the P&C side, they would give you credit for that. I was wondering if you have any comments on that.

Mr. Sheptin: In the program that I was in, I experienced the same thing. The only courses I got credit for were mathematical methods and statistics and economics. What you might want to do is send the syllabi of what you've taken thus far to the schools you're interested in and ask, which courses can I be given credit for? They would probably be in more of the quantitative method departments. When did you become an ASA?

From the Floor: 1993.

Mr. Sheptin: OK, so you were under the old rules without any of the finance courses. I'll be very honest with you. I took course 220 in the actuarial exams, and I probably could have placed out of the intro finance course in graduate school. However, there are certain things that I learned that I did not get from the exams; ways of looking at the world, so to speak.

Panelist: Maybe you don't need the whole MBA, but take a few select courses that might help you.

Panelist: If you're looking for the knowledge, rather than the perceptual value of the degree, then that's probably the way to go. Also, it's very clear, in what we do, that as you get older, the MBA becomes less valuable to you, except to you personally in terms of the knowledge. But the perceptual value of it does go down. If you're 45 and you get your MBA, you're not going to be in the same boat as one of the 27-year-olds we're talking about who comes right out of Columbia with an MBA.

Panelist: An MBA also has a life. If you look at any of the top 20 programs, it has maybe 8–10 year life, where it's marketable and it's valid. After that, it's more what you have done on your job, obviously.

Mr. Linney: Again, because my degree was in mathematics, I don't have any credit for the courses I teach. And it's interesting again, this tension between the academic aspect of certification, the MBA, versus the professional, the FSA. We

are a profession. The MBA really isn't a profession; there's no sense of professional designation, like a doctor, lawyer, accountant, or actuary. There's a kind of apples and oranges element, in the question, why should I go back and take Finance 101 when I'm an actuary, even though 99% of the business schools would respond by saying you don't have it on this piece of paper to show that you have done it. Again, that's just some way of marketing the FSA so that schools and MBA programs are aware of what we know, and could give, like you said, credit.

Panelist: I have a question somewhat based on that. We talked about this yesterday. The FSA being a professional designation is definitely a major distinction. How many of you who are actuaries would have your children pursue the MBA rather than the FSA, if some sort of choice had to be made? Who thinks that the MBA is more valuable?

From the Floor: In the community in which we do the business, we have to understand the perceptions of the society as a whole, and what they want. They don't want mathematical things. They don't want actuarial stuff. They want to succeed in business. And in order to succeed in business, they need to struggle for existence in the community, or in the business community, to survive. So we need other skills, not just analytical skills. We need basic intelligence, not just actuarial intelligence. And if we have that capability, then we can survive and go beyond an MBA. But if you don't have that ability, if you just have the FSA, you cannot go beyond the bottom line. I got my B.S. in mathematics, I but didn't know what to do, so I earned my M.S. in statistics. Still I wanted to use my brain, so I went on to demographics. Then I did my M.S. in actuarial science. Still unhappy, I got my ASA. I took my ASA exams, without having experienced life study. Yet, I still got my Associateship without having any experience. Still I am unemployed. I have three Master's degrees, and I am an ASA, but have nothing to stay in the business community. For the time being I am back in school, taking business administration courses, financial administration courses, and computer science courses so I can have all-around skills and become comfortable in the market sometime in the future.

Panelist: I'd like to ask Bill a question. You don't have an MBA, yet you deal with senior management all the time.

Mr. Horbatt: Yes, it's something that happens with experience. You have to look at the problem that senior management's facing, and you have to try to find the solution. What I'm finding is it takes more than one skill set. If you look at the consultants, how often do you have a single consultant coming into the

organization? Very infrequently, you see teams instead. To me, the battle isn't so much whether the actuary will be on the team, the battle is, will the actuary lead the team. I personally think the actuary has some unique skills, but he or she has to learn from other people. But I'd like to go back to one of the first questions that was raised, in terms of talking about the profession and its changing challenges. I think most of us here are part of what I would call the baby boom FSAs. We were people who entered this profession when it was a well-defined profession; it was higher than it is today in terms of the pay scale and the pecking order. We were living off the fruits of labor of people who came before us. The actuaries who first started this profession and dealt with issues like mortality weren't making the big bucks. They didn't have a set ladder to follow. They were out creating value for their companies. And the question I'm asking is, what are we doing to create value for our profession? What are we doing outside of it? Where are we experimenting? I was working as an independent consultant for three years, not making very much money, but I was experimenting. And the question is, how many of us are willing to experiment and to build new roles for ourselves? Any thoughts on that?

Panelist: How many people can do that today? I guess that's the other problem. When you leave the work force and go into a full-time program, you have to realize that, you're giving up two years of income. You're also paying for the privilege of going to some graduate school on the order of \$40,000 a year, after all your expenses. Basically, you're \$80,000 in the hole. Let's say you make \$60,000 a year for 2 years. If you don't go back to school, you have \$120,000 that you've made, so for all intents and purposes, you're \$200,000 poorer than you were coming in 2 years ago. There is no guarantee that any designation, be it an MBA, an FSA, or an ASA, will give you the golden ring, so to speak.

From the Floor: I was going to ask a different question, not whether to go back to education, but how do you make a contribution? How do you contribute to the human endeavor, if you will? Is it research, or is it selling a new concept? Once you get older, once you've been in business, after those eight years when the MBA's halo effect has worn off, how do you add to the profession?

Mr. Linney: To respond to that, I heard a radio show once talking about the medical profession, that the hotshot surgeons have an eight-to-ten year range, just like the MBAs. What happens to MBAs after eight to ten years? In the medical profession, they become teachers, hospital managers, administrators, or something more service-oriented, not day-to-day surgery. I don't feel that the exams I took 20 years ago prepared me for the world today. After eight years, the MBA exams you took don't prepare you for the world either. Looking at my

personal experience, as a 20-year FSA, what value can you bring to industry? I found value in developing younger students, but I wonder what other people value. As you've said, what's going to happen after your MBA curve wears off?

Panelist: Well, actually, here we have different spans. Out in the audience, we probably have people that are within, say, the five-year window. We have some people out there and up here who are well beyond the five-year window.

Panelist: How many years have each of us been in the business? I've been in, say, 23 years or so. You've been in approximately the same.

Mr. Linney: 25, yes.

Mr. Geiss: About 11 years.

Mr. Sheptin: 13.

Panelist: Yes. I think there is some difference, and the fact that we have MBAs and you don't is not a coincidence. I know that every actuary I am acquainted with who's my age has thought about the MBA and because I have one, many people come to me and ask me about it. I tell them what I've said today. I think part of that is because back in the golden age, at least in the benefits business, there was ERISA.

Panelist: The full employment act for actuaries of 1974?

Panelist: Right. There was plenty of work, enormous growth, and people were moving up. But in the late 1980s, which is sort of what I ran into a little bit, those opportunities for moving up weren't happening because the people ahead of me were still there. That's one reason why I looked into the MBA. I obviously chose to come back to the profession because I thought it was a good fit for me, and I think in the long run that's what you ought to do.

Panelist: This session was sponsored by the Actuaries of the Future Section. One of the things we're trying to do as a section is to explore a way to get some of the critical MBA knowledge without going through business school.

Mr. Sheptin: I think part of it also is the actuarial curriculum. Right now, there is an investment track and a finance track. If you choose to pursue one of these, and couple it with 60 credits of electives that appeal to you, ones that are more general, as opposed to product-related—you also have the courses, the 220-230

series, which are, again, financially related—nearly 60% of your exam process could be MBA-related. The way the exams are being restructured, there are really, I think, two courses where there is more business knowledge versus going deeply into modeling and mathematics courses. There's going to be more of a divergence in the skill sets than there is right now.

From the Floor: Yes, just on this very subject, how do you get the necessary supplemental knowledge to your relatively narrow actuarial education? And putting aside any value of an MBA, per se, how do you get the knowledge that's desirable? I know that the Society has added some courses that would be similar to the same courses you might take in an MBA program. First, I don't know how effective they are, and, second, the main Society method of teaching is similar to a self-taught, correspondence course. Those of us who have gone through commerce or business know that you use a case method much more in working with other people, which is very difficult to put into our framework. I still think the best education for most actuaries is not a degree that's heavy in mathematics, but to take business courses as an undergraduate instead. That's what I did, but I had a five-year course as opposed to a normal four-year, so you're getting into many of the same things as an MBA program. You don't have the imprimatur of the MBA, but you do take two years of accounting, production law, security analysis, economics, and the whole works. I know you're shaking your head so you must disagree, but I would like to hear your comments on that.

Panelist: I didn't know what an actuary was until spring semester of my senior year, and I think asking students to know in retrospect makes sense, but I think it's a challenge to expect a student to want to be an actuary. That's asking a lot of someone, and I don't know if you should.

Panelist: The reality of the market right now is that if somebody's hiring a kid who's starting in a student program right out of an undergraduate institution, that student needs to have enough exams under his or her belt to suggest that he or she will be a successful candidate.

From the Floor: The amount of university mathematics you need to pass actuarial exams is very limited: probably one year of calculus and statistics, if you can get it, and life contingencies, if the school teaches it, but of course, many don't. Yes, you have to pass exams, but I suggest that's not a factor in how many years of university mathematics you've taken.

Panelist: Why become an actuary if that's your path? If you're in the business, and it seems that's just the MBA track, why get an FSA then? What's that going to do for you?

From the Floor: My orientation was to get into the insurance business and apply all the things I learned in the actuarial exams. But there wasn't enough in the actuarial exams, so I was fortunate to get some things outside, which, however, were not enough.

Panelist: He's not here, but I'll quote Sam Cox, who would say very strongly that what makes actuaries different is the mathematical skills. That's what makes FSAs, the mathematical skills, not just the business.

From the Floor: Steve Radcliffe and I have had this debate, and Steve is very much on that side. I think the thing that makes a successful actuary, though, and I admit I'm measuring success by probably position and compensation, is not necessarily mathematical skills. There are other ways of measuring success.

Panelist: The best actuaries are probably not those who have a math major and a computer science minor with a lot of statistics and accounting. Was anyone in this room not a math, economics, computer science, or actuarial science major in college? OK. I'm curious, can you tell me your majors?

From the Floor: Commerce. Business.

Panelist: OK, economics.

From the Floor: Psychology.

From the Floor: Biochemistry.

From the Floor: Demographics.

Panelist: OK, we have Psychology, Business, Demographics, Chemistry. I find that of the students who I have interviewed, the best ones, tend to be those who are not math majors. I'll tell you the surprising ones whom I liked the best: the English majors and the history majors. They know how to analyze, they know how to read, and they know how to tell a story. If they have a math minor, great. I know that not only can they qualify for the exams, but they can read something and not just regurgitate; they know how to tell a story. My personal

opinion is, for a business major as an undergraduate, unless you want to be an accountant, I'd rather see a more heavy liberal arts concentration.

Panelist: That goes back to Dave's point. He's seeing actuaries going into nontraditional roles within the insurance industry.

Panelist: Right.

Panelist: I think we need diversity. I don't think there is a single definition of an actuary today. If you look at the specialization and the tracks that we've developed, I'd like to have more commonality. I wish everyone had the exact same exams through associateships, so that we shared things, such as knowing pensions even if you are in life insurance. That day may have passed, but as a profession, to be strong, we have to meet a diverse set of challenges. We need a diverse group of people.

Mr. Linney: Maybe I can help. I haven't found that experience of English and history majors knowing how to use what I call problem-solving analytical skills. I have a problem here. I've found that most of my business majors want to read the theory of interest, rather than develop that analytical problem-solving mentality.

Mr. Sheptin: Yes, the problem is reading and doing, OK? What happens after you've passed Course 140 and someone asks you to apply it and to explain what's going on? It's well and good to understand what your force of interest is, and how to convert $I^{(12)}$ into $v^{(4)}$. But suppose that I gave my students a technical reading and asked them to tell me what it means, and how I can apply it. I find that many of the students that I've had work for me, who are the math majors, try to understand and absorb every single bit of information. I'm like that as well. They think this is an actuarial exam, and I'm playing Trivial Pursuit with them. I'm not. I want to know, in five minutes, what does this mean?

From the Floor: I don't know if we've gotten off this point, but I got my ASA about 10 years ago, and I continued taking all the pension exams. I'm a pension actuary. I then took many years off, and I'm proud of it, to help change diapers. I'm now going back to the exams, and the main reason I'm going back is because of the investment exams that they offer. I think they are fantastic, and I highly recommend them. They're the most meaningful exams I've ever taken.

Panelist: I hope you go out to Wall Street and get yourself a job. Pound on some doors.

Panelist: There are actuaries who have been very successful on Wall Street without MBAs, by the way.

From the Floor: I remember a time, around the mid-1980s, when it seemed, maybe informally, that the Society checked how many FSAs were actually serving as chief executive officers of life insurance companies. The perception was, it was important for us to measure part of our success as how far we go up in senior management in these companies. I don't see it happening as much today. Maybe we stopped counting because there were so few FSAs who made it to senior management. What I'm trying to get at is, are we changing our perception back to that narrow belief, that says it's a measure of success if you make it into senior management; we want to be the actuary who is mathematical and adheres to those probability lines we are so familiar with. More than that, regardless of what these actuaries come to the business with, does our training really prepare us for that kind of role? How many people who are planning their succession for management really think of the actuary as part of that list of people they want to put forward, and if that is so, aren't we still in that narrow fold we're trying to get out of, regardless of what we do?

Panelist: I would say no. In fact, maybe you're not seeing as many go up, but certainly actuaries are spreading throughout the organizations. At least this current generation, the baby boom generation, is spreading out, and I think you'll see, whether it's CEOs or not, that ten years from now, there will be many actuaries in upper-level positions that they weren't in previously. So I do not think it's becoming more narrow, at least from what we see in the employment patterns.

Panelist: I do think, as a second side to your argument, probably 20 to 30 years ago, the SOA was, in some sense, run by the classic large Eastern mutual actuaries, and the actuarial SOA and the industry were much more interlocked than they are today. I think that's a real concern that, again, as you've said, most people running the insurance industry or the financial service industry are not actuaries. We're sitting here, as a profession, and that gap, to me, coming back to Gary's point, seems to be widening, who we are as actuaries, and who, if you will, our bosses and our managers are. In a broad sense, that's what we're talking about. How can we bring ourselves closer together?

Panelist: But if you're looking at it, we, as a profession, developed to meet a certain need. It was managing risk. As time has changed, the business evolved, and the insurance industry matured. Life insurance sales are flat, if not

declining. Asset accumulation products are taking over. What's been the primary focus of management over the last decade? One is marketing, but second, and this is what the stock market is rewarding the most, is controlling costs. Our training, our traditional skills, aren't necessarily focused on those areas. I personally think they could be. I think we have something to learn about these other fields, whether it's marketing research or organizational elements. But the nature of our training and the nature of the challenges our industry is facing have diverged, and how we pull them back together again is going to determine how successful we are.

Panelist: Another problem, also, if you look at many of the large insurance companies is that they are now run by bankers. Bankers have a very different mind set from insurance professionals. About three years ago, I was doing some work at Aetna. The president of the company brought in all these bankers, and the banker mentality was, if something doesn't work get rid of it quickly. So it's much more immediate. I think the insurance professionals tend to look at things with a longer horizon; if it doesn't work today, let's give it some more time. There is a concern that, yes, we're bringing the bankers into our fold, but we're not going out to the other side.

Panelist: That's going to take some innovative people to get out there, like the Jim Tillys who go into investments.

From the Floor: I'd like to offer my perspectives on the discussion that Professor Linney and Gary Corbett had a couple moments ago. The first point was on the value of the mathematical courses that you might take. I think Gary was waving it off, saying that you could just take a couple and get through the exams. Actually, I agree with that wholeheartedly, because my own experience in 20 years with Met Life validates that the main value of the calculus exam, and this is a big value, is that it demonstrated the logical thinking ability that was needed to be brought to the table. This weeded out weaker candidates because if you couldn't think in that logical way, you weren't going to do well for the kind of things you had to face. That was the value, as opposed to taking lots of math courses, which I did. The only time I ever used calculus at Met Life in 20 years was when my boss told me to help his friend's daughter with her calculus homework. I felt obligated, so I ran down to the library to get a book to remember how to do those things. The second point was on those other courses that people could take—marketing, law, economics, finance, while they're in school. I think Jay correctly said that for many people, it's too late. And my feeling is, that's one area where the SOA could do a better job—advertising the profession and the skill sets you need and the courses that you ought to take at

the start of college, so that it isn't a surprise at the end of senior year when somebody's looking for a job, and finds out about the actuarial career, when it's too late to go back and take courses. I know, for myself, I was lucky enough to know I wanted to be an actuary as I was graduating from high school. I was in contact with a professor who informed me of the right things to do, and he later became an actuary himself. He gave me the list of courses, so I took all the ones that Gary enumerated, marketing and such. Back to one of your points, professor, I took all those courses because I wanted to be an actuary, not because I wanted to be an MBA. From time to time I would say, yes, I'm glad I had those two years of accounting because it helps in my job. I'm glad I had that semester of marketing. I don't think it's an automatic requirement that you take those courses if you want to become an MBA. I wanted to be an actuary, and in doing some homework, I found out those were the right courses to take, so I took them.

Mr. Linney: Let me follow that up because I think that is a key point. What do you want to be? It seems as if I encounter many wanna-be actuaries who want to enter the profession because we've overemphasized the money aspect, and the job opportunities. I'll just share one story. Last year, I had 33 students who started my program who wanted to be actuaries. Only three of them survived the first year. Now that makes it difficult for me, but once they find out what it means, they really didn't want to be an actuary. What is it that makes one say, I want to be an actuary?

From the Floor: I remember clearly how I became an actuary. My mother came home from the library with a little brown brochure that the SOA put out that was stuck in the back of some holder, and when I read it, it said, in this career you use math, business, and computers. I had been walking around saying, I want a career where I can use math, business, and computers, so decision's made. Until that moment I had no idea what I wanted to be, and I've never been dissatisfied since then. To me, it goes back to what I mentioned earlier. The SOA needs to do a better job of educating people earlier. Even at the high school level, so that those who are interested in actuarial science can pursue that career and take the right courses and those who aren't interested can pursue something else at an earlier date. I think if you canvassed actuaries, most of them found their careers by accident. When you ask most people how they embarked on their career, there's some sort of accidental event, such as your mother coming home from the library with a brochure.

Panelist: You don't start out wanting to be an actuary.

From the Floor: Right. They didn't even know what an actuary was.

Mr. Sheptin: I remember, as an anecdote, I was looking through the exam syllabus, and there was a course on financial reporting for life insurers or something like that. It said for background you should read this book, *Introduction to Accounting*, chapters one through six. And I said, yes, with all my free time, I'm going to study for this exam, and I'm going to spend precious time trying to figure out this book. The one thing that I would tell anybody who wants to go into business, whether it's actuarial work or advertising, is take a basic accounting course. It is so important to understand what a balance sheet means, and how it integrates with an income statement and the statement of cash flows. If you don't understand that, and I didn't understand it until four years ago, when I took my first course, you're at a real disadvantage.

Panelist: Another thing regarding the MBA vis à vis the FSA, if you go into a top school, you also have a huge network, OK? Let's say I'm interviewing you, and you went to Harvard Business School. We have an immediate rapport. We've gone to the same place. Even when I do recruiting for my undergraduate school, or I see someone who went there, it's a rapport, and I will do much more to help that person than someone else who might not have gone to my school. There is an incredible network. Whereas with an FSA, given the choice between a fellow ASA and someone who went to my graduate program, chances are I'd help the person who went to my graduate program more than the ASA.

Panelist: But again, it's like your university, whereas if it was an ASA versus just another MBA, I bet you would help the ASA, is that accurate?

Panelist: It depends.

Panelist: But, to go back to that, you have to sell it. I mean, take the example of demography. There is a fundamental weakness in the way school boards, at least in my municipality or my state, project enrollments. They don't use sound demographics. All they do is basically a linear interpolation of the children who entered the school or were born in the last few years. They don't look at turnover of houses as people get older. But it's controlled by this educational establishment. Now, somebody like yourself, with your skills, if you wrote papers and got them published, if you went around and knocked on the school doors, you might not make a lot of money, but you can change the whole way a process is done. You can create new opportunities for actuaries that would then become standard actuarial jobs from then on. So it's not education that I'm talking about here, I'm talking about sweat and selling these concepts to other communities beyond our traditional base.

Mr. Sheptin: I think what each of us here probably need to do is get out of the ivory tower. If you look at our profession compared to attorneys, how many of your friends, peers, partners, or spouses really know what an actuary does? My wife still says, I have no idea what you do every day at work; you could be in the Mafia for all I know. If we get out there in our communities and show, yes, we do have great analytical and communicative skills—even if it's working within, again, your municipality, and helping in whatever aspect, I think that helps as well.

From the Floor: We have the Actuarial Circles program, which is run by the SOA. They look for contacts in each community, who can then deal with the press to comment on any editorials that are statistically and actuarially wrong, so there is a program in place to give actuaries more prominence in the community.

Panelist: Just some thoughts from the audience. All of us know our intrinsic skill sets. If you take a step back, where do you think actuaries could compete, either in or outside of the financial markets, and not necessarily in pension consulting and product development? What are the things that you should be trying to pursue?

Panelist: I'm totally amazed that actuaries don't control, say, the derivatives marketplace. What has happened is that Wall Street has found that the physicist, the Ph.D. in Physics, was the best person because they had enough analytical depth and practicality. Nonetheless, given the nature of the way our exams have been changing, we should have been the natural choice. I don't know what happened, but we didn't accomplish it.

Panelist: We were in the ivory tower, that's part of the problem. And we didn't have good P.R., possibly.

From the Floor: In the SOA, we are the mathematical actuaries. But nowadays we have to become business actuaries.

Panelist: I agree.

From the Floor: If we want to survive and compete, we don't need MBAs.

Panelist: We'd like to get some new people up, if we could.

From the Floor: This might be directed toward Mr. Simpson more than anyone else up there. I'll use an extreme example, and then maybe you can infer what I'm trying to get at. I was paging through *The Wall Street Journal* maybe a week

or two ago, and I noticed an ad that was admittedly out of the ordinary. The Winter Olympics of 2002 is looking for a chief financial officer (CFO). And they're also looking for a CPA, but an MBA is preferred. I was thinking to myself, while I'm definitely not qualified to handle such a daunting task, I would think there must be at least some type of an actuary out there who would be able to at least partially handle that kind of a responsibility as well as somebody with an MBA or a CPA. How would somebody go about breaking down those barriers short of using an actuarial recruiter?

Mr. Simpson: Unfortunately, from my standpoint, an actuarial recruiter would probably not be of a lot of help to you in pursuing a position that's totally unrelated to the traditional role of an actuary. This sounds totally unrelated. And that is a problem for an actuary. Not that you'd get an MBA to do it, but Alan was saying right off the bat that the MBA opens the doors of thousands of places that the lesser-known degrees don't get you in. Just to answer this in a practical sense, if you did feel you were qualified for a position like this, you'd have as good a chance by calling and educating the people who are doing the hiring, as to what an actuary can do, and the skills actuaries possess, and that you specifically possess.

From the Floor: It would seem to me that in a position like that, that's fairly high level, they put MBA and CPA down as a weeding process, but the person who ultimately gets selected will be someone who has networks and contacts.

Mr. Simpson: If it's something that really excites you, what I would do is try to find a contact person and say, look, I will offer you services gratis if there's no conflict of interest with your company. If it's something that you want to do, figure out a way to get yourself into the inner circle. If it's something that really sparks your interest and excites you, offer your services for free just to learn.

Mr. Bob Field: Commenting on the derivative situation, and following up a bit on what Gary said, I think five years ago I would have agreed with him that as actuaries we didn't really need too much in the way of higher mathematical skills. I know I didn't use much of the mathematics that I had learned. But now, as I start looking at some of the new products and the work I'm having to do in cash-flow testing and A/L matching, sometimes I feel that when I look at some of the literature, I have to go back and relearn a lot of the mathematics that I've forgotten. In my mind, one of the reasons actuaries didn't carry the ball on the derivatives was, as a profession, we've fallen behind on our mathematical skills. Sure there are some people now who have advanced mathematical skills and

are writing some very sophisticated papers, but for me, I'm finding that I'm having a great deal of difficulty understanding them.

Panelist: The derivatives trading firms are going straight to math Ph.D.s now.

Ms. Angelica B. Michail: I'm with the National Actuarial Network. I'm an FSA, but I also recently finished my executive MBA degree. After receiving my MBA degree, I realized the importance of communication and management skills. You develop a certain mind-set and realize the importance of being entrepreneurial in your thinking. To what extent did you cover the importance of communication and management skills and interpersonal skills in your discussion today? Because I find that that's often the advantage, I think, of the MBA versus the FSA.

Panelist: We talked a little bit about that, but I think we pointed out that you didn't necessarily need an MBA to pick up those skills.

Ms. Michail: When I was an actuary, I often looked down on the need for learning the communication and management skills. I always thought that they were very easy to pick up, when in fact, they may be easy in theory, but they're really difficult to develop.

Panelist: At the Actuaries Club in New York, Morton Dickstein, who's their current President, feels so strongly about that—he's been a pension consultant and he's just retired—that he's going to put on a Dale Carnegie-type course for actuaries in our area. So it goes back to that issue, we can learn those skills by signing up for Toastmasters and having a good peer group that will help us learn them. You don't have to get an MBA.

Ms. Michail: Yes, since you mentioned the Actuaries Club in New York, I just wanted to say that I did present what I call an Actuary Plus seminar under the sponsorship of the Actuarial Club of Greater New York. It was a full-day seminar on communication and management skills. I'll tell you, though, not too many people attended.

Panelist: Well, that's our mailing list and that's a story for another day.

Panelist: There are many things that all of us can do here if we want to improve our communication skills. It's anything from volunteering in the schools program to Toastmasters to going to a high school in your area to talk to the kids in the advanced placement math classes about what an actuary does. You're in

front of 25 doubting Thomases, and you have to tell your story to them. It just doesn't involve giving a presentation to the VP and actuary in your department, or writing the bang-up memo that everyone's going to think is the next *Gone with the Wind*. There are other ways to do it.

Mr. Thomas J. Walker: I think, having listened to the whole discussion here, what we've identified is that actuarial science is a process-based career, not a fact-based career. I think with our curriculum, particularly in the last eight to ten years, we've increased the travel time, and it seems every time something new is published, it gets added to the syllabus without anything being removed from the syllabus. If you compare the fellowship exams to the associateship exams, for part one, we basically knew you had to use calculus. How you learned the calculus wasn't important. If calculus had been a fellowship exam, there would be 97 calculus textbooks listed there and you'd say you have to know all of them because there might be a reference to a footnote on page 250. So the communication and the analytical skills we needed—the process-based skills—had to come out of the math courses. If you didn't pick those out of the math courses, you certainly weren't going to get them in the fellowship courses. A dedicated student who's working hard and getting the necessary industry experience has to be able to finish his actuarial career at an age comparable to people who are going on to their MBA. Otherwise, they're starting out at a two- or three-year disadvantage. We also have to educate people on what actuaries are.

Panelist: If the FSA has an eight-year travel time, and you're already outmoded when you complete it, that's a funny type of cycle. How can you learn everything you need to know, but not become outmoded almost immediately when you're done, and have to start all over again? Most of us don't want to start all over again when we're 30 or 32 years old to learn all of the things we should have learned much earlier.

Ms. Michail: I forgot to give a plug. We have an SOA Committee on Management and Personal Development, and they're doing a lot to help our members acquire better communication and management skills. They do have sessions for that, and you're welcome to call any of the committee members, as far as trying to develop those skills. In fact, the committee developed what they call an actuarial competencies document. It's really just a four-page document, but it lists on one side your left-brain functions, such as actuarial functions, and on the other your right-brain functions, such as management, interpersonal, and communication skills. We're looking at the fact that actuaries need both types of skills to be successful in today's business environment.

From the Floor: We do many presentations at the universities, and we find junior and seniors have very little idea what they will be doing in the future. They know they're graduating and they're going to be in this great profession in which they're going to make a lot of money, and they have to pass exams. They have no idea, though, what they're going to be doing, and that's what we tell them. We need to get the word out about what actuaries actually do.

From the Floor: I graduated in the actuarial science program at Penn State. I was a math major, and had no idea what an actuary did when I graduated. I didn't want to do it because I thought it was strictly math, and I wasn't going to get to use any other skills. I didn't decide, until late in my junior year, when I took the actuarial courses. I never had any of the right classes, and I didn't feel prepared for it. So I think you should go to the high schools and explain to the kids what an actuary does. Yes, you do need to be good in math to a certain extent, but you need so much more. You were talking about giving back to the community, and that's the way to give back. Go out and tell kids what actuaries do.

Panelist: I agree 150%. When I was at Met Life, my first job, one of the things that I did was start a career awareness program. We got a number of students who'd go out to the high schools and tell the story of what an actuary does. I think a number of actuarial students feel that their whole life revolves around studying for these exams, which is kind of unfortunate.

From the Floor: That's what I thought.

Panelist: The other problem is that many companies are unwilling to send someone for a couple of hours outside of the office. There is so much work to do that we can't afford to let someone go for a few hours. It's sad, but that's the reality.