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## SUPPORTING THE INTERNATIONAL ACTUARY

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Panelists: LINDA B. EMORY

COLM FAGAN JOHN E. TILLER, JR.

Recorder: CURTIS E. HUNTINGTON

This session will focus on the professional issues facing the actuary working in the international environment. Topics to be discussed include licensing, education, code of conduct, and cultural differences.

MR. CURTIS E. HUNTINGTON: I am a professor of mathematics at the University of Michigan. The panel that we have assembled for the presentation consists of Linda Emory, who is executive vice president and corporate actuary of ING North America Insurance Corporation. Linda is based in Atlanta but has lived in Holland for a number of years in the past. She will describe some of the activities and the life actuarial philosophy from her Dutch-based company and how it's been applied in her own practice.

Second, we'll hear from John Tiller who is the principal in charge of the life actuarial practice area of KPMG Peat Marwick. Colm Fagan will be our final panelist. He is the chief executive of Life Strategies of Dublin, Ireland. He will talk about the impact on the European Community (EC) and how a single passport might work, and how it will work in terms of the impact upon the actuarial profession.

MS. LINDA B. EMORY: I would like to tell you about ING, my company. Basically, we are ranked number one in diversified financial services on the Fortune Global 500. There aren't too many on the diversified financial services list. That doesn't mean we're so big; we're 88 in the global 500. We have \$1.3 billion in income or profits and \$27 billion in revenue and we have about \$207 billion in assets. We have operations in more than 50 countries. A little more than half the earnings comes from the life and/or the insurance operations, and then almost half is from the banking operations. So we are truly diversified in the sense of having both banking and insurance operations.

I thought I would mention the countries where we have life operations because we will mostly talk about insurance. About half, or maybe more than half, of our revenues and earnings still comes out of the Netherlands—our home office. The U.S., Canada, and Mexico, the countries that the North American regional office (where I work) now controls, has about 25% of the total operations. The other 25% comes from Belgium, Spain, Greece, Hungary, the Czech Republic, Italy, Poland, Japan, Taiwan, Korea, and Australia, with most of these operations being what we call green fields or start-up operations in emerging markets. That's basically what we're specializing in these days.

Because of the obvious lack of being able to sign off except by local actuaries, the ING philosophy has been to hire qualified local actuaries. We do that even in the start-up countries where such actuaries exist. If they don't exist, we sort of hire the people closest to actuaries, and we train our own at the moment. Then we set (and I give Peter Kuys, the chief actuary in the Netherlands, much of the credit for this) ING actuarial standards to use around the world. They are sort of based on embedded values, but you have to do sort of a profitability test for new business and use a present value of future profits for in-force

business. These actuarial standards are really based on principles that we study in the examination process here in the U.S., and that a U.K. or an Australian actuary would be very comfortable with.

So basically we have these standards in place in all our operations now. We sort of set the target surplus requirements, either based on European Union (EU) standards or on market standards in the countries where there are market standards. For instance, in the U.S., I can make a case—and have made a case—for required surplus that is based on what I need for my ratings and my companies.

Hurdle rates are the discount rates that a company has to earn or derive based on local interest rates and inflation rates and so forth. The head office sets the discount rate I have to use for my embedded value, and the values are the hurdle rate I have to use for pricing. Obviously, I have input into those types of decisions for my North American company. Then we have sort of a standard pricing report that requires sensitivity and risk analysis. Of course, we have sort of an ING GAAP earnings with standards for how we want those reserves and deferred acquisition costs (DACs) determined.

We are beginning to get into asset/liability management. The big thing about the actuarial standards is the disclosures. We do not like surprises—we won't shoot you if you tell us now, but we will consider it if you tell us later. That is sort of the philosophy that we work on. It makes a difference, I think, for the kind of support we need from our actuarial societies and so forth.

There is also a functional reporting relationship among ING actuaries. The actuaries in the North American companies functionally report to me in North America. I functionally report to the head actuary in the Netherlands. So this should keep the information flowing. That is an informal functional reporting relationship, but it is clear that the relationship exists

We are now making sure that all these actuarial standards are in place and are being complied with in an appropriate manner. We are having audits from the head office. It is sort of a combination actuarial/financial-type audit. It is to be sure that everything is going well.

That basically sets you up with how we operate. Now I am going to go back five years and talk about my experience serving in the Netherlands. Basically, when I was in the Netherlands, my title was international actuary. That meant that I took care of the actuarial resource needs for all the countries except for continental Europe. We did not have operations in many of these countries that I mentioned to you. For instance, we were just beginning to get into Hungary, Poland, and the Czech Republic, and we have entered some of the others since that time.

One of the things that I did when I was there is I mentioned all the Dutch actuaries who were on the staff of the international division. At that time, U.S. actuaries were perceived—and I believe it is true—to have stronger, broader experience in education than the Dutch actuaries. The Dutch actuaries at that particular time had a more narrow focus. They were trained to be sort of, what we would call, back-office actuaries. They were highly trained to calculate dividends by using the most complex formulas I had ever seen. But I think that was because they were in an environment in the Netherlands, at that

particular time, in which there was hardly any competition. There was very little pricing and actuaries did not need to be involved in an active way, and there were not sophisticated market problems. Much changed in the time since I was there.

I think that this is changing rapidly these days. Of course, at that point, Dutch actuaries were not trained in the kind of pricing that we require now for embedded values. They were basically not using the Anderson profit-testing approach in any way. The actuaries were not trained in these approaches.

Colm Fagan will explain more about the training of actuaries in the EU. When I was there, the actuaries did not have that basic training, so much of what I was there to do was to help the international staff actuaries just understand about how we priced so that they could begin to have input in the operating companies where need be.

For me, licensing was no problem because we used the local actuaries or we used consulting actuaries. Now I can see that as we get involved in many countries, it would be nice to have this sign-off. For me that was not a particular problem.

My problem was the need to develop knowledge of local regulations, requirements, policies, products, risk profiles, how products were presented to the customers, investment philosophy, investments available, and that type of thing; in other words, I needed to know the real basic things about these countries.

I would say that generalized world principles and codes of conduct were consistent from country to country because of ING's standards. However, there are cultural differences.

Actually, my biggest obstacle is language. English is the official language of ING, so basically that takes me a little bit off the hook, but it is difficult sometimes to find English-speaking actuaries. For instance, we hired an excellent staff in Mexico. They are very much in demand and are very expensive. Obviously, anything that you want to study up on is not always in English. So that is the biggest obstacle.

I have run into some cultural differences. John Tiller will talk about this as well. He told me he would not have been quite as up front as I will be about the U.K. actuaries. I apologize if I am insulting anyone. The U.K. actuaries whom I dealt with happened to be from Scotland. This was probably not true of the consulting actuaries whom I dealt with, but I found it interesting that apparently no one had ever questioned them about things before. They were just amazed that I would even ask them questions. It could have been the quality of my questions—I give you that—because I was learning at the time. But the communication problems I had and the cultural differences that I saw seemed to center around the fact that they weren't accustomed to answering questions, and I was asking many of them, but their operations deserved those questions at the time.

Then, as I said, in Mexico, you can have communication problems; they are so polite. They agreed to everything whether or not they truly agreed. You have to keep checking to see if they are in accordance with what they previously agreed to.

Again, Dutch actuaries tend to be very detail-oriented. I am sure they think that we American actuaries are not disciplined at all because we tend to kind of sweep over

numbers to the umpteenth degree. These are the kinds of cultural differences that we run into.

As far as support when I was in the Netherlands, I did speak one time at the local actuarial club. But it was very rare that people at their meetings speak anything but Dutch. So communications were difficult there. I did learn some Dutch, but not enough to really get much out of technical papers discussed at these meetings. I did go to the Institute meeting once or twice in London.

International meetings, sometimes with the reinsurance companies, were very helpful. Of course, Society contacts whom I knew in different countries or in the U.S. and who said I could call for information, were very helpful.

I am hoping, with the International Section and with more international relationships, such as the new the International Federation of Actuarial Associations (IFAA) through the International Actuarial Association, that we will begin to find forums to give us better support that we need for doing international work.

MR. HUNTINGTON: Just to show you some cultural problems—the IFAA is an organization that has just been formed. The original F was going to be "Federation." But the French objected to "Federation." It had some fairly bad connotations for them from a Napoleonic context. They insisted, and the rest of the countries agreed, to change the word to "Forum." So there is an IFAA in existence and all the literature and the letter-heads that have been proposed still have the initials "IFAA" on them. The only thing is that the "F" stands for something different from what it was originally planned to be.

MR. JOHN E. TILLER, JR.: The bulk of my comments addresses what I would consider to be professional cultural issues, rather than technical matters. In most countries, I found that one plus one equals two. Once you define what you mean by reserve, people can calculate it, but it is all the stuff between here and there that causes problems.

My experience has been both in company and consulting roles, but the majority of my comments will be of a consulting orientation. Please keep in mind as I make these comments that I am talking not just about relations or communications among actuaries but also among actuaries and nonactuaries, which is where I think we have a bigger problem. There are larger cultural differences around the world.

To evaluate my observations, I thought it might be worthwhile to share a little of my background and activities with you to see if you think they were at all relevant. My international insurance experience began about 20 years ago when I was working for a major U.S. insurer that had operations around the world, which I would say were mostly budding operations in the growth place. The company had direct or indirect operations in at least the following countries and maybe more: Australia, Japan, South Africa, Germany, France, the Netherlands, the U.K., and Greece as well as a long-established Canadian operation—operating as a branch as well as a subsidiary. I quickly found myself in the reinsurance division working with companies and organizations in each of those countries, trying to provide surplus or risk management programs.

The next stop in my career was at a major international actuarial consulting firm that had a very large practice outside the U.S., primarily in London. Major projects there of an

international nature involved the use of capital, tax issues, reinsurance, product design, and acquisition issues.

As was said earlier, I am with KPMG Peat Marwick. It is a major worldwide accounting and consulting firm with operations in nearly every country. We have major international clients for which we provide international service teams. About 85% of the life insurance actuaries for Peat Marwick worldwide are in the U.S. So we get brought into a number of issues. But we primarily find ourselves involved in financial reporting activities, especially putting non-U.S. companies on a U.S. GAAP reporting basis. We find ourselves involved quite a bit in reinsurance, product, tax, and mergers and acquisitions (M&A) issues—such as I did in my previous life.

I know our U.S. actuaries have been involved in and have physically visited in the past 12 months Venezuela, Chile, Panama, Mexico, Japan, Singapore, Hong Kong, the U.K., Germany, Norway, and Canada. I believe I am benefiting both professionally and personally from my international activities. But as with most endeavors, there are certain roadblocks and frustrations. I am going to talk mostly about those, because you will pick up the positives for yourself.

The potentially negative aspects in my experience appear to center around some common things. There are six of these: differences in language (Linda alluded to this); differences in terminology; differences in education and training of actuaries; differences in roles of the actuaries (what does the actuary do locally?); differences in products; and differences in common practices, especially the accounting models. When I talk about accounting models I am not talking about assigning things to a cell and assumptions. U.S. statutory is an accounting model. U.S. GAAP is an accounting model. U.S. tax is an accounting model. Canadian GAAP is another model. This is the framework within which your financial reporting takes place. Those are the six areas in which I found problems. You may find others as you go forward.

Each of these can be put into a category that I would call problems with communications; either communicating the meaning of what we are talking about or communicating of expectations, which is where the role and the education comes in so much. First let's talk about language. Communications problems presented by differences in language tend to be fairly easily comprehended. I don't speak a foreign language. I wish I did. I don't read one. I took two years of Spanish at great resistance in high school and a year of German in college and that's it. I have since picked up some CDs and tapes and tried to learn some more, but I don't do well learning that way.

Luckily, at every meeting I have been at people have spoken and written very good English have understood it. Now frequently they have to stop and have a sidebar conversation in the other language, and they then come back and tell me what they were talking about. Sometimes this even happens in England. They go off and talk about it and then come back and try to translate back to something I would understand. However, even when communications do take place in England, I have found that it's important to try to express my thoughts very carefully and distinctly in, what I would consider, a somewhat slow manner. Idioms, colloquialisms, and phrasing can be very different from one background to another. I think we find some of that just going north to Canada. As we go to England, as we get further afield in other languages, things are not picked up on an everyday basis. A potential problem to look out for is that both parties may understand the

words but leave with different meanings because of local practices or their cultural backgrounds.

The second point was terminology. Insurance and actuarial terminology is not necessarily the same thing worldwide. Broadly speaking, what we refer to as participating business in the U.S., is called with-profit business in the U.K. I think there is a separate term in Germany and in some of the other parts of the world. But not everywhere does with-profits business or participating mean what we think it means. In some countries, all business is participating even if it is written by a stock company. And there are some different rules as to how things roll out. I think Linda mentioned dividends. Some countries' dividends are driven largely by very complicated formulas rather than by a board action or by something else.

These differences in terminology can be resolved by learning the insurance language of the country involved. Having two different terms for the same object, such as with-profits and participating, meaning largely the same thing, is fairly easy to sort through. I find it much more difficult if the same term means something different in another country. Then there is obviously a bigger chance for miscommunication.

I would like to turn to education and training. Linda talked about U.S. actuaries, at least five years ago, tending to have stronger, broader experience in training and education. I think if you put aside the U.K., Canada, and Australia, that is basically true. Both the type and the detail of education vary widely from country to country. Broadly speaking, those differences can be reduced to the emphasis placed on business and management issues.

In every country that I have dealt with, basic actuarial mathematics is taught in one way or another and then that emphasis is taken care of; that is, what that local country thinks is important for the education of an actuary. I am under the impression, for example, that there may be less of a risk-area approach in many countries than there is here in the modern educational programs. But our mathematics may have evolved differently because we see a different role and because of different types of products. In many instances around the world, the education of an actuary takes place in a university and that education focuses on probability and statistics, life contingencies, maybe how to do a claim triangle in a limited fashion, and that is about it. These actuaries see very little exposure to marketing, tax, product design, assets, or broader accounting issues. In other words, they are trained primarily in technical issues, not business issues. Those technical issues may be different from the ones we are accustomed to dealing with.

As many of you are aware, the system for educating actuaries in the U.K. and in other English-speaking countries is similar to that in the U.S. and Canada. I would classify those programs, obviously, as being broader insurance industry training than those university-based programs in certain other countries.

The role of the actuary is different in different countries. Just as the education of actuaries varies among countries, the role of the actuary will also vary. Not too surprisingly, the role of the actuary tends to follow the education provided. Or is the education the predictor of the role? I am not sure which is the case. Where the education is primarily technical or mathematical, the actuary tends to be used in technical roles—just calculating reserves or premiums, as Linda said. Where the education is broader, the actuary is involved in broader issues. An important point is that this does not necessarily limit the

actuary in his or her individual ability to grow or rise in the company. Actuaries can move to broad management roles and in many companies in Europe and Japan and elsewhere in the world they have. However, the actuarial role tends to be viewed more narrowly.

I would say, in general, and Colm will probably touch a little more on this, the roles of actuaries in most English-speaking countries are fairly similar. Then, again, this is in the broader range. Differences in roles and expectations can be exhibited in many ways. As an example, inside my firm in the U.S., our actuaries have a very broad range of influence. We operate fairly independently. We can look at a broad range of business issues in Germany, and in a large degree in the U.K., and find the actuaries are viewed more as being technical support for audit purposes and don't get into broader business issues and don't have as much independent consulting activity.

These differences in the typical roles of an actuary inside a country lead to different expectations of what you would be doing if you worked in that country or for a company based in that country. If you as an actuary want to have a broader influence, it may be necessary to demonstrate that you have not only appropriate training but also the experience and expertise to deal with broader issues and not be pushed into a low black box or cubbyhole.

One of the other issues that I mentioned was products. Obviously, products differ from country to country. In the U.S., Canada, and the U.K., there is significant competition based on premiums, benefits, benefit design, dividends and sales compensation, and sales organizations. In many other countries, however, premiums are set by a tariff method, dictated largely by a central authority. Competition is through a dividend history, reputation or agent recruiting and training, not through the products or benefits.

I think it is less common now, but in some countries, in the past, there were significant tax benefits to, say, a whole-life policy. You could essentially treat it as we could an IRA in the old days and deduct the premium, or a certain level of premium, from income.

Those countries weren't likely to buy term insurance. And it was hard to change the operational mode because of the tax structure and the cultural structure of the country. The type of policies offered and the method of competition will lead to typical practices in a country that may appear naive or unreasonable to an outsider. But given that different experience base, those individuals in that country cannot necessarily understand our concerns or our approach to things without some detailed explanation.

It is safe to say that different market factors drive different practices and that these combine to create different expectations. Communication is the best when each party understands the other party's expectations as derived from this local situation.

The last of my six points was common practices or accounting methods. Common practices in various countries lead to confusion or misunderstanding as we go from one country to another. What is a given or a mandatory practice in one country may be an uncommon or improper practice in another country or may be handled differently in another country. Individuals tend to understand the accounting systems with which they normally work. Again, I want to go back to my point. Statutory is an accounting system; it is not a god, as a rule. It is a box you deal with.

Each country has somewhat unique models for statutory, GAAP, and tax purposes. Profit, as you all know, is often dictated by cash flows and not by the accounting model. Except for differences in taxation based upon differences in timing in a tax model, profit isn't affected by the accounting model but with the timing with which that profit is released. However, we all tend to come to believe that the accounting method, the kind of model that we are used to dealing with in our country, is the right model. Any deviations from that model tend to be viewed as being inappropriate or at least are viewed with skepticism.

As an example I would like to pick on the U.K. and AIDS reserves. In the U.K., AIDS reserves have been required reserves. They are apparently at a very substantial level. When we do a GAAP conversion from a country such as that to put it on the U.S. GAAP basis, the companies always want to carry these AIDS reserves along because, for both GAAP and statutory purposes in the U.K., they are required to do so.

In the U.S., under GAAP accounting, AIDS reserves are not allowed unless there has been a loss recognition event. Now speaking of that new in-force business, presumably you are making a provision for it anyhow. But it is something that is mandatory in one system, it is very ingrained into the thought process, and it is absolutely inappropriate in another system. It sometimes takes days to work through those issues. As you work on a project, another one of those issues will come up every now and then. You can't get them all surfaced at the beginning.

The differences may appear simple, but it takes a lot of time to get through the communication and explain to everybody what it is and get people comfortable. A personal list of various or different definitions or practices that exist would be in the definition methodology and application of local GAAP and local statutory accounting, which we referred to; in the reserve guidelines outside that; in the overall accounting model; in capital and surplus requirements; and in the requirement for, and actual building up of, provisions for adverse deviation. Again, it is something that tends to be taken very seriously and very precisely in the U.K. and Canada.

In the U.S., it is more of a rounding issue. Frankly, as a lower issue, there is a different standard. The U.S. GAAP accounting provision for adverse deviation has to do with maybe a 75% probability of loss over the life of the business. I would say that U.K. standards are more like 90% probability of nonloss per year. So there is quite a difference in these standards.

Restrictions on allowable assets is another difference. I spend a great deal of time in reinsurance. The requirement for risk transfer and the definition of risk transfer vary significantly from system to system. We have already talked about product differences, technical meanings, and tax methods.

I find that people tend to want to have a rule book. But there is not a rule book. There is really not a rule book for U.K. accounting. There is not a rule book for GAAP accounting, but there are many guidelines. You have to eventually bring it down to a combination of experience and general guidelines of the accounting model that you are working under or the product model or the country that you are working under.

In summary, the vast majority of problems I have encountered have been associated with communications in a very broad sense. Most of these problems can be avoided with a

good face-to-face meeting. Telecommunication is great. But I haven't found anything that beats sitting down face-to-face with somebody for one to three days very early on in the project. You get to know each other. You understand body language, you understand nuances of conversation. It is my experience with telecommunications, either by telephone or by fax or by video conference, that it is for a scheduled period of time. There is a tendency to force it to briefness. We need to spend more time getting to know each other in these projects. As I said, body language can be quite important.

I have talked a lot about negatives. I want to go back to something I said earlier. I think that my career and my life have both been enhanced by my international activities. I would just advise anybody who participates in these activities to remember that it does take extra effort, but I personally think the extra effort is worth the prize at the end.

MR. HUNTINGTON: Our last panelist is Colm Fagan from Dublin.

MR. COLM FAGAN: I am a Fellow of the Institute of Actuaries in London. We now have a separate actuarial society, so I'm also a Fellow of the Society of Actuaries in Ireland, but it is not large enough yet to be an educational body. We have quite a separate regulatory regime from the U.K., but it is modeled broadly on the U.K. regime.

I want to talk about the European single market and how that affects the international actuary, and I'll maybe intermingle it with my own experience. I want to paint some of the background for the international actuary in Europe at the moment. Then having looked at that background, I will look at some of the issues that are facing the actuary working against that new background. There are some very challenging and, one might say, exciting issues in that.

So I will talk first about the background of life insurance in Europe. As has been indicated already by the two previous speakers, the traditions in Europe have been very different. Obviously, first is language, with all the different languages in different countries in Europe. Then there are quite different systems of law within the European continent. There are phenomenal differences in taxation in different countries. The particular ones, for instance, that we would be aware of would be fundamental differences between what we have in the U.K. and in Ireland—what is called the "I minus E" system. The life insurance companies are taxed on the investment income. There is tax on the internal buildup of the funds with relief for the expenses—that is the I minus E. On the continent, there is very often a gross buildup within the fund, but then there is an exit tax on the policyholder.

The one difference that I want to focus on most particularly is regulation and supervision of insurance companies. I want to just focus on that background to differences in Europe. There have been two quite different traditions in Europe and they are called the normative tradition and the material tradition. I will try and explain to you what those two are, what their impact is, how they affect things coming into the single market, and what their effect is on the actuarial profession.

I will talk about the normative approach to regulation, which would be the one I would be familiar with from Ireland and the U.K. This is characterized by a very high level of freedom among individual companies. They have freedom in relation to the products that they can design, the prices they can charge for those products, the assets to which they can

link them, and the methods that they use to calculate the liabilities to policyholders. There is very wide freedom on all of those fronts. How can they have this freedom? Basically, the appointed actuary system is the glue that holds this system together. The appointed actuary system is one that is applied right throughout this century in the U.K. and Ireland. A company can design what products it likes and charge whatever premiums it likes as long as an actuary who has this certification of an appointed actuary will certify that the mathematical reserves are OK. The actuary has been very involved in things such as asset/liability matching, going way back. The 1954 paper from F.R. Redington ("Review of the Principles of Life Office Valuations," Journal of the Institute of Actuaries, Vol. 78.) was sort of a landmark in the U.K. actuarial profession on bringing the actuaries very closely into the asset/liability matching.

From 1952 onwards, the actuaries in the U.K. would have been into asset/liability matching. In the past, that would have been a criticism of U.S. actuaries. Funny that we all think our own systems have certain virtues. But when I was in training, a criticism of the American actuarial system was that it was too confined to the liability side of the balance sheet. There was also supposed to be this chase for high yield in the U.S. insurance companies. We would never do things such as that in Ireland. But we all make mistakes of a different nature, and we will talk about those mistakes later.

I am saying yes, we have this normative approach to regulation that depended very much on the appointed actuary system. It has worked quite well in practice, with a few caveats that I will mention later, but there has been a great deal of innovation. Companies have had very high levels of solvency. There have been very few insolvencies within the U.K. or Irish markets. Actually, in Ireland, since the 1936 Insurance Act, there has not been one insolvency of a life insurance company.

So that is the normative approach. I think only two countries—the U.K. and Ireland—have had it, although the Netherlands has had it to some extent. I think it would be the closest of the continental countries to use a normative approach.

Then the other one would be the material approach to supervision. This is applied in most continental countries with, I would say, the possible exception of the Netherlands, which I am not too familiar with. Now this relies on very strict government regulation of the products that are offered, the conditions attached to those products, the policy conditions, and the prices. As John said earlier, the only price competition in some countries would be on the bonus payouts, and all companies would have to have the same premium rate.

The assets that companies can link their policies to and the reserving basis are all established by statutes and fiats by the regulators. In those markets there was minimal or little room for innovation. And the role of the actuaries is confined to much more technical areas. For example, to be honest, they would buy and sell me a million times on mathematics on all sorts of formality for mortality tables and things such as that, but they would not be close to the real business. That would be my perception. I think we all have to be careful about our perception, because we all hear different things. One of the things you do learn in international is a bit humbling. Other people know much more than you in certain areas, so I would not want to be judgmental in that respect. But from our perspective, the continental actuary would be very much a technician; very highly versed in mathematics but not in some of the core business issues.

What has been the result of these differences between what I call the normative approach to regulation and the material approach to regulation? Well, the markets are more developed and we can measure development in different ways. The markets in the U.K. and Ireland are more highly developed. I suppose one measure of development, which I saw in *The Wall Street Journal* recently, was the penetration of unit-linked products in the market. Now I think we may have different views on whether that represents progress.

But in Germany, which is Europe's largest insurance market, unit-linked life insurance accounts for just 3.1% of new business. In the U.K., it is 63% and in Ireland it is 67%. That is why I mean we always want to be the winner.

There is maybe a small amount of humility coming in on some of the dangers for the consumer in these so-called sophisticated products. I will come back to this later when I talk about the issues facing the international actuary. The sophistication of the insurers and of their actuaries exceeds the consumer's ability to understand that sophistication. Basically we have been too smart for our own good in many ways. We have designed products that have information symmetry between the buyer and the seller. The seller knows a lot more than the buyer does about the products and how they work. And that is always a recipe for problems. We have seen some of the consequences of that in the U.K. in recent years. The prime example would be the 1987 Financial Services Act and the whole plethora of regulation that was drawn on that. This was all a consequence of this ability of the insurers to con their buyers. That is putting it fairly bluntly, but I don't think it is too far from the truth.

And so you have had all these primary insurance amounts (PIAs), and selection interview blueprints (SIBs). You can have initials coming out your ears to try to follow all the regulatory developments in the U.K. To be honest, I believe that whole process of consumer regulation has inhibited development of the life insurance market in the U.K. and may have contributed to a slightly more developed market in Ireland. We would have had the same U.K. experience but we took a slightly more pragmatic approach. In practice, it has worked well up until now on the consumer protection side. Basically, we have caps on commissions to intermediaries. You can't pay more than a certain amount in commissions to intermediaries in Ireland. By and large it is a measure that will work well as it has kept products reasonably priced. Now I move on from there with that as the background. The prime aspects to that background are the differences between the normative and material approaches to regulation.

The European Commission wants to create a single European market. The idea is that if you are a provider of insurance products in Sweden, you can sell your services in Portugal. Or, if you are a manufacturer in Ireland, you can sell your products in Italy or wherever. It is like being in Texas and selling your insurance products in Massachusetts. Try to create that framework. The companies were facing a number of major obstacles, of which I mentioned some, such as language, tax, and so on.

There was this determination to create this single passport with one license, one power—the single passport. With one authorization, you can transact business in any country in Europe. So that was one thing that companies wanted. Now they had to get over a number of hurdles to get to that. So they made one critical decision too. The EU, in framing the regulations for the single market, said that it would allow the normative, rather than the material, approach to regulation. In other words, that immediately gave a

competitive advantage to companies that have based themselves in countries such as Ireland or the U.K. for selling insurance to other countries.

The final rule that was brought in was a distinction between what was called the home country and the host country. The home country is the country where the insurance company is supervised from. So that I would call the country of manufacture. The host country is the country where the product is being sold. So the idea was that solvency is supervised by the home country and regulation of sales practices is supervised from the host country.

Now, as I said, this would, in theory, create a competitive advantage for countries such as, say, Ireland or the U.K., which have this normative approach to regulation. It is not easy and it is the sort of advantage that I think economists or the strategists call a sustainable competitive advantage. It is not easy to create that entire system in Italy or in Germany or wherever. There are so many different training systems and cultural things. So there was this advantage. But there was a problem with it in that the countries that had that advantage were hampered in European context by having this so-called I-minus-E approach to taxation. There was taxation of the internal buildup of policies. This prevented our countries from being used as bases. But as luck would have it—and this did happen to be particularly good luck for yours truly, which I will talk about in a second—the Irish government sent the begging bowl to its friends in Europe, saying that it was a very poor country. "You have to give us some advantages to help us to establish a financial services industry in Ireland." And it got what it asked for.

Basically there is now an International Financial Services Center (IFSC) in Dublin. With the blessing of the European Union, Dublin has a situation where a life insurance company is established and does not sell to domestic layers (it only sells policies outside Ireland), it is not taxed on the internal buildup on that policy. Also, there is only a 10% corporation tax on that. There is a terrific advantage: the starting-off advantage of this normative approach to regulation and then the growth buildup on tax. So all that led to an explosion of interest by the EC, mainly continental countries, in sort of using Ireland as a base for it's European operations. I will talk to you a little bit about some of those in a second.

I suppose there was an additional piece of luck for myself because about the time that we began thinking of that as a product area, I started my consulting firm (two years ago). We just got into this at the right time, so I would say it did prove to be quite lucky.

Having painted that background, you are all clear on what the background is to this wonderful thing called the European market. I want to talk now a little bit about some of the issues that are involved for the actuary in that market and look at it from an actuarial perspective. I will sort of pull out a few of the issues by showing some examples of assignments that I am currently working on.

The first one I will talk about is an insurer (I won't say whether it is already established or about to establish because it may give the game away too much). In Dublin's International Financial Service Center, I am planning to use this single passport, the single license, to sell insurance throughout Europe. Now if this company is in discussion with a potential distributor in a Mediterranean country, that has the traditional approach, then this will be a very powerful institution in that country, which does not have an insurance

operation at present. But since it does have a strong retail franchise with a certain customer base that would prove to be a very strong distributor.

This company now is looking at entering into an agreement with this distributor and it will sell its products in that particular market. I am the appointed actuary to this company in the home country there. Now you might say that from my point of view it is all very simple and straightforward—I am the actuary of the home country insurance company, so I simply look at the solvency position and what happens in the host country is of no concern to me.

Unfortunately, that is not the question. I am sorry that is not possible for me because what happens at the point of sale is more important than looking at the solvency of that life insurance company. Because there will be inevitable misunderstandings between the salesperson and the consumer as to what the product will deliver. That is what I was saying about these complex products; that they can lead to all sorts of uncertainty. This is especially true if the people who are selling and buying them are coming from backgrounds in which they were used to insurance products meaning a certain thing, but now they mean something completely different.

I have to ask myself, what are the real liabilities? I know what the policy contract, as I read it in English and as I interpret it through Irish law, will have as being delivered under that policy. But what would really happen? What country's court would be called to judge this if there were some disagreement over what the policy pays out on the end of the day? Now the appointed actuary must concern himself or herself with this because, as I say, solvency is dependent on actually what has to be paid out.

There is the further problem of the unfair-contracts directive, a new directive that has been brought into the European Union. If you are deemed to have sold a contract that is unfair in some way in its terms, well then they can renegotiate on the consumer's behalf.

There is a further thing, which we in Ireland and in the U.K. call policyholders' reasonable expectations. Once again, it was devised mainly for the so-called with-profit or participating business in the U.K. But it is bringing the appointed actuary closer to looking at what happens at the point of sale. So that is a big issue in the particular area of the concerns of the international actuary when working with an across-the-border business.

I have to look very carefully in that situation at the whole issue of the training of the sales force and at the compliance procedures at the time of sale and how they establish meeting the needs of the consumer. Now in this situation I must say I am very much heartened by the approach of the board of directors who are very well aware of these issues and who are as anxious as myself to ensure that they do the right thing. Now if I were dealing with directors who were simply looking for a quick sale, and I didn't consider the implications down the road, it could be quite a different category. I am just saying that is one set of issues that the international actuary or the actuary working with international life insurance now has to concern himself or herself with.

The second example would be closer to yourselves. A U.S. insurer has approached me only last month. It has quite a successful operation in a very specialized area in certain states. I think it has authorizations in all 50 states, but its operation is concentrated in one particular state. It has a specialized product. But it is now thinking of offering that

product and, in fact, a number of products on a related line, in Europe. And after getting some independent advice, it has decided to base its life insurance company in Ireland. The idea is not to sell in Ireland but to sell through other European countries from that Irish base. Now it has asked me and my firm to advise it on the whole application process. Then, for the initial period anyway, I would work as its appointed actuary.

It is a slightly different situation from the other one because under the Irish certification process you have to produce financial projections for three years of operations, which includes the reserves at each of those three years. So it is effectively a wheel-within-a-wheel operation. You look at what is beyond the three years—what reserves you would be establishing after three years. I have to certify, as the prospective appointed actuary with this company, that I am satisfied with the three-year projection for this business. Those three-year projections cover everything from the premium income to the sale of expenses. But here is a company and I have looked at its business and it has a very exciting product. I must say I have decided to do business with it because I was excited by the concept that it was offering. It has a very successful track record in the U.S. market. It has a very efficient, streamlined operation. I believe, as obviously it does, that it could be quite successful. But it has no distribution channels in any country in Europe. The company has been through some fairly large distributors for this particular product.

I am not sure how this thing will go and neither does the company, but we have to still prepare this projection by showing what the sales volumes will be for three years. It is challenging to do that and to put it in an all-comprehensive planner. So when I go back, I will be doing more with that one there. I will be working very closely with the people and I will say, "Well, this is what the regulation is." And they will say, "Well, we don't know." I will say, "They don't expect you to know, but put together a plan that has a certain coherence that you will be approaching in so many different ways. You will be approaching so many types of financial institutions each year and you can expect to get so many affiliated. Once recruited, you can expect to get such and such sales, and this is what to pay your salespeople." It is lovely; it is great fun doing that.

For international life insurance in Europe, these are very exciting times. They are also very challenging times for the international actuary. We can't ask for much more than that.

MR. WILLIAM P. CHIROLAS: This question is addressed to our Irish colleague. You mentioned that I minus E is the modified tax in the Irish and U.K. system such that the inside buildup is not being taxed. How is that being done? What's the mathematics of that?

MR. FAGAN: I said I wanted to put the mathematics to my continental colleagues, but there is simply no tax on the internal buildup.

MR. CHIROLAS: Do you calculate an I again on the investment funds?

MR. FAGAN: Sorry, there is no tax on the investment income.

MR. CHIROLAS: So there is no I minus E on the income?

MR. FAGAN: No, there isn't. That is why I say there is no tax on the policyholder buildup. Then on the shareholder return, it is simply 10% on the profits. Once again, a company would find a way of allocating monies to policyholders, even to avoid that 10% until such time as it wants to take out dividends.

MR. ROBERT V. LYLE: I want to make a couple comments and then I have a question. I have often had the experience of the language problem. But I find that many people in foreign countries really like to speak English because they want to practice their English so language is really not a problem at all. There are a couple of exceptions to that I would say, but don't think language is a big problem.

I want to pose a question to Colm about the single-market situation in Europe. How quickly do you think the single market really will develop into a practical reality, recognizing some of the problems and challenges that we have?

MR. FAGAN: About language—I agree with you, to some extent, but I agree with John on the problems of interpretation. When I was preparing my talk about this American company, I said that I thought its product was going to go "a bomb." Then I suddenly realized I think it means exactly opposite things on both sides of the Atlantic. When we say everything is going "a bomb," we mean it's going to do terrific. I think you mean the opposite.

How long would it take the single market? There are many views on that. I will try to give some objectivity. I would not want to understate the problems that will be involved in creating some type of a single market in insurance because there are differences in the tax regimes of different countries.

Even though countries are obliged to sort of go with the flow on the single market, they have an out clause in that they can do certain things for the general good. That is being subject to many different interpretations. But I am impressed at the general process the European Commission is adopting, which is to try to force the pace. The countries are shown to be very defensive at certain times. So, therefore, you can constantly keep chipping at the edges and they take sort of a snowball effect in which they sort of let it roll down the mountain and the momentum fills of its own accord.

To some extent, we are there already. This is a true situation I am talking about. The company selling business in this particular area happens to be Italy from the Irish base. These discussions are actually taking place at the moment and it hopes to start there very soon.

In 1994, of all the life insurance premiums in Sweden, more than 50% of those premiums were from companies based outside Sweden. That was due to a particular tax anomaly in Sweden, which is gone now.

In one sense, the market is there already, but it is there mainly for people of a certain high net worth and the expatriots and people with mobile capital. But I think there is a trend and within the next few years, it will start moving down to the more common ordinary type of policy and to policies in which there is a minimal tax issue, such as term insurance. Where there are massive differences in premium rates, I think the thrust of competition will move very fast in some of those areas.

I think with some of the more esoteric products, we will be having the problems of understanding, which we were talking about earlier. I do think, quite rightly, that the countries and regulators are right to try to prevent too much encroachment there, but I think that there is very little defense in the case of a pretty straightforward term insurance product.

MR. P.G. ALISTAIR CAMMIDGE: I would like to ask our panelists about the alternative route toward European insurance single market. That is to say not the home-country/host-country approach, but the approach that has been widely adopted of an insurance company in one country acquiring a whole brood of subsidiaries in other countries, usually by purchase. I would ask the panelists how they have seen this approach developing; how they expect it develop; and which approach—the acquisition approach or the home-country/host-country approach—they expect to prevail.

MS. EMORY: Based on my company's experience, we are going with developing companies in the different countries. So we are not planning to go with the home-country/host-country approach at all. I can't explain why, but my company obviously thinks that is most logical in what it expects to prevail.

MR. FAGAN: Alistair, I want to take the opportunity to say how much I enjoy your letters from America in the *The Actuary*.

Up until now, the acquisitions approach has been mainly the approach adopted. But I do think it has to be superseded by the home-country/host-country approach. On simple economic grounds, with the acquisitions, you have a whole host of head officers, as it were. Therefore, in terms of usage of economic resources, it seems to be quite inefficient.

Furthermore, it does not do what the commission is actively trying to do, which is to promote the competition among regulatory systems. It accepts regulatory systems. The commission has already said it is allowing there to be competition among regulatory systems. In Darwinian evolutionary terms, it would be survival of the fittest. I believe in that situation the survivor will be the subnormative regime, and this will drive out the material supervisory regime quickly. That is the point I was making earlier about the whole single-market thing having a momentum of its own that develops.

I think it is no contest, with the caveat that I think there will be some casualties in terms of retail and misconceptions about what products we will deliver.

MR. TILLER: Everything I have seen has been in the individual company, but in the acquisitions area, certain operations are being consolidated at a higher level, but they are still fairly inefficient.