

# RECORD, Volume 25, No. 3\*

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San Francisco Annual Meeting  
October 17–20, 1999

## Session 34PD Emerging Reinsurance Markets

Track: International/Reinsurance  
Key Words: International Insurance, Reinsurance

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*Summary: Some insurance markets are expanding and reinsurance opportunities are expanding with them. A panel of experts provides an overview of markets in Mexico and South America (Argentina, Brazil, and Chile) and the North American offshore market. They explain the role of reinsurance in these markets, including development, growth, products, solvency/capital requirements, financial reporting, and regulatory aspects.*

Mr. Bruce D. Moore: Mike Gabon is currently assistant vice president and corporate actuary with Scottish Annuity and Life and specializes in reinsurance of blocks of in-force business on life, annuity, and health products. He is based in the Cayman Islands. Steve Zonca is currently vice president and chief actuary at RGA/Swiss Financial Group, where he has been working for the past four years on capital-oriented reinsurance. He has done a wide variety of work including pricing and product development, valuation, financial reporting, and investment management for life, health, and annuity products. Froylan Puente is the chief actuary for Latin America at the Employers Reinsurance Company (ERC) Group. He's co-responsible for opening five offices across Latin America, including Mexico. He has done work on reinsurance proposals for a pension portfolio, pension systems for annuity markets in Mexico and Argentina, pension reform analysis in El Salvador, and workers' compensation analysis where they've been reforming systems in Colombia and Argentina.

Mr. Michael E. Gabon: The program said we were going to be covering North American offshore and Latin America, but we have added value as Steve is going to be covering the Far East. Offshore is a typical name, a traditional name, but you can think of it as being international. Froylan will speak on Latin America and Steve will speak on the Far East.

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† Mr. Puente, not a member of the sponsoring organizations, is Chief Actuary at Employers Reassurance Company in Colonia Santa Fe, Mexico.

Mr. Froylan Puentes: First, I want to say thanks to the Society of Actuaries through its committee for this kind invitation, which I was delighted to accept.. I have structured this presentation in two parts. First, I want to put in context for you what Latin America and the Caribbean are, before going to the insurance and reinsurance market, because they are quite new markets for many of you. The second part will be what to do and how to do it when you are entering a new emerging reinsurance market.

It would be impossible to kick off this presentation without first mentioning Latin America's geography, culture, and language. Let me try to explain this with the following expressions. The best word I have found to define Latin America and the Caribbean is the word *mosaic* because it's a combination of so many things. In terms of geography, Mexico is closer to London, England than to Sao Paulo, Brazil, so that gives you an idea of the extent of the territory. Flying time is the same from Mexico City to Bogota, Colombia for instance, as from Mexico to New York. There are totally different habits, dress, and culture. For instance, not all of us eat tortillas. We Mexicans do, of course, and some of Central America and part of the Andean Pact countries do as well, but not the Southern cone which includes Argentina, Uruguay, Chile and Paraguay, and also not Costa Rica even though it is in Central America. So that gives you a flavor of the variety of things we have in Latin America. We have the same language, but there is a different culture and what works in Mexico may not work in Argentina. People in Nicaragua, for instance, may not buy what a Peruvian or a Colombian buys easily, so we have very different territories.

Allow me to give a quick overview of Latin America in terms of geographics and population. In terms of population, we are close to 500 million in population, in territory, 20.5 million square kilometers. In terms of gross domestic product (GDP), it's about one and a half trillion U.S. dollars. We have a free trade market of more than ten trillion dollars in terms of GDP. This field includes NAFTA, the free trade between Mexico, the United States and Canada. There are more than 20 bilateral agreements plus 200 billion U.S. dollars in trade between Latin America, the Caribbean and the United States. Half of that is exports to the United States.

What have Latin America and the Caribbean done in the last 15 years? Table 1 shows some relevant figures in terms of demographics and socials to illustrate the quick improvement we have had in Latin America. There is a positive correlation of the drop off of the birth and death crude rates with our life expectancy improvement, which has increased 24% in the last 40 years. The growth in vaccination coverage is remarkable; it has grown 47%, and now we have more than five countries with a 100% vaccination coverage. This has helped a lot to bring down the infant mortality, which is a relevant point in Latin America in a very important way; however, there are still some countries with a very high infant mortality.

TABLE 1  
WHAT HAS LATIN AMERICA AND THE CARIBBEAN  
DONE IN THE LAST 15 YEARS?

<b>Social and Demographics:</b>	<b>80–85</b>	<b>90–95</b>	<b>Percentage Change</b>
Crude Birth Rate %	30.9	25.9	-16.0
Crude Death Rate %	7.0	6.9	-13.0
Urban Population %	65.1	74.3	14.0
Life Expectancy	65.0	68.0	8.0
Infant Mortality %	59.0	43.0	-27.0
Polio, DPT, BCG Vaccine	59.4	87.5	47.0
<b>Major Social Security Reforms</b>	1980s: 1 Country 1990s: 9 Countries 00s: 19 Countries		

Sources: Pan American World Health Organization  
World Health Organization 1997

Another important event that has happened in the last 15 years is social security reforms have taken place since the early 1980s, where we had just one country as a pioneer, namely Chile. In the 1990s, we have eight more countries with patient and health care social security reforms. In the first five years of the next millennium, we are expecting to have 19 countries in total with these reforms, which will increase the life expectancy and the health care level in a very important way.

However, not all consequences of all these changes are positive. The region is going through very fast change in terms of industrialization and the demographics combined with the social and economic composition. As a result, we now have heavy incidence of what we can call "industrialized" diseases, like cancer and heart attacks. At the same time, we still have a heavy incidence of "non-industrialized" diseases like communicable diseases and infant mortality. So we are now trying to deal with these two different kinds of mortality and diseases in the region.

Table 2 has a lot of information. This is a dependency ratio analysis done by the United Nations, which goes from 1950 and is projected to the year 2025. The dependency ratio is the old population divided by the productive population. The development from 1950 to the year 2025 in Latin America has practically no movement at all, the ratio stays around 10%. This is in contrast with the developed regions, where the ratio goes up 23 points, and the world total where it goes up nine points. The developed regions in 1950 used to have an 18.7% dependency ratio, and now it's projected to be 41.6% in the year 2025, whereas Latin America is practically even at 10% all the way through.

TABLE 2  
 SOCIAL AND DEMOGRAPHICS  
 LATIN AMERICAN AND CARIBBEAN  
 AND OTHER REGIONS OF THE WORLD  
 (DEPENDENCY RATIOS 1950–2025: PERCENTAGE)

Regions	1950	1970	1985	1990	2025
World Totals	14.0	15.4	15.3	15.7	23.4
Regions More Developed	18.7	24.1	25.6	27.4	41.6
Regions Less Developed	11.5	11.5	11.7	12.0	20.0
Africa	10.9	10.0	9.6	9.6	10.5
Latin America	9.9	11.7	12.1	12.4	10.1
			Population 60 more x 100 Population (15–59)		

Source: United Nations

The United Nations also looked at a modified dependency ratio where the denominator also includes the infant population (ages 0-14). Latin America has the lowest modified dependency ratio in the world, going from 85% in 1950 to 62% in the year 2025, as compared with more developed regions like Europe, Canada, the United States and some of Asia, where the modified dependency ratio actually goes up from 64% to 76% in the year 2025. In summary, we have a tremendous demographic change in our region that goes from being very young to having a more mature population. Today, some countries in Latin America, including Mexico, show that 50% of its population is under 20 years old. However, the demographic pyramid will change dramatically, and, from 2025 to 2040, we're going to have around 40% of our population in the productive ages.

To this demographic base, we add four points that will create an economic boom in this region. The first point is that in some of the larger countries, like Brazil, Argentina, and Mexico, we have more than 60 years of developing a manufacturing labor force; in other words, we have a consolidated manufacturing expertise. The second point is that we are having or are going to have a dramatic change in a whole generation in education. The third point is computer knowledge. Some countries in Latin America have the largest computer coverage in the world in terms of computers per capita and level of knowledge. Number four is social security reforms that will raise the living standards and help solve the pension problem.

Now let's move to some politics. My father's generation, for instance, has seen three different government systems that have run from Totalitarianism in the 1950s and 1960s, to Populism in the 1970s and 1980s, and now to the so-named Neo-liberalism. All these changes happened in just one generation. Another challenge, in terms of politics, is that we have had a consolidation of our peace and our democracy in some of the countries. As you know, in the 1970s and 1980s, there were a lot of civil wars in most Latin American countries, especially in Central America.

In terms of economics, what has happened in the last 15 years? There are a couple of challenges. The first challenge for Latin America and the Caribbean is to have a sustained GDP growth for the next ten years, otherwise we're not going to get the future we are projecting. The second challenge is that this generation has to be

patient with the benefits of the free trade agreements. For instance, in Mexico, NAFTA was established in 1994. After five years, there are a lot of sectors in the country that are not being patient with the benefits of this agreement. There is GDP growth. We had a 3.3% growth in GDP in the last eight years versus the 1% we had in previous years. The trade balance has gone from negative twenty billion to positive twenty billion U.S. (for all of Latin America and the Caribbean). Foreign investment in Argentina, Mexico, Chile, Colombia and Venezuela has more than doubled. Peru is becoming more and more important in terms of their investment, and so has Brazil. It has moved from \$18 million to \$20.5 billion in ten years in terms of foreign investment. There's still a lot to come, especially in Brazil, because Mexico started its open market policy ten years ago, but Brazil has just started with the sale of telecommunications, ports and their heavy industry is still to come.

Now let us turn to the insurance and reinsurance sectors. The important changes that have affected the insurance sector are the break-up of monopolies, the opening of markets to private and foreign players, and the new and huge opportunities coming from social security reforms. Today we have only two countries with government-run insurance markets, which are Cuba and Costa Rica. Countries in the process of liberalization are Nicaragua and Uruguay. The rest of Latin America and the Caribbean have free insurance markets. Some of them still have government insurance companies, like Colombia, Peru, Mexico and Uruguay.

You may be thinking about the largest market in the region, Brazil. Effectively, Brazil is the largest insurance market in the region, with more than 50% of all Latin American and Caribbean insurance premiums, and around \$400 million in net written premium in reinsurance premium. As some of you know, Brazil has a reinsurance monopoly, which is about to be abolished. This has been delayed for political reasons until probably the middle of 2000, but it has been re-approved in the Congress. Brazil's Institute of Reinsurance (IRB) is to be opened to private and foreign players as well.

How is this whole market moving in this region? Latin America is the fastest growing insurance market in the world, growing at the rate of 19.1% for the years 1993 to 1995. Compare this with other emerging markets like Asia or Western Europe, which are growing at the rates of 10% and 14%, respectively. In the last three years, from 1996 to 1998, the Latin American market has grown 14%.

Where has this growth come from? It has come from four main activities. The first one is the opening of markets and a great product development activity in our region. The second is social security reforms. Just one single market in South America has more than \$3 billion, in U.S. dollars, in insurance premiums in pension business coming from social security reforms. Of course, Bancassurance has started to be important.

The third activity is the elimination of offshore business in this region. In the majority of the Latin American countries, what we call offshore business is illegal. That doesn't mean it's right or wrong; it's just against the law for us. Some U.S. players or U.K. players, who used to have a big offshore business in South America, for instance, have converted this offshore portfolio into a local or legal portfolio. That has helped a lot of

these regions to grow the market. It doesn't mean that the foreign players have stopped doing business over there.

The fourth activity is that we have started seeing an increase in the insurance culture of the people, and in the economic ability to buy it. This has been very, very slow, but it is happening too.

Even though the growth rate has been 19.1%, the market penetration is still too low. In most of Latin America (except Chile), countries such as Colombia, Brazil, Venezuela, Argentina, and Mexico, insurance premiums are still below 2% of GDP. If you compare this with the more developed countries or regions in the world, like Japan, the U.S., and Europe, we are far away from that level of penetration. However, remarkably, life insurance in Latin America has grown from 0.5% of GDP to above 2% in ten years.

I have mentioned the word *fast* several times. An example that is amazing to me is Argentina. The life market in Argentina, in the beginning of the decade of the 1980s, was practically nil, due in part to offshore business and hyperinflation. They used to have 500–1,000% inflation rate every year, which killed the life insurance market. However, right now, the life insurance industry in Argentina is \$1.3 billion, which is exactly the same size as Mexico's life business, which has accumulated for many, many years. Now, Argentina has the same business as Mexico, but they did it in just 10–15 years.

Now let's leave behind the past and the present, and discuss some forecasts for the future of the region. According to some figures from the Inter-American Development Bank, the region will be growing for the next five years at the rate of practically 5% every year. Two things will drive this figure of 5%, which actually is our goal for Latin America. First, the service sector, where the insurance market is, has to grow slightly above 5%. The other point is that the growth is going to be driven by the top three economies, which are Brazil, which will be 40% of the whole GDP for the region, Mexico, with 26%, and Argentina with 17%. In other words, for Latin America to achieve this goal the service sector and the top three economies have to accomplish their tasks.

This task will depend upon these five key points. One is the continuation of economic and political reforms. There is still a lot to do in Latin America in these two aspects. Two is mitigation of the impact of natural disasters, earthquakes, hurricanes, and aviation. We have to build up more risk management here. Three is trade integration. Learn to live with countries like U.S., Canada, and Europe, but between the Latin American countries, there has to be real trade integration. Four is consolidation of democracy and peace. Five is a more even distribution of wealth. As you can see, any of these five are very difficult to achieve in our region, so there's a lot of work to do.

How will this impact the insurance and reinsurance sector? In our view, both the insurance and reinsurance sector will be driven by the following: bancassurance; pension and health reforms; obligatory insurance, like third-party liability and automobile; and the consolidation of current market operations. This is in terms of sales force and channel distribution, the improvement of underwriting and claims handling, and the improvement of reinsurance protections. Privatization will still play a

very important role to make all this happen. All this is happening right now. We are forecasting that the combination of these drivers will take the Latin American insurance premiums from their current 1.5% of the world's total net written premium, which is \$31 billion, to 2.5% in the year 2010, which will be \$90 billion—three times in ten years. In terms of reinsurance this will go from 5% of the world's total net written premium to more than 7–8%. This last figure on reinsurance includes only non-life business. If we include life, pension and health business, this 7–8% will be much higher.

The next part of the presentation will cover reinsurance emerging markets. First of all, we're going to see what the reinsurance playing field is, what to do in Latin America's emerging market, and finally how to do it. What is the playing field in this region? It is full of threats as you could see before, but with opportunities as well. The first threat is market volatility that has shown itself historically as very high inflation, with a very high devaluation problem and unemployment as well. The other problem is the foreign capital coming and going in these regions. However, the Chilean case has proven that Latin American economies can deal with these threats successfully by implementing a solid domestic saving policy and by sometimes "punishing" short-term investors. Chile has been very successful in that.

Direct markets are extremely competitive and have soft reinsurance pricing. The term "soft" unfortunately now applies to the life and health business as well. This is linked to my prior point about catastrophes that impact the local price and capacity. An example of this is the earthquake in Mexico in 1985 and Hurricane Mitch last year in Central America. These two major events did not affect the underlying insurance sector because, fortunately or unfortunately, depending on your point of view, there were not losses on insured property or on insured lives.

We mentioned before all the major opportunities coming from social security reforms. This is new for everybody. It's new for the customer, it's new for the broker, it's new for the insurer, and it's new for the reinsurer, so we're going to have unknown claims behavior in this field.

Another important point is the weak contractual position that we reinsurers have in Latin America. Oftentimes, a reinsurer is pushed to accept very adverse reinsurance wording. An example of this is that it is very difficult to put a delayed payment clause in a contract. They just delete it; they just don't buy it. In general, there is a lack of respect for the letter of the wording that we have in our agreements. In this sense, the world's leading reinsurers need to educate the market. There is the opportunity for reinsurers to have a big influence in the development of the product, pricing, and the rights in the product so that we have the influence to change things sometimes.

What should you do as a reinsurer in Latin America? First and very importantly, develop technical studies. Second, measure future results in workers' compensation, pension, and health new business. Third, develop true partnership relationships in long-tail claim business. Fourth is a strong involvement by reinsurers in claims analysis. Reinsurers need to be more involved in claims analysis. This is not only for looking after our monies, but it is also a tremendous help to the market. Today's market development and competition is based on globalization and quick entrance in

different regions and with thinner margins. We need to do more research in order to truly understand new markets, assist direct players, and to assess the risks more accurately, and promote understanding and profitable relationships.

What should reinsurers do when financial reinsurance becomes an important aspect in Latin America? Current regulatory changes are pushing the market to have a fewer number of more highly capitalized insurance companies. There are a large number of local players that need more capital to play in niche markets. Financial reinsurance will be needed. We're talking about developing the market. The one key element is our reinsurers need to be more involved in the administration and claims analysis, through what one day will be the purchase or strategic alliance with TPAs for administration and claims handling issues, especially on health business.

The reality is that our clients are not just insurance companies but hospitals, independent physician associations, TPAs, bancassurers and the direct industry under self- insurance. These are our new clients; these are nontraditional clients. But I would say in the emerging market, there are no longer traditional clients.

Finally, I would like to give you six hints on how to enter the market and how to succeed in Latin America's emerging markets. First is market segmentation as a true believer. Without this, no reinsurer can be successful as low human resources is the norm, given the financial need to make a reasonably fast return of equity. Don't forget that the service standards need to be kept high and constant. You can not do all this for everyone at the same time.

Second is monitoring of profitability as a religion. If you segment the market, you have to drill down by country, client, line of business. To monitor the profitability, you have to drill up the other way around to review the line of business, the client, and then rate the country. Each client on each line of business has to be profitable.

Third is to update technical studies. If mortality has changed and will continue changing, imagine what happens to medical expense, disability, and longevity? We need to know precisely the margins and their trends. An example of this is the claims ratio experience of pension business in Argentina, which opened in 1984. Four years later, the claim ratio had grown more than 80%, just because of disability. Nobody predicted what disability would become because this was very new. You can counter this with technical studies.

It is a must to be as local as possible. Service standards and a true segmentation cannot be done without this. Reinsurers need to invest and bet on certain regions. Hire locals; language and knowledge are invaluable. The actuarial level in Mexico, Chile, Argentina and Colombia is high. Let's choose them. We can combine global expertise with local knowledge.

Don't overcentralize decisions and actions or operations. The market needs quick response and assistance. Our former CEO used to put in writing in the annual report, "Don't tell me you have to call corporate, why can't you give me an answer right now?" More than ever, reinsurers need to really contribute to developing the insurance market through profitable long-standing relationships.



Finally, some of you may be thinking that the last three points apply not only to reinsurance, but to insurers. At the end of the day, we all are actuaries and underwriters assessing the risk as best as we can, and at the end of the day we are insurers.

Mr. Gordon A. Gibbons: What is the process for getting in line for being a reinsurer in Brazil?

Mr. Puente: For the last five years, everybody in Brazil has been talking formally and informally about the abolishment of the reinsurance monopoly. Now this has partially become true because the monopoly was supposed to be broken this year, and then the local private foreign players are allowed to bid for shares of the IRB. However, presumably talking instead about entering the market. Right now, the process has been that the main reinsurers have set up offices and have made an agreement with authorities in the market to only give technical assistance. They cannot take reinsurance yet, and reinsurers can have a representative office to undertake reinsurance business, is that right? It can be in two modalities—one is through investing in the IRB because they're buying a share of the IRB or setting up an office. The original idea is that the IRB will have the first right of refusal of the risks or have a flat 40% of the market. Not everything will go out to foreign players. In a risk, 40% in the first five years has to be kept by the IRB and then 60% effectively will go out for foreign reinsurers. That's the process right now.

Mr. Stephen A. Zonca: I'm going to start off with an overview, working in more details as we move along, and finish up with a discussion of a specific emerging reinsurance market. I'm going to cover an overview of the common characteristics of the countries and the region and some of the issues they face. I will talk about the current issues in a direct market in Asia and how some of this carries over to the reinsurance market. I'm going to try to split the countries into a couple of groups, those where there's less of an opportunity for reinsurance and those where there might be more of an opportunity for reinsurance. Last, I'm going to get into a case study of how an emerging market in financial reinsurance in Japan was developed.

First of all, as you may or may not know, Asia was one of the, if not *the* fastest growing regions in the world. Many countries have made tremendous strides in the past 10–20 years. Recent free market forces were creating a significant middle class in the region, which was an insurance buying middle class. In other areas, it was lifting many out of poverty. The effects, however, of the late 1997-98 economic crisis, which started in Thailand, spread to most of the other countries in the region and was a significant set back for many countries. Countries had debated, but most realized they had to open up their market and liberalize restrictions, otherwise they would be placing their local companies at a long-term disadvantage to more nimble foreign companies. But the economic crisis of last year has slowed down progress in this area. As a result, however, of the economic crisis, some areas still have significant potential political, social, and economic hurdles to overcome. Graft and corruption are commonplace in some areas. Threat of military rule, in places that are not already under military rule, is present. However, all areas need to attract foreign capital. They know they can't finance their growth on their own.

In the direct life and health insurance market, economic growth has produced a sizable middle class insurance buying public in many areas, but some others still haven't advanced enough. Some public markets haven't developed because much or all of the needed risk protection is provided by the governments. Generally the products are antiquated by U.S. standards, no one stands out in the crowd here, and there are even times when the regulators are dictating product design and pricing. There are, however, some very highly profitable products throughout the region. One common example is personal accident insurance which tends to be extremely profitable by all sellers throughout the region. In most countries, the distribution system is part-time. Japan is an example; housewives (called "sales ladies") do the selling. Purchases are made because of relationship or friendship rather than a need. In many countries, you have too many companies chasing too few customers. There is clearly a need for industry consolidation.

On the positive side, the economic crisis did highlight the need for risk management. On the negative side, in some cases, it was a little too late. There were many companies in or near insolvency, and this was at a time when regulators were trying to strengthen solvency margin requirements. The last point, which is a familiar one, is that companies would stretch or depend on investment income rather than underwriting profits. There are many countries in this region where having 20–30% of your portfolio in common equities is not unusual.

What do reinsurers face as they try to operate in this region? Many face sometimes heavy restrictions on entering markets. Some countries restrict or limit licenses in order to inflate the perceived value. You find some markets are closed or semi-closed. Taiwan, China, the Philippines, and Thailand are examples of countries where government-owned reinsurers automatically get major shares of any reinsurance transactions, sometimes the entire transaction.

Lately, there has been much discussion, with only a minor amount of action, on privatizing these companies. There's potentially a great opportunity in some of the more developed markets that find that reinsurance premiums are less than 1% of total direct premiums. That is in contrast to the United States where that proportion is in the 15–20% range. Given the slow pace of product development in these areas, when they do liberalize and open up the markets, one of the common support services provided by reinsurers is product development support. There could be a great opportunity there. The need for raising capital highlights the need for financial reinsurance in this area, but in many countries in this area, it's not approved for use yet. Regulators need to be educated and learn about how reinsurance can be utilized. The reinsurance market in Asia traditionally has been dominated by the European companies, but they haven't disclosed much about their financial success or lack thereof in the region.

I'm going to talk about specific country situations. I'm going to split this into three groups: groups where there's limited or no opportunity for reinsurance (areas where you'd have to take a very long-term view); countries where recent opportunities have kind of taken a step back; and countries where we feel that some opportunities exist. Now this is my view. Some other people may have different categories than I have or might slot them into slightly different categories.

On the first list, there's limited or no opportunity because of lack of disposable income, a limited direct market, and economic and political instability, some of which has been even heightened because of the economic crisis. Again you have to take a very long-term view in these countries. They include Brunei, Cambodia, Laos, Burma, Vietnam, Bangladesh, North Korea, Pakistan, and Sri Lanka. There is not much opportunity there.

The second list has areas where, a few years ago, there was tremendous opportunity, but they've sort of taken a step back in the past couple of years. Economic development had produced an insurance buying middle class, it had experienced rapid growth in a direct market. There was low penetration in the direct market and a great deal of opportunity to keep growing. They were hit hard by the economic crisis (some were hit especially hard). As a result, the economic and political risks have increased. I've placed Indonesia, Malaysia and Thailand in this category.

I'm going to cover the remaining countries in relative order from lower potential to higher potential for reinsurance. The first country on the list is China, and that's primarily because of the sheer size of the country. Recent economic growth has seemed to indicate massive potential, and they have had rapid growth in the direct market. One thing to keep an eye on here in this country is there is rampant corruption and fraud in China in both the direct and the reinsurance market. There are examples of direct companies paying the reinsurance premium on only bad blocks of business or paying the premium only when they need it to file a claim. There is also a state-owned company that controls the reinsurance market. Direct writers must reinsure 20% of all business they write to China Re. They are beginning to consider opening the doors to foreign reinsurers. This may be an example of what I mentioned earlier that they limit the licenses available to inflate the values over realistic values for licenses to operate in this country over their realistic value.

Next on the list is India. India and China are similar in size, but India also has a sizable middle class as well and has had one for a long time. They had many direct companies before their independence from Britain. The direct market was fairly well developed, but after independence, the government felt that the insurance industry was better off under control of a state-owned company. As of now, there is one company, one reinsurer operating in India, but the country is beginning to consider opening the market to both domestic and foreign private companies. I think when this market opens up, there could be a tremendous amount of potential there.

The next country is the Philippines. It has had considerable longer-term economic progress before the 1998 economic crisis, and as a result, it wasn't hit as hard initially as other countries, but they are starting to feel the effects. It has a more stable political environment, but there are still many public complaints about corruption in the Philippines. The market was open to foreign competition in 1992, and 11 joint ventures have opened up since 1992. They have over 30 direct-writing companies, and there has been 15% to 20% annual growth in direct market premium from the early to mid-1990s, so it was a well developing market, and there was still a lot of room for growth.

South Korea is next on my list. It was one of the more successful developing countries in the world, and it had a rapid growth in its direct market. They have 20–30% growth in annual premiums in the direct market over the early to mid-1990s; however, this country was hit very hard by the economic crisis. The financial aspects of the country were shaken to its core with major name bankruptcies. The International Monetary Fund (IMF) has placed heavy restrictions on the funding they provided to help the economy there. It is the sixth largest direct insurance market in the world. To give you an idea of its potential, only less than 1% of the life premiums are reinsured.

The next country is Singapore. It had less damage than most from the economic crisis. They had much sounder economic fundamentals. It was one of the more mature direct markets in the region. It still had periods of rapid growth however, and it had more sophisticated products that were introduced recently, so they were really developing. They had increased their efforts to deregulate even after the economic crisis. This was in stark contrast to other countries in the region, which kind of started to close doors a little bit more after the economic crisis. Singapore took the opposite stance and is trying to open markets a little bit more. They have over 50 registered reinsurers right now. They're trying to become a center for reinsurance in the region. They've had eleven new companies since 1997, both in the life and the property/casualty area. Many say their strategy is to try to assume Hong Kong's regional role as Hong Kong is absorbed into China.

Taiwan has a very well-developed direct market, with more than 30 direct writers. Many foreign players, including several U.S. companies, have been fairly successful there. Even with the well-developed market, they're still experiencing 15–20% annual premium growth in the direct market. Taiwan has better economic fundamentals, fewer bad loans, and less leverage than other countries, so there was a smaller impact from the economic crisis. One must, however, in all cases, consider their relationship with mainland China. It overshadows much of the aspects of life and business in Taiwan today. Also, the state-owned reinsurer dominates the market. Actually, I think it's only 80% owned right now. They have started to privatize it. They are looking to privatize it more, and open it up to more and more reinsurers.

Next is Hong Kong. Because of its tradition, its relationship with Britain, and Britain's open economic policy, there have been limited barriers to entry in this market. It has resulted in an overcrowded market. Many foreign companies use Hong Kong right now as a base for their regional operations, including many reinsurers but as I mentioned Singapore is trying to take over that role. However, in Hong Kong, at this stage in their economic development, they still have limited direct market penetration, so there's a potential for reinsurance on the direct side. It sort of stands out in a region that has had a wide variety of reinsurance structures. Most of the region typically does yearly renewable term (YRT) and nothing else. Hong Kong has basic excess retention YRT all the way to complicated financial reinsurance structures. But again, you have to consider the giant in the region, the impact of the integration to China and how that's going to work out. The effects of that have not yet fully materialized.

Last is Japan. It's one of the largest life insurance markets in the world. The per capita ownership of life insurance is the highest in the world; however, unlike the U.S., there

are very few companies. A few years ago, there were only 30 or 35 companies operating in a market almost the size of the U.S. These companies are typically large mutual companies. There is potential for growth in reinsurance. Only 1% of life premiums are reinsured versus 15–20 in the U.S. The economic crisis there started much earlier. The asset bubble burst in the early 1990s in Japan; however, it was less severe than most areas but the effects are still persisting. They're still dealing with some of their asset problems. They are opening their markets to foreign and domestic competition as well.

In my final area of discussion, I'm going to focus specifically on an emerging market in Japan for financial reinsurance. I will talk a little bit about how the need arose, some of the problems and issues as the market for financial reinsurance came into being, and what the outlook is for the market. Some things in and of themselves may not seem to be problematic, but they may give you an idea of how companies got themselves in the current situation.

I'll start by talking about how Japanese companies got into the state they're in today. Again, the highlight of the area is a very simplified product design, older style U.S. product, with no interest-sensitive business. Product variety is 20 flavors of term rather than different types of products. They have a captive salesforce, with an emphasis on relationship-based selling. The direct market is saturated; almost every adult owns a life insurance policy in Japan because of relationship selling. There is limited price competition. The government dictates interest, mortality, and expense assumptions for all policies. Obviously you come up with the same gross premiums then, and the companies compete on distribution. I would say more recently, in the mid-to-late 1980s, they started developing longer-term guarantees on their pension products. In some cases, there were lifetime interest rate guarantees, and much of this led to a certain amount of complacency, lack of competition, feeling of invulnerability; and then the problems came to the forefront.

In the early 1990s, the bubble burst. The Nikkei stock index was trading around 41,000 at one time, but over the next several years, it lost two-thirds of its value. Imagine the effect of that. Think of, in the U.S., the Dow trading at 3,000 two or three years from now. Companies started chasing investment yield. They had been using their double-digit stock returns to offset low bond yields. Sometimes they would invest in foreign securities and U.S. long-term bonds. Unfortunately they didn't hedge them; the exchange rate went in the wrong direction and created more asset losses. While all this was going on, both the public and the government were largely unaware of what the state of the companies were. The government started introducing solvency margin standards because the companies were very thinly capitalized. You'd see surplus-to-asset ratios well below what you would see in the U.S. Economic troubles continue to persist.

The first insolvency of a life company recently occurred in Japan's post-World War II history in Japan. The life company, Nissan Mutual, collapsed under the weight of heavy long-term, lifetime pension guarantees. They had 5–7% interest rate guarantees with an asset portfolio earning 2–3% under optimistic accounting, and current new money rates for long-term investments in Japan were in the 1–2% range. While Nissan had very little hope of coming out of that, most of the other companies weren't in as bad a

situation as that company. Those other companies had other profitable blocks of business to help offset the yield problem.

The regulators and the companies themselves started looking into things to try to solve the problems that were occurring, including the previously unimaginable things like bringing foreign partners into the business. Regulators began discussing demutualization and formed a task force, but they found that besides those issues mutual companies faced in the U.S., there were a host of other issues in Japan. It looks like demutualization is still years away in Japan before it will ever get approved. They also looked at providing additional alternative forms of capital, including subordinated debt. Subordinated debt isn't capital, but in Japan, it can be included as equity, if it's longer than five years in maturity. This caused companies to obviously gravitate to that as a form of raising capital. They also introduced an instrument called Tekin, which is very similar to surplus notes in the U.S.

At about that same time, conceptual discussions were going on about using financial reinsurance. There was a lot of initial skepticism and concern. Companies and the regulators viewed it as accounting gimmickry. Some of them felt that the insolvencies of life companies in the U.S. in the 1980s were a result of financial reinsurance, so you had to develop a sponsor in order to get the enabling regulation in place. Conceptually, different U.S. regulations are made about what you can't do, and you do everything else that's not specified. In Japan, the regulations say what you can do, and you can't do anything else. You have to do only what's specified. In Japan, the only approved form of reinsurance was YRT.

Ultimately, there was a financial reinsurance transaction put in place. The process began by educating the company about what financial reinsurance was, what it could do, and what it couldn't do. Then they had to look for products to reinsure. In the U.S., old whole life blocks are profitable and term is cut-throat competition. In Japan, it was the opposite. Whole life wasn't profitable and the term business was very profitable. They had to educate the regulators and put some examples together. Finally, however, that process did work. Enabling regulation was developed largely based on the U.S. Model Reinsurance Regulation, so it's a very similar regulation to the U.S. There were some differences, however, such as requirements of ratings for reinsurers, and the fact that only certain types of structures are allowed. In the end, they also had a heavy sensitivity to requiring cash ceding commissions. Given the lack of desire for companies to put cash into a situation like that, they had to develop creative structures to work around the need for cash ceding commissions. They overcome all that, and the first transaction was put into place in March 1998.

A year-and-a-half later, there have been three transactions completed with three different companies. We have begun to see much of the initial skepticism disappear, especially on the parts of companies. Companies that only granted courtesy visits years ago are now considering or seriously considering financial reinsurance. There is still some stigma present that needs to be overcome. If you use financial reinsurance, it's going to identify you as a weaker company, so some of the stronger companies are still hesitant to consider financial reinsurance. I have to continue to deemphasize that. In the U.S., financial reinsurance is a widely used tool that many AAA-rated and AA-rated companies utilize in their capital management efforts.

A recent big boost to the financial reinsurance market was that regulations were changed last year to create an additional solvency standard. They have always allowed subordinated debt in their primary measure, but they would not allow subordinated debt to be counted as capital in this new secondary measure. Given how much companies have depended on the introduction of the secondary standard helps to create an increase in interest in financial reinsurance. There's a limited supply of alternative nonreinsurance capital in Japan. All the other companies providing capital in Japan are trying to shore up their own balance sheets.

In the end, if this market does take off, you have to question whether or not there is enough capacity, possibly even worldwide, to fund this market. Some of the largest companies would need transactions of about 100 billion yen to be meaningful for them, which is a billion U.S. dollars, and that's about the size of the annual sales of financial reinsurance in the United States.

Mr. Michael E. Gabon: What we're going to be covering today is the who, what, where, when, why and how of offshore reinsurance. What does offshore mean, where is it, why is it emerging, who's doing it, when is it being done, and how does some entity get into this business if they decide to?

There are two definitions of offshore. One is a transaction where the currency and the jurisdiction of the transaction differ. The second is where there's a financial vehicle offered in entities other than the jurisdiction where the vehicle originates. Offshore is often misunderstood, and it doesn't necessarily involve water. For example, Luxembourg is offshore even though it is surrounded by land, but, on the other hand, Catalina Island is not offshore. We have what I guess I'm calling a European offshore market. Offshore seems to be the traditional nomenclature, but you could think of it as international, covering the geographic areas surrounding or close to Europe. In North America, the offshore market includes Bermuda, the Cayman Islands, the Bahamas, Barbados, Turks & Caicos, the Virgin Islands. Froylan mentioned that deregulation in South America will cause the offshore market there to disappear. Basically offshore reinsurers offer surplus relief and risk cover, but primarily buy-outs providing capital. Also, offshore refers to the expatriate and nonresident market as opposed to a company domiciled, say, in the Caribbean selling to locals.

The reasons for the emergence of the market includes macroeconomic trends, industry trends, direct-writing products, and domicile-specific factors. I'm going to whip through the first three so I can get to the fourth one. The decline in interest rates is a key macroeconomic trend. You have contracts out there with guarantees, so capital is of use. Favorable demographic trends in North America include the baby boom, savings products, longevity payout (due to people living longer), and so on. More than \$665 billion of fixed annuity reserves were out there about a year ago, and only 6.7% of that business is currently being reinsured as of January 1998. There's more than \$5 billion of structured settlement premium out there. so there is a market.

Let's move on to the industry trends. We have companies worldwide focusing on capital management, adequacy and efficiency, adequacy from the regulators, and rating agencies. Policyholders are concerned that the company survives and they get their coverage or their payoff. Shareholders are looking at the aspect of efficiency.

There's also a lot of consolidation and demutualization—the urge to merge. In 1998, we had 79 transactions, which accounted for about \$175 billion of the value, and through demutualizations and formations of mutual holding companies (MHCs), 24 conversions.

Again, as I said, there are international trends. The life sector is becoming global, and interest rates are low throughout the world. There are mergers and acquisitions, demutualizations, and reconstructions happening around the world. In some reorganizations, capital was the main driver. The basic thing is to unlock capital and enhance financial ratios. One example is the annuity line of business. Many companies haven't really focused on that; they've written it as a side line to their life business. As for payout annuities, we haven't really focused on longevity, so they're often underperforming, and there are the reserving issues to address. The annuity line of business is a significant user of capital under risk-based capital (RBC) standards.

Let's discuss the direct-writer process. Using an annuity as an example, we know that there was \$665 billion of annuity reserves. In 1993, 4.6% of that business was being reinsured, and by now only 6.7% is reinsured, or \$45 billion of reserves. That means that over \$600 billion of annuity reserves are out there to be reinsured.

Let's move on to offshore. There's growing interest. These are the things that are giving us evidence of the market. Total credit for unauthorized reinsurance has grown to \$9.4 billion. There are a couple of firms out there that made initial public offerings in 1998, and there's consolidation amongst domestic reinsurers. There's a large capacity out there for finite reinsurance and short-term reinsurance. There's room for new players, and it is being used. You see some of the property/casualty companies trying to get into what was traditionally known as financial reinsurance on the side. The industry composite RBC ratio was about 276% but was and only 205% for reinsurers. On the annuity line of business, you get about a 20 to 1 leverage ratio. For example the increase in reinsured annuity reserves from 1993-1997 was \$6 billion, moving from 39 to 45, and this increase was generated using only \$300 million of capital. So it's much more efficient in the reinsurance sense for this annuity business.

In terms of the market emerging, from the reinsurer's viewpoint, there are some good things. There's a reason for somebody, either existing reinsurers or entities trying to get into this market, to actually get in the market. The typical offshore location is a low-cost provider. There's no corporate income tax, and overhead is relatively limited, and mandatory capital requirements are typically lower. Of course, you can hold any amount of capital you want. As for product choice, you may not be able to get the coverage onshore. This may have to do with currency, where perhaps our benefits are in one currency and your premiums are in another, or it may have to do with specific cover to protect some fancy risk. In light of the federal excise tax, which we will soon discuss, this offshore business is much more beneficial for longer tail business.

Let's say we have a U.S. reinsurer and an offshore reinsurer, and let's say that they both have \$100 million of premium coming in. Let's also say they are both paying out the same \$80 million in benefits. But now remember we said that there is lower overhead for the offshore insurer. We have, say, \$10 million of overhead for the U.S.



reinsurer and \$6 million for the offshore reinsurer. The product produces an underwriting profit just on the pure risk, but that profit is a little bit higher offshore. If you take into account income tax say at a tax rate of 35%, then the U.S. reinsurer pays \$3.5 million while the offshore insurer pays nothing. However, there's no excise tax onshore, whereas offshore the typical excise tax in the life business is 1% of premium. The after-tax underwriting profit is therefore \$6.5 million for the U.S. reinsurer and \$13 for the offshore reinsurer, which is about double. But wait, it gets better.

In terms of investment income, I tried to be very realistic. I said that the expenses were all at the beginning of the year and benefits were mid-year. You may see some illustrations where benefits are at the end of the year, in which case you get a larger cash flow, which produces a greater discrepancy; but I think my illustration is realistic. I estimate gross investment income of \$3.3 million for the U.S. reinsurer versus \$3.5 million for the offshore reinsurer, which is not much different. It's just basically a timing difference, and there's not a whole lot of difference in the cash flow throughout the year. But again, there's income tax on your gross investment earnings onshore whereas there is no income tax offshore. So for investment income, we're actually ahead after tax, and as we've seen the operating income gets close to double. That's just an illustration of the impact of being offshore versus onshore.

There's a final benefit to a reinsurer being offshore which, from the ceding company's viewpoint, is the favorable regulatory environment. The accounting system is fairly flexible. You don't have statutory and GAAP and tax. There's no corporate income tax, so you're working with one accounting system. The methodology is flexible. Most firms use U.S. GAAP right now, and eventually will probably use international GAAP. In terms of reserve methodology, in the U.S., you have set assumptions and certain decrements that you're forced to build in. Offshore, you're not forced to build anything, yet you can put some realism into it that is GAAP-like. The style of supervision is very different. There are fewer companies offshore, so the regulator can spend more time with you. We sat down with the regulator in our offshore jurisdiction, and they were willing to walk through and they were very pro business for us rather than trying to halt business. As for the form or plan of reinsurance, there's some flexibility in there again because you're not onshore and restricted to pure risk transfer regulations and the structure of the reinsurance program.

Ceding companies pick up better pricing through offshore reinsurance. The ceding companies probably will say, "Now that you showed us that example, give us some of that." So some of the savings are being passed back, and there's typically a better deal to be had by the ceding company. There is a lower overall tax burden. If you have a block of annuities out there, you may be paying \$20 million in corporate taxes, but when you reinsure that business, it might cost you \$1 or \$2 million of federal excise tax but overall, you're ahead. So it's a win-win financial situation for the reinsurer and the ceding company.

Some potential supplementary benefits are: (1) confidentiality (being offshore it may allow another level of confidentiality), (2) speed of placement (onshore you must get regulatory approval on both ends; you don't necessarily need it on the offshore end so it may be faster), and (3) depending on where you are, if your onshore is say in Japan

or a country that's in economic turmoil, you have less sovereign risk. So we see the benefits of ceding from the perspective of the reinsurance entity and the ceding company. The ceding company will probably have some questions and concerns such as: How are the domestic regulators going to treat the offshore reinsurance? What kind of regulation exists offshore (again this is all pointing to security)? What special concerns will the IRS have? From the domestic regulator view, there are a couple of things that the NAIC talks about that would address this. It doesn't attempt to regulate offshore entities. They're not in its jurisdiction. But in terms of credit for reinsurance, the focus is again on security. The model regulation on life and health reinsurance again doesn't make any distinction between onshore versus offshore.

In terms of offshore regulation from the accounting viewpoint, there are no statutory reserves. The assumptions aren't specified, the RBC is smaller, and start-up capital is minimal. So what about the security if you're on the ceding side? Well, you can make your transaction a non-cash transaction. The ceding company can withhold part of the premium, and the assets can be held in trust. You can put restrictions on the type of investments, how often you can withdraw, letters of credit, and trustee surplus. There is an interesting concept that exists in the Cayman Islands. It's the only jurisdiction offshore that has such a thing. It is on the individual side, but something along these lines can possibly be applied on the reinsurance side. It's called a segregated portfolio company (SPC), and basically an individual can have, in a sense, their own company within your company by purchasing a policy. It permits the flexibility in allocating capital between what is truly the core business and individual SPC. Creditors only have access to that one individual cell, not the remainder of the company.

Who's entering into offshore reinsurance? I was going to list a bunch of names, but I talked to a few reinsurers, and they said that they really didn't want their names mentioned, so this is a big mystery. I'm sure you would've heard of a number of them. Then there are newer entrants coming into this marketplace, and it's very dependent on the sub-segment to the market. It is also dependent on the plan and whether it's life or annuity or health. The form or plan or structure of the reinsurance makes a difference. Again, some of these P&C type entities may be crossing over into the life area. They've been doing it since the mid-1990s, and it's expected to continue, but possibly not in South America. How do you do it? They're either subsidiaries or branches or partnerships, or you can have an independent company. As I mentioned, there were a couple of IPOs back in 1998. These are companies that are really doing business in that country versus a captive. This will be U.S. reinsurers, or on the direct-writer side, non-U.S. direct writers. Basically these are shops that have two or three people or maybe none, and they're just for convenience.

In terms of the captive, let me just quickly read the strict definition here. A captive is a company whose charter permits it to offer insurance to its parent or sister subsidiaries in return for premiums. It is usually located offshore for tax reasons. There are a few out there, but basically they are likely to be subsidiaries of existing companies or a branch. So there is faster incorporation and licensing just because it's not a brand new company. There are also reduced capital requirements because it's part of the same group entity, and there's greater flexibility in the capital structure. This is because it's either a subsidiary or a branch, so it can make use of the other capital within the group. Again, you'll probably have more flexibility. You're investing because you can

probably take some assets or view things and diversify total book portfolio. Increased flexibility and product offerings for the whole entity gives greater dividends. This is important for the parent. What is a reserve at the captive level becomes an insurance cost at the parent level, so you convert a reserve to an expense item. There are lower expenses again because if you are a whole group and this is just a branch, you don't have to staff it with IT people or marketing people. You can have a limited staff there.

My advice to companies that want to enter into it is be clear on what competencies are and what your entity has. Do you have asset or product management competencies or operational or IT efficiencies? You should be developing options for both organic, internal, and acquisition-oriented development. You can't really dabble or expect a quick hit. You have to be patient. These types of deals take a fair bit of time to totally close. In addition, you pretty much have to acknowledge all offshore jurisdictions, not just the one that you're in. Take into account various ceding company marketplaces not just one country. There's a whole world out there. When choosing a domicile, take into consideration the regulatory burden. How extensive are the corporate taxes? How extensive are the reserving requirements? Other considerations include the stability of the economy and politics and reputation. Don't go to a domicile that's renowned for money laundering and being an illegal environment. If there is a dispute, what type of law is currently being used? Hopefully, it is common law, which is something that has a worldwide standard. Finally, look for availability of people to look after the business.