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Investing within Developing Countries—A Caribbean Case Study

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Moderator: MICHELLE CHONG TAI-BELL
Panelists: STEPHEN M. C. ALLEYNE
DAISY M. MCFARLANE-COKE
A. CLAUDE MUSAIB-ALI
Recorder: MICHELLE CHONG TAI-BELL

Summary: This panel discussion addresses the following issues:

- *Prevailing economic scenario*
- *Financing economic growth*
  - *–Government policies*
  - *–Role of the insurance/pension industry*
  - *–Role of the actuary*
- *Investment strategies*
- *Risk management*

Ms. Michelle Chong Tai-Bell: I would like to introduce the panel. We are all actuaries, resident and practicing in the Caribbean and are all members of the SOA. I'm corporate actuary and executive director responsible for the long-term insurance strategic business unit of the Maritime Financial Group in Trinidad. Maritime is a 100% locally owned stock company that began its operations in Trinidad in the early 1960s as a branch of the canadian company Maritime Life Assurance of Halifax, Nova Scotia.

Our Jamaican panelist, Daisy McFarlane-Coke, is a consulting actuary at Coke & Asssociates in Kingston, Jamaica. She studied mathematics at the University of the

West Indies and statistics at Oxford University. Daisy received actuarial training while attached to the Government Actuaries Department in the United Kingdom and has worked as government actuary in Jamaica's Ministry of Finance. Past positions include vice president, investment and actuarial, at the Jamaica Mutual Life Assurance Society and deputy chairperson of the National Hotels and Properties Board, which succeeded in divesting 14 government-owned hotels. She currently serves on the boards of the National Insurance Fund, a Merchant Bank, and a development bank. Daisy, a fellow of the Institute of Actuaries of the U.K. and an Associate of the SOA, is current president of the Caribbean Actuarial Association.

Stephen Alleyne is director and vice president, actuarial, at Life of Barbados, responsible for all actuarial aspects of the company's operations, corporate analysis and planning, underwriting and policy issue, claims administration, and reinsurance. Since 1990, he has been the consulting actuary for the Central Bank of Barbados pension scheme. Stephen is a fellow of the Scottish SOA. Since 1991, Stephen has been a member of the Executive Council of the Caribbean Actuarial Association.

Claude Musaib-Ali is managing director of Colonial Life Insurance Company, the largest insurance company registered in Trinidad and Tobago. He has held the position of chairman of Trinidad's National Insurance Board, is current Chairman of our Home Mortgage Bank, and has held actuarial positions at the Wyatt Company, Bacon Woodrow & De Souza, and Travelers. Claude is an alumnus of my alma mater, the University of Western Ontario in London, Ontario, where he obtained his master's degree in mathematics. He's a Fellow of the Society of Actuaries (FSA), and a Fellow of the Canadian Institute of Actuaries (FCIA).

In this panel discussion our presenters will attempt to paint a picture of the environment within which investment takes place in the developing economies of the Caribbean. They will deal with the economic and, to some degree, political issues, (which in our economies, are two sides of the same coin) that shape investment strategy and investment decisions. They will give their views on the appropriate role of the local pension and insurance industries as well as foreign investment in financing economic growth. Above all, they will share their views and personal experiences on the unique role that the actuary must play in the scenarios that they describe.

Ms. Daisy M. McFarlane-Coke: I am probably a little more typical in that I'm more the sort of stolid, heavyweight Jamaican mother, the kind of person who, in our difficult economic times, would have taken on the world with no foreign language. The economy was difficult. Foreign exchange was hard to come by. Exports were suffering. We needed the imports. So that breed of Jamaican and Guyanese took on the world, sailed through Haiti, through Puerto Rico, down to Curaçao, across Panama and developed what is now called the underground economy. Sometimes they say the other economy.

Now, about these people who occupy the Caribbean Islands: an important thing to understand is that when you live on an island, a small island, you look across. You travel a lot. Our migration was for many reasons. It included migration for education and migration for work. Some of these influences came back with our workers or with our students, so you'll find in our economies, certainly those of the English-speaking Caribbean, that the labor is very well organized. The unions are very strong. They, in fact, are affiliated with unions outside of the region.

They understand things like tax incentives. They understand things like the World Trade Organization (WTO). They understand that the North American Free Trade Agreement (NAFTA) has passed us by. They also understand that there's a new world out there for which they have to be quickly trained. They also understand that we have a shortage of resources, but our important resource, we still think, is our people. This kind of education has meant that we are still net importers of actuaries, though we are net exporters—and the Canadians will remember this—of professionals like doctors, nurses, teachers.

Now, we share some things too, in that we not only organize the sports, we also organize our own university, which now has a campus in three countries. It started out in Jamaica, where medicine was the first faculty, and I think Jamaica, being the largest island, had the biggest source of clinical material, and that's the accident that made the university start there. There now is a campus in Trinidad whose primary, single course that the others do not duplicate is engineering and one in Cave Hill, Barbados, which houses the faculty of law. Mathematics, which you are interested in, is offered on all three campuses.

We have regional employer associations which started off, first of all, being specific groups for our products, like sugar, like citrus, like coconuts. Then we got organized because we discovered that in order to market abroad, it made sense to be organized. So, you find, for example, those of you who are listening to what we are complaining about from this part of the world, that on things like our sugar, we've combined with African and Pacific countries to secure that (ACP) LOME Convention. Whenever you hear about our striving to get good prices for our sugar and our bananas, please remember that you know some of the people whose futures are connected with this, and that the people at Chiquita are not the only people who have a call on us as neighbors.

Now, in our various countries the payroll taxes begin to look alike. These are imposed by needs of the moment. For example, in Trinidad there is an unemployment levy. In Barbados, unemployment's a part of the social security program. When you go to Jamaica, housing is a significant problem. So there is a housing contribution, which is financed by employers and employees. All these countries have funded social security schemes, and it's very interesting to discover that funded schemes are now being recommended. When we began ours, there were many people who told us that these funds were going to get so large that we would not be able to take the hands of our government officials out of the coffers of the social security funds. In any case, funding social security schemes was a means of increasing inflation. Perhaps we have a few things to teach or could suggest from our experience in funded schemes.

In terms of what we do for a living, apart from Trinidad, which has a significant oil and petrochemical industry, Jamaica and Guyana have bauxite. Barbados has managed to be the envy of all of us because without these kinds of resources it, in fact, has a higher per capita income than the rest of us. Agriculture, with traditional products like sugar, bananas, and so on, continues to be important, though, of course, these are now playing second best to tourism and, to a certain extent, services. We have learned to wake up to the fact that it's not enough to produce a pretty; we have to learn to sell it. We have to learn to advertise it, and we have to learn to make sure that it comes out without anything on the skin, even though you probably know that the things on the outside of a banana never really get underneath. When you unzip a banana, you have a perfect banana. But if the outside is not pretty, the people are not going to buy it.

Now, back to what happens in terms of institutions, which are currently at home. Credit unions are there. In Barbados, Trinidad, Jamaica, and Guyana, we have mutual companies that are over 140 years old and have survived all that time thanks to the prudence of the founding fathers and the guidance of actuaries out of the U.K. Just after independence in most of these territories there was an attempt by the government to do something about developing capital markets, not allowing the market to evolve but deliberately ensuring that appropriate institutions were established.

So, for example, you find that the first time there was a unit trust, it was a government unit trust. Years later there are many unit trusts. The mortgage bank was a device of our government. The reinsurance company was an institution developed through special government effort. Merchant banks developed out of private enterprise. The commercial banks came out of attempts by the government to recommend to mainly Canadian banks that they should establish local subsidiaries rather than maintain them at a branch office level, and something similar happened for the insurance companies. Things like the effect of bilateral and multilateral flows from the World Bank and development banks in Europe, ensured that funds flew through things like the Caribbean Development Bank (CDB), which is funded by Canada and Venezuela, and the Inter American Development Bank (IADB), which you know about. These have found means of funding local institutions in their efforts to try and develop the equity market and the capital market. Our rare problem, of course, is that our stock markets, which are quite young, have not grown to satisfy the needs of the savers. Savings are mobilized through the same vehicles, as you know; the most significant is through life insurance companies.

We have some institutions created artificially, you might say, by government effort. It meant we had to have people trained, and during the development we didn’t really try to invent the wheel. We took advantage of our Commonwealth links, and we took advantage of technical aid. We thrashed them out and ensured that we were capable of operating the institutions that were born. The peculiar problem, of course, arose that we had institutions first and then regulatory framework after. So, in fact, we are just now getting a whole gamut of the financial service sector organization properly regulated. Insurance acts were early on the scene. For most countries, that meant that pensions were regulated, but, generally speaking, the regime for pension funds came through tax incentives for savings, both on investment of the funds and the contributions by the employees and the employers. Outside of the public sector, the pension funds were contributory. Deposit insurance exists in Trinidad. This is only now being discussed in Jamaica.

Now I come to something practical. What do you do when the funds begin to pile up? You have a responsibility, as actuaries and as persons responsible for the long-term finance and also for the current development of the capital market. What do we do about investing in our kind of scenario? I want to give you a practical example of something we had to do and have continued to do. Flows from outside of the region are very careful about the type of investments in which they are put. The tourism sector has, for a long time, been identified as an important sector in the economy, important not only for the employment, directly and indirectly, which tourism supports, but also for the foreign exchange in-flows, which tourism has the ability to bring into the country. Remember that, outside of Trinidad, we are talking about economies with a lot of people, with heavy imports of necessities like drugs, meat, milk, as well as capital goods.

What happened was that the development of the hotels that happened in the 1960s occurred mainly through investment from countries and companies supported by guarantees of the government. In the 1970s in Jamaica, this came about through our dealings with Castro. We were told that we were flirting (I think that was the correct terminology) with communism. We saw the flight of a number of the people who had funded our hotels. I was on the board of a company called National Hotels and Properties, which owned 14 hotels. Overnight, the government owned 14 hotels because the government had guaranteed loans on the hotels, and tourism was down, the income was not happening, and people felt that Jamaica was not a nice place to come to. Therefore, the people who were operating the hotels handed the keys to the government and disappeared.

We were then faced with the problem that unemployment was looming. We had these hotels which, by now, were run-down, and we needed to do something about opening them up, maintaining them, and ensuring that we had occupancies. The business of enticing people back to that part of the Caribbean is easy to do because you diversify. You go to Europe, and you cease only going for a winter trade. You try to get the business to go all year-round. Those sort of strategies are easy to do, but our problem was how do we make those hotels attractive?

What we, in fact, did—had to do, because no help was coming from the budget—was what I think in North America you'd call a rent sale. Well, when properties can't sell, the people who rent get part of that towards the purchase price. What we had to do was negotiate with proper operators of hotels with a good track record, to come in with upfront refurbishing money and take it off the guaranteed rent, which we would get. We hoped that by filling the hotel we would end up getting some of the participatory rent. The typical project was such that there was a guaranteed rent. You then had participation in the profits according to some formula. We did this for about eight hotels, and we had the four largest ones left.

So we got the larger pension funds and the investment managers of all the insurance companies together in a room in one of these very derelict hotels, on the top floor, to be exact. We felt that there was a future in tourism and that was an important industry for the country. The savings of the country should be invested in the cement, the steel, and the blocks that provided tourism. We should no longer consider that we were passing through as other investors had done. We had the feeling they were going to throw us through the window of this high-rise hotel, because they thought we were brash to be suggesting that pension funds and insurance funds should be invested in something as risky as tourism.

To make a long story short, what eventually happened was we got a group of the larger insurance companies and the bigger pension funds to do consortium funding to, in fact, purchase those hotels. One couldn't help but smile for the next two or three years when you read the annual reports of these companies; they boasted about their investments in tourism. So I suppose it made sense to have confronted them, and it probably made sense not to have considered the risk of actually confronting them.

We now are at a further stage where divestment is very popular. It's what is recommended by the people from whom we have borrowed money to fund a lot of our infrastructure. Therefore, any large project which is going to happen now, it seems, has to be funded by equity, which comes locally or by loans locally and/or a combination of those two. It is easier now because insurance companies are no longer competing with each other in that sense. Once upon a time, when projects were presented to you, the person would say that if you would not fund it, they would opt to go to Company X down the road.

Nowadays large projects are, in fact, put together in consortium fashion, and we find things like the National Insurance Fund, as well as the larger insurance companies and a number of the older pension fund trustees, participating in this sort of venture. It actually brings something that's important, I think, in that people are now beginning to feel that they own a part of the country. We now experience clamoring for discount rates for workers at the hotels in the off-season. In fact, some people have seen the advantage of doing that because the next stage in development is when you tell your workers that they, too, ought to have a holiday at home rather than thinking of coming to Disneyland.

Ms. Chong Tai-Bell: Stephen will discuss the environment for foreign investment within the Caribbean.

Mr. Stephen M. C. Alleyne: In my presentation I am going to deal with the question of economic growth as a function of investment. If there's one thing we know about economic development, it is that investment must increase relative to consumption as a proportion of the national income in order for growth to occur. As such, investment is the engine of growth, and that is the perspective that I am going to bring to my short discussion here. Now, to explore this connection I'm first going to define the Caribbean area that I'm going to be dealing with. Then, because much of the Caribbean's economic growth has been funded on foreign investment, we're going to have a look at the sources of that investment in the past and the circumstances which surrounded that investment. Finally, we are going to look at the forms that this investment has taken, along with the policy environments in which investment has occurred.

So where is the Caribbean? Daisy was quite certain that you all knew where it was, and I'm not going to embarrass you by asking you to define it. I'm just going to give you a few outlines. Geographically, the Caribbean is an archipelago. It's a sea of small islands numbering about 150 and stretching from the southern coast of Florida to the right in a wide arc about 2,500 miles long to the northeastern coast of Venezuela on the South American mainland. So that is the geographical area we're talking about. Generally, when one about the Caribbean, one also includes the country of Guyana, which is a former British colony in South America. So I am also going to be considering Guyana in my discussion.

The islands themselves vary quite widely in size. They occupy a total area of about 90,000 square miles, and they have in them about 30 million souls. Now, these souls live in an area which is probably the most politically fragmented anywhere in the world. There are a multiplicity of sovereign states within the region and many more separate units in the smaller islands, each of varying degrees of self-government. Now, because of that diversity I'm going to concentrate in the main islands which comprise what is called the Caribbean Community or Caricom. There are 13, all English-speaking, and their population is about five million. I'm going to draw from time to time on specific examples from that group, from some of the more developed countries, which happen to be represented here—Jamaica, Trinidad, and Barbados.

Historically, these economies have been agriculturally based, sugar being the main component. About one-quarter of the world's output of sugar comes from the Caribbean, but, as Daisy pointed out, there has been diversification into a number of other crops, bananas, and the like. There has also been diversification into manufacturing, into industry, and, of course, tourism and other service industries. Now, this diversification has been hampered by the absence of raw materials in most of the islands, by the shortage of skilled workers, and also by the limited capacity of the domestic markets, although exploitation of raw materials has been a feature of the Trinidadian economy, with oil and petrochemicals and bauxite in Jamaica. So tourism is a factor of major importance in the economies of most of the Caribbean islands, and it's traditionally ranked with Hawaii—as the holiday paradise of Americans and Canadians. It's probably in this context that you are most familiar with the area, but we hope to give you a different picture by the end of this session.

So what has been the history of foreign investment flows into the Caribbean? In reviewing investment, it is very desirable to look at foreign as opposed to domestic investment, and it is that tack, the foreign angle, that I'm going to look at first and try to put myself in the shoes of the foreign investor who is interested in investing in the Caribbean.

The first thing that we need to be aware of is that for most of the decade of the 1980s, since 1982 when the international debt crisis had its origins, and for the early part of the 1990s, most developing countries, and the Caribbean was no exception, actually experienced a large and sustained decline in the level of foreign investment. International banks during this period adopted quite defensive stances. International donor governments imposed leaner budgets, and later in this period, as you know, the countries of Eastern Europe proved to be very voracious consumers of capital. Official flows did not expand adequately. Export credits were negative. And the large debt-servicing burdens which faced the Caribbean countries meant that the perverse situation existed where there was, in fact, a net transfer of resources away from developing countries in the Caribbean into the developed countries. In short, the Caribbean was, in fact, investing in the developed world. So it's a little known fact not recognized by many analysts that, in fact, the current economic recovery experience in the U.S. was, in fact, due to Caribbean investment. So there you have it.

More seriously, economic adjustment pressures and preservation of consumption level meant that there was a decline in domestic savings and a decline in foreign investment, and so—I think this is important to bear in mind—the overall effect was that the growth rates in the Caribbean region declined and, to some extent, became negative.

Well, the happy news is that as the decade of the 1990s has grown older, some of these trends have been reversed. In this new age, though, the turnaround has not been uniform, and some countries have done much better than others. Among the developing countries the darlings have been China, Mexico, Brazil, and Chile especially, and the countries of Southeast Asia. In the Caribbean, Trinidad and Barbados have been successful in reenergizing those capital flows; Jamaica and Guyana have been less so as they struggle with large accumulated debt burdens.

You may ask, why is foreign investment needed in the Caribbean anyway? Well, in economic terms foreign investment is required to fund the resource gap between imports and exports and the part of the gap that is not funded by domestic savings. To put it another way, foreign investment is needed when the level of domestic savings or level of imports is not sufficient to support the target levels of growth. So you can regard it as a supplement linked to the government strategies of creating certain levels of growth.

What have been the main sources of investment into the Caribbean area? Well, there are four main categories of investment that the Caribbean has experienced in recent times. The first is what is called overseas official development finance. The second is export credit. The third I would describe as direct investment. And the last one is international bank and other private lending, that is, official development finance, export credit, direct investment, and international bank and other private lending. Now, the proportions and size of these various elements have varied markedly from year to year. During the period that I described earlier, the period of the 1980s and early 1990s, official development finance comprised a vast majority of the foreign investment in the Caribbean area; in some years it exceeded 100% because the contribution from the other areas was, in fact, negative.

So if you want to understand investment into the Caribbean area from abroad, you really have to make sure that we understand characteristics of this official development finance because there's a clear, positive correlation between the flow of that finance, official finance, and that of private foreign investment. Now, official development finance (ODF) is divided into two categories: development assistance, where the finance is provided in a concessional manner and at concessional rates, and nonconcessional ODF, which is provided at commercial terms and rates. Each of these investments come in the form of either bilateral or multilateral assistance. ODF will typically be used by governments to fund noncommercial or infrastructural projects, projects which may not have an immediate return or which are easily quantifiable in terms of dollars and cents: examples are the building of a road into an area which was previously undeveloped or a school or a medical facility. These are projects that have clear social benefits and are clearly desirable but which are not capable of demonstration of a rate of return in the same circle that other investments are.

Now, the bilateral flows are flows from country to country as opposed to from financial institutions. Typically, bilateral flows are a function of political, strategic, and commercial interests. You probably don't have to dig very deep to figure out that not much of this year's U.S. budget is going to go to Cuba. The actual quantum of official development finance is a function of the donor country's perception of the appropriate relationship between the overseas development finance and its entire GNP. The U.N. had noted a figure for that ratio of 0.7%, but, unfortunately, it was not bought into by the majority of the donor countries. Very few of the major donors approached this percentage. The Scandinavian countries and the Arab countries did, but they did not comprise a very large portion of development finance into the Caribbean.

Now, as Daisy alluded to, a shift away from the Caribbean is very evident in the distribution of multilateral sources of official development finance. The main criterium used for judging accessibility to this finance is that of per capita income, and, judged by this criterium, the commonwealth Caribbean fares very poorly, or well, depending on which way you're looking at it. It is very likely that in the near future alternative sources of funding are going to have to be sought. Caribbean governments, while looking for these sources, would argue that the size of Caribbean economies poses severe limitations on the economies of scale that they can foster and the degrees of structural transformation that they can achieve without concessional assistance—whether anyone is listening is a moot point. All of this points to an increased and increasing reliance on private foreign investment flows into the Caribbean in the future.

What are the factors which are likely to influence this flow of foreign investment? There are several factors, and most of them contribute to the market's perception of a country's creditworthiness, its likely growth, and its export potential.

There are issues such as the political stability of the countries of the Caribbean, their pattern of economic growth, their financial stability, and exchange controls governing imports and remittances, the level of their exchange rate and whether it is a realistic one vis-à-vis the U.S. dollar, and the strong domestic savings and investment environment. These are factors which are all going to contribute to the volume of flows into the Caribbean. At the end, the question being addressed is what is the scope of profit?

Caribbean countries have, however, been able to take advantage of the fact that foreign investors are not homogeneous in their requirements. Mining and oil companies are influenced by world market conditions and local raw material availability, as well as the specific contractual and tax regimes applicable in the sector. So Trinidad has taken such good advantage of this confluence of circumstances that the oil and the petrochemical industries have consistently provided more than one-quarter of that country's gross domestic product (GDP), most of it fueled by foreign investment.

Export-oriented manufacturers, on the other hand, would largely be concerned with labor costs and productivity. The countries of the commonwealth Caribbean, of the Caribbean community, have considerable potential in this sector, especially in relation to skill-intensive exports, given those islands' relatively high standards of education. Barbados has long prided itself on its 98% literacy rate, which compares favorably with any country in the world.

What are the main policy tools that a foreign investor will need to be aware of as they're applied by Caribbean governments? The first main element of the macroeconomic policy is the country's monetary policy, which is largely concerned with cost and availability of credit. The aim here is to affect the demand for goods and services in the country and to impact, thereby, on the balance of payments. The other element of the macroeconomic policy, which is of significance to the investors, is the government's fiscal policy. What is the effect of the government spending and borrowing policies on the economy? These two policies must be coordinated, and the investor will be looking for an overall anti-inflation bias, which allows for the achievement of appropriate real rates of interest.

The investor also will be concerned with the exchange rate policy. Are exchange rates allowed to be sensitive to market forces, or are they managed by the government? Trinidad, I think, is a good example of a country that has allowed a floating exchange rate to, in effect, define the competitiveness of the industries within that country, and I think that the trade or balance of payments, which Trinidad has seen, or the adjustment in those, is a true testimony to the importance of this policy.

The level, type, and structure of taxation which applies in the Caribbean economy is being considered. A foreign investor will be particularly interested in any concessions that would be granted for operating in that environment. Finally, does the regulatory framework allow adequate and prudent regulatory and supervisory systems to operate, to ensure the viability and the security of the investment? All of these policies must coalesce in medium-term national plans, which are based on a consensus of wages, prices, and productivity, and that consensus must be bought into by business, by labor, and by government, if the policies that you see in place are to be sustained.

Let's look for a while at the various forms of private foreign investment that have been achieved within the Caribbean. There are many forms that don't involve equity investment in the conventional sense but, nevertheless, ensure that—in different ways—returns from financial flows and contractual obligations return to financial investors, the foreign investors related to project performance. In the oil sector, for instance, there are arrangements which involve production or revenue sharing, as well as service contracts and concessions. In other sectors like manufacturing, agriculture, and tourism, there exist licensing arrangements, technologies, management contracts for marketing or engineering, and franchise arrangements relating payments to results. Joint ventures also offer a variety of possibilities for combining foreign, local, private, and government equity and, by incorporation of local partners, perhaps offering some assurance against political and economic risk.

A feature of note in the generation of foreign flows into developing countries in recent years has been the growing amount of portfolio investment in emerging stock markets, particularly in the Asian and developing countries. The main reason for this has been the growth in the number and size of the country-specific or multicultural funds based on the major stock exchanges of developed countries. Country-specific funds exist in Brazil, China, Korea, Taiwan, Portugal, and Mexico. Now, as the stock exchanges of the Caribbean develop, it is conceivable that portfolio investment in these stock exchanges will prove a valuable avenue through which investment in the Caribbean can be achieved. There are presently, as Daisy points out, three stock exchanges in the Caribbean—in Jamaica, Trinidad, and Barbados. Currently, they individually suffer from a lack of critical mass. The size of the participating economies is probably insufficient to create efficient, viable markets. However, if Singapore, with a population of three million, can develop a vibrant stock exchange capable of attracting the foreign investor, then it is just possible that in the greater stock markets of the region—perhaps coupled with those to be developed in Guyana, the other islands of the Caribbean and the Bahamas, with a population of five million and with natural resources in this region far exceeding those of Singapore—the appropriate critical mass could be created for a viable stock exchange operation.

The real value that will accrue for the Caribbean from the stock exchange is not necessarily the source of new capital, because a vast proportion of new investment in most economies derives not necessarily from issues on the stock exchange but from the retained earnings of commercial banks and from corporate bonds. The critical importance of the stock exchange is that it sustains the liquidity of millions of dollars worth of common stock which is issued. It also confirms the ability of firms to use retained earnings because of the fact the shareholders are willing to forego current dividends as they look towards capital gains that are implicit in a vibrant stock market. In the Caribbean context it is also arguable that an integrated stock exchange would have very significant, positive influences for economic integration in a wider and trade sense.

What is the actuary's role in all of this? The fundamental role played by the actuary in the question of foreign investment is no different than that he or she plays in any other environment: assessment of risk, matching of asset to liabilities across a range of parameters, etc. Caribbean actuaries or actuaries operating in the Caribbean are increasingly appealing to risk-based measures of capital adequacy to assist in their investment review. One additional dimension, though, is that actuaries in the developing country context are generally required to be aware of a vast spectrum of factors, all of which could conceivably impact on the investment decision. Markets and financial behavior do not always conform to the same patterns and principles that are obtained in more sophisticated markets, and it's important for the actuary to ensure that he or she is aware of the main drivers that can affect the investment decision.

Ms. Chong Tai-Bell: Our final presenter, Claude, will give his perspective of investing from the point of view of a local company seeking to fund its liabilities. He brings to us actuarial experience, combined with executive management experience, within a company that is involved in ventures from malls to Guyanese timber, to hotels in Barbados, to banks, and their most controversial and probably most profitable venture, a methanol company in Trinidad.

Mr. A. Claude Musaib-Ali: I don't think I'll get into that bit about the Caribbean—by now I guess everyone knows where the Caribbean is—but I want to say something about Trinidad and Tobago because this country is different in a number of ways. It consists of the southernmost islands in the chain of islands. It's just about seven miles outside South America near Venezuela. The population is very cosmopolitan, a mixture of people of African descent and Indian descent, with a small European and Chinese group. I think the most significant thing for the future is that because we sit so close to South America, there is a significant move, to get people in Trinidad and Tobago to look south. So we think of NAFTA. There is a big push to get everyone to learn to speak Spanish. Our manufacturers and industrialists are encouraged to go south, think more south than north, and that's a very important factor in the development and how it's going to impact the development of Trinidad and Tobago.

However, in order to appreciate the scope of investment opportunities in the Caribbean, it is useful to briefly look at the political and economic background of the countries and the region. As a consequence of our British colonial past, the English-speaking countries of the Caribbean all have stable, democratically elected, independent governments. These countries have maintained a Westminster style of parliament with an English legal system, and they still rely on the Privy Council in England as their final court. Practically all these countries gained their political independence in the 1960s, a period characterized by the cold war between America and the Soviet Union and during which we enjoyed relatively favorable trade and financial concessions and an incentive to remain loyal to the democratic and capitalistic ideals of the U.S.

However, the end of the cold war has diminished the importance of the Caribbean from a geopolitical standpoint and has also coincided with the establishment of major trading blocs in all regions of the world. This signals a major challenge for countries in the Caribbean region that have enjoyed for many years preferential trade privileges and, in many instances on a nonreciprocal basis, an access to financial capital for infrastructural development at concessional terms. It means the special treatment is no longer available in some cases, and for others it is fast coming to an end. Countries would therefore have to make their way in the international marketplace on terms that give no special favors.

How have we risen to this challenge, or how would we rise to a challenge of change in the international environment? What has Trinidad and Tobago done to increase investment activity in the country, and how successful has it been? Following political independence, many countries pursued economic policies that included import substitution supported by high tariff barriers and state ownership of important sectors of the economy. In Trinidad and Tobago the government assumed ownership of companies operating in the petroleum sector and in the sugar industry, the country's two main foreign exchange earners. The ability to earn foreign exchange on a steady basis is critical to the survival of these small economies. However, about ten years ago, there was a dramatic and fundamental shift in government policy. The government started a privatization process and began divesting itself of many of the state-owned companies. By and large, some of these enterprises were unprofitable and thus represented a drain on government's financial resources. Concurrent with this there was a determined and concerted effort to implement other measures which would place the country on a sound macroeconomic basis with a view to achieving fiscal surpluses, lower rates of inflation, and sustained positive economic growth. However, this was not entirely painless for many groups in the society who had to bear the burden of readjustment through loss of jobs or reduction in real income.

However, the results in Trinidad and Tobago in the recent past have been encouraging. They have experienced a real growth of 5.1% in 1994 and 1.9% in 1995, and inflation has been steadily declining from 8.8% in 1994 to 5.3% in 1995, and it's projected that it will be 3.5% in 1996. As part of this policy of financial liberalization and in the hope of making the country more attractive to external or foreign investors, exchange controls were removed in 1993. The Trinidad and Tobago dollar floated, and restrictions on holding foreign-denominated accounts were removed. In addition, there are also no oppressive restrictions by international standards on repatriation of capital or profits, and the trend of taxation has been downward both on corporation earnings and on individual incomes.

These reforms and policy initiatives were also undertaken as preparation to an application to join NAFTA, and to serve to bolster investor confidence in the country. Membership in NAFTA was considered important because of the access it gives a country to the U.S. market on a duty-free basis in sectors where the country can be competitive probably due to some sort of comparative advantage, notwithstanding that it was on a reciprocal basis.

Trinidad and Tobago realizes that in an era of globalization of production and the elimination of tariffs, it has to be an active player in the global network if it is to remain on a growth path. To be successful, though, a number of issues must be addressed. What is the current size of the savings pool? Is it adequate for the level of investment required to sustain the desired economic growth? To what extent do we need foreign capital? In fact, who does need foreign capital? Savers are important in this situation. There is a Caricom, a Caribbean committee on saving, that is looking at how to improve the level of savings in the Caribbean.

There's something peculiar about saving in the Caribbean. There's both a formal and informal, or the voluntary and the forced systems of savings. The formal is through bonds or through your typical type of investments. The informal is through networks in the countries. In Trinidad we have something called a sou-sou where people get together, and they save on a small scale. They meet certain objectives.

It may be as simple as accumulating funds to build a home, but it is outside the formal banking system or savings network.

As for forced savings, as was mentioned by Daisy, we do have national insurance schemes, which are on a funded or partially funded basis. These had been a deliberate policy of the framers of the national insurance laws to serve as a means of accumulating capital to meet the development needs of the country at the time, and, fortunately, it has worked out quite well for us. So there is an element of forced savings as well.

Another contributor to the savings pool in a small economy such as ours, or I guess in any small economy, is the extent to which government is a major earner of foreign exchange. A portion of that foreign exchange can be set aside as savings for future development and future investment.

It is the view of some economists that investment of about 25–30% of the GDP is needed to sustain a reasonable rate of growth in the economy or any economy. In Trinidad and Tobago the gross national savings rate has increased from 18.9% of GDP in 1994 to 22.5% in 1995, and gross capital formation or long-term investment as a percentage of GDP moved from 14.4% in 1994 to 18.8% in 1995. Therefore, investment from local sources is not sufficient to generate a reasonable or 6–10% rate of GDP growth. It is interesting to note that Southeast Asian countries, which have maintained high growth rates over the past 15–20 years, have been supported by high rates of investment in productive, export-oriented activities. Because of the low rate of local formal investment, it has been necessary to attract foreign investment to boost the rate of growth of the economy, and the macroeconomic policies, as well as the financial and other legal and regulatory measures, are designed to give confidence to foreign investors and thus attract foreign investment.

As was mentioned earlier, the country was being made ready for NAFTA, so that, for example, a number of pieces of legislation dealing with governing the financial sector have already been put in place or are about to be put in place. So there is a Financial Institution Act. They’re going to revise the Insurance Act. There is an SEC on the table and a number of different pieces of things to give some sort of comfort to foreign investors. However because of the absence of a significant stock exchange and as a consequence of an underdeveloped capital market, opportunities for significant portfolio investment for any investor, both local and foreign, are very limited. So the form of equity investment that seems most likely is direct investment in plant and equipment in an industry that has significant export orientation.

What has been the experience with direct investment flows to Trinidad and Tobago? Trinidad and Tobago is fortunate to have considerable amounts of natural gas and oil, and this sector has been the major recipient of direct equity foreign investment. Many major U.S. and British oil companies are heavily invested in Trinidad and Tobago, and new equity investments are proposed in the area of oil exploration and production, and liquid natural gas production. Activities in steel and iron production are also expected in 1998. A new methanol plant, two ammonia plants, an ethylene plant, and an aluminum smelter are also on-stream. What is noteworthy about these projects is that they will use natural gas as a feedstock or as fuel.

There's also the potential for the development of downstream industries with value-added features. The exports of Trinidad and Tobago are mainly commodities—methanol, oil, fertilizers, sugar—which are sold to bulk purchasers for further refinement or transformation into other products. Ideally, there exists a potential for carrying out these transformation-type activities locally to produce products which are closer to the consumer or the user. Despite these apparent opportunities, it may come as a surprise to you to learn that the local private sector investors play a very small role in this important sector—the petrochemical sector of the economy.

Historically, it has been the government that has been involved, and that's partly because the investments required are huge and also involve a certain amount of risk. Pension funds and life insurance companies confine investment of their policyholders' funds in assets which meet certain strict criteria as required by the Insurance Act and which exclude start-ups or green-field-type projects, except in special circumstances. For example, equity investments are restricted to listed stocks with a three-year dividend payment history. On investment in nonlisted stocks, private companies are confined to certain limits. In order to encourage investment in small private companies, the government has recently introduced legislation to promote venture capital funds and has offered generous tax incentives to investors in venture capital companies. Incentives are also being offered to encourage investment in sectors other than the petroleum sector in an attempt to diversify the economy. Sectors such as tourism and agrobusiness are being targeted.

The difficulty faced by countries whose capital markets are underdeveloped and where therefore the cost of equity capital is high, is that the chances of new industries developing are likely to be low, unless mechanisms on investment vehicles are developed to facilitate the investment by local institutional investors, such as local pension funds and life insurance companies, in the equities of these new enterprises.

I don't want to leave the impression that there aren't many successful and profitable small businesses in the Caribbean or in Trinidad and Tobago—it's quite the opposite. There are many small entrepreneurs and vibrant small businesses, but these are family owned or sole proprietorships, and for these people, control, privacy, ownership, and the ability to provide employment for family members have a greater priority than having the business publicly listed, even though it may provide cheaper workers and long-term capital. The success of venture capital funds may modify some of this thinking and change the disposition of family-owned businesses regarding the movement from private businesses to publicly listed companies.

Local institutional investors such as mutual funds, pension funds, and life insurance companies have a natural bent or inclination to publicly listed equities. So they would need to be encouraged to get into venture capital funds. For example, local companies may be allowed to participate in a closed-end venture capital fund up to a certain limit, say 5% of their fund's assets with special tax privileges. It should be noted, however, that a peculiar characteristic of venture capital funds is that they invest in firms at different stages of development, at the start-up stage or the expansion stage. Therefore, in addition to capital, what's equally important for the success of these companies is the management support in areas such as marketing, financial planning, and management. Local institutional investors may, therefore, have to consider the establishment of or alliances with management firms which will oversee the performance of the investing firms so as to increase their chances of becoming profitable.

What are the investment opportunities in small developing economies such as the Caribbean? If one is thinking along conventional lines, one would find that, apart from government securities and mortgages, there isn't much else for suitable long-term investment because listed equities are limited in supply. Therefore, local institutions which mobilize savings must get involved in the process of creating the investment opportunities because foreign institutional investors will not do it, and we are told that governments are no longer involved in business because our economies are now market driven and private sector led. That's the World Bank's new theology.

Alliances and joint ventures between local private sector investors and foreign companies seem to be an approach that may be adopted by local venture capital funds and financial institutions. However, this is not necessarily an easy path, but there may be no easier alternatives, given that governments are now out of the commercial business. We should note, however, that some hold the view that governments may have to get involved in green-field projects, which can have a significant impact on the economy and require large amounts of capital.

What is the role of the actuary in these small countries? Well, in small, developing economies, the economics are very different from those of large countries. A significant part of the national expenditure is spent on imports—food, drugs, clothing, machinery, equipment—and therefore exports and the ability to earn foreign exchange are essential to the country. The actuary's role in such an environment in which there is an almost nonexistent capital market and where investment opportunities are limited must be different than if he or she were practicing in a developed country.

The actuary not only is called upon to be more innovative and creative in the design of products but also must advise on the management of the investment risk in order to safeguard the integrity of the policyholders' funds. In these circumstances the actuary has a special responsibility to ensure that the policyholders have a full understanding of the investment risk which they're undertaking, and this, therefore, requires proper and accurate communication. The actuary may be expected to play a greater role in areas such as corporate finance and in the structuring, pricing, and negotiating financial packages for small companies in which investments are needed. This provides the opportunity to be part of a management team which is responsible for managing the firm in which the venture capital fund is invested.

Let us turn to the strategy of potential investors. The investment strategy will depend on the type of fund that is invested. The funds may be any of the following: a pension fund, a life insurance fund, a mutual fund, a small venture capital fund, or a large equity fund, an agricultural fund, and so on. As we all know, pension funds aim at long-term capital growth and may, therefore, allocate a small portion of their funds to private equity funds and venture capital funds. Private equity funds would have other large investors, and the investments of these funds would typically be less liquid and would be in unlisted companies. Life insurance funds may also participate in private equity funds and venture capital funds to a limited extent. Since venture capital funds are illiquid, there must be a clear understanding of the exit strategies, whether through repurchase of the shares by the firm founder, purchase of the shares by another party, or the acquisition of the firm by another company. In the case of mutual funds it will depend on the objectives of the fund. Is it a balanced fund? Is it a growth fund or income fund? However, the reality is that in a small economy the options are few, and therefore a balanced fund may be the most practical alternative.

Operating in capital markets which offer a limited number of instruments makes the transfer of portfolio risk almost impossible. Furthermore where investment opportunities and the scope of diversification are limited, the policyholder may have to bear a greater portion of the risk, and the funds have a greater responsibility to ensure the limitation of exposure to any one risk or investment. This can be achieved probably through consortium financing. This is an important consideration because the individual policyholder in any one of these countries is not very sophisticated in assessing investment risk.

Furthermore, as a means of giving some protection against the exchange or devaluation risk, a portion of the fund may be held in investments of a stronger currency. Just to give you an example, think of what happens throughout the Caribbean. Most countries allow the funds to invest a portion of their assets outside of the local country, the domestic country. For example, in Trinidad you are allowed to invest up to 20% of your assets in foreign investments. However, most companies do not make full use of it. When I went through the Supervisor of Insurance report, I observed that, on average, only about 17% of total assets are invested overseas.

The investment mix of the life insurance industry and pension fund plans in Trinidad and Tobago in recent years gives a fairly accurate representation of the investment preferences. Government securities are at the level of 21%, with a range of about 18–40%; mortgages comprise about 19% of the portfolio; real estate is at 10%; local equities are 13%; and local corporate bonds are about 11%. Clearly there is room for an increase in the equity component in the portfolios that are heavily weighted with fixed-income types of investments and that have no potential for capital growth.

I just want to turn for a few minutes to my own company. When Michelle asked me to be here, she said "I want you to say a few words about your own company" because we are taking the unusual step for an insurance company of getting involved in a direct investment project—in a methanol company. As I said in my address, Trinidad is essentially a petrochemical economy. I think Stephen made a point that about 25% of our economy, of our GDP, comes out of the petrochemical sector. At the time we made the decision there was a recession, which we spoke about, after 1983. Most companies at that time really had very few opportunities to make profitable investments. So we formed an alliance with a German firm, which has a lot of experience in these matters, and a Canadian firm. We funded or we became partners in developing this methanol plant, which fortunately came on stream at the right time.

At the time we started, construction prices were about $120 or $100 per ton, and by the time we were on stream the per ton prices of methanol had risen to almost $500. So we were in the fortunate position of being able to recover our investment. We felt that it was a path we had to go down, given the circumstances of the country. After we got into the investment and to limit the exposure of the policyholders' funds—some of the capital for that investment had been debt, some policyholders' funds—we repaid the policyholders' funds. We restructured the entire company so that the insurance company is reducing its exposure in real assets, and it's more into financial assets.

So we are involved in another methanol plant, but we hold a very small portion of that as a proportion of our total assets, again in order to control the risks. We are involved in other things, but it's all done through a holding company. So the insurance company took that step of getting involved but not putting up the entire investment—the entire capital that came from our group was not policyholders' funds. A portion was capital. After that was done, we restructured the entire group to reduce or diminish the extent of exposure by the company to that investment.

Now, it's a sort of chicken-and-egg situation. Ideally you would like to have a stock market where you have investments which meet all the fundamental and traditional virtues of investment—liquidity, security, etc.—but the reality of the situation is that those don't exist. So how do you get it? How do you get equities onto the market? How do you prime the pump, so to speak?

To do it, the government, the financial institutions, and the national insurance or the social security system all have a responsibility to share the risk to really develop the market, develop industries, and encourage these industries to eventually move from a private company status to a publicly listed company status so that these companies can gradually become investors in the more conventional type of equities. We believe that other companies in the area, other companies in Trinidad, would eventually have to follow that sort of path because of the shortage of investment opportunities in the country.

Ms. McFarlane-Coke: There was a little story about the financial sector in our system. The people in charge of the treasury would ask the people at the National Insurance Office what the net investable funds are likely to turn out to be that fiscal year, and they do a little arithmetic on what the insurance companies are likely to do, and then they pitch the level of the government debt. What happened was that we went through a period in which government debt was controlled so that there was no automatic investment of the national insurance (social security) funds in common debt.

So we formed a board and gave them specific instructions that they were to diversify the assets, and they were to ensure growth. If you look at the portfolio now, we have some assets that, in your language, you'd probably call a land bank. We have about five large projects that we are piggybacking on developers'/hotel operators' skills because we do not have that sort of skill. So we are joint venturing. Typically it will be about 30% of the equity and maybe 80% of loan funds through that sort of project.

At the end of the meeting I will give you a brochure on the hotel where we are going to have our Caribbean Actuarial Conference and invite you to the conference.

But that is actually funded 40% by the National Insurance Fund for equity, 80% of the loan, a bank, and a venture capital fund which is funded by all sorts of people—banks, insurance companies, pension funds, the equity holders—and the land originally came from a family. So, they, in fact, have some private sector people in it. That sort of investment means you're not only owning a property, but you're actually owning the operating company for the hotel. And if you know anything about that kind of business, that's where the money is. Jamaica currently has very high interest rates. So, we do play the tight liquidity market very well. The other things would be loans through what would have been specific quasi-government projects like light and power, the Urban Development Corporation, which is a development company that does things like develop new regions. Some of it I think you would call infrastructure. We actually loaned some money for housing, but the interest was so high that they paid us back and went and got lower financing from the National Housing Trust.

From the Floor: How do people save money?

Mr. Musaib-Ali: In Trinidad, a significant part of the savings is through pension funds and individual annuities. The working population can be divided into three groups: government workers, the formal private sector, and the self-employed informal private sector. In the formal private sector, you would find employees of large companies. Most of those people would have individual annuities because it's similar to the Individual Retirement Accounts (IRAs). So for tax reasons they would buy it. They are usually in a pension fund, a contributory pension fund, which again enjoys tax privileges like a tax relief on your contributions, a tax shelter of the investment income.

Many government workers are also buying individual annuities as a means to reduce their taxes, and in the self-employed or the informal private sector, I would say about 50% of those people are also into savings through some sort of instrument like individual annuities or unit trusts, which are mutual funds. So, overall, if it's one-third, one-third, one-third, I would say it could probably be as high as 50% of the working population.

Ms. McFarlane-Coke: I think on savings, if you start with lower-paid workers, for example, they would really belong to a credit union, even the very lowest worker. And this goes through the entire community. If you go in a government office, for example, on payday, you can tell who is the person who "holds their hand." The savings method that Claude described is called a sou-sou in Trinidad. At home we call it a partners where a group of employees give, let's say $100 a month. So I would contribute $100, or if I have four hands, I put in $400. Actuaries wouldn't do this, but it's a very useful method of buying consumer items, since each person gets the combined "hands" in turn each month. The sequence is determined by a draw. The thing about it is that you must remember that there was a time when many people didn't have access to banking. If somebody died or you had a school fee to pay, then it would be agreed you could jump the queue. The person who actually collects the money and distributes it in sequence gets something, a commission, for doing it. So that's the best person to be in the partnership. That's the person you ought to be. Also, if you got the first draw, and let's say there are 12 people in the partnership, you have done very well because you can get interest on that money.

Building Society savings are very well established because people want housing. The rate of interest you get on Building Societies is low, but so is the rate at which you borrow, and up until about two years ago the rate that a Building Society could charge, in fact, was controlled by law. That has been liberalized now, but because their cost of funds is cheap, they still charge the least for interest, and they have a body of savers all through the countryside who are very loyal to them. And then, of course, most people buy a policy because the agents get to them, and there are more sophisticated things nowadays. In the newspapers people now advertise unit trusts. They now advertise interest rates very competitively, and bankers are on the street. They're no longer behind their desks.

From the Floor: Would you describe the Caribbean people as risk-takers or risk averse? For instance, how would a variable life product do in the Caribbean?

Ms. McFarlane-Coke: It's there. I think probably over the last ten years that is a most significant product.

Mr. Alleyne: I would say different islands do have different national characteristics, so that, for instance, in Jamaica, and Trinidad, particularly with the high interest rates, those products have been very successful. In other islands, like Barbados and other islands of the Caribbean, they are less successful.

Ms. Chong Tai-Bell: And as Claude suggested, because of the need to match your assets to your liabilities, you have to design the liabilities in view of the limitations on the asset side. So much of our business is variable business or interest-sensitive business.

Mr. Musaib-Ali: My company sells a line of products for which we don't guarantee the cash value. By law you're not required to guarantee it. It's along the lines of what you find in the U.K. So people would take the risk—they're aware that they're taking the risk.