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Session 6PD
Product Development and Pricing in Periods of Inflation or Devaluation

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Summary: The session focuses on pricing and product design in emerging insurance markets in an inflationary or devaluation-plagued environment. Country-specific examples are presented.

Mr. John O. Nigh: Juan Punchin will give us an overview of the uses of currency indices drawing upon his experience as a senior officer with Metropolitan Life Insurance Company in Spain, Mexico, and Argentina.

Jesus Zuniga San Martin, otherwise known as Chucho, is technical director of the life insurance operations for Grupo Nacional Provincial in Mexico City, which until April 29, 1996 was the largest company in Mexico. On that day, the merger of Seguro's Commercial America with Aseguradora Mexicana was announced. He will give us the benefit of his ten years of working in the Mexican environment, and tell us how his company in particular has dealt with the changing environments.

Then we have my colleague from our Toronto office, Elisa Wever, who has been very active in the Latin American market. She will give us an overview of both the Latin America situation and the Canadian experience and draw analogies to what we've experienced here in the U.S.

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Mr. Jesus A. Zuniga San Martin: I want to share with you some lessons we learned in our company, after ten years of working under high inflation and then devaluation and then high inflation again. How did we manage to put this inside our product design process?

First, it is necessary to determine the effects of inflation or the devaluation from the clients and the industry's perspective. It may be clear for everybody, but I want to stress the impact in order for you to get a clearer idea of the importance that those two items have in our business.

What can be done? Of course, what can be done from my perspective is different from Juan's or Elisa's perspective. You will have the opportunity of hearing not one, but three perspectives.

The question is what are the effects of inflation? Inflation is a worldwide fact. The difference is the magnitude that inflation has from one country to another. For example, let's look at the U.S., Mexico, and Brazil. All three countries have inflation or have been through inflation in the last ten years. However, the degree of inflation in my country and Brazil is so high that it almost makes the U.S. look like an inflation-free country.

Another consequence is that the exchange rate of our currency against any strong currency, like the U.S. dollar, the British pound, or German mark, is also hurt by inflation. For example, in 1985, you could buy $470 with 100 pesos. After 10 years you could buy almost nothing—just $13. Strong currencies, even when they are issued by a country with inflation, still have advantages to the local currency.

The effects are both for the client and company. The client faces a loss of policy value. He or she starts buying the policy that has a cost that, most of the time, is important. He pays what he perceives is a high premium for some period. Afterwards, he loses the value of the death benefit and all the cash values. He feels betrayed and because of that the industry as a whole loses credibility.

I'm not sure what the situation is in the U.S., but in Mexico people talk about insurance companies in general, not about each and every one of them in particular, so any harm that is done by one insurance company has an impact on the industry as a whole.

From our industry perspective, high inflation normally means high interest rates. So policy loans are exercised because high interest rates actually encourage the policy-owner to borrow the money and invest it elsewhere.

Of course the expenses increase—I'm talking just about the maintenance—which have a larger impact. Because of the problems we described on the client side, persistency decreases. That is one of the major sources of our profitability problems.

I have heard agents say that we don't sell policies or coverage, instead we sell concepts. We as an industry describe a concept that normally has a monetary value assigned, and this constitutes what the insured bought. If you have inflation and purchasing power is reduced, what you get as a result is a devaluation not of the policy and benefit, but of the concept.

Let me try to dramatize the effect. Think about what you could have bought with $5,000 in 1985. If you use the inflation for the U.S. and project the loss of purchasing value to 1995, you lose 32% of your purchasing power. This is something, but it’s nothing compared to what will happen with Mexican inflation figures. Imagine that you could have bought 106 tickets for the theater in 1985 and then with the same money in 1995 you could just go to 3 shows.

On the other side, when inflation started to get very high, interest rates started to get very high as well. Everybody sells individual life through illustrations using projections. Imagine the effect of one peso after 20 years of high interest rates.

You could arrive at a projection for the investment values of policies in the trillions of dollars just by taking the policy loans and investing them in the bank. Of course that assumed premiums that vanish after four years for a whole life policy. However, when inflation and interest rates went down, there were promises that weren't kept. There we had another area of loss of confidence from our clients.

On the profitability side, expenses reflect inflation directly. You may have sold a policy for 100,000 pesos face amount and have a premium that covered the maintenance expenses which were less than 1% of premium. After 10 years, maintenance expenses went from 6 to 200. You need to be very careful about how to project the maintenance expenses.

As I said earlier, policy loans were exercised by our customers. In the early years, loan rates were fixed by the authorities. They were around 8%. After some years of lobbying, we could get a loan rate of 19%, in times when banks paid rates as high as 160%. Hence, the banks were encouraged to get money from policyholders.

We compared five good companies in the U.S. to five good companies in Mexico. The results compare persistency for companies in both countries. In fact, it is hard to see the effects of inflation. The persistencies in Mexico range from about 70% to

80% and in the U.S. from about 90% to 95%. Of course, this has to impact the profitability of the products.

The question now is, What can be done? Fortunately, after ten years of experience, we arrived at the conclusion that there are many things you can do. You can start increasing the face amount of your policies in an economy with high inflation or cyclical inflation. Inflation-indexed policies are even better. If there's no feasible way of indexing the face amount in inflationary terms, you can index your policy against some currency, such as the dollar, yen, or mark.

The yen is in trouble. Be sure that the policies have high values in real terms in the long term and that they are also flexible products. Let’s go deeply into each of those issues now. This is a persistency warning: whenever you think about a policy with benefit increases, with some factors, it’s desirable to have the factors adjust for inflation as close as possible.

If not, whenever the premiums grow more than inflation, they grow more than what the insured earns or has as income. There's a great possibility of having high lapse rates. Comparing the value of the peso with the dollar from 1994 to 1995, the inflation was reflected and increased more on the dollar side.

Our experience in Mexico in 1995 was a year with high lapsation rates on the dollar index policies because from one year to the next you doubled the premium and you just almost maintained the purchasing power for our customers.

I will now tell you a brief history of evolution according to the market needs. We start in 1901 when life insurance was born in Mexico, at least for purposes of this story. From then until the early 1920s there were only level face amount life insurance plans. We used term, whole life, endowment, level death benefit, level premium, and combinations of these products.

In 1973 we faced inflation, so in 1974 we started offering policies with premium and face amount increases, stated as a percentage of the initial death benefit. In 1985 we were able to start having investment side funds and financial dividends added to each and every traditional plan we sold.

All of these helped the life insurance company fight inflation, but not very successfully, because in 1985 we were still in an environment where there was no relationship between the products and the economic conditions.

In 1988 we started selling universal life (UL) products with inflationary increases. In 1989 the law changed and we were able to start selling dollar-denominated policies. In the early 1990s we started with unit-linked policies.

In 1995 the Mexican market started having Unidad de Inflacion (UDIs)—indexed traditional term policies. UDIs are some kind of alternative currency for Mexico. Unidad de Fomentos (UFs) in Chile are monetary units that have an exchange rate of one peso to one UDI on a determined date and then start being adjusted by inflation. I think the best way of looking at UDIs is as inflationary currencies. Economists hate this term because they say the UDI works in favor of inflation.

Automatic inflationary face amount increases maintain purchase power. I would encourage you, if you are going to one of our economies, to work with automatic face amount increases. Also supplemental benefits should be increasing, and products must be interest-sensitive. If you just do the first two items and don't make the policy value and, of course, the cash values interest-sensitive, you are at a very high risk of having the policy loaned and the money invested somewhere else. It doesn't matter if it’s a universal life policy, a unit-linked policy, or something with investment dividends, but there must be a way of making the product interest sensitive.

In our case we work with universal products that increase the death benefit with inflation and dollar denominated products, including traditional policies, term, and whole life, that increase their value according to the dollar exchange rate. The payments are done in pesos for, from, and through the company, but each and every value of the policies are indexed to the dollar.

The UL products increase monthly according to Mexican inflation and the target premiums around are a 20-year-term premium. This is not the case in the U.S. where the target premium is nearer to a whole life policy premium.

It is important to note that we actually don't invest in American investment instruments. We invest in Mexican investment instruments that are U.S. dollar denominated. There used to be a market for something called Tesobonds that some people blame for the Mexican problems that we now are facing. There are also commercial paper and other instruments that are dollar denominated that are available to any institutional investor in Mexico.

Oftentimes, in addition to being interest sensitive, dividends are paid on excess investment returns. Actually this is highly recommended because normally it’s better in Mexican situations where there’s much instability to price using a conservative inflation interest rate and then pay dividends whenever you have income above this rate.

For profitability, we used the same thing that you use in the U.S.—asset shares to make financial projections. We look at the internal rate of return which is determined using a real internal rate of return. A break-even year is extremely important when you see how inflation reduces your persistency.

Also, to ensure profitability, my suggestion is that commissions on premium increases should be lower than new business. This is very hard to achieve. For a long time, adjustable policies weren't sold because commissions on premium increases were not attractive to agents.

On the administrative side, you must include per policy charges to cover increasing administrative expenses. Those per policy charges should preferably increase with inflation, at least at the same level that benefits and premiums increase.

We now have a situation where we have a product that may be good for us, because it's profitable, and a product that is good for the client, because it's interest-sensitive. Its benefits adjust with inflation or with a strong currency. To be successful you need to get these products to the clients, and this requires high-quality service to the client. Our experience is that high flexibility in coverage and premium changes are needed. As I described before, there are situations where your premium gets multiplied by two because of a devaluation. Many people will not be able to pay this increase, so you will need to do some adjustment to the policy.

Communication with the clients becomes critical. If you don't tell the client that benefits or the cash value increased, you're losing an opportunity to solidify your relationship with the customer. Communications plays an important role.

Of course, good sales practices are important also. Bad sales practices can do a great deal of harm to the industry. High-quality projections are needed. Our first suggestion is to include interest and inflation in any projections that you make.

Profitability must be measured frequently. We ask local institutions that specialize in economic forecasting to provide us with their inflation and interest projections. We analyze new issues quarterly using a model office to measure profitability by product. We closely track persistency and reserve adequacy. We're also starting to do some regional analysis in order to find differences between the different regions of the country.

Let me offer some final remarks. Real interest in Mexico is higher. The return on investment requirements for any policy in Mexico must be high, and the second remark is very important. Inflation usually means uncertainty. But pricing shouldn't be extremely conservative or products will be expensive.

These concepts are very important in combination with a third factor. Every Latin American nation has agents selling North American products, priced without inflation problems. We face a situation where many agents are illegally selling policies from the U.S.

If you get extremely conservative, those guys will take all of the business, because your policies will be extremely expensive. So you need to monitor foreign competition to balance between being conservative and competitive.

Mr. Juan F. Punchin: I'm glad to be participating in this panel discussion, and sharing with you some of my experiences in working abroad.

We have just heard an excellent presentation from Jesus on Mexico. I would like to first go into more detail on the indexed-linked unit that Jesus mentioned. After that, I would like to talk about what inflation has done to the life industry in Argentina.

What is an index-linked unit? I like to think of it as a kind of hypothetical currency, which has an exchange rate relative to the local currency. This exchange rate varies with an index, for example, the CPI.

An index-linked product would have its policy values expressed in these units. The policy values would be payable in the local currency, at the exchange rate in effect at the time of payment.

Here are some actual examples of index-linked units used in some countries. In Chile the peso is the legal currency, but the UF is virtually used for all financial transactions.

Insurance policies are issued in UFs, for example. Bank loans are expressed in UFs, investments are made in UFs, and so on. The value of the UF in relation to the Chilean peso varies directly and solely with the CPI.

Chile's inflation is high by U.S. standards. Over the past ten years or so it has ranged between 12–30% measured over 12 month periods. The last few years the rate has been on the lower end of the range. The Chileans, however, seem to have been able to cope and live within this environment and have learned how to manage it. With this level of inflation, the UF makes good sense.

This type of indexing is not used in Mexico. In Mexico we introduced the concept of an index-linked unit as a choice for our insurance products along with dollar-denominated policies and Mexican peso policies. The concept was novel for the industry when it was introduced by our company in Mexico.

We called this unit the Unidad de Valor Adquisitivo Constante (UVAC). Translated, it means unit of constant purchasing power. We chose as our index the 28-day Treasury rate. Since the very beginning, the sale of individual policies in UVACs enjoyed tremendous popularity. In terms of reserves, these policies currently represent about 70% of our in-force business.

In choosing an index, there are some important factors to consider. First, the index must move reasonably well with inflation, and it must be reflective of the underlying economic conditions.

Second, the index has to be relatively simple. One should be able to explain the calculations simply to the consumer. The index must also be familiar to the marketplace. It must have a certain degree of visibility and be trustworthy.

Third, and perhaps the most important considerations, are the investment and risk considerations. Often in an emerging economy, the range of investment instruments that might meet the company’s investment criteria is very limited. Or even disregarding criteria, one might find that investment choices are limited.

With life insurance one is talking often of long-term guarantees. In Mexico, we did not feel comfortable guaranteeing the CPI on a long-term basis in our policy values.

In large measure, it was because of the investment limitation considerations and the lack of longer-term investment instruments, that we decided to use the short-term Treasury rate as our index. We sacrificed fit with inflation, but we gained in terms of managing the longer-term investment risk.

Let's look at how the UVAC actually works. The value of the UVAC in terms of Mexican pesos is updated on a monthly basis. We take the 28-day CETES rate, which is the government Treasury rate. From the annual rate we subtract 4 percentage points, and then take 90% of the resulting amount. The 4 percentage points basically reflect the interest guarantees used in the calculation of our premiums and in the reserves. We hold back 10% for a company margin. We then convert the resulting interest rate to its monthly equivalent and apply it directly to increase the prior month’s UVAC value.

For level premium traditional policies, the amounts of insurance and the premiums are expressed in UVACs. Thus, when we update the UVAC each month, the face amount and the future premiums are automatically updated. Further, the reserves for these policies are held in their UVAC equivalents. So we see that the balance of the traditional prospective reserve formula is maintained.

Ideally, if we wanted to minimize the investment risk we would invest the reserves in CETES, the Treasury rate. However, this might not often be the case because of competitive pressures or pressures to increase earnings.

In our policies, we have allowed for the possibility of paying extra dividends if we were to, for example, outperform the Treasury rate by any significant amount.

For flexible premium policies like UL, the amounts of insurance and the future premiums are also revalued monthly, like for the traditional policy. However, unlike the traditional policies, the concept of revaluing reserves is not applicable. The reserves reflect the actual historical payments made and the actual historical interest credited.

The mortality cost charged against the UL fund will be increased because of the increased face amount. There is no guarantee on the future adequacy of the fund, and it is therefore important for a company to periodically test the future target premiums and to provide advice to the customer as needed.

Table 1 shows how the UVAC has done relative to inflation in the last 4 years. As we can see, the value has kept up pretty well with inflation. On a cumulative basis if one does the arithmetic, one will find that the UVAC has revalued to roughly 75% of inflation during this time period. The big jump in 1995 is the consequence of the latest Mexican crisis which started in the last few days of 1994.

TABLE 1
ANNUAL INCREASES
UVAC VS. INFLATION

Year	UVAC	Inflation
1992	9%	13%
1993	8%	8%
1994	8%	7%
1995	36%	52%

It is interesting to compare the change in the UVAC value with the change in the exchange rate, U.S. dollars to Mexican pesos, over the same time period (Table 2).

For the UVAC, the pattern is one of always increasing value. For the most part the increases are fairly smooth, especially when you see it on a month-to-month basis.

On the other hand, the U.S. dollar exchange rate can go up or down and show fairly wide swings overnight. For example, the 5.4 exchange rate that you see in Table 2 for year-end 1994 virtually happened overnight, and in the next few weeks, the exchange rate really took off.

TABLE 2
UVAC VS. DOLLAR

Date	UVAC	Dollar
December 1991	3.1050	3.097
December 1992	3.3710	3.1815
December 1993	3.6400	3.1444
December 1994	3.939	5.4
December 1995	5.343	7.6842

Dollar-denominated policies are subject to currency exchange fluctuations. Premiums very often will be paid in at a certain value and benefits will be paid out at quite another value. In times of crisis, currency markets will not behave rationally. The problem can be compounded if the government has artificially managed the exchange rate. This often happens in emerging economies. The advantages of a UVAC policy over dollar-denominated policies are fairly clear.

The persistency results that we experienced after the Mexican crisis are interesting. Following the crisis, we expected our lapse rates to go up very significantly. In actual fact this did not happen for our UVAC policies. As for dollar-denominated policies, the lapse rates really went through the roof.

In retrospect this result is not all that surprising. Whereas for dollar policies, the premium that the policyholder had to pay virtually doubled overnight. The change in the UVAC value was much more gradual, since any big change is spread out a month at a time.

Let me turn now to Argentina. Argentina is another country that has experienced significant inflation. For example, between 1975 and 1986, inflation ranged from a low of 82% in 1986 to a high of almost 700% in 1984. During this time period, most Latin American countries had to cope with inflation, but not as high as these levels.

In 1989 inflation really went through the roof, reaching 200% a month in July. For all of 1989 it was over 5,000%. Such prolonged periods of inflation and unpredictability led to a complete loss of confidence in the government's ability to manage the economy. This loss of confidence killed any long-term outlook, and along with it went longer-term life insurance. Basically through this high inflation period, people thought no more than a few days ahead at a time.

About the only type of life insurance that survived was group life insurance. That's because the benefits were tied to salaries, and were being adjusted virtually on a monthly basis.

There was one segment during this time period that enjoyed some moderate success—the retirement fund. This was prior to the current privatization of the social security system. In 1987, legislation was enacted that allowed the creation of private retirement funds. These funds were managed by private banks and insurance companies. Employees contributed on a voluntary basis, and employers could contribute on their behalf. Tax incentives were incorporated for both worker and employer.

From an investment standpoint, the high interest rates that were available made the proposition attractive. After enjoying some initial success, growth stagnated because of the reforms that were introduced in 1994 to the social security system.

The vehicle that was used to fund these retirement plans was a flexible premium deferred annuity. It was sold both on an individual and group basis. This product is still sold today. The principal characteristics of the product are as follows:

1. The product has to guarantee the interest rate credited to savings accounts by the government bank.

2. Excess interest is accumulated separately in another account called the fluctuation fund. This account is not immediately vested and vests only in the event of death, retirement, or surrender. It is available to absorb fluctuations in the investment returns.

3. The funds are valued on a daily basis, based on market value. In those days of high inflation, interest rates were changing drastically day-by-day, and daily valuation was a necessity.

4. Initially there were products that attempted to index premiums and funds. But currently this is prohibited under the so-called convertibility plan, which I will explain in a few minutes.

5. The product has surrender charges with the maximums set by state regulation.

What's happened in the last few years? Carlos Saúl Menem, the current President, was elected in 1989. Under his presidency and with his economic team, led by Domingo Cavallo, the country has been on a path to recovery. Trade barriers have been lifted and markets privatized and deregulated.

Since 1991 the Argentine peso has been pegged to the dollar under the so-called convertibility plan, resulting in currency stability. Under this plan enacted by the congress, the monetary base has to be fully backed by freely available international reserves of the Central Bank. Effectively, the power of printing more money was taken away from the government. The economy was thus effectively dollarized. With convertibility, indexation was prohibited. The feeling of the government was that indexation would generate more inflation. This included indexation of insurance premiums and benefits.

As with other industries, insurance suffered for years from overregulation and protectionism. However, over the last few years, Argentina has opened up its economy, and we have seen some major changes in the regulation of the insurance industry. For example, first, the state-owned insurance company, which had the largest share of the market, was privatized. Second, the state monopoly on reinsurance business was ended, and this permitted international reinsurance players to compete in the market. Third, the insurance regulatory framework was overhauled. Last is the privatization of the Social Security system. This is perhaps the most important change which has affected the insurance marketplace in recent years. It has created opportunities in many areas.

There are some potential hazards that have been created by this sudden shift to a low inflation environment. The most worrisome is the immediate annuity pricing. A very large market for immediate annuities has been created by the recent reforms in social security.

The high interest rates and margins that were available during the inflationary period completely overshadowed the mortality and expense assumptions, and not much attention was paid to the mortality assumptions or the expense assumptions in the calculation of the annuity rates. Under stability, interest rates have come down very significantly and, thus, so have the margins.

Today we find ourselves with inadequate regulation on the reserves that companies must hold and little experience in the marketplace with regards to the pricing risk for immediate annuities. Some companies are still using the group annuity mortality table (GAM 71) to price immediate annuities without projection factors for future mortality improvements. Some rough calculations show that rates could be underpriced by as much as 20%, in relation to the 1994 GAM generational tables that are currently being recommended in the U.S.

In a market that is worth hundreds of millions of dollars, a potentially very serious problem is being created for the future. Again, the challenge will be to educate the marketplace to work with the regulators to update basically the reserve requirements.

In summary, we have seen two very different approaches in two countries that have suffered inflation. I think in countries where perhaps inflation is not as high, to live by indexation is viable. In Argentina right now is the dollar economy. Basically I think that people are buying long term by the dollar amounts. This works when there’s a certain stability in the currency exchange rate.

I don't think there's any easy solution and I think that countries, especially Latin American countries, are still challenged by inflation. Taming inflation will remain a high priority item for the Latin American governments.

Ms. Elisa M. Wever: Jesus Zuniga has talked about how a high inflationary environment affects both insurance companies and policyholders. His focus was based on the Mexican experience. Juan has talked about his experience in Chile, Mexico, and Argentina. Now that Latin American countries are experiencing lower inflation and interest rates, my focus will be on the impact of lower rates on the pricing of life insurance products and on dividends. The experience is mainly drawn from the Canadian industry, but the situation is similar in the U.S.

I will be exploring my topic under three broad headings. First, I will talk about the current economic and regulatory environments both in Latin America and in Canada. Then I will present a view of how lower interest rates have impacted pricing of life and annuity products, as well as how lower interest rates have impacted dividends on participating products. I will briefly touch on the issue of sales illustrations, and the credibility impact that they have had in the insurance industry.

Finally, I will try to provide an outlook of the impact of lower interest rates in the Canadian insurance industry. I hope to extrapolate from that experience to what one can expect will happen in Latin America with its new, more stable economic environment.

Recent economic and political developments are turning the focus on Latin America. There is a definite trend to privatization of government institutions. For example, we're seeing banks, telephone companies, and even Social Security systems being privatized.

We're seeing the opening of markets, mainly through the liberalization of ownership restrictions, and the reduction of tariffs. With the fall of Eastern Europe in the 1980s, communism fell out of vogue, and we are seeing many Latin American countries electing Democratic governments.

Economic growth, in general, and the growth of the middle class, in particular, increases the need and emphasizes the importance of insurance in Latin America. Most countries in Latin America are pursuing economic policies aimed at fostering economic growth, controlling inflation and monetary stability. The outlook for Latin America is bright.

Let’s compare inflation statistics in several Latin American countries with those of the U.S. and Canada over the past few years. In hyperinflationary environments, life insurance markets can be crippled, and Juan touched on what happened in the Argentinean market. There was no life insurance market in Argentina during its hyperinflationary period. Argentines unlike Mexicans, as Jesus Zuniga described, did not come up with mechanisms or product designs to be able to sell life insurance in an high inflation environment.

In Chile, life insurance practically disappeared in the pre-1980 era. Inflation was so high that there was no insurance being sold and public confidence in it was lost. Mexico's insurance market felt the squeeze of the financial crisis experienced in 1995, compared to the prior two years. Its economic situation was worsened by the political climate that included the assassinations of two very prominent people and by the government's insistence that the peso would not devaluate.

In 1995 both Argentina and Chile had single digit inflation and Brazil cut its inflation by 97%. Mexico experienced very low inflation relative to its prior history in both 1993 and 1994, but with the devaluation of the currency in late 1994, inflation was over 50% in 1995.

In Chile, with President Ugarte Pinochet, the economy improved significantly. The market was liberalized in 1980. The artificial currency that Juan talked about, the UF, really helped foster a healthy insurance industry. In Argentina there has been a rebirth of individual life insurance. The Argentine currency, the peso, is currently fixed to the U.S. dollar. This has provided much public confidence in the stability of the currency. As far as Mexico is concerned, it is expected that its economy will stabilize again and return to an economic environment, similar to that in existence pre-1995.

The level of inflation, prevailing interest rates, and the stability of the currency are three factors that are key in influencing product design. The challenge in Latin America is to be able to anticipate the economic climate and to be able to design and provide products that are responsive to the needs of the market.

With interest rates coming down, there are winners and there are losers. It all depends on the product mix on the liability side, the investment portfolio composition on the asset side, as well as the interaction between the two. That is, in the matching of the assets and the liabilities.

Winners are products with short or no interest guarantees, where the impact of lower interest rates can be quickly reflected in the pricing of both in-force and new business or can be passed onto the policyholder, and asset portfolios that are either well matched or are invested long.

Losers, in particular, are products with long guarantees. Examples of these are pay-out annuities, and a product such as what we call “term to 100" in Canada. This is nonparticipating whole life insurance with no cash surrender values and guaranteed premiums. It was introduced in the early 1980s, when interest rates were very high. There was no experience to draw upon and lapses were anticipated to be relatively high. With falling interest rates, new premiums have increased making older versions of the product more attractive and lapses have come down considerably, increasing the duration of the liabilities.

The situation for products with long guarantees is worse for companies not well matched or invested too short. Matching of these types of products, that is products with long guarantees, is particularly difficult because you have ongoing premiums. In the case of products such as term to 100 products, for example, or in the case of annuities it’s hard to find assets that are long enough to match the liabilities. As reinvestment rates fall, portfolio rates eventually come down. If you have many of these types of products in your portfolio, the value of the in-force block likely comes down.

From an asset portfolio point of view, I believe the challenges of declining interest rates are much greater in the U.S. than in Canada. In Canada, the majority of a company's assets would typically not have prepayment options, and there is nothing in Canada comparable to the collateralized mortgage obligation (CMO) market in the U.S.

In terms of participating business (products with dividends or that allow dividends to purchase enhancements to coverage, or products whose premiums vanish as interest rates go down), to the insurer, the impact of lower rates will depend on how quickly and to what extent the company will pass these lower rates on to the policyholder through lowering the dividend scale.

Dividends probably are not adjusted down quickly enough as dividend scales tend to be sticky downwards. Agents can readily accept a drop in GIC rates when interest rates are falling down, but it's harder to see the link between lower interest rates and lower dividends. Perhaps policy dividends are seen more like stock dividends.

As interest rates come down, the consequences are that the enhancements illustrated at the point of sale become harder to achieve and eventually can no longer be supported, and dividends are lowered.

For the consumer, lower dividends mean either one or a combination of the following:

- Smaller cash value accumulations or payouts
- Premium increases
- Reappearance of vanishing premiums
- Reductions in death benefits.

Unfortunately not all consumers had the nonguaranteed nature of their insurance policies fully explained and understood when the policy was sold. The result of this has netted out to much, publicized consumer disillusionment and, in the U.S., insurance companies being sued by disgruntled policyholders.

In addition to the lawsuits, investigations of sales practices have been launched by regulators, and to top all this, there has been tremendous media coverage on deceptive sales practices. Most major companies in the U.S. have been affected as well as many smaller companies.

The situation is not the same in Canada, but many think it's just a matter of time. So far there have been few complaints compared to the U.S., and unfortunately, this has brought a state of complacency among insurance companies. Focus remains only on disclosure but this is probably not enough. Rigorous and periodic updates to illustrations should probably be provided to existing policyholders. Had this been done in the U.S., the impact of consumer disillusionment on the industry may have been mitigated.

The sales illustration guidelines issued in Canada by the Canadian Life and Health Insurance Association (CLHIA) jointly with the Life Underwriters Association of Canada (LUAC) and the CIA are merely guidelines and they are not mandatory.

Some of the requirements for the illustrations include:

- It must contain a description of the product using some standard wording.
- It must give equal prominence to guaranteed and nonguaranteed values.
- The wording used should not mislead, that is, wording should not imply that nonguaranteed values are guaranteed. This has been a problem in the past, in particular.
- It must show what the impact of adverse experience is on dividends. It may also show the impact of favorable experience, although this is optional.
- It must contain a disclaimer for nonguaranteed values, that is that actual results will likely differ from those illustrated.

The guidelines say that it is acceptable to use the current scale for illustration purposes; however, any new reduction in the scale has to be reflected in the illustrations within 60 days of that reduction happening.

In conclusion, what are some of the difficulties faced by the insurance industry in Canada and the U.S. in the 1990s? From a consumer perspective we have seen two major events. First we have the impact of insurance company failures, some of them quite major, as in the case of Confederation Life. It was a large, well-established mutual with multinational operations, rated AAA by Standard & Poor's (S&P) as recently as three years before it failed. We have similar examples of failed companies in the U.S. Second, we have the practice of using aggressive assumptions in illustrations which eventually caused illustrated values not to be realized. These two events have damaged the reputation of the industry and have resulted in a loss of consumer confidence.

For the Canadian industry, lower interest rates, coupled with new minimum capital requirements, have made it more difficult to achieve reasonable shareholder returns and one impact of this has been the consolidation of the industry. Major players have exited the market, with Prudential of America being the latest one to announce the sale of its Canadian branch operations.

We will probably see increased emphasis on the sale of variable products, where the risk of lower interest rates is passed on to the policyholder. To better manage risks such as lower interest rates, we will see companies with better financial controls and more actively managed business.

Finally, we should expect to see increased regulation with respect to the calculation of reserves and with respect to illustrations. In Canada, the appointed actuary sets the reserve assumptions every year, and there is considerable leeway with much reliance placed on the judgment of the appointed actuary. We expect to see some increased regulation in that area.

For Latin America, as the economies become more stable and interest rates come down, we should see a similar impact on pricing and on dividends as we saw in North America, as well as similar issues with respect to aggressive prior illustration practices. Jesus' presentation covered some of the practices in Mexico.

Finally, lower interest rates necessitate more sophisticated pricing with less reliance on financial products to meet profitability targets. This means companies will need to more finely calibrate other pricing assumptions such as mortality and expenses. Globally, as markets open and economies stabilize, we should see differences between markets become less and less pronounced.

From the Floor: You said earlier that hyperinflation tends to dry up the individual insurance market. Once inflation is in check, the industry is reborn. I noticed in your examples that once efforts are put forth to correct hyperinflation, it usually corrects pretty quickly. In some cases, inflation was in check within a five-year period.

Can you comment on some of the strategies or the disciplines that a pricing actuary may keep in mind during that period where inflation is coming into check?

Mr. Punchin: When inflation is coming into check, there generally are other things happening within the environment, such as the opening of markets, the adoption of market-based capitalism, and the establishment of sound fiscal policies.

Opportunities are created very quickly for business as well as for the people. The level of income of people also changes very rapidly. Competition also becomes keen very quickly.

With the economy coming under control, one has to expect the interest rates to go down. The large investment margins that may have been available in the past will disappear. I think that we just have to pay a great deal of attention to the other factors in pricing and not just rely on the investment income. We have to go back to the fundamentals of pricing.

This has been difficult to do in the countries where the insurance industry really is nonexistent and is just being reborn. Although there may be actuarial training at the universities, actuaries have not had experience in life insurance, not true life experience because there hasn't been an industry.

One of the major items is that the investment income just goes down. Since interest rates are reduced, hence, the margins that were relied upon go down, and I think that we just have to pay attention to many of the other factors in pricing and not just rely on investment income.

What we can do now that we are more global is to help educate by participating in industry conferences and working more closely with local actuarial associations and regulators in other countries.

Mr. Zuniga: Typically, when a country really tries to get inflation down, it does. There are ways of getting inflation down in a two-year period. Just look at the Mexican or the Chilean experience.

The problem with those short periods is that, well at least with our experience in Mexico, real interest rates are really high. So the temptation of going to investments during this period is very high.

Let me give you some advice. You can use it for a short period of time. I would recommend some kind of products which may hurt you in the long term, but can help you get market where you can assume good interest rates for a period of two or three years, and then reduce them. This is an approach that helps many companies become competitive and get into the market slowly.

This is good if you are actually restarting the insurance industry and you don't have a big powerful sales force. In Mexico, for instance, we have companies with 4,000 or 5,000 agents selling individual life. This strategy is sometimes very hard to be corrected, because you start selling a product that's very competitive, and then, when the interest rates go down, you try to change them and you clash with your agents.

Mr. Gerald J. Rankin: I have a question for Señor Zuniga. I wonder if you'd describe the type of investment portfolio a Mexican life insurance company would have that is investing in index products?

As a sideline I wonder if you'd comment on the popularity of UL products in Mexico where I believe there's no income tax but there's a value-added tax?

Mr. Punchin: There is something very different in Mexico than in the U.S. and this is the absence of long-term investment instruments. Actually, we are almost invested in 28 maturity dates. Sounds funny but we have been this way for 10 years. Why not continue for the next 10?

We are investing the reserves under these instruments. Let me remind you that on the UL we talked about indexing the death benefit. Actually, there are no guarantees on the cash value on the UL policies.

Anyway, investing in these kinds of instruments usually gives you an investment income that matches pretty well with inflation on the long term. So having a product without a real interest guarantee in the front, but a good performance against inflation, gives you good results.

On the other side as I told you, there are also medium term papers, no more than three years at the most; but there are also papers that pay around 8–9%.

For the UL, how attractive it is can vary from company to company. For instance, in our case, UL accounts for half of our amount or 70% to 80% of the policies we sell. Although given the fact as you thought in the UL, the target premium is a wonderful policy, it accounts only for half of the premium income for the company. The other half comes from dollar index policies.

The tax issue on the accumulation side? Well, there is no value-added tax for life insurance premiums. Actually there is no tax for life insurance premiums, and there is no tax on the accumulation. You can find the income on investments made in banks or other instances has very low tax rates. This is not a very big advantage for our product.

We used to have some advantage with some individual annuity products. But it hasn't been very successful. Actually, I think that there were interest sensitivity and indexing of life benefits to inflation.

On the UDI product there are papers issued by the government with a duration of no more than three or four years. We are also going through a privatization of the social security system, where we expect to see more and more indexed inflation instruments.

Mr. Nigh: I might add a tag onto that—the portfolios of the Mexican insurance companies tend to have a significantly higher percentage of their assets invested in common stocks.

Ms. Wever: Just adding onto the tax issue, in Mexico, we see also life insurance being used as a tax shelter. You see policies such as six-month endowments, where the purpose is really to use life insurance as a savings vehicle, that having the life insurance protection built into it protects it from tax.