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## Session 130PD

### North and South of the Border—Product Distinctions

**Track:** Product Development

**Moderator:** DOMINIQUE LABEL

**Panelists:** MARC-ANDRE BRUNET

ELINOR FRIEDMAN

ROBERT MALLETTE

*Summary: The U.S. and Canadian marketplaces are seeing an increase in the market share of "traditional" life insurance products, such as whole life (WL) and universal life (UL). Although both countries are seeing a similar shift to traditional products, U.S. and Canadian traditional products are not alike. What are the differences and how did these differences arise? With a focus on WL and UL insurance products, panelists from both sides of the border discuss: market and regulatory differences and similarities; the comparison of product offerings in each country; and an overview of current issues in product development.*

**MR. DOMINIQUE LABEL:** I'm with Tillinghast in the Hartford office, and I'll be your moderator for this session. We'll start off with Marc-André Brunet from Knights of Columbus, who will cover WL. Next will be Elinor Friedman from Tillinghast who will cover UL products in the United States, and then we'll end with Robert Mallette from RGA who will cover UL products north of the border. Before we begin with Marc-André, let me talk a little about what's going on in the U.S. and Canadian insurance marketplaces.

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**Note:** The chart(s) referred to in the text can be found at the end of the manuscript.

Chart 1 shows that, in the United States, variable life (VL) sales have been declining over the last four years. Since there's a strong historical correlation between VL sales and stock market performance, we expect to see an upturn in sales soon.

I have a comment about Chart 2. It seems to show that variable universal life (VUL) isn't sold in Canada. What the United States calls VUL and UL is called universal life in Canada (i.e., you can invest in equity-related funds and fixed options in a UL policy in Canada), so the decrease in UL in Canada reflects the performance of the equity markets.

Both the United States and Canada have been showing a trend to non-equity-related products such as WL, which is why we decided to focus on UL and WL for this session.

Chart 3 shows that if you add the market share of VL to UL in the United States, you get a VL/UL market share of about 50 percent (i.e., both countries show a similar distribution of market share by product).

Now, let me introduce Mark-Andre Brunet. Mark-Andre is the illustration actuary for the Knights of Columbus located in New Haven, Conn. He has been involved in pricing term, permanent-life and fixed-annuity products in a fraternal environment, both for the U.S. and Canadian marketplaces. He's also involved with developing experience studies, mainly for mortality and expenses. Before that, he was involved in the pricing and valuation of life insurance products for Foresters and Sun Life of Canada. He is a member of the Academy and is an FSA and a Fellow of the Canadian Institute of Actuaries (FCIA).

**MR. MARC-ANDRE BRUNET:** Today I will talk about three subjects in relation with WL: similarities, differences and current issues in Canada and the United States. This is going to be a "back to basics" presentation.

Why is WL successful in both countries? You have to understand the context of my comments. I work for a fraternal benefits society—the Knights of Columbus. We offer our products both in Canada and the United States. For us, a member is first of all a Knight. We are looking for products that have served and continue to serve the long-term needs of our members and their families well. I am sure many of you are familiar with the Knights of Columbus, as a social organization, dedicated to do good things in our communities. From the beginning, we have been a way for Catholic families to receive protection against premature death of their breadwinner. We are in the business of paying death claims. That may sound trivial, but, in my opinion, that may not be true of all organizations.

So why are we offering WL? It is because WL offers permanent protection, for the lowest premium outlay, with the greatest degree of flexibility in meeting changing needs and circumstances of the insured. Am I talking about UL? No. This is a quote from a very famous book called *Life Insurance* by Dan McGill. That book came out

before UL. So, before UL came into the picture, WL was perceived as a product offering flexibility. Furthermore, WL has two basic characteristics: a guaranteed level death benefit and a guaranteed level premium. One fundamental aspect of life that nobody can dispute is that we all will die one day. The only unknown is when. I think that, somehow, this fact has been lost in the design of many life insurance products. Too often, the industry designs and promotes life insurance products that are based on scenarios that do not require that a death benefit ever be paid. However, this fact is a cornerstone design of WL and thus fits very well with our mission of paying death benefits. From that you calculate the necessary level premium to adequately fund such benefits and ensure that enough money is available to pay those benefits. As a result of the level premium concept, you have cash values, because the amount of level premium exceeds the pure cost of insurance (COI) in the early years. This building of assets reduces future net amount at risk and makes the WL concept a viable long-term proposition. As you want to have a high probability of delivering on your promises, you want to be conservative up front and develop premiums that have margins. These margins have been used in developing the concept of dividends, which are returns of excess premiums, no longer needed to pay benefits. Finally, if you stop paying premiums, you are entitled to nonforfeiture options, like reduced paid-up insurance, extended term insurance or a cash surrender value. If you miss a premium, you can use the automatic premium loan provision. Emphasis on permanent guaranteed benefits and flexibility in your premium structure make WL a perfect product for fraternal companies.

Competition is an important aspect of offering WL. This is true in Canada and the United States. It takes various forms: term, UL, mutual funds or another WL product from another company with higher projected values. The decision of whether or not to buy WL often turns around the illustrations.

Another similarity is whether or not you decide to reinsure some of your business and deciding which reinsurer to select. You may find that the reinsurance market is not as competitive as you would like. We retain most of our business. Preferred underwriting is something that may come up with WL, but we do not have that right now. Another similarity between the United States and Canada is that death benefits are not taxable and that, in most instances, the inside build-up of cash values is tax-deferred. In both countries, commission structures are very important, if you want to sell your products.

Finally, the history of par business is similar in both countries. Before 1980 was the golden age of insurance and many life insurance companies were supporting large numbers of captive agents. The respect in the community for life insurance agents and the products they sold was very high. In the 1980s, there was a gradual increase in the interest rates. Personal computers were invented, bringing the ability to illustrate and administer more complex life insurance products. New products, including UL, were created. One big thing about UL was that it did not have to carry the "baggage" of the low-interest earning assets that backed existing

WL blocks of business. So UL could promise higher values and more features. This flexibility became a major selling point of UL. In those days, WL dividends were increased but in most cases their projected values were still lower than many UL products.

Eventually interest rates started to decrease. There was pressure to decrease dividend scales. A consequence of decreased dividend scales was lawsuits. There was a problem with reasonable policyholder expectations. Of course, at that time, the stock market was booming and companies could develop VL products that offered high rates of return and illustrated very high projected values. WL illustrations could not compete with that.

Another blow to the WL concept was the demutualization of large companies. Companies lost interest in the concept of WL as a product supporting the cycle of quality. The costs associated with distributing WL were too high and the return too far into the future.

Chart 4 shows the slowly increasing interest rates from the 1960s to 1980s and then decreasing interest rates thereafter. The same thing happened in Canada and the United States.

But now we see a rebirth of WL. Why a rebirth? There were two years of double-digit negative returns on the stock markets and so people are looking for quality products that provide guarantees. Now, in the financial press, we start reading a little bit more about some uneasiness with the UL concept. Another important thing is that some WL dividends are still calculated using 7 to 8 percent interest rates, even if the long-term rates are much lower. Interest rates used for most WL dividends are based on conservative portfolio investments in bonds purchased when interest rates were higher, which creates a book value rate that is higher than what you get on the new business. That creates the ability to illustrate WL products at a very competitive level. You have to remember that many life insurance products are sold because of the illustration. If you have a good illustration, you have a much greater chance of making the sale.

Also, there has been a reinforcement of the agency forces. We have been seeing that at the Knights of Columbus, as recruiting captive agents seems to be easier.

Another interesting point here is that the UL products are becoming more complex. UL products are adding guarantees, because the customer wants guarantees. However, a more complex product is by definition more difficult to sell.

It's all nice for WL, but WL advantage is largely based on book value return. If new money rates start to increase again, we may see another cycle in which UL illustrations look better than WL illustrations.

Now let me talk about the differences.

First is the product approval process. In Canada there's no such thing as a product approval process. It's much easier for Canadian companies to get their products introduced. In the United States you have the filing with each state that creates a lot of interesting additional work and delays. When U.S. companies don't have as many products as they would like, it is probably because they are frightened by the prospect of having to go through the filing process.

The second difference is the life insurance illustration regulations. In the United States, states which have adopted the NAIC Life Insurance Illustration Model Regulation (37 states so far) are requiring an annual actuarial certification that illustrated nonguaranteed benefits meet specific tests and are less than or equal to current payable dividend scales. In Canada, requirements come from the Canadian Life and Health Insurance Association (CLHIA). You must illustrate your nonguaranteed benefits under two bases.

In the United States, to be exempt from taxation on the inside build-up, your contract must comply, at issue, with either the guideline test or the cash-value accumulation test. For the Knights, we use the cash-value accumulation test. In Canada, to be an exempt policy, you compare your projected cash surrender values against the reserves or the funds of a hypothetical life insurance endowment at age 85, using the pricing assumptions. The interest rate cannot be lower than 4 percent. For the first 20 policy years, you use straight interpolation. This test must be done each year. If your contract fails once, it permanently becomes a nonexempt contract. Nonexempt policies are subject to annual taxation reporting of any inside build-up.

Another difference is in the design of single-premium life insurance products. In the United States, such products are considered modified endowment contracts (MECs). To determine whether or not your contract is an MEC, you use a seven-pay test. If the contract fails the test, it becomes an endowment contract. Once a contract becomes an MEC, policy withdrawals and loans will be subject to special taxes. Such distributions from an MEC are considered earnings first and are subject to a 10 percent penalty tax if the insured is not age 59.5 or older. In Canada, single-premium life insurance products are considered nonexempt policies. Again, nonexempt policies are subject to annual taxation reporting of any inside build-up.

The adjusted cost basis (ACB) under non-MEC contracts in the United States is basically the premiums paid. Policy loans are generally not taxable events. For MEC contracts in the United States, the ACB is somewhat more complicated and does take policy loans into account. In Canada, the ACB is defined as the premium less the mortality costs on the net amount at risk. Policy loans from a life insurance contract can be taxable, if you have used up all of your ACB with previous distributions.

Another product difference is that Canada does not have any requirement regarding minimum surrender values. This allows the design of products such as term to age 100. These contracts often have no cash values or cash values starting at very late durations. It allows profits from lapses to subsidize initial premiums.

Other differences between the United States and Canada result from currency exchange rates reserves calculation, underwriting practices and investment practices.

Charts 5 and 6 show the Canadian dollar versus the U.S. dollar. Why are we talking about that? Well, for most of you, it may not be a very interesting subject. However, for the Knights it can be. We do administer all our business from New Haven, Conn. This includes calculation of Canadian reserves, administration of Canadian insurance contracts and any product development. Among other things, it means that we need to adjust our expense unit factors that we use in our reserve calculations, for the difference in currency exchange rate between the U.S. and Canadian dollar. You can see that there could be quite a fluctuation. Interestingly enough, from 1935 to 1975, the rate was pretty flat and then it jumped. Recently, it decreased from a high of 1.60 (1\$ U.S. = 1.60\$ Canadian) to 1.30.

Considering reserves—in Canada, they have the Canadian asset liability method. The Web site of the Canadian Institute of Actuaries (CIA) provides a good description of this method. In summary, it requires the actuary to determine the amount of assets required to mature all the liability cash flows. Multiple scenarios may be required. You need to take into account the policyholders' expectations. In determining the scenarios, you need to set assumptions and determine margins for adverse deviation. Other methods are allowed if you can show that they are equivalent. In Canada, GAAP equals statutory. In the United States, statutory reserves are formula- and assumption-driven. You also have XXX, deficiency reserves and X factors—a lot of work. You have an asset-adequacy testing procedure where the actuary may have to set up additional reserves. In the United States, GAAP is different from statutory.

I have some quick observations on underwriting. In Canada, you have a significant percentage (20 percent to 25 percent) of the population who communicate exclusively in French. If you operate these underwriting functions from the United States, it does create some problems. An example is the translation of medical reports from French to English. So that's an issue for us, but it's probably specific to the Knights. The other point on underwriting is data quality. We should use only sources of preferred experience data with sufficient credibility and duration to evaluate longer-term impacts.

Now I want to make a couple of points on getting insurance quotes on the Internet. In comparing Canada and the United States, and this is not a scientific comparison, I have found that on the Canadian sites, you need to provide personal information in order to receive a quotation. However, there was one exception I saw and it was

from a large bank. If you are interested in e-insurance, the Life Insurance Marketing and Research Association (LIMRA) has an interesting Web site with good documentation. One Canadian company is offering 12 to 15 percent lower rates for UL purchased on the internet.

In the United States, I did not have to give personal information, and I was able to get detailed quotes on many companies.

Canadian interest rates tend to be a little bit higher than U.S. rates most of the time. If you are a large company in Canada, you have access to all kinds of investment products. Large Canadian companies can pursue almost any kind of investment strategy to match their assets and liabilities. If you're a medium-sized Canadian company, your options may be somewhat more limited. For one thing, there is no collateralized mortgage option (CMO) market in Canada. Residential mortgages in Canada are mainly five years or less in duration. That's a difference from the United States, where mortgage durations can go up to 30 years. As a result, in the United States it may be somewhat easier for companies of any size to match their assets and liabilities by using CMOs.

In the United States, a current issue is the new 2001 CSO mortality table and its impact on premiums, reserves and guaranteed cash values. For the Knights, it means new plan codes. This will be an impact on the definition of life insurance for tax purposes and the seven-pay test. The low-interest-rate environment is also a concern. There will be pressure to reduce illustrated dividends.

In Canada, I don't see any requirement for adopting the 2001 CSO mortality table. I've noticed as far as tax is concerned, there is a minimum of 4 percent on the exempt calculations, so if you were to use guaranteed cash values based on 3.5 or 3 percent, you may end up with nonexempt policies. Again, the low-interest-rate environment will put pressure on to reduce illustrated dividends.

**MR. LEBEL:** Let me quickly introduce Elinor Friedman. Elinor is a consultant in the St. Louis Tillinghast office. Elinor provides consulting assistance to the insurance industry focusing on financial analysis, modeling, product design and pricing. She is currently a member of the Academy's Illustration Actuary Practice Notes Working Group, which is addressing interpretations of actuarial standards of practice 24 (ASOP 24), dealing with illustration actuary certification. She's also a member of the SOA Product Development Council. Prior to joining Tillinghast, she worked at General American and RGA. Elinor received a B.S. in math from Concordia University in Montreal and an M.S. in math from the University of Ottawa in Ottawa. She is an FSA and a Member of the Academy.

**MS. ELINOR FRIEDMAN:** Are you guys ready to take a look at a truly flexible insurance product with strong guarantees? I'm going to cover UL south of the border. As I was preparing for this presentation, I was talking on the phone with Robert. We quickly realized that many of the developments and drivers north and

south of the border are country-specific. Here's what I'd like to cover. I'll give a quick current market overview; talk about no-lapse guarantees and the reserve requirements for them; the new valuation table and the impact that's going to have on UL in the United States; and I'll talk about profit objectives and also some recent developments in pricing.

UL sales have grown rapidly over the last couple of years and market share has increased from about 17 percent in 2000 to approximately 30 percent mid-year 2003. Some of the factors contributing to this growth include the sustained downturn and volatility in the equity markets, which has caused a shift away from variable products. In some instances, UL is replacing traditional WL as well. We often hear that newer agents prefer UL and term to traditional WL. Other factors include ongoing use for life insurance to meet protection in the estate-planning needs and the consumer's desire for strong guarantees and death benefit protection. Companies south of the border have responded by offering very competitive long-term protection-oriented products with no-lapse guarantees, and most of my comments are going to focus on the protection type of products and specifically no-lapse guarantees.

It's a very competitive market currently in the United States. Here are some examples of rates pulled from the full disclosure report produced by the Blease Research Group. This is for a male preferred, non-tobacco user, \$250,000 face amount, and these are the annual no-lapse premium guarantees. That's the premium, if paid, that will keep the policy in force regardless of the performance in the base UL fund. You can see it's a tightly packed group. The key competitive benchmark in the no-lapse-guarantee market is the level of the no-lapse premium guaranteed. Another key feature is the length of the guarantee. The primary focus in the market is on an attained age 100 or lifetime guarantee. Companies will often offer shorter length guarantees, but the primary focus has been a lifetime guarantee.

**Table 1**  
**Male Preferred Best Non-Tobacco**  
**\$250,000 Level Death Benefit and Annual Premium**

Company	Product	Issue Age 55	Issue Age 65
American General	Platinum Protector	\$ 3,100	\$ 5,100
Equitable	Athena UL	3,062	5,458
General American	ULSG	3,237	5,300
Jefferson Pilot	Legend 300 UL	3,283	5,301
John Hancock	Protection UL	3,228	5,577
Manufacturers	UL – G	3,313	5,470
Mass Mutual	UL2G	3,321	5,451
Prudential	Protector	3,225	5,367
Reliastar	GPUL	3,061	5,024
Sun Life	Protector LP	3,333	5,596

\*Source: Full Disclosure by Blease Research

Cash value, on the other hand, is not a primary competitive feature in the no-lapse-guarantee market and many products develop low or even no cash values in later durations, which is why some products have been likened to term 100 products in Canada. Credited interest rates on most of the products are based on portfolio interest rates. The actual level of the credited rate again is very secondary because there's not much attention placed on cash value build-up; however, the rate implicit in determining the no-lapse-guarantee premium is very important. On compensation, the commissionable target is generally set at or above the annual no-lapse guarantee, and there is a trend towards using a rolling target.

There's been a lot going on south of the border with regard to no-lapse guarantees. I guess one of the developments that has had the greatest impact is the adoption by most states as of January 1, 2000, of a new reserve requirement for UL secondary guarantees. The Valuation of Life Insurance Policies Model Regulation or "XXX" kept a lot of actuaries busy, and there was a lot of innovation and design to try to deal with the new reserve strain. At the beginning of this year, Actuarial Guideline 37 or "AXXX" became effective and addresses some of the new design innovations that were in response to XXX. We've also been experiencing a very low-interest-rate environment that has heightened the awareness of the true risks and costs of providing this type of guarantee. Looking forward, we have a new valuation mortality table being adopted as we speak.

Even with all the new developments, the no-lapse guaranteed premium designs keep evolving in the United States. The premiums remain low compared to other types of products with similar guarantees.

There are three general no-lapse guaranteed designs in the United States. The first is the stipulated premium design, which is the traditional design and the easiest to understand. As long as the policyholder pays the specified premiums by the

specified dates, the death benefit will be guaranteed regardless of the performance in the base UL fund.

The next one is the most difficult to explain—the shadow fund design. Essentially the shadow fund operates similarly to the UL base policy (often with COI charges, policy loads and an interest rate), and as long as the shadow fund is greater than zero, your guarantee is intact, regardless of what's going on in your UL-based policy fund. You might be asking: How does that provide me a guarantee? The loads, charges and interest rate in the shadow fund are guaranteed at issue and they are generally and in aggregate more generous than the guarantees in the UL-based policy fund. Typically, products with a shadow fund design are still sold as level annual premium products. That is, you solve for the level of premium at issue that keeps your shadow fund positive until attained age 100. However, the actual minimum premiums that you need to pay to keep the guarantee in place could be determined by looking at the beginning of each policy month or policy year and figuring out how much you need to pay to have one dollar of shadow fund value at the end of that period. These premiums are the minimum premiums required, and that turns out to be a stream of increasing premiums like annual renewal term (ART) premium, which leads to our third design. This is kind of a hybrid design and it stipulates a stream of increasing premiums. As long as the policyholder meets a cumulative premium test which involves a discount factor, the guarantee remains intact.

Again, this is all pretty complex, and truly the evolution in design has been driven largely by the reserve requirements. What do I mean by that? XXX prescribed a method and basis for calculating reserves for no-lapse guarantees. Prior to its adoption, most no-lapse guarantees were provided through the stipulated level premium design. Under XXX, this type of design generates substantial additional reserves and, hence, the shadow fund design emerged. Under XXX, the premiums that you use in your reserve calculations are the minimum required premiums or the "specified premiums." For the shadow fund and ART designs, these are ART premiums. Products can be designed where the resulting stream of ART premiums results in minimal or no additional reserves under XXX. Again these products are generally sold as level premium products, so now you have one type of design with a great advantage with regards to reserve strain over another type of design.

This leads us to our next development. Actuarial guideline AXXX is intended to levelize the playing field for all designs. It prescribes a nine-step method for calculating reserves for UL no-lapse guarantees, keeping us all very busy. It introduces a mechanism to reflect not just the minimum required premiums, but also the actual premiums being paid. It is intended to require the same level of reserves, regardless of design, if the policyholder pays the same level of premium.

So how are companies responding, or going to respond? This is kind of a comprehensive list, because we haven't really seen companies take the extreme measures of withdrawing completely. I am aware of some companies that have

increased their no-lapse-guarantee premiums. There are companies who are accepting lower returns, hopefully on a temporary basis, while they wait and see what their competitors are doing or are investigating design modifications and reinsurance solutions. With regards to design modification, all designs are still not equal, it seems. There is still some flexibility in managing reserve strains through design modifications even with AXXX.

With regards to reinsurance, there has been a pull-back from third-party reinsurers in providing solutions for the reserve strain. Companies are beginning to look inward and are investigating setting up their own offshore reinsurance companies to help manage their capital for this line of business and other lines of business. Also, in earlier sessions this week you may have heard the topic of securitization raised and that might be something on the horizon for AXXX reserves.

There is some relief in sight with the new valuation mortality table. The 2001 CSO table was approved by the NAIC at the end of 2002. Four states have adopted it to date, and we expect the majority of the states will adopt it by the end of 2005. In general, the 2001 CSO mortality rates are lower than the 80 CSO table and that clearly impacts values and reserves. Guaranteed COI rates will be reduced and, in some instances, if your current COIs are bumping up against the new guarantees, you may need to reduce your current COIs as well. In general, the maximum permissible surrender charges are reduced and as a result of those two things, product development actuaries will probably be restructuring their loads a little so that they can maintain profitability.

The required reserves with the new valuation mortality table are generally lower, and there's generally an improvement in profitability with the new table. I would expect companies that sell a lot of UL with no-lapse guarantees to move to the new table as soon as they can. However, I don't expect that it's going to cause a big shift in the premiums that we're seeing. I would expect that the premium levels will probably remain about the same. Any improvement in profitability from the new valuation table really only partially offsets some of the other developments that have occurred due to AXXX and the low-interest-rate environment.

So what are companies pricing for in the United States? Here's a summary of results from Tillinghast's 2002 pricing methodology survey. Statutory internal rate of return (IRR) remains the most common profit measure in the United States for UL. In 2002, the median target was 12 percent, which was slightly lower than the results from our 2000 survey, and I suspect might be slightly lower today. These are just profit targets, as mentioned, and there are some companies who probably are not achieving their targets right now.

The most common secondary measure is profit margin. Our survey respondents said that they price their lifetime, permanent life products over a 20- to 30-year pricing horizon. We didn't drill down and ask specifically about UL no-lapse-

guarantee products. Clearly, given the length of the guarantee, a longer pricing horizon may be more appropriate—say, 40 or 50 years.

With all these recent developments, there has been more emphasis on risk assessment during the pricing phase. Traditionally, UL products were priced using liability only models and companies performed a limited number of deterministic sensitivity tests on key assumptions. With some of the recent pressures, less reliance on reinsurance and the low-interest-rate environment, some companies are taking a more rigorous approach to analyzing the true cost and risk associated with these guarantees. One area of development is stochastic interest rate scenario testing. I think stochastic mortality scenario testing may be on the horizon. There are tools today that make that a feasible next step. I think companies are beginning to try to develop a complete risk profile for this product. There's a belief that the XXX or AXXX reserves may be redundant. However, it is also clear that holding fund value or UL CRVM reserves for low-cash-value products is not sufficient. So it's important to try to figure out where the true or realistic reserve might fall. That's what's going on south of the border.

**MR. LEBEL:** Next up is Robert Mallette. Robert is a senior vice president at RGA in Canada. He focuses on product development, marketing and pricing. Prior to joining RGA, Robert worked for Tillinghast and at a few major Canadian insurance companies. Robert is an FSA and FCIA and is a graduate of the University of Montreal.

**MR. ROBERT MALLETTE:** First off, I didn't realize it was UL versus WL, I thought it was UL north and south of the border. I may have to rearrange my presentation a little bit to take that into account. I'll go through some parts a little bit more quickly as I don't have a whole lot of time. In his presentation Marc-Andre referred to a quote from a book about WL being very flexible. Interestingly enough, the book was published before UL was actually introduced, so as a result, I'm pretty sure that the author of the book didn't realize at the time how flexible a life insurance policy could actually be. So with UL, I'd be curious to see what he would write today.

The objective of my presentation is to introduce the key features of UL north of the border, to discuss how we got there and to provide some insight and recent developments and to see what may be coming. How will we do this? Well, first of all what's a session without a good old UL 101 to start with? We'll talk about the features of the product in Canada, the factors driving the differences between the United States and Canada, trying to connect the two together and then relate back to the two previous presentations. What's the latest evolution on the product and the challenges facing life insurers?

What's important to know is that right now on the Canadian market, UL is a very important product. It's a product that has shown to be flexible and to provide a lot of value for different types of customers. Initially the product was seen as being a transparent option to WL and for well-informed or high-end buyers. This is no

longer the case. The product is used in many sales situations from pure protection all the way up to investment-driven sales. Even with the recent reduction in terms of growth on the UL side, it still is the most popular product. It's still far and above the WL product. WL is regaining some life; however, this is primarily in some key markets where clients seek fully guaranteed options.

Initially, the product was perceived as being more transparent than WL. Marc-Andre already alluded to the fact that when new money rates were high, UL was seen as a good alternative and that it could show much better value or provide insurance protection at a lower cost. Since then, interest rates have gone down. But for a while the equity markets were booming. As a result, companies developed product alternatives and investment options under the UL platform that included equity investments. In the United States, these would be called VL and VUL. In Canada, it remains under the same platform, but with different investment options. That's still true today with the equity markets having gone through some rough times over the last 18 months and interest rate returns being lower. There's a market for WL in selected circumstances. However, what we have to remember (a key point Marc-Andre mentioned) is that right now if you buy a WL at a guaranteed rate, you're basically locking yourself in at a high price (low return). If interest rates and/or equity markets turn around, you won't be able to benefit from this increase. UL by its flexibility can adapt better to changing conditions.

Now I'll look at the product feature drivers in Canada. Number one would be the distribution network's appetite for guarantees. Distributors in Canada are extremely risk-averse. They've gone through rough times in the 1980s with adjustable products that were priced at high interest rates, plus they've had to go through really major adjustments with participating products where dividends have gone down steadily through recent years. Having to go back to their clients and justifying more premium or fewer benefits has made our distribution network very risk-averse. As a result they're looking for strong long-term guarantees in the products they offer.

**Regulatory requirements.** As we've seen a few times already, there are no requirements for filing products in Canada. We basically let market forces drive what the products will look like. This creates a very efficient marketplace in that you don't have to wait a year and a half for a product approval. You can go to market very quickly, and, believe me, the market is a very, very good place to make sure that the products are customer-friendly and distribution-friendly. Companies are probably the ones that have to be the most careful in terms of how they structure the products to make it viable for them. We have, as Marc-Andre mentioned again, dynamic reserving and capital requirements that are based on a logical annual review process. As a result, if you make pricing errors, they come back to haunt you very quickly. This environment is driving product design in Canada in the sense that we're not trying to develop products that are based on "working around" the regulations but to develop products that fulfill customer needs.

**Tax rules.** Marc-Andre mentioned the exempt test earlier and the exempt test policy process that we go through. This is one example where, in Canada, we have a pre-defined way of doing things that is very regulated and rules-driven. The rules were designed and put in place prior to the introduction of UL. As a result, they don't apply well to the product, and this is one area where I've seen actuaries trying to change their design to work around some of those rules. As you can see in this case, once you have static rules-based regulations, you open the door for that type of product design initiative. Over time, the regulation has been adapted somewhat to UL, and right now, we have enough guidelines to provide a framework for UL. The actuary's creativity really comes into play—at times for the best; at times, maybe we're creating things that are a little too complicated for the market to understand.

I have one quote that provides a good example of that. This is from an investment magazine that was published in February 2002. The author was talking about another investment option that was available in the market, not treating UL as a life insurance product, but more as an investment product. He said, "The universal life insurance policies offer attractive tax benefits and investment alternatives, but their complex details vary widely among insurers." Then, and this is the one that really hurts: "...often to the point that many advisors say the products were designed by actuaries from hell." So we're probably not helping our situation too much if we make things too complicated.

**Key product features in the market.** Strong long-term guarantees are one. As I said, the types of guarantees offered are very much driven by the distributors; not only on mortality rates or on expense charges, but also on the lapse and interest rates. Marc-Andre mentioned T100 products earlier with their level premiums, level benefits and no CSV. Well, we have a design in Canada that's called UL with level cost of insurance (LCOI) where you're embedding a T100 product within the UL platform. As a result, what you're doing is you're guaranteeing on the COI: the interest rates and the lapse rates used in the pricing. That's not always ideal, especially when you don't have a lot of information to set assumptions such as long-term lapse rates. Another form of interest guarantee is the minimum interest rate credited on the fund value, but that's typical of most markets.

**Investment bonuses.** UL products in Canada have a multitude of different investment bonuses. Some are persistency-type bonuses where an additional interest rate will kick in after a certain number of years. Another form is where, if the fund value is greater than a certain pre-determined benchmark, then the client receives an additional payout in the form of a percentage of the account value. Another form would be if you pay enough additional premium over and above the minimum, you get a certain percentage of the fund added. Yet another form is where the interest rate credited to the account is higher than a certain benchmark then this rate is increased by a fixed percentage. I think I'm making my point.

There are a large number of them and they're fairly complex. Most companies include at least one type. But some will include up to three or more of these bonuses in their product. At times these bonus features put the accountability of the products into question. I have seen company marketing pieces where one company compares its product to another and talks about how company XYZ's bonus(es) are paid and questions whether or not they're realistic, implying that the customer should be wary of whether the bonus(es) will be paid and to be wary of the definitions of the said bonus(es). As a result, it is one aspect that our market needs to watch for to make sure everyone understands the bonus structure included in a product.

LCOI is a lapse-supported product where very little experience is available. The only industry study that we have to date on lapse rates, for UL, came out in June 2003, after the market had been selling the product for close to 15 years. Rates start at the 8 percent or 9 percent level, but drop very, very quickly to below 2 percent. A more meaningful measure for pricing is single life by face amount. They start low and drop even lower very quickly. They drop to well under 2 percent, closer to 1 percent. Keep in mind that starting in duration 10 plus, there's very little credibility. There's not a whole lot of experience.

Another key feature for us—that may not be as widely offered in the U.S. market—are joint last-to-die contracts. Because of some tax rules in Canada on capital gain, this is a very popular option and in some companies it represents as much as 20 percent or 25 percent of their UL sales. Unfortunately, most have used single equivalent age methods to determine the COI for the specific policy and age combination. As a result, the implicit assumption is that this business will lapse at rates similar to that of single lives. If you look at the experience for single lives, you'd probably end up using assumptions in the area of the single life ages. Now, if you look at the experience of joint last to die by face amount, from day one it's on the order of 1 to 1.5 percent per annum. This is mainly because we're talking about a very sophisticated sale with high face amounts. There are some small tick marks from duration nine to 12. I did that on purpose, since there is some data out there, but the lapse experience so far is zero. There's not a lot of data, but so far it produces very low lapse rates. It makes it a challenge from a pricing perspective, especially when you look at what would have been used typically in those products as a lapse assumption when it was originally priced.

Now I'll look at more features in Canada that influence the product. There's a wide array of investment options. As I said we don't have VUL, VL or UL. We have universal life and within the universal life platform we have fixed investment options, as well as equity-linked types of investment options. The investment options vary widely by carrier. You can see as many as 20 to 25 investment accounts available on the same product. Each account may have different investment fees or management expense ratios (MERs) and each may have different guarantees on those MERs. So it's again creating additional complexity. However, it does provide a lot of flexibility within the product. Preferred

underwriting products are starting to come out. Close to half of the market right now is on a preferred underwriting basis in UL. We can expect that in the next three or four years the rest of the market will join in as well.

"No-lapse design" is not common in Canada. We've seen it once in a while, creeping up here and there. Companies are trying to do something similar, but it's done more implicitly using a T100 design within the universal life platform, which creates a no-lapse type of guarantee. With this design, clients only need to pay the LCOI and the expense loading and they're okay for the life of the policy.

Now, why the differences between Canada and the United States? As referred to in Marc-Andre's presentation, the regulatory requirements create differences between Canada and the United States. An example is the filing requirements. Another example would be the nonforfeiture laws. In Canada, LCOI options in the product are possible while it would likely not be possible in the United States. We have one method for reserves, for tax, statutory or GAAP. It's the same method and the same assumptions. There are a variety of methods used in the United States. There are policyholder taxation differences between the two countries. The level of guarantees offered is also very different. Based on Elinor's presentation it looks like guarantees are there in the United States, but they're probably a little more implicit than they would be in Canada, where they would likely be stronger and more explicit, but with similar results.

**The Canadian market today.** We have seen very few core changes to the products being offered in the last 10 years. The last life product innovation has really been UL. Product developers are using UL's flexibility to introduce different options. The market is changing. The focus ten years ago was LCOI with 90 percent or more of sales, and 10 percent was YRT COIs. In 2002, that split was about 50/50. We had been seeing a migration back to YRT, but I suspect that had a lot to do with the equity market being so good for a period of time and being able to illustrate well on a YRT basis. More recent numbers appear to reveal a reversal of that trend. We're now seeing more players coming out with revised LCOI options. Even going back to 1998, the LCOI was about twice the sales of YRT whereas in 2001, it's 50/50.

There are more challenges. We have complex bonuses as I mentioned, with very flexible features, very strong guarantees, and this can be a recipe for disaster for any pricing actuary not paying close attention to how the product is sold.

There's still very little actual experience on the LCOI. There's only about eight years of fairly credible data for lapses. For a product that can be on your books for 30 or more years, this is not a lot. Once you pass that eighth year there's really no credible information. The challenge then is to come up with a lapse assumption that will be realistic.

**Cost of capital on the guaranteed products.** Up until now, reinsurance was a good provider of fairly inexpensive capital. That trend seems to be reversing a little bit. The prices on reinsurance are leveling off somewhat. They're not dropping as quickly as they were, so it's going to be interesting to see how that translates into future UL products going forward. You can see what actuaries have to say about product pricing. If you look at LCOI products on a joint last basis, you can see that 80 percent of pricing actuaries surveyed believe that their own product is underpriced. All of them (100 percent) believe that someone out there is underpricing their product. Then the assumption would be that they are subsidizing it with something else. Well that something else would likely be UL LCOI for single life. Seventy percent of those believe that their own product is underpriced and 90 percent believe that some of their competitors are underpricing it. So I'm not exactly sure what they're using for the cross subsidy. Perhaps it would have to be term insurance. But then that's a different story.

A key challenge relates to the illustrations being used and the investment fees being charged all combined with product bonuses. I suspect that a lot of those features are not necessarily understood well by clients and probably not that well by distributors. Given some of the pricing errors seen in the past, I'm not sure that even all actuaries understand these things very well.

**Market share.** Now that most Canadian carriers are stock companies, everyone wants to grow faster. If you want to grow, you have to be a market player/leader. If you want to be a market player, your price has to be comparable to the others, so it's creating this huge spiral that is really difficult to get out of. So where will this take us? I think we'll end up having products that will retain their flexibility, but that will likely be simpler. The next company that will have a lot of success with this product will be the one to come up with a fairly simple solution that still provides a flexible product for a key part of their distribution outlet. They might not try to be all things to all people with one product. They may try to focus a little bit more. Will we see fewer bonus options? Probably fewer, but they won't go away all together. It's something that will stay around in the market. We're now in a market that requires bonuses to produce attractive illustrations, so we're stuck with those for quite a while. Will there be more regulation? I don't think so. It's a good product, given it's had a lot of success and companies have been there to provide good options for customers. The industry regulates itself and does it fairly well, so I don't see too much change at this level. More accountability and transparency will be inevitable. It's something that will have to happen. We'll have to go back to the drawing board and come up with options that are understandable by our customers, understandable by our distributors and understandable by the actuaries that are actually pricing the product.

**MR. JEFF ROBINSON:** I'm glad this session happened at the last part of the meeting, because I've always been what I would consider a WL bigot, but I wasn't sure why. Now, I'm sure why, and I'd like to address some points. Elinor said that the agents prefer term and WL and I think consulting actuaries prefer term and not

WL, but UL. What do the consumers prefer? Several of the actuaries up here are illustration actuaries. Does anybody understand shadow accounts? If I don't understand them, how do they understand them? A lot of my friends ask me about their policies and I say: What kind of policy do you have? Most of them say I don't know. I say, is it UL? What's a UL policy? The agents sell it because of the flexible premium; they say it's flexible—you don't have to pay a premium. Tell an insured you don't have to pay a premium and he loves it. It's an easier sale I believe, not necessarily the appropriate sale, but an easier sale.

I haven't seen a UL illustration in a while. I know in the late 1980s people were illustrating 10 percent, 12 percent returns. New York required that you show the actual, medium and then low returns. I just can't conceive that the middle market, which is a big market that hasn't been addressed, really understands this product.

I think WL is an older product and it evolved. After listening to some of the comments, I think UL is mutating, as opposed to evolving. It seems like it's addressing short-term situations. Interest rates went way up, people were getting CDs, so we had to come out with a product to beat that and when the equity markets go down, we have better sales. However, WL can address all of these things. Maybe I'm more used to nonparticipating WL. I think participating WL may be the most flexible of all. It's also more transparent and it's more easily regulated.

I think the industry shot itself in the foot by coming out with UL. I don't see any advantage. Everybody says it's evolving with regulation. Do consumers care about AXXX? No. They may care if the company goes under, but we're gaming it of course. Somebody called it creativity. I call it gaming. Every time a new regulation comes out, we try to beat it and the regulators are always a little behind. But my point is that this is a very complex product and the Jim Anderson I blame is the Jim Anderson who came out with this, who was a consulting actuary.

Now, I am a WL bigot. I said that to begin with, but I just see so many problems in this. I see WL as a product that can cover circumstances as they go up and when they go down. I've learned over 41 years that what happens today may not happen tomorrow, but it will happen again some time in the future. It's a policy that can cover long-term circumstances that can cover long-term guarantees. I don't see UL doing that. I see it reacting to short-term situations. I apologize for being so passionate about this, but I really think UL is not the answer.

**MS. FRIEDMAN:** I appreciate your comments. I agree that the consumer doesn't care about AXXX and how the guarantee is being provided, but even with a shadow plan or an ART design the guarantee is there. As mentioned these products are generally sold based on a level premium solve for the guarantee.

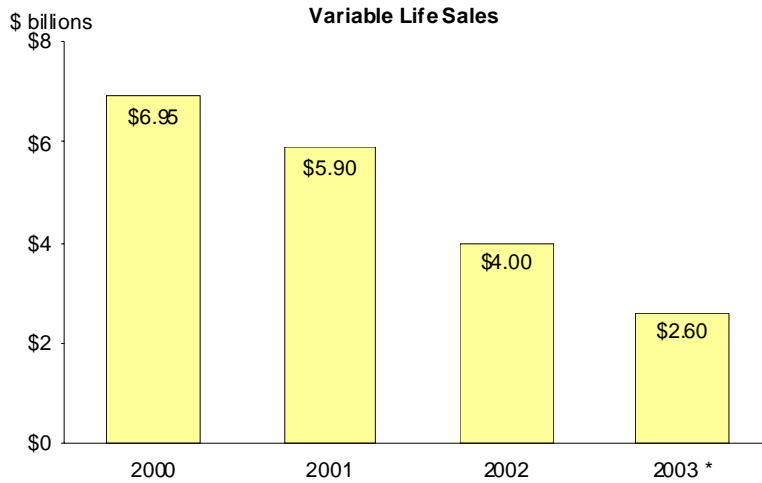
**FROM THE FLOOR:** But is it a contractual guarantee or an implied guarantee?

**MS. FRIEDMAN:** It is a contractual guarantee.

**MR. BRUNET:** WL is not the solution for everything. Everybody has to do their job. For WL to work, we need good persistency, good mortality, good agents and good studies to monitor progress. For the Knights of Columbus, it has worked well. I think that the credibility of the actuaries is on the line. One of the problems with WL is to explain how the values are calculated. Agents and customers rely on actuaries. You should explain to your management and your distribution system the qualities of WL and that it is a simple product. But, because of the portfolio rates going up and down, there will be variations in WL illustrations, maybe not as fast as in UL. This is true for Canada as well as the United States.

Chart 1

US variable life sales have experienced significant setbacks in recent years



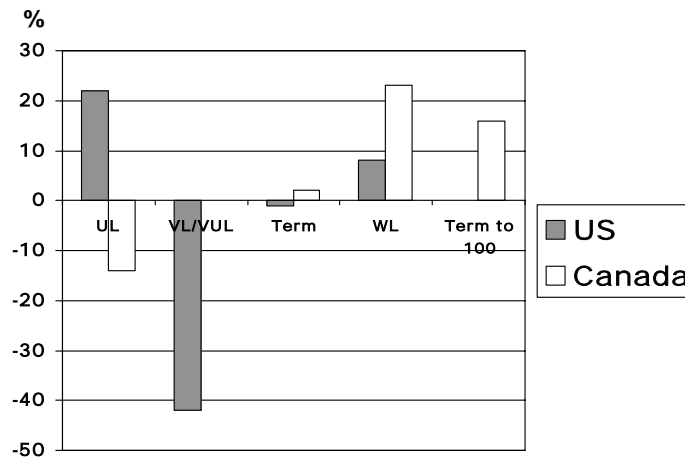
\* 2003 sales estimated based on first half sales of \$1.3 billion

Source: Tillinghast VALUE Survey. Sales include first-year target premiums, 100% of dump-ins and 10% of single premium.

Chart 2

Fixed products are growing while variable products are declining

Annualized Premiums Q2 2003 vs. Q2 2002

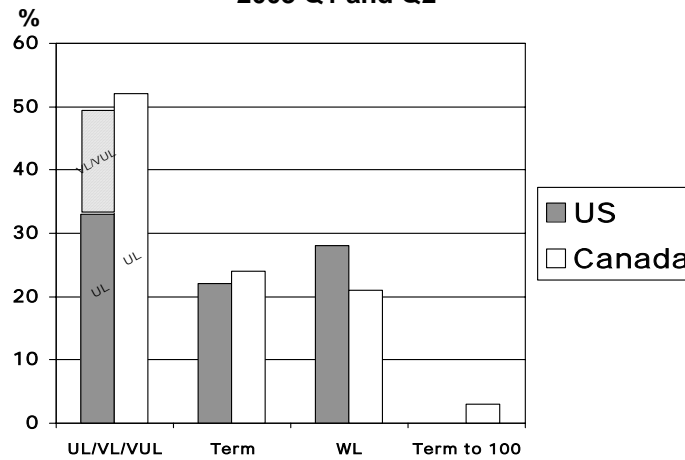


Source: LIMRA International, Inc.

Chart 3

UL, term and whole life capture over 80% of the market share in both markets

Market Share Estimates (Annualized Premiums)  
2003 Q1 and Q2



Source: LIMRA International, Inc.

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Chart 4

# Par Life Insurance - History



Similarities

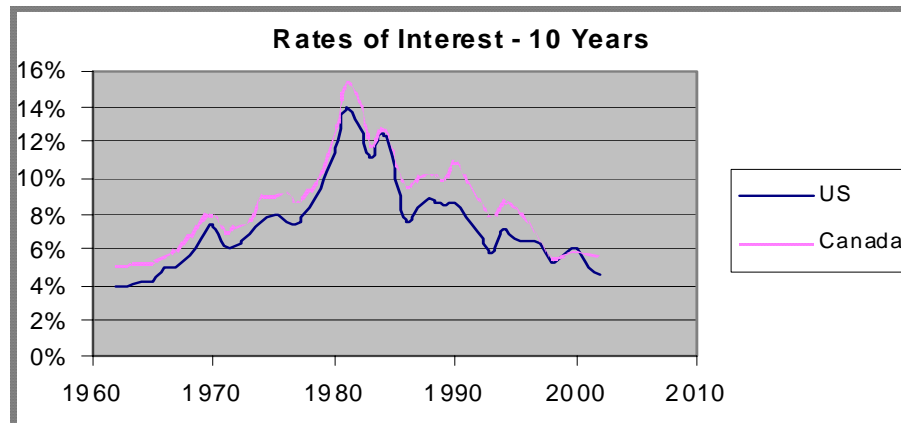
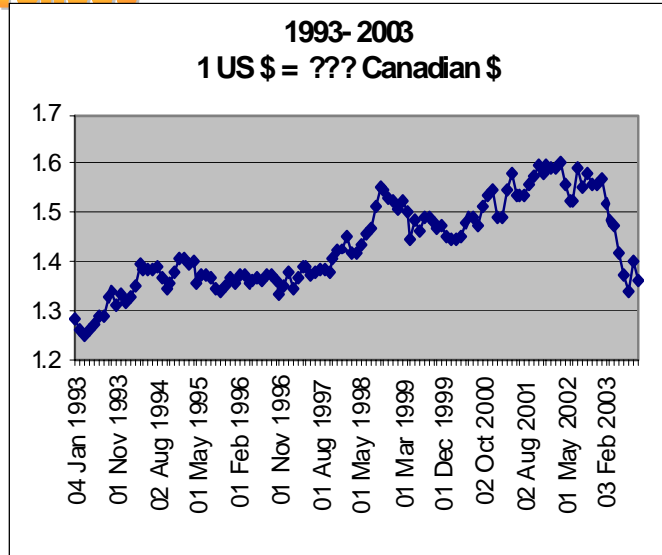


Chart 5



### Currencies



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Chart 6



### Currencies

