

# Agent's Guide to Understanding Fixed Indexed Annuity Pricing

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ADLF 5647 (12-2006) Index rates are subject to a cap. Policies issued by OM Financial Life Insurance Company, Baltimore, MD 06-416 Rev 06-2007						
OM FIN	NANCIAL LIFE INSURANCE COM	ΡΑΝΥ				

Sales of Fixed Indexed Annuities have increased significantly since their introduction in the mid 1990's. Today, there are hundreds of Indexed Annuities available, dozens of crediting methods, and a variety of benefits to choose from. Out of all the features used to distinguish the products (caps, spreads, participation rates, etc.), the long term performance potential of an Indexed Annuity is most affected by one thing: initial and renewal index option pricing. After all, clients are purchasing a product they will own for many years to come.

Although some products may look good on paper, if they are not designed with integrity and explained correctly, the end result will be a disappointed client. With that in mind, this guide is provided to you by Old Mutual Financial Network (OMFN) to help you understand what factors influence index option pricing, and ultimately put you in a better position to properly advise your clients on what to expect from their Indexed Annuity.

At Old Mutual Financial Network, we are proud of our initial and renewal index option pricing and remain committed to providing your clients the best possible value in the Indexed Annuity marketplace.

## **Overview**

As you know, for every dollar of Indexed Annuity premium, the majority is used to support the product's minimum interest guarantee. This minimum guarantee is the anchor that helps to classify the product as a fixed annuity and supports one of the main reasons that consumers purchase the products: safety. As with any fixed annuity, the funds used to back these guarantees are invested by the issuing insurance company in bonds and other long-term instruments. The policy owner does not have any interest in these underlying investments; they are part of the insurer's general account.

Beyond the minimum guarantee, the remaining portion of the premium is used to pay for expenses and index options. These options are the mechanism that allows us to credit additional interest tied to index gains to our policyholders and provide upside performance potential.

It is important to note that index options are not all purchased up-front to support credited indexed interest gains over the life of the policy. Therefore, the caps offered on our Indexed Annuities are guaranteed one year at a time (on annual reset designs). Each year we must purchase new options to cover the indexed interest gains that will be credited over the coming year.

Why don't we purchase all of the options up-front and guarantee the caps/spreads for the term of the policy? The primary reason is that, in today's environment, the trade-off between having guaranteed caps and the cost of guaranteeing those caps would not be attractive to prospective clients; guarantees come at a cost. If the guarantees were offered for a longer period, the guarantee would need to be offered at a lower rate.

A simple way of understanding the pricing of Indexed Annuities is to think of their design in terms of a budget. The minimum guarantee budget is fixed, and is "spent" upfront as discussed earlier. The option budget is also fixed, but is "spent" on a yearly basis by purchasing options. Simply stated, our Indexed Annuities are priced assuming a level option budget throughout the term of the policy. This option budget is the amount that we can afford to spend to purchase options each year.

Option costs fluctuate year to year based on market conditions, so if the price of options is higher in a given renewal year than what was assumed at the time the policy was issued, fewer options can be purchased. The end result in this scenario is that renewal caps on the policy will have to be lowered (fewer options purchased translates in to a lower cap). Conversely, lower option costs result in higher renewal caps.

We are often asked why the caps on newly issued policies are oftentimes different than renewal caps on older policies. This difference is primarily driven by the bonds that were purchased to back the policies. If, for example, interest rates have risen since a policy was issued, newly issued policies will be supported by bonds that offer a higher yield. With higher yields, less money is needed to support the minimum guarantees and more money can be allocated to the purchase of index options. With more options, of course, higher caps can be offered on new policies than the renewals on older policies. The reverse would be true in a falling interest rate environment; new policies would have less money allocated for option purchases, which would result in lower caps as compared to caps offered on renewals.

# What affects the cost of options?

There are two major variables that affect the cost of the options we purchase: Risk-Free Rate of return and the volatility of the equities market.

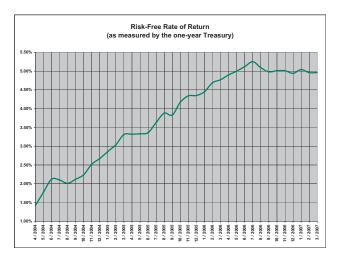
#### **Risk-Free Rate of Return**

#### What is it?

The Risk-Free Rate of return is typically represented by the return on government-issued Treasuries; there is virtually no risk associated with investments backed by the

government. Specifically, OMFN uses the one-year Treasury as a measure of the Risk-Free Rate of return.

#### **Recent History**



The treasury rates shown in the chart above are based on monthly 1-year Treasury Constant Maturity rates. From the Federal Reserve Statistical Release, www.federalreserve.gov/releases.

As can be seen in the chart labeled "Risk-Free Rate of Return", interest rates have been on a steady climb since the beginning of 2004. From 2002 through 2003, interest rates remained low in the range of 1.0%-1.5%.

#### **Option Cost Effect**

An increase in the Risk-Free Rate will generally cause the cost of options to increase. Conversely, a drop in the Risk-Free Rate will cause option costs to decrease. Options cost more when the Risk-Free Rate is higher because not only does a Risk-Free Rate investment cost more now (because it is providing a higher yield) but so does an investment that has additional risk and uncertainty (such as call



From internal OMFN data.

options which offer the potential for higher returns). The relationship between the Risk-Free Rate and option costs is exhibited in the chart labeled "Option Cost by Treasury Rate Level".

#### **Pricing Assumptions**

When we issue an Indexed Annuity policy, an assumption is made as to what the Risk-Free Rate will average over the life of the contract. Currently, the Risk-Free Rate is above 5%. The majority of policies issued over the past two years (2004 & 2005) have been issued in an environment when the Risk-Free Rate was between 2% and 4%. A rising Risk-Free Rate will cause the cost of options to increase and result in lower renewal caps.

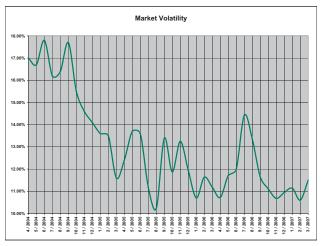
#### **Market Volatility**

#### What is it?

The performance of the equity markets can at times fluctuate up and down significantly in a short period of time. Movements in a given stock index are used to predict the standard deviation of the market index for the following year, which is the main determinant of the cost of the options.

#### **Recent History**

The volatility of U.S. equity markets from 2003 through



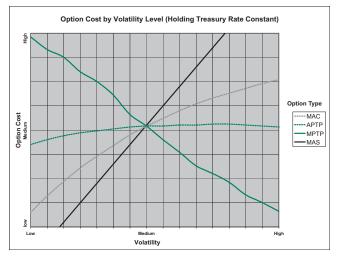
The volatility level is based on the average implied monthly volatility during that month. From Bloomberg.

much of 2004 was in the 16%-18% range; however, in the last few months of 2004 volatility dropped sharply from around 17% to about 14%. Since the beginning of 2005 volatility has fluctuated substantially from month to month but stayed in the 11%-14% range.

#### Option Cost Effect

The volatility of the market affects the likelihood of whether or not an option will pay off and what return it will provide, which of course helps determine the cost of the option.

The exhibit labeled "Option Cost by Volatility Level" shows that the four option types behave differently based on



From internal OMFN data.

changes in market volatility. The Annual Point to Point with cap option (APTP) cost is relatively insensitive to changes in volatility. The Monthly Average with cap option (MAC) and Monthly Average with spread option (MAS) costs decrease for volatility decreases (direct relationship) and the Monthly Point to Point with cap option (MPTP) cost increases significantly due to volatility decreases (inverse relationship).

#### **Pricing Assumptions**

At the time of policy issue, an average market volatility level is assumed for the life of the contract. When current volatility is at the level of our pricing assumption, each option type will have option costs identical to the budget that has been set for the products at issue (assuming a constant Risk-Free Rate of return). If, however, current volatility is below pricing assumptions, the MAC and MAS option costs will be lower than assumed (allowing for more options to be purchased), and the MPTP options will be more expensive (allowing for fewer options to be purchased).

# **Aggregate Option Cost Effect**

As discussed earlier, the combined effect of changes in the Risk-Free Rate and market volatility determine the cost of options that will be purchased each renewal year for an Indexed Annuity policy. If the net effect is a higher option cost, fewer options can be purchased and the renewal caps

	Risk-Free Rate		Market Volatility	
Option Type	Higher	Lower	Higher	Lower
MAC	Higher Cost	Lower Cost	Higher Cost	Lower Cost
APTP	Higher Cost	Lower Cost	Small Change	Small Change
MPTP	Higher Cost	Lower Cost	Lower Cost	Higher Cost
MAS	Higher Cost	Lower Cost	Higher Cost	Lower Cost

will be lower. If the cost of options is lower, the fixed option budget will allow for more options to be purchased. This would result in higher renewal caps. The table below summarizes how the Risk-Free Rate and market volatility will impact the cost of options on an Indexed Annuity.

Impact of Past two Years on Renewal Option Costs						
Option Type	Risk-Free Rate Cost Effect	Volatility Cost Effect	Aggregate Cost Effect			
MAC	Higher	Lower	Slightly Higher			
APTP	Higher	Small Change	Higher			
MPTP	Higher	Much Higher	Much Higher			
MAS	Much Higher	Much Lower	Slightly Lower			

For most of the past two years (2004 & 2005) we have experienced market volatilities that are lower than we would normally have expected and we have also seen higher Risk-Free Rates than expected. The following table shows the relative effect of these market changes on renewal option costs.

As you can see from the table above, policies that have been issued over the past two years have experienced higher renewal option costs (with the exception of the MAS crediting option), and as would be expected, renewal caps on these policies were lowered.

### Summary

Old Mutual Financial Network's Indexed Annuities are not priced to include first-year "bonus" cap or spread rates. They are priced using assumptions of how the market, as measured by the Risk-Free Rate and market volatility, will behave over the term of the policy. Based on these assumptions, an annual option budget is established at policy issue. This budget is used to purchase index options on an annual basis. If option costs are higher at time of renewal, fewer options can be purchased and the policy renewal interest rate will be lower. If option costs are lower, more options can be purchased resulting in a favorable adjustment to the interest rate caps.

We hope that this explanation of how Indexed Annuities are priced and affected by changes in the market will help you to better explain to your clients what to expect at renewal time from their Indexed Annuity. Our suite of Indexed Annuities is unmatched in the industry and we believe our approach to setting initial and renewal rates offers exceptional value over time to your clients.

We welcome your feedback! If you have comments about this guide, please feel free to write us at sales@omfn.com.



At Old Mutual Financial Network, we are proud of our initial and renewal caps. We remain committed to providing your clients the best possible value in the Fixed Indexed Annuity marketplace.

# About Us – Old Mutual Financial Network

Old Mutual Financial Network (OMFN) is the marketing name for the U.S. life insurance and annuity operations of Old Mutual plc, including OM Financial Life Insurance Company. Headquartered in London, England, Old Mutual plc was founded in 1845, is one of the world's largest insurers, ranks as a Fortune Global 500 company and employs nearly 50,000 people worldwide. OMFN has the knowledge, expertise and resources a global powerhouse can provide and is committed to delivering innovative and balanced financial solutions. OM Financial Life is solely responsible for it's contractual commitments.

# Consider all the facts, then make your own decision.

OM Financial Life offers index annuity products with different features, benefits, and charges, including different issue ages, premium requirements, interest rates, withdrawal privileges, and charges.

No single annuity product design may have all the features you find desirable. To better meet the needs of you and your family, you should carefully consider your financial situation and all the alternatives available to you.

For details, contact your licensed sales representative today, email us at contact-us@omfn.com or visit us on the World Wide Web at www.omfn.com.



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