Understanding the Use of Options in Equity Indexed Annuities

Before we begin, it's important that we clear up any misconceptions the terms "Derivative" and "Option" may hold in your mind. We are not talking about Coffee Futures or Pork Bellies or European Currencies. A "Derivative" simply "derives" its value from something else. Good examples of this are bank savings account rates (derived from the yield the bank earns from its own investments) and the rate you pay for your car insurance (derived from the value of total claims your insurer expects to pay out in your area). To illustrate the concept further:

> "How much money would ordinary people invest in a *Managed Bank Portfolio of Mortgage & Bond Derivatives*? The answer is $800 billion according to the Federal Reserve Board. Of course, the bank marketing department name for these derivatives is certificates of deposit."[1]

The EIA is a <u>fixed</u> annuity. This means your personal premium is not ever directly at risk in the stock market. The insurance company has <u>guaranteed</u> to you that they will not lose your initial premium, so they need a more conservative way to accomplish stock-like gains. Using only a small amount of money to purchase Options on the value of the stocks that make up an Index, they invest the majority of their funds in Bonds or something similar. Equity Indexed Annuities are credited with a share of these profits. Here's an over-simplified example of how it works:

1.) A stock index is currently at a level of '10', based on the value of all the stocks in that index.

2.) Firm 'A' owns the same portfolio of stocks that make up that index. Therefore, its current value is $10.

3.) Insurance Company 'B' offers $1 to Firm 'A' for the rights (the 'Option') to buy their portfolio sometime in the next year at the 10 level for $10. Firm 'A' agrees and keeps the $1.

4.) In nine months, the Index (and the Firm 'A' portfolio) has moved up to a level of 15. Insurance Company 'B' decides to use their Option, buys the portfolio from Firm 'A', and then immediately sells it, making a $5 profit.

5.) Alternatively, if the stock index had moved down to a level *below* 10, the Insurance Company would have done nothing, and simply lost the $1 they paid for the Option to buy.

It simply makes good business sense to use Options. Option buyers are not obligated to use ('exercise') the Option, but the seller of the Option <u>is</u> obligated to sell to the buyer if they so decide. The Insurance Company can never lose more than what they spend on the Option, but their profit potential is unlimited.

[1] Jack Marion, Annuity Advantage; *The Index Compendium*, November 2003.