

The Advantages and Disadvantages of Equity Index Annuities

by Geoffrey VanderPal, CFP®, CLU, CFS, RFC

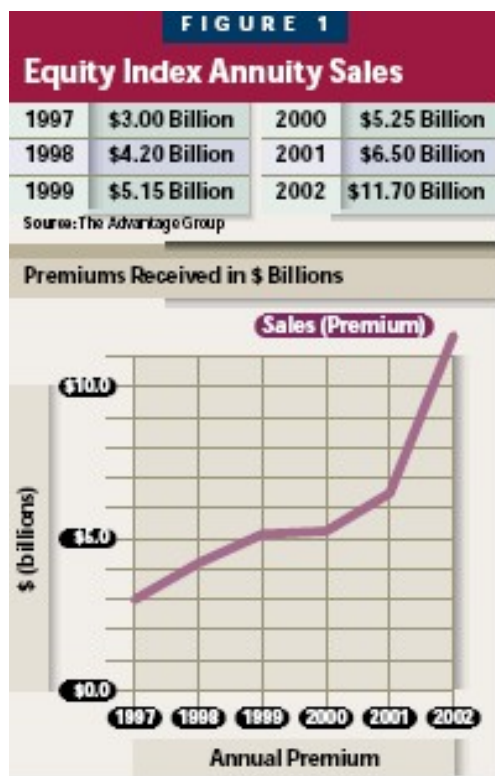
Executive Summary

- Equity index annuities combine the safety of a standard fixed annuity with returns linked to an investment index. EIAs, which come in many variations, have advantages and disadvantages.
- Studies show that EIAs typically outperform certificate of deposits and taxable bond mutual funds, but not stock indexes over the long term. There are over 120 equity index annuities and about 40 crediting methods.
- EIAs are ideal for clients who want to participate in market returns yet are uncomfortable with market risk.
- EIA portfolios are a combination of targeted maturity investment grade bonds and a European Call Index Option, which is a derivative security based on the underlying increase in value of an index over time with a set end date for exercise.
- The article examines three major crediting methods—point to point, high water point and averaging—as well as numerous variations that can affect performance, such as annual reset, caps, minimum guarantees, participation rates and bonuses.
- Participation, caps and asset fees/spreads depend directly on the mechanical structure of interest yields of bonds and the pricing index option. Lower yields and more volatile markets decrease the amount of options that can be bought, thus lowering overall EIA return.
- Current participation rates are 50–100% with various cap levels, but as market volatility decreases, participation rates and caps should rise, improving EIA returns.
- The strongest EIA crediting methods are point to point, point to point with annual reset and the high-water mark.

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Over the past three years, advisors have been seeking safer alternatives to grow client wealth with minimal risk to capital. One alternative is equity index fixed annuities. They have been around since February 1995 when Keyport Life developed the concept of providing returns linked to the S&P 500 Index with the safety of a standard fixed annuity. An equity index annuity provides a guarantee of principal, guarantee of a minimum return over time and allows for growth participation pegged to a stock or bond index on a tax-deferred basis. There are advantages as well as disadvantages to these programs, and many advisors are either not aware that equity index fixed annuity programs exist, or exactly how they function.

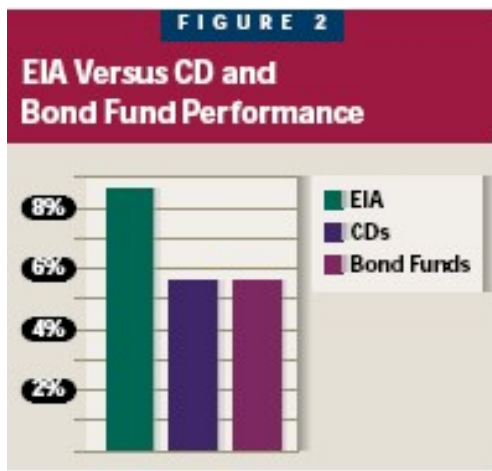
An equity indexed annuity (EIA) is a fixed annuity and does not require a securities license to solicit clients. The EIA has gained in popularity and sales have increased dramatically over the past eight years (see Figure 1).



EIA Returns

Annuities over the years have received negative press, some fair and some unjustified. Annuities do provide a good alternative for retirement savings when other sources of retirement vehicles such as IRAs and qualified plans are maximized. Due to the unique nature of the EIA with its principal protection and index-linked returns, an EIA may be more appealing than standard fixed annuities without the market risk of variable annuities or mutual funds. In fact, the EIA typically provides a guaranteed minimum return between two and three percent annually over the term of the contract, even if the index-linked return is flat or negative during the annuity contract period.

A study by The Advantage Group, a research firm in St. Louis, Missouri, examined five of six annual reset point-to-point EIA programs (this type of program is explained below) from January 2, 1997– January 2, 2002, and concluded that the annual reset equity index annuities outperformed certificates of deposit and taxable bond mutual funds by 40 percent (see Figure 2). In that five-year period, equity index annuities returned an average of 8.3 percent annually, CDs and the bond funds returned an average of 5.6 percent annually. In addition, the study concluded the EIAs had higher returns than 61 percent of all mutual funds and outperformed 99 percent of the 626 bond funds with five-year track records.



A more recent study conducted by The Advantage Group determined that from March 31, 1998, to March 31, 2003, equity index annuities had higher returns than 63 percent to 75 percent of all mutual funds for the same time frame. This analysis was based on the crediting rates of a majority of index annuities available for the five-year period calculated by The Advantage Group and total returns for 2,344 mutual funds during that same period.

There are over 120 EIAs and about 40 known crediting methods for calculating index linked returns to the contract holder, according to Moody's Investor Services. An EIA can participate in a number of indices, including the S&P 500, S&P 400 Midcap, Dow 30, Russell 2000 (small cap), Nasdaq 100 and Lehman Brothers U.S. Treasury Index. The return realized over time is based on the index chosen and the crediting method used.

The philosophy of "it's not what you make, it's what you keep" is paramount. The volatility of the stock market requires large upward spikes in investment return to elevate above the market troughs or losses. The EIA allows for protection of principal in down markets and provides for a zero percent return instead of a negative return during market declines. Many EIA programs provide a minimum guarantee of two or three percent annually if the index-linked return is less than the minimum guaranteed return at the end of the annuity contract.

An EIA is ideal for clients who would like to participate in market returns yet are uncomfortable with market risk. A financial planner understands that even as people age, inflation continues to erode the buying power and savings of clients. Over time, the highest investment returns have resulted from the equity markets. With the uncertainty of the stock market, overvaluation of bond and REIT portfolios, and low interest rates, clients are seeking safe alternatives to provide returns immune from market risks.

Interest Crediting Methods

To better understand the mechanics of an equity indexed annuity, planners need to understand the major crediting methods used to calculate index-linked returns in order to evaluate potential returns for a contract owner.

Point to point. The point-to-point design credits interest based on the difference between the index value at the beginning and end of a period of at least one year. Keep in mind that the change in the index is a "price change only" measure and does not reflect dividends. For example, the S&P 500 Index is at 900 and at the end of the crediting period the index result is 1,100. A gain of 22 percent is realized. The point-to-point design can be annual with an annual reset, or over a longer period of time, also known as a term point-to-point, that normally ranges from 7 to 12 years without a reset. *The point-to-point term method works best in upward-trending markets over time, whereas the point-to-point with annual reset tends to work best in uncertain and volatile markets.*

High-water point. The high-water point, or high-water mark, is a variation of the point-to-point term method. Rather than using the ending point, the calculation for an HP is based on the highest obtained value during the

term of the contract based on annual contract anniversary index values. For example, if the index doubled its original value on the first anniversary date and then proceeded to decline for the remaining contract period, the high-water point method would calculate an index return of 100 percent. The high-water mark is locked in no matter how much the market may go down. *The high-water mark method performs best when the market rises to a high level and then surrenders a significant portion of the gain over the remainder of the contract term.* The high-water mark represents less than one percent of sales and has not been a major method in over seven years.

Averaging method. The averaging method averages the index performance over a period of time on a monthly, weekly or daily basis. For example, the ending index value of a monthly averaging method would be calculated as the last 12 monthly anniversary values added and divided by 12 to create an average annual value. In this case, averaging protects the contract holder from sudden declines in the index. With averaging methods, a loss of upward performance in the index calculation occurs, which can be a major long-term drawback. *The averaging method works best in volatile markets over a limited period of time.*

In addition to the three main crediting methods, there are variations that can affect index performance.

Annual reset. The annual reset credits interest annually to the contract holder. As a hedge against unforeseen financial circumstances, such as increased hedging expenses, the insurance company usually reserves the right to alter participation rates annually. The annual reset method is advantageous for locking in or ratcheting contract holders' earnings annually. For example, using point-to-point EIA, the Standard & Poor's 500 Index value starts at 1,000 and ends at 1,100 on the first contract anniversary and at 900 on the second policy anniversary. The resulting return, using a 90 percent index participation and a 0 percent floor return for each policy year, would be 9 percent cumulative for the two-year period, whereas a standard index mutual fund would have experienced a 20 percent loss during the second year and a cumulative loss of 10 percent. In this scenario, the annual reset point-to-point EIA produced 19 percent more return over two years compared with a standard index mutual fund. The annual reset method works well under volatile market conditions and has become popular in the past two years. This method also provided the best index participation potential when taking out periodic or systematic withdrawals.

Cap. A cap is the maximum amount of indexed interest credited to an EIA. A cap is often used in combination with a participation rate and is common to EIAs with an annual reset design. This can limit the upside market potential to a contract holder and many contracts allow for annual readjustments of the cap. The adjustment is based on index-option pricing and how much the insurance company can purchase for index participation. An example of a cap is an EIA that limits index returns at a particular level or ceiling. If an EIA had a cap of ten percent, then the EIA can only provide up to a ten percent return for a given period.

Floor or minimum guarantee. The minimum credited interest rate, also known as the guaranteed interest rate. Usually, the floor is either a 90 percent or 100 percent guarantee of principal invested, with a three percent annual interest credit. This can vary by annuity company or specific program.

Participation rate. The percent participation of an increase in the market value of the index used to determine the amount of indexed interest to be credited to a contract holder. The percentage stated (participation rate) is multiplied by the amount of increase in the index value to determine the indexed interest. For example, when the S&P 500 value increases 10 percent, an EIA with an 80 percent participation rate will receive indexed interest credit of 8 percent.

Index term. The contract period during which an EIA policy is indexed, or contract period.

Yield spread or asset fee. The yield spread is often called the asset fee or margin reduction. It is stated as a percentage deduction from the amount of indexed interest. It is used to cover the expense of purchasing index

options and other underlying expenses. The yield-spread deduction has the same effect as would a participation rate of less than 100 percent. For example, if the index increases ten percent, an EIA contract with a yield spread of two percent would net interest of eight percent after deducting the fee.

Bonus. Some EIA programs offer an upfront bonus to clients. This can be used to offset previous client losses or a surrender fee for early redemption of a previous investment.

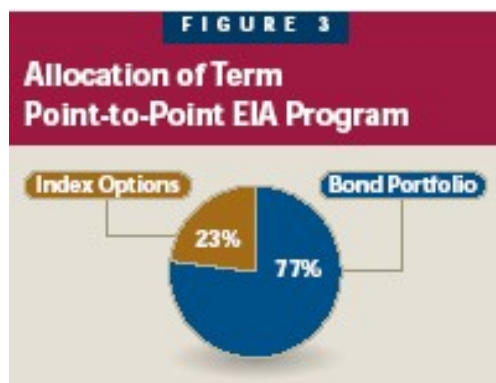
Liquidity. Most EIAs offer a 10–20 percent standard withdrawal feature while providing a nursing home or terminal illness waiver that may allow for a substantial or complete withdrawal without penalty. Typically most contracts allow for full contract value without penalty upon death of the annuitant.

Internal Function of EIAs

The mechanics of the equity indexed annuity are based on a targeted maturity investment grade bond portfolio and equity index (European call) options of a particular index. A European call index option is a derivative security based upon the underlying increase in value of an index over a period of time with a set end date for exercise. The vast majority of contract holders' funds are placed into the bond portfolio (similar to standard fixed annuities). The investment grade bond portion of the underlying annuity portfolio accounts for between 70–98 percent of the initial funds invested depending upon the type of crediting method used and the term or maturity period of the contract. An EIA contract can range from 5 through 16 years for contract maturity.

An EIA with a point-to-point design over a term or period of time (not annual reset) will invest the funds into an investment grade bond portfolio targeted to the contract maturity. Calculated upon a discounted present value of the bond portfolio, the discounted amount is placed into customized equity index options for the maturity period. As the bonds mature in the underlying portfolio, the matured bond value provides the principal protection, and the minimum guaranteed contract return is based upon a portion of the dividends generated. The typical point-to-point crediting method calculates the index return based on the beginning point and the ending point. During the interim, the return is subject to market volatility, not the principal.

As an example, the annuity company is able to purchase a bond portfolio, maturing in nine years, generating a five percent return. The annuity company provides for a 100 percent guarantee of principal, with a two percent guaranteed yearly return. This leaves three percent net (five percent return minus two percent guarantee) left to use as a discounting factor over the nine-year period. Based on the present value using a 3 percent discount, the annuity company places about 77 percent of the funds into the bond portfolio while the remaining 23 percent (minus internal fees) is used to purchase the index options. Figure 3 shows the hypothetical allocation of a term point-to-point EIA program based on the example above.



The participation, caps and asset fees/spreads depend directly on the mechanical structure of interest yields on bonds and the pricing of index options. Lower bond yields decreases the amount of options that can be

purchased on the index since more funds on a present value basis must be placed into the bond portfolio for the principal guarantee and minimum guaranteed return. Index option premiums are priced on market volatility. The more volatile the market, the more expensive the option premium. In volatile markets, this translates into fewer index options being purchased, which reduces the amount of index participation in an EIA.

The EIA with an annual reset point-to-point model works in a slightly different manner than the traditional point-to-point over a term greater than one year. The annual reset feature allows for gains to be locked in annually, and previous gains are not affected by current or future market losses. This is accomplished by the insurance company annually purchasing equity index options with a portion of the underlying bond portfolio dividends and yields. This is ideal for clients withdrawing funds systematically for income because it has the least effect on index participation over time. The annual reset is structured with the annuity company buying index options annually.

Some point-to-point annual reset EIAs provide a 100 percent principal guarantee with a 3 percent compounded annual return as a minimum contractual obligation, with market-linked returns based on an index, whichever is greater for the client over the EIA contract period. This is very attractive to retirees who want safety and need funds to grow beyond the rate of inflation.

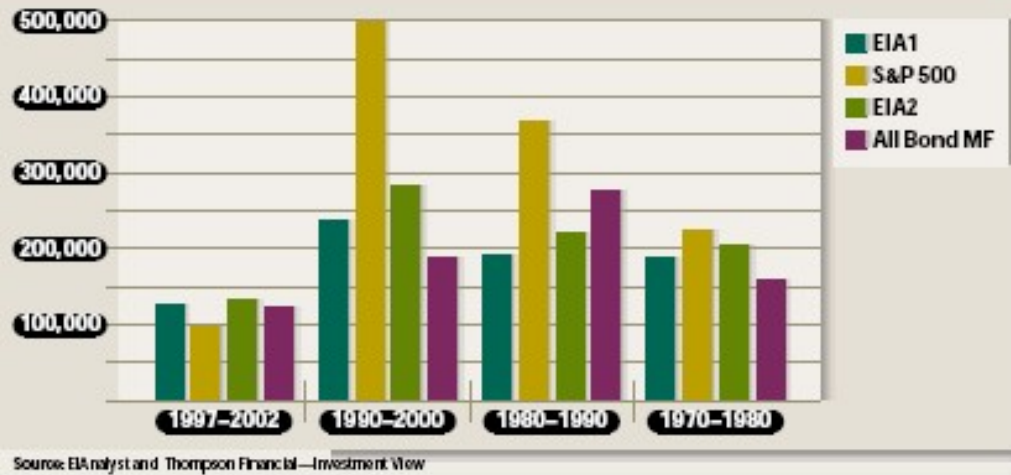
Higher Participation Rates in Future

A common question is whether caps, spreads or participation rates have a significant effect on contract earnings for clients and how those limitations affect the overall return compared with the actual index. A financial planner must be able to weed out the programs that have the least favorable terms. Research has shown that a cap has a lesser impact on EIA index returns than an annual asset fee or yield spread. The point-to-point with annual reset tends to be more dynamic because the participation rate or cap levels can change annually. Since interest rates are at a 45-year low and index option premiums have been at higher levels in the past year, due to market volatility, using an EIA that can increase annual participation or increase cap levels can be advantageous for your clients as long as the insurance company continues providing a competitive participation rate and cap level. As of the second quarter of 2003, participation rates were in the 60–70 percent range, whereas in January 2002, many EIAs provided participation levels well into the 80–100 percent range for the year. As the equity markets become less volatile, the index option premiums will decrease, allowing higher annual participation levels and higher caps for EIA index returns.

The equity index annuity is not designed for outperforming the index long term, but instead is designed to allow for investors to potentially receive better returns over standard fixed instruments without market risk. Analyzing various time periods to compare a conservative annual reset point-to-point EIA concept against the S&P 500 Index will detail this concept more clearly. If we placed \$100,000 during various periods of time and compared several EIA programs against the actual S&P 500 Index and the Thompson U.S.: All US Fixed Income Mutual Fund index, what would result? Figure 4 examines this question. We reinvested dividends with both indexes. The Fixed Income Mutual Fund index results are net of management and 12b-1 expenses, and represent an aggregate index of all U.S. fixed income funds during the respective time periods. The EIA number one strategy is an annual reset point-to-point crediting method with 100 percent participation and a 12 percent annual cap. The EIA number two strategy is an annual reset point-to-point crediting method with 100 percent participation and a 15 percent annual cap.

FIGURE 4

EIA Versus S&P 500 and Bond Mutual Funds



The actual annual returns for the two EIA programs provided a 4.64–5.75 percent annual return from 1997–2002. During 1990–2000, the EIA programs annually returned 9 percent to 11.03 percent. From 1980–1990, the EIA programs returned 6.81 percent to 8.23 percent annually. Finally, during 1970–1980, the EIA programs returned 6.62 percent to 7.48 percent annually.

The two EIA programs illustrated are based on the fixed criteria including participation rates and caps. A higher cap and participation level are used in this example to illustrate a closer approximation of EIA performance over various time periods because caps and participation rates over the years have been closer to the figures illustrated. The S&P 500 Index beat the EIA each period analyzed except in the past five-year bull and bear market. The main reason for the accelerated index performance in the 1990s was due to a five-year anomaly of greater than 20 percent consecutive annual index returns. During the early to mid-1980s, the United States experienced higher-than-normal historical interest rate averages that provided strong bond and bond fund returns. The EIA is designed to outpace most fixed income securities and certificate of deposit programs. The EIA typically will not outperform the equity index returns over an extended time.

High-Water Mark Example

Let's examine a high-water mark EIA and how it would have performed during the seven years from June 1996–June 2002 based on a 60 percent participation rate of the S&P 500 Index high-water mark determined at each contract anniversary in comparison with the Vanguard Index 500 mutual fund based on a \$10,000 investment.

The high-water mark EIA assumes the highest value that occurred in this example in June 2000 when the S&P 500 hit a high of 1,454.60 (see Figure 5). The growth between 670.63 and 1,454.60 represents a 116.9 percent cumulative gain in the index. A participation rate of 60 percent multiplied by the cumulative gain of 116.9 percent provides a 70.14 percent interest earnings to the client over a seven-year period, providing a gross value of \$17,014. When we compare the Vanguard Index 500 mutual fund for the same period of June 1996–June 2002, the cumulative return is 60.79 percent, with a gross value of \$16,079. The EIA outperformed the index mutual fund, even though this example illustrates less than 100 percent index participation and no dividends for the EIA. If we used June 1995–June 2001, the return increases further since the index started at a lower point in June 1995 at 544.75, and would have outperformed the index even further based on the same timetable.

FIGURE 5

High-Water Mark EIA Performance June 1996–June 2002



Source: Yahoo Finance, Thompson Financial—Investment View

The strongest EIA crediting methods are the point-to-point, point-to-point with annual reset and the high-water mark. Because the return of the EIA is predicated upon the return of the indices available, there is no guarantee of future performance. Laddering a portfolio with different crediting methods and several indices over various maturity periods will provide the best potential returns in various market situations. The averaging method, whether it is monthly, weekly or daily averaging, tends to perform at about 50 to 60 percent of the return of a point-to-point and point-to-point with annual reset over time.

Keep in mind that even though EIAs do not provide complete participation in an index, based on various crediting methods and market anomalies, you may actually receive a better return over time than in various mutual funds or variable annuities. Considering variable annuities with mortality and administration expenses, sub-account management fees and other various charges account for 2.25 percent to 3.50 percent of annual expenses that erode market returns. A variable annuity sub-account that earned 10 percent in the market would net between 6.50 percent to 7.75 percent to the client's account after internal fees are deducted from earnings. An EIA does not have sales loads or management fees or 12b-1 marketing fees. Instead, the insurance company skims a small amount from the underlying portfolio that lowers participation in the market index to cover administrative costs and commissions to brokers.

Some hurdles you may experience when explaining this concept to clients is conveying the mechanics of how the insurance company actually invests the money and why there is no market risk to the client. Other issues arise when placing client funds into longer-term contracts even though longer-maturity EIAs tend to provide better potential index participation. This is premised on longer-term bonds proving higher dividend yields that, in turn, allow for more index options purchased to increase index participation for the contract holder.

Conclusion

Like any product, there are particular items to avoid so that a client is assured of receiving the best available equity index annuity program. I recommend the following guidelines to when evaluating EIA programs:

1. Avoid an annuity that requires a period of payments made to the owner or beneficiary due to death of the annuitant.
2. Avoid any equity index annuity that does not provide full-accumulated earnings growth up to date of death. A few EIA providers will guarantee only original value invested if death occurs before maturity.
3. Avoid monthly, weekly or daily averaging over long periods of time. Many EIA programs allow changing

crediting methods yearly. Using an averaging method long term will decrease potential earnings.

4. Avoid low participation levels with a low index return cap.
5. Avoid asset fees or spreads to reduce erosion of credited index returns. If you would like to further your knowledge and keep abreast of current EIA programs available,

I recommend the following Web site: www.IndexAnnuity.org. Another Web site, www.EIASeminarSystem.com, offers an EIA seminar system for prospecting.