



Exploring the Equity Indexed Annuity: An In-depth Look for Financial Advisors

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Preface

This white paper is written to examine the Equity Indexed Annuity (EIA) from a perspective for financial advisors. The EIA is a relatively new investment and there is very little documentation regarding the risk and return potential of the various product configurations. This white paper can act as a reference guide.

In purpose, this paper will provide an introduction to the basics of EIA product construction, an introduction of concepts surrounding Option Contract development (focusing on both the Seller's and Buyer's needs), and finally a look at the performance of Index Credit Methods provided by the options.

I will discuss and explore the following topics:

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1. A Brief History of Insurance Product Development

Insurance companies, investment brokerage firms and banks used to have very different functions for the societies that they served. In fact, there were laws like the Glass-Steagall Act that prevented banks from engaging in the practices of brokerage houses. By the late 1990's the lines of differentiation had become very blurred. Investment brokerage firms now offer mortgages; banks now sell insurance and insurance companies now have two separate focuses: 'Variable' and 'Fixed' products. Both of these focuses continue vying for their resources, but roughly 10 years ago the fixed Insurance companies launched a salvo into the financial services industry with a product that has largely crept up on this unsuspecting segment to become a force to be reckoned with. This product is the Equity Indexed Annuity. But how did the EIA evolve?

A look back at insurance products in the 1960's

During this period the predominant offerings from insurance companies were Whole Life of offered by Mutual companies (cash value accumulated by the success of the underwriting by the insurance companies) and annuities (annuities at that time were a series of payments paid to an annuitant for life).

New insurance products of the 1970's

During this period of time interest rates reached historic levels and many investors flocked to banks, purchasing certificates of deposit to capture the rather large interest rates paid for such investments. Concurrently the stock and bond markets were struggling because of a sluggish economy and insurance companies dividends weren't keeping pace with the inflation of the time.

As a response to the market conditions, insurance companies developed new products. The most popular of products to be created was the universal life insurance contract. This type of policy accumulated the cash value based on the paid interest rates and not the dividends paid from the company's profits. This allowed the consumer to capture the high interest rates but they also assumed the risk that the policy's integrity would be compromised at drop in interest rates.

Deferred fixed annuities also enjoyed an increased popularity since the interest rates earned were pegged to fixed income interest instruments.

Insurance product innovations during the 1980's

During this period of time, the stock market began a long bull run. The stock market's gains began to attract investors to brokerage firms who invested into securities and mutual funds on their behalf. Stock market bull runs typically occur in lower interest rate environments and this was the case during the 80's. Interest rates started their slide from the historic highs of the late 70's and early 80's.

With investors flocking to the brokerage firms while products pegged to interest rates continued losing favor, insurance companies needed to evolve in order to stay competitive.

Variable life insurance and variable annuity products were created to compete with the securities offered by the brokerage firms. Insurance companies then created divisions within themselves, establishing departments that focused on the creation and marketing of these investment products. At this point the dual focus for the insurance companies came about that I alluded to previously.

Insurance product evolution in the 1990's

During this period the stock market continued its unprecedented bull run with a few hiccups caused by Desert Storm ('90) and a short lived rise in interest rates ('94). Insurance companies and their competitors enjoyed growth and the blurring of the company offerings began to increase. To grab as much market share in the burgeoning wealth created by the stock market appreciation as possible, banks began to offer securities and insurance through affiliates.

Although insurance companies enjoyed the revenue growth of their variable products, their fixed divisions lagged. So, that old mother of invention – necessity- was put to work on the development of a product that would attract investments from the stock market-savvy consumers and offer potential returns greater than the returns offered by interest rates. This gave birth to the Equity Indexed Annuity. Just as they did in the 70's by pegging the earnings within Universal Life products to interest rates, they pegged the earnings of the new products to the growth of the Stock Market.

Insurance products and the New Millennium

In 2000 the stock market's bubble burst and left many investors running for safety. However, "safety" to the new-millennium consumer meant something different than it had in the past. The late 90's had a drastic sociological and psychological impact on investors. Securities investing had permeated through much of the U.S. through investment in mutual funds and the popularity of the 401k. Investors at large had become educated about what drives stock market returns and sought after investments pegged to these returns, especially when they saw interest rates driven down to historic lows.

One might say that the EIA was in the right place at the right time. The essence of this product's composition is that the pegging of earnings to stock market returns is accomplished through the purchase of Call options on stock indexes. In the remainder of this paper, I will be evaluating this unique investment product: a non-security that is dependent on security-like returns. The complexity of this concept is not difficult to understand, but the way an EIA should be evaluated based on its return characteristics can be. I will present an investment analyst's study of the merits of the EIA and show how to determine the investment discipline (index credit method) most suitable for differing investment objectives.

2. An Option ‘Primer’

Although there are many detailed explanations about Options, I will present a brief discussion for the purpose of edification only as it relates to equity indexed annuities. Since Options are the primary return component, it is important for us to understand their characteristics and attributes to even begin to understand the creation of returns within the EIA.

Introduction

Basically, an Option is a contract. There is a buyer and a seller. The seller asks for monetary compensation to offset their risk that they will not participate in the potential profit. In essence the buyer of the Option contract purchases a limited amount of ownership in an underlying security or stock index.

Options typically have a premium price (cost) most influenced by term of the contract and volatility of the underlying security. Therefore, the greater the price volatility and the longer the time period to move in the direction that creates profit, the greater the premium (cost) for that Option.

Call and Put Options

There are two categories of options: Call options and Put options. Call options allow the purchaser to profit when the underlying security rises in price and a Put option allows the purchaser to profit when the underlying security price falls. Insurers purchase Call Options to create returns for equity indexed annuities.

The two most important attributes of an Option are the ‘expiration date’ of the Option and the ‘strike price’. The expiration date of the Option is the day when most Options are settled. The important factor of strike price is the price level of the underlying security where the Option becomes ‘in the money’ – meaning the Option’s cost is below the market value of the underlying security and therefore could be sold at a profit. Options can be in-the-money before their expiration, but on the expiration date they must settle. This is to say that if there was a December 2005 Call option on the S&P 500 with a strike price of 1000 and on the day of expiration the S&P 500 index value was 1200, then that Call option would be in-the-money 200 points.

Listed and Negotiated Options

There are two types of Options for purchase: Listed or Negotiated. Listed options sell on exchanges like the Chicago Board of Options Exchange (CBOE). They have predefined Option attributes (expiration and strike price) and the price/premium for the Option fluctuates based on the activity of the underlying security.

There are times that Listed options are not appropriate for the needs of institutional investors such as an insurance & annuity issuing company. Either the length of the Option doesn’t fit or the strike price is too high or low. This is

where a Negotiated option can be a valid choice for this investor. Negotiated options can be created by the CBOE using their Flex-Option market makers or they can be simply contracts between two entities. Negotiated options are not for small investors. Flex-Options usually are for a minimum of \$10 million in notional value.

Option Strategies for EIAs

Options for EIAs are unique to the marketplace. They are constructed so as to pass returns to the purchaser that emulate the ownership of the underlying security with very little impact of traditional market forces. There are a number of market forces that affect the value of an option and they were succinctly depicted by the Black-Scholes option pricing formulas. The forces that their models measure each have Greek names. Here is a list of many of these forces and a brief description of each:

1. *Delta* - The ratio comparing the change in the price of the underlying asset to the corresponding change in the price of a derivative.
2. *Gamma* - The rate of change for delta with respect to the underlying asset's price.
3. *Vega* - The amount that the price of an option changes compared to a 1% change in volatility.
4. *Theta* - A measure of the rate of decline in the value of an option due to the passage of time.

The options for EIAs are constructed with a set of constraints that provide a more easily quantifiable formula of attributes. The attributes of these options are described below:

1. Participation – The percent of any gain over a set period by the underlying stock market index that the annuity investor receives.
2. Spread or Asset Fee – A fee percentage subtracted from the profit before the investor's annuity contract is credited.
3. Cap – A cut-off level (measured by a percentage of gain) above which the annuity no longer has the stock index's gain applied.
4. Crediting Method - The formula used to calculate the gain of the index.

The attributes of Options purchased for EIAs will be discussed more thoroughly in the next section of this paper.

Determination of Option Premium

In short, the more the potential for the buyer to gain the more the seller has to lose and therefore the Option premium is higher. The above statement should always be considered first when as a financial analyst, you begin an evaluation of the attributes of an EIA index crediting method.

The greatest influence on the option price for EIAs is the crediting method. Crediting methods can constrain the potential gain for an investor. For example, a monthly averaging calculation has lower return volatility than a point to point calculation. If participation rates, spreads, and caps were the same for both these crediting methods, the premium for the point to point calculation would be greater. To further make this point, when you look at the EIA products offered you will see that the point to point crediting methods have a lower cap than their monthly averaging brethren. In this case the Option contract has adjusted the Cap rate to lower the option premium.

As we continue this analysis through the remainder of this paper, you should begin to see how the Option attributes will influence potential returns for investors in EIAs.

3. Index Credit Strategies Described

Long Term Resets

Long term reset crediting methods can be described as index crediting methods greater than 5 years. These crediting methods can offer the highest of participation rates, no caps, and little if any spreads or fees.

The reason that they can offer such perceived value is that potential loss to the seller of the Options has diminished because of the longer time period (term) of the period reset. As you can imagine, when there is a greater time period used for a performance evaluation, the effects of annual return dilution (averaging) and return reversals (market downturns) are present longer. Interestingly when you evaluate stock market performance, you will find that market declines have a steeper grade than those of market increases.

This is to say that when you think about a 9-10 year period reset crediting method, the total loss potential to the seller of the Option is diminished because of the annual return averaging.

Annual resets

Annual reset design crediting methods provide an Option expiration of 1 year. This strategy can create the greatest losses to the seller of the Options. The reason for this is that within one year's time the volatility of the stock market can have great variances. For example, 2 standard deviations of the historical annual returns of the S&P 500 index point values can be greater than 30%. If we take this into account, the loss to a seller of an S&P 500 Option therefore could be 30% by the end of that year. It is this fact that causes the EIA option strategies to exhibit the variations seen in the basic EIA attributes of crediting method, participation rate, spread/asset fee, and cap.

Point to Point

Point to point is just another way of measuring the actual return performance of an index without accounting for the impact of dividends (if dividends are applicable). Point to point offers no dilution to the returns created by this crediting method and so to reduce the loss potential to the seller of the Option the caps, participation rates and spread/asset fees are applied most stringently.

Monthly Averaging

Monthly Averaging is a crediting method that uses averaged index values (measured monthly) over the course of a year to determine an ending point in order to calculate a derived annual return. Monthly averaging as a crediting method is used to reduce the loss potential to the seller of the Option due to its return dilution. Historically, monthly averaging has the effect of reducing annual return variance to less than two-thirds of the actual index point value return.

Daily Averaging

Daily Averaging is a crediting method that uses averaged index values (measured daily) over the course of a year to determine an ending point in order to calculate a derived annual return. Daily averaging as a crediting method is used to reduce the loss potential to the seller of the option due to its return dilution. Historically, daily averaging also has the effect of reducing annual return variance to less than two-thirds of the actual index point value return.

Monthly Point to Point

Monthly Point to Point (a.k.a. Monthly Cap) is a crediting method that uses monthly returns of index values (measured monthly; always with a monthly cap rate applied) over the course of a year to determine a derived annual return. Although this credit method doesn't substantially reduce the annual return variance, the impact of the monthly return cap has a substantial impact on the return distribution. This is to say that monthly point to point has a lower frequency of positive returns than the point to point crediting method; meaning less years of positive returns.

Multi-Year Resets

Multi-Year resets are variations of the aforementioned annual reset crediting methods. As was stated in the section regarding the long term crediting methods, lengthening the period reset has the impact of diluting annual return potential. Often these period resets will have higher participation rates, higher caps and lower spread/asset fees. This is afforded by the reduced annual loss potential caused by the multi-year resetting.

Vesting

As the old adage says, "If it sounds too good to be true, it probably is". Vesting is an additional attribute added to a particular crediting strategy. Typically, it alone is not added to the crediting method. Vesting has the effect of reducing the possible returns. For example, two new EIA products offered by Allianz Life have internal values used to determine the annual returns that will be credited to the annuity contract, and this value can actually decline in periods of negative credit method returns. This negates the beneficial annual resetting nature of the crediting method! In other words, these products offer vesting but in effect remove the annual resetting of all positive returns.

Other methods

There is a proliferation of new crediting methods developed. Many are just different variations of the crediting methods described above. However when evaluating these, pay close attention to the methods used to reduce the loss potential to the Option seller.

4. Proliferation of EIA Strategies

So, what drives the creation of EIA index credit methods? Is it consumer demand, advisor demand or the insurance companies?

The investment return analysis is complex enough for us to believe that it is not the consumer driving the creation of new crediting methods. Most advisors lack adequate tools for due diligence so it would be difficult for any advisor to recommend any, either. Insurance companies also frequently lack sufficient resources to develop their own new EIA crediting methods.

Who creates Index Crediting Methods?

Many EIA index crediting methods are created by organizations affiliated with the insurance industry: companies that market insurance products. These Insurance Marketing Organizations (IMOs) focus on marketing insurance products to agents. They know what product designs have the attributes that can drive sales to consumers. Some insurance marketing organizations keep actuaries on staff to work on the development of new index crediting method designs. One such IMO is Creative Marketing Insurance Company in Kansas City, KS. They have approximately four actuaries on staff. CMIC was the developer of the 'monthly point to point' index credit method. They license this index crediting method for a fee to insurance companies for use in their EIAs. They use their actuaries not only to create index credit strategies but to justify the use of their index credit strategy. CMIC has a vested interest in promoting the monthly point to point index crediting method to insurance companies - but they also market the EIAs directly to insurance agents and derive revenue from agent sales. Unfortunately this creates a conflict of interest, one that should not be ignored by advisors evaluating the merits of an EIA product.

There are other companies, such as Genesis of Canada that develop index credit methods and market them directly to Insurance Companies.

Who is the Largest Seller of EIAs?

There are approximately 20 insurance companies that offer EIAs. The largest seller of EIAs is Allianz Life Insurance Company. They enjoy approximately 80% market share of annual sales. Allianz Life Insurance Company has a very good rating from AM Best and a wide selection of EIA products, but they also have an advantage unlike any other company – an advantage they keep rather quiet about. Allianz actually owns (in whole or in part) many of the insurance marketing organizations that promote EIAs and support agent sales. I contend that this creates a hidden conflict of interest when an advisor looks to their IMO to provide unbiased or analytical advice regarding EIA index crediting methods. Advisors should inquire of their IMO whether they are an independent firm or not.

Who is the Leader in EIA Industry Analysis?

To date, there has been only one industry analyst of any caliber: Jack Marrion and his firm, the Advantage Compendium Ltd. He tracks industry news, catalogues product volume sales data and for a fee provides it to subscribers of his various service offerings. He also writes a free e-newsletter and as a speaker, he educates agents about EIAs in general. However, in his discussions he is never too frank about any particular insurance company's EIA product – most likely because he has to be concerned with losing his relationship with the insurance company who is providing him with data and paying for his services. Jack personally prefers EIAs to be as simple as possible and this may also cause a bias when he offers analysis on the multidimensional nature of an index credit method and its attributes. Recently, he has become a paid endorser of some rudimentary EIA sales & analytical software tools, but an analyst will find these tools unsatisfactory, due to their complete lack of analytical depth.

What is the Leading Organization Representing EIAs in the Regulatory Environment?

The National Association of Fixed Annuities (NAFA) is a small non-profit organization created to represent the interests of insurers and agents within the regulatory environment. Apparently this is accomplished by submitting Opinion letters to the NASD and SEC. For example, they recently submitted a simple, rather stilted 1-page response to the NASD NTM 05-50. Originally NAFA had a different name: the National Association for Indexed Products. They seem to believe this 'renaming' strategy is effective: the change of their organization's name was to precipitate a broader focus on fixed annuities as a whole, and they are now so concerned that the EIA may be viewed as a security, they have championed (along with Jack Marrion) the re-naming of the product to "fixed indexed annuity" (I always smile and ask which 'fixed index' they are pegged to).

A few IMO's have adopted this affectation, but it remains to be seen if NAFA will have any real industry clout on this matter.

Their Board is made up of members elected from insurers and insurance marketing organizations. Kim O'Brien is the Director. Unfortunately, NAFA's position on providing pre-sales education for agents and consumers regarding the EIA is to focus on the annuity product structure itself and not on the credit method or its potential performance. Kim is adamant that the analysis methodologies typically used by advisors - and which I personally endorse - (historical back-testing and Monte Carlo based forecasting) would only exacerbate the possibility of the EIA being treated as a security. Unfortunately, with this mindset it is difficult to foresee NAFA ever supporting such analysis methods or encouraging agent education about credit method performance.

A Popular (but Faulty) EIA Sales Strategy

There is a software sales tool for annuities that seems to have permeated the income planning industry – I get asked about it regularly. I have heard it said by users, “It’s all about the math”. However, after analyzing the “income bucket” strategy employed within the software I have found that it doesn’t add up. In fact, I will hopefully convince you that the income bucket strategy is actually nothing but “Smoke and Mirrors”.

As a former investment advisor, I used the split annuity approach for meeting client income needs frequently. The goal of the client usually was to increase their income through investing in the stock market, while at the same time maintaining level income provided through an immediate annuity.

For you who may be unfamiliar with what a split annuity is, let me explain. Clients need stable income and yet they need to increase their income over time to compensate for the loss of buying power due to inflation, for example. A split annuity is just that, splitting an investment into 2 different annuities; an “Immediate Annuity” and a “Deferred Annuity”.

The immediate annuity turns the portion invested into a guaranteed income stream that creates level income for a set period of time, during which time the portion invested into the deferred annuity grows to a value greater than the initial value of the total investment. Since the deferred annuity is usually invested in securities (we are talking about a ‘variable annuity’ here), the immediate annuity should be for a long enough period to reduce the principal risk. For example, if historically the S&P 500 has never had a loss over a 10 year period, then using a “10 period-certain” (immediate annuity payout terminology) would be sensible.

The concept is really very simple: Give your client a stable income while providing for growth. The added value to this strategy is that the immediate annuity provides for a lower taxable income because of the immediate annuity's

exclusion ratio. This exclusion ratio is nothing other than a measured amount of each payment that is considered a return of principal; therefore there is no taxation on it. Immediate annuities are good for creating level income with no risk but they have very low Internal Rates of Return; currently around 1.5%.

Important note: there is an increasing taxability each time the immediate annuity is purchased.

Now that we understand with the “split annuity” concept, we can begin to understand the “bucket” strategy used within that sales software. The strategy employed is an attempt to leverage the benefits of the split annuity. It increases the frequency of immediate annuity maturities while investing the maturing deferred annuities in principal-safe insurance products.

When I used the split annuity concept, the Equity Indexed Annuity had yet to be invented. If it had, I would not have used the split annuity at all; let me show you why. The only reason I used the immediate annuity to create the income for a client was that I needed to allow ample time for the investments in securities to grow and minimize principal risk. However, this strategy promotes the use of EIAs as the deferred annuity because an EIA carries with it no principal risk.

In a world that includes EIAs I would never need to use the split annuity strategy. I would simply use the EIA and withdraw the amount the clients needed each month. Think about it this way:

- The internal rate of return (IRR) on an immediate annuity is around 1.5%
- The average return a fixed annuity is about 4%
- The average return on an EIA is around 7% (for a No Cap product)

If there is no principal risk to the EIA why wouldn't you have all the client's investable dollars in the EIA? Is it because there is a tax benefit with the Immediate Annuity?

Let's think about it: what interest rate would we need to earn to compensate for “full taxability” in order to be superior to the immediate annuity? If the IRR on the immediate annuity is 1.5% and the client's effective tax rate is 33%, then we would need to earn 2.25% to be equal.

If the EIA averages 7% then you can see that we would not be just equal, but far superior.

Additionally, when using this multi-bucket approach and deferring taxation, you run the risk that the beneficiaries will inherit the tax. In the late 1990's, financial advisors were being sued by their client's beneficiaries because of taxes. The claimants proposed that the financial advisor was not instituting good judgment by failing to evaluate the overall tax consequences of tax deferral for both the

client and their beneficiaries. If you are an advisor to seniors, you must be conscious of both your client's needs and their beneficiaries. This is simply good estate planning.

All in all, the tax benefits are moot since the bucket strategy is designed for eventual consumption of the investments by both the client and their beneficiaries. And since many beneficiaries have higher tax rates than the client, the overall taxes could be greater.

When calculating expected returns of both approaches, the math is simple:

\$100,000 Initial Investment	
Bucket Strategy	No-cap Equity Indexed Annuity
\$40,000 @ 1.5% = 0.6%	\$100,000 @ 7%
\$30,000 @ 4% = 1.2%	
\$30,000 @ 7% = 2.1%	
<i>Weighted Return = 3.9%</i>	<i>Weighted Return = 7%</i>

The results speak for themselves: EIA all the way (yes - it's all about the Math).

5. Investment Analysis of Index Credit Methods

In this section we will begin the analysis of the return potential of various EIA index crediting methods.

Primary Risk of the EIA: Returns

Although EIAs are not securities and they have no principal risk, they do have a risk of return distributions. Traditional fixed annuities provide returns to the investor based on interest rates. These interest rates offer positive returns each and every year that the investor remains invested. However, an EIA index crediting method offers returns to the investor only when the index crediting method result is positive; otherwise the investor receives a 0% return. Though some EIA products do offer guarantees of a minimum return annually, others offer minimum returns only over the life of the EIA contract. In this section we will discover the risks and returns of the various index credit methods measured by generally accepted financial analysis methods.

Risks Inherent to Index Credit Methods

All index crediting methods (other than point to point) can be considered derivative strategies. Since the index crediting methods are based on return calculations that do not directly relate to the actual return performance measure of the period reset, there is the risk that the index credit method will not have comparable returns.

Various Measures to Evaluate an Index Credit Method

Return

'Return' measures the percentage gain or loss of the stock index or index crediting method. For the purpose of different analytical viewpoints, returns will be presented both as 'arithmetic average' and 'geometric average'. Arithmetic averages are simple averages: annual returns are totaled and the sum divided by the number of years. Geometric averages are compound averages: it differs from arithmetic averages because it accounts for the impact of sequential returns. It is more commonly known as "internal rate of return" or simply IRR.

Risk

Risk will be a factor of the variance of returns, and we can measure variance by using standard deviation. Standard deviation is a measure of the degree of dispersion of the data from the mean value. Stated another way, the standard deviation is simply the "expected" variation around an average. Here is the formula: if you square all individual deviations around the average, add these up, divide by 'N', then take the square root, you would have the 'root' of the mean squared deviation [RMS], which in a very simple sense is the "average" or "expected" variation around the average.

A large standard deviation indicates that the data points are far from the mean and a small standard deviation indicates that they are clustered closely around the mean.

Correlation Coefficient

Correlation coefficient is a measure of the relationship between an index crediting method and the underlying stock index being used. The correlation coefficient, a concept from statistics, is a measure of how well trends in the predicted values follow trends in past actual values.

It is a measure of how well the predicted values from a forecast model "fit" with the real-life data.

Beta

Beta will be used to quantify the index crediting method's ability to capture the positive returns of the underlying stock index.

This is a measure of an investment's Risk in relation to the Market (for example, the S&P500) or to its benchmark. Roughly speaking, an investment with a Beta of 1.5 will have returns, on average, that are 1.5 times the Market's return. (More precisely, that investment's excess return - over and above a short-term Money market rate - is expected to move 1.5 times the market excess return.) According to asset pricing theory, Beta represents "Systematic risk" - the type of risk that cannot be reduced through diversification.

Total Return and Volatility

In the study below, we will analyze the performance of various index crediting methods versus the performance of the S&P 500 as measured by point value changes over different market conditions.

As you review my analysis presented in the following tables and charts, you will want to evaluate the pertinence of the particular historical time period that is most applicable to your current market forecast: Bearish (1970's), Bullish (1990's), or the overall market (Last 40 Years). As you evaluate the Financial Statistics for the period most applicable, you will want to think about the overall investment goal:

- Highest Overall Rate of Return - *Arithmetic Average & Geometric Average*
- Lowest Return Distribution Volatility - *Standard Deviation*
- Returns with Highest Correlation to the S&P 500 - *Correlation Coefficient*
- Returns that capture the greatest amount of S&P 500 gains - *Beta*

EIA Index Crediting Methods Used in the Following Analysis

Profile Name	Index	Credit Method	Participation	Asset Fee	Cap Rate	Reset	Vesting
MPP	SP500	Monthly Point to Point	100%	0%	Monthly/ 2.5%	Annual	No
APPnc	SP500	Annual Point to Point	55%	0%	No Cap	Annual	No
PDex	SP500	Monthly Point to Point	100%	0%	Monthly/ 3.7%	Annual	Yes
MaMti	SP500	Monthly Averaging	100%	0%	No Cap	Multi Period	Yes
MaNCp	SP500	Monthly Averaging	100%	1.50%	No Cap	Annual	No
DayAv	SP500	Daily Averaging	85%	0%	No Cap	Annual	No
PDX	SP500	Annual Point to Point	100%	0%	Annual/ 8%	Annual	Yes
APPc	SP500	Annual Point to Point	100%	0%	Annual/ 7%	Annual	No

Bear Market Scenario (1970 to 1980)

Annual Returns

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc	SP500 NoLoss
1970	0.10%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%	0.10%	0.10%	0.10%
1971	10.79%	0.06%	5.93%	0.00%	0.00%	5.16%	5.67%	8.00%	7.00%	10.79%
1972	15.63%	11.75%	8.60%	12.19%	5.55%	6.03%	5.84%	8.00%	7.00%	15.63%
1973	-17.37%	0.00%	0.00%	0.00%	2.40%	0.00%	0.00%	-14.35%	0.00%	0.00%
1974	-29.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1975	31.61%	6.15%	17.38%	0.00%	0.00%	25.64%	21.80%	0.10%	7.00%	31.61%
1976	19.15%	4.27%	10.53%	0.00%	1.26%	12.47%	11.12%	8.00%	7.00%	19.15%
1977	-11.50%	0.00%	0.00%	0.00%	0.24%	0.00%	0.00%	8.00%	0.00%	0.00%
1978	1.06%	0.00%	0.58%	0.00%	0.00%	0.00%	0.90%	0.00%	1.06%	1.06%
1979	12.31%	2.07%	6.77%	0.00%	0.78%	6.00%	6.06%	0.00%	7.00%	12.31%

Investment Growth of \$100,000

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc
1970	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
1971	\$ 100,100	\$ 100,000	\$ 100,050	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,100	\$ 100,100
1972	\$ 110,901	\$ 100,060	\$ 105,983	\$ 100,000	\$ 100,000	\$ 105,160	\$ 105,670	\$ 108,108	\$ 107,107
1973	\$ 128,235	\$ 111,817	\$ 115,097	\$ 112,190	\$ 105,550	\$ 111,501	\$ 111,841	\$ 116,757	\$ 114,604
1974	\$ 105,960	\$ 111,817	\$ 115,097	\$ 112,190	\$ 108,083	\$ 111,501	\$ 111,841	\$ 100,002	\$ 114,604
1975	\$ 74,437	\$ 111,817	\$ 115,097	\$ 112,190	\$ 108,083	\$ 111,501	\$ 111,841	\$ 100,002	\$ 114,604
1976	\$ 97,967	\$ 118,694	\$ 135,101	\$ 112,190	\$ 108,083	\$ 140,090	\$ 136,222	\$ 100,102	\$ 122,627
1977	\$ 116,727	\$ 123,762	\$ 149,328	\$ 112,190	\$ 109,445	\$ 157,559	\$ 151,370	\$ 108,110	\$ 131,211
1978	\$ 103,304	\$ 123,762	\$ 149,328	\$ 112,190	\$ 109,708	\$ 157,559	\$ 151,370	\$ 116,759	\$ 131,211
1979	\$ 104,399	\$ 123,762	\$ 150,194	\$ 112,190	\$ 109,708	\$ 157,559	\$ 152,733	\$ 116,759	\$ 132,602

Investment Analytics

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc
Arith. Avg	3.20%	2.43%	4.98%	1.22%	1.02%	5.53%	5.14%	1.79%	3.62%
Geom. Avg	1.60%	2.36%	4.84%	1.16%	1.01%	5.26%	4.94%	1.56%	3.56%
Stand. Dev	17.59%	3.73%	5.66%	3.66%	1.68%	7.79%	6.62%	6.56%	3.40%
Correl. Coef¹	N/A	69.2%	100.0%	21.3%	16.0%	96.4%	97.5%	30.5%	85.8%
Beta¹	N/A	0.25	0.55	0.08	0.03	0.73	0.63	0.19	0.28

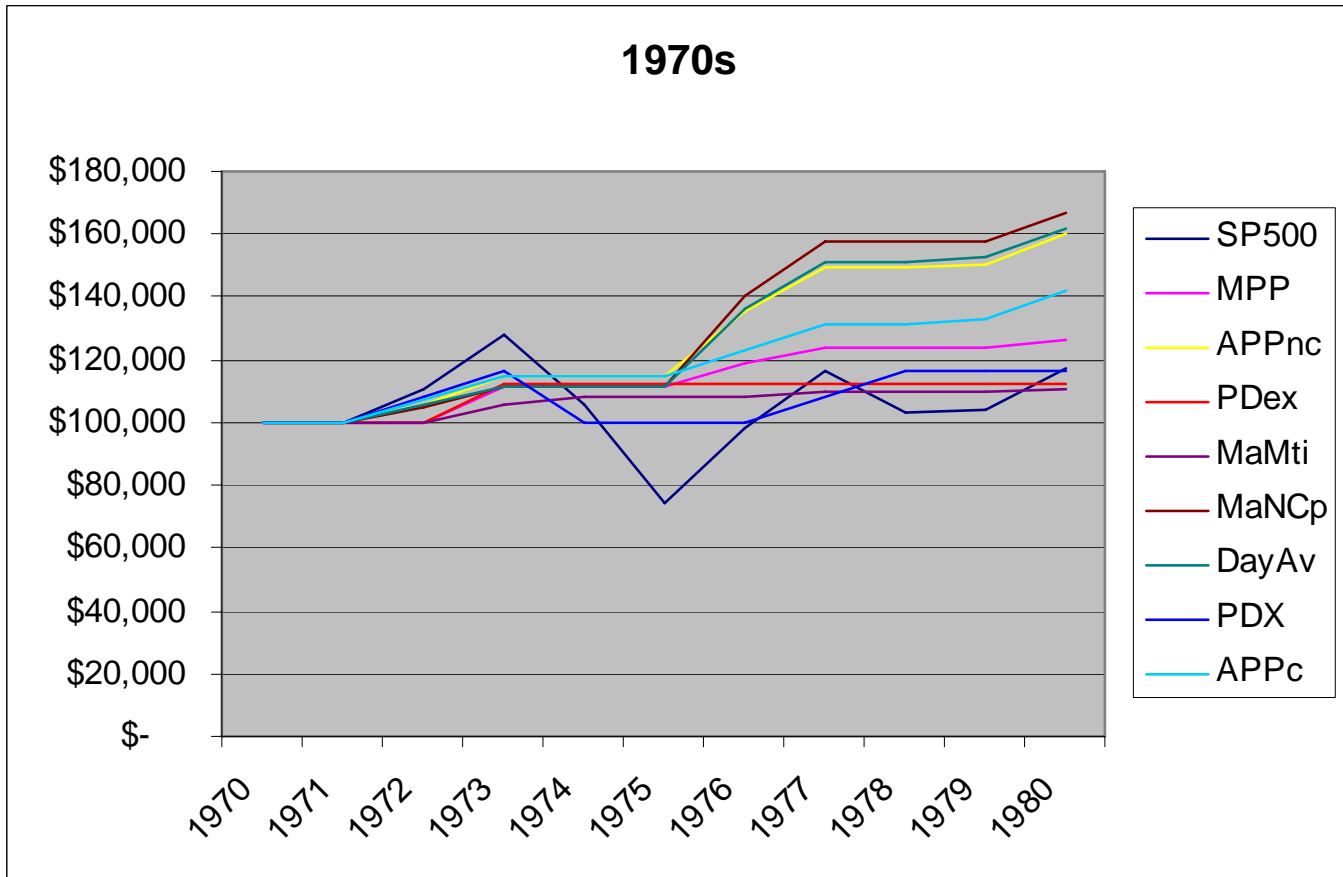
¹ Correlation Coefficient and Beta calculations are based on positive returns only.

Key to EIA Index Crediting Methods Used

Profile Name	Index	Credit Method	Participation	Asset Fee	Cap Rate	Reset	Vesting
MPP	SP500	Monthly Point to Point	100%	0%	Monthly/ 2.5%	Annual	No
APPnc	SP500	Annual Point to Point	55%	0%	No Cap	Annual	No
PDex	SP500	Monthly Point to Point	100%	0%	Monthly/ 3.7%	Annual	Yes
MaMti	SP500	Monthly Averaging	100%	0%	No Cap	Multi Period	Yes
MaNCp	SP500	Monthly Averaging	100%	1.50%	No Cap	Annual	No
DayAv	SP500	Daily Averaging	85%	0%	No Cap	Annual	No
PDX	SP500	Annual Point to Point	100%	0%	Annual/ 8%	Annual	Yes
APPc	SP500	Annual Point to Point	100%	0%	Annual/ 7%	Annual	No

Bear Market Scenario (1970 to 1980)

Index Credit Methods vs. Stock Index point value changes



Key to EIA Index Crediting Methods Used

Profile Name	Index	Credit Method	Participation	Asset Fee	Cap Rate	Reset	Vesting
MPP	SP500	Monthly Point to Point	100%	0%	Monthly/ 2.5%	Annual	No
APPnc	SP500	Annual Point to Point	55%	0%	No Cap	Annual	No
PDex	SP500	Monthly Point to Point	100%	0%	Monthly/ 3.7%	Annual	Yes
MaMti	SP500	Monthly Averaging	100%	0%	No Cap	Multi Period	Yes
MaNCp	SP500	Monthly Averaging	100%	1.50%	No Cap	Annual	No
DayAv	SP500	Daily Averaging	85%	0%	No Cap	Annual	No
PDX	SP500	Annual Point to Point	100%	0%	Annual/ 8%	Annual	Yes
APPc	SP500	Annual Point to Point	100%	0%	Annual/ 7%	Annual	No

A Bull market Scenario (1990 to 2000)

Annual Returns

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc	SP500 NoLoss
1990	-6.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1991	26.31%	6.80%	14.47%	0.00%	1.01%	14.04%	11.79%	8.00%	7.00%	26.31%
1992	4.46%	2.37%	2.45%	2.44%	5.62%	0.00%	0.00%	4.46%	4.46%	4.46%
1993	7.06%	6.05%	3.88%	7.00%	5.07%	2.57%	3.09%	7.06%	7.00%	7.06%
1994	-1.54%	0.00%	0.00%	0.00%	3.26%	0.00%	0.00%	-1.54%	0.00%	0.00%
1995	34.11%	23.27%	18.76%	27.79%	5.62%	17.58%	15.20%	9.69%	7.00%	34.11%
1996	20.26%	10.50%	11.15%	13.77%	8.03%	8.07%	7.50%	8.00%	7.00%	20.26%
1997	31.01%	6.21%	17.05%	14.61%	10.96%	16.74%	15.16%	8.00%	7.00%	31.01%
1998	26.67%	1.82%	14.67%	10.22%	12.23%	10.60%	10.03%	8.00%	7.00%	26.67%
1999	19.53%	4.48%	10.74%	11.68%	12.89%	6.75%	6.75%	8.00%	7.00%	19.53%

Investment Growth of \$100,000

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc
1990	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
1991	\$ 93,440	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
1992	\$ 118,024	\$ 106,800	\$ 114,470	\$ 100,000	\$ 101,010	\$ 114,040	\$ 111,790	\$ 108,000	\$ 107,000
1993	\$ 123,288	\$ 109,331	\$ 117,275	\$ 102,440	\$ 106,687	\$ 114,040	\$ 111,790	\$ 112,817	\$ 111,772
1994	\$ 131,992	\$ 115,946	\$ 121,825	\$ 109,611	\$ 112,096	\$ 116,971	\$ 115,244	\$ 120,782	\$ 119,596
1995	\$ 129,959	\$ 115,946	\$ 121,825	\$ 109,611	\$ 115,750	\$ 116,971	\$ 115,244	\$ 118,922	\$ 119,596
1996	\$ 174,289	\$ 142,926	\$ 144,679	\$ 140,072	\$ 122,255	\$ 137,534	\$ 132,761	\$ 130,445	\$ 127,968
1997	\$ 209,599	\$ 157,934	\$ 160,811	\$ 159,360	\$ 132,072	\$ 148,633	\$ 142,719	\$ 140,881	\$ 136,926
1998	\$ 274,596	\$ 167,741	\$ 188,229	\$ 182,642	\$ 146,547	\$ 173,515	\$ 164,355	\$ 152,151	\$ 146,511
1999	\$ 347,831	\$ 170,794	\$ 215,842	\$ 201,308	\$ 164,470	\$ 191,907	\$ 180,839	\$ 164,323	\$ 156,766

Investment Analytics

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc
Arith. Avg	16.13%	6.15%	9.32%	8.75%	6.47%	7.64%	6.95%	5.97%	5.35%
Geom. Avg	15.31%	5.96%	9.10%	8.44%	6.38%	7.44%	6.80%	5.90%	5.31%
Stand. Dev	13.54%	6.51%	6.78%	8.40%	4.27%	6.58%	5.73%	3.60%	2.78%
Correl. Coef¹	N/A	65.4%	100.0%	73.2%	50.1%	97.5%	98.2%	85.4%	78.5%
Beta¹	N/A	0.35	0.55	0.50	0.17	0.52	0.46	0.25	0.18

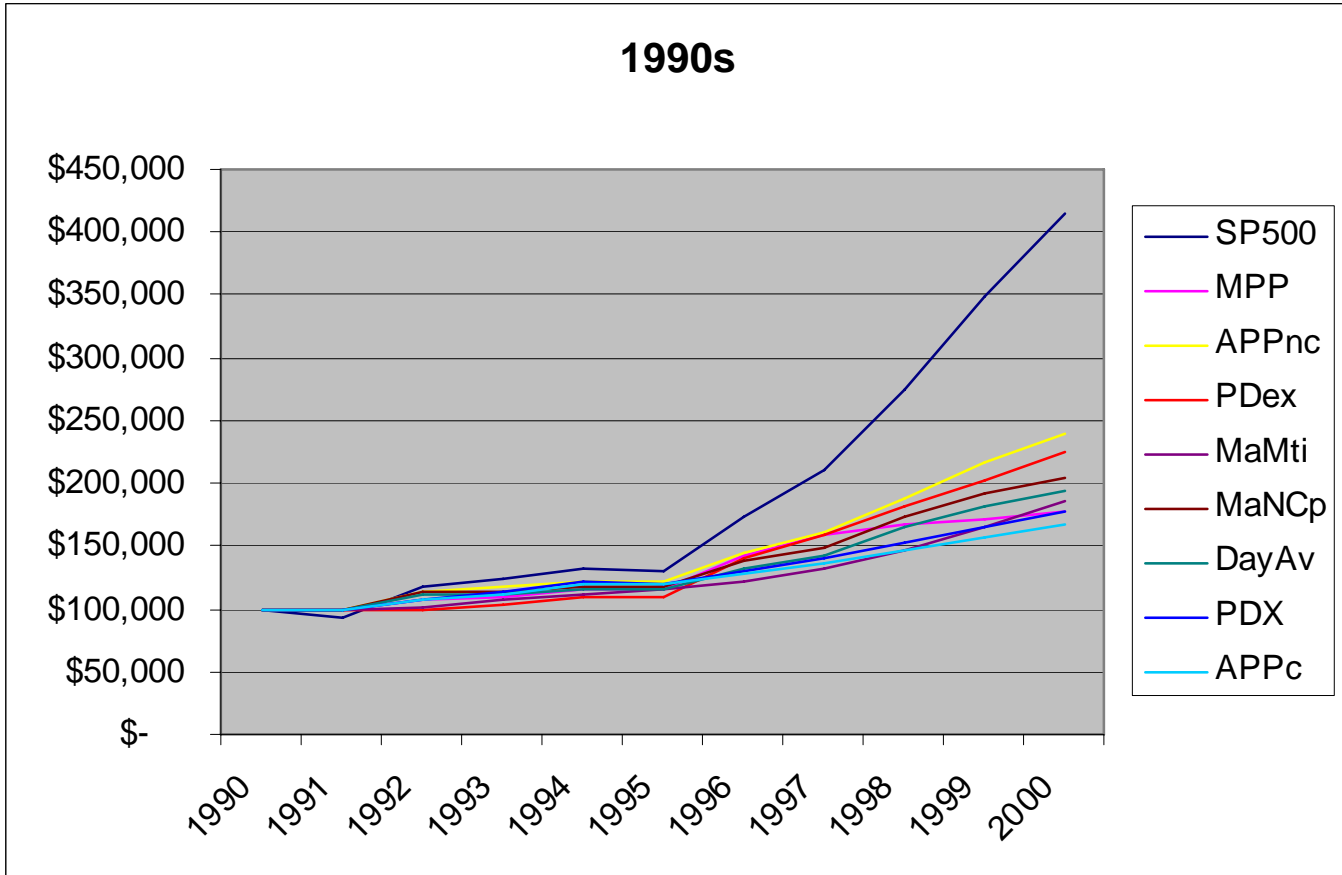
¹ Correlation Coefficient and Beta calculations are based on positive returns only.

Key to EIA Index Crediting Methods Used

Profile Name	Index	Credit Method	Participation	Asset Fee	Cap Rate	Reset	Vesting
MPP	SP500	Monthly Point to Point	100%	0%	Monthly/ 2.5%	Annual	No
APPnc	SP500	Annual Point to Point	55%	0%	No Cap	Annual	No
PDex	SP500	Monthly Point to Point	100%	0%	Monthly/ 3.7%	Annual	Yes
MaMti	SP500	Monthly Averaging	100%	0%	No Cap	Multi Period	Yes
MaNCp	SP500	Monthly Averaging	100%	1.50%	No Cap	Annual	No
DayAv	SP500	Daily Averaging	85%	0%	No Cap	Annual	No
PDX	SP500	Annual Point to Point	100%	0%	Annual/ 8%	Annual	Yes
APPc	SP500	Annual Point to Point	100%	0%	Annual/ 7%	Annual	No

A Bull market Scenario (1990 to 2000)

Index Credit Methods vs. Stock Index point value changes



Key to EIA Index Crediting Methods Used

Profile Name	Index	Credit Method	Participation	Asset Fee	Cap Rate	Reset	Vesting
MPP	SP500	Monthly Point to Point	100%	0%	Monthly/ 2.5%	Annual	No
APPnc	SP500	Annual Point to Point	55%	0%	No Cap	Annual	No
PDex	SP500	Monthly Point to Point	100%	0%	Monthly/ 3.7%	Annual	Yes
MaMti	SP500	Monthly Averaging	100%	0%	No Cap	Multi Period	Yes
MaNCp	SP500	Monthly Averaging	100%	1.50%	No Cap	Annual	No
DayAv	SP500	Daily Averaging	85%	0%	No Cap	Annual	No
PDX	SP500	Annual Point to Point	100%	0%	Annual/ 8%	Annual	Yes
APPc	SP500	Annual Point to Point	100%	0%	Annual/ 7%	Annual	No

Last 40 Years (1965 to 2005)

Annual Returns

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc	SP500 NoLoss
1965	9.06%	6.38%	4.98%	9.05%	4.39%	2.89%	3.39%	8.00%	7.00%	9.06%
1966	-13.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-7.41%	0.00%	0.00%
1967	20.09%	8.43%	11.05%	0.00%	2.20%	13.25%	12.25%	12.72%	7.00%	20.09%
1968	7.60%	0.00%	4.18%	0.00%	2.88%	0.65%	1.67%	7.60%	7.00%	7.60%
1969	-11.31%	0.00%	0.00%	0.00%	1.47%	0.00%	0.00%	-11.31%	0.00%	0.00%
1970	0.10%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%	0.40%	0.10%	0.10%
1971	10.79%	0.06%	5.93%	0.00%	1.18%	5.16%	5.67%	10.45%	7.00%	10.79%
1972	15.63%	11.75%	8.60%	0.00%	2.44%	6.03%	5.84%	9.81%	7.00%	15.63%
1973	-17.37%	0.00%	0.00%	0.00%	1.47%	0.00%	0.00%	-7.41%	0.00%	0.00%
1974	-29.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1975	31.61%	6.15%	17.38%	13.35%	27.14%	25.64%	21.80%	0.00%	7.00%	31.61%
1976	19.15%	4.27%	10.53%	8.44%	8.99%	12.47%	11.12%	0.00%	7.00%	19.15%
1977	-11.50%	0.00%	0.00%	0.00%	0.88%	0.00%	0.00%	8.00%	0.00%	0.00%
1978	1.06%	0.00%	0.58%	0.00%	0.00%	0.00%	0.90%	0.00%	1.06%	1.06%
1979	12.31%	2.07%	6.77%	0.00%	1.59%	6.00%	6.06%	0.00%	7.00%	12.31%
1980	25.76%	5.67%	14.17%	1.24%	3.83%	9.28%	8.45%	8.00%	7.00%	25.76%
1981	-9.72%	0.00%	0.00%	0.00%	3.80%	0.00%	0.00%	-7.41%	0.00%	0.00%
1982	14.75%	0.00%	8.11%	0.00%	1.85%	0.00%	0.00%	11.88%	7.00%	14.75%
1983	17.27%	8.84%	9.50%	0.60%	5.62%	12.81%	11.94%	8.00%	7.00%	17.27%
1984	1.41%	0.00%	0.77%	0.00%	4.22%	0.00%	0.00%	1.41%	1.41%	1.41%
1985	26.33%	8.67%	14.48%	14.67%	12.99%	11.49%	9.91%	8.00%	7.00%	26.33%
1986	14.62%	0.00%	8.04%	3.64%	13.22%	11.58%	10.07%	8.00%	7.00%	14.62%
1987	2.03%	0.00%	1.12%	0.00%	11.23%	16.60%	15.67%	2.03%	2.03%	2.03%
1988	12.40%	5.60%	6.82%	0.97%	3.16%	6.99%	6.44%	8.00%	7.00%	12.40%
1989	27.25%	10.57%	14.99%	15.18%	6.59%	16.00%	13.82%	8.00%	7.00%	27.25%
1990	-6.56%	0.00%	0.00%	0.00%	4.51%	0.00%	0.00%	-6.56%	0.00%	0.00%
1991	26.31%	6.80%	14.47%	0.00%	5.65%	14.04%	11.79%	15.58%	7.00%	26.31%
1992	4.46%	2.37%	2.45%	2.44%	5.55%	0.00%	0.00%	4.46%	4.46%	4.46%
1993	7.06%	6.05%	3.88%	7.00%	5.41%	2.57%	3.09%	7.06%	7.00%	7.06%
1994	-1.54%	0.00%	0.00%	0.00%	4.33%	0.00%	0.00%	-1.54%	0.00%	0.00%
1995	34.11%	23.27%	18.76%	29.12%	19.08%	17.58%	15.20%	9.69%	7.00%	34.11%
1996	20.26%	10.50%	11.15%	13.77%	11.70%	8.07%	7.50%	8.00%	7.00%	20.26%
1997	31.01%	6.21%	17.05%	14.61%	14.46%	16.74%	15.16%	8.00%	7.00%	31.01%
1998	26.67%	1.82%	14.67%	10.22%	13.90%	10.60%	10.03%	8.00%	7.00%	26.67%
1999	19.53%	4.48%	10.74%	11.68%	13.42%	6.75%	6.75%	8.00%	7.00%	19.53%
2000	-10.14%	0.00%	0.00%	0.00%	9.53%	0.00%	0.00%	-10.14%	0.00%	0.00%
2001	-13.04%	0.00%	0.00%	0.00%	2.84%	0.00%	0.00%	-11.66%	0.00%	0.00%
2002	-23.37%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	0.00%	0.00%
2003	26.38%	10.46%	14.51%	0.00%	0.00%	8.52%	8.22%	8.00%	7.00%	26.38%
2004	8.99%	6.78%	4.95%	0.00%	1.24%	0.48%	1.43%	8.00%	7.00%	8.99%

Key to EIA Index Crediting Methods Used

Profile Name	Index	Credit Method	Participation	Asset Fee	Cap Rate	Reset	Vesting
MPP	SP500	Monthly Point to Point	100%	0%	Monthly/ 2.5%	Annual	No
APPnc	SP500	Annual Point to Point	55%	0%	No Cap	Annual	No
PDex	SP500	Monthly Point to Point	100%	0%	Monthly/ 3.7%	Annual	Yes
MaMti	SP500	Monthly Averaging	100%	0%	No Cap	Multi Period	Yes
MaNCp	SP500	Monthly Averaging	100%	1.50%	No Cap	Annual	No
DayAv	SP500	Daily Averaging	85%	0%	No Cap	Annual	No
PDX	SP500	Annual Point to Point	100%	0%	Annual/ 8%	Annual	Yes
APPc	SP500	Annual Point to Point	100%	0%	Annual/ 7%	Annual	No

Last 40 Years (1965 to 2005)

Investment Growth of \$100,000

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc
1965	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
1966	\$ 109,060	\$ 106,380	\$ 104,980	\$ 109,050	\$ 104,390	\$ 102,890	\$ 103,390	\$ 108,000	\$ 107,000
1967	\$ 94,784	\$ 106,380	\$ 104,980	\$ 109,050	\$ 104,390	\$ 102,890	\$ 103,390	\$ 99,997	\$ 107,000
1968	\$ 113,826	\$ 115,348	\$ 116,580	\$ 109,050	\$ 106,687	\$ 116,523	\$ 116,055	\$ 112,717	\$ 114,490
1969	\$ 122,477	\$ 115,348	\$ 121,453	\$ 109,050	\$ 109,759	\$ 117,280	\$ 117,993	\$ 121,283	\$ 122,504
1970	\$ 108,625	\$ 115,348	\$ 121,453	\$ 109,050	\$ 111,373	\$ 117,280	\$ 117,993	\$ 107,566	\$ 122,504
1971	\$ 108,733	\$ 115,348	\$ 121,514	\$ 109,050	\$ 111,373	\$ 117,280	\$ 117,993	\$ 107,996	\$ 122,627
1972	\$ 120,466	\$ 115,417	\$ 128,720	\$ 109,050	\$ 112,687	\$ 123,332	\$ 124,684	\$ 119,282	\$ 131,211
1973	\$ 139,295	\$ 128,979	\$ 139,790	\$ 109,050	\$ 115,436	\$ 130,769	\$ 131,965	\$ 130,984	\$ 140,395
1974	\$ 115,099	\$ 128,979	\$ 139,790	\$ 109,050	\$ 117,133	\$ 130,769	\$ 131,965	\$ 121,278	\$ 140,395
1975	\$ 80,857	\$ 128,979	\$ 139,790	\$ 109,050	\$ 117,133	\$ 130,769	\$ 131,965	\$ 121,278	\$ 140,395
1976	\$ 106,416	\$ 136,911	\$ 164,085	\$ 123,608	\$ 148,923	\$ 164,298	\$ 160,734	\$ 121,278	\$ 150,223
1977	\$ 126,795	\$ 142,757	\$ 181,363	\$ 134,041	\$ 162,311	\$ 184,786	\$ 178,607	\$ 121,278	\$ 160,739
1978	\$ 112,213	\$ 142,757	\$ 181,363	\$ 134,041	\$ 163,740	\$ 184,786	\$ 178,607	\$ 130,980	\$ 160,739
1979	\$ 113,403	\$ 142,757	\$ 182,415	\$ 134,041	\$ 163,740	\$ 184,786	\$ 180,215	\$ 130,980	\$ 162,443
1980	\$ 127,363	\$ 145,712	\$ 194,765	\$ 134,041	\$ 166,343	\$ 195,873	\$ 191,136	\$ 130,980	\$ 173,814
1981	\$ 160,171	\$ 153,974	\$ 222,363	\$ 135,703	\$ 172,714	\$ 214,050	\$ 207,287	\$ 141,458	\$ 185,980
1982	\$ 144,603	\$ 153,974	\$ 222,363	\$ 135,703	\$ 179,277	\$ 214,050	\$ 207,287	\$ 130,976	\$ 185,980
1983	\$ 165,932	\$ 153,974	\$ 240,397	\$ 135,703	\$ 182,594	\$ 214,050	\$ 207,287	\$ 146,536	\$ 198,999
1984	\$ 194,588	\$ 167,585	\$ 263,234	\$ 136,517	\$ 192,856	\$ 241,470	\$ 232,037	\$ 158,259	\$ 212,929
1985	\$ 197,332	\$ 167,585	\$ 265,261	\$ 136,517	\$ 200,994	\$ 241,470	\$ 232,037	\$ 160,491	\$ 215,931
1986	\$ 249,289	\$ 182,115	\$ 303,671	\$ 156,544	\$ 227,103	\$ 269,215	\$ 255,031	\$ 173,330	\$ 231,047
1987	\$ 285,735	\$ 182,115	\$ 328,086	\$ 162,242	\$ 257,127	\$ 300,390	\$ 280,713	\$ 187,196	\$ 247,220
1988	\$ 291,536	\$ 182,115	\$ 331,761	\$ 162,242	\$ 286,002	\$ 350,255	\$ 324,701	\$ 190,996	\$ 252,238
1989	\$ 327,686	\$ 192,313	\$ 354,387	\$ 163,816	\$ 295,039	\$ 374,738	\$ 345,612	\$ 206,276	\$ 269,895
1990	\$ 416,980	\$ 212,641	\$ 407,509	\$ 188,683	\$ 314,483	\$ 434,696	\$ 393,375	\$ 222,778	\$ 288,788
1991	\$ 389,626	\$ 212,641	\$ 407,509	\$ 188,683	\$ 328,666	\$ 434,696	\$ 393,375	\$ 208,164	\$ 288,788
1992	\$ 492,137	\$ 227,100	\$ 466,476	\$ 188,683	\$ 347,235	\$ 495,727	\$ 439,754	\$ 240,596	\$ 309,003
1993	\$ 514,086	\$ 232,482	\$ 477,905	\$ 193,287	\$ 366,507	\$ 495,727	\$ 439,754	\$ 251,326	\$ 322,784
1994	\$ 550,381	\$ 246,548	\$ 496,447	\$ 206,817	\$ 386,335	\$ 508,467	\$ 453,342	\$ 269,070	\$ 345,379
1995	\$ 541,905	\$ 246,548	\$ 496,447	\$ 206,817	\$ 403,063	\$ 508,467	\$ 453,342	\$ 264,926	\$ 345,379
1996	\$ 726,749	\$ 303,919	\$ 589,581	\$ 267,042	\$ 479,968	\$ 597,856	\$ 522,250	\$ 290,598	\$ 369,556
1997	\$ 873,988	\$ 335,831	\$ 655,319	\$ 303,814	\$ 536,124	\$ 646,103	\$ 561,419	\$ 313,846	\$ 395,425
1998	\$ 1,145,012	\$ 356,686	\$ 767,051	\$ 348,201	\$ 613,647	\$ 754,260	\$ 646,530	\$ 338,953	\$ 423,104
1999	\$ 1,450,387	\$ 363,177	\$ 879,578	\$ 383,788	\$ 698,944	\$ 834,212	\$ 711,377	\$ 366,070	\$ 452,722
2000	\$ 1,733,647	\$ 379,448	\$ 974,044	\$ 428,614	\$ 792,743	\$ 890,521	\$ 759,395	\$ 395,355	\$ 484,412
2001	\$ 1,557,855	\$ 379,448	\$ 974,044	\$ 428,614	\$ 868,291	\$ 890,521	\$ 759,395	\$ 355,266	\$ 484,412
2002	\$ 1,354,711	\$ 379,448	\$ 974,044	\$ 428,614	\$ 892,951	\$ 890,521	\$ 759,395	\$ 313,842	\$ 484,412
2003	\$ 1,038,115	\$ 379,448	\$ 974,044	\$ 428,614	\$ 892,951	\$ 890,521	\$ 759,395	\$ 338,949	\$ 484,412
2004	\$ 1,311,970	\$ 419,138	\$ 1,115,378	\$ 428,614	\$ 892,951	\$ 966,393	\$ 821,818	\$ 366,065	\$ 518,321

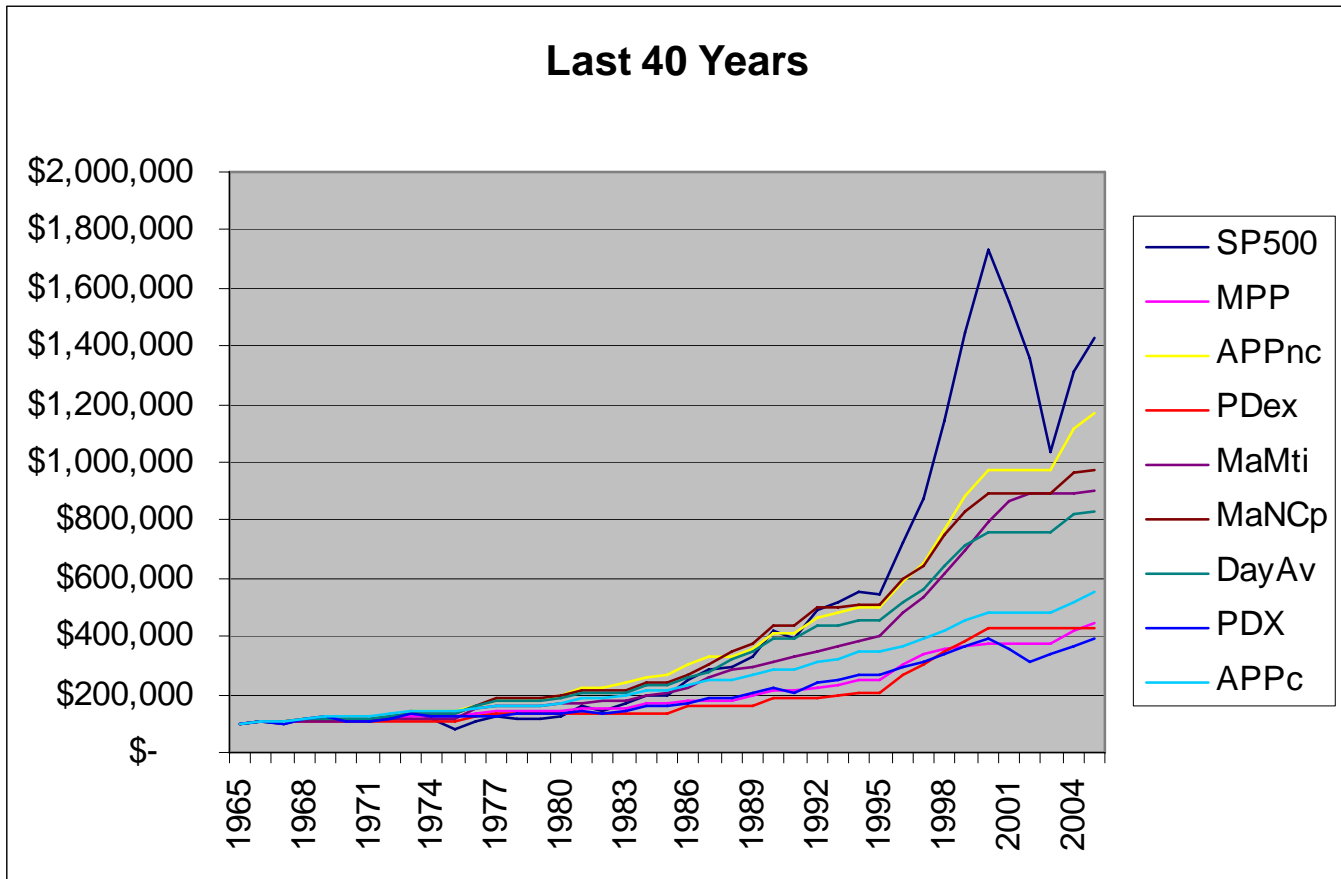
Last 40 Years (1965 to 2005)

Investment Analytics

	SP500	MPP	APPnc	PDex	MaMti	MaNCp	DayAv	PDX	APPc
Arith. Avg	8.17%	3.93%	6.52%	3.90%	5.82%	6.05%	5.60%	3.74%	4.43%
Geom. Avg	6.88%	3.82%	6.34%	3.71%	5.66%	5.85%	5.44%	3.50%	4.38%
Stand. Dev	16.19%	4.95%	6.13%	6.58%	5.98%	6.74%	5.88%	6.99%	3.24%
Correl. Coef ¹	N/A	74.4%	100.0%	68.6%	61.8%	83.4%	83.4%	61.7%	82.0%
Beta ¹	N/A	0.33	0.55	0.41	0.33	0.50	0.44	0.39	0.24

¹ Correlation Coefficient and Beta calculations are based on positive returns only.

Index Credit Methods vs. Stock Index point value changes



Key to EIA Index Crediting Methods Used

Profile Name	Index	Credit Method	Participation	Asset Fee	Cap Rate	Reset	Vesting
MPP	SP500	Monthly Point to Point	100%	0%	Monthly/ 2.5%	Annual	No
APPnc	SP500	Annual Point to Point	55%	0%	No Cap	Annual	No
PDex	SP500	Monthly Point to Point	100%	0%	Monthly/ 3.7%	Annual	Yes
MaMti	SP500	Monthly Averaging	100%	0%	No Cap	Multi Period	Yes
MaNCp	SP500	Monthly Averaging	100%	1.50%	No Cap	Annual	No
DayAv	SP500	Daily Averaging	85%	0%	No Cap	Annual	No
PDX	SP500	Annual Point to Point	100%	0%	Annual/ 8%	Annual	Yes
APPc	SP500	Annual Point to Point	100%	0%	Annual/ 7%	Annual	No

6. Recommended Presentation Standards.

Notice to Members 05-50: Member Responsibilities for Supervising Sales of Unregistered Equity-Indexed Annuities

This recent Notice to Members addresses the responsibility of firms to supervise the sale by their associated persons of equity-indexed annuities (EIAs) that are not registered under the federal securities laws.

To view the entire NTM from the NASD's website, click the link below.

http://www.nasd.com/web/groups/rules_regs/documents/notice_to_members/nasdw_014821.pdf

Is the EIA a Security?

In very basic terms a security should be thought of as an investment that is assigned a value that can be traded. The value of the investment can increase and decrease, creating gains and losses. In this sense the Equity Indexed Annuity is not considered a security.

It is the National Association of Security Dealers (NASD) that is voicing a concern about the ways the EIA could be considered a security and therefore falls under all their regulations. However the NASD is not arguing that the EIA is a security because of the product's attributes, but rather the way in which it is being presented to prospective customers.

The NASD appears to be insinuating that the presentation of the EIA as an investment makes the EIA a security. This thinking is derived from the various marketing materials that they have gleaned whereby the advertisements communicate "market-like returns with less risk". It is their contention that this type of marketing leads to the EIA being sold as an investment and thus, should be considered a security.

Fair and Balanced Sales Presentations

At the heart of any security compliance and regulation is the presentation of investments with fair and balanced methods. In short, cherry-picking time periods for historical analysis or benchmarking against inappropriate indexes fail to demonstrate to the potential customer how an investment performs during both good and bad times.

The EIA industry is seriously lacking tools that enable an advisor to evaluate – let alone demonstrate - the hypothetical performance in terms that the average investor can understand. Additionally, the insurance industry is lacking advisors who understand analytical methodologies that perform forecasting.

However, both of these conditions are easily remedied by the proper use of software tools like those contained within the MCP Premium EIA sales platform.

Within this Suite of tools are sophisticated hypothetical back-testing tools and Monte Carlo simulation tools. Additionally, the software Suite contains portfolio optimization tools that implement two different optimization methods.

When creating EIA index crediting method hypotheticals, an advisor should present three investment types on the same report for the purpose of a balanced presentation to their potential client. They are the following:

1. *A Fixed Rate* – e.g. the current interest rate of a 1-year CD
2. *The EIA index credit method*, based on the current rates
3. *A Stock Index*. This should be the same index that the index credit method uses.

The rationale for using these three investment types contained on a report is to assist the potential customer in assessing the expected return potential of the EIA versus a fixed interest product versus a stock index. Since risk is at the heart of return potential (as I covered earlier in this paper), this format allows the purchaser of an EIA to see that the EIA typically will offer higher returns than that of a fixed rate investment type but less than that of the stock index performance. Demonstrating this will enable the potential purchaser of an EIA to properly set their return expectations and remove the insinuation that the EIA is being sold as a security.

Sample Balanced Presentation Report

The next few pages feature this type of balanced historical hypothetical report, as created by the MCP Premium software. Notice that the report also factors in the client receiving an income stream in the form of annual withdrawals from each investment type.

(Note: additional sample reports - including Monte Carlo simulation reports - can be found at the software web site: http://mcppremium.com/mcp_eiasoftware.asp)



EIAAnalyst2™

Premium
Producers
Group

Prepared by:
Sample Advisor

Prepared for:
John and Mary Sample

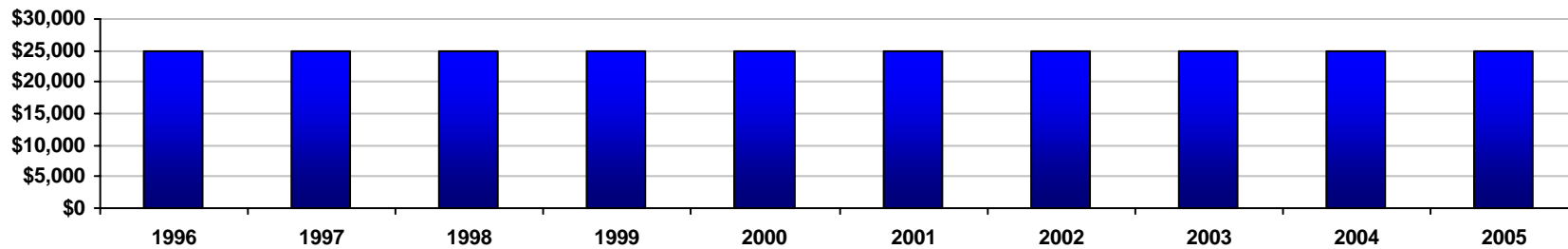
"Evaluating and comparing the historical performance of Equity Index Annuities."

Investment Amount:	\$500,000.00	
Historical Time	January	1995
Period Evaluated:	January	2005

Retirement Income Schedule

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00

Annual Retirement Income



1. This report is designed to illustrate the performance of equity indexed annuities, indexes and fixed accounts during a financial modeling scenario.
2. Equity indexed annuity performance is hypothetical and based on the index point value of the applicable index.
3. All index performance is without dividends.
4. This report is hypothetical and not intended to imply any future performance.



Investment Strategy Details

	CD_3%	AmrPP	SP500
Subaccount #1			
Allocation	N/A	100%	100%
Index Name	N/A	S&P 500	S&P 500
Crediting Method	N/A	Point-to-Point	Stock Index
Asset Fee	N/A	2.00%	0.00%
Participation Rate	N/A	70.00%	100.00%
Cap	N/A	0.00%	0.00%
Period Reset	N/A	1 Year(s)	1 Year(s)
Bonus Amount	N/A	0%	0%
Bonus Duration	N/A	1 Year(s)	1 Year(s)
Additional Criteria	N/A	None	None

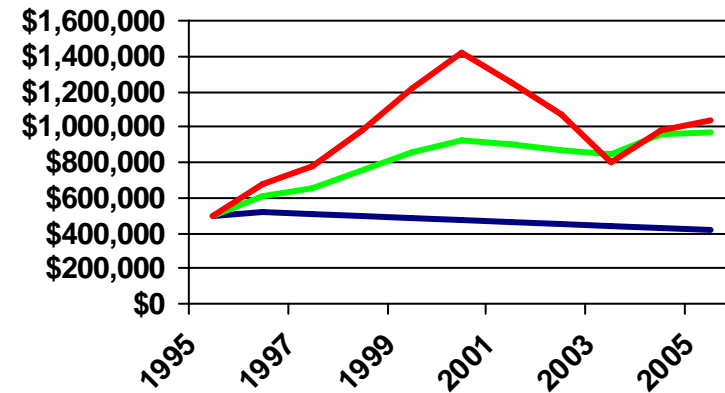
Subaccount #2			
Allocation	N/A	N/A	N/A
Index Name	N/A	N/A	N/A
Crediting Method	N/A	N/A	N/A
Asset Fee	N/A	N/A	N/A
Participation Rate	N/A	N/A	N/A
Cap	N/A	N/A	N/A
Period Reset	N/A	N/A	N/A
Bonus Amount	N/A	N/A	N/A
Bonus Duration	N/A	N/A	N/A
Additional Criteria	N/A	N/A	N/A

Fixed Account			
Allocation	100.00%	N/A	N/A
Interest Rate	3.00%	N/A	N/A
Bonus Amount	0.00%	N/A	N/A
Bonus Duration	1	N/A	N/A

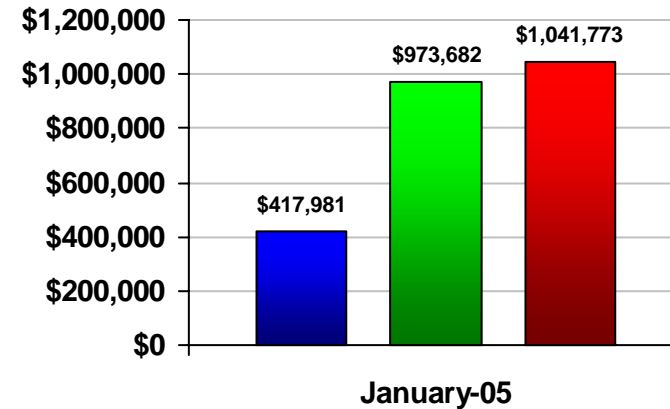
Contract Guarantees			
Interest Rate	0.00%	0.00%	0.00%
Principal Amount	0.00%	100.00%	0.00%
Guarantee Term	0 Year(s)	10 Year(s)	0 Year(s)

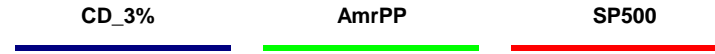
Hypothetical Account Valuation

Compare EIA Growth

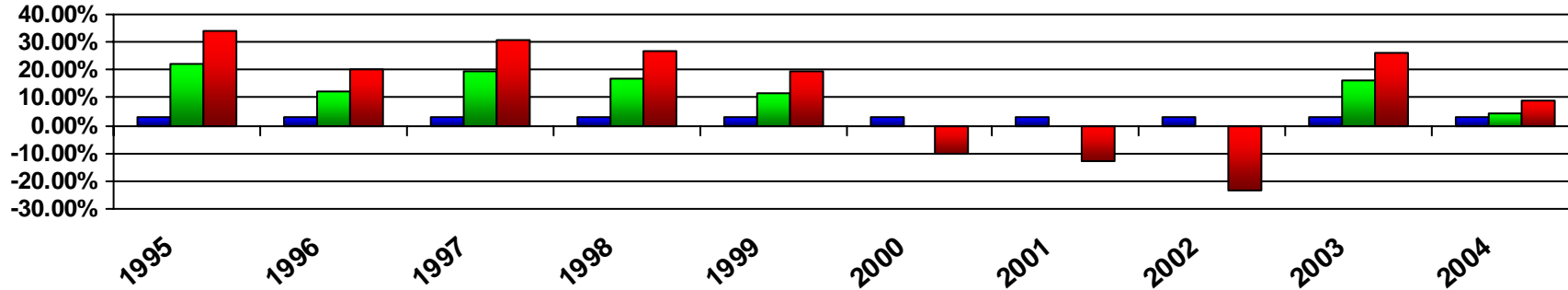


Compare EIA Ending Values

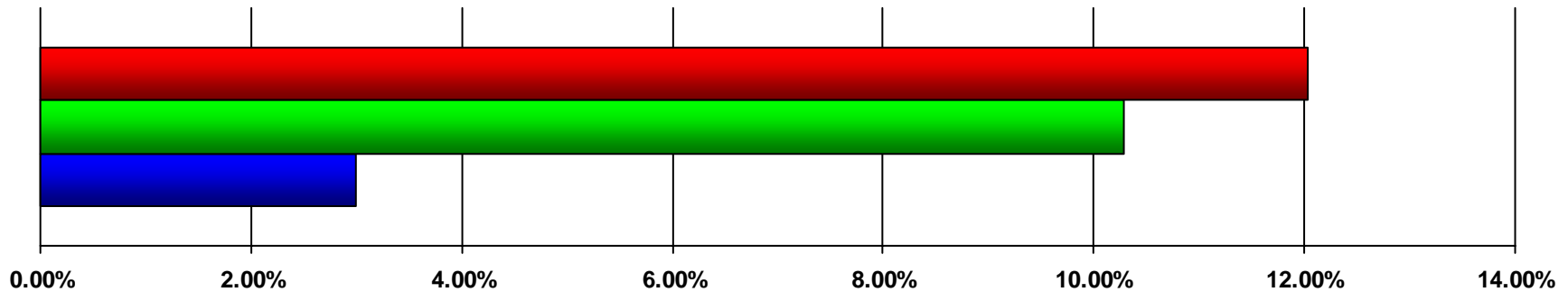




Annual Returns



Average Return



This report is based on past history and is not intended to predict future results. Data has been gathered from sources we believe reliable, but no warranty to its accuracy is made. Indexes do not include dividends. Annuities are products of the insurance industry and are not insured by the FDIC. Contract guarantees are based on the claims-paying ability of the issuing insurance company. Early surrenders may involve a loss of a portion of premium. "DJIA" is a registered trademark of Dow Jones Company. "NASDAQ 100" is a registered trademark of the NASDAQ Stock Market, Inc. "Russell 2000" is a registered trademark of the Frank Russell Co. "SP 500" is a registered trademark of The McGraw-Hill Companies, Inc. © Copyright 2005 Premium Producers Group, LLC. All Rights Reserved.

7. Summary & Final Thoughts

The Equity Indexed Annuity is a unique investment. It is not a security, but those who sell it can make it become a security for the purposes of regulation through their sales practices. EIAs are offered by insurance companies and have a number of attributes other than their Index Credit Method e.g. surrender period, company ratings and withdrawal provisions. However Index Credit Methods are the most important component to the delivery of interest returns credited to the owner of the EIA. That fact makes the analysis of Index Crediting Methods paramount. Analysis should start with a foundation of understanding the market forces that drive the index point activity of the underlying stock index.

Additionally, knowledge of options and the forces that impact the pricing of them is important. For highly sophisticated and less sophisticated advisors alike each can benefit for the use of the most comprehensive software available for EIA analysis and presentation: MCP Premium EIA Sales Platform. Clients can only benefit from the EIA if they and their advisor both understand them.

About the Author

Mitchell M. Maynard spent over a decade as a top annuity producer and grew a successful financial planning and investment advisory practice with his own asset management programs. He even created and managed a small, derivatives-based mutual fund. Three years ago, he stepped away from all personal production and launched his own software product line, MCP Premium Suite for equity indexed annuities. Mitchell feels strongly that the equity indexed annuity has a very important place in the retirement plans of the consumer.

If you would like to contact Mitchell Maynard with your questions or comments, please email him at mitchm@premiumproducersgroup.com . Complete information about his EIA software can be found at <http://mcppremium.com> .