

*alpha*

INVESTMENT MANAGEMENT



THE FORMULA™  
A RISK-MANAGEMENT INNOVATION

The image shows the lower portion of the Vitruvian Man drawing, focusing on the legs and feet. The figure's legs are spread apart, touching the bottom corners of a circle. The drawing is a black and white line art style.

## **Overview**

The Formula™ is a strategy designed for investors seeking a long-term, systematic approach to risk management of equity capital. The primary objective of this strategy is to avoid large losses. The Formula™ seeks to accomplish this by restricting investment in the stock market to well-defined time periods when the odds of positive returns are significantly higher than average. These time periods are called “power zones”.

The Formula™ uses index funds and other mutual funds as investment vehicles.

The Formula's™ long-term effectiveness as an investment strategy hinges on the assumption that the stock market exhibits cyclical regularities which “skew” the distribution of returns into clearly identifiable time-periods which can be exploited for profit.

Alpha's research has identified two cyclical forces which profoundly and regularly affect the distribution of stock market returns. They are:

- 1) The annual earnings forecasting cycle
- 2) The four-year presidential election cycle

These cycles produce well-defined time periods when the market climate is positive; in other words, when the odds of a rising market are significantly higher than average. They also produce clearly identifiable time periods when the market climate is risky and the odds of a market decline increase substantially.

These market effects are, of course, the result of changes in investor psychology which are produced by the specific characteristics of each cyclical force.

### **Force One: The Annual Earnings Forecasting Cycle**

Investors are constantly seeking ways to reduce uncertainty. This desire has created a world-wide industry which attempts to satisfy the demand for insight into the future. The investment forecasting industry is highly paid for its “expertise” in predicting the probable course of the economy, the stock market, and the earnings of specific companies.

Investors, like most human beings, believe in “experts”. It seems rational to believe that intelligent, dedicated, experienced, and well-paid professionals should be able to get a handle on what is likely to happen over the next 12-18 months. This expectation, however, flies in the face of the facts: expert opinion is wildly overrated.

A significant body of research exists which shows that expert forecasts of earnings tend to be substantially off the mark, with a strong bias toward overly optimistic estimates. This optimistic bias creates the annual forecasting cycle.

Toward the end of the calendar year, the forecasting industry puts out its predictions for the upcoming year. These predictions tend to be overly optimistic. Early in the year, analysts routinely increase their earnings estimates and continue to defend them until about mid-year. By late-June the first two quarters' earnings are “in” and a more realistic appraisal of full-year earnings is called for. At this point, earnings estimates for the year begin to be revised downward. This process typically continues to year-end.

This cycle causes the annual returns of the stock market to be “skewed”. The returns of the market between late-October to early-May tend to be significantly higher than returns from June to late-October. This is caused by investors influenced by expert confidence during the first half of the forecasting cycle. As expert confidence falls and earnings are revised downward, this translates into investor concern and a desire to re-organize portfolios. This is especially true for institutional investors who are strongly influenced by calendar-year comparisons to investment benchmarks. This explains why the bulk of bear market damage and large market corrections occur between June and November.

This explanation is backed up by the long-term statistics:

From 1949 through 2009, using the Dow Industrials as a benchmark:

- The average daily gain from November to May was 27 times higher than the average daily gain of all other days.
- The annualized return of the six-month “power zone” was 17%.
- The Dow was down 43% of the time between May and November.
- The Dow was down 20% of the time between November and May.
- A \$1,000 investment only during the November to May “power zone” grew to \$73,738.
- A \$1,000 investment only during the May to November “dead zone” shrank to \$729.

The Formula™ exploits this annual “skewing” effect using mid-cap stocks. Our benchmark is the S&P MidCap 400 Index. Our research indicates that the mid-cap index is the best performing U.S. equity index, having a 30% excess annual return premium to the S&P 500. In addition, the mid-cap index has an annual power zone of seven months, from late-October to late-May, which increases returns due to the additional low-risk month.

<b>The Annual Forecasting Cycle</b>					
<b>S&amp;P MidCap 400 Index</b>					
<b>1981 - 2011</b>					
<b>DEAD ZONE</b>			<b>POWER ZONE</b>		
<b>S&amp;P MIDCAP 400</b>			<b>S&amp;P MIDCAP 400</b>		
<b>YEAR</b>	<b>% CHANGE</b>	<b>INVESTING</b>	<b>YEAR</b>	<b>% CHANGE</b>	<b>INVESTING</b>
	<b>JUNE 1 - OCT 31</b>	<b>\$ 1,000</b>		<b>NOV 1 - MAY 31</b>	<b>\$ 1,000</b>
1981	-3.8%	\$ 962	1981-82	-2.3%	\$ 977
1982	18.3%	\$ 1,138	1982-83	35.5%	\$ 1,324
1983	-0.9%	\$ 1,128	1983-84	-9.3%	\$ 1,201
1984	10.5%	\$ 1,246	1984-85	20.5%	\$ 1,447
1985	4.1%	\$ 1,297	1985-86	33.6%	\$ 1,933
1986	-1.2%	\$ 1,281	1986-87	13.6%	\$ 2,196
1987	-17.3%	\$ 1,059	1987-88	13.9%	\$ 2,501
1988	6.5%	\$ 1,128	1988-89	23.5%	\$ 3,089
1989	5.8%	\$ 1,193	1989-90	8.2%	\$ 3,342
1990	-20.0%	\$ 954	1990-91	49.1%	\$ 4,983
1991	8.0%	\$ 1,030	1991-92	7.2%	\$ 5,342
1992	3.3%	\$ 1,064	1992-93	14.8%	\$ 6,133
1993	5.9%	\$ 1,127	1993-94	-1.8%	\$ 6,023
1994	4.2%	\$ 1,174	1994-95	8.9%	\$ 6,559
1995	11.3%	\$ 1,307	1995-96	15.4%	\$ 7,569
1996	1.7%	\$ 1,329	1996-97	16.2%	\$ 8,795
1997	14.2%	\$ 1,518	1997-98	13.8%	\$ 10,009
1998	-6.2%	\$ 1,424	1998-99	19.4%	\$ 11,951
1999	1.4%	\$ 1,444	1999-00	19.8%	\$ 14,317
2000	9.9%	\$ 1,587	2000-01	0.9%	\$ 14,446
2001	-13.2%	\$ 1,378	2001-02	18.0%	\$ 17,046
2002	-19.3%	\$ 1,112	2002-03	12.6%	\$ 19,194
2003	16.1%	\$ 1,291	2003-04	9.1%	\$ 20,941
2004	1.7%	\$ 1,313	2004-05	12.0%	\$ 23,454
2005	5.0%	\$ 1,379	2005-06	10.1%	\$ 25,823
2006	3.1%	\$ 1,422	2006-07	17.6%	\$ 30,368
2007	-0.5%	\$ 1,415	2007-08	-2.0%	\$ 29,761
2008	-35.2%	\$ 917	2008-09	2.6%	\$ 30,535
2009	15.3%	\$ 1,057	2009-10	16.7%	\$ 35,634
2010	9.4%	\$ 1,156	2010-11	21.6%	\$ 43,331
2011	-10.7%	\$ 1,032	2011-12	TBA	TBA
<b>Losing Periods</b>		<b>11</b>	<b>Losing Periods</b>		<b>4</b>
<b>Winning Periods</b>		<b>20</b>	<b>Winning Periods</b>		<b>26</b>
<b>31 Yr Gain / (Loss)</b>		<b>\$ 32</b>	<b>30 Yr Gain / (Loss)</b>		<b>\$ 42,331</b>
<b>Compound Annual Return</b>		<b>0.1%</b>	<b>Compound Annual Return</b>		<b>13.4%</b>

## Force Two: The Four-Year Presidential Election Cycle

The presidential election cycle causes a cyclical bias which has been operating in the U.S. market since the formation of the Federal Reserve in 1913. Specifically, the election cycle tends to skew returns into a 15-month period beginning with the mid-term elections.

<b>PRESIDENTIAL ELECTION CYCLE QUARTERLY % CHANGES</b>					
<b>Dow Jones Industrials (1933 to 2009)</b>					
	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Year</b>
<b>Post-Election</b>	-0.4%	4.7%	-0.6%	1.3%	5.0%
<b>Mid-Term</b>	0.4%	0.9%	-1.4%	<b>7.2%</b>	6.7%
<b>Pre-Election</b>	<b>5.8%</b>	<b>5.5%</b>	<b>3.3%</b>	<b>1.6%</b>	<b>17.1%</b>
<b>Election</b>	0.6%	0.8%	1.1%	2.2%	4.8%

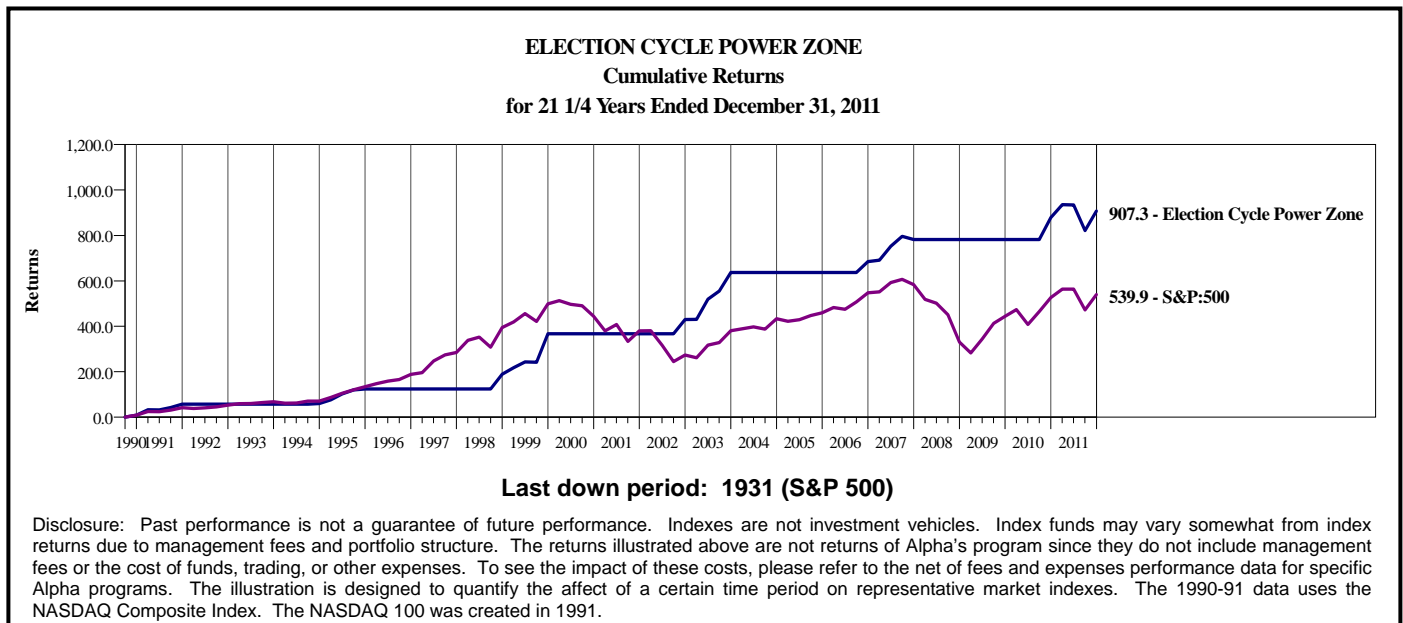
The five-quarter period beginning in the fourth quarter of the president's second year has not been down since 1931, generating an average return of 25.6% plus dividends (Dow Industrials, ending 2009). This 15-month period accounts for almost all of the total appreciation of the market since the Great Depression. The average daily return during this period is 7.6 times greater than the average daily return during all other months. We call this period the election cycle "power zone".

The mid-term elections cause the political class to focus on the next presidential election. This shift in focus is dramatic. In the first two years of the presidential term the dominant party attempts to pass legislation with significant social importance and increased governmental activism. Such changes are generally resisted by investors, who tend to be cautious during periods of uncertainty. After the mid-term elections, however, the political class becomes less aggressive and more fiscally conservative.

During this period there is no mention of higher taxes, increased regulation on businesses, or large legislative agendas. The dominant party knows that economics will play a large part in determining the presidential election and they pull out all the stops to make the U.S. economy vibrant during the election year. Naturally, this plays well on Wall Street.

The Formula™ adopts a fully invested position in the market during the 15-month "power zone". The strategy invests equally in the S&P 500 and the NASDAQ 100. The NASDAQ 100 represents the largest companies in the NASDAQ Composite Index. It is heavily tilted toward technology companies, such as Microsoft and Intel. Large growth companies tend to do very well during this optimistic period in the election cycle. A look at the last five cycles confirms this.

<b>1990 – 2011</b>	
<b>Election Cycle Power Zone</b>	
Q4 Mid-Term Year, Q1-Q4 Pre-Election Year	
<b>50% S&amp;P 500 / 50% NASDAQ 100</b>	
<b>Cumulative Returns</b>	
<b>Q4 1990 – Q4 1991</b>	<b>57.95%</b>
<b>Q4 1994 – Q4 1995</b>	<b>42.12%</b>
<b>Q4 1998 – Q4 1999</b>	<b>108.22%</b>
<b>Q4 2002 – Q4 2003</b>	<b>57.63%</b>
<b>Q4 2006 – Q4 2007</b>	<b>19.67%</b>
<b>Q4 2010 – Q4 2011</b>	<b>11.24%</b>
<b>Average:</b>	<b>49.47%</b>
<b>Cumulative Gain:</b>	<b>907.34%</b> (as of 12/31/2011)
<b>Cumulative Gain S&amp;P 500:</b>	<b>539.91%</b> (as of 12/31/2011)



## Bonds

The Formula™ invests in bonds when not invested in equities. Bond exposure covers 14 months every election cycle; during the five-month annual “dead zone” in years one and four, and the four-month “dead zone” in year two.

Fixed-income exposure is limited to intermediate term bonds, using the PIMCO Total Return Fund as the model investment.

This fund, managed by Bill Gross, who many consider to be the best bond manager in the world, is the largest bond fund in existence. Because it is found in so many portfolios ranging from 401K accounts to large institutional accounts, it seems a likely candidate to represent a well-managed, intermediate maturity fixed-income investment.

The objective of this component is to earn monthly returns in excess of money market returns with relatively low risk.

## Asset Allocation Schedule

<b>Asset Allocation Schedule</b>			
<b>Based on the Four-Year Election Cycle</b>			
<b>Year 1 (Post-Election)</b>	JANUARY 1 → MAY 31 S&P MidCap 400	JUNE 1 → OCTOBER 31 PIMCO Total Return	NOVEMBER 1 → DECEMBER 31 S&P MidCap 400
<b>Year 2 (Mid-Term)</b>	JANUARY 1 → MAY 31 S&P MidCap 400	JUNE 1 → SEPTEMBER 30 PIMCO Total Return	OCTOBER 1 → DECEMBER 31 50% S&P 500 / 50% NASDAQ 100
<b>Year 3 (Pre-Election)</b>	JANUARY 1 → DECEMBER 31 50% S&P 500 / 50% NASDAQ 100		
<b>Year 4 (Election)</b>	JANUARY 1 → MAY 31 S&P MidCap 400	JUNE 1 → OCTOBER 31 PIMCO Total Return	NOVEMBER 1 → DECEMBER 31 S&P MidCap 400

## Summary

In the end, The Formula™ can be seen as a simple strategy for managing equity capital efficiently over time. Market risk is assumed only during periods when a positive market climate is expected. This expectation is based upon two forces which are well-defined and which reflect causal mechanisms at work on investor psychology. Decades of supporting return data provide empirical evidence for their influence on market returns.

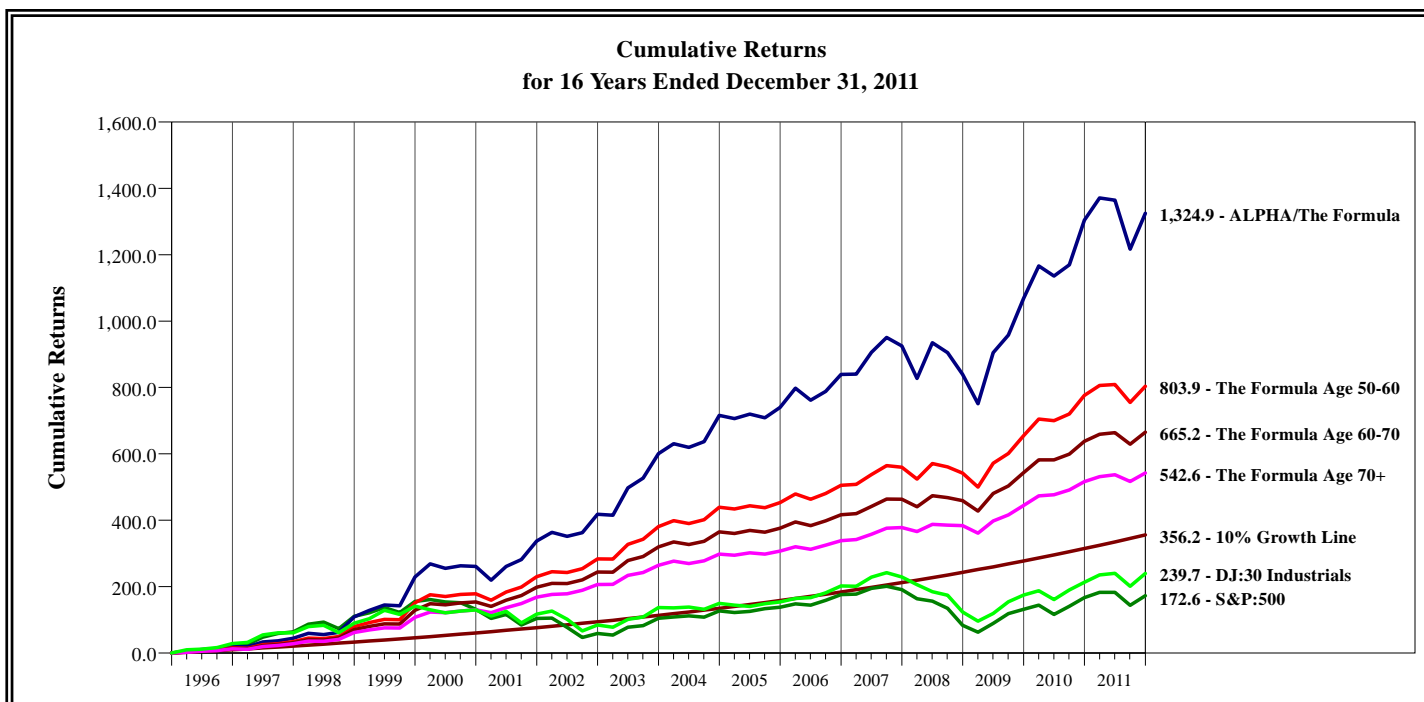
The Formula™ has historically exhibited lower risk with higher returns over longer time periods than equity indexes alone. The Formula™ has also outperformed almost all diversified mutual funds, particularly in the past ten years – years containing two severe bear markets.

The Formula™ represents a good alternative to mutual funds and managed accounts which assume a constant exposure to market risk. Buy and hold strategies, even when actively managed, remain exposed to unpredictable market risk during the market’s “dead zone” which decades of return data have shown to be unproductive over the long-term and likely to suffer the most during bear markets.

For retired investors seeking to boost returns from low-yielding fixed-income portfolios, The Formula™ represents a lower-risk equity component which has the potential to increase total returns significantly. The performance illustrations which follow show historical combinations of low-risk bonds with The Formula™ based on age.

# The Formula™

## Model Performance History With Age Category Bond Mixes



**Annual Returns for Calendar Years  
16 Years Ended December 31, 2011**

	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
ALPHA/The Formula	1.47	20.18	24.35	-8.37	9.13	11.83	3.00	16.41	35.28	18.41	21.25	9.60	57.27	44.42	19.24	21.57
The Formula Age 50-60	3.16	16.11	17.47	-2.66	9.05	9.35	2.56	12.18	25.42	16.02	18.69	10.73	39.85	33.52	15.79	16.33
The Formula Age 60-70	3.70	14.69	15.02	-0.72	9.02	8.52	2.42	10.75	22.11	15.17	17.56	10.97	34.11	29.91	14.64	14.58
The Formula Age 70+	4.21	13.24	12.48	1.24	8.99	7.69	2.27	9.32	18.80	14.28	16.30	11.12	28.40	26.32	13.48	12.82
S&P:500	2.11	15.06	26.47	-37.00	5.49	15.79	4.91	10.88	28.68	-22.10	-11.89	-9.11	21.04	28.58	33.36	22.96

**Compound Annual Returns  
for Periods Ended December 31, 2011**

	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 4 Years	Last 5 Years	Last 6 Years	Last 7 Years	Last 8 Years	Last 9 Years	Last 10 Years	Last 11 Years	Last 12 Years	Last 13 Years	Last 14 Years	Last 15 Years	Last 16 Years
ALPHA/The Formula	8.22	1.47	10.43	14.89	8.57	8.68	9.20	8.29	9.28	11.90	12.53	13.30	12.99	15.90	17.73	17.83	18.06
The Formula Age 50-60	5.70	3.16	9.45	12.06	8.18	8.36	8.52	7.65	8.20	9.99	10.58	11.30	11.25	13.22	14.57	14.65	14.75
The Formula Age 60-70	4.91	3.70	9.06	11.01	7.95	8.17	8.22	7.37	7.79	9.30	9.87	10.55	10.58	12.24	13.41	13.50	13.56
The Formula Age 70+	4.15	4.21	8.63	9.90	7.67	7.93	7.89	7.07	7.35	8.56	9.12	9.76	9.87	11.20	12.21	12.30	12.33
S&P:500	11.82	2.11	8.39	14.11	-1.64	-0.25	2.26	2.64	3.63	6.16	2.92	1.48	0.55	1.99	3.70	5.45	6.47

**Key:**  
**The Formula Age 50-60 = 70% The Formula / 30% Barclays Capital Intermediate Treasury Index**  
**The Formula Age 60-70 = 60% The Formula / 40% Barclays Capital Intermediate Treasury Index**  
**The Formula Age 70+ = 50% The Formula / 50% Barclays Capital Intermediate Treasury Index**

Disclosure: Past performance is not a guarantee of future performance. The Formula™ returns presented above are hypothetical prior to July 2010 and represent a reduction in gross returns of 3% annually for fees and expenses which would be expected in a real-time managed account. Beginning July 2010, actual client net composite returns are used. The client composites are weighted by account size and assets included in the composites are net of all fees and trading expenses. Alpha's management fees range from 0.8% annually to 2.0% annually.

The Formula™ is a precise asset allocation strategy applied over time using equity indexes and bond funds as components. The equity indexes are the S&P 500, NASDAQ 100, and the S&P MidCap 400. The bond fund is the PIMCO Total Return Fund. The age-based illustrations combine The Formula™ with the Barclays Capital Intermediate Treasury Index in the proportions noted in the key. The age-based illustrations are models which are rebalanced annually. The Barclays Capital Intermediate Treasury Index is presented gross of fees and expenses. The Formula™ is not an actual investment, but rather a recipe detailing the allocation of indexes and bond funds over time. As such, it is, like an index, not investable. A managed account based on The Formula™ may use funds which deviate from the indexes in the illustration. This strategy may be executed using variable annuity company products which may increase the total expense factor. These expense factors cannot be quantified in advance. Potential investors should inquire as to the exact additional costs of these investment venues. Model results, being hypothetical, have inherent limitations due to the fact that they do not reflect actual trading and may not reflect the impact that material economic and market factors might have had on the advisor's decision-making if actual client funds had been invested in the model strategy. No matter how positive the model returns have been over any time period, the potential for loss is always present due to factors in the future which may not be accounted for in the model.

## Disclosure to The Formula™ Data and Illustrations

The Formula™ is an investment model that specifies an asset allocation strategy based on the annual forecasting cycle and the four-year presidential election cycle. The model determines, in advance, when to be invested in stock index funds and when to be invested in bond funds. The investment components of the model are: the S&P MidCap 400 Index, the S&P 500 Index, the NASDAQ 100 Index and the PIMCO Total Return Bond Fund. Over the course of the four-year cycle, the model is invested 29% of the time in bonds and 71% of the time in stocks.

The Formula™ is a model containing actual net of fees and expenses results since July 2010. Prior to July 2010, the model uses computer backtesting to reconstruct past returns based on the instructions of The Formula™. Hypothetical backtests should be regarded with caution since they are created with the benefit of hindsight and do not reflect how the investment manager would have reacted to the occurrence of actual market and economic events. Past performance is not a guarantee of future performance.

The SEC mandates that we state: The investment strategy that the backtested results were based upon can (theoretically) be changed at any time with the benefit of hindsight in order to show better backtested results, and (theoretically) the strategy can continue to be tested and adjusted until the desired results are achieved. Please note that Alpha has not made any data-fitting adjustments to its managed account model.

The returns of the model prior to July 2010 have been reduced by .75% quarterly to reflect Alpha's maximum management fee and estimated fund expenses. The actual expenses of the PIMCO Total Return Bond Fund are included before the quarterly return reduction. Beginning July 2010, actual client net composite returns are used. The client composites are weighted by account size and assets included in the composites are net of all fees and trading expenses. Alpha's management fees range from 0.8% annually to 2.0% annually.

The precise description of the construction of The Formula™ is included in this literature.

The hypothetical returns of The Formula™ do not correspond to the returns of managed accounts based on it. Alpha's managed accounts use modifications of The Formula™ which seek to enhance the long-term returns of the model.

