

**Investment Objective**

The Dynamic Quant model is designed to leverage the time-proven qualitative risk management capabilities of our Dynamic Moderate Growth model while blending it with a rules-based quantitative approach to sector rotation and risk management.

**Client Suitability**

The Dynamic Quant Strategy is for clients willing to accept manager and strategy risk but who are unwilling to accept market risk. The Dynamic Quant model requires a minimum household investment of \$250,000.

**Portfolio Composition**

The Dynamic Quant model is structured with a 62.5% core portfolio and a 37.5% satellite portfolio. The core portfolio is invested in the Dynamic Moderate Growth model - a more qualitatively risk-managed model that is measured against a 60% equity / 40% fixed income benchmark. The satellite portfolio is invested in a proprietary quantitative model that uses valuation and momentum to sector rotate within the US equity market and is designed to protect against major market declines by moving to either bonds or cash, depending on market conditions.

**Model Benchmark**

This Dynamic Quant model is measured against a six-asset class benchmark, rebalanced monthly, consisting of 75% equities and alternatives (37.5% MSCI USA Index, 27.5% S&P 500 Index, 7.5% MSCI EAFE Index, 2.5% blended commodity benchmark) and 25% fixed income and alternatives (22.5% Barclays US Aggregate Bond Index, 2.5% Barclays 0-3 Month T-bill Index). The S&P 500 is also shown as a well known industry benchmark for U.S. stocks.

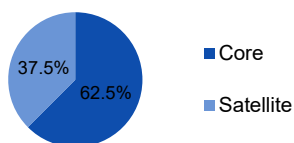
**Program Highlights**

The program is a separately-managed account program, which permits greater customization for planning purposes and greater transparency.

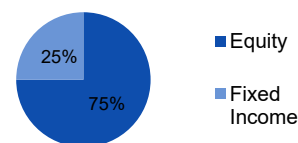
Assets are managed at the household level, which means that assets are treated as a single portfolio regardless of the number of client accounts. Performance of individual accounts may vary.

To improve after-tax returns, the program implements tax-loss harvesting and tax location. Tax location allocates securities to taxable and tax-deferred accounts based on tax efficiency. Studies suggest this technique can add between 0.20% and 0.50% to annual after-tax returns.

**Model Structure**

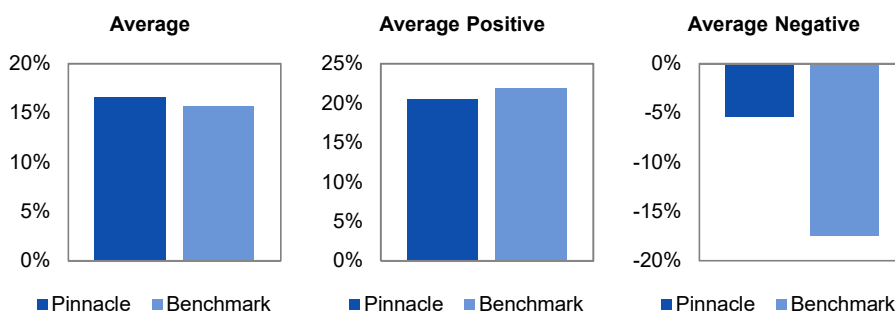


**Model Benchmark**



| Start Date           | End Date   | Dynamic Quant* | Benchmark | S&P 500 |
|----------------------|------------|----------------|-----------|---------|
| 10/31/2002           | 12/31/2002 | 0.93%          | 0.49%     | -0.33%  |
| 12/31/2002           | 12/31/2003 | 22.07%         | 22.68%    | 28.68%  |
| 12/31/2003           | 12/31/2004 | 12.53%         | 9.57%     | 10.88%  |
| 12/31/2004           | 12/31/2005 | 6.73%          | 5.51%     | 4.91%   |
| 12/31/2005           | 12/31/2006 | 11.27%         | 12.88%    | 15.79%  |
| 12/31/2006           | 12/31/2007 | 8.05%          | 6.56%     | 5.49%   |
| 12/31/2007           | 12/31/2008 | -13.62%        | -28.70%   | -37.00% |
| 12/31/2008           | 12/31/2009 | 23.62%         | 21.49%    | 26.46%  |
| 12/31/2009           | 12/31/2010 | 11.18%         | 12.55%    | 15.06%  |
| 12/31/2010           | 12/31/2011 | -2.32%         | 1.75%     | 2.11%   |
| 12/31/2011           | 12/31/2012 | 10.67%         | 12.39%    | 16.00%  |
| 12/31/2012           | 12/31/2013 | 20.71%         | 20.95%    | 32.39%  |
| 12/31/2013           | 12/31/2014 | 8.31%          | 8.90%     | 13.69%  |
| 12/31/2014           | 12/31/2015 | -5.56%         | 0.11%     | 1.38%   |
| 12/31/2015           | 12/31/2016 | 3.53%          | 8.46%     | 11.96%  |
| 12/31/2016           | 5/31/2017  | 7.18%          | 6.98%     | 8.66%   |
| Quarter-End Mar-2017 |            | 5.25%          | 4.59%     | 6.07%   |
| Trailing-Three-Year  |            | 3.24%          | 6.58%     | 10.13%  |
| Trailing-Five-Year   |            | 8.09%          | 10.72%    | 15.42%  |
| Trailing-Ten-Year    |            | 5.93%          | 5.44%     | 6.94%   |
| Since Inception      |            | 8.13%          | 7.63%     | 9.33%   |

**Two Year Rolling Period Returns**



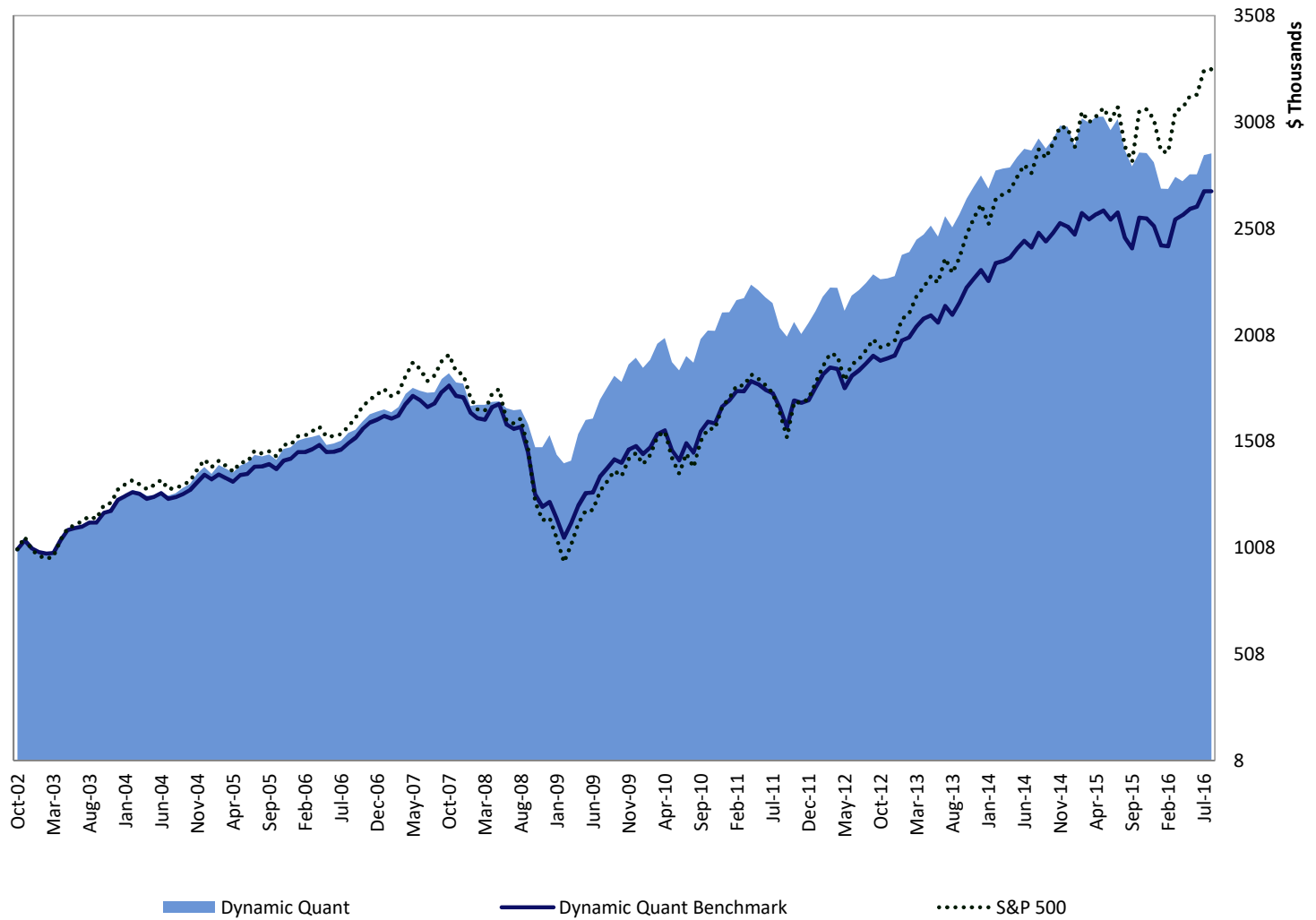
**Additional Metrics**

|                    | Dynamic Quant* | Benchmark | S&P 500 |
|--------------------|----------------|-----------|---------|
| Alpha              | 2.10%          | 0.23%     | 0.00%   |
| Beta               | 0.57           | 0.75      | 1.00    |
| Standard Deviation | 8.64%          | 10.22%    | 13.60%  |
| Sharpe Ratio       | 0.80           | 0.63      | 0.60    |
| Correlation        | 89.4%          | 99.2%     | 100.0%  |

\*Backtested performance net of 1.3% fee - please refer to the attached full backtested performance disclosure.

# Dynamic Quant

Growth Of \$1000,000.00



## Dynamic Quant Series

Quantitative Series is designed for investors that desire a material portion of the portfolio to run off a rules based engine. We currently offer only one model in this series, and it uses Pinnacle's Dynamic Moderate Growth (DMG) portfolio as the chassis, and then adds on a purely quantitative allocation of the portfolio. The DMG's actively managed portfolio is 62.5% of the total portfolio, while the quantitative allocation makes up 37.5%. The Quantitative allocation rotates between ten U.S. equity sectors and fixed income, depending on how the quantitative model evaluates current market conditions based on a set of valuation and technical indicators. This series should appeal to clients that desire a heavily rules based approach, and that are willing to make aggressive allocation changes depending on market conditions.

## Dynamic Quant

This portfolio has a heavy emphasis on capital appreciation and limited exposure to income-generating and principal-protecting assets. This portfolio is managed to achieve a higher inflation-adjusted total return than more conservative portfolios, and will take on more volatility in order to achieve those target returns. The returns of this portfolio would typically be compared to a portfolio containing primarily stocks with a modest exposure to bonds. This portfolio is generally suitable for clients that have a long-term time horizon, are not dependent on sustaining withdrawals from the portfolio, are not risk averse, and need or want to take on a high level of short-term principal risk in order to achieve their financial goals.

## Disclosure

Pinnacle Advisory Group, Inc. ("Pinnacle") is a registered investment adviser under the SEC Investment Advisers Act of 1940.

**The Dynamic Market Series and Dynamic Quant Series strategies have less than three years of performance as model portfolios at Pinnacle Advisory Group and all performance data cited in this report is based on back-tested data and not actual performance.**

### Market Series Benchmarks

DMC Benchmark - 33% S&P 500 Total Return Index / 9% MSCI Daily Total Return Net EAFE USD Index / 3% Commodity Blended Benchmark / 49% Barclays Capital U.S. Aggregate Bond Index / 6% S&P/BGCantor 0-3 Month U.S. Treasury Bill Index. The benchmark is rebalanced monthly.

DMM Benchmark - 44% S&P 500 Total Return Index / 12% MSCI Daily Total Return Net EAFE USD Index / 4% Commodity Blended Benchmark / 36% Barclays Capital U.S. Aggregate Bond Index / 4% S&P/BGCantor 0-3 Month U.S. Treasury Bill Index. The benchmark is rebalanced monthly.

DMA Benchmark - 55% S&P 500 Total Return Index / 15% MSCI Daily Total Return Net EAFE USD Index / 5% Commodity Blended Benchmark / 23% Barclays Capital U.S. Aggregate Bond Index / 2% S&P/BGCantor 0-3 Month U.S. Treasury Bill Index. The benchmark is rebalanced monthly.

## Disclosure – Dynamic Market Series Model Performance – Back-tested data

Pinnacle Advisory Group, Inc. ("Pinnacle") is a registered investment adviser under the SEC Investment Advisers Act of 1940.

The Dynamic Market series of portfolios are designed to capture market returns across full investment cycles while seeking to protect or improve returns at market peaks and troughs. The performance cited within this report is based on back-tested data of hypothetical portfolios relative to each model and may not be relied upon for investment purposes and are not meant to represent actual, current, or future performance. This report is unaudited and does not replicate actual returns for any client.

This is a hypothetical model presentation and may only be used in a one-on-one presentation for specified individual clients. This should not be further disseminated without compliance approval. Perspectives, opinions, and testing data may change without notice. Please contact a Pinnacle investment professional for additional information. Past performance is not indicative of future return. All information is believed to be correct but accuracy cannot be guaranteed.

The Market series of portfolios are structured with a 70% Core portfolio and 30% Dynamic portfolio. The core portfolio owns a static diversified 11-asset class portfolio of equity and fixed income securities. The satellite portfolio owns a quantitatively derived (based on a set of valuation and technical indicators) mix of equities and fixed income to protect against market extremes. Back tested results represent the period of October 2002 to the most recent month-end date. Results should be evaluated over a complete market cycle, which includes both bull market and bear market returns.

The Dynamic Market Conservative (DMC) portfolio performance is measured against a five-asset class benchmark, rebalanced monthly, consisting of 45% equities and alternatives (33% S&P 500 Total Return Index, 9% MSCI Daily Total Return Net EAFE USD Index, 3% Commodity Blended Benchmark\*) and 55% fixed income (49% Barclays Capital U.S. Aggregate Bond Index, 6% S&P/BGCantor 0-3 Month U.S. Treasury Bill Index). Pinnacle's proprietary investment process considers factors such as additional guidelines, restrictions, weightings, allocations, market conditions and other investment characteristics and thus returns may at times materially differ from the stated benchmark.

The Dynamic Market Moderate (DMM) portfolio performance is measured against a five-asset class benchmark, rebalanced monthly, consisting of 60% equities and alternatives (44% S&P 500 Total Return Index, 12% MSCI Daily Total Return Net EAFE USD Index, 4% Commodity Blended Benchmark\*) and 40% fixed income (36% Barclays Capital U.S. Aggregate Bond Index, 4% S&P/BGCantor 0-3 Month U.S. Treasury Bill Index). Pinnacle's proprietary investment process considers factors such as additional guidelines, restrictions, weightings, allocations, market conditions and other investment characteristics and thus returns may at times materially differ from the stated benchmark.

The Dynamic Market Appreciation (DMA) portfolio performance is measured against a five-asset class benchmark, rebalanced monthly, consisting of 75% equities and alternatives (55% S&P 500 Total Return Index, 15% MSCI Daily Total Return Net EAFE USD Index, 5% Commodity Blended Benchmark\*) and 25% fixed income (23% Barclays Capital U.S. Aggregate Bond Index, 2%

S&P/BGCantor 0-3 Month U.S. Treasury Bill Index). Pinnacle's proprietary investment process considers factors such as additional guidelines, restrictions, weightings, allocations, market conditions and other investment characteristics and thus returns may at times materially differ from the stated benchmark.

Portfolio holdings are assumed to be rebalanced when holdings diverge from model weightings by more than 1%. No taxes or transaction costs are included in the analysis. All returns are net of maximum investment management fees, but are gross of all other costs, expenses and commissions associated with client account trading and custodial services. Any comments regarding an individual security are presented at the client's request, may only be used for client reference, and are not reflective of composite or individual portfolio ownership. Pinnacle may or may not have held or currently hold a specific security. The position may or may not have been profitable and may or may not be profitable in the future. Any positive comments regarding specific securities may no longer be applicable and should not be relied upon for investment purposes. No security is profitable all of the time and there is always the possibility of selling it at a loss. Investments are subject to change without notice.

Decisions and information provided were based on available research at the time and as these are not realized returns, specific action or lack of action is not known for certainty. Material economic and market factors may have changed and certain investment restrictions may have affected performance. Foreign investments involve special risks including greater economic, political and currency fluctuation risks, and international accounting difference risks which may be more excessive in emerging markets. Returns do include the reinvestment of gains, dividends and other income. Individual client returns may be materially negatively affected due to expenses and commissions associated with client account trading and custodial services.

\*Comprised of 100% Bloomberg Commodity Total Return Index from 10/31/2002 to 6/30/2006 and 100% iPATH® Bloomberg Commodity Index Total Return ETN from 6/30/2006 to present.

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## Disclosure – Dynamic Quant Model Performance – Back-tested data

### Quant Series Benchmarks

**DQ Benchmark** - 27.5% S&P 500 Total Return Index / 37.5 MSCI Daily TR Net USA USD Index / 7.5% MSCI Daily Total Return Net EAFE USD Index / 2.5% Commodity Blended Benchmark / 22.5% Barclays Capital U.S. Aggregate Bond Index / 2.5% S&P/BGCantor 0-3 Month U.S. Treasury Bill Index. The benchmark is rebalanced monthly.

The Quantitative series of portfolios represent hypothetical model portfolio results that are designed to capture market returns across full market cycles, and also to protect or improve returns at market peaks and troughs. Back tested and model presentations may not be relied upon for investment purposes and are not meant to represent actual current or future performance. This report is unaudited and does not replicate actual returns for any client.

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**The Dynamic Quantitative (DQ)** portfolio uses Pinnacle's Dynamic Moderate Growth (DMG) portfolio as the chassis (see Dynamic Prime Series as described in investment policy statement for description of the DMG portfolio), and then adds on a purely quantitative allocation of the portfolio. The DMG's actively managed portfolio is 62.5% of the total portfolio, while the quantitative allocation makes up 37.5%. The Quantitative allocation rotates between ten U.S. equity sectors and fixed income, depending on how the quantitative model evaluates current market conditions based on a set of valuation and technical indicators. Back tested results represent the period of October 2002 to the most recent month-end date. Results should be evaluated over a complete market cycle, which includes both bull market and bear market returns.

**The Dynamic Quantitative (DQ)** portfolio performance is measured against a six asset class benchmark, rebalanced monthly, consisting of 75% equities and alternatives (37.5% MSCI US, 27.5% S&P 500 Total Return Index, 7.5% MSCI Daily Total Return Net EAFE USD Index, 2.5% Commodity Blended Benchmark\*) and 25% fixed income (22.5% Barclays Capital U.S. Aggregate Bond Index, 2.5% S&P/BGCantor 0-3 Month U.S. Treasury Bill Index). Pinnacle's proprietary investment process considers

factors such as additional guidelines, restrictions, weightings, allocations, market conditions and other investment characteristics and thus returns may at times materially differ from the stated benchmark.

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