



## PIA MARKET DURATION

## INVESTMENT OBJECTIVE

**PIA's Market Duration Strategy** seeks to outperform the **Bloomberg Barclays Government-Credit Index** over a full interest rate cycle on average by 0.25% per year net of PIA management fees, with equal to or lower volatility. There is, of course, no assurance that these goals will be realized. Portfolio values will fluctuate as market conditions change.

## INVESTMENT PHILOSOPHY

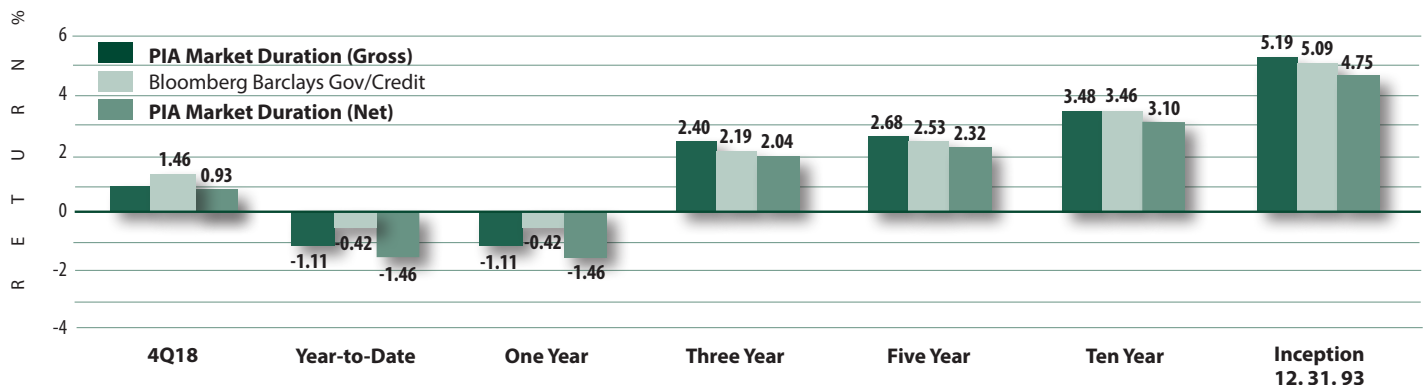
**We know** that the various sectors within the bond market are periodically torqued by cyclical, monetary or market pressures, which can lead to mispricings and create opportunities to produce excess return. **We intend** to exploit these periodic opportunities by risk-adjusting the various bond market sectors, utilizing yield curve and sector analysis, and fundamental bottom-up risk measurement. **We seek** to capitalize on these opportunities to earn above-average risk-adjusted yields, while creating the potential for capital gains as these sectors revert toward their fair value.

## THE FIRM

Ownership	<b>Independent and Employee-owned</b>
Inception	<b>1986</b>
Location	<b>Santa Monica, California</b>
Employees	<b>30</b>
Firm Assets	<b>\$7 billion</b>
Strategy Assets	<b>\$544 million</b>
GIPS Verified	<b>Yes</b>
Firm Verifier	<b>ACA Performance Services, LLC</b>

## INVESTMENT PROCESS

- » **Yield Curve and Sector Analysis** PIA deconstructs the bond market into yield curve, quality and industry sectors and utilizes quantitative yield curve and sector analysis to identify sectors that are undervalued on a risk adjusted basis. We further apply qualitative bottom-up fundamental analysis to identify the issues that best reflect our sector views.
- » **Security Research** We combine fundamental top-down industry analysis with bottom-up fundamental security and ratio analysis to select credit securities. Additionally, we utilize multi-factor models that produce value and risk metrics to identify attractive Mortgage-backed and Asset-backed Securities.
- » **Portfolio Construction** Portfolio Managers construct portfolios to meet the strategic portfolio objectives set forth by the PIA Macro Strategy Group for duration, sector weights and yield curve positioning. The PIA Neural Network, which produces probabilistic insights into factors affecting sector valuations, is a tool utilized by the Macro Strategy Group in tactical decision-making. Credit securities are selected by our credit analysts, while mortgage-backed securities are selected with the support of our MBS specialists. PIA believes that diversification is the optimal method to manage security specific risk. PIA utilizes proprietary (completion) mutual funds to invest in BBB-rated credits, as well as securitized debt to offer accounts the benefit of greater diversification.
- » **Portfolio Management** Portfolio Managers strive to consistently maintain the risk / return composition goals stated in the client's investment policy statement (IPS). The firm's Portfolio Administrator is responsible for quarterly verification that client portfolios adhered to their IPS.

ANNUALIZED PERFORMANCE<sup>1</sup> as of 12.31.18

<sup>1</sup>Periods less than one year are not annualized.

Market Duration Composite consists of portfolios benchmarked to the Bloomberg Barclays U.S. Government/Credit Bond Index and is constructed from all major fixed income sectors. Portfolios managed in this style tend to be conservative in terms of sector weights, quality and duration ranges, compared to that of the index. The composite may invest in sectors that are not included in the Index and may not necessarily be representative of its benchmark. The minimum account size for this composite is \$1 million. Prior to April 1, 2009 there was a \$3 million minimum account size for this composite.

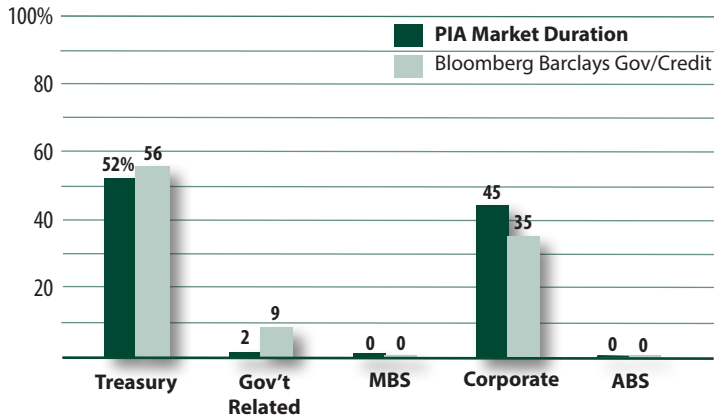
Returns are presented gross and net of fees and include the reinvestment of all income. Gross and net of fee returns are net of all transaction cost. Past performance is not indicative of future results. The U.S. Dollar is the currency used to express performance. Market Duration Composite was created January 1994. The inception date is January 1, 1994.

Net of fee performance was calculated using the highest annual management fee of 0.35%, applied to the gross results on a monthly basis. For the periods 6/30/98 to 12/31/12 the highest management fee was 0.40%. Prior to 6/30/98, the highest management fee as 0.60%. The management fee schedule is as follows: 0.35% on the first \$10 million, 0.30% on the next \$40 million, and 0.25% on the balance. Actual investment advisory fees incurred by clients may vary.



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## SECTOR ALLOCATION<sup>1</sup>

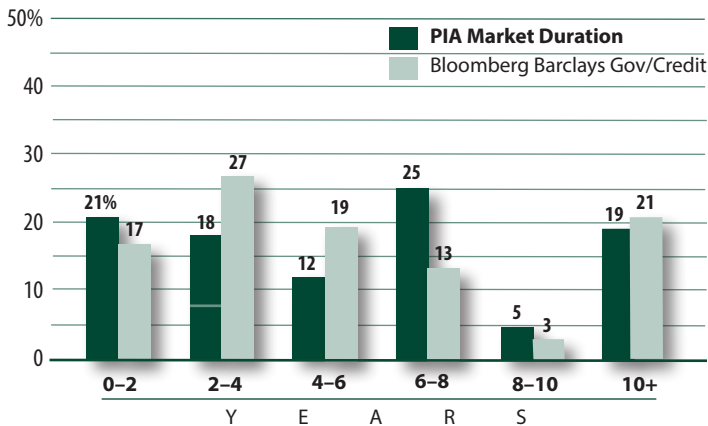


Percentages shown may not total 100% due to rounding and/or incidental allocation to cash.

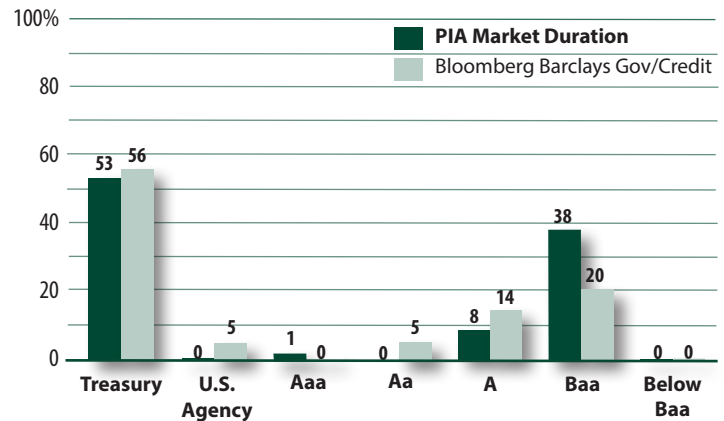
## PORTFOLIO CHARACTERISTICS<sup>1</sup>

	PIA	BARCLAYS GOV/CREDIT
Duration	6.1	6.4
Weighted Avg. Life	8.2 yrs	8.8 yrs
Current Yield	3.2%	3.1%
Yield to Maturity	3.5%	3.2%
Avg. Credit Quality	Aa3	Aa2
No. of Securities	31	7,073

## DURATION DISTRIBUTION<sup>1</sup>



## QUALITY DISTRIBUTION<sup>1</sup>



Pacific Income Advisers, Inc. (PIA) is an autonomous investment management firm registered under the Investment Advisers Act of 1940. PIA manages a variety of fixed income, equity, and balanced assets for primarily United States clients.

PIA claims compliance with the Global Investment Performance Standards (GIPS®)

To receive a complete list and description of PIA's composites and or a presentation that adheres to the GIPS standards, contact Nicholas Parenti, at (310) 255-4427 or by email at nparenti@pacificincome.com.

<sup>1</sup>The portfolio characteristics shown above relate to a single account as of the date noted above, deemed by Pacific Income Advisers to be generally representative of its standard account. Not every client's account will have these exact characteristics. The actual characteristics with respect to any particular client account will vary based on a number of factors including but not limited to: (i) the size of the account; (ii) investment restrictions applicable to the account, if any; and (iii) market exigencies at the time of investment. Pacific Income Advisers, Inc. (PIA) is an autonomous investment management firm registered under the Investment Advisers Act of 1940. PIA manages a variety of fixed income, equity, and balanced assets for primarily United States clients.

Data is obtained from Yield Book and Barclays Live systems and is assumed to be reliable.

The Bloomberg Barclays U.S. Government/Credit Index includes securities in the Government and Credit Indices. The Government Index includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government). The Credit Index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. You can not invest directly in an index.



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