

Firm Overview

Since its founding in 1955, Federated Investors, Inc. (NYSE:FII) and its subsidiaries have grown to become one of the nation's largest investment management organizations with assets under management of \$459.9 billion (as of 12/31/18) in investment strategies of domestic and international equity, fixed income and money market asset classes. Federated offers depth and breadth in its selection of products to meet the needs of virtually any client, from the large institutional investor and high net worth individuals, to retirement plan participants.

Composite

Core Plus
Managed Account

Index

Bloomberg Barclays U.S.
Aggregate Bond (Index)

Key Investment Team

Robert Ostrowski, CFA
Chief Investment Officer for the
Global Fixed Income Group
31 Years Experience

Denis Doherty, CFA
Senior Portfolio Manager
31 Years Experience

Jordan Oeler
Associate Portfolio Manager
1 Years Experience

**Core Plus
Managed Account**

Objective

The strategy seeks to achieve maximum total return from the following decision points: duration management, yield curve strategy, sector allocation, and security selection.

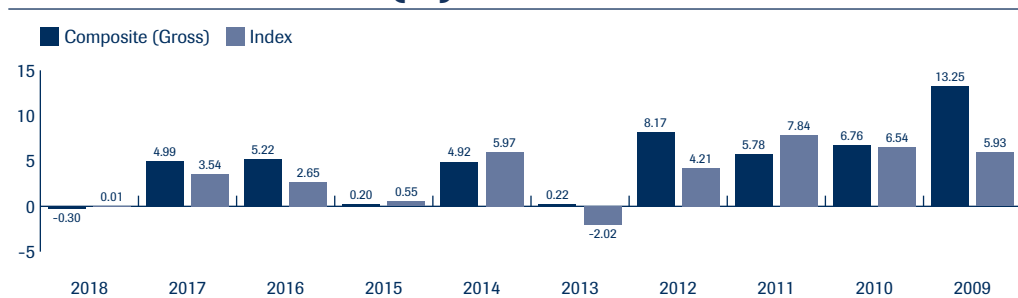
Positioning

Seeks to outperform the Bloomberg Barclays U.S. Aggregate Bond Index.

Philosophy

Federated's fixed-income philosophy has been in practice for more than 40 years and is built on a solid foundation of investment experience. We believe that optimum results in fixed-income products are best achieved through a traditional value-based approach, grounded in fundamental analysis. Our process concentrates on analysis of duration, sector, yield curve and security characteristics and incorporates an assessment of major long-term indicators of interest rate direction. The process is designed to capture strong, full-cycle performance while managing risk.

Calendar Year Returns (%)*



Annualized Returns (%)*



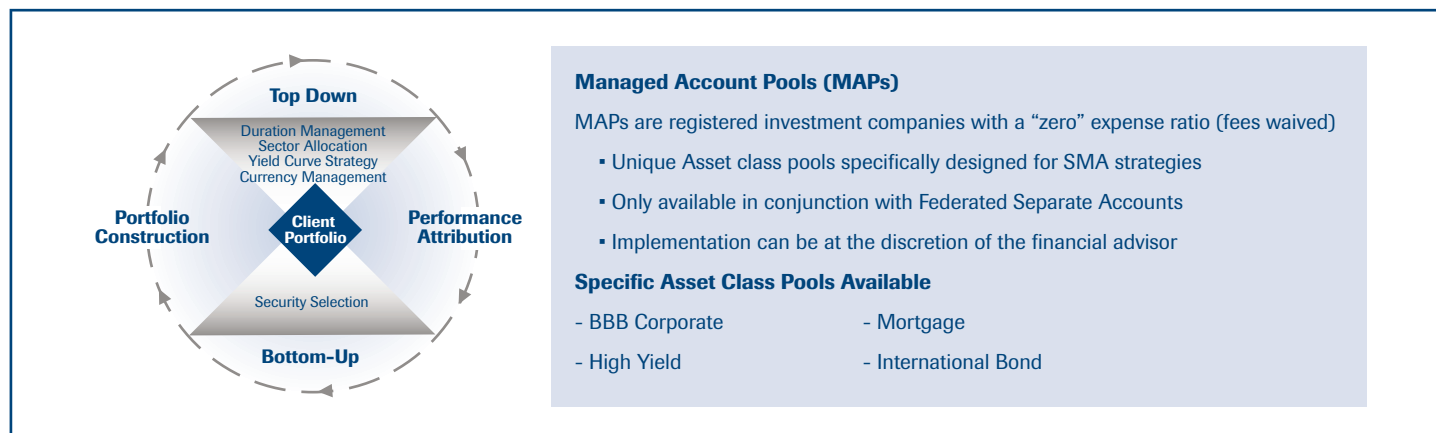
Data as of 12/31/18. Information is supplemental to the attached GIPS presentation.

*For a comparison of gross to net returns, see chart on page 3. "Pure" gross-of-fees returns do not reflect the deduction of any expenses, including trading costs. "Pure" gross-of-fees returns are supplemental to net returns. This information is supplemental to the attached GIPS presentation which should be referred to for the current performance, including the net figures.

While there is no assurance that the Strategy will achieve its objective, the Advisor endeavors to do so by selecting securities in the manner described in this document. Performance data quoted represents past performance which is no guarantee of future results.

Investment Process and Decision Tools

The investment process combines top-down decision making with bottom-up security selection. This process is designed to capture the depth of experience and focus of product teams while providing a diversified, risk-adjusted portfolio. Our process seeks to capitalize on structural inefficiencies or anomalies and extract relative performance from each of the four major decision tools.



Portfolio Characteristics

	Portfolio	Index
Effective Duration (Yrs)	5.46	5.87
Average Maturity (Yrs)	8.01	8.27
Yield to Maturity	4.08%	3.29%
Current Yield	3.79%	3.19%
Average Coupon	3.70%	3.19%

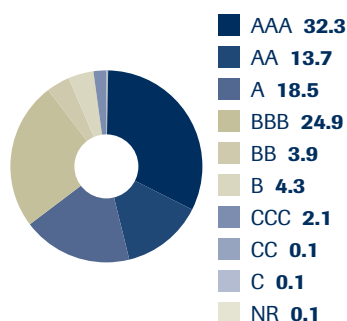
Risk Management

	5 Year		10 Year	
	Portfolio	Index	Portfolio	Index
Sharpe Ratio	0.96	0.70	1.57	1.08
Std. Deviation	2.48	2.77	2.81	2.83
Beta	0.80	1.00	0.82	1.00
Upside Capture	103.04	100.00	126.77	100.00
Downside Capture	76.38	100.00	65.37	100.00

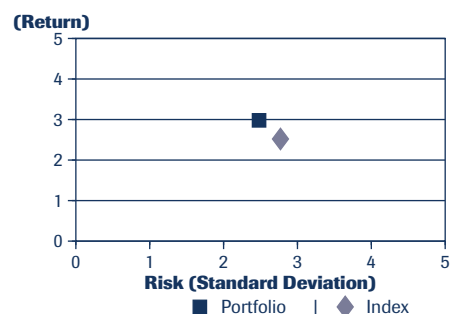
Sector Weights (%)



Quality Weights (%)



5 Year Risk/Return (%)*



Portfolio information is derived from a model portfolio managed in the Strategy as of 12/31/18. Since this is a managed portfolio and market conditions can fluctuate suddenly and frequently, the portfolio holdings and investment mix will change. Information is supplemental to the attached GIPS presentation.

*For a comparison of gross to net returns, see chart on page 3. “Pure” gross-of-fees returns do not reflect the deduction of any expenses, including trading costs. “Pure” gross-of-fees returns are supplemental to net returns. This information is supplemental to the attached GIPS presentation which should be referred to for the current performance, including the net figures.

Past performance is no guarantee of future results.

Index Descriptions (An index is unmanaged and has no expenses, and it is not possible to invest directly in an index.)

Bloomberg Barclays U.S. Aggregate Bond Index: Is an unmanaged index composed of securities from the Bloomberg Barclays Government/Corporate Bond Index, Mortgage-Backed Securities Index and the Asset-Backed Securities Index. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indices are rebalanced monthly by market capitalization.

Effective Duration: A measure of a security’s price sensitivity to changes in interest rates: One of the methods of calculating the risk associated with interest-rate changes on securities such as bonds.

Schedule of Rates of Return and Statistics

Composite **Core Plus Fixed Income Managed Account Composite**
 Index **Bloomberg Barclays US Aggregate Bond Index**
 Periods Ending **12/31/2018**

Returns (%)			
	Gross Composite Return	Index	Net Composite Return (Assuming Maximum Fee)
Q4 18	0.35	1.64	-0.02
1 Year	-0.30	0.01	-1.79
3 Years (Annlzd)	3.27	2.06	1.74
5 Years (Annlzd)	2.98	2.52	1.44
7 Years (Annlzd)	3.30	2.10	1.77
10 Years (Annlzd)	4.85	3.48	3.29
15 Years (Annlzd)	4.69	3.87	3.13
20 Years (Annlzd)	5.22	4.55	3.66
Oct 96 - Dec 18 (Annlzd)	5.72	5.04	4.15

	Composite Gross Return	Composite Net Return	Benchmark Return	Composite* 3-Yr St Dev	Benchmark* 3-Yr St Dev	Number of Portfolios	Dispersion**	% of Carve-Outs	Composite Assets (\$mil)	Firm Assets (\$bil)
2009	13.25	11.58	5.93	4.52	4.11	21	0.01	0.00%	31.1	384.4
2010	6.76	5.17	6.54	4.51	4.17	51	0.12	0.00%	78.2	354.3
2011	5.78	4.21	7.84	2.83	2.78	96	0.08	0.00%	112.1	363.9
2012	8.17	6.57	4.21	2.44	2.38	141	0.11	0.00%	157.3	371.3
2013	0.22	-1.28	-2.02	2.99	2.71	184	0.11	0.00%	185.3	366.8
2014	4.92	3.36	5.97	2.86	2.63	293	0.08	0.00%	244.4	349.3
2015	0.20	-1.30	0.55	2.87	2.88	372	0.03	0.00%	298.8	343.4
2016	5.22	3.66	2.65	2.80	2.98	443	0.10	0.00%	337.9	342.3
2017	4.99	3.43	3.54	2.58	2.78	507	0.06	0.00%	347.1	354.7
2018	-0.30	-1.79	0.01	2.55	2.84	546	0.04	0.00%	315.2	377.2

*Represents the 3-year annualized standard deviation for both the composite and index returns. The statistic is used to measure the volatility of composite returns.

**Standard deviation is calculated using gross returns. Standard deviation is not applicable ("N/A") for any period if fewer than five accounts are in the composite for that period. (See footnote 5)

This composite is comprised of all separately managed account portfolios managed to the Bloomberg Barclays US Aggregate Bond Index with full authorization to utilize Federated Managed Account Pools (MAPs) in a strategic fashion. MAPs are zero fee mutual funds that have been specifically designed for use with the Federated managed accounts. All portfolios must have the ability to use high yield and international as part of their core strategy. High yield bonds carry increased levels of credit and default risk and are generally less liquid than government and investment-grade bonds. Investments in less developed or emerging markets generally entail greater political, economic, market, tax, credit and other risks, and generally have greater price volatility than securities issued or traded in developed markets. Additionally, investments in currency entail risks related to daily fluctuations in the value of currency, which may be more volatile in times of increased market risk. The Bloomberg Barclays U.S. Aggregate Bond Index is a broad-based benchmark that measures the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. Indexes are unmanaged and cannot be invested in directly. All portfolios utilize Federated's primary institutional fixed income approach, a benchmark-driven process designed to add value through fundamental analysis with teams focused by sector to extract value from each step of the process - analysis of sector, yield curve, and security characteristics, and assessment of major long-term indicators of interest rate direction and volatility - within client-driven parameters that meet the above criteria. Prior to January 2009, this composite consisted of the Core Broad Market Fixed Income Institutional Composite. Beginning January 2009, wrap fee accounts make up 100% of this composite. Accounts eligible for this composite must have wrapped or bundled fees, follow this style, and be fully-discretionary. Accounts eligible for this composite generally are stand-alone portfolios and not part of a balanced portfolio. Separate accounts eligible for this composite generally have a minimum of \$250,000 at the time of opening. Effective July, 2018, accounts deemed as non-U.S. investors were removed from this composite. Effective 2Q2009, the significant cash flow policy in effect for this composite requires portfolios with a 10% or larger cash flow to be removed from the composite until it is invested in line with the model. Additional detail on this policy is available upon request. This composite was created in January 2009. Federated Investors has managed portfolios in this investment style since October 1996. Performance shown for 1996 is for a partial period starting on October 1, 1996. Federated Investors claims compliance with the Global Investment Performance Standards ("GIPS®") and has prepared and presented this report in compliance with the GIPS® standards. Federated Investors has been independently verified for the period of January 1, 1992, through September 30, 2018. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS® standards on a firm-wide basis, and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS® standards. Verification does not ensure the accuracy of any specific composite presentation. Performance results are presented both net and gross of total wrap fees and reflect the reinvestment of income. "Pure" gross returns are shown as supplemental and do not reflect the deduction of transaction costs. Net returns reflect the deduction of a maximum fee. A fee equal to the highest anticipated wrap fee that a client could pay (1.50% annually as charged by the program sponsor, inclusive of up to a maximum investment advisory fee of 0.35%) is used. This total wrap fee includes all charges for trading costs, portfolio management, custody and other administrative fees. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size.

See Notes to the Schedule of Rates of Return and Statistics.

Notes to the Schedule of Rates of Return and Statistics

- 1. Federated Investors is a global, independent, multi-strategy investment management firm with offices in Pittsburgh, New York, Rochester, Boston, London, Dublin, and Frankfurt. For GIPS® purposes, Federated Investors is defined to include the assets of registered investment companies, separate (or private) accounts, managed accounts (including wrap accounts) and commingled or collective trusts that are advised or sub-advised by the following subsidiaries: Federated Advisory Services Co.; Federated Equity Management Co. of PA; Federated Investment Counseling; Federated Investment Management Co.; Federated Global Investment Management Corp.; International Management Limited; MDT Advisers; Federated Securities Corp.; effective December, 2008, (the date of acquisition) the institutional assets of Federated Clover Investment Advisors, and effective September, 2009, (the date the assets were brought into compliance) the SMA/Wrap assets of Federated Clover Investment Advisors; and effective April, 2012 (the date of acquisition) Federated Investors (UK) LLP. Effective with the January 1, 2011, change in GIPS® policies regarding fair value, the assets of the Capital Preservation Fund (a Guaranteed Investment Contract vehicle) were included in the defined firm assets. Prior to that date they were excluded as they are not market value based investments. Firm assets on this report exclude the advisory-only, model-based assets that maybe included in other reports providing total firm assets*
- 2. Interest income and dividends are recognized on an accrual basis. Returns include the reinvestment of all income.*
- 3. All market values and performance information are valued in U.S. dollars unless currency is denoted in composite title.*
- 4. With the exception of the Federated Clover Investment Advisors composites, annual composite dispersion is measured and presented using the asset weighted standard deviation of the returns of all of the portfolios included in the composite over the entire year. Quarterly dispersion is measured using all portfolios included in the composite for that quarter. With regard to Federated Clover Investment Advisors composites, annual dispersion is measured using the equal weighted standard deviation of the returns of all the portfolios included in the composite over the entire year.*
- 5. Composite dispersion does not measure the risk of the product presented, it simply measures the return variance among portfolios managed in a similar fashion. This variance can be affected by variations in cash flow or specific client parameters among the portfolios comprising the composites, as well as by Federated's execution of strategy across accounts.*
- 6. See the composite description language on the prior page for a discussion on appropriate fees currently applied to calculate composite performance. With regard to the institutional composites not managed by the Federated Clover or MDT Advisers teams, for the period July 1, 1992 through September 30, 2009, net of fee performance was calculated monthly by reducing the gross composite return by the highest actual fee of any account in the composite for that month, regardless of investment vehicle. Prior to this, the maximum management fee charged for the period July 1, 1992 through September 30, 1992 was used to calculate net of fee performance back to inception of the composite. In addition, further fee information can be obtained from Federated's respective Forms ADV Part 2 Brochure Item 5.*
- 7. Additional information regarding the policies for valuing portfolios, calculating performance, and preparing compliant presentations, as well as a complete list and description of the firm's composites is available upon request.*
- 8. Past performance is not indicative of future results.*
- 9. See disclosures on the Schedule of Rates of Return and Statistics Reports for additional information.*



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Federated Investment Counseling

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