

## WILSHIRE AXIOM<sup>SM</sup>

### SUMMARY OF FEATURES

The **Wilshire Axiom<sup>SM</sup>** global fixed income portfolio management solution delivers an **integrated platform** for **analytics, risk management** and **performance attribution**.

For **more than 20 years**, the **Wilshire Axiom** has been one of the **world's leading solutions** in **fixed income** analytics, performance attribution, risk management, scenario analysis and portfolio optimization. **Wilshire Axiom** offers the following features for domestic and global portfolios.

Feature	Description
<b>Wilshire Axiom Risk Management<sup>SM</sup></b>	Analyze portfolio total risk, tracking error and Value at Risk (VaR), display marginal and issuer specific risk and compare a portfolio against any benchmark in terms of exposures to currency, term structure, sector, quality and other spread utilizing the Wilshire Axiom Global Credit Risk Model <sup>SM</sup> .
<b>Wilshire Axiom Performance Attribution<sup>SM</sup></b>	Decompose portfolio returns using a <i>factor-based method</i> (returns are relative to a benchmark or other portfolio within the framework of the Wilshire Axiom U.S. Risk Model <sup>SM</sup> or Wilshire Axiom Global Credit Risk Model) or a <i>Brinson-style returns-based method</i> (returns are an algebraic breakdown in group allocation and security selection, optionally in excess of duration return, yield return or Treasury-equivalent return).
<b>Wilshire Axiom Scenario Analysis<sup>SM</sup></b> (Stress Test/Forecast)	Project portfolio performance over a finite time horizon relative to a benchmark, given sets of yield curve, exchange rate and/or spread shift scenarios.
<b>Wilshire Axiom Menu Report<sup>SM</sup></b>	Display fundamental portfolio characteristics (more than 450 data items available).
<b>Wilshire Axiom API<sup>SM</sup></b>	Expose Wilshire Axiom database and portfolio characteristics, run Wilshire Axiom risk/performance attribution analyses within third-party components and create custom applications and reports using an application programming interface (API). Includes a Microsoft <sup>®</sup> Excel <sup>®</sup> <i>Add-in</i> .
<b>Wilshire Axiom Compliance Reporting<sup>SM</sup></b>	Set portfolio fundamental characteristic constraints or goals based on policy guidelines and highlight policy violations.
<b>Wilshire Axiom Benchmark Variance<sup>SM</sup></b>	Decompose portfolio relative risk (measured by relative tracking error) compared to a benchmark, other portfolio or subset of the Wilshire Axiom security universe.
<b>Wilshire Axiom Benchmark Comparison<sup>SM</sup></b>	Compare portfolio characteristics to any benchmark.
<b>Wilshire Axiom Portfolio Comparison<sup>SM</sup></b>	Compare a single portfolio structure and risk profile at two different pricing dates.
<b>Wilshire Axiom Cash Flow Analysis<sup>SM</sup></b>	Project portfolio holdings generated cash flows through final effective maturity or last liability flow.
<b>Wilshire Axiom Optimization<sup>SM</sup>: Scenario</b>	Optimize a portfolio to a particular objective, relative to yield curve/spread shift scenarios.

<b>Feature</b>	<b>Description</b>
<b>Wilshire Axiom Optimization: Horizon</b>	Optimize a portfolio to a particular objective subject to specific allocation and/or characteristics constraints and, optionally, subject to a liability schedule.
<b>Wilshire Axiom Optimization: Dedication</b>	Obtain the minimum cost solution portfolio within a set of constraints, matching assets to a defined liability schedule (domestic only).
<b>Wilshire Axiom Optimization: Index</b>	Optimize a portfolio to a particular objective, relative to a benchmark or other portfolio.
<b>Wilshire Axiom Cash Flow Risk Profile<sup>SM</sup></b>	Compare portfolio cash flow to the projected cash flow of a benchmark or customizable distribution schedule.
<b>Wilshire Axiom What If Trade Analysis<sup>SM</sup></b>	Test the effect of proposed trades on portfolio risk characteristics, run analytic reports and calculate/allocate block trades across one or more portfolios.
<b>Wilshire Axiom Administrative/ Security Control<sup>SM</sup></b>	Set security guidelines for access to portfolios, benchmarks, report formats, modules, utilities and database securities with user login IDs and passwords.
<b>System Hosting Option</b>	System and processes hosted by Wilshire Associates (optional).
<b>Historical Database</b>	Modify security characteristics and portfolio holdings and re-run reports for any date in the Wilshire Axiom database.
<b>Automated Batch Reporting</b>	Schedule reports for automatic generation at a user-defined time and frequency.
<b>Multiple, Concurrent Users</b>	Access to Wilshire Axiom for multiple firm users.
<b>Multiple Data Sources</b>	Access to Interactive Data, Municipal Security Database, Markit (CMO/ABS), Trepp (CMBS), Tullett Prebon Information, Lewtan Technologies, Standard & Poor's, Moody's Investors Service and optional indices and data (Barclays Capital, Merrill Lynch, iBoxx, Citigroup, JPMorgan, FTSE, HSBC, DEX, Oslo Børs, UBS and more).

**Wilshire Associates  
Santa Monica**  
1299 Ocean Avenue,  
Suite 700  
Santa Monica, CA 90401  
1.310.451.3051

**Wilshire Associates  
Jersey City**  
525 Washington Boulevard,  
Suite 2205  
Jersey City, NJ 07310  
1.201.984.4899

**Wilshire Associates  
London**  
23 Austin Friars  
London, EC2N 2NB  
United Kingdom  
44.20.7920.3100

**Wilshire Associates  
Singapore**  
3 Pickering Street  
#02-39, China Square Central  
Singapore 048660  
65.6435.2169

Email: [fixedincome@wilshire.com](mailto:fixedincome@wilshire.com)  
[www.wilshire.com](http://www.wilshire.com)