



# WILSHIRE

## COMPASS

Setting New Standards in Fund Sponsor Information and Investment Technology

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## 2007 ASSET ALLOCATION ASSUMPTIONS

This marks the 26<sup>th</sup> year Wilshire Associates has forecasted long-term asset class returns and risks for institutional investors. Much has changed over the last quarter of a century, but Wilshire has continued to apply consistent and sound methodology in helping clients meet financial objectives.

Below is an exhibit highlighting some of the changes from the 2007 assumptions as compared to the 2006 assumptions:

**Exhibit 1**  
 Wilshire's Expected Return Assumptions

	Total Return			Risk
	2006	2007	Change	
<u>Investment Categories:</u>				
US Stocks	8.25 %	8.25 %	0.00 %	16.00 %
Dev ex-US Stocks	8.25	8.25	0.00	18.00
Emerging Mkt Stocks	8.25	8.25	0.00	24.00
Cash Equivalents	3.00	3.00	0.00	1.00
U.S. Bonds	5.00	5.25	0.25	5.00
High Yield Bonds	6.50	6.75	0.25	10.00
TIPS	4.75	5.00	0.25	6.00
Non-U.S. Bonds	4.75	5.00	0.25	10.00
US RE Securities	6.25	5.75	-0.50	15.00
Private Real Estate	n.a.	6.75	n.a.	12.50
Non-US RE Securities	n.a.	5.75	n.a.	13.00
Private Markets	11.75	11.75	0.00	29.00
Commodities	5.25	4.25	-1.00	13.00
<u>Inflation:</u>	2.25	2.25	0.00	1.00
<u>Total Returns minus Inflation:</u>				
U.S. Stocks	6.00	6.00	0.00	
U.S. Bonds	2.75	3.00	0.25	
Cash Equivalents	0.75	0.75	0.00	
<u>Stocks minus Bonds:</u>	3.25	3.00	-0.25	
<u>Bonds minus Cash:</u>	2.00	2.25	0.25	

Building on recent research, this year's report is the first to include Global Real Estate Securities. In an approach similar to Wilshire's approach to Private Markets, the 2007 report also develops a Private Real Estate forecast, combining allocations to core, value-added, and opportunistic real estate sub-class forecasts in a 70%, 15% and 15% allocation.



Other highlights of the study include the increase for most of the fixed income asset classes by 25bps, a trimming of the U.S. Real Estate forecast by 50bps (due to a continuing decline in dividend yields), and a reduction of the commodity futures return of 100 bps in light of the massive volume of long-only capital flows into these derivative instruments. Also, the correlation of TIPS to several other asset classes has been increased primarily due the availability of 10 years of data for this asset class, which has allowed modeling the impact of historical returns over a longer-time frame.

For a copy of the complete report and other Wilshire research papers, please access the Resource Library through the client area of [www.wilshire.com](http://www.wilshire.com) by logging on with your username and password. Should you have any questions, please feel free to contact Wilshire Compass client service.

## WILSHIRE UNIVERSES

As documented in the Summer 2006 Wilshire Compass newsletter, Wilshire Consulting has enhanced its style and size scoring methodology for U.S. Equity portfolios. Below summarizes a comparison between the two scoring systems:

Feature	Legacy Approach	New Approach
Size Designation	Ordinal Capitalization Ranking	Log of Market Capitalization
Style Factors	No Forward-looking Factors	Includes Forward-looking Factors
Security Coverage	~3,000 Securities	All DJ Wilshire 5000 securities (plus other U.S. traded stocks)
Underlying Indexes	Wilshire Target Style Indexes (unpublished constituent list)	DJ Wilshire US Style Indexes (published constituent list)
Standardization Universe	Proprietary / Unpublished	Transparent / Published

More specifically, the new approach utilizes six factors in defining style. There are two historically-based factors (trailing 5-year Revenue Growth and 5-Year Earning Growth), two current fundamental measures (Price/Book and Dividend Yield) and two forward-looking factors (Projected Price/Earnings and Projected Earnings Growth). These new scores were made available in the Wilshire Compass beginning with the Third Quarter 2006 portfolios.

Because of the inclusion of the two forward looking factors, clients may notice that some portfolios will exhibit large increases or decreases in style scores than what the historical range may have been. In other words, a portfolio may appear to exhibit more growth or value tendencies than it has historically.

The direction, however, will not have changed.

Given the above, Wilshire has made some slight modifications to the holdings-based criteria for the Wilshire-defined Universes to better reflect the characteristics of the overall market. A portfolio will be considered “growth” if its Style Score is greater than or equal to 60, “core” if the Style Score falls between -10 and 60, and “value” if the Score is less than or equal to -10. Size scores were not materially impacted by the new methodology; therefore, no adjustments were made to those criteria. All other rules in the creation of the Wilshire Universes still apply.

The intent of the Universes has remained the same: to create “pure” universes for peer comparisons. Since manager style scores have generally become more pronounced with the new methodology, it became necessary to review the breakpoints of the scores to keep the original purpose of the universes intact.

## NEW RELEASE

The Wilshire Compass team is in the final stages of compiling a new release that will add various new features into the system. Many of the features focus on new data items available for screening in the *Manager Search* analytic. For instance, users will be able to screen on Global REIT managers, GIPS Compliance, and Regional Exposures for Non US Equity (% Developed and Emerging).

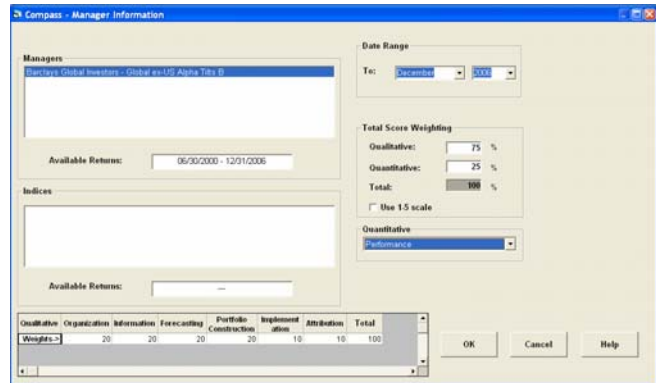
The most significant additions revolve around the ability to run reports/screens on Wilshire’s Manager Research new scoring methodology for separate account products. The legacy *Organization*, *Philosophy/Process* and *Resources* Qualitative factors have been replaced with the following 6 categories:

1. **Organization:** Objective is to evaluate the organization as a whole relative to its peers, including the investment team and incentive structures in place.
2. **Information:** Objective is to determine the comparative advantage of information and information collection process versus other managers.

3. **Forecasting:** Objective is to determine the comparative advantage of the forecasting process versus other managers.
4. **Portfolio Construction:** Objective is to determine the comparative advantage of the portfolio construction process versus other managers.
5. **Implementation:** Objective is to determine the comparative advantage of the manager to implement or trade to the desired portfolio.
6. **Attribution:** Objective is to determine the comparative ability of the manager to understand the relationship between the investment process and the results obtained.

Users will also be able to screen data on the 2 Quantitative factors. The **Performance Score** ranks managers within each asset class or style based on a 5-Year Information Ratio calculated against the manager's indicated benchmark. If a manager doesn't select a benchmark, the Wilshire Compass assigns a default benchmark based on the asset class for use in the calculation. The **LPI (Leading Performance Indicator)** is a statistical process control that combines two equally weighted components; cross sectional and time series. While the time series portion compares the volatility and the trend of the manager's information ratio to its own history, the cross sectional portion ranks the manager's information ratio compared to its peers (across all asset classes).

The **Manager Rank** report in the *Manager Information* Analytic will also allow users to create a custom ranking report based on the new criteria, including weightings & scales to the qualitative and quantitative factors, and the selection of either the Performance Score or the LPI as the quantitative measure:



The new release is scheduled to be available in late-March. Since there will be new data items available in the system and included in the daily update process, it is important to note this impact.

- If a user machine or client server has received new databases since around mid-January, the daily update should continue to work as normal. However, in order to see the new features and data, client machines must be upgraded to the new release and specific tables must be “refreshed” on the databases (a new Manager database will also accomplish this).
- If a user machine or client server has not received new databases since mid-January, users will begin to notice that the daily update will begin to fail, particularly with the Manager database. A “refresh” of the affected tables will permit the update to continue, or if this is not an option, the databases should be replaced. As with the above, users will not be able to see the new features and data until the new Wilshire Compass release is upgraded on their system.

If you are unsure as to your individual scenario, please contact Wilshire Compass client service for any assistance or questions.

## S&P MUTUAL FUND DATA

Morningstar recently announced the acquisition of S&P's Mutual Fund database, which the Wilshire Compass has used since September 2006. We will keep you apprised of any developments as to the impact for the Wilshire Compass users as we learn of them.

## 2006 TECHNOLOGY SEMINAR

Attendees to the 2006 Wilshire Compass Technology Seminar in October were treated to two and a half days of intense hands-on training at the Silverado Resort in Napa, California. Topics ranged from using the Asset Allocation tools to perform Surplus Optimization, to illustrating how to include Portable Alpha Strategies as part of asset class optimization, to using the Wilshire Compass as a research tool in developing investment strategies.

We hope all who attended enjoyed the conference and the discussion as much as we did. For those who were unable to join us, CDs containing PDF copies of the presentation were mailed to clients a couple of months ago. Should you need additional copies, please do not hesitate to contact client service. We are also beginning to plan the next annual meeting, slated to be somewhere in the Eastern U.S. in the Spring of 2008. But it's not too late to get your vote in for a location!

## UPCOMING USER GROUPS

As we have done in the past, we are planning to hold several one-day Users Group sessions in 2007 in various locations around the country. These sessions are designed to operate in a hands-on, mini case study format, covering topics as selected by participants.

We are currently planning on sessions in the following cities:

- ✓ Houston, TX: May 3rd
- ✓ Charlotte, NC: May 10th
- ✓ New York City: May 21st

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As the dates approach, further information will follow including specific locations in each city and surveys asking for recommended topics. Additional locations will follow later in the year.

## NEXT GENERATION OF THE WILSHIRE COMPASS

Given all of the technological advances and changes over the last couple of years, we are exploring ways to make the Wilshire Compass an even more powerful and flexible tool in helping clients solve their investment problems. With this in mind, we will be sending a survey around shortly to ask your guidance in the re-design. Your input is very important in this process, and we look forward to your suggestions.

## WILSHIRE CONSULTING AWARD

We are pleased to announce that Wilshire Consulting was recently named 2007 Consultant of the Year by *Global Pensions*, a UK-based magazine.

“This award, voted on by industry peers spanning the globe including plan sponsors, money managers, custodial banks and others, is a testament to the thought leadership, hard work and dedication to excellence of Wilshire Consulting’s professionals and staff,” commented Dennis A. Tito, chairman and chief executive officer of Wilshire Associates. “As we here at Wilshire know, the innovative thinking and thoughtful insight that our consulting teams provide to their clients is industry leading. To have that confirmed by our peers is both gratifying and humbling”