

Joint Pension Board Priorities Review of the Diversified Equity Fund

Joint Pension Board Preferences

At the last Joint Pension Board meeting we asked board members to prioritize the 11 options under consideration for addition to the Diversified Equity Fund. Members were asked to provide their top 4 preferred options, list those they wanted to dismiss and those they were unsure about. The table below shows the results of the voting process and identifies the number of times a strategy got a top 4 ranking, listed as dismiss or listed as unsure.

Joint Pension Board Preferences			
Summary	Top 4	Dismiss	Unsure
Private Equity	7	1	0
Emerging Markets	6	0	1
Commodities	4	1	2
Small Cap	3	2	1
Low Volatility	3	0	1
Long Short	2	2	1
Infrastructure	1	1	5
Market Neutral	1	4	1
Real Estate	0	0	7
Active Currency	0	3	2
GTAA	0	4	2

Based on this ranking, the following strategies are worth doing more analysis on:

- Private Equity
- Emerging Markets
- Commodities
- Small Cap
- Low Volatility

Private equity got by far the most votes, which is not surprising given that a significant amount of time was dedicated to reviewing the strategy at previous board meetings.

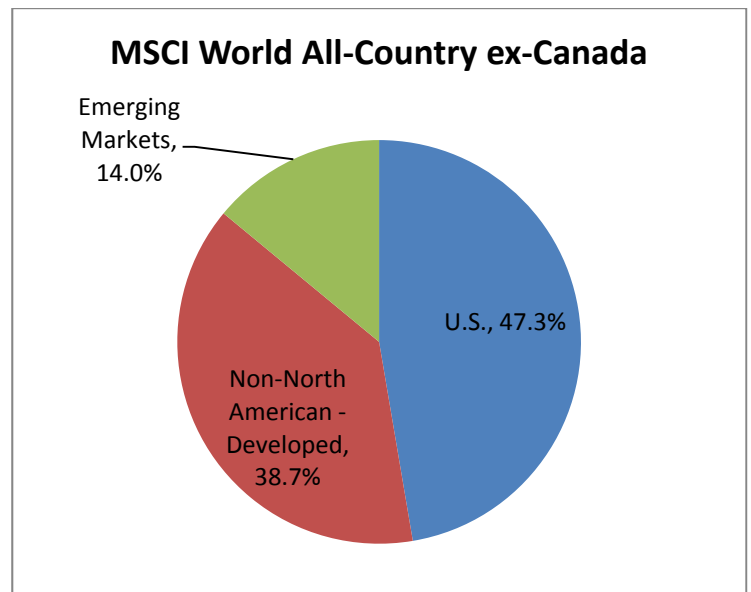
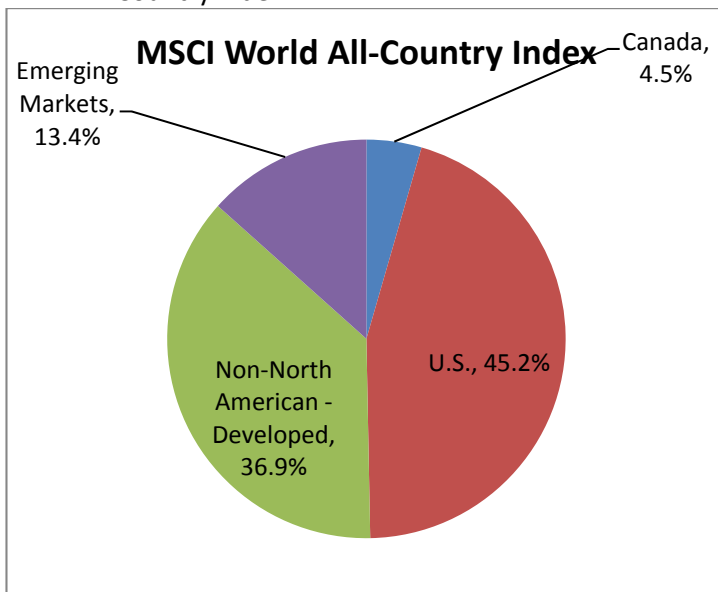
Low volatility strategies are also worth reviewing further, given that the strategy received a large number of votes, despite the fact that limited education material was provided on the topic. In addition, the strategy meets all the Joint Pension Board Principles.

Guidelines for Allocating New Strategies in the Portfolio

Based on the mean-variance analysis conducted earlier in the review process and available research, the following guidelines could be used to integrate new strategies into the portfolio:

1. For a Canadian investor, the optimal allocation to Canadian equity in an equity portfolio is around 30%
 - a. Any new Canadian equity mandate (small cap or low volatility) should be included within the Canadian equity allocation
2. The U.S. / EAFE equity ratio should be representative of the world equity markets composition in order to avoid unintended regional bets. As of February 2012, the U.S. represented 47.3% of the MSCI World All-Country Index (ex-Canada) and EAFE equities (including emerging markets) 52.7%.
3. When calculating regional allocations:
 - a. Emerging markets equities should be included with EAFE equities
 - b. Private equity and commodities would be classified as global mandates
 - c. Small cap and low volatility strategies should be classified based on the region the product focuses on
4. There should be a minimum allocation of 5% per mandate in order for the strategy to have a meaningful impact
5. The total allocation to illiquid strategies should be limited to 10%
6. Currently, the Diversified Equity Fund allocation to global mandates is 17.5%, compared to 52.5% for U.S. / EAFE mandates combined. Allocations to new mandates should come from the U.S. / EAFE bucket first, given the relative imbalance and the demonstrated ability of global managers to add value over U.S. / EAFE managers.

The next two charts show the composition of the world equity markets, based on the MSCI World All-Country Index.

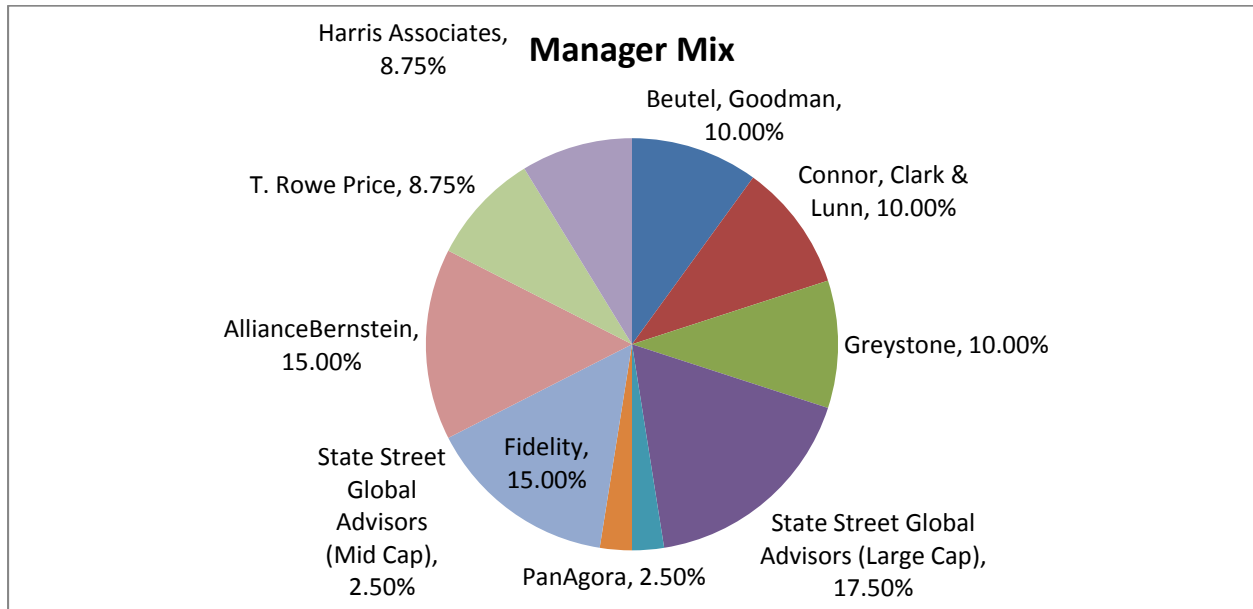


Tentative Timeline

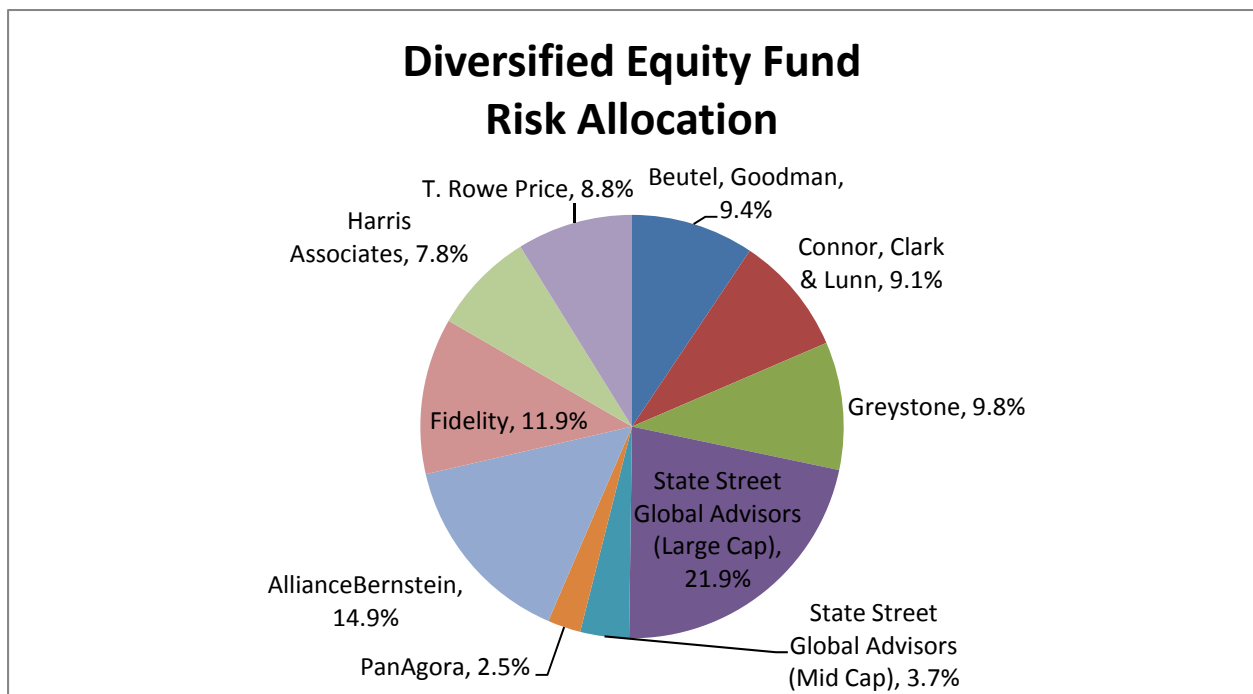
Meeting Date	Action
March 12, 2012	<ul style="list-style-type: none"> • Finalize priority list • Provide additional education on private equity • Provide pre-reading material on low volatility strategies
May 22, 2012	<ul style="list-style-type: none"> • Provide additional education on the next priority • Provide pre-reading material on subsequent priority
June 18, 2012	<ul style="list-style-type: none"> • Provide additional education on remaining priorities • Select strategies to include in the Diversified Equity Fund • Determine new asset allocation for Diversified Equity Fund
Summer 2012	<ul style="list-style-type: none"> • Manager searches for mandates selected
September 2012	<ul style="list-style-type: none"> • Approval of new managers by Joint Pension Board

Risk Budgeting

The chart below presents the current allocation of the Diversified Equity Fund.



The next chart looks at the contribution to risk for each of the sub-portfolio managers.



The main conclusions from the risk budgeting analysis are as follows:

- The U.S. equity large component, which represents 17.5% of the portfolio, has accounted for 21.9% of the risk since October 2008

- The U.S. equity mid cap component, which represents 2.5% of the portfolio, has accounted for 3.7% of the risk since October 2008
- The international equity component managed by AllianceBernstein has accounted for more of the fund's risk than Fidelity, even though they both have the same allocation
- T. Rowe Price has accounted for more of the risk than Harris Associates, which makes sense given their growth style and typical large allocation to emerging markets
- All three Canadian equity managers have had fairly similar contribution to risk (please note that the Beutel, Goodman returns include a period when AllianceBernstein was managing Canadian equities)

Low Volatility Strategies

The table below compares the risk-return characteristics of various Canadian equity portfolios, with or without a low volatility strategy, from October 2009 to December 2011. The low volatility strategy used is the TD Emerald Low Volatility Canadian Equity Fund.

**Simulated Canadian Equity Portfolios
From October 2009 to December 2011**

	Return	Volatility
4-Manager structure ¹	4.45%	12.63%
3-Manager structure ²	4.69%	12.72%
4-Manager structure with allocation to low volatility strategy ³	8.37%	10.96%
S&P/TSX	4.96%	12.86%

¹ Includes Beutel, Goodman, CC&L, Greystone and Highstreet in equal proportions.

² Includes Beutel, Goodman, CC&L and Greystone in equal proportions.

³ Includes Beutel, Goodman, CC&L, Greystone and TDAM in equal proportions.