AGENDA ITEM 7D.

COLLEGE ILLINOIS!® PREPAID TUITION PROGRAM
FIXED INCOME ASSET CLASS STRUCTURE

Submitted for: Action

Summary: Reference: Attached Fixed Income Structure Presentation from Callan

Periodic evaluation of asset class structures is necessary for optimum fund performance. The Absolute Return asset class was approved at the June meeting of the Commission and now a review of the Fixed Income structure is necessitated by expiring investment management contracts. Contracts for core managers, CS McKee, Piedmont, and Pugh expire on June 30, 2013. The contract for Income Research and Management (IR&M) expires on June 30, 2015.

The related structure study presentation from Callan provides the necessary information for evaluating the current portfolio and potential options. I recommend that we adopt a structure similar to Callan's "alternative B" in which the current core mandates are replaced with a new passive manager and a new core plus manager, while retaining IR&M. This option would reduce fees as well as the operational resource burden as the manager count is reduced from four to three one of which is passive.

Implementing the new structure will require a search process for a passive core manager and an active core plus manager. I anticipate RFP posting in October and evaluation in late 4Q12 and early 1Q13. Recommendations to the Investment Committee should be ready by February 2013. Final approval by the full Commission would follow approval by the Investment Committee approval.

The recommended structure was reviewed and approved by the Investment Committee on August 29, 2012, subject to approval by the full Commission.

Action requested: Approval of a new fixed income asset class structure similar to Callan Alternative B with one manager in each of the following styles: 35% passive core, 35% active core plus, and 30% active intermediate duration. The new structure will be implemented following procurement of a passive core investment manager and an active core plus investment manager.

Callan

August 29, 2012

Fixed Income Manager Structure

Illinois Student Assistance Commission

Ryan Ball, CFA
Vice President

Brianne Weymouth
Vice President

James W. Van Heuit
Senior Vice President

How to Best Structure the Fixed Income Portfolio?

- Callan Premise:
  - A low-risk bond portfolio provides broad, diversified exposure to the fixed income market
  - Focus on investment-grade quality bonds with medium duration and low correlation with other asset classes
  - The total fixed income structure is generally neutral to the target market
    - *Neutrality is primarily defined as the interest rate sensitivity ("duration") range and secondarily as the credit quality*
- The four main factors that define U.S. fixed income structures are:
  - Active versus passive implementation
  - Use of tactical "core plus" mandates versus dedicated allocations to securities outside of the benchmark (in the case of the BC Aggregate), primarily high yield and non-U.S. bonds
  - The duration of the overall portfolio
  - Broad market exposure versus one narrowed by sector or duration
- The most commonly employed structures include passive (benchmarked to the Aggregate), active core, active core plus, and specialty
  - Intermediate fixed income is appropriate for investors very concerned about rising interest rates or who have shorter-term liabilities

Role of Fixed Income

- Fixed income is a low risk, diversifying asset for the equity allocation
  - Not a primary source of additional return to the Fund
  - Offers protection in the short run
  - Dependable income provides comfort in economic downturns or sudden market corrections

- Is the Barclays Capital Aggregate the right benchmark?
  - No one sector is clearly a superior diversifier to equity
    - *Government securities provide the best downside protection*
    - *While credit and mortgage securities are more volatile than government securities, these sectors also produce relatively higher returns and provide some additional diversification*
  - Duration
    - *A market duration portfolio provides an attractive risk/return profile from a total fund perspective*
    - *An intermediate duration portfolio can provide some capital preservation in a rising rate environment*

Specialty Fixed Income Strategies

- Passive Core
  - Match the return of the Aggregate index through stratified sampling of US investment-grade bond market
- Active Core
  - Managers with risk (tracking error) close to the broad investment-grade bond market (Aggregate)
  - May provide value added via modest duration and yield curve management, sector and security selection
- Core Plus
  - Active managers with a mandate to tactically invest in markets outside of the Aggregate index such as high yield, non-U.S. bonds, bank loans, and emerging market debt
  - Moderate tracking error versus the Aggregate
  - Performance typically benchmarked to the Aggregate
- Active Intermediate
  - Maintain risk close to the BC Intermediate Government/Credit index
  - May provide value added via modest duration and yield curve management, sector and security selection
- Active Short Term
  - Maintain risk close to the BC Government 1-3
  - May provide value added via modest duration and yield curve management, and security selection
  - Sector selection is limited to Treasury, government-related and agency securities
  - Current yield on the index is only ~30 bps
  - Given the low yield, an allocation to active short term would involve re-evaluating the expected rate of return calculated in the asset allocation study

Specialty Fixed Income Strategies

- Specialty
  - Dedicated investments in one of the core plus markets or other markets such as currency or convertibles
  - Emphasize excess returns
  - Plan sponsor establishes target allocation and rebalancing ranges for each market
  - Each market will have its own manager and its own benchmark

Active versus Passive Considerations

- Active and passive strategies can be complementary and can play important roles in a fixed income portfolio
- Passive mandates provide low-cost exposure to the market
- Passive allocations are good liquidity vehicles for rebalancing, transition management, and making cash contributions/distributions
- Passive allocations are simple to monitor with less strategy and business risk
- Passive mandates provide competitive performance in efficient markets and lower the tracking error for the total portfolio
- There are active managers who outperform the index – the challenge is to identify and hold them throughout their full performance cycle
- Like any style of investing, passive management will go in and out of favor over time

Current Fixed Income Structure

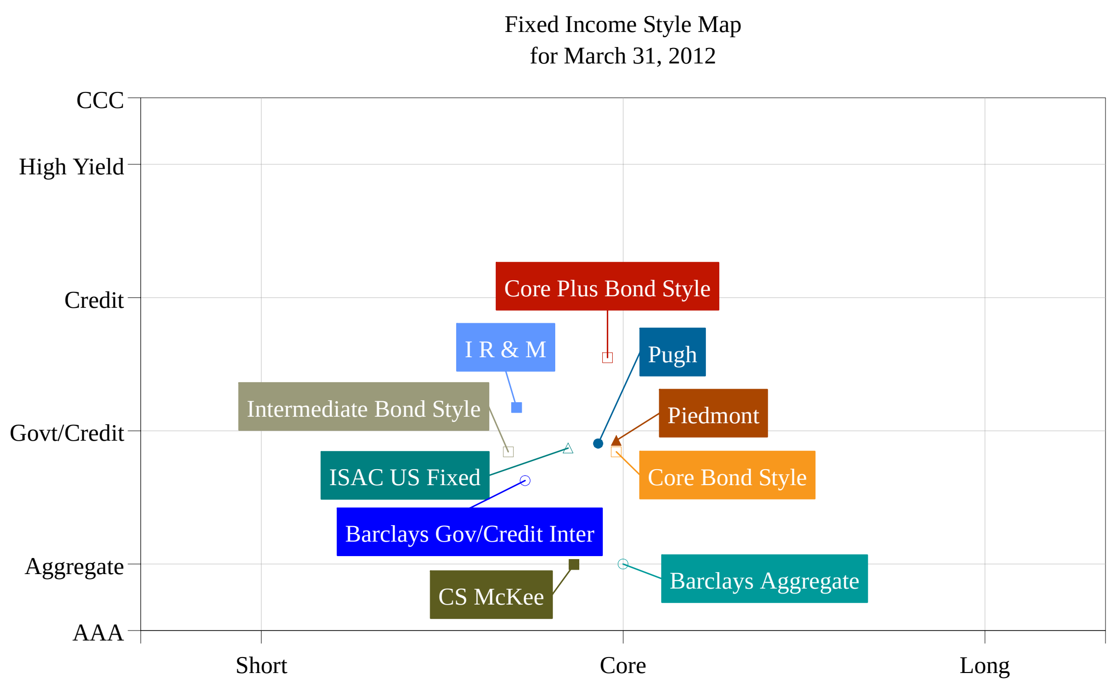
Percentage and Dollar Exposures

Style	%	$ mm		Active/Passive	Style	Benchmark Index
Core	69.4	155.79				
CS McKee	33.1	74.29		Active	Core	BC Aggregate
Piedmont	16.1	36.04		Active	Core	BC Aggregate
Pugh	20.3	45.46		Active	Core	BC Aggregate
Intermediate Duration	30.6	68.54				
Income Research & Management	30.6	68.54		Active	Intermediate	BC G/C Interm
Total	100.0	224.33				

- The current structure contains both market and intermediate duration bond managers
  - Only about 30% of the bond portfolio is in intermediate duration
- All of the bond managers have a core style
  - There are no core plus managers
  - The intermediate duration manager has a market benchmark for this duration
- The current structure is entirely actively managed

Current Fixed Income Structure

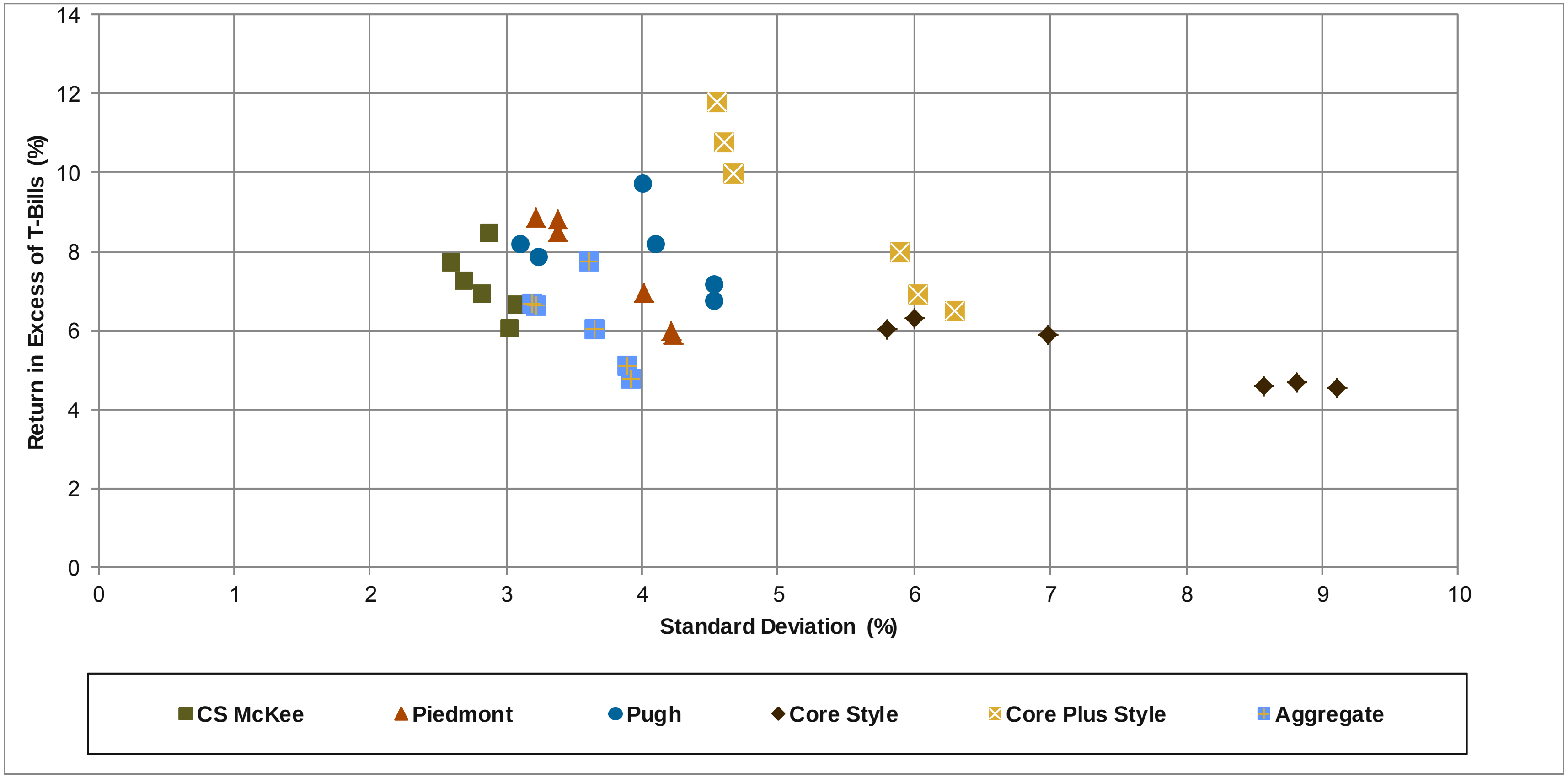
Credit and Duration Exposures



- The core managers had duration and credit exposures that were consistent with benchmarks and style groups
  - Pugh and Piedmont had very similar characteristics to the Core style
  - McKee closely resembled the Aggregate index
- IR&M took somewhat more credit risk than the Intermediate style and index
- The ISAC fixed income portfolio resembled the Core Bond style

Current Core Fixed Income Manager Performance Analysis

Sharpe Ratio, 6 Rolling 3-Year Periods Ended Q1 2012



- Managers generally performed better than the Aggregate index and the Core style
  - Managers often took less risk and earned higher returns while reflecting the same performance patterns as the benchmarks
- Managers took less risk but earned less return than the Core Plus style

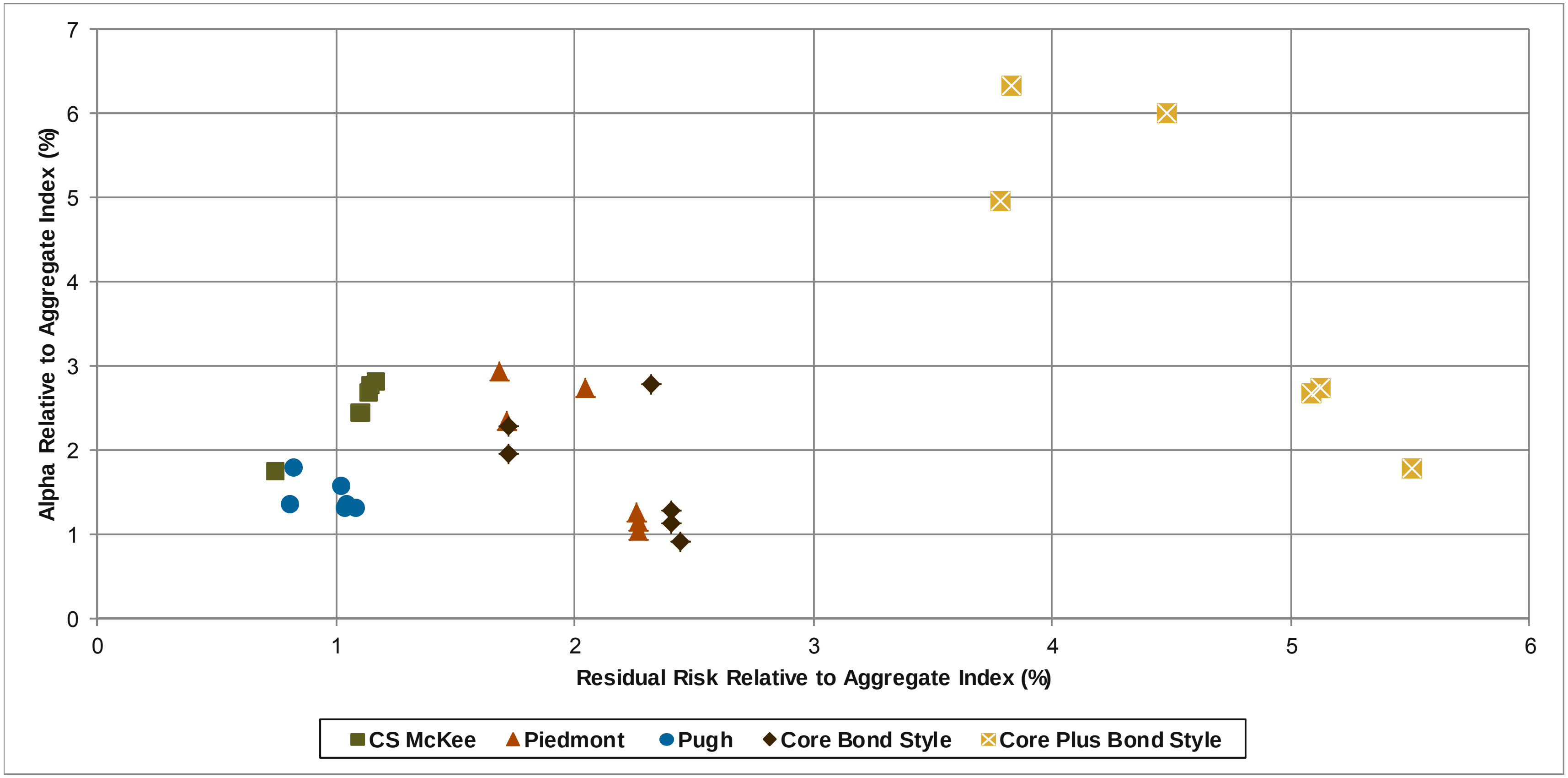
Current Core Fixed Income Manager Performance Analysis

Excess Return Ratio, 6 Rolling 3-Year Periods Ended Q1 2012

- Managers regularly performed better than the Core style
  - Managers generally exhibited less tracking error without sacrificing return in excess of the Aggregate
- Lower tracking error was associated with generally lower returns than the Core Plus style

Current Core Fixed Income Manager Performance Analysis

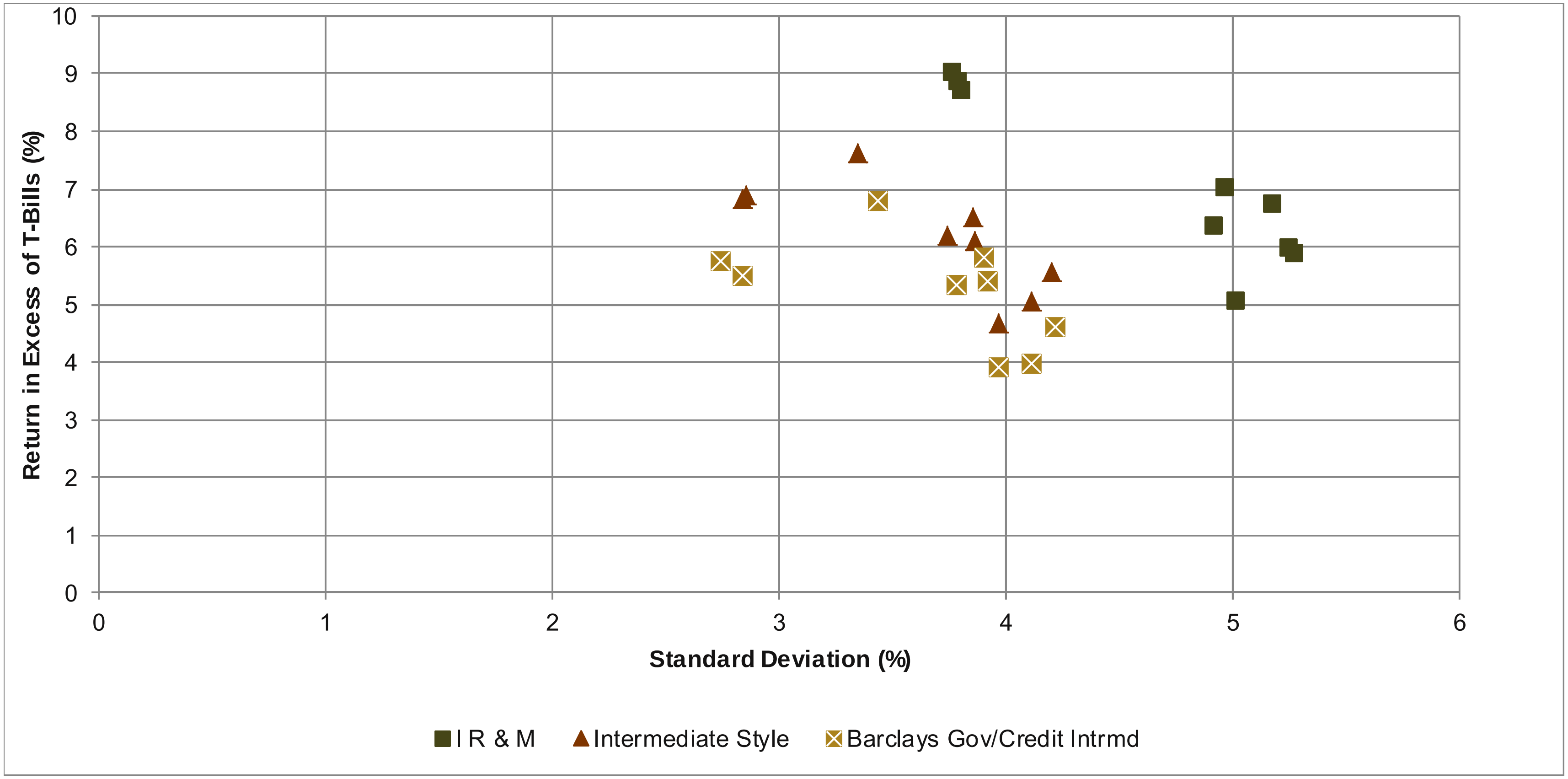
Information Ratio, 6 Rolling 3-Year Periods Ended Q1 2012



- Managers tended to perform better than the Core style
  - Managers generally had similar or greater alpha with less residual risk
- The Core Plus style was rewarded with more alpha for taking more tracking error

Current Intermediate Fixed Income Manager Performance Analysis

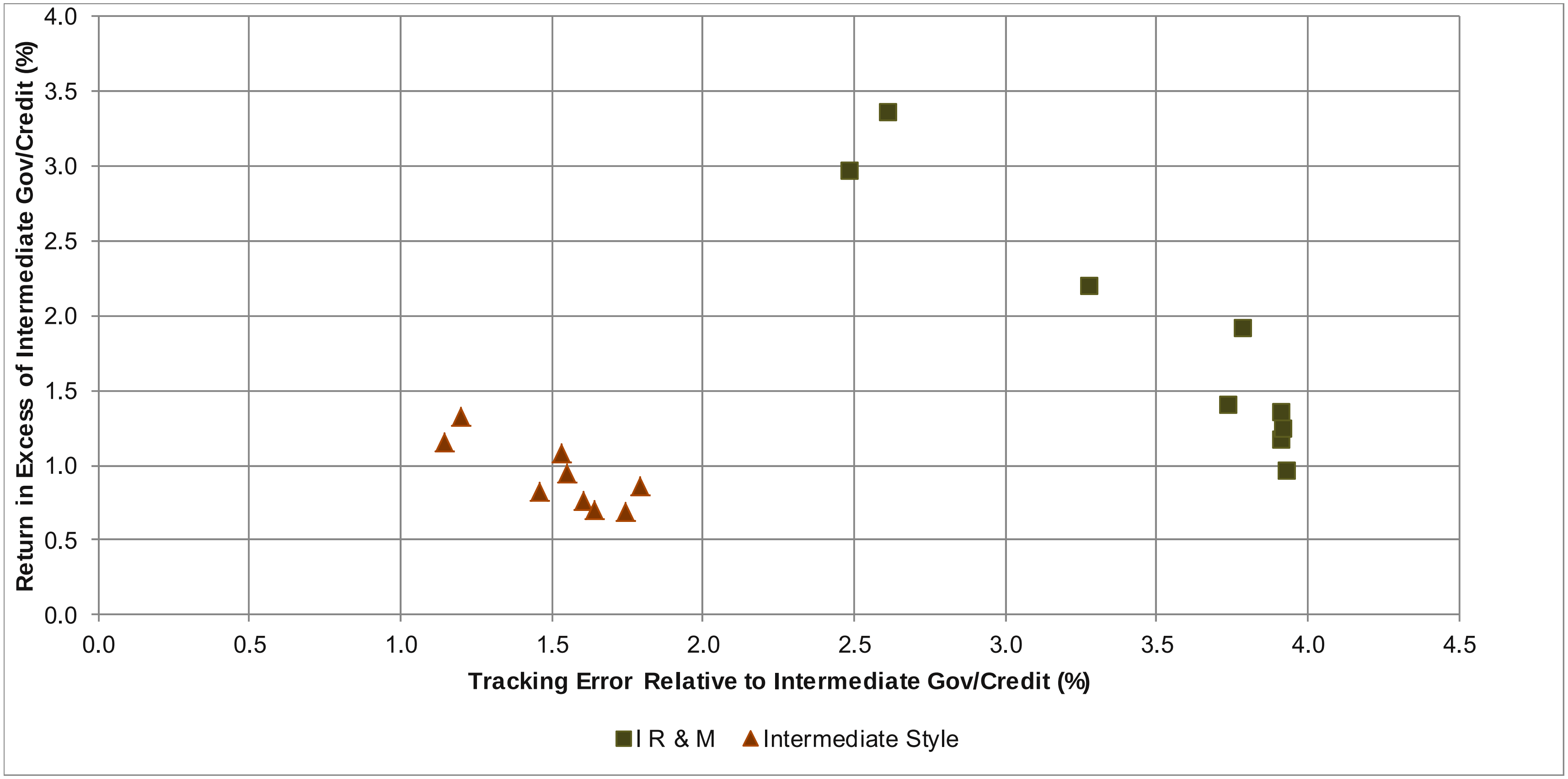
Sharpe Ratio, 9 Rolling 3-Year Periods Ended Q1 2012



- IR&M had higher returns but somewhat more risk than the Intermediate index and style
  - IR&M generally reflected the same performance patterns as the benchmarks

Current Intermediate Fixed Income Manager Performance Analysis

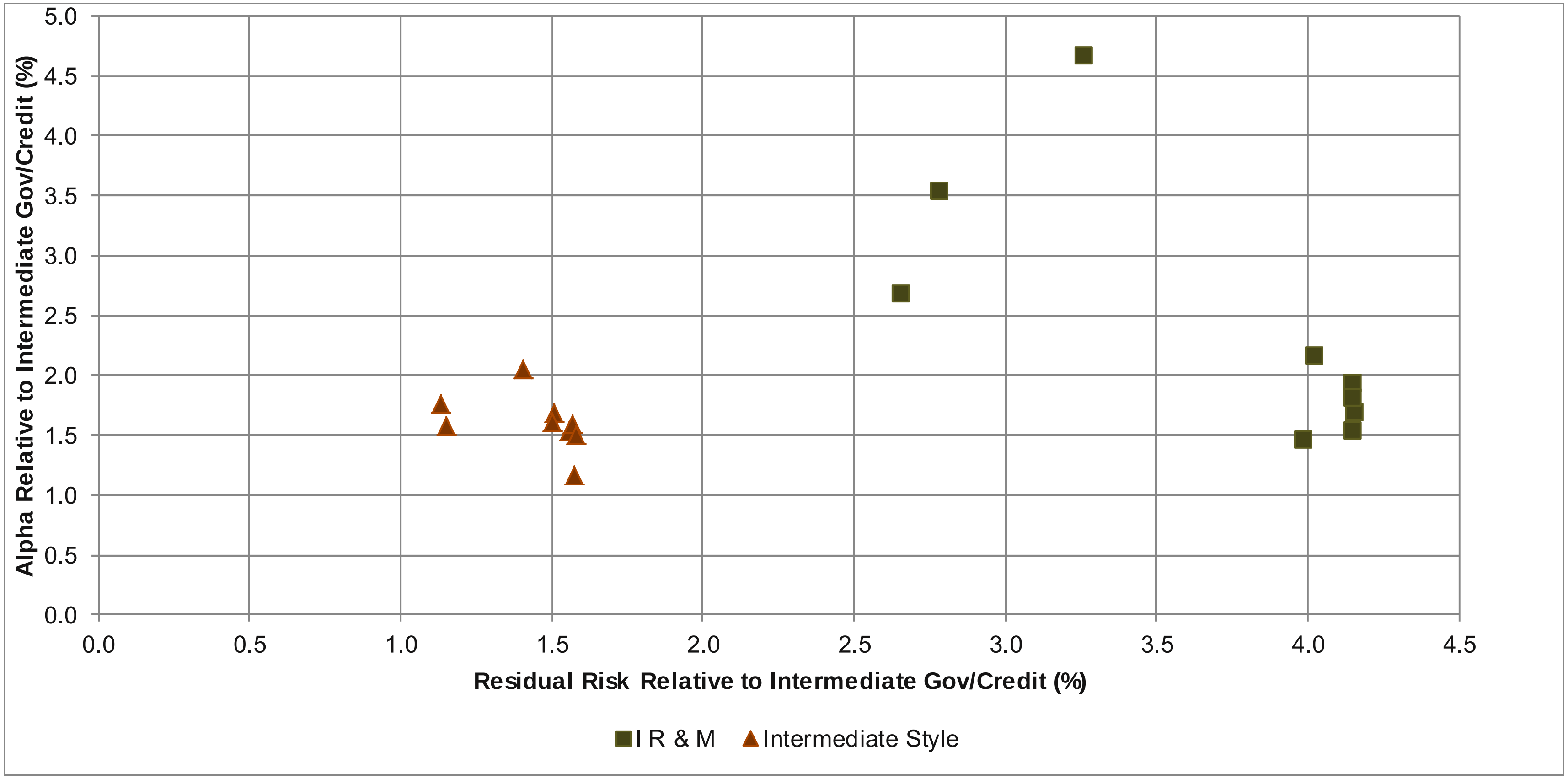
Excess Return Ratio, 9 Rolling 3-Year Periods Ended Q1 2012



- IR&M exhibited about twice the tracking error of the Intermediate style
- IR&M earned excess returns that were generally above those of the Intermediate style

Current Intermediate Fixed Income Manager Performance Analysis

Information Ratio, 9 Rolling 3-Year Periods Ended Q1 2012



- IR&M took more than 2% more residual risk than the Intermediate style
- IR&M was rewarded with an average of approximately 75 bps in additional alpha

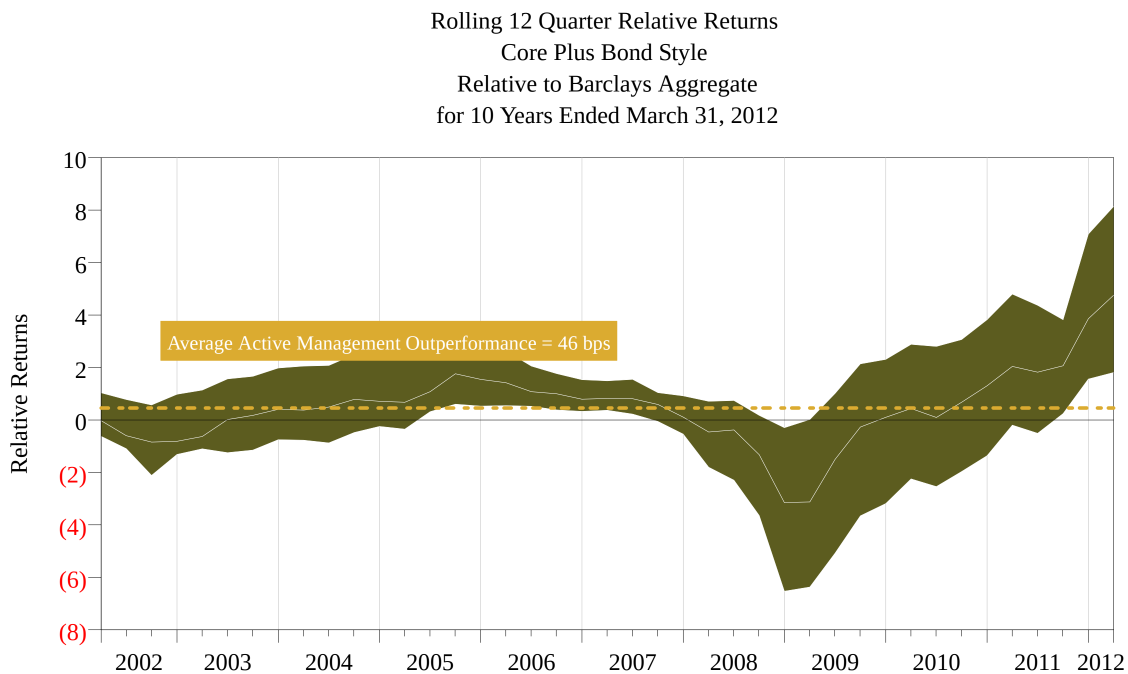
Performance of the Core Bond Style

Returns Relative to Benchmark

- Over the most recent 10-year period the Core Bond Style has outperformed the Aggregate index by an average of 21 bps gross of fees
- There was significant active management underperformance during the credit crisis due to active overweights to spread product

Performance of the Core Plus Bond Style

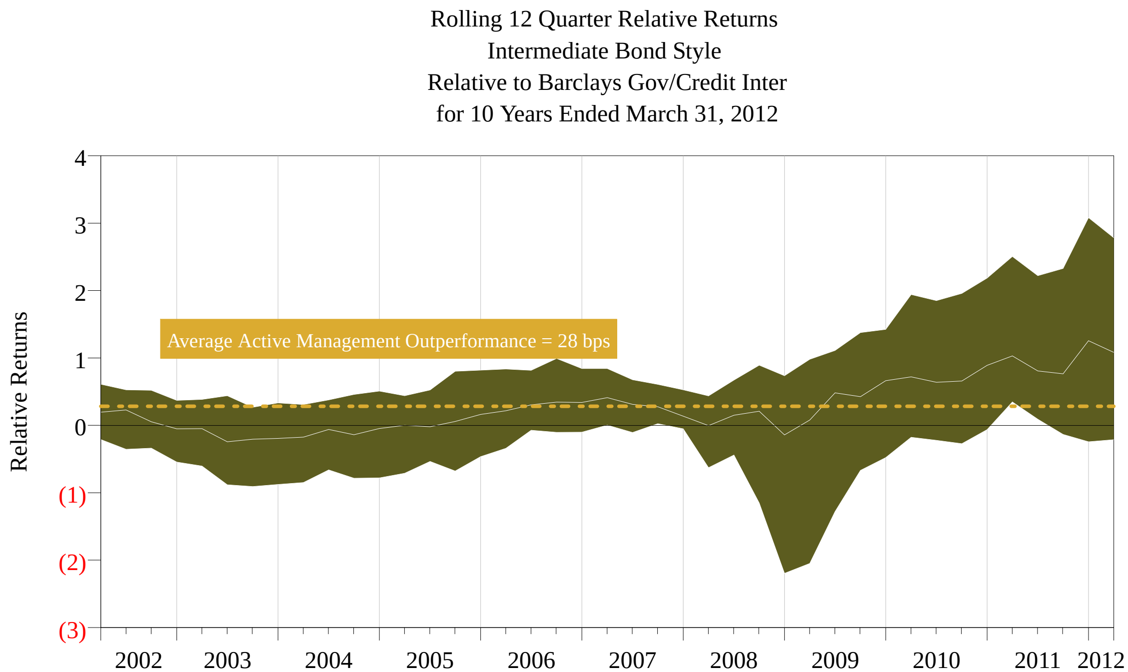
Returns Relative to Benchmark



- Over the most recent 10-year period the Core Plus Bond Style has outperformed the Aggregate index by an average of 46 bps gross of fees
- There was significant active management underperformance during the credit crisis due to active overweights to spread product especially non-Agency mortgages

Performance of the Intermediate Bond Style

Returns Relative to Benchmark



- Over the most recent 10-year period the Intermediate Bond Style has outperformed the Intermediate index by an average of 28 bps gross of fees
- There was significant active management underperformance during the credit crisis due to active overweights to credit

Summary of Broad Structure Alternatives

Reflections of Current and Future Conditions

- The current bond structure does not need to be changed
  - The overall structure resembles the Core Bond style
  - The current managers have characteristics similar to their benchmarks and style groups
  - The current structure should provide stability during an equity market downturn and should respond to future increases in interest rates somewhat better than the overall market due to the allocation to intermediate bonds
- Number of core managers could be reduced
  - Three managers for current asset size risks paying active fees for passive results
- Passive management could be employed
  - Reduce fees relative to active management
  - Could replace one or more active managers to reduce investment complexity
  - Likely to diversify equity better in a downturn
  - Relatively large Treasury allocation could be a drag on returns
- Core plus could be introduced to enhance returns
  - Generally added value over the Aggregate index
  - Likely to increase the volatility of the bond portfolio
  - Probably increase the correlations of the fixed and equity portfolios reducing diversification
- Short duration was not used in the alternative structures
  - The current low yields make short duration a very expensive hedge against interest rates that are unlikely to rise significantly in the next several years

Alternative Fixed Income Structures

		Current Allocation		Alternative A		Alternative B		Alternative C		Alternative D	
Style	Active/Passive	%	$ mm	%	$ mm	%	$ mm	%	$ mm	%	$ mm
Core		69.4%	155.8	70.0%	157.0	35.0%	78.5	20.0%	44.9	20.0%	44.9
New Passive Manager	Passive	0.0%	0.0	0.0%	0.0	35.0%	78.5	20.0%	44.9	20.0%	44.9
CS McKee	Active	33.1%	74.3	35.0%	78.5	0.0%	0.0	0.0%	0.0	0.0%	0.0
Piedmont	Active	16.1%	36.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
Pugh	Active	20.3%	45.5	35.0%	78.5	0.0%	0.0	0.0%	0.0	0.0%	0.0
Core Plus		0.0%	0.0	0.0%	0.0	35.0%	78.5	50.0%	112.2	40.0%	89.7
New Core Plus Manager	Active	0.0%	0.0	0.0%	0.0	35.0%	78.5	25.0%	56.1	20.0%	44.9
New Core Plus Manager	Active	0.0%	0.0	0.0%	0.0	0.0%	0.0	25.0%	56.1	20.0%	44.9
Intermediate Duration		30.6%	68.5	30.0%	67.3	30.0%	67.3	30.0%	67.3	40.0%	89.7
I R & M	Active	30.6%	68.5	30.0%	67.3	30.0%	67.3	30.0%	67.3	40.0%	89.7
Total		100.0%	224.3	100.0%	224.3	100.0%	224.3	100.0%	224.3	100.0%	224.3
Total Number of Managers			4		3		3		4		4
Total Estimated Fees (bps) (1)			27		27		17		22		21
Historical Excess Return (2)			23		23		25		31		30

(1) Fees are based on style group estimates rather than current manager fees to facilitate comparisons.

(2) Historical values of excess return are based on the average rolling 3-year values over the most recent 10 years for each style group and are gross of fees.

- Structures range from alternative A which is closest to current allocation to alternative D which is closest to a “clean sheet of paper”
- Structures are intended to be representative, not exhaustive
  - The appropriate structure may be a refinement to one or more of the alternatives

Alternative Structures

Descriptions and Motivations

- Alternative A
  - Refines the existing structure by eliminating one active core manager
  - The reduction from 4 to 3 managers provides some operational efficiencies
  - There is no preference for which manager would be eliminated; the elimination of Piedmont was arbitrary
  - Fees are reduced by less than 1 bp
  - There is no impact on historical excess return
- Alternative B
  - Eliminates all active core managers and replaces them with a passive core exposure
  - The passive core exposure is reduced by half to fund a new core plus mandate
  - The reduction from 4 to 3 managers provides some operational efficiencies
  - Switching from active to passive core reduces fees by approximately 10 bps even after accounting for the new core plus manager
  - Alternative B would have contributed an extra 2 bps of excess return relative to the current structure historically as the reduction in excess return by the elimination of the core managers is more than offset by the increase in excess return provided by the core plus manager

Alternative Structures

Descriptions and Motivations

- Alternative C
  - 15% of total assets in alternative B are transferred from the passive core allocation to a second core plus manager
  - The number of managers returns to the current level of 4
  - Fees are reduced by 5 bps relative to the current structure
  - Excess return is increased by 8 bps relative to the current structure
- Alternative D
  - The core plus manager allocations are reduced from their levels in alternative C to fund additional assets in intermediate duration
  - All intermediate duration assets are managed passively
  - The number of managers remains at 4
  - The fees are less than half of the fees currently being paid
  - This alternative helps to protect against rising rates by shortening duration
  - This alternative helps to protect against equity market declines because passive managers tend to have larger Treasury allocations than active managers and Treasurys are less correlated with equities than spread bonds

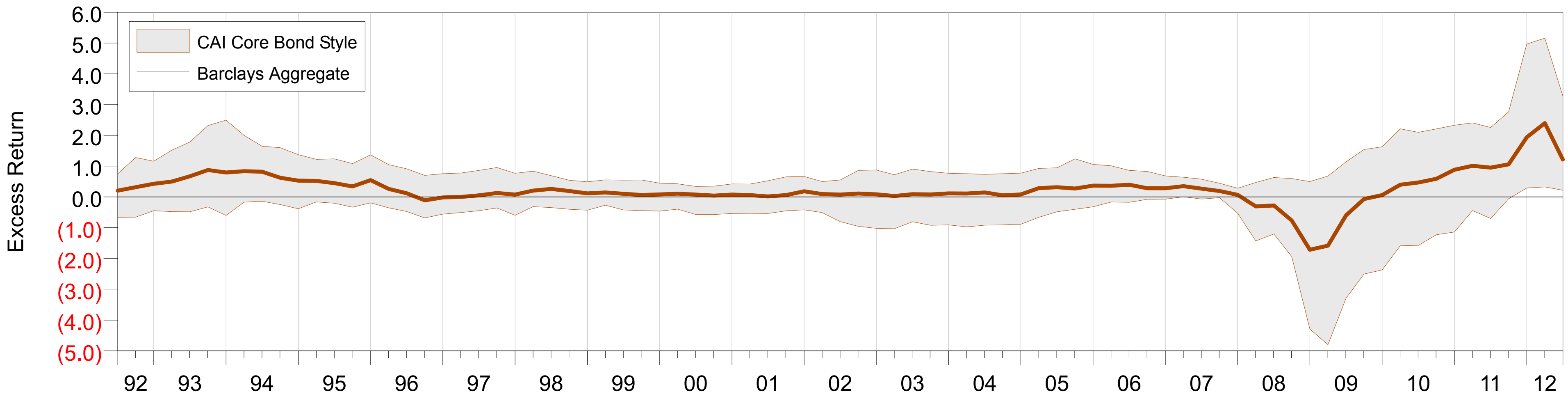
Core Bond Style versus Barclays Aggregate

- Percent of Three-Year periods where Manager Beat Benchmark by more than Hurdle – by Percentile

Hurdle	0.20%	0.25%	0.30%	0.35%	0.40%	0.45%	0.50%	0.55%	0.60%	0.65%
Median	46%	45%	36%	33%	26%	25%	23%	19%	16%	15%
45th Percentile	51%	48%	41%	39%	34%	29%	26%	25%	21%	18%
40th Percentile	65%	56%	49%	44%	40%	36%	30%	26%	26%	24%
35th Percentile	78%	65%	56%	48%	45%	40%	35%	33%	30%	26%
30th Percentile	89%	76%	68%	56%	50%	45%	41%	36%	35%	30%
25th Percentile	96%	89%	79%	69%	58%	54%	48%	44%	40%	38%

Average Annualized Excess Return – Median Manager: 0.26%

Rolling 12 Quarter Excess Return relative to Barclays Aggregate for 20 Years ended June 30, 2012



Core Plus Bond Style versus Barclays Aggregate

- Percent of Three-Year periods where Manager Beat Benchmark by more than Hurdle – by Percentile

Hurdle	0.20%	0.25%	0.30%	0.35%	0.40%	0.45%	0.50%	0.55%	0.60%	0.65%
Median	69%	69%	68%	66%	66%	63%	61%	60%	59%	54%
45th Percentile	73%	71%	69%	69%	69%	68%	65%	64%	63%	60%
40th Percentile	76%	74%	74%	73%	73%	71%	70%	68%	68%	66%
35th Percentile	81%	80%	76%	75%	74%	74%	74%	73%	71%	68%
30th Percentile	84%	83%	83%	83%	80%	79%	76%	75%	75%	73%
25th Percentile	90%	88%	88%	88%	85%	83%	83%	80%	78%	76%

Average Annualized Excess Return – Median Manager: 0.73%

Rolling 12 Quarter Excess Return relative to Barclays Aggregate for 20 Years ended June 30, 2012