

DATE: March 11, 2010

TO: BWC Investment Committee
BWC Board of Directors

FROM: Bruce Dunn, CFA, Chief Investment Officer

SUBJECT: **Mercer Investment Consulting, Inc.**
Investment Consulting Contract Renewal

Background

A Request for Proposals (RFP) was issued on October 30, 2007 by the BWC for the services of an Investment Consulting firm. The purpose of this RFP was to identify an investment consulting firm that could provide a comprehensive range of consulting advice and services to assist and advise the BWC Board of Directors, its Investment Committee and BWC staff in carrying out its fiduciary duties and oversight responsibilities with regards to the BWC invested assets.

Mercer Investment Consulting, Inc. (Mercer) was approved as the new BWC investment consultant on January 25, 2008 by vote of the BWC Board of Directors. Mercer was selected as BWC investment consultant as the result of a thorough RFP selection process. An investment consulting contract dated February 6, 2008 was executed by BWC and Mercer. A copy of this original contract is provided with this report.

The BWC Board of Directors approved at its March 20, 2009 meeting the first of two potential one-year renewals of Mercer as BWC investment consultant. A copy of this Addendum renewal contract executed by Administrator Ryan on June 2, 2009 is also provided with this report.

Contract Terms

The investment consulting contract with Mercer was for an initial 17-month period ending June 30, 2009 with the ability, at the sole discretion and option of BWC, to renew such contract for up to two additional one-year terms. The contract specifies the scope of services to be provided by Mercer. The initial 17-month retainer fee of the contract was \$39,583 per month (\$474,996 annualized) with both the first one-year term period extension ending June 30, 2010 and the second one-year term period extension ending June 30, 2011 having a monthly retainer fee of \$40,833 (\$490,000 per annum) or 3.16% higher than the initial 17-month term retainer fee.

Among the scope of investment consulting services provided by Mercer and included at no additional fee to BWC under the current contract are an asset-liability study during the initial contract term, quarterly performance monitoring and reporting, a defined number of traditional investment manager searches, investment policy strategy and guidelines, education sessions, market research, and participation in 12 Investment Committee meetings per year as well as BWC Board meetings on an as needed basis. The current contract allows for 8 traditional (active or passive) manager searches for the initial term ending June 30, 2009, a cumulative 13 traditional manager searches over the first two contract terms ending June 30, 2010 and a cumulative 18 traditional manager searches over the full three contract terms ending June 30, 2011. Mercer has participated in a cumulative 11 traditional passive manager searches (six for State Insurance Fund, four for Disabled/Coal Workers funds and one for Public Workers/Marine Industry funds) with the BWC investment staff during its contract period to date. As a result, Mercer can participate in up to 7 additional traditional manager searches if the Mercer contract is renewed for a third and final term through June 30, 2011 without any possible additional fee charged BWC. The investment consulting contract with Mercer also provides examples of out of scope services that would require additional defined fees for extra manager searches and certain operations/monitoring services that may be exercised at the discretion of the Bureau.

Action Item

With the second 12-month term of the Mercer contract expiring on June 30, 2010, a decision must be made by the BWC Investment Committee and Board of Directors in March, 2010 to address the optional one-year renewal period of the contract effective from July 1, 2010 through June 30, 2011. If the decision is made not to renew the current contract with Mercer, sufficient lead time must be given to BWC staff to issue a new RFP for investment consulting services with the objective and goal of selecting a new investment consulting firm for the Bureau effective around July 1, 2010 so as to prevent any gap in coverage to the Bureau of an investment consulting firm.

If the Board of Directors votes to renew Mercer for an additional one-year term, a second addendum to the current contract would be executed by both parties to reflect such action taken. This second addendum will also represent the final renewal of Mercer as BWC investment consultant under this contract and the terms of the RFP issued in October, 2007. A new RFP for investment consulting services will be required to be issued in late 2010 or early 2011 by BWC to avoid any interruption of investment consulting firm services supporting the Bureau.

It must be mentioned that although the Mercer contract states renewal terms in annual periods, Section 7.6 (p. 28) of the applicable Investment Consultant RFP included with this report allows for the BWC Board of Directors to terminate such contract *for convenience* by giving Mercer not less than 30 days advance notice in writing regarding the BWC intent to terminate.

AGREEMENT
Between
OHIO BUREAU OF WORKERS' COMPENSATION
And
Mercer Investment Consulting, Inc

This is an Agreement by and between Mercer Investment Consulting, Inc. (hereinafter referred to as the "Consulting Firm"), having offices at 10 South Wacker, Chicago, IL 60606, and the State of Ohio, Bureau of Workers' Compensation (hereinafter referred to as the "Bureau"), having offices at 30 W. Spring Street, Columbus, Ohio 43215-2256, entered into the day, month and year set out below.

Whereas, the Bureau issued a Request for Proposals Number B08010 for SERVICES OF A FULL SERVICE INVESTMENT CONSULTANT to serve as consultant to the Bureau, and the Consulting Firm submitted a proposal determined by the Bureau to be the best responsive and responsible response to the Request for Proposals;

Now, therefore, the parties hereto mutually agree to perform the contract in accordance with the Request for Proposals and the Consulting Firm's Proposal, which are hereby incorporated by reference as if fully rewritten herein. Furthermore the parties agree that if there is any conflict between the Request for Proposals and the Consulting Firm's Proposal, the Request for Proposals controls.

SCOPE OF SERVICES. The Consulting Firm agrees to perform the services described in the RFP under Scope of Services, Sections 3.1 through Section 3.6 and in Appendix A of this contract.

The Consulting Firm shall report to the Bureau. When so directed by the BWC Board of Directors, the Consulting Firm shall advise and consult with the BWC Investment Staff to implement any recommendations to the Bureau Investment Policy.

CONDITIONS PRECEDENT. The parties agree that as a condition precedent, any applicable approvals of the Office of Budget and Management must be given before obligations under this Agreement commence. If at any time sufficient funds are not available to continue funding the payments due under this Agreement, the Bureau shall provide written notice to the Consulting Firm immediately of such circumstance, and this Agreement will terminate on the date the funding ceases to be available.

FEES. The Bureau, in consideration of the Consulting Firm's promise to perform services in accordance with the terms of this Agreement, agrees and promises to pay the Consulting Firm for services performed according to the following terms:

- The parties agree that the Consulting Firm shall submit monthly invoices for services rendered not to exceed the amounts described on the attached Scope of Services. Notwithstanding any terms to the contrary, total costs for the Scope of Services within the initial Contract period of February 6, 2008 until June 30, 2009 (17 months) shall not exceed the amount of \$673,000 dollars.

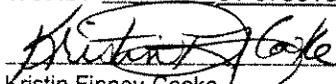
The Bureau shall use its best efforts to pay the Consulting Firm within thirty (30) days upon receipt of Consulting Firm's properly submitted invoice. Failure to pay the Consulting Firm promptly within thirty (30) days entitles the Consulting Firm only to interest on the amount due and payable at the rate allowed by law in accordance with the provisions of Ohio Revised Code Section 126.30. Failure to promptly pay within thirty (30) days shall not be deemed to constitute default on the part of the Bureau.

TERM. The parties agree that services under this contract shall commence on February 6, 2008, and shall continue until June 30, 2009. At the sole discretion of the Bureau, and subject to all Conditions Precedent, this Contract can be renewed for two (2) additional one (1) year terms.

In witness whereof, the parties hereunto affix their signatures this 6th day of February 2008.

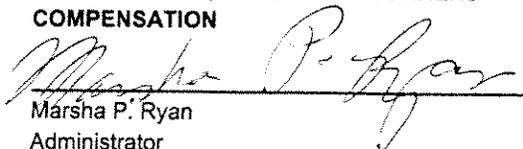
Mercer Investment Consulting, Inc.

TAX ID: 61-0736136



Kristin Finney-Cooke
Senior Consultant

STATE OF OHIO, BUREAU OF WORKERS'
COMPENSATION



Marsha P. Ryan
Administrator

ORIGINAL

Appendix A

Scope of Services:

The scope of investment consulting services that Mercer will provide to the Bureau is the following:

- **Asset Allocation and Liability Study (once only, during initial contract term)**
- **Strategic Asset Allocation, Portfolio Structure, and Risk Budgeting**
- **Investment Policies, Strategies and Guidelines**
- **Quarterly Performance Monitoring and Reporting**
- **Ongoing Due Diligence for Public Market Managers**
- **5 Traditional Manager Searches per year**
- **Market Research**
- **Education Sessions**
- **Transition Management Services**
- **Participation in 12 Investment Committee Meetings and on an as needed basis for Full Board Meetings**

Additional Traditional Manager Searches Outside Scope of Services:

Given that the initial contract period is 17 months with 2 one year extensions at the sole discretion of the Bureau, the following detail is provided regarding Traditional Manager Searches. In the first 17 months, the Bureau can conduct up to 8 Traditional Manager Searches and remain within scope. If the Bureau utilizes the renewal option of one one-year extension or two one-year extensions on the contract, then the Bureau can complete 5 Traditional Manager searches per each one-year renewal period with no limitations on when within the one-year period extension or two one-year period extensions the searches must be completed and remain within scope of the contract. If the Bureau conducts fewer than 8 allowable Traditional Manager Searches over the first contract term or 13 allowable Traditional Manager Searches over the first two contract terms, the Bureau may defer any unused searches and apply them towards the next renewal term period limits provided for allowable Traditional Manager Searches if the Bureau exercises its option to renew this contract for an additional one-year term.

If the Bureau conducts more than (i) 8 allowable Traditional Manager Searches over the first contract term, (ii) 13 allowable Traditional Manager Searches over the first two contract terms or (iii) 18 allowable Traditional Manager Searches over the first three contract terms, the first three additional Traditional Manager Searches above the allowable number of Traditional Manager Searches over the respective time period contract terms stated herein will be charged separately at the fee amount stated below for Traditional Passive Manager Searches, and any additional Traditional Manager Search above the first three extra searches per contract term will be charged at the fee amount stated below for Traditional Active Manager Searches; provided, however, that the Bureau may defer the fees associated for these extra searches and apply them towards the next renewal term period limits provided for allowable Traditional Manager Searches if the Bureau exercises its option to renew this contract for an additional one-year term. If the Bureau does not exercise its one-year term contract extension renewal option, the Bureau will be obligated to pay all such out of scope Traditional Manager Search fees to the Consulting Firm upon the termination of this Agreement.

Fees:

- Contract period of February 6, 2008 until June 30, 2009 the monthly retainer fee is \$39,583 (\$673,000 for entire 17 months)
- First 1 year extension – monthly retainer fee is \$40,833 (\$490,000 annually)
- Second 1 year extension – monthly retainer fee is \$40,833 (\$490,000 annually)

- Out of scope of services manager search fees
 - Traditional Passive Manager Search – \$11,000
 - Traditional Active Manager Search – \$25,000
 - Alternative Asset Class Manager Search - \$30,000

Additional Services/Fees:

Sentinel Services (estimated costs for illustrative purposes only):

- Operations review ranges from \$20,000 to \$50,000
- Custodian Search - \$45,000
- Security Lending Review - \$25,000
- Monitoring Security Lending - \$25,000 (semi-annual)
- Investment Manager Operations/ Implementation Risk
 - \$25,000 for long only investment manager
 - \$40,000 for alternatives investment manager
- Investment efficiency (operational and implementation) ranges from \$30,000 to \$100,000

If desired by the Bureau, Additional Services offered by the Consulting Firm such as those described above and their associated Fees will depend upon the actual scope of services agreed upon by the Bureau and the Consulting Firm.

ADDENDUM

The following is an Addendum renewing the Agreement between Mercer Investment Consulting, Inc. hereinafter "Consulting Firm," having an address of 10 South Wacker, Chicago, IL 60606 and the State of Ohio, Bureau of Workers' Compensation, Hereinafter "Bureau", having offices at 30 W. Spring Street, Columbus, Ohio 43215-2256 for investment consulting services for the period July 1, 2009 to June 30, 2010.

WHEREAS, it is expressly understood and agreed that all contracts to which the Bureau is a party must conform to Ohio statutes and rules;

WHEREAS, it is expressly understood and agreed that approval of this Agreement by the Office of Budget and Management and certification of the availability of funds sufficient to meet the obligation to be incurred hereunder, pursuant to Ohio Revised Code Section 126.07, shall be conditions precedent to the creation of any obligation under this contract; and

WHEREAS, the Consulting Firm was awarded a contract as a result of the Consulting Firm's successful response to Request for Proposals # B08010 for a Full Service Investment Consultant and the contract is hereby renewed for one additional year:

THEREFORE, the parties mutually agree to the following Terms and Conditions:

RENEWAL: As provided by the Agreement, the Bureau exercises its option to renew the Agreement for one additional year, commencing July 1, 2009 and terminating June 30, 2010.

CONDITIONS PRECEDENT: It is expressly understood and agreed that approval of this Agreement by the Office of Budget and Management and certification of the availability of funds sufficient to meet the obligation to be incurred hereunder, pursuant to Ohio Revised Code Section 126.07, shall be conditions precedent to the creation of any obligation under this contract.

State appropriations expire on June 30th of every odd-numbered year. Notwithstanding any other terms of the Agreement, the Bureau's duty to make payments also expires on June 30th of every odd-numbered year. Continuation thereafter is conditioned upon Renewal to continue the contract into the next biennium budget period. All payment obligations of this Agreement are subject to appropriation and, unless renewed, terminate at the end of the State of Ohio biennium budget period, to wit: the 30th day of June of each odd-numbered year.

OHIO ELECTIONS LAW: Consulting Firm hereby certifies that all applicable parties listed in Divisions (I)(3), (J)(3), (Y)(3) and (Z)(3) of O.R.C. Section 3517.13 are in full compliance with Divisions (I)(1), (J)(1), (Y)(1) and (Z)(1) of O.R.C. Section 3517.13.

CONFLICTS OF INTEREST AND ETHICS COMPLIANCE CERTIFICATION: Consulting Firm affirms that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict, in any manner or degree, with the performance of services which are required to be performed under any resulting Contract. In addition, Consulting Firm affirms that a person who is or may become an agent of Consulting Firm, not having such interest upon execution of this Contract shall likewise advise the Bureau in the event it acquires such interest during the course of this Contract.

Consulting Firm agrees to adhere to all ethics laws contained in Chapters 102 and 2921 of the Ohio Revised Code governing ethical behavior, understands that such provisions apply to persons doing or seeking to do business with the Bureau, and agrees to act in accordance with the requirements of such provisions; and warrants that it has not paid and will not pay, has not given and will not give, any remuneration or thing of value directly or indirectly to the Bureau or any of its board members, officers, employees, or agents, or any third party in any of the engagements of this Agreement or otherwise, including, but not limited to a finder's fee, cash solicitation fee, or a fee for consulting, lobbying or otherwise.

In accordance with Executive Order 2007-01S, Vendor or Grantee, by signature on this document, certifies: (1) it has reviewed and understands Executive Order 2007-01S, (2) has reviewed and understands the Ohio ethics and conflict of interest laws, and (3) will take no action inconsistent with those laws and this order. The Vendor or Grantee understands that failure to comply with Executive Order 2007-01S is, in itself,

grounds for termination of this contract or grant and may result in the loss of other contracts or grants with the State of Ohio.

NON-DISCRIMINATION. Contractor certifies that Contractor, any subcontractor, and any person acting on behalf of Contractor or a subcontractor are in compliance with, and will comply with, all state and federal laws, rules and regulations governing fair labor and employment practices and equal employment opportunity, including, but not limited to, Ohio Revised Code Section 125.111 and all related Executive Orders.

Contractor, any subcontractor, and any person acting on behalf of Contractor or a subcontractor shall not discriminate, by reason of race, color, religion, sex, age, disability or military status as defined in Ohio Revised Code Section 4112.01, national origin, or ancestry, against any citizen of this state in the employment of a person qualified and available to perform the work under this Agreement.

Contractor, any subcontractor, and any person acting on behalf of Contractor or a subcontractor shall not, in any manner, discriminate against, intimidate, or retaliate against any employee hired for the performance of work under this Agreement on account of race, color, religion, sex, age, disability, military status as defined in Ohio Revised Code Section 4112.01, national origin, or ancestry.

Contractor represents that it has a written affirmative action program for the employment and effective utilization of economically disadvantaged persons, as referred to in division (E)(1) of Ohio Revised Code Section 122.71, and that it shall file a description of the affirmative action program and a progress report on its implementation with the equal employment opportunity office of the Ohio Department of Administrative Services.

In fulfilling the obligations and duties of this Agreement, Contractor, any subcontractor, and any person acting on behalf of Contractor or a subcontractor are encouraged to purchase goods and services from certified Minority Business Enterprise (MBE) and Encouraging Diversity Growth and Equity (EDGE) vendors.

ORDER OF PRIORITIES: The parties mutually agree that if any provisions in the Agreement are in conflict and cannot be reconciled with any provisions of this Addendum, the provisions of this Addendum shall control.

In Witness, the parties hereunto affix their signatures this 14__ day of _____ May _____, 2009.

Mercer Investment Consulting, Inc.
TAX I.D. 61-0736136

STATE OF OHIO
BUREAU OF WORKERS' COMPENSATION

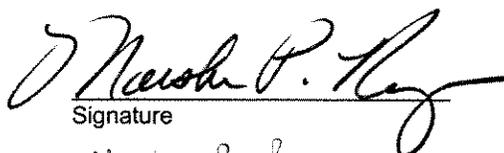


Signature

Guy M. Cooper
Printed Name

Principal
Title

May 14, 2009
Date



Signature

Marsha P. Ryan
Printed Name

BWC Administrator
Title

4/2/09
Date

REQUEST FOR PROPOSALS

by the

STATE OF OHIO

BUREAU OF WORKERS' COMPENSATION

for the

SERVICES OF A FULL SERVICE INVESTMENT CONSULTANT

October 30, 2007

Bid # B08010

The term of the contract shall commence upon execution and shall end June 30 2009, renewable at the BWC's sole discretion for no more than two (2) subsequent one (1) year periods, and subject to all Conditions Precedent, including appropriations.

The contract with the selected consulting firm may be terminated if any changes are made to the authority of the BOD over BWC's investment activities.

7.4 Contract Compliance

During the term of this contract, BWC shall be responsible for monitoring the consulting firm's performance and compliance with the terms and conditions of the contract. It is specifically understood that the nature of the services to be rendered pursuant to any contract resulting from this RFP are of such a nature that BWC is the sole judge of the adequacy of such services.

7.5 Contract Termination

If for any reason the consulting firm fails to fulfill its obligations under the contract in a timely and professional manner, or if the consulting firm violates any of the covenants, agreements, or stipulations of the contract or applicable Ohio statutes, BWC shall have the right to terminate the contract by giving one (1) day written notice to the consulting firm for defaults not subject to cure, and fifteen (15) days written notice to the consulting firm for defaults subject to cure. Failure to maintain commercial general liability coverage or workers' compensation coverage will immediately terminate any agreement made pursuant to this RFP. Notification of such termination will be by Certified U.S. Mail. If BWC's representative observes any infraction(s), such shall be documented and conveyed to the consulting firm for immediate correction. Continued failure on the consulting firm's part to comply with the terms and conditions of the ensuing contract may result in the immediate termination of the consulting firm from the contract by BWC. In the event that BWC executes its right to terminate the contract, the consulting firm shall not be relieved of any liability for damages sustained by BWC by virtue of any breach by the consulting firm, and BWC may withhold any payment due to the consulting firm, whether the payment is due to the consulting firm under the contract or otherwise, for the purpose of set off until such time as damages to BWC are determined.

7.6 Termination for Convenience

Notwithstanding section 7.5, above, BWC, in its sole determination, may terminate the contract with the consulting firm for convenience by giving not less than thirty (30) days notice in writing to the consulting firm of its intent to so terminate for convenience and the effective date of such termination. In the event that termination under this provision is elected, the contractor shall receive payment for work satisfactorily performed as determined by BWC to the date of termination.

MERCER

Consulting. Outsourcing. Investments.



MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

Ohio Bureau of Workers' Compensation Strategic Asset Allocation Analysis Marine Industry Fund and Public Work Relief Employees' Fund

March 2010

Guy Cooper
Jordan Nault
Kweku Obed

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Deterministic Economic Scenario Environments

Contrasting Economic Growth and Inflation

		U.S. INFLATION		
		Low	Medium	High
U.S. ECONOMIC GROWTH	Low	<p>U.S. Prolonged Recession</p> <p>Economic growth and inflation fall over a three year time period and then recover partially, but not all the way back to equilibrium. Interest rates decline and remain at the lower level. Equity returns are initially negative, but rebound. Fixed income returns are initially very strong, but fall to a lower equilibrium level of return.</p>		<p>U.S. Stagflation</p> <p>Economic growth declines over a three year time period and recovers slightly, but not all the way back to equilibrium. Inflation jumps up and stays high for the forecast period. Initial equity and fixed income returns are negative, but once a new equilibrium is established, high nominal returns are earned, but returns are lower on an inflation-adjusted basis.</p>
	Moderate		<p>U.S. Base Case</p> <p>A projection of average economic growth and inflation. Equity returns based on current capital market assumptions. We assume that the yield curve rises at the short and intermediate maturities over a three year time horizon. After three years, fixed income starts to earn returns slightly above the equilibrium rate.</p>	
	High	<p>U.S. Ideal Growth</p> <p>Economic growth increases and stays above average for the remaining forecast period. Inflation drops to lower levels and stays low for the forecast period. Short term interest rates increase slightly while long term rates decline. Bond and equity returns are above average on an inflation-adjusted basis.</p>		<p>U.S. Inflationary Growth</p> <p>Economic growth increases over the first three years, then remains level for the remainder of the period. Inflation increases and stays high for the forecast period. Equities are initially hurt by rising inflation and interest rates, but reach a high equilibrium level of nominal return.</p>

Marine Industry Fund (MIF)

Marine Industry Fund

Specialty Fund Description

- The MIF provides voluntary coverage (employers may choose to purchase the insurance from BWC, from a private carrier, or self insure) to employers who have employees who work on or about navigable waters, as required by the Federal Longshoremen and Harbor Workers' Act.
- Benefits provided by fund: A Marine Fund claim is filed with both the Department of Labor and the BWC; therefore, two claims will exist for the same injury. The Federal Government determines the claimant eligibility for benefits and sets the benefit levels. An injured worker may only receive lost time benefits from the federal claim or the BWC claim, but not from both for the same period. Medical benefits may be paid from either the federal claim or the BWC claim as long as duplicate payments do not occur. Injured workers covered under the Marine Industry Fund are entitled to the same benefits as other injured workers except for the following:
 - Living Maintenance and Living Maintenance Wage Loss benefits
 - Lump Sum Advancements
 - Rehabilitation Services only as ordered by the Department of Labor

Marine Industry Fund

Current Status

- June 30, 2009 Funding Ratio = 10.2
 - \$17.4M (funded assets) / \$1.7M (funded liabilities)
- Healthy funded status, no reason to take additional investment risk in order to increase assets
- Duration of the liability is approximately 10 years, but given the healthy funded status there is no need to extend the fixed income duration of the assets
- Mercer suggests a conservative asset allocation approach for MIF
 - Secure funded status
 - Reduce risk / volatility

Marine Industry Fund

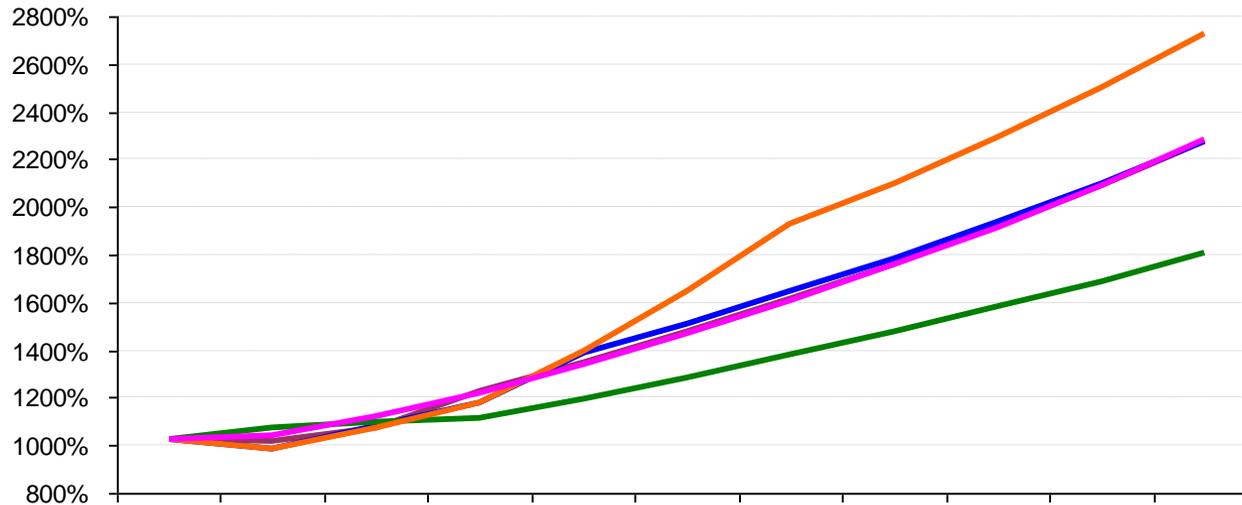
Alternative Mixes

	<u>Mix A</u> <u>(current)</u>	<u>Mix B</u>	<u>Mix C</u>
	0% Eq 100% FI	0% Eq 100% FI	0% Eq 100% FI
Equity			
US Equities - All Caps			
World x-US			
Total - Public Equity	0.0%	0.0%	0.0%
Fixed Income			
US FI - Aggregate Bonds (Dur = 4.3)		100.0%	50.0%
US FI - TIPS (Dur = 2.0)			50.0%
US FI - Intermediate (Dur = 3.9)	100.0%		
Total - Fixed Income	100.0%	100.0%	100.0%
Est. Weighted Average Duration of US Fixed Income	4	4	3
Total	100.0%	100.0%	100.0%
Total Portfolio Statistics			
Long-Term Expected Passive Annual Return	4.7%	4.9%	4.8%
Standard Deviation of Returns	4.5%	5.5%	4.5%

- Mix A represents the current asset allocation
- Mix B reflects moving the portfolio to a typical core bond portfolio
- Mix C reviews adding TIPS exposure to a typical core bond portfolio

MIF – Current Mix

Funding Ratio Projections



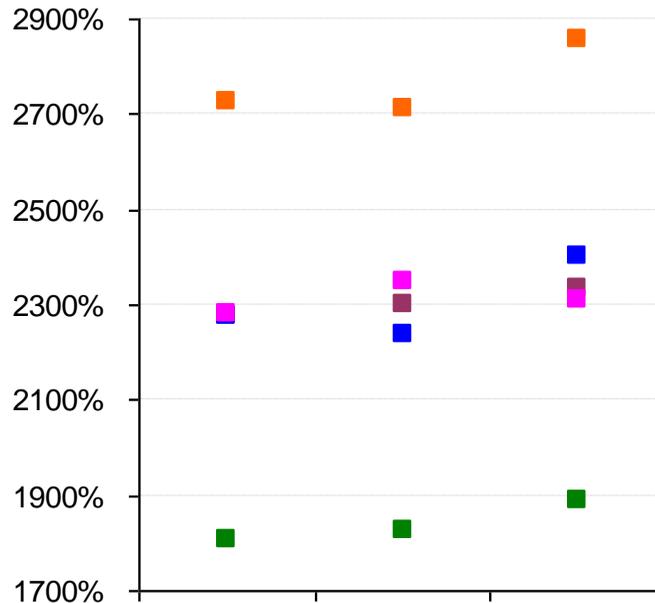
	Funded Ratio at 6/30/										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Base Case	1024%	1022%	1076%	1231%	1350%	1477%	1616%	1761%	1919%	2090%	2275%
Stagflation	1024%	987%	1078%	1182%	1386%	1510%	1645%	1785%	1937%	2100%	2277%
Recession	1024%	1076%	1100%	1111%	1197%	1286%	1381%	1478%	1581%	1689%	1805%
Inflationary Growth	1024%	986%	1077%	1181%	1401%	1647%	1925%	2102%	2293%	2501%	2726%
Ideal Growth	1024%	1041%	1124%	1218%	1338%	1467%	1608%	1756%	1916%	2091%	2280%

Funding ratio expected to increase under all scenarios

Worst Case Scenario occurs under Recession scenario, low inflation experience drives bonds yields lower, causing higher liability levels. But growth in the current asset levels are more than enough to offset the liability increases in the long run.

MIF – Alternative Mixes

Funding Ratio in 2019



Investment Strategy
Mix A - Current (100% Interm Bond)
Mix B - 100% Aggregate Bond
Mix C - 50% Agg / 50% TIPS

Mix A – Intermediate bonds have better funding ratios for high inflation scenarios versus Mix B

Mix B – Aggregate bonds illustrate better funding ratios in low inflation scenarios and under the base case scenario in comparison to current mix

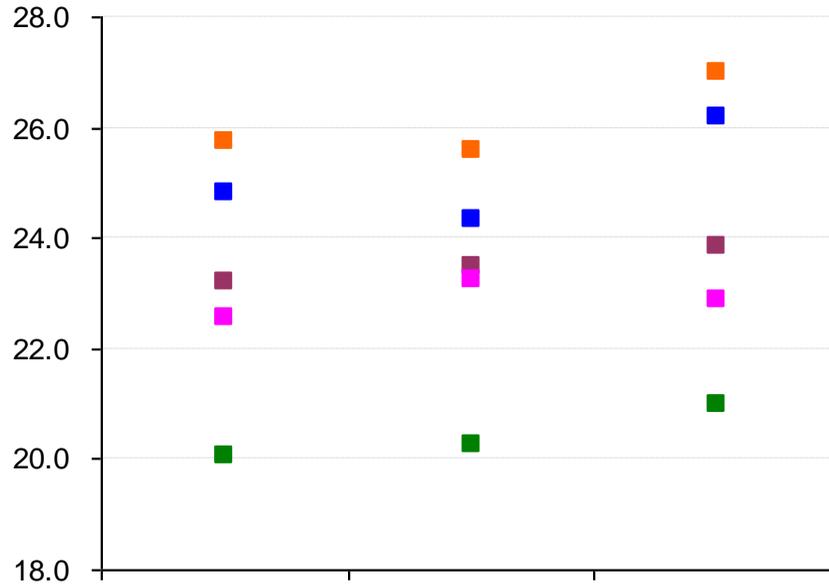
Mix C – Exposure to TIPS enhances funding ratio metrics in all scenarios except under Ideal growth

	Funded Ratio at 6/30/2019		
	Mix A	Mix B	Mix C
Base Case	2275%	2302%	2335%
Stagflation	2277%	2235%	2399%
Recession	1805%	1824%	1887%
Inflationary Growth	2726%	2709%	2855%
Ideal Growth	2280%	2349%	2311%

MIF – Alternative Mixes

Surplus / (Deficit) in 2019

Investment Strategy
Mix A - Current (100% Interm Bond)
Mix B - 100% Aggregate Bond
Mix C - 50% Agg / 50% TIPS



Funding ratio in dollar amount shown

Fund is expected to remain in high surplus position

Results are skewed as funding ratio surplus is heavily influenced by the growth in asset compared to smaller liabilities

(\$millions)

		Projected Surplus / (Deficit) at 6/30/2019		
		Mix A	Mix B	Mix C
Base Case		23.2	23.5	23.8
Stagflation		24.8	24.3	26.2
Recession		20.0	20.3	21.0
Inflationary Growth		25.7	25.6	27.0
Ideal Growth		22.6	23.3	22.9

Marine Industry Fund

Discussion

- Mercer supports continued investment in Mix A (the current asset allocation)
 - The conservative risk/return profile is appropriate
 - Given the healthy funded status, a shorter duration fixed income portfolio versus the MIF liability duration is reasonable. Longer dated bonds would introduce greater volatility and over hedge the interest rate risk
 - The current fixed income allocation is well diversified among Treasuries, Agencies, and Corporates
 - Maintaining the current asset allocation avoids implementation and transaction costs associated with a transition
 - Mix B introduces a higher risk profile with a higher expected standard deviation than the current (4.5% vs 5.5%)
 - Mix C offers a marginally higher expected return (4.7% vs 4.8%)

**Public Work Relief Employees'
Fund
(PWRF)**

Public Work Relief Employees' Fund

Specialty Fund Description

- The PWRF fund provides workers' compensation benefits for “work-relief employees” who are engaged in any public relief employment and receiving “work-relief” in the form of public funds or goods in exchange for any service or labor rendered in connection with any public relief employment. Employers are public employer taxing districts or public employer state agencies.
- Benefits provided by fund: Injured workers covered under the PWRF are entitled to the same benefits as other injured workers without any exceptions.

Public Work Relief Employees' Fund

Current Status

- June 30, 2009 Funding Ratio = 5.9
 - \$23.4M (funded assets) / \$4M (funded liabilities)
- No reason to take additional investment risk in order to increase assets
- Duration of the liability is approximately 10 years, but given the healthy funded status there is no need to extend the fixed income duration of the assets
- Mercer suggests a conservative asset allocation approach for PWRF
 - Secure funded status
 - Reduce risk / volatility

Public Work Relief Employees' Fund

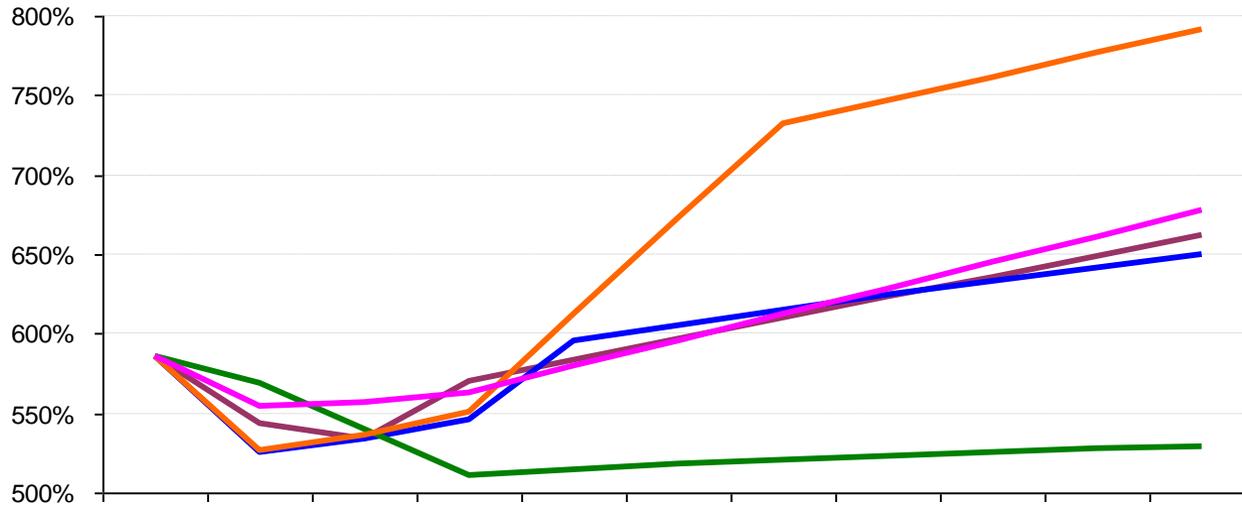
Alternative Mixes

	<u>Mix A</u> <u>(current)</u>	<u>Mix B</u>	<u>Mix C</u>
	0% Eq 100% FI	0% Eq 100% FI	0% Eq 100% FI
Equity			
US Equities - All Caps			
World x-US			
Total - Public Equity	0.0%	0.0%	0.0%
Fixed Income			
US FI - Aggregate Bonds (Dur = 4.3)		100.0%	50.0%
US FI - TIPS (Dur = 2.0)			50.0%
US FI - Intermediate (Dur = 3.9)	100.0%		
Total - Fixed Income	100.0%	100.0%	100.0%
Est. Weighted Average Duration of US Fixed Income	4	4	3
Total	100.0%	100.0%	100.0%
Total Portfolio Statistics			
Long-Term Expected Passive Annual Return	4.7%	4.9%	4.8%
Standard Deviation of Returns	4.5%	5.5%	4.5%

- Mix A represents the current asset allocation
- Mix B reflects moving the portfolio to a typical core bond portfolio
- Mix C reviews adding TIPS exposure to a typical core bond portfolio

PWRF – Current Mix

Funding Ratio Projections



	Funded Ratio at 6/30/										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Base Case	585%	544%	534%	570%	583%	597%	610%	623%	636%	649%	662%
Stagflation	585%	525%	534%	546%	596%	606%	615%	624%	633%	642%	650%
Recession	585%	569%	540%	511%	515%	518%	521%	523%	525%	527%	529%
Inflationary Growth	585%	526%	536%	551%	612%	673%	732%	747%	762%	777%	791%
Ideal Growth	585%	554%	557%	563%	580%	596%	612%	629%	645%	661%	678%

Funding ratio expected to increase under all scenarios except under the recession scenario

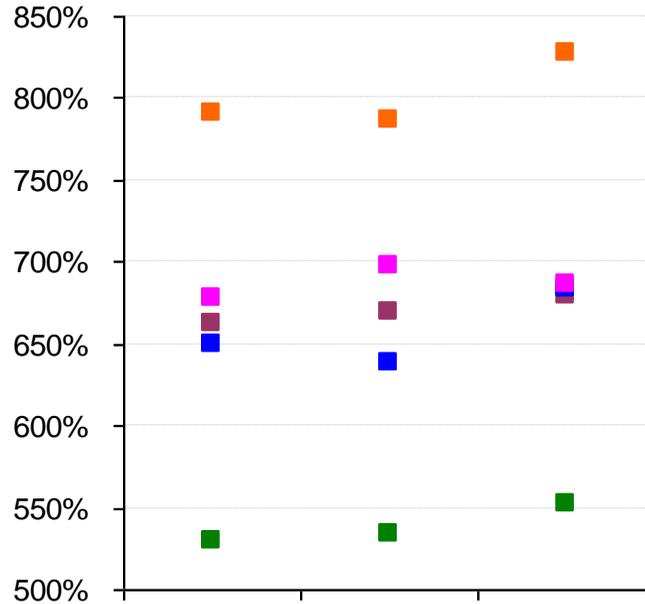
Worst Case Scenario occurs under Recession scenario, low inflation experience drives bonds yields lower, causing higher liability levels. Current asset levels are almost more than enough to offset the liability increases in the long run.

PWRF has lower initial funded status position, the funded status does not elevate as much as MIF

PWRF – Alternative Mixes

Funding Ratio in 2019

Investment Strategy
Mix A - Current (100% Interm Bond)
Mix B - 100% Aggregate Bond
Mix C - 50% Agg / 50% TIPS



Mix A – Intermediate bonds have better funding ratios for high inflation scenarios versus Mix B

Mix B – Aggregate bonds illustrate better funding ratios in low inflation scenarios and under the base case scenario in comparison to current mix

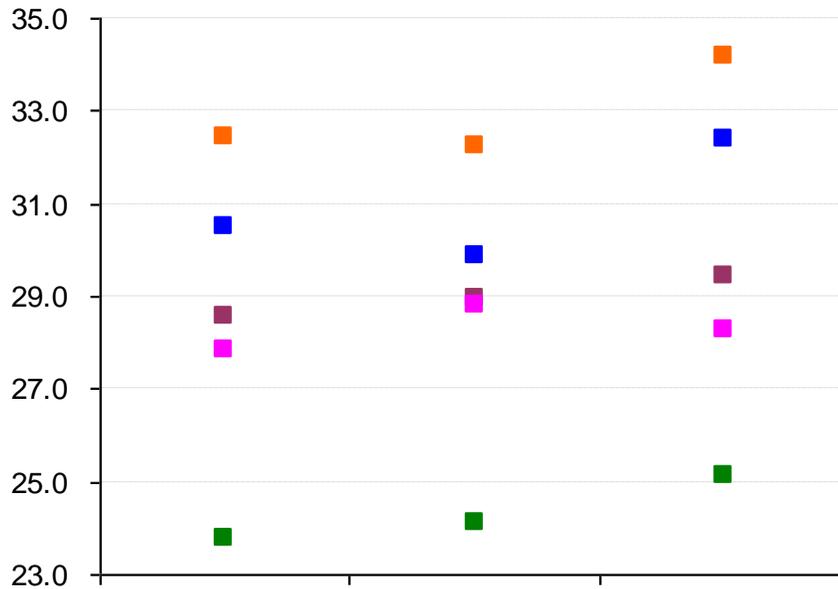
Mix C – Exposure to TIPS enhances funding ratio metrics in all scenarios except under Ideal growth

	Funded Ratio at 6/30/2019		
	Mix A	Mix B	Mix C
Base Case	662%	669%	679%
Stagflation	650%	638%	684%
Recession	529%	535%	553%
Inflationary Growth	791%	787%	828%
Ideal Growth	678%	698%	687%

PWRF – Alternative Mixes

Surplus / (Deficit) in 2019

Investment Strategy
Mix A - Current (100% Interm Bond)
Mix B - 100% Aggregate Bond
Mix C - 50% Agg / 50% TIPS



Funding ratio in dollar amount shown

Fund is expected to remain in high surplus position

Results are skewed as funding ratio surplus is heavily influenced by the growth in asset compared to smaller liabilities

(\$millions)

		Projected Surplus / (Deficit) at 6/30/2019		
		Mix A	Mix B	Mix C
Base Case		28.6	29.0	29.4
Stagflation		30.5	29.9	32.4
Recession		23.8	24.1	25.1
Inflationary Growth		32.5	32.2	34.2
Ideal Growth		27.8	28.8	28.3

Public Work Relief Employees' Fund

Discussion

- Mercer supports continued investment in Mix A (the current asset allocation)
 - The conservative risk/return profile is appropriate
 - Given the healthy funded status, a shorter duration fixed income portfolio versus the PWRF liability duration is reasonable. Longer dated bonds would introduce greater volatility and over hedge the interest rate risk
 - The current fixed income allocation is well diversified among Treasuries, Agencies, and Corporates
 - Maintaining the current asset allocation avoids implementation and transaction costs associated with a transition
 - Mix B introduces a higher risk profile with a higher expected standard deviation than the current (4.5% vs 5.5%)
 - Mix C offers a marginally higher expected return (4.7% vs 4.8%)

Appendix

Marine Industry Fund

Assumptions – Annual Report June 30, 2009

- 6/30/09 Financial Statement Liability (in thousands) = \$1,850
 - \$1,700 in Reserves/Liability
 - \$150 in Interfund payables and Other liabilities
- 6/30/09 Financial Statement Assets (in thousands) = \$17,420
 - \$17,388 in Bond and Cash
 - \$32 Other accounts receivable and Interfund receivables
- June 30, 2009 Funding Ratio = 10.2
 - \$17.4 (funded assets) / \$1.7 (funded liability)
- June 30, 2009 Discount Rate = 4.50%
- June 30, 2009 Inflation (Benefit Escalation) Assumption = 4.0%
- June 30, 2009 Medical Inflation Trend = 1st year: 6.0%, 2nd year: 7.0%, 3rd year: 8.0%, Long term: 9.0%

Marine Industry Fund

Assumptions – Sensitivities to economic changes

- Interest Rate Sensitivity
 - A 1% change in interest rate, such as from 5% to 4%, will increase the liability by 9.9% (if valuation rate is independent of the benefit escalation rate)
 - The actuary has the authority to adjust the benefit escalation rate assumption which may shorten the duration of the liability
- Inflation Sensitivity (effects 71% of the liabilities)
 - A 1% point increase in benefit escalation factor will increase the discounted liability by 7.6%
- Medical Inflation Sensitivity (effects 29% of the liabilities)
 - A 1% point increase in medical inflation will increase the discounted liability by 7.1%

Marine Industry Fund

Future Benefit Cash Flows

- Expected Benefit Payments over the next ten years (in millions, based on 2008 projection model)

Year Ending	Benefit Payments	Year Ending	Benefit Payments
2010	0.180	2015	0.114
2011	0.157	2016	0.104
2012	0.141	2017	0.099
2013	0.130	2018	0.094
2014	0.120	2019	0.090

Public Work Relief Employees' Fund

Assumptions – Annual Report June 30, 2009

- 6/30/09 Financial Statement Liability (in thousands) = \$4,019
 - \$4,000 in Reserves/Liability
 - \$19 Interfund Payables and Other Liabilities
- 6/30/09 Financial Statement Assets (in thousands) = \$23,425
 - \$23,138 in Bonds and Cash
 - \$113 Accrued Premiums
 - \$174 Investment Receivables and Accounts Receivable
- June 30, 2009 Funding Ratio = 5.9
 - \$23.4 (funded assets) / \$4.0 (funded liability)
- June 30, 2009 Discount Rate = 4.50%
- June 30, 2009 Inflation (Benefit Escalation) Assumption = 4.0%
- June 30, 2009 Medical Inflation Trend = 1st year: 6.0%, 2nd year: 7.0%, 3rd year: 8.0%, Long term: 9.0%

Public Work Relief Employees' Fund

Assumptions – Sensitivities to economic changes

- Interest Rate Sensitivity
 - A 1% change in interest rate, such as from 5% to 4%, will increase the liability by 9.7% (if valuation rate is independent of the benefit escalation rate)
- Inflation Sensitivity (effects 39% of the liabilities)
 - A 1% point increase in wage escalation factor will increase the discounted liability by 5.6%
- Medical Inflation Sensitivity (effects 61% of the liabilities)
 - A 1% point increase in medical inflation will increase the discounted liability by 6.9%

Public Work Relief Employees' Fund

Future Benefit Cash Flows

- Expected Benefit Payments over the next ten years (in millions, based on 2008 projection model)

Year Ending	Benefit Payments	Year Ending	Benefit Payments
2010	0.125	2015	0.081
2011	0.107	2016	0.079
2012	0.096	2017	0.077
2013	0.089	2018	0.077
2014	0.084	2019	0.077

Description of the Economic Environments

Base Case

Reflects current conditions as starting point; Treasury bond yields are expected to rise dramatically while corporate bond yields are rising at the very short and long end of the yield curve; equity returns, starting in year ending 2013 offer an expected risk premium over bonds.

Base Case		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
	Economic Growth		3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
	Health Care Inflation		6.0%	7.0%	8.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
	3-Month Treasury	0.19%	1.29%	2.45%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%
	2-yr Treasury	1.11%	2.03%	3.12%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%
	5-yr Treasury	2.54%	3.07%	3.84%	4.60%	4.60%	4.60%	4.60%	4.60%	4.60%	4.60%	4.60%
	10yr Treasury	3.53%	3.53%	4.44%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	30yr Treasury	4.52%	4.39%	4.74%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%
	Real 10yr TIPS	1.78%	1.85%	1.93%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
	3-Mo Corp AA	0.84%	1.83%	3.01%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%
	2-Yr Corp AA	2.97%	2.98%	3.99%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	5-Yr Corp AA	4.32%	4.05%	4.77%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
	10-Yr Corp AA	5.62%	5.08%	5.54%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
30-Yr Corp AA	6.17%	5.51%	5.85%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	
Returns	Domestic Equities		22.4%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%
	International Equities		26.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%
	Mkt Bonds		2.8%	0.4%	1.2%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%
	Interm Bonds		2.3%	0.4%	1.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
	Long Bonds		7.2%	0.2%	0.8%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%
	Long Corp		11.3%	1.3%	1.8%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%
	Long Gov		2.5%	-1.0%	-0.3%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
	Extra Long Bonds		0.3%	-4.7%	-4.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%
	Cash		0.6%	1.9%	3.0%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
	TIPS		6.04%	4.0%	4.1%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
	Private Eq		37.0%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%
Real Estate		37.7%	6.2%	6.4%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	
High Yields		19.4%	6.9%	6.9%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	

Description of the Economic Environments

Stagflation

Federal budget deficit and expansive monetary policy cause sharp increase in debt issuance; foreign investors back away from US asset ownership, causing bond yields to rise, slowing economic growth as cost of capital rises.

- Inflation and yields rise until June 2012 and stay at that level thereafter.
- Equity returns are low until June 2012 due to declining economic growth and rebound the following year.

Stagflation		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		3.5%	4.3%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Economic Growth		0.0%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Health Care Inflation		7.0%	8.5%	10.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
	3-Month Treasury	0.19%	2.09%	4.05%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
	2-yr Treasury	1.11%	2.73%	4.52%	6.30%	6.30%	6.30%	6.30%	6.30%	6.30%	6.30%	6.30%
	5-yr Treasury	2.54%	3.71%	5.10%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
	10yr Treasury	3.53%	3.53%	5.57%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%
	30yr Treasury	4.52%	4.95%	5.88%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%
	Real 10yr TIPS	1.78%	1.69%	1.59%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
	3-Mo Corp AA	0.84%	2.86%	5.08%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%
	2-Yr Corp AA	2.97%	3.91%	5.86%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%
	5-Yr Corp AA	4.32%	4.91%	6.51%	8.10%	8.10%	8.10%	8.10%	8.10%	8.10%	8.10%	8.10%
	10-Yr Corp AA	5.62%	5.88%	7.14%	8.40%	8.40%	8.40%	8.40%	8.40%	8.40%	8.40%	8.40%
	30-Yr Corp AA	6.17%	6.31%	7.45%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
Returns	Domestic Equities		15.3%	-0.7%	-0.3%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
	International Equities		19.4%	-0.2%	0.2%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%
	Mkt Bonds		-0.6%	-3.1%	-1.3%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
	Interm Bonds		-0.4%	-2.3%	-0.5%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
	Long Bonds		1.5%	-6.0%	-4.1%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
	Long Corp		5.1%	-5.4%	-3.3%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%
	Long Gov		-2.1%	-6.0%	-4.3%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
	Extra Long Bonds		-10.1%	-17.8%	-16.7%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
	Cash		0.9%	3.1%	5.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%
	TIPS		7.79%	6.9%	7.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%
	Private Eq		28.0%	-1.7%	-1.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%
	Real Estate		31.9%	-0.9%	-0.1%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%
High Yields		14.5%	1.9%	3.3%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	

Description of the Economic Environments

Recession

Growth stalls as credit concerns linger. Another round of bank failures occurs.

- Economic growth falls over a three year time period and then recovers.
- Inflation rate increases over a three year time period and remains at the lower level.
- Both intermediate and longer term bond yields decrease significantly over three years.
- Equity returns are initially low (even negative), but rebound to a lower equilibrium level.
- Fixed income returns are initially very strong, but fall to a lower equilibrium level.

Recession		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		0.5%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
	Economic Growth		-0.7%	-0.3%	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Health Care Inflation		6.0%	6.5%	6.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
	3-Month Treasury	0.19%	0.18%	0.21%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
	2-yr Treasury	1.11%	0.88%	0.82%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%
	5-yr Treasury	2.54%	1.87%	1.44%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	10yr Treasury	3.53%	3.53%	2.27%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	30yr Treasury	4.52%	3.35%	2.68%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
	Real 10yr TIPS	1.78%	1.60%	1.43%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%
	3-Mo Corp AA	0.84%	0.94%	1.25%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
	2-Yr Corp AA	2.97%	2.03%	2.09%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%
	5-Yr Corp AA	4.32%	3.08%	2.84%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%
	10-Yr Corp AA	5.62%	4.26%	3.91%	3.55%	3.55%	3.55%	3.55%	3.55%	3.55%	3.55%	3.55%
30-Yr Corp AA	6.17%	4.77%	4.39%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
Returns	Domestic Equities		7.6%	-12.9%	-15.2%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
	International Equities		12.2%	-11.8%	-13.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
	Mkt Bonds		7.1%	5.2%	4.9%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
	Interm Bonds		6.0%	4.3%	4.0%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
	Long Bonds		15.3%	10.2%	10.1%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
	Long Corp		17.3%	8.5%	8.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
	Long Gov		12.6%	11.7%	11.7%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	Extra Long Bonds		21.9%	23.0%	22.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
	Cash		0.1%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
	TIPS		6.05%	4.3%	4.7%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
	Private Eq		18.4%	-17.0%	-19.8%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Real Estate		27.1%	-9.3%	-11.0%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	
High Yields		11.7%	-4.3%	-5.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	

Description of the Economic Environments

Inflationary Growth

Uptick in broad-based inflation eases credit hangover, which inspires confidence in consumer and business sectors. Fed doesn't tighten quick enough to contain inflation.

- Similar annual inflation, yields and fixed income returns as for the Stagflation economic scenario but with higher equity returns due to stronger economic growth.

Inflationary Growth		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		3.5%	4.3%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Economic Growth		3.4%	3.7%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Health Care Inflation		6.0%	7.5%	9.0%	10.0%	11.0%	12.0%	12.0%	12.0%	12.0%	12.0%
	3-Month Treasury	0.19%	2.43%	4.71%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
	2-yr Treasury	1.11%	3.07%	5.18%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%
	5-yr Treasury	2.54%	4.01%	5.70%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%
	10yr Treasury	3.53%	3.53%	6.10%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
	30yr Treasury	4.52%	5.24%	6.44%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%
	Real 10yr TIPS	1.78%	1.85%	1.93%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
	3-Mo Corp AA	0.84%	2.86%	5.08%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%
	2-Yr Corp AA	2.97%	3.91%	5.86%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%
	5-Yr Corp AA	4.32%	4.88%	6.44%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
	10-Yr Corp AA	5.62%	5.85%	7.07%	8.30%	8.30%	8.30%	8.30%	8.30%	8.30%	8.30%	8.30%
30-Yr Corp AA	6.17%	6.29%	7.42%	8.55%	8.55%	8.55%	8.55%	8.55%	8.55%	8.55%	8.55%	
Returns	Domestic Equities		21.4%	8.0%	9.1%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
	International Equities		25.3%	8.1%	9.1%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%
	Mkt Bonds		-1.0%	-3.3%	-1.4%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%
	Interm Bonds		-0.8%	-2.6%	-0.7%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
	Long Bonds		0.9%	-6.4%	-4.3%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%
	Long Corp		5.4%	-5.0%	-3.0%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
	Long Gov		-4.3%	-8.1%	-5.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%
	Extra Long Bonds		-13.6%	-22.5%	-21.4%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
	Cash		1.0%	3.6%	5.9%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
	TIPS		6.59%	5.5%	6.3%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
	Private Eq		35.7%	9.2%	10.5%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%
	Real Estate		36.5%	5.6%	6.9%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%
	High Yields		19.3%	8.7%	10.6%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%

Description of the Economic Environments

Ideal Growth

Jobs grow; consumers continue spending resulting in economic growth; Fed completes anticipated increase in fed funds rate, minimizing fears of inflation on the part of investors; productivity gains also suppress inflation.

- Economic growth becomes stronger and rises to 4% by December 2012.
- Equities slightly boom and earn near 25% in 2010 through 2012.
- Inflation remains tame, subsides to 1.8% by December 2012.

Ideal Growth		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		2.5%	2.1%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
	Economic Growth		3.4%	3.7%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Health Care Inflation		6.0%	6.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
	3-Month Treasury	0.19%	0.99%	1.85%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
	2-yr Treasury	1.11%	1.72%	2.48%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
	5-yr Treasury	2.54%	2.71%	3.10%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
	10yr Treasury	3.53%	3.53%	3.60%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%
	30yr Treasury	4.52%	4.02%	4.01%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
	Real 10yr TIPS	1.78%	1.77%	1.76%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	3-Mo Corp AA	0.84%	1.39%	2.15%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%
	2-Yr Corp AA	2.97%	2.53%	3.09%	3.65%	3.65%	3.65%	3.65%	3.65%	3.65%	3.65%	3.65%
	5-Yr Corp AA	4.32%	3.55%	3.77%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
	10-Yr Corp AA	5.62%	4.56%	4.51%	4.45%	4.45%	4.45%	4.45%	4.45%	4.45%	4.45%	4.45%
30-Yr Corp AA	6.17%	5.07%	4.99%	4.90%	4.90%	4.90%	4.90%	4.90%	4.90%	4.90%	4.90%	
Returns	Domestic Equities		35.2%	23.2%	21.6%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%
	International Equities		38.4%	22.5%	21.1%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
	Mkt Bonds		4.9%	2.9%	3.2%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%
	Interm Bonds		4.0%	2.3%	2.7%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Long Bonds		10.9%	4.7%	4.7%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
	Long Corp		15.2%	6.0%	6.0%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%
	Long Gov		7.4%	4.9%	4.9%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%
	Extra Long Bonds		6.4%	3.1%	3.2%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Cash		0.5%	1.4%	2.3%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
	TIPS		6.38%	4.0%	3.7%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
	Private Eq		52.9%	28.2%	26.2%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%
	Real Estate		47.5%	17.6%	16.6%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
	High Yields		24.0%	12.2%	11.4%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%

MERCER



MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

DATE: March 16, 2010

TO: BWC Investment Committee
BWC Board of Directors

FROM: Bruce Dunn, CFA, Chief Investment Officer

SUBJECT: **Chief Investment Officer Recommendations**
Asset Allocation Strategy
Public Work-Relief Employees' Fund
Marine Industry Fund

The BWC Chief Investment Officer (CIO) is supportive of the existing asset allocation mix for both the Public Work-Relief Employees' Fund (PWRF) and the Marine Industry Fund (MIF) investment portfolios. This current asset allocation mix is reflected as Mix A (excluding 1% cash allocation) in the Mercer Strategic Asset Allocation Analysis report dated March, 2010 to be presented to the BWC Investment Committee at the March 25, 2010 meeting.

The current portfolio asset allocation mix for both PWRF and MIF is a 99% allocation target to intermediate bonds benchmarked to the Barclays Capital U.S. Intermediate Government/Credit (BIGC) index and a 1% allocation target to Cash benchmarked to the 3-month U.S. Treasury bill. This has been the approximate actual asset allocation mix of both funds since February 2009 when these funds first invested in a non-lending commingled fund passively managed by State Street Global Advisors (SSGA) to the BIGC benchmark index. At the end of February 2010, the market value of assets invested in this commingled fund was \$24.2 million for PWRF and \$18.1 million for MIF.

Both PWRF and MIF are extremely well funded trust funds with a June 30, 2009 funding ratio of 5.9 for PWRF and 10.2 for MIF, as represented in the referenced Mercer analysis report. Given their very strong funded status, a conservative asset mix investment strategy that both preserves and further strengthens this very strong funded status with future low-risk, steady income earning assets is clearly the appropriate strategy for these two specialty funds in the opinion of the CIO. Longer maturity bonds or any exposure to equities would increase the standard deviation of returns (defined as risk) of each portfolio which is certainly not necessary given the current funded status of these two funds. To undertake any portfolio mix change for these two funds would introduce added transition implementation and transaction costs that would be counterproductive, in the judgement of the CIO.

The long-term expected annual return of the Mix A status quo portfolio projected by Mercer is a very respectable 4.7% (exceeding the current discount rate) with a relatively low 4.5% standard deviation of return. The BIGC index is well diversified among Treasuries, Agencies and credit bonds (mostly corporates) with a high overall average quality rating of between AA1 and AA2. The index is currently comprised of approximately 49% Treasuries, 19% U.S. Agencies and 32% credits (27% corporates) by market value. The modified duration of the index is typically in the range of between 3.5 and 4.0 years with its current duration being 3.9 years. All bonds in the index have a final maturity between one and ten years and are all rated investment-grade in quality.

As a matter of information, the management fees paid to SSGA as commingled fund manager of the non-lending BIGC benchmarked index fund owned by PWRF/MIF are 4.0 basis points per annum less a 5% discount (if SSGA manages in excess of \$4 billion of BWC assets). Based on the current respective commingled fund market asset values of PWRF/MIF, annual management fees paid by PWRF and MIF amount to an estimated \$9,300 and \$7,050, respectively. The current management contract with SSGA applicable to this mandate for PWRF/MIF has a termination date of June 30, 2011 with one renewal option for an additional two-year term expiring on June 30, 2013.

Attached to this CIO recommendation are the current Sections VI.D and VI.E of the BWC Statement of Investment Policy and Guidelines (IPS) pertaining to PWRF and MIF. In addition, attached are both a marked version followed by a clean version of recommended changes to Section VI.D and VI.E of the IPS focusing on the statement of the nature of the liabilities of both of these specialty trust funds. The Mercer Strategic Asset Allocation Analysis referenced herein asserts that the duration of the liabilities of both MIF (p.5 of Mercer report) and PWRF (p.13 of Mercer report) are approximately 10 years which is long-term in nature. The red-marked changes of the IPS presented by the CIO to revise the IPS, as consistent with the Mercer study, are recommended for approval.

**The Ohio Bureau of Workers' Compensation
Statement of Investment Policy and Guidelines**

D. Public Work-Relief Employees' Fund (PWRF)

The Public Work-Relief Employees' Fund ("PWRF") provides benefits for "work-relief employees" who are engaged in any public relief employment and receiving "work-relief" in the form of public funds or goods in exchange for any service or labor rendered in connection with any public relief employment.

These liabilities are intermediate-term in nature, with an approximate duration of 3-4 years. Premiums are set each year at a level that is expected to cover the cost of future claims. These costs are discounted at a rate that is consistent with the guidelines as established by the GASB.

The Board has a long-term asset allocation policy that identifies the strategic target weights to each of the major asset classes. The table below highlights the general asset classes approved for investment and the strategic target weights. The allowable range for all target weights is reflected in the following table.

<u>Public Work-Relief Employees' Fund</u>			
<u>Investment Category</u>	<u>Target Allocation</u>	<u>Permissible Range</u>	<u>Performance Benchmark</u>
Indexed Intermediate Duration Fixed Income	99%	94-100%	Barclays Capital Intermediate U.S. Government / Credit Index
Cash and Cash Equivalents	1%	0 - 6%	3 Month U.S. Treasury Bills
Total Fixed Income	100%		
Total Public Equity	0%		
			Fund Performance Benchmark
Total: Public Work-Relief Employees' Fund	100%		<u>A weighted index consisting of:</u> 99% BC Intermediate U.S. Gov / Credit Index 1% 3 Month U.S. Treasury Bills

**The Ohio Bureau of Workers' Compensation
Statement of Investment Policy and Guidelines**

E. Marine Industry Fund (MIF)

The Marine Industry Fund (“MIF”) provides voluntary coverage to employers who have employees who work on or about navigable waters as required by the Federal Longshoremen and Harbor Workers’ Act.

These liabilities are intermediate-term in nature, with an approximate duration of 3-4 years. Premiums are set each year at a level that is expected to cover the cost of future claims. These costs are discounted at a rate that is consistent with the guidelines as established by the GASB.

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<u>Marine Industry Fund</u>			
<u>Investment Category</u>	<u>Target Allocation</u>	<u>Permissible Range</u>	<u>Performance Benchmark</u>
Indexed Intermediate Duration Fixed Income	99%	94-100%	Barclays Capital Intermediate U.S. Government / Credit Index
Cash and Cash Equivalents	1%	0 - 6%	3 Month U.S. Treasury Bills
Total Fixed Income	100%		
Total Public Equity	0%		
Total: Marine Industry Fund	100%		Fund Performance Benchmark <u>A weighted index consisting of:</u> 99% BC Intermediate U.S. Gov/Credit Index 1% 3 Month U.S. Treasury Bills

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Statement of Investment Policy and Guidelines**

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These liabilities are ~~long-term~~ in nature, with an approximate duration of ~~10~~ years. Premiums are set each year at a level that is expected to cover the cost of future claims. These costs are discounted at a rate that is consistent with the guidelines as established by the GASB.

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Total Fixed Income	100%		
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			Fund Performance Benchmark
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Indexed Intermediate Duration Fixed Income	99%	94-100%	Barclays Capital Intermediate U.S. Government / Credit Index
Cash and Cash Equivalents	1%	0 - 6%	3 Month U.S. Treasury Bills
Total Fixed Income	100%		
Total Public Equity	0%		
Total: Marine Industry Fund	100%		Fund Performance Benchmark <u>A weighted index consisting of:</u> 99% BC Intermediate U.S. Gov/Credit Index 1% 3 Month U.S. Treasury Bills

**The Ohio Bureau of Workers' Compensation
Statement of Investment Policy and Guidelines**

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Cash and Cash Equivalents	1%	0 - 6%	3 Month U.S. Treasury Bills
Total Fixed Income	100%		
Total Public Equity	0%		
			Fund Performance Benchmark
Total: Public Work-Relief Employees' Fund	100%		<u>A weighted index consisting of:</u> 99% BC Intermediate U.S. Gov / Credit Index 1% 3 Month U.S. Treasury Bills

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Indexed Intermediate Duration Fixed Income	99%	94-100%	Barclays Capital Intermediate U.S. Government / Credit Index
Cash and Cash Equivalents	1%	0 - 6%	3 Month U.S. Treasury Bills
Total Fixed Income	100%		
Total Public Equity	0%		
Total: Marine Industry Fund	100%		Fund Performance Benchmark <u>A weighted index consisting of:</u> 99% BC Intermediate U.S. Gov/Credit Index 1% 3 Month U.S. Treasury Bills

**Ohio Bureau of Workers' Compensation
Invested Assets Market Value Comparison
TOTAL FUNDS**

<u>Asset Sector</u>	<u>Market Value Feb. 28, 2010</u>	<u>% Assets</u>	<u>Market Value Jan 31, 2010</u>	<u>% Assets</u>	<u>Increase(Decrease) Prior Month-End</u>	<u>% Change</u>	<u>Market Value June 30, 2009</u>	<u>% Assets</u>	<u>Increase (Decrease) Prior Fiscal Year-End</u>	<u>% Change</u>
Bonds	12,818,765,930	67.9%	12,796,886,385	69.2%	21,879,545	0.2%	\$13,230,413,310	76.9%	(411,647,380)	-3.1%
Equity	5,490,638,726	29.1%	5,365,098,766	29.0%	125,539,960	2.3%	3,522,150,726	20.5%	1,968,488,000	55.9%
Net Cash - OIM	73,186,149	0.4%	101,173,785	0.5%	(27,987,636)	-27.7%	27,624,432	0.2%	45,561,717	164.9%
Net Cash - Operating	448,365,137	2.4%	167,490,713	0.9%	280,874,424	167.7%	366,634,742	2.1%	81,730,395	22.3%
Net Cash - SIEGF	45,916,391	0.2%	49,865,098	0.3%	(3,948,707)	-7.9%	54,583,234	0.3%	(8,666,843)	-15.9%
Total Net Cash	567,467,677	3.0%	318,529,596	1.7%	248,938,081	78.2%	448,842,408	2.6%	118,625,269	26.4%
Total Invested Assets	\$18,876,872,333	100%	\$18,480,514,747	100%	\$396,357,586	2.1%	\$17,201,406,444	100%	\$1,675,465,889	9.7%

OIM: Outside Investment Managers

SIEGF: Self-Insured Employers' Guaranty Fund

Market Value of Bonds and Stocks includes accrued investment income.

Net Cash includes the impact of net trade receivables/payables, accrued money market earnings, and accrued investment manager fees.

February 2010/January 2010 Comparisons

- Net investment income in February 2010 was \$119 million representing a monthly net portfolio return of 0.7% (unaudited).
- Bond market value increase of \$21.9 mm comprised of \$37.3 mm in interest income, \$(42.4) mm in OIM realized/unrealized losses (\$42.1 mm net realized gain), and by \$27.0 mm in OIM/TM net purchases, representing a monthly net return of +0.0% (unaudited).
- Equity market value increase of \$125.5 mm comprised of \$8.4 mm of dividend income, \$116.7 mm in net realized/unrealized gains (\$12.1 mm net realized loss) and by \$0.4 mm in OIM/TM net purchases, representing a monthly net return of +2.3% (unaudited).
- Net cash balances increased \$248.9 mm in February 2010 largely due to increased operating cash balances (\$280.9 mm), offset partially by \$28.0 mm in OIM/TM net purchases. JPMorgan US Govt. money market fund had 30-day average yield of 0.03% for February 2010 (0.05% for Jan10) and 7-day average yield of 0.02% on 2/28/10 (0.04% on 1/31/10).

February 2010/June 2009 FYTD Results

- Net investment income for FYTD2010 was \$1,667 million comprised of \$474 mm of interest/dividend income and \$1,198 mm of net realized/unrealized gains (\$566 mm net realized loss), offset by \$4 mm in fees, representing a FYTD2010 net portfolio return of +9.8% (unaudited).
- Bond market value decrease of \$(412) mm for FYTD2010 comprised of \$415 mm in interest income and \$502 mm of net realized/unrealized gains (\$41 mm net realized gain), offset by \$1,274 mm in OIM/TM net bond sales and \$55 mm in OIM rebalancing redemptions, representing a FYTD2010 net return of +7.1% (unaudited).
- Equity market value increase of \$1,968 mm for FYTD2010 comprised of \$55 mm in dividend income, \$696 mm in realized/unrealized gains (\$607 mm net realized loss), \$1,220mm in OIM/TM net purchases and \$55 mm in portfolio OIM rebalancing purchases, offset by \$58 mm in portfolio redemptions for operations, representing a FYTD2010 net return of +19.4% (unaudited).

Ohio Bureau of Workers' Compensation Investment Asset Allocation - Combining Schedule As of February 28, 2010

(in thousands)

	SIF	% Trust	DWRF	% Trust	BLF	% Trust	PWRF	% Trust	MIF	% Trust	SIEGF	% Trust	ACF	% Trust	Totals	% of Total
Bonds	\$ 11,636,313	67.2%	\$ 937,946	77.7%	\$ 202,163	78.5%	\$ 24,236	99.2%	\$ 18,108	97.4%	\$ -	0.0%	\$ -	0.0%	\$ 12,818,766	67.9%
Long Credit	5,023,705	29.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	5,023,705	26.6%
Long Government	1,277,585	7.4%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1,277,585	6.9%
Long Gov/Credit	-	0.0%	685,802	56.8%	149,407	58.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	835,209	4.4%
TIPS	2,930,787	16.9%	252,144	20.9%	52,756	20.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,235,687	17.1%
Aggregate	2,404,236	13.9%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2,404,236	12.7%
Intermediate Gov/Credit	-	0.0%	-	0.0%	-	0.0%	24,236	99.2%	18,108	97.4%	-	0.0%	-	0.0%	42,344	0.2%
Stocks	5,175,143	29.9%	260,264	21.5%	55,232	21.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	5,490,639	29.1%
Russell 3000	3,548,175	20.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,548,175	18.8%
MSCI ACWI ex-U.S.	1,614,689	9.4%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1,614,689	8.6%
S&P 500	-	0.0%	259,671	21.5%	55,106	21.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	314,777	1.7%
Dividends Receivable	8,401	0.0%	593	0.0%	126	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	9,120	0.0%
Miscellaneous	3,878	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,878	0.0%
Net Cash & Cash Equivalents	508,920	2.9%	9,144	0.8%	59	0.0%	191	0.8%	478	2.6%	45,916	100.0%	2,759	100.0%	567,467	3.0%
Total Cash & Investments	\$ 17,320,376	100.0%	\$ 1,207,354	100.0%	\$ 257,454	100.0%	\$ 24,427	100.0%	\$ 18,586	100.0%	\$ 45,916	100.0%	\$ 2,759	100.0%	\$ 18,876,872	100.0%

Market value of bonds includes accrued investment income.

Net cash and cash equivalents includes the impact of net trade receivables/payables, accrued money market earnings, and accrued investment manager fees.

State Insurance Fund (SIF)

Overall SIF allocation to 70% bonds/30% stocks from 80% bonds/20% stocks was completed in December, 2009 (new asset allocation transitions began in July, 2009). Transitions included the Russell 3000, Barclays US Aggregate, the Long Credit/Government split and four tranches of the international equity mandate which completes the overall new asset allocation for SIF by asset class. Final placement transitions to approved target investment managers are anticipated to continue through First Quarter and into Second Quarter, 2010 as legal contracting and background verifications are completed.

The equity indices returns of the Russell 3000 (+3.39%) and the S&P 500 (+3.10%) benchmarks increased for the month of February. The MSCI ACWI ex-U.S. (+0.00%) benchmark remained flat for the month of February. The bond indices return for U.S. TIPS Index decreased (-1.16%) modestly offset by increases in the U.S. Aggregate Bond Index (+0.37%), Barclays Capital Long Government Term Index (+0.32%) and the Barclays Capital Long Credit Index (+0.28%) in February. The SIF overall slightly negative bond performance combined with the strong positive performance in equities for the month of February resulted in the overall decrease in bond asset allocation from 68.6% at end of January allocation to 67.2% at end of February (while equity remained constant at 29.9% due to strong equity monthly returns).

Cash allocations increased from 1.5% at end of January to 2.9% at end of February due to an increase in net SIF operating cash largely due to premium collection of \$280.9 million partially offset by decreased investment manager cash balances of \$28.0 million.

Disabled Workers' Relief and Coal Workers' Pneumoconiosis Funds (DWRF and BLF)

BWC Board of Directors' Investment Committee approved the Coal Workers' Pneumoconiosis Fund new asset allocation at the December, 2009 meeting and the Disabled Workers' Relief Fund new asset allocation at the January, 2010 meeting.

PWRF, MIF, SIEGF

Mercer Consultant presented a preliminary asset allocation for PWRF and MIF in February, 2010. Further consultant (Mercer) presentations and approval of asset allocation for PWRF and MIF are anticipated for the March/April, 2010 Investment Committee meetings. The SIEGF analysis is anticipated for Summer, 2010.

	Fund Asset Allocation:			Total
	Equity	Bonds	Cash	
SIF	30%	69%	1%	100%
DWRF	30%	69%	1%	100%
BLF	20%	79%	1%	100%
PWRF		99%	1%	100%
MIF		99%	1%	100%
SIEGF			100%	100%
ACF			Not Applicable	

SIF: State Insurance Fund

DWRF: Disabled Workers' Relief Fund
BLF: Coal Workers' Pneumoconiosis Fund

PWRF: Public Workers' Relief Fund
MIF: Marine Industry Fund

SIEGF: Self-Insured Employers Guaranty Fund
ACF: Administrative Cost Fund

Ohio Bureau of Workers' Compensation Investment Asset Allocation - Combining Schedule

As of January 31, 2010

(in thousands)

	SIF	% Trust	DWRF	% Trust	BLF	% Trust	PWRF	% Trust	MIF	% Trust	SIEGF	% Trust	ACF	% Trust	Totals	% of Total
Bonds	\$ 11,611,929	68.6%	\$ 941,637	78.5%	\$ 201,153	78.6%	\$ 24,135	99.2%	\$ 18,032	98.1%	\$ -	0.0%	\$ -	0.0%	\$ 12,796,886	69.2%
Long Credit	4,977,875	29.4%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	4,977,875	26.9%
Long Government	1,271,404	7.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1,271,404	6.9%
Long Gov/Credit	-	0.0%	686,859	57.2%	147,839	57.8%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	834,698	4.5%
TIPS	2,962,249	17.5%	254,778	21.3%	53,314	20.8%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,270,341	17.7%
Aggregate	2,400,401	14.2%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2,400,401	13.0%
Intermediate Gov/Credit	-	0.0%	-	0.0%	-	0.0%	24,135	99.2%	18,032	98.1%	-	0.0%	-	0.0%	42,167	0.2%
Stocks	5,059,516	29.9%	252,087	21.0%	53,496	20.9%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	5,365,099	29.1%
Russell 3000	3,435,706	20.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,435,706	18.6%
MSCI ACWI ex-U.S.	1,615,526	9.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1,615,526	8.7%
S&P 500	-	0.0%	251,823	21.0%	53,440	20.9%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	305,263	1.8%
Dividends Receivable	4,406	0.0%	264	0.0%	56	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	4,726	0.0%
Miscellaneous	3,878	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,878	0.0%
Net Cash & Cash Equivalents	257,531	1.5%	6,348	0.5%	1,294	0.5%	201	0.8%	348	1.9%	49,865	100.0%	2,943	100.0%	318,530	1.7%
Total Cash & Investments	\$ 16,928,976	100.0%	\$ 1,200,072	100.0%	\$ 255,943	100.0%	\$ 24,336	100.0%	\$ 18,380	100.0%	\$ 49,865	100.0%	\$ 2,943	100.0%	\$ 18,480,515	100.0%

Market value of bonds includes accrued investment income.

Net cash and cash equivalents includes the impact of net trade receivables/payables, accrued money market earnings, and accrued investment manager fees.

State Insurance Fund (SIF)

Overall SIF allocation to 70% bonds/30% stocks from 80% bonds/20% stocks was completed in December, 2009 (new asset allocation transitions began in July, 2009). Transitions included the Russell 3000, Barclays US Aggregate, the Long Credit/Government split and four tranches of the international equity mandate which completes the overall new asset allocation for SIF by asset class. Final placement transitions to approved target investment managers are anticipated to continue through First Quarter and into Second Quarter, 2010 as legal contracting and background verifications are completed.

The equity indices returns of the MSCI ACWI ex-U.S. (-4.89%), Russell 3000 (-3.60%) as well as the S&P 500 (-3.60%) benchmarks all decreased for the month of January. This resulted in an overall decrease in equity asset allocation from 31.0% to 29.9% over the month of January, 2010. All bond indices returns increased in January: Barclays Capital Government Long Term Index (+2.56%), U.S. TIPS Index (+1.61%), Barclays Capital Credit Long Term Index (+1.53%) and the U.S. Aggregate Bond Index (1.53%). The positive bond performance combined with the negative performance in equities resulted in the overall increase in bond asset allocation from 67.3% at end of December to 68.6% at end of January.

Cash allocations decreased from 1.7% at end of December to 1.5% at end of January largely due to a reduction in net SIF operating cash of \$70 million partially offset by increased investment manager cash balances of \$36 million.

Disabled Workers' Relief and Coal Workers' Pneumoconiosis Funds (DWRF and BLF)

BWC Board of Directors' Investment Committee approved the Coal Workers' Pneumoconiosis Fund new asset allocation at the December, 2009 meeting and the Disabled Workers' Relief Fund new asset allocation at the January, 2010 meeting.

PWRF, MIF, SIEGF

Mercer Consultant is anticipated to present initial asset allocation analysis in February/March, 2010 meetings. The SIEGF fund analysis is anticipated for Summer, 2010.

	Fund Asset Allocation:			Total
	Equity	Bonds	Cash	
SIF	30%	69%	1%	100%
DWRF	30%	69%	1%	100%
BLF	20%	79%	1%	100%
PWRF		99%	1%	100%
MIF		99%	1%	100%
SIEGF			100%	100%
ACF			Not Applicable	

SIF: State Insurance Fund

DWRF: Disabled Workers' Relief Fund
BLF: Coal Workers' Pneumoconiosis Fund

PWRF: Public Workers' Relief Fund
MIF: Marine Industry Fund

SIEGF: Self-Insured Employers Guaranty Fund
ACF: Administrative Cost Fund

INVESTMENT DIVISION

TO: Marsha Ryan, Administrator
BWC Investment Committee
BWC Board of Directors

FROM: Bruce Dunn, CFA, Chief Investment Officer

DATE: March 15, 2010

SUBJECT: CIO Report February, 2010

Fiscal Year 2010 Goals

The Investment Division has three major goals for fiscal year 2010. These goals and brief comments on action plans for each goal follow:

1. Provide support and execute new BWC Investment Policy resulting from investment consultant Asset-Liability studies.
2. Explore for investment consideration and subsequently initiate implementation processes pertaining to appropriate identified subject matters.
3. Continued establishment and execution of appropriate internal investment controls and compliance procedures.

Strategic Goal One – PORTFOLIO TRANSITION

BWC investment consultant Mercer completed an asset-liability study and related investment strategy recommendation for the State Insurance Fund that was approved by the Investment Committee and BWC Board of Directors at their respective March, 2009 meetings. A new Investment Policy Statement reflecting the new approved investment strategy target asset allocation for the State Insurance Fund was approved by the Investment Committee and BWC Board of Directors at their respective April, 2009 meetings.

As a result of these important actions, the Investment Division issued an RFP document on July 2, 2009 for Passive Index Management Services inviting proposals from qualified passive index investment managers for one or more of eight investment class mandates, six of which are the benchmark index mandates for the State Insurance Fund under its new targeted portfolio asset allocation as well as two holdover benchmark index mandates that remain applicable for the Disabled Workers Fund and the Coal Workers Fund.

The Bureau received four qualified responses to this RFP on August 4, 2009. The RFP Evaluation Committee has evaluated these RFP responses and has conducted a thorough and complete RFP evaluation process. Finalists for recommendation for each of the six asset class mandates of the State Insurance Fund were presented to and approved by the Investment Committee and Board of Directors at the monthly scheduled meetings over the period September, 2009 through January, 2010.

During the interim period until these finalist managers were identified and ultimately approved by the Board and under contract, a detailed asset allocation transition implementation plan approved by the Investment Committee and Board of Directors at their respective May, 2009 meetings is being executed by the Investment Division with approved BWC transition managers. This plan identified five distinct asset class transitions and prioritized each transition with an expected timeline. This plan enabled the State Insurance Fund to achieve its targeted asset class mandate exposure for its approved new asset class mandates (intermediate duration bonds, international equities, small/mid cap U.S. equities represented in the Russell 3000 index) months sooner than when new target asset managers can be funded.

The Investment Division will support investment consultant Mercer as necessary to perform and complete asset-liability studies on each of five speciality trust funds (Disabled Workers Fund, Coal Workers Fund, Public Work-Relief Employees Fund, Marine Industry Fund, Self Insured Employers Guarantee Fund) for the purpose of presenting investment strategy recommendations for each of these funds for consideration by the Investment Committee and Board.

Mercer did present a final strategic asset allocation analysis on the Disabled Workers Fund and the Coal Workers Fund at the December, 2009 and January, 2010 Investment Committee meetings for consideration. The Investment Committee and Board of Directors approved the targeted asset allocation recommendations of Mercer and the CIO for each of these speciality funds at these respective meetings. The BWC Investment Policy Statement reflecting the new portfolio asset allocation targets for these two speciality funds were revised and also approved by the BWC Board of Directors at these respective meetings.

Mercer is to present a strategic asset allocation analysis on the Public Work-Relief Employees' Fund and Marine Industry Fund at the March, 2010 Investment Committee meeting for consideration. Mercer and the CIO will be making recommendations on the targeted asset allocation for both of these speciality funds at this meeting.

The Investment Division has and will provide assistance as desired by the Investment Committee in revising the BWC Investment Policy Statement to accommodate the implementation and execution of new asset class mandates for all affected BWC portfolios.

Strategic Goal Two – NEW INVESTMENT CONSIDERATIONS

Over the course of fiscal year 2010, the Investment Division intends to explore for investment consideration certain additional identified asset classes as well as the potential employment of active investment management of certain to be identified asset classes. The employment of active management is closely associated with any prospective minority manager program to be implemented by the Investment Division upon consideration and approval by the Investment Committee and Board.

The Mercer asset-liability study for the State Insurance Fund presented to the Investment Committee in March, 2009 suggests in its Mix 5 strategy that a 5% asset allocation to high yield bonds and a further 5% asset allocation to alternative investments (2 ½% to each of private equity and real estate) provides a higher long-term expected portfolio rate of return and lower standard deviation of expected returns than alternative mixes presented in this Mercer study that either exclude one or both of these two asset classes.

A three-step phase timeline for addressing investment policy decisions was presented by Mercer in its asset-liability study that logically addresses each of these investment considerations mentioned above. The Investment Division is in the process of implementing Phase 1 presented in this study for the State Insurance Fund as reflected in the Investment Policy Statement revisions approved in April, 2009 by the Investment Committee and Board. It is anticipated that Phase 1 will largely be completed by sometime in the January-March, 2010 quarter. Phase 2 and Phase 3 presented in the Mercer study addresses high yield bonds, alternative investments, active management and minority manager engagement. Once Phase 1 is largely completed, the Investment Division will focus on Phase 2 and Phase 3 topics in close coordination with Mercer and the Investment Committee over the second half of fiscal year 2010 (Jan-June 2010). Appropriate and necessary education will be provided to the Investment Committee by Mercer working closely with the Investment Division.

One important additional subject that will be explored during the second half of fiscal year 2010 involves the daily cash management of all trust fund portfolios by the Investment Division. The BWC Fiscal and Planning Division currently manages all cash balances of each of these portfolios, including operating cash, with virtually all cash being invested in a single U.S. government money market fund managed by JP Morgan that is utilized as an overnight cash sweep vehicle. The Investment Division intends to explore expanding the use of other higher yielding money market funds available as well as direct investments in short-term money market investments (commercial paper, certificates of deposit, repurchase agreements, etc.) in order to improve investment income and returns on its cash investments while maintaining desired liquidity.

Strategic Goal Three – INTERNAL INVESTMENT PROCEDURES

The Investment Division will continue to establish and improve upon internal investment policies and procedures. Such procedures will be written and mapped through the use of the Web Methods schematic mapping process. Among the procedures recently addressed in fiscal year 2010 were policies and procedures regarding the selection of transition managers. The BWC Internal Audit Division will be engaged as appropriate in auditing the Investment Division internal policies and processes.

The Investment Division has previously focused on establishing internal policies and processes on management oversight of the passive style investment managers, compliance, performance reporting, portfolio rebalancing, RFP/RFQ/RFI processes vendor invoice payments, as well as other investment activities to support the BWC Investment Policy. Internal processes will also be developed for the monitoring of active style investment managers in advance of the anticipated selection and engagement of any such managers as an outcome of any new active investment strategy approved. The formulation of proper detailed policies and processes with regards to potential Investment Division cash management of portfolio assets will also be essential.

Passive Index Management Services Master RFP

There were four qualified responses received by the Bureau on August 4, 2009 for its RFP for Passive Index Management Services that was issued on July 2, 2009. This master RFP includes eight investment class mandates consisting of each of the six bond or stock benchmark index mandates under its new targeted portfolio asset allocation for the State Insurance Fund as well as two holdover benchmark index mandates that remain applicable for the Disabled Workers Fund and the Coal Workers Fund.

The four respondents to this RFP were Barclays (now BlackRock), Mellon, Northern Trust and State Street. Three of these four respondents provided proposals on each of the eight distinct asset class mandates of the RFP. The other respondent provided proposals on all but one mandate, the exception being the international equities mandate.

The BWC RFP Evaluation Committee has completed the grading of the RFP proposals. The RFP Evaluation Committee has identified investment manager finalists for each of the six asset class mandates for the State Insurance Fund. Further due diligence analysis is conducted by members of the RFP Evaluation Committee with each prospective investment manager finalist for each mandate, including full-scale on-site meetings, before any investment manager finalists are confirmed by the RFP Evaluation Committee for presentation to the Investment Committee.

The Evaluation Committee presented investment manager finalists for the State Insurance Fund for recommendation to the Investment Committee and Board for consideration at the monthly scheduled meetings over the period September, 2009 through January, 2010. Each of these recommended finalist managers were approved for specific targeted asset class mandates by the Investment Committee and Board. The Transition Activity Update section of this report that follows provides updated information on certain investment manager finalists approved by the Investment Committee and Board at each of the respective September, 2009 through January, 2010 monthly meetings.

Mercer completed and presented a strategic asset allocation analysis for the Coal Workers Fund at the December, 2009 Investment Committee meeting. A new asset allocation mix recommended by both Mercer and the CIO was approved for the Coal Workers Fund by the Investment Committee and Board of Directors at their respective December, 2009 meetings. This new asset allocation mix maintained an 80/20 fixed income/equity asset allocation mix but added a new asset class for both fixed income (intermediate duration bonds) and equities (non-US equities) in addition to two existing asset classes (TIPS fixed income and U.S. equities) retained. Mercer completed and presented a strategic asset allocation analysis for the Disabled Workers Fund at the January, 2010 Investment Committee meeting. A new asset allocation for this fund recommended by the CIO and Mercer was approved by the Investment Committee and Board of Directors at their respective January, 2010 meetings. This recommendation included the same four asset classes approved the prior month for the Coal Workers Fund, although the recommended asset allocation mixes differ between the two funds. The new asset allocation mix for the Disabled Workers Fund is a 70/30 fixed income/equity mix. The BWC RFP Evaluation Committee presented investment manager finalists selected and recommended for each of the four approved fixed income (excluding cash) and equities mandates for each of the Disabled Workers Fund and Coal Workers Fund to the Investment Committee and Board for consideration at the February, 2010 meeting. Each of these recommended finalist managers were approved for specific targeted asset class mandates by the Investment Committee and Board at their respective February, 2010 meetings.

Transition Activity Update

The Priority #1 Transition for the State Insurance Fund (SIF) involving the investment in fixed income securities of the broad Barclays Capital U.S. Aggregate Index commenced in late July, 2009 and was essentially completed in mid-August, 2009 by the transition manager chosen by the BWC Transition Manager Evaluation Committee. This U.S. Aggregate Index has a targeted 15% asset allocation for the SIF portfolio under its new Investment Policy Statement. A total of approximately \$2,327 million of invested assets were allocated to this transition whereby approximately \$2,204 million of assets at market value were contributed from the Long Government bond portfolio (mostly bonds with some cash) and the remaining approximately \$123 million in market value were contributed from the Long Credit bond portfolio. All of these Long Credit bonds were in-kind transferred to the transition account to be strategically retained by the transition manager to represent the long credit bond portion (approximately 5%) of the target U.S. Aggregate Index. Over approximately a three-week period, the BWC transition manager sold longer duration bonds received from the legacy Long Government bond portfolio and purchased shorter duration bonds represented in the target benchmark index. The transition manager reduced the duration of this \$2.3 billion transition account bond portfolio from 11.7 years to the target benchmark index duration of 4.4 years by the end of the second day of heavy trading. This significant achievement was accomplished by selling the longest duration bonds first and accumulating short duration securities and cash in order to achieve the portfolio duration target of the U.S. Aggregate bond index as quickly as feasible. Once the duration target of the target benchmark bond index was achieved, additional trading was conducted by the transition manager to both maintain the duration target of this transition account consistent with the target benchmark index while also continually reducing tracking error to the index by accumulating additional bonds represented in the target benchmark index for the transition account portfolio to better match the asset sector profile of the index.

Since mid-August 2009 when the Priority #1 Transition account portfolio was determined by the transition manager to be sufficiently correlated in performance to the target benchmark index, the BWC transition manager has been serving as an interim index investment manager for the Bureau. State Street Global Advisors (SSGA) was recommended by the RFP Evaluation Committee and approved by the Board as the single finalist investment manager for the U.S. Aggregate index mandate at the October, 2009 Board meeting. Necessary background checks on the identified index management team of the approved target asset manager(s) and legal contracting of the management services agreement were completed by late December, 2009, enabling the transition account assets to be transferred to SSGA as the chosen finalist target manager in late December, 2009. The net market asset value of the assets involved in this U.S. Aggregate index mandate transfer was approximately \$2.375 billion.

The Investment Division has now completed all four phases of the Priority #2 Transition for SIF involving investments in a targeted 10% asset allocation in non-U.S. equities of the All Country World Index (ACWI ex-US). The final fourth stage of this transition was completed in mid-December, 2009. The first three phases of this transition occurred between late August and early November, 2009. The BWC transition manager chosen by the BWC Transition Manager Evaluation Committee for this specific transition largely sold Long Government bonds (in first two transition phases) and TIPS (in third transition phase) that were all transferred in-kind to the new transition account for the purpose of funding the purchase of non-U.S. equities with approximate initial respective market values aggregating \$1,199 million to date. Each transition varied between \$375-425 million in assets sold to fund the international equities purchases. The final phase of this Priority #2 Transition involved the transfer of cash assets valued at approximately \$425 million raised from the sale of U.S. equities in the Priority #3 Transition account as directed by BWC. These assets sold consisted of U.S. equities benchmarked to the Russell 3000 index. These cash assets were transferred to the Priority #2 Transition account to fund this final purchase phase of non-U.S. equities to achieve its targeted 10% asset allocation for SIF. The reason for U.S. equities becoming the funding source for this final purchase phase for non-U.S. equities in the Priority #2 Transition was because the U.S. equities market value in the SIF portfolio began to exceed its 23% target asset allocation upper limit range

due to its recent significant outperformance compared to the SIF fixed income asset classes. By the Investment Division exercising this funding strategy for this final phase of the Priority #2 Transition, the SIF portfolio was assured of being within its target ranges for each of its asset classes at the end of December, 2009 so that no portfolio rebalancing activity was necessary in early January, 2010. Legal requirements for some of the underlying emerging market country non-securities lending commingled funds being launched as well as the master commingled fund being launched that BWC will invest in have recently been successfully addressed and completed by the Board approved single finalist investment manager (BlackRock, formerly Barclays Global Investors). With the completion early in February, 2010 of all necessary legal requirements for the creation of these new commingled funds, legal contracting with BlackRock as the exclusive investment manager of non-U.S. equity assets of SIF was completed so that the transfer of SIF assets from the Priority #2 transition account to the newly created master commingled fund could occur. This transfer of assets occurred over the last week of February, 2010 with the initial cost basis of the commingled fund units being \$1.612 billion.

The Priority #3 Transition for SIF involving the transition of the domestic U.S. equity portfolio (\$3.8 billion market value) was executed in October, 2009 by the transition manager chosen by the BWC Transition Manager Evaluation Committee. This transition included a change in the benchmark index for this 20% targeted asset allocation mandate to the broad Russell 3000 Index from the large-cap stock S&P 500 Index. All 500 stocks held in the SIF S&P 500 index separate account managed by Northern Trust (valued at \$3.75 billion) were transferred in-kind to the transition account. The transition manager implemented the Priority #3 Transition by selling a portion (15-20% on average) of each of the S&P 500 stocks received into the transition account in order to fund many of the mid-cap and small-cap stocks represented in the Russell 3000 index. These sales aggregated \$715 million in market value. This transition manager retained the remaining shares of each of the S&P 500 stocks as those stocks are included in the Russell 3000 index and represent approximately 85% of the total current market value of the benchmark index. As mentioned in the preceding comments regarding the Priority #2 Transition, approximately \$425 million in cash from sale proceeds of assets were transferred out of the Priority #3 Transition account in mid-December, 2009 to fund the final purchase phase of the Priority #2 Transition.

Northern Trust Global Investments was recommended by the RFP Evaluation Committee and approved by the Board in December, 2009 as a passive index manager for the SIF U.S. Equities mandate for a targeted 14% asset allocation. Mellon Capital Management was recommended by the RFP Evaluation Committee and approved by the Board in January, 2010 as the second passive index manager for the SIF U.S. equities mandate for the remaining 6% targeted asset allocation of this asset class.

Legal contracting and background checks are proceeding with all approved SIF, Disabled Workers Fund and Coal Workers Fund investment managers. It is the goal of the Investment Division that all necessary asset class transfers to approved finalist investment managers for these three trust funds will be completed during the second quarter of 2010. A transition manager will need to be engaged to implement the necessary asset class mandate shifts recently approved by the Board for both the Disabled Workers Fund and Coal Workers Fund.

The assets of the SIF U.S. Long Government portfolio managed by SSGA aggregating \$522 million in market value were transferred in-kind to BlackRock on January 28, 2010. BlackRock was approved as the exclusive passive investment manager of this SIF mandate resulting from the RFP process. BlackRock already managed \$746 million market value of long U.S. government bonds for SIF on this transfer date.

A large portion of the SIF U.S. TIPS portfolio managed by SSGA aggregating \$2.063 billion in market value was transferred in-kind to BlackRock on February 24, 2010. BlackRock was approved as the largest passive investment manager of this SIF asset class mandate for a targeted 12% of SIF total portfolio market value resulting from the RFP process, with State Street as an existing SIF TIPS passive manager being reduced to a targeted 5% from a targeted 17% of total SIF portfolio market value.

A portion of the SIF U.S. Long Credit fixed income portfolio managed by SSGA aggregating \$486 million in market value was transferred in-kind to BlackRock on March 3, 2010. BlackRock was approved as a passive investment manager for this SIF mandate for a targeted 8% of SIF total portfolio market value resulting from the RFP, with State Street as a SIF U.S. Long Credit passive fixed income manager representing a targeted 20% of total SIF portfolio market value. BlackRock already managed \$945 million market value of long credit bonds for SIF on this transfer date.

Compliance

The investment portfolios were in compliance with the BWC Investment Policy at the end of February, 2010.

Quarterly Investment Manager Meetings Summary (Fourth Quarter 2009)

BlackRock Institutional Trust Company

(Passive Long Government Fixed Income; Passive Long Credit Fixed Income)

The BWC investment staff and Chief Operating Officer Raymond Mazzotta met with the BlackRock Institutional Trust Company (BlackRock) fixed income strategist (Chris Barr) and the BWC primary relationship manager on February 2, 2010 at the Investment Division offices.

The acquisition of Barclays Global Investors (BGI) by BlackRock was completed as scheduled on December 1, 2009. Virtually all post-merger senior level management positions have been determined. The combined BlackRock/BGI organization now manages approximately \$3.2 trillion of client assets with a well-balanced distribution of active and passive management styles as well as a balanced asset class mix of equities, fixed income, cash management, alternative assets and advisory services offered to clients. BlackRock continues to manage well its securities lending activities and, unlike some competitors, it has no outstanding client securities lending related litigation. Its investment policy for managing cash collateral funds supporting securities lending has become more conservative with much shorter duration targets on cash collateral management with higher quality. BlackRock continues to exhibit rapid growth in assets of its ishares exchange-traded funds (ETF). Its TIPS ishare ETF is over \$20 billion in assets now and recent growth has been \$1 billion per month. BlackRock is experiencing large and growing institutional demand by institutions for its ETF's which are being utilized to quickly establish asset class positions as well as to change asset class mixes by large investors.

The fourth quarter of 2009 was the first full quarter of management by BlackRock of the separate account SIF Long Government and Long Credit fixed income portfolios after the BWC initiated split on August 13, 2009 of the portfolios from the previously combined Long Government/Credit managed portfolio totalling \$1.63 billion market value managed by BGI. As reported by BlackRock, the new SIF Long Government portfolio had a total return of negative 5.08% compared to the benchmark return of negative 5.07% for 4Q2009. This portfolio owned 60 issues compared to 127 issues in the benchmark on 12/31/09. The portfolio composition was very well matched to the benchmark with respect to duration, yield and convexity for both Treasury and Agency issues. As reported by BlackRock, the performance of the new SIF Long Credit portfolio had a total return of negative 0.86% versus the benchmark index of negative 0.73% for 4Q 2009. Most of this negative tracking error occurred in Oct09 (-0.10%) and largely offset the positive tracking error of +0.09% reflected in Sept09. The BlackRock fixed income strategist indicated price volatility in the long credit sector was high over the quarter. The BWC portfolio owned 600 issues on 12/31/09 compared to 1,094 issues in the benchmark index. Many less liquid issues in the benchmark do not trade every day which creates pricing discrepancies. The BWC long credit portfolio was slightly overweighted in BBB securities (+0.43%) and underweighted in AAA securities (-0.50%) versus the index on 12/31/09.

Northern Trust

(Passive Large Cap U.S. Equity)

The BWC investment staff as well as Administrator Marsha Ryan and Chief Operating Officer Raymond Mazzotta met with three members of the Northern Trust relationship management team and the primary portfolio manager of its S&P 500 passive indexed portfolio on February 4, 2010 at the Investment Division offices.

With regards to business strategy, Northern Trust is placing increasing importance on developing stronger relationships with more pension plan sponsors to attract more assets under management. Its deposit base grew strongly during the recent financial crisis in a flight of deposits to high quarterly institutions such as Northern Trust. Management is focused on leveraging the custody business in expanding its relationships with its custody clients. Northern Trust is observing two significant trends in its investment management business, namely continued migration of assets from active to passive management and more utilization of non-securities lending funds. Northern Trust has launched between 20-30 new non-lending funds over the past year and its non-lending Russell 3000 index managed funds now exceed its lending funds in total assets under management. Of the funds managed by Northern Trust shifting to non-lending from securities lending, Northern Trust has been able to retain 75% of these flows. With respect to its securities lending collateral pools, market value to book value has recovered significantly.

The Investment Division in mid-October 2009 transitioned all \$3.8 billion of assets managed for SIF away from a separate asset S&P 500 index portfolio managed by Northern Trust to a transition manager account benchmarked to the new Russell 3000 US equity benchmark index. The BWC assets that remained managed by Northern Trust over 4Q 2009 were the Disabled Workers' Relief Fund (DWRF) and Black Lung Fund (BLF) assets invested in the non-lending commingled B fund passively managed to the S&P 500 benchmark index. This fund had a return of 6.06% versus the S&P 500 benchmark index return of 6.04% for 4Q09. This outperformance of 2 basis points for the quarter is primarily attributable to several significant class action settlement distributions received by the commingled fund from class action lawsuits originated years ago. DWRF and BLF benefited from these distributions even though the two specialty funds were not investors in the commingled fund at the earlier time of the financial loss incurred by the commingled fund. There were eight additions and deletions to the S&P 500 index over 4Q09. The non-lending commingled B fund of Northern Trust had a total market value of assets of \$1.4 billion on 12/31/09, including a combined \$317 million for DWRF and BLF.

The group heard a teleconference economic update by Jim McDonald, chief investment strategist of Northern Trust. Mr. McDonald indicated that securitization of assets and very poor underwriting standards associated with these large pools were a major reason for the difficulties of the U.S. economy in 2008-2009. The cyclical global economic rebound now emerging has been led by massive government and central bank stimulus measures. It will be a challenging job market for the next several years as improvement in the labor market will be slow, in the opinion of Mr. McDonald. The U.S. economy needs to create 125,000 new jobs per month just to keep the unemployment rate flat. Mr. McDonald believes inflation will remain low due to a combination of large excess capacity and labor in the U.S. having no bargaining power for higher wages. Inflation expectations, nevertheless, are on the rise as reflected by inflationary indicators and are now back to a normal level of about 2.5% annualized. With respect to portfolio tactical asset allocation strategy, Northern Trust recommends overweights in emerging market equities, large cap stocks and commodities, with most prominent underweights in U.S. government debt and non-U.S. developed country equities. Northern Trust believes that emerging market equities will go from a discount valuation to a premium valuation versus developed market equities because of their faster growth rates and lower debt as a percentage of GDP versus the developed country markets.

State Street Global Advisors

(Passive Long Government Fixed Income; Passive Long Credit Fixed Income; Passive U.S. Aggregate Fixed Income; Intermediate Duration Fixed Income; Passive U.S. TIPS Fixed Income)

The BWC investment staff as well as Administrator Marsha Ryan and Chief Operating Officer Raymond Mazzotta met with the primary relationship manager and a fixed income portfolio manager (Mike Brunell) on February 4, 2010 at the Investment Division offices. In addition, the group heard via conference call from a U.S. TIPS portfolio manager (Marc Touchette) and a portfolio strategist (Dan Pierce) on the economic and market outlook.

State Street Corporation, the parent company of State Street Bank and Trust and subsidiary State Street Global Advisors (SSGA), raised both equity and debt capital in 2009. The parent company reported total tangible common equity of \$8.7 billion at 12/31/09 and a tangible common equity ratio of 6.6% with total tangible assets of \$130.4 billion. Its Tier 1 common capital ratio to risk-weighted assets was 15.3% compared to a “well capitalized” bank regulatory minimum ratio of 4%. State Street Corp. reported operating net income of \$1.8 billion for calendar year 2009 before an extraordinary loss, net of tax, of \$3.7 billion related to the May 2009 consolidation of the administered asset-backed commercial paper conduits onto its balance sheet. SSGA ended 2009 with \$1.86 trillion of client assets under management and added \$248 billion in net new assets under management, with more than half of the new business being from existing clients.

BWC completed on December 28, 2009 the transition of the SIF U.S. Aggregate fixed income portfolio with an in-kind transfer of all assets valued at \$2.375 billion from the assigned SIF Priority #1 Transition manager to SSGA as finalist target manager. SSGA ended 2009 as a BWC passive indexed manager of four fixed income mandates for SIF as well as for three fixed income mandates for BWC specialty funds totalling \$11.0 billion in market value. The fourth quarter of 2009 was the first full quarter of management by SSGA of the separate account SIF Long Government and Long Credit fixed income portfolios subsequent to the BWC invested portfolio split on July 23, 2009 from the previously combined Long Government/Credit managed portfolio having a \$7.23 billion market value at time of split.

As reported by SSGA, the performance of the SIF Long Government portfolio was a negative 5.07% for 4Q09 which matched the benchmark index return. As reported by SSGA, the SIF Long Credit portfolio had a return of negative 0.87% for 4Q09 compared to the benchmark index return of negative 0.73%. The underperformance was attributable by the portfolio manager to sampling where the portfolio owns approximately 70% of the issues in the index during a time when credit spreads to Treasuries continued to tighten and it was difficult to find many well performing secondary credit issues to purchase for the portfolio. Total 4Q09 returns of the DWRF and Black Lung Fund LDFI portfolios reported by SSGA were negative 2.74% and negative 2.73%, respectively, as compared to the negative 2.64% benchmark index return. Similar to the SIF Long Credit portfolio, this underperformance was attributable to issuer sampling whereby the respective portfolios own slightly more than half of the over 1,200 securities currently in the benchmark index. All key characteristics of both the SIF Credit portfolios and DWRF/BLF LDFI portfolios very tightly matched to the respective benchmark indexes. The two smaller specialty funds (Public Work-Relief Employees’ Fund and Marine Industry Fund) investment in the commingled Intermediate Duration Fixed Income fund managed by SSGA had a return of 0.28% reported by SSGA for 4Q09 versus the benchmark return of 0.31%.

A good discussion occurred with PM Mike Brunell who is a primary portfolio manager for the new \$2.375 billion SIF fixed income U.S. Aggregate portfolio received for separate account management by SSGA at the end of December, 2009. The PM specifically discussed the strategy to add more diversification of issues to the U.S. Aggregate portfolio received from the transition manager as well as the selection process for identifying suitable mortgage-backed pools as the large MBS pool forward delivery contract positions are reduced.

The TIPS portfolio managed by SSGA for each of SIF, DWRF and BLF had total returns of 1.76% for 4Q09 as represented by SSGA which matched the benchmark quarterly return of 1.76%. SSGA presented a monthly attribution analysis of the Barclays Capital (BarCap) U.S. TIPS benchmark performance comparing the benchmark performance utilizing the BarCap TIPS prices with the benchmark return utilizing Interactive Data (IDC) prices which the BWC sub-custodian JPMorgan Bank as well as many other large custodians use as the primary pricing source for month-end reporting. This attribution analysis revealed that the difference or tracking error between these two pricing sources was 102 basis points for calendar year 2009 whereby IDC prices were lower than the index BarCap prices by this difference (10.40% IDC return vs. 11.42% BarCap benchmark return). Part of this difference is attributable to pricing methodology whereby BarCap applies a mid-price between bid/ask prices whereas IDC uses bid prices only. While there has been a narrowing of bid/ask prices for U.S. TIPS in recent months, it still is creating price discrepancies which the Investment Division is sensitive to and is monitoring. The TIPS PM indicated the TIPS real yield curve steepened in 4Q09 signalling more demand for shorter dated TIPS with headline CPI accrual greater than expected due to a rebound in commodity prices. The full breakeven curve shifted upward in 4Q09 with higher inflationary expectations reflected in investor sentiment as longer nominal Treasuries increased significantly in yield (over 50 basis points) in 4Q09 whereas TIPS nominal yields declined slightly. For example, ten-year Treasury break-even nominal/TIPS yields expanded to 2.4% on 12/31/09 from 1.8% on 9/30/09. Inflation expectations were a big driver of the strong performance of the U.S. TIPS benchmark for 2009 having a positive return of 11.41% compared to negative returns for nominal Treasuries last year. SSGA continues to see large inflows into the TIPS asset class with liquidity continuing to improve. The TIPS PM expects demand for inflation protection should continue to support this asset class in 2010.

The SSGA strategist gave an overview of the current economy and a financial markets outlook. Although the global recession appears over, there is still limited confidence in a global recovery with no speculative excesses currently in the financial markets. Limits to a vigorous U.S. economic recovery are constrained credit availability and cautious consumers. Central bank accommodation is unlikely to end quickly and emerging markets remain a key source for global growth. Trends in world trade are improving significantly and interbank liquidity continues to improve. Income considerations are significantly influencing risk appetites and credit spreads may continue narrowing. Quality equities appear relatively cheap and balance sheet integrity remains important. Lack of competition and very low short-term yields make equity valuations appealing. The SSGA strategist believes emerging markets equities will be the best performing asset class over the next five years. Stocks to be overweighted in developed country equity markets would be companies that are the beneficiaries of global demand.



Ohio Bureau of Workers' Compensation Active vs. Passive Management

March 25, 2010

Guy M. Cooper
Jordan Nault
Kweku Obed

Active vs. Passive Management

Debating, Discussing and Disagreeing

Let us agree on what we are debating, discussing and disagreeing about: active vs. passive management:

Active management is the art of stock picking and market timing. Passive management refers to a buy-and-hold approach to money management. It can be applied to any asset class: big stocks, small stocks, value or growth, foreign or domestic can all be accessed by passive techniques.

Neither label, "active" or "passive," is perfect, and there will not always be a complete dichotomy between them. In any event, this is a debate about both market behavior and investor behavior.

Rex A. Siquefield, October 1995

Active vs. Passive Management

Definitions

- **Active management:** A portfolio manager's use of analytical research, forecasts, and their own judgment in making investment decisions.
- **Passive management:** A style where a fund's portfolio mirrors an index.
- **Index:** An portfolio of securities representing a particular market (for example the S&P 500 or the Barclays Capital Aggregate Index).
- **Benchmark:** A standard against which the performance of an investment manager can be measured (the benchmark is usually the index or a blended standard).
- **Alpha (or excess return):** If the benchmark returns 10% but the portfolio earns 15%, the portfolio's alpha or excess return is 5%.
- **Systematic risk (Beta):** Risk inherent to the entire market.
- **Specific risk:** Risk that affects a single company or small number of securities.
- **Efficient market:** A market (for example US Large Cap Equity) in which asset prices reflect all available information and adjust instantly to any new information. If the security markets are truly efficient, it is not possible for an investor consistently to outperform stock market averages such as the S&P 500. An inefficient market (for example Private Equity) is one where prices adjust slowly to new information.

Active vs. Passive Management

Objective of Discussion

Objective

- Our goal is to provide a detailed overview of the Active vs. Passive debate in a ‘real world’ context. We look at what the data tells us, but we also take into account practical issues such as fees, manager selection, the ability to save costs by managing assets internally.
- This presentation will evaluate the pros and cons of active and passive management styles in the following asset classes / strategies:
 - U.S. Large Cap Equity
 - U.S. Small & Mid Cap Equity
 - International Equity (EAFE)
 - Core Fixed Income
 - Long Duration
 - Treasury Inflation Protection Securities (TIPS)
 - High Yield
 - Alternative Investments (Private Equity, Real Estate and Hedge Funds)

Active vs. Passive Management

Objective of Discussion

Key takeaways

- The decision to employ active or passive management should consider the market efficiency of each asset class, which affects a manager's ability to add value over a market benchmark. Associated fees and expenses should be considered as they can erode a manager's excess return (alpha). Greater market efficiency = less opportunities to generate alpha.
- While a manager's skill should be measured on a gross-of-fee basis, it is most important to consider net-of-fee returns because it is net returns that influence the growth of assets over time.
- Evaluating the risk of active managers, and their additional volatility relative to the benchmark is also important when determining which approach to employ.
- For certain strategies such as Alternative Investments (for example, Private Equity, Real Estate and Hedge Funds), active management is strongly preferred as it is difficult to construct an investable Alternatives Investment benchmark that can be easily replicated.
- The Active vs. Passive debate also applies to Minority and /or Women-Owned Business Enterprises (MWBES) as these firms have strong representation in most of the major asset classes.

Active vs. Passive Management

Objective of Discussion

Key takeaways

- The BWC's various funds are all passively managed. These strategies are listed below.

Long Duration Fixed Income - Credit (SIF)

Long Duration Fixed Income – Government (SIF)

U.S. Aggregate Fixed Income (SIF)

Russell 3000 (SIF)

ACWI ex-US (SIF)

TIPS (SIF, DWRF, COAL)

Long Duration Fixed Income – Government/Credit (DWRF and COAL)

S&P500 (DWRF and COAL)

Intermediate Duration Fixed Income (PWRF and MIF)

- ***The question is not whether the BWC should significantly shift from its current total passive strategy. Rather the question should be “How much active management should be incorporated into the BWC’s asset mix and, which areas are most suited for active management?”***

Active vs. Passive Management

Mercer's Analysis and Observations - Summary

Over the next few slides we will provide our rationale for the following broad recommendations for the following asset classes / strategies. We are not automatically assuming that these broad recommendations apply to the BWC.

U.S. Large Cap Equity → Passive Exposure and /or Enhanced Index Exposure

U.S. Small & Mid Cap Equity → Active Exposure

International Equity → Active Exposure

Core Fixed Income → Active Exposure

Long Duration → Active Exposure

Treasury Inflation Protection Securities (TIPS) → Passive Exposure

High Yield → Active Exposure

Alternative Investments (Private Equity, Real Estate and Hedge Funds) → Active Exposure

Emerging / MWBE managers → Dependent on Asset Class

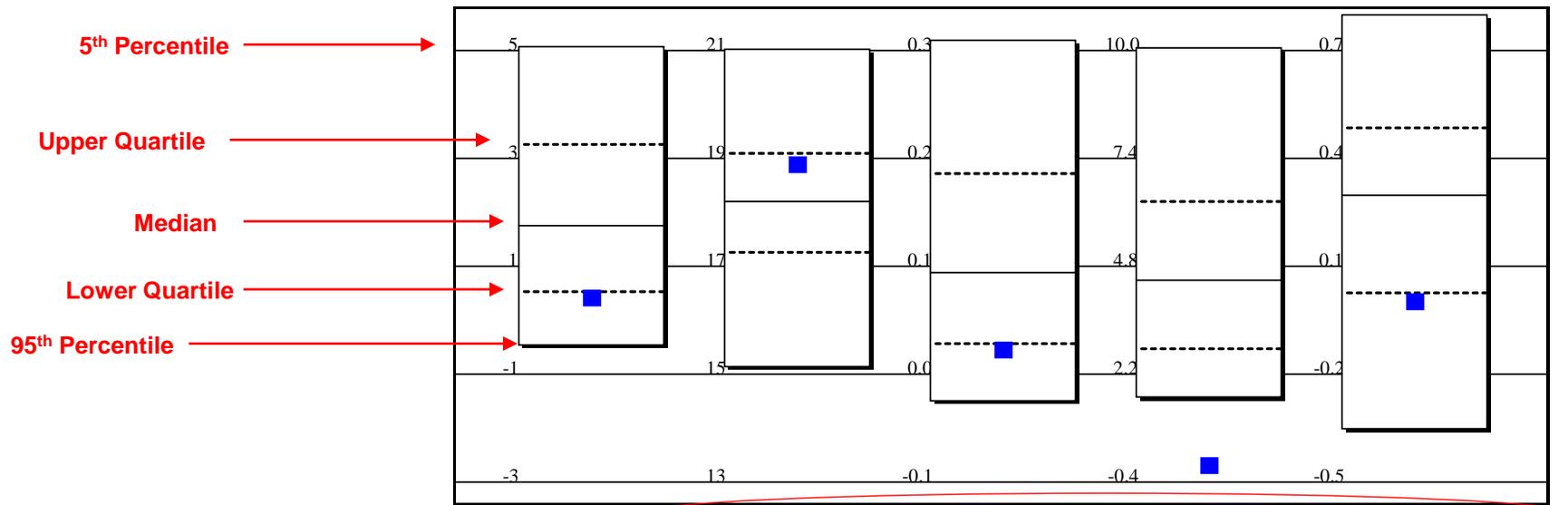
Active vs. Passive Management

Definitions

- **Reward to risk:** A ratio used by many investors to compare the expected returns of an investment to the amount of risk undertaken to capture these returns. This ratio can be calculated by dividing excess returns (alpha) by some measure of risk (for example standard deviation).
- **Standard deviation:** The standard deviation of an investment is used to measure an asset's volatility, or "risk". An investment that exhibits widely different (volatile) return streams relative to a defined benchmark over successive measurement periods will have a high standard deviation.
- **Tracking error:** A measure of how closely a portfolio follows the index to which it is benchmarked. Some portfolios are expected to replicate, before trading and other costs, the returns of an index exactly (a 'passive' index fund), while others are expected to 'actively manage' the portfolio by deviating from the index in order to generate excess returns. Tracking error (also called active risk) is a measure of the portfolio's deviation from the benchmark. An index fund would have a tracking error close to zero, while an actively managed portfolio would normally have a higher tracking error.
- **Information ratio:** Dividing portfolio active return (alpha) by portfolio tracking error yields the information ratio, which is a risk adjusted performance metric. Active return is the amount of overperformance (or underperformance) of a portfolio relative to a pre-determined benchmark index. A high information ratio is an indicator of value-added performance.

Active vs. Passive Management

Interpreting Mercer's Quartile Charts



	Return (%pa)	Std Deviation (%pa)	Reward to Risk	Tracking Error (%pa)	Information Ratio
RU1000USI	0.4 (76)	18.9 (31)	0.0 (77)	0.0 (100)	0.0 (76)
5th Percentile	5.1	21.0	0.3	10.0	0.8
Upper Quartile	3.2	19.1	0.2	6.3	0.5
Median	1.8	18.2	0.1	4.5	0.3
Lower Quartile	0.5	17.2	0.0	2.8	0.0
95th Percentile	-0.5	15.1	0.0	1.6	-0.4
Number of Funds	173	173	173	173	173

Numbers in parentheses indicate percentile ranking

Please refer to definitions on slide 7

Number of Funds in the peer group

Active vs. Passive Management

Mercer's Analysis and Observations - U.S. Large Cap Equity

U.S. Large Cap Equity

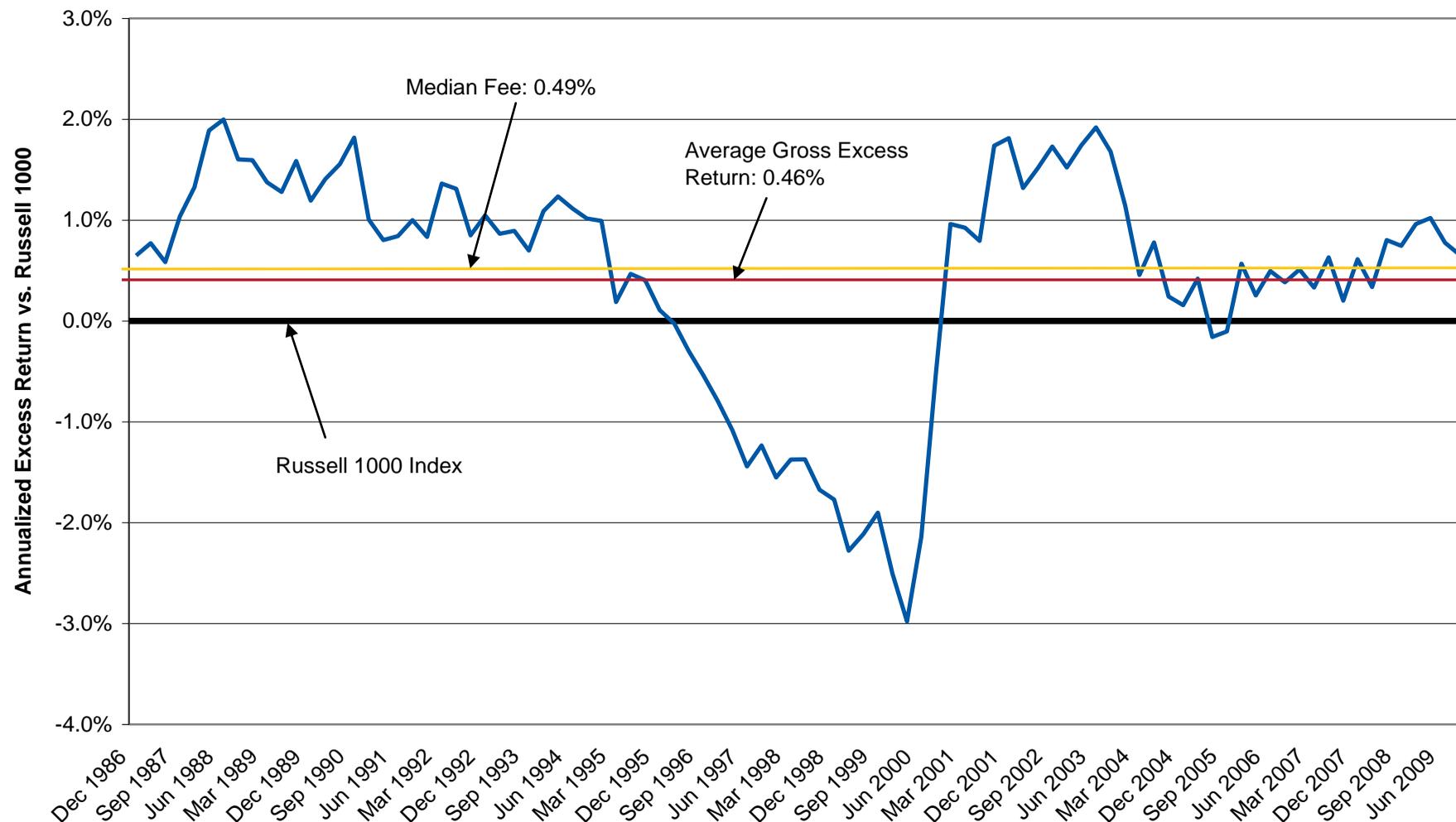
- U.S. Large Cap Equities are widely considered to be a relatively efficient asset class. In other words, Large Cap names (for example Apple or Microsoft) can be traded (bought and sold) with ease and information on these firms can be easily obtained. Large Cap names are also followed by a large number of investment analysts.
- As more analysts and investors follow a company, new information is quickly disseminated into the marketplace and incorporated into the stock price. This leaves less opportunity for active managers to exploit mispricing and add value above the benchmark.
- Mercer's Fee Study shows that the median fee for a separately managed \$100 million active U.S. Large Cap Equity portfolio is 0.49%.

Active vs. Passive Management

Mercer's Analysis and Observations - U.S. Large Cap Equity

The average gross excess return of 0.46% is less than the median fee of 0.49%.

Large Cap Core Universe Median Rolling Three-Year Excess Returns



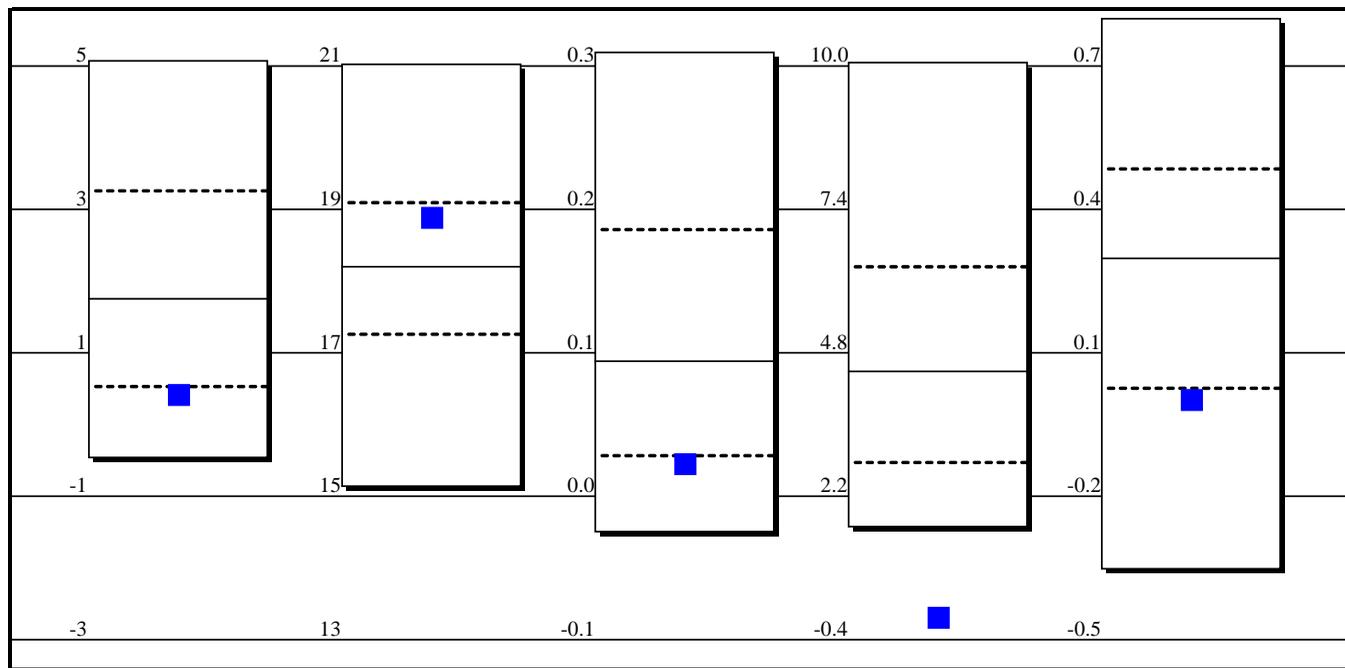
Active vs. Passive Management

Mercer's Analysis and Observations - U.S. Large Cap Equity

- Evaluating the risk of active managers, and their additional volatility relative to the benchmark, is also important when determining which approach to employ.
- For the recent ten-year period, the median large cap core manager exhibited a better reward-to-risk ratio than the benchmark, with a higher annualized return and a lower annualized standard deviation. While the median manager's total volatility was slightly lower than the index, active management introduces tracking error versus the benchmark.

Comparison with the Mercer US Equity Large Cap Core Universe

Risk and Return Characteristics (calculated quarterly) versus RU1000USD for the period from Dec 1999 to Sep 2009



	Return (%pa)	Std Deviation (%pa)	Reward to Risk	Tracking Error (%pa)	Information Ratio
RU1000USD	0.4 (76)	18.9 (31)	0.0 (77)	0.0 (100)	0.0 (76)
5th Percentile	5.1	21.0	0.3	10.0	0.8
Upper Quartile	3.2	19.1	0.2	6.3	0.5
Median	1.8	18.2	0.1	4.5	0.3
Lower Quartile	0.5	17.2	0.0	2.8	0.0
95th Percentile	-0.5	15.1	0.0	1.6	-0.4
Number of Funds	173	173	173	173	173

Active vs. Passive Management

Mercer's Analysis and Observations - U.S. Small & Mid Cap Equity

U.S. Small & Mid Cap Equity

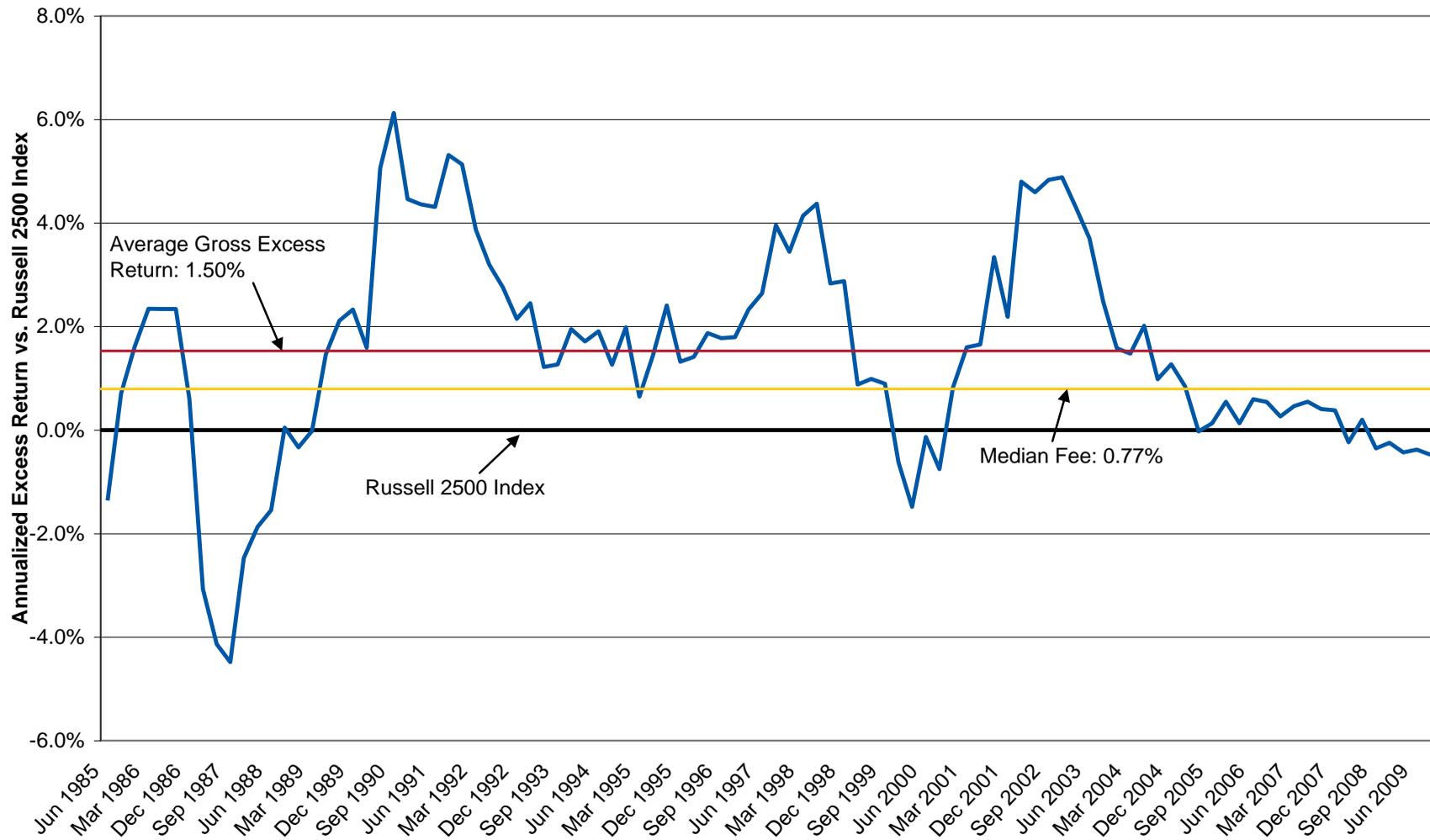
- U.S. Small & Mid Cap equities are generally considered to be a less efficient asset class compared to their Large Cap cousins. In theory, less efficiency (lower analyst coverage and less information on a company) should mean that a Small or Mid Cap stock should have a greater chance of being mispriced by the market.
- Mercer's Fee Study shows that the median fee for a \$100 million separately managed active Small Cap Core portfolio is 0.75%.
- Under the fee study, the median fee for a \$100 million separately managed active Mid Cap Core portfolio is 0.63%.
- The median fee for a \$100 million separately managed active Small-Mid (SMID) strategy is 0.77%.

Active vs. Passive Management

Mercer's Analysis and Observations - U.S. Small & Mid Cap Equity

The average gross excess return of 1.50% exceeds the median fee of 0.89%.

Small & Mid Cap Core Universe Median Rolling Three-Year Excess Returns

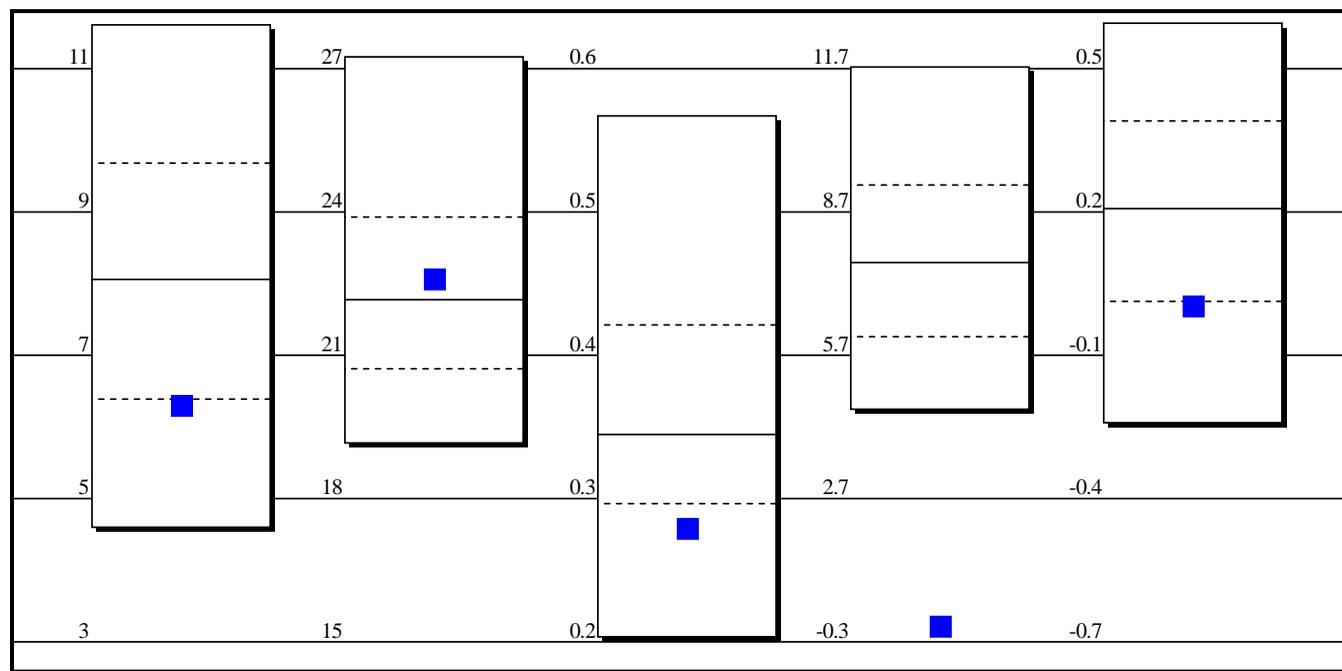


Active vs. Passive Management

Mercer's Analysis and Observations - U.S. Small & Mid Cap Equity

- The median Small & Mid Cap Core manager exhibited a modestly lower standard deviation than the Russell 2500 Index for the recent ten-year period. At the same time, their higher return (8.1% vs. 6.3%) resulted in a higher reward to risk ratio (0.34% vs. 0.28%).
- While total volatility was similar, the median manager's tracking error of 7.6% signals how active managers have the potential to go through periods of over and underperformance.

Comparison with the Mercer US Equity Small+Mid Core Universe
 Risk and Return Characteristics (calculated quarterly) versus RU2500 for the period from Dec 1999 to Sep 2009



	Return (% pa)	Std Deviation (% pa)	Reward to Risk	Tracking Error (% pa)	Information Ratio
RU2500	6.3 (78)	22.6 (42)	0.3 (79)	0.0 (100)	0.0 (78)
5th Percentile	11.6	27.2	0.6	11.7	0.6
Upper Quartile	9.7	23.9	0.4	9.2	0.4
Median	8.1	22.2	0.3	7.6	0.2
Lower Quartile	6.4	20.7	0.3	6.1	0.0
95th Percentile	4.6	19.1	0.2	4.5	-0.2
Number of Funds	102	102	102	102	102

Active vs. Passive Management

Mercer's Analysis and Observations - International Equity (Developed Markets)

International Equity (EAFE)

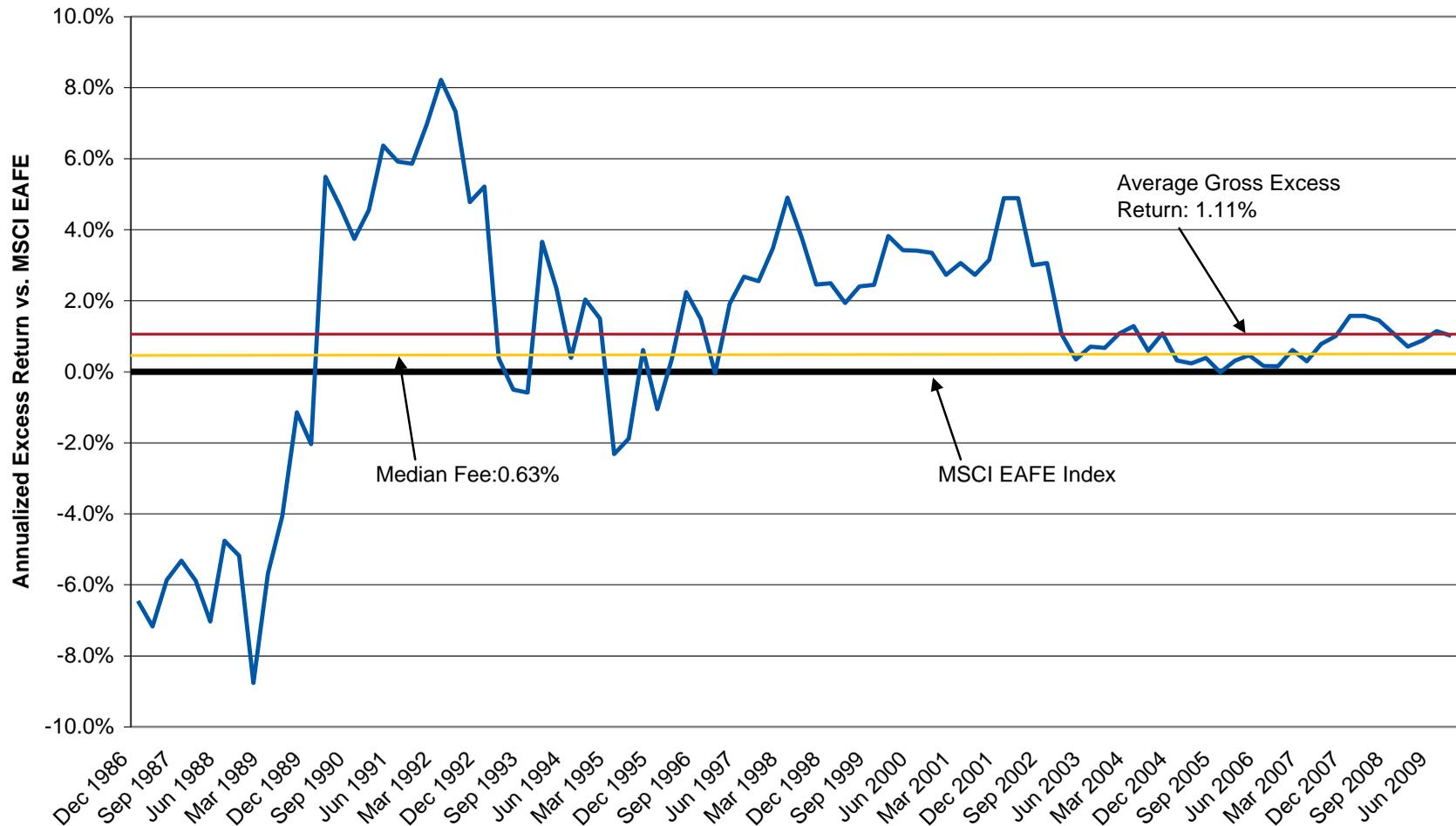
- International equities are also considered to be a less efficient asset class (as compared to U.S. Large Cap Equities). Additionally, managers have a greater opportunity set in international stocks which may mean investing in emerging markets and/or international small cap stocks. A skilled manager can also take advantage of over- or underweighting country exposures - another potential source of excess return.
- Developed Large Cap International stocks are becoming more widely followed (efficient) however, Emerging Markets are still widely viewed as an asset class in which managers can add value.
- Mercer's Fee Study shows that the median fee for a \$100 million separately managed active international core portfolio is 0.63%.

Active vs. Passive Management

Mercer's Analysis and Observations - International Equity

The average gross excess return of 1.11% exceeds the median fee of 0.63%.

International Equity Universe Median Rolling Three-Year Excess Returns

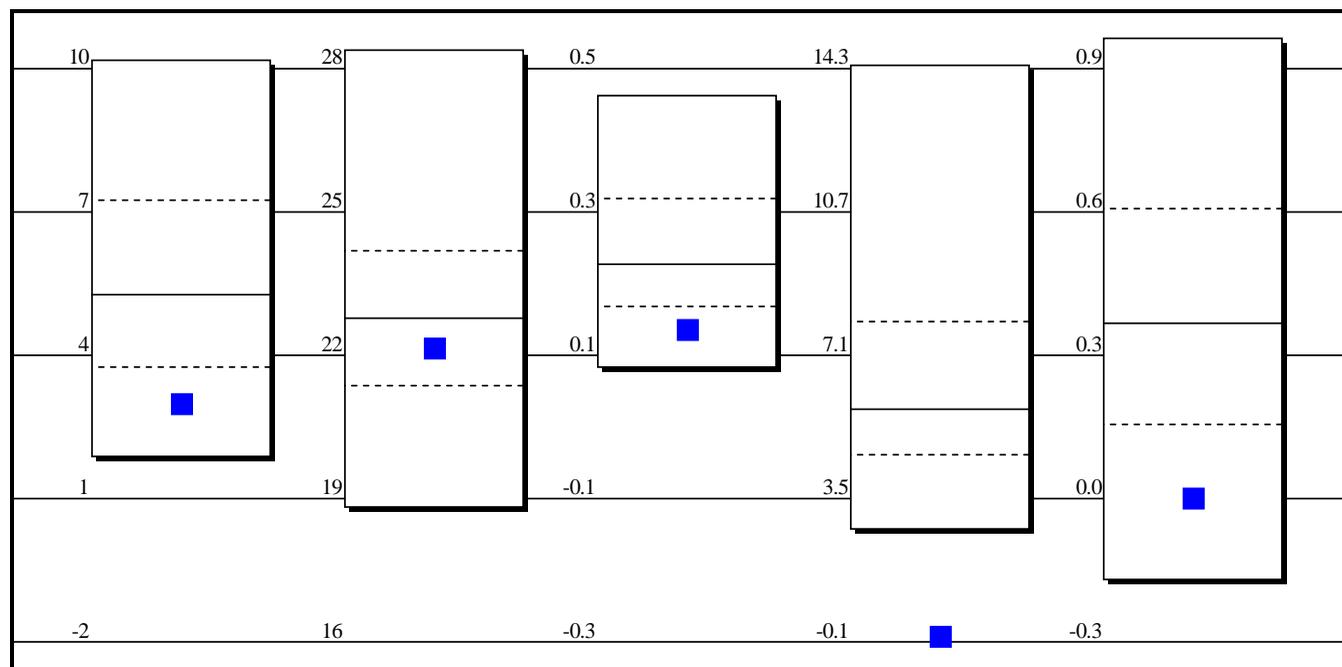


Active vs. Passive Management

Mercer's Analysis and Observations - International Equity

- The median International Equity manager outperformed the benchmark by 230 basis points for the recent annualized ten-year period, but exhibited higher standard deviation than the index. The median reward-to-risk ratio exceeded the benchmark due to the higher returns.

Comparison with the Mercer International Equity Universe
Risk and Return Characteristics (calculated quarterly) versus MSCI EAFE for the period from Dec 1999 to Sep 2009



- The median International manager held a tracking error of 5.7%.

	Return (% pa)	Std Deviation (% pa)	Reward to Risk	Tracking Error (% pa)	Information Ratio
MSCI EAFE	3.0 (89)	22.2 (63)	0.1 (88)	0.0 (100)	0.0 (89)
5th Percentile	10.2	28.4	0.5	14.4	1.0
Upper Quartile	7.2	24.2	0.3	7.9	0.6
Median	5.3	22.8	0.2	5.7	0.4
Lower Quartile	3.7	21.4	0.2	4.6	0.2
95th Percentile	1.9	18.8	0.1	2.7	-0.2
Number of Funds	175	175	175	175	175

Active vs. Passive Management

Mercer's Analysis and Observations - Core Fixed Income

Core Fixed Income

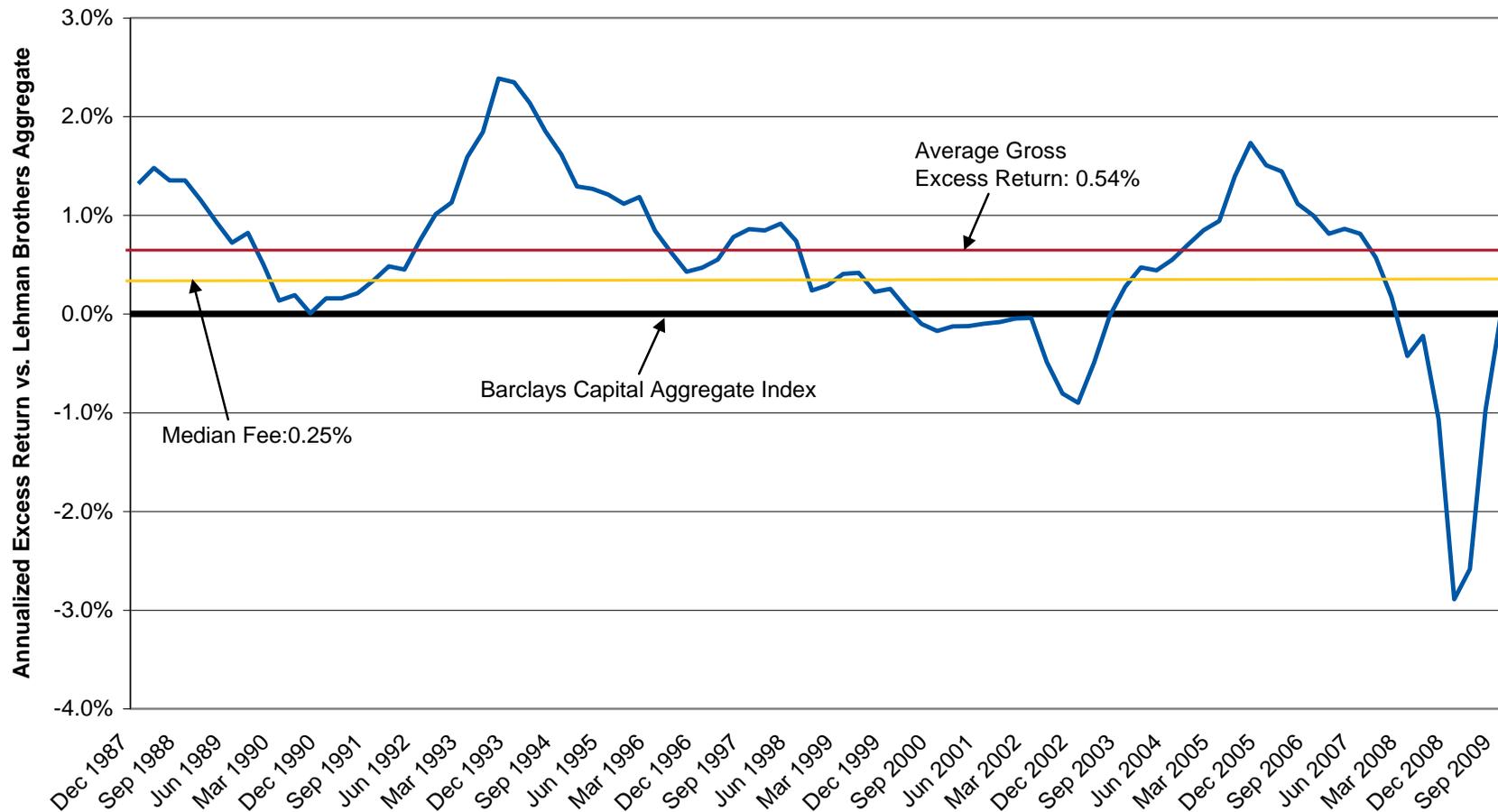
- The investment grade U.S. domestic fixed income (Core) market is often considered to be fairly efficient. Opportunistic Core managers, however, have the advantage of being able to invest in higher-yielding securities (for example below-investment grade debt and non-US securities, including emerging markets bonds). These types of securities can add value relative to the benchmark, which does not contain non-dollar or high yield issues.
- Fixed income managers generally yield a smaller level of excess return as compared to equity managers.
- Mercer's median fee for a \$250 million separately managed core opportunistic portfolio is 0.25%.

Active vs. Passive Management

Mercer's Analysis and Observations - Core Fixed Income

The average gross excess return of 0.54% exceeds the median fee of 0.25%.

Fixed Core Opportunistic Universe Median Rolling Three-Year Excess Returns

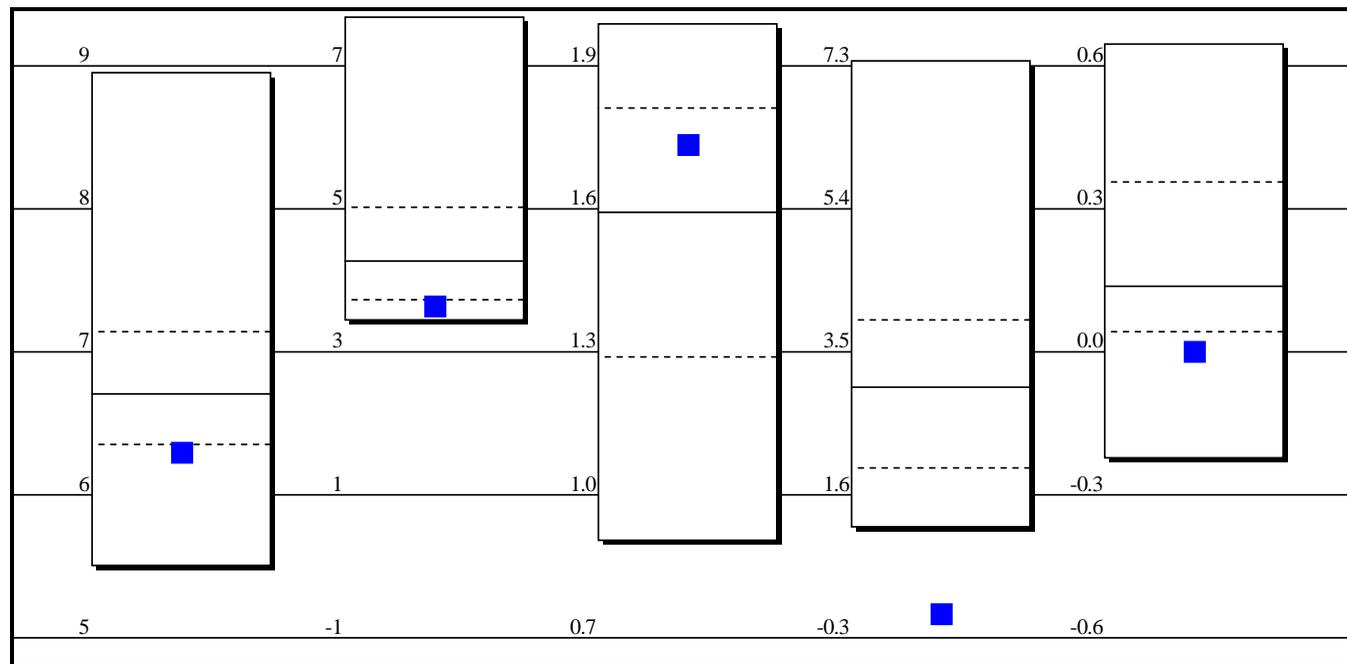


Active vs. Passive Management

Mercer's Analysis and Observations - Core Fixed Income

- The median opportunistic fixed income manager outperformed by 40 basis points for the ten-year period, while exhibiting 70 basis points more volatility. This resulted in a lower reward-to-risk ratio for the median manager.
- The median manager's tracking error for the ten-year period was 3.0%.

Comparison with the Mercer US Fixed Core Opportunistic Universe
 Risk and Return Characteristics (calculated quarterly) versus BCUSAG for the period from Dec 1999 to Sep 2009



	Return (% pa)	Std Deviation (% pa)	Reward to Risk	Tracking Error (% pa)	Information Ratio
BCUSAG ■	6.3 (80)	3.6 (82)	1.7 (34)	0.0 (100)	0.0 (80)
5th Percentile	8.9	7.7	2.0	7.4	0.6
Upper Quartile	7.1	5.0	1.8	3.9	0.4
Median	6.7	4.3	1.6	3.0	0.1
Lower Quartile	6.4	3.7	1.3	2.0	0.0
95th Percentile	5.5	3.4	0.9	1.2	-0.2
Number of Funds	70	70	70	70	70

Active vs. Passive Management

Mercer's Analysis and Observations - TIPS

TIPS

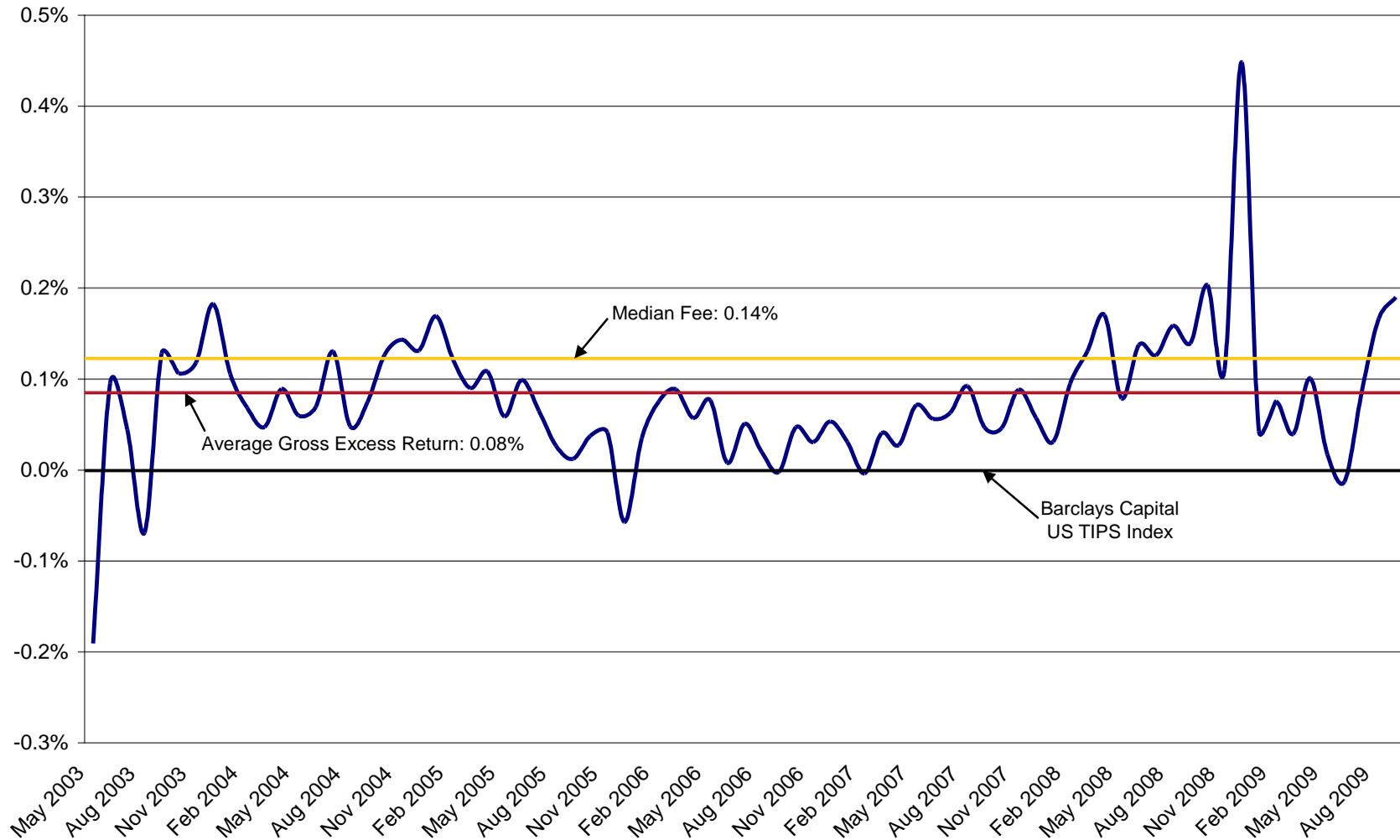
- Treasury Inflation-Protected Securities, or TIPS, are securities whose principal is tied to the Consumer Price Index (CPI). The principal increases with inflation and decreases with deflation. When the security matures, the U.S. Treasury pays the original or adjusted principal, whichever is greater. TIPS pay interest every six months. The primary goal of a TIPS portfolio is to preserve the real value of capital (not to generate excess returns). Also, given the highly efficient nature of the TIPS market, passively managed portfolios are more common than actively managed portfolios.
- Mercer's median fee for a \$250 million TIPS (Inflation-Linked Bonds) portfolio is 0.14% (given the relatively small number of active TIPS options that are available in the marketplace, this median fee also includes actively managed TIPS strategies).

Active vs. Passive Management

Mercer's Analysis and Observations - TIPS

The average gross excess return of 0.08% is less than the median fee of 0.14%.

US Inflation Linked Bonds Universe Median Rolling Three-Year Excess Return (Gross-of-Fee)

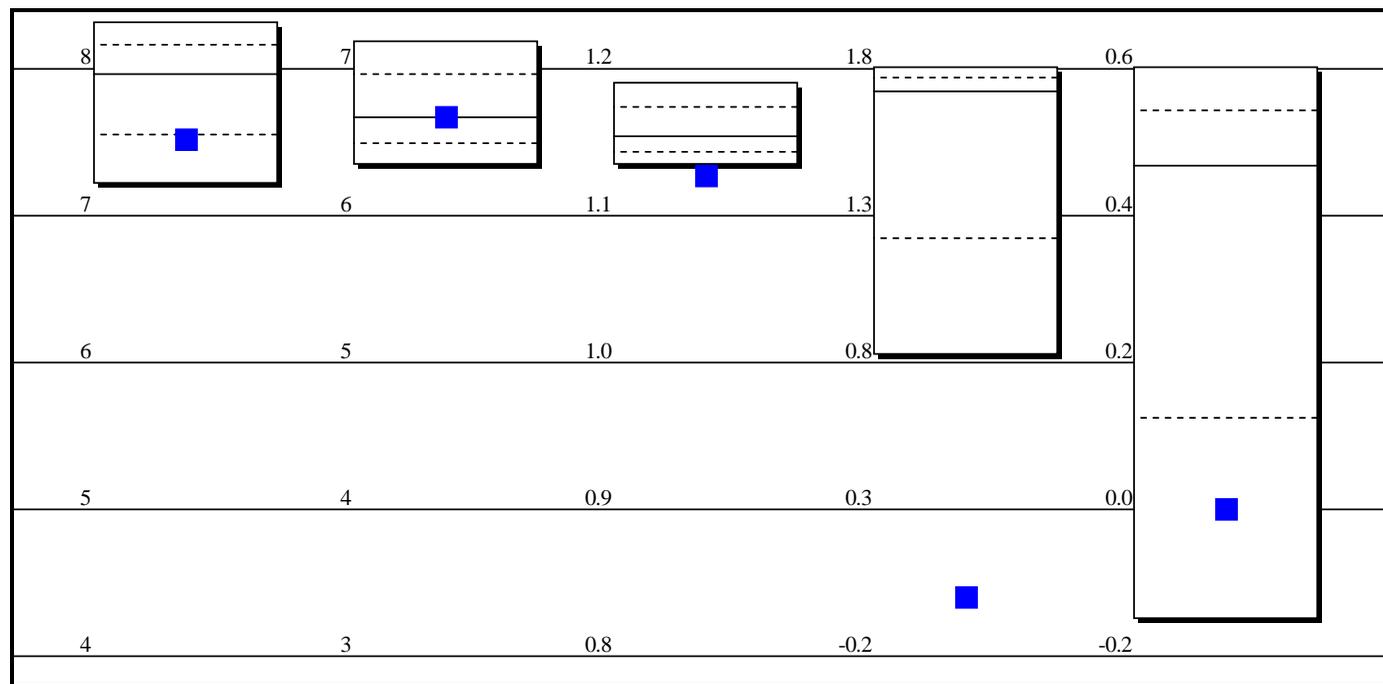


Active vs. Passive Management

Mercer's Analysis and Observations - TIPS

- The median U.S. TIPS fixed income manager outperformed by 50 basis points for the ten-year period, while exhibiting similar volatility to the index. This resulted in a slightly higher reward-to-risk ratio for the median manager.
- The median manager's tracking error for the ten-year period is 1.7%.

Comparison with the Mercer US Fixed Inflation Linked Bonds Universe
 Risk and Return Characteristics (calculated monthly) versus BCUSTIPS for the period from Oct 1999 to Sep 2009



	Return (% pa)	Std Deviation (% pa)	Reward to Risk	Tracking Error (% pa)	Information Ratio
BCUSTIPS	7.5 (77)	6.7 (50)	1.1 (100)	0.0 (100)	0.0 (84)
5th Percentile	8.3	7.2	1.2	1.8	0.6
Upper Quartile	8.2	7.0	1.2	1.8	0.5
Median	8.0	6.7	1.2	1.7	0.5
Lower Quartile	7.5	6.5	1.1	1.2	0.1
95th Percentile	7.2	6.3	1.1	0.8	-0.1
Number of Funds	3	3	3	3	3

Created on 12 Jan 2010

Active vs. Passive Management

Mercer's Analysis and Observations - High Yield

High Yield

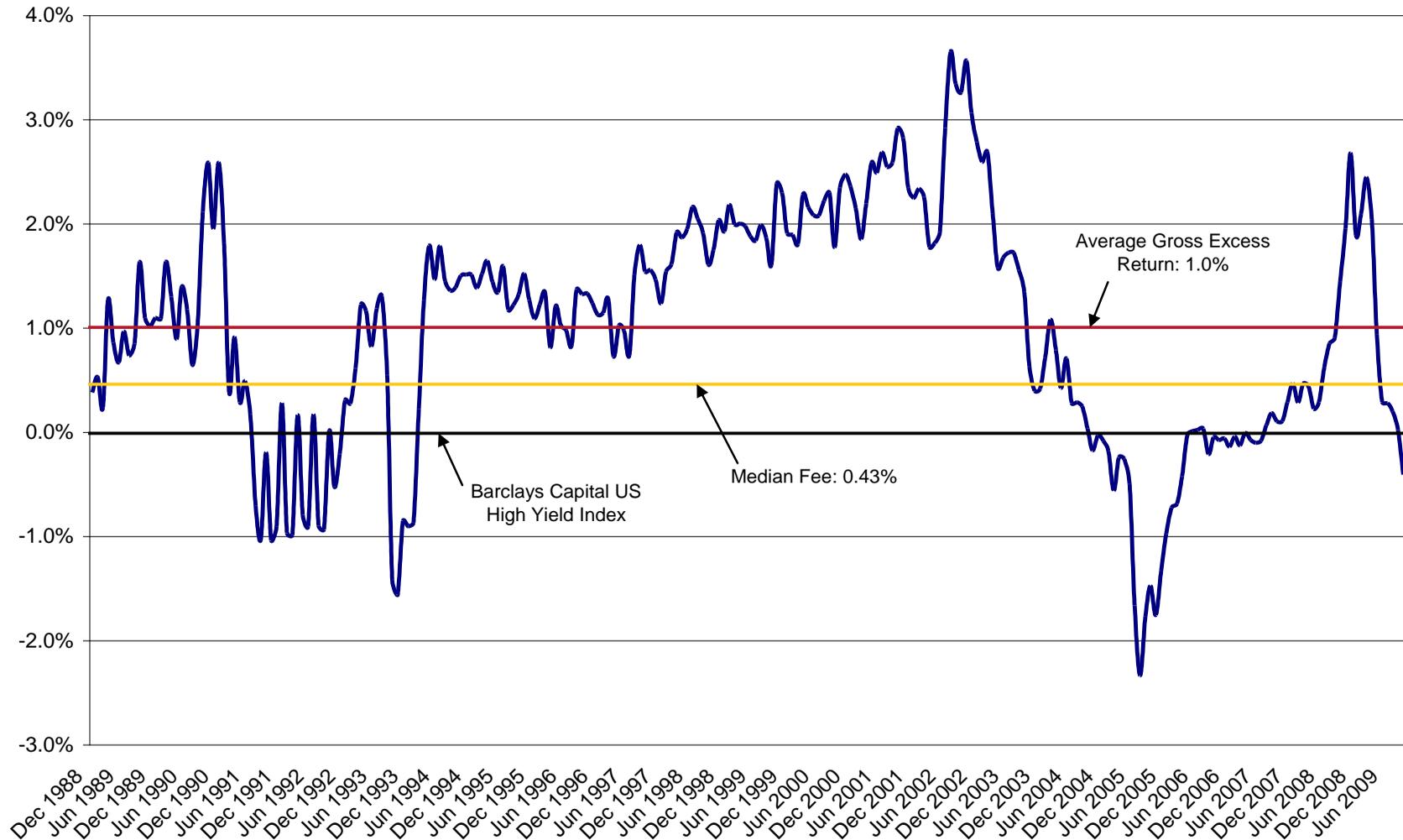
- High-Yield bonds are fixed income securities that are rated below investment-grade by the credit rating agencies (Below BBB by Standard & Poor's and Fitch Below Baa by Moody's).
- In comparison to investment-grade bonds High Yield bonds contain higher yield and return potential to compensate for additional credit risk. Investing in the High Yield Bond market presents an opportunity to earn higher risk adjusted returns relative to domestic investment grade fixed income securities.
- There are difficulties in managing High Yield Bonds passively. These difficulties include the broad range of bonds in the universe. Also, the numerous constituents in a High Yield Bond performance benchmark (such as the Barclays US Corp High Yield Index) are subject to call provisions, sinking funds, defaults, and upgrades and downgrades into and out of the High Yield Bond market. Problems can also arise in the trading and pricing of individual bond issues because the major secondary market for most bonds is an "over the counter" (OTC) market with many bonds that are subject to infrequent trading.
- Mercer's median fee for a \$250 million actively managed High Yield portfolio is 0.43%.

Active vs. Passive Management

Mercer's Analysis and Observations - High Yield

The average gross excess return of 1.0% exceeds the median fee of 0.43%.

US High Yield Universe Median Rolling Three-Year Excess Returns (Gross-of-Fee)

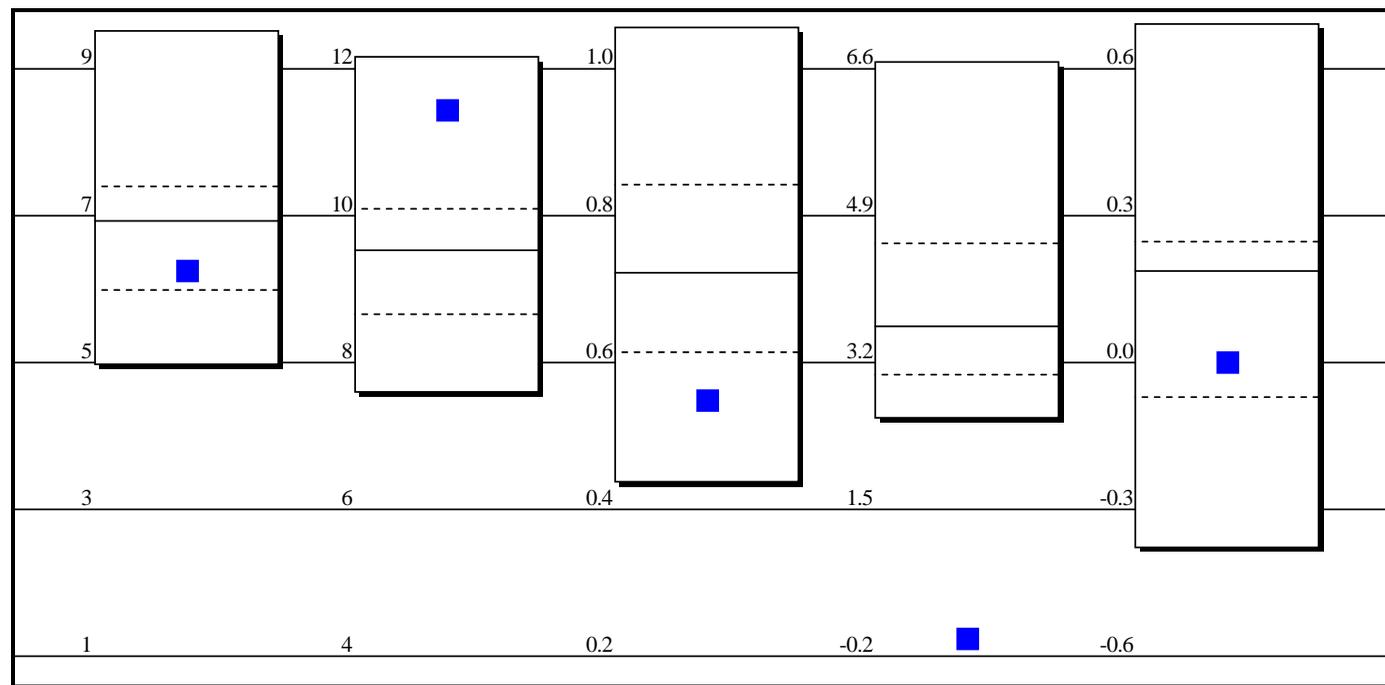


Active vs. Passive Management

Mercer's Analysis and Observations - High Yield

- The median High Yield fixed income manager outperformed the benchmark by 60 basis points for the ten-year period, while exhibiting less volatility. This resulted in a slightly higher reward-to-risk ratio for the median manager.
- The median manager's tracking error for the ten-year period was 3.6%.

Comparison with the Mercer US Fixed High Yield Universe
 Risk and Return Characteristics (calculated monthly) versus BCUSHYCOMP for the period from Oct 1999 to Sep 2009



	Return (% pa)	Std Deviation (% pa)	Reward to Risk	Tracking Error (% pa)	Information Ratio
BCUSHYCOMP ■	6.3 (70)	11.4 (9)	0.5 (90)	0.0 (100)	0.0 (70)
5th Percentile	3.0	0.4	0.2	-0.2	-0.6
Upper Quartile	7.4	10.1	0.8	4.6	0.2
Median	6.9	9.5	0.7	3.6	0.0
Lower Quartile	6.0	8.6	0.6	3.0	-0.1
95th Percentile	5.0	7.6	0.4	2.5	-0.4
Number of Funds	61	61	61	61	61

Created on 12 Jan 2010

Active vs. Passive Management

Mercer's Analysis and Observations - Long Duration

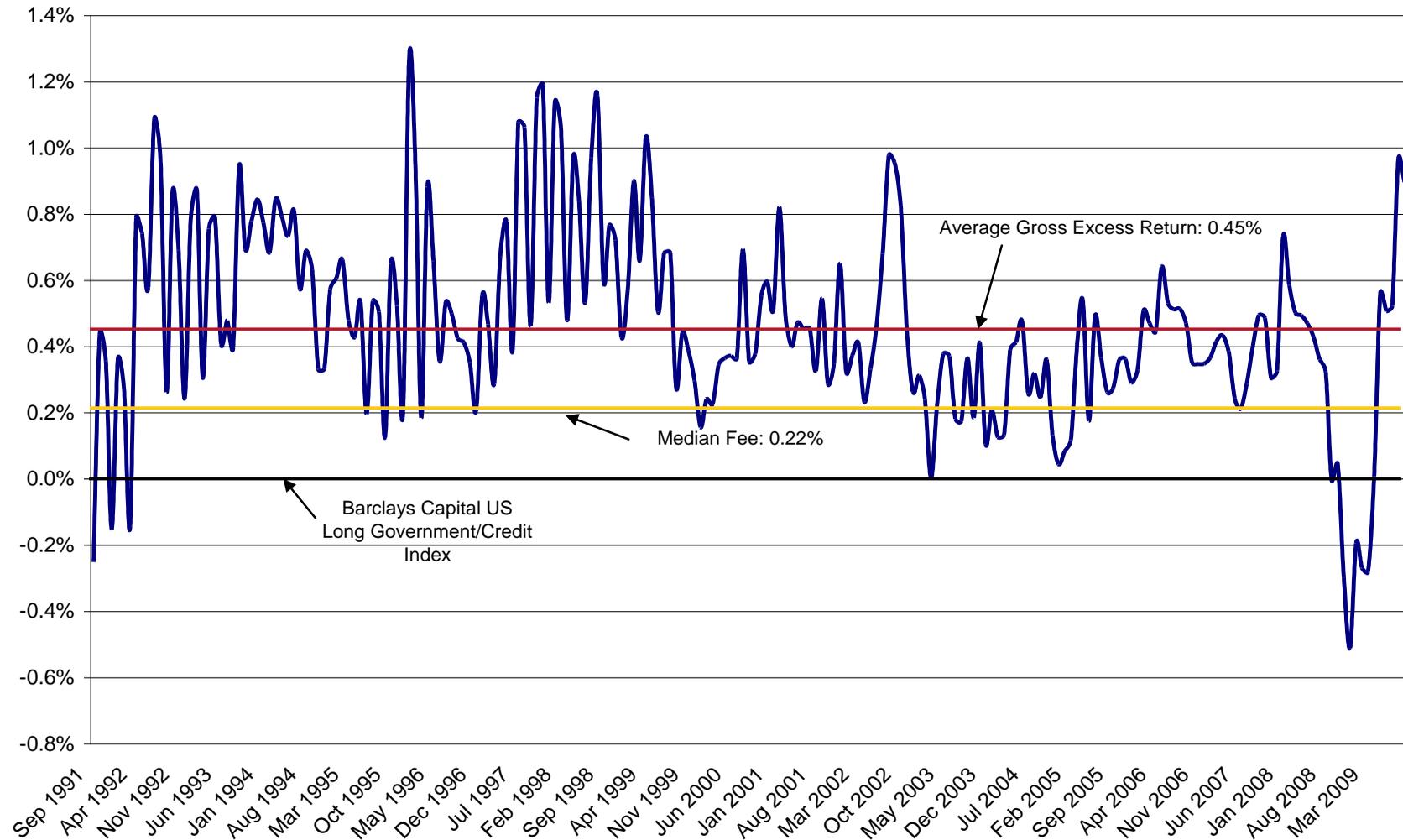
Long Duration (Government / Credit)

- A typical Long Duration portfolio will have an average duration of 11 – 12 years. Given that duration measures a bond's sensitivity to interest rate changes, longer duration portfolios will tend to be more sensitive than Short Duration or Intermediate Duration bonds.
- Long Duration Bond portfolios may have exposure to Corporate Bonds, Government Sponsored Bonds, High Yield and Foreign issues. These types of securities have the potential to add value through active portfolio management. In-depth fundamental research (free cash flow and balance sheet analysis), capital structure and covenant analysis, as well as an understanding of key industry trends may help skillful managers to add alpha over the benchmark.
- If the Long Duration exposures of a portfolio are to be managed separately (i.e. segregated between Government and Credit), we recommend active exposure to Long Duration Credit portfolios and passive exposure to Long Duration Government portfolios.
- Mercer's Fee Study shows that the average fee for an actively managed \$250 million Long Duration portfolio is 0.22%.

Active vs. Passive Management

Mercer's Analysis and Observations - Long Duration

The average gross excess return of 0.45% exceeds the median fee of 0.22%.
US Fixed Income Long Duration Universe Three Year Rolling Excess Return (Gross-of-Fee)

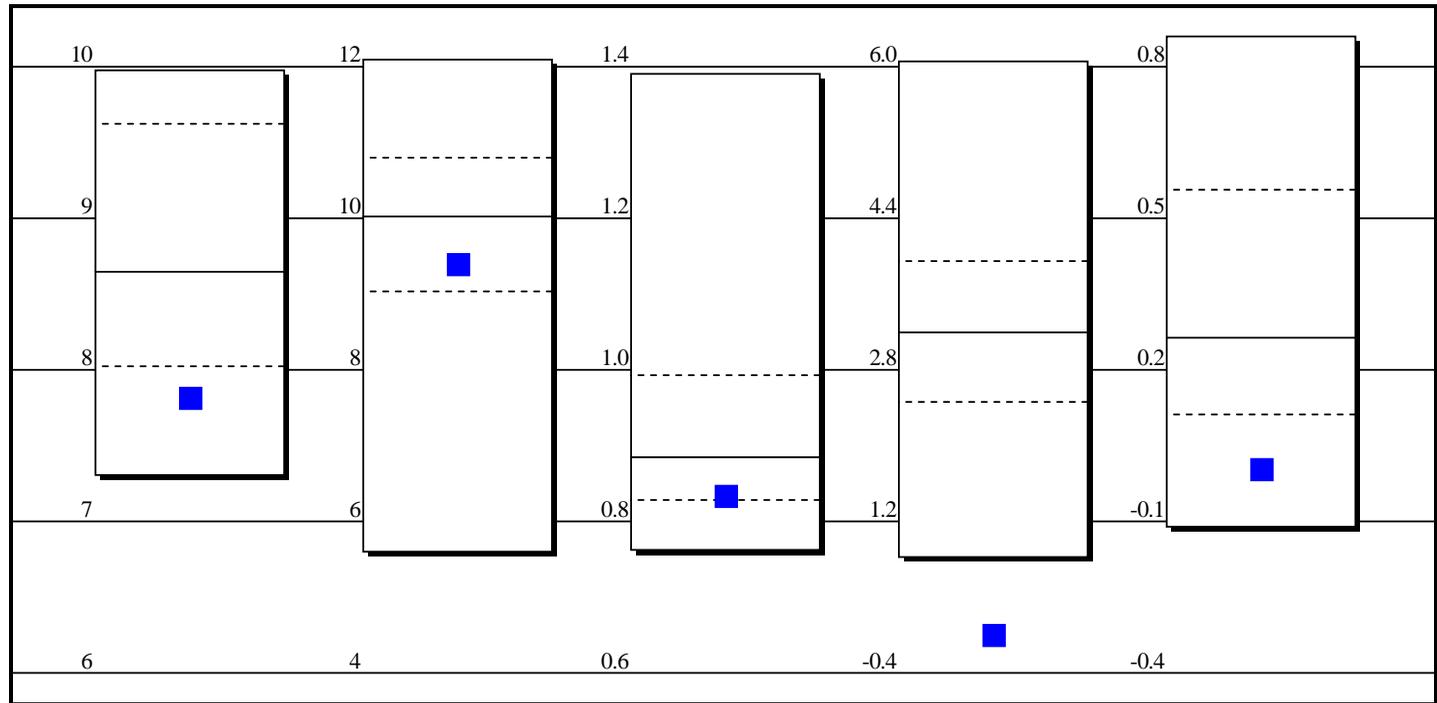


Active vs. Passive Management

Mercer's Analysis and Observations - Long Duration

- For the recent ten-year period, the median Long Duration manager exhibited a better reward-to-risk ratio than the benchmark, with a higher annualized return but a higher annualized standard deviation.

Comparison with the Mercer US Fixed Long Duration Universe
Risk and Return Characteristics (calculated monthly) versus BCUSLGOVCR for the period from Oct 1999 to Sep 2009



	Return (% pa)	Std Deviation (% pa)	Reward to Risk	Tracking Error (% pa)	Information Ratio
BCUSLGOVCR ■	7.8 (85)	9.4 (69)	0.8 (72)	0.0 (100)	0.0 (85)
5th Percentile	10.0	12.1	1.4	6.0	0.9
Upper Quartile	9.6	10.8	1.0	3.9	0.6
Median	8.6	10.0	0.9	3.2	0.3
Lower Quartile	8.0	9.0	0.8	2.4	0.1
95th Percentile	7.3	5.6	0.8	0.8	-0.1
Number of Funds	18	18	18	18	18

Created on 12 Jan 2010

Active vs. Passive Management

Alternative Investments – Active or Passive Exposure? (1/3)

Benchmarks

- To be truly passively managed, an index fund must closely mimic an appropriate benchmark.
- The appropriateness of a benchmark can be measured by an industry standard, the “Bailey Criteria” (first noted in J.V. Bailey’s “Are Manager Universes Acceptable Performance Benchmarks,” *Journal of Portfolio Management*, Spring 1992, pp. 9-13).
- In general, a benchmark should possess the following characteristics: (1) unambiguous, (2) investable, (3) measurable, (4) appropriate, (5) representative (reflective) of current investment opinions, and (6) specified in advance.
- Creating an appropriate benchmark for alternative strategies can be problematic vis-à-vis the Bailey Criteria – this is why investors tend to favor active exposure in alternative investments.

Active vs. Passive Management

Alternative Investments – Active or Passive Exposure? (2/3)

- **Unambiguous – A benchmark is unambiguous if it clearly defines the names and weights of all assets included in the benchmark**
 - The construction of an unambiguous benchmark is problematic for many alternative strategies as their underlying holdings can be illiquid with no formal secondary market
- **Investable – An investable benchmark is one that the portfolio manager can hold as a passively managed portfolio if he or she chooses**
 - The unique nature of the underlying assets in some alternative investments (for example Private Equity), it is generally *not* possible to hold the benchmark
- **Measurable – If a benchmark is measurable, accurate data is readily available so that performance can be calculated frequently**
 - Infrequent valuation/unit pricing, long holding periods and lack of an active secondary market for some alternative investment strategies make the construction of a benchmark difficult.

Active vs. Passive Management

Alternative Investments – Active or Passive Exposure? (3/3)

- **Appropriate – The benchmark should be an appropriate representation of the manager's style**

- Some alternative investment strategies may have an evolving style (for example multi-strategy Hedge Funds). A benchmark that has the same evolving focus may be very difficult to identify

- **Specified in advance – The benchmark should be specified in advance, so that the manager knows how performance will be measured (i.e., relative to the benchmark)**

- Alternative Investment strategies are generally evaluated in terms of absolute return over a hurdle-rate (for example LIBOR + 200 basis points) and not the return relative to a benchmark

Active vs. Passive Management

Minority and/or Women Owned Business Enterprises (MWBEs)

MWBEs

- In Mercer's experience with emerging managers, we have seen strong and growing representation in the following broad asset classes: Domestic Equity, Non-US Equity, US Fixed Income, Non-US Fixed Income, Private Equity and Private Real Estate. MWBE firms are a subset of emerging managers.
- The Active vs. Passive debate also applies to Emerging / Minority and /or Women-Owned Business Enterprises (MWBE) as these firms have strong representation in the major asset classes.

Active vs. Passive Management - Debating, Discussing and Disagreeing

Active vs. Passive Management

Other Empirical Evidence – What do the Numbers Tell Us? (1/4)

Standard & Poor's recently released the **S&P Indices Versus Active (SPIVA) Funds Scorecard for year-end 2008**. The SPIVA scorecards for year-end 2009 should be available later this year:

Equities

- The passive index benchmark outperformed the majority of active funds in 9 out of 9 equity fund categories for the 5-year period ending 12/31/2008.

S&P's scorecards from prior 5-year periods

- 2006 → Active funds lost in 9/9 categories.
 - 2005 → Active funds lost in 9/9 categories.
 - 2004 → Active funds lost in 8/9 categories.
- Over the five year market cycle from 2004 to 2008, S&P's scorecards show:
 - The S&P 500 outperformed 71.9% of actively managed large cap funds, the S&PMidCap 400 outperformed 79.1% of mid cap funds and the S&P SmallCap 600 outperformed 85.5% of small cap funds.
 - These results are similar to that of the previous five year cycle from 1999 to 2003.

Active vs. Passive Management

Other Empirical Evidence – What do the Numbers Tell Us? (2/4)

Fixed Income

Based on S&P's Scorecard for year-end 2008:

- The passive benchmarks outperformed greater than 90% of actively-managed government bond funds.
- The passive benchmarks outperformed greater than 90% of actively-managed investment-grade corporate bond funds—with 100% outperformance in both the long-term and short-term categories.
- The passive benchmark outperformed greater than 95% of actively-managed municipal bond funds.
- Five year benchmark shortfall ranges from 2-3% per annum for municipal bond funds to 1-5% per annum for investment grade bond funds.

Active vs. Passive Management

Other Empirical Evidence – What do the Numbers Tell Us? (3/4)

The table below illustrates the percent of active funds over the last two five-year market cycles that were outperformed by indices.

Percent of Active Funds Outperformed by Benchmarks Over Market Cycles

Fund Category	Benchmark Index	2004 to 2008	1999 to 2003
All Domestic Funds	S&P Composite 1500	66.21	50.76
All largecap Funds	S&P 500	71.9	53.41
All midcap Funds	S&P MidCap 400	79.06	91.36
All smallcap Funds	S&P SmallCap 600	85.45	69.38
Largecap Growth Funds	S&P 500 Growth	80.51	43.4
Largecap Core Funds	S&P 500	77.55	55.12
Largecap Value Funds	S&P 500 Value	53.19	54.96
Midcap Growth Funds	S&P MidCap 400 Growth	76.58	95.5
Midcap Core Funds	S&P MidCap 400	76.15	83.33
Midcap Value Funds	S&P MidCap 400 Value	79.17	93.02
Smallcap Growth Funds	S&P SmallCap 600 Growth	95.58	69.86
Smallcap Core Funds	S&P SmallCap 600	81.36	62.94
Smallcap Value Funds	S&P SmallCap 600 Value	69.51	61.95

Source: Standard & Poor's and CRSP Database as of December 31, 2008

Active vs. Passive Management

Other Empirical Evidence – What do the Numbers Tell Us? (4/4)

The table below illustrates the breakdown of the percentage of funds outperformed by benchmarks in different style classifications.

Percent of Active Funds Outperformed by Benchmarks in Bear Markets

Fund Category	Benchmark Index	2008	2000 to 2002
All largecap Funds	S&P 500	54.3	53.5
All midcap Funds	S&P MidCap 400	74.7	77.3
All smallcap Funds	S&P SmallCap 600	83.8	71.6
Large Growth	S&P 500 Growth	90	49.4
Large Core	S&P 500	52	53.4
Large Value	S&P 500 Value	22.2	36.5
Mid Growth	S&P MidCap 400 Growth	89	82.4
Mid Core	S&P MidCap 400	62.3	70.2
Mid Value	S&P MidCap 400 Value	67.1	82.8
Small Growth	S&P SmallCap 600 Growth	95.5	87.5
Small Core	S&P SmallCap 600	82.5	70.8
Small Value	S&P SmallCap 600 Value	72.6	58.3

Source: Standard & Poor's and CRSP Database as of December 31, 2008

Active vs. Passive Management

Why would I ever want to invest with an Active Manager?

Q: Based on the data and press releases that I have seen from providers such as S&P, why would I ever want to invest with an Active Manager? Why shouldn't we go with a purely passive portfolio?

A: Alpha opportunities still exist through Manager Selection.

A: In certain ('less efficient') Asset Classes and Strategies, alpha opportunities still exist

- Some investors have the risk tolerance and time horizon to venture into less efficient Asset Classes and Strategies (private equity, distressed debt, short selling, small capitalization equity, hedge funds, private real estate).

A: High fees will eat into returns, larger institutional investors such as the BWC with large separate account mandates may be able to negotiate favorable fee concessions (especially in this current market environment).

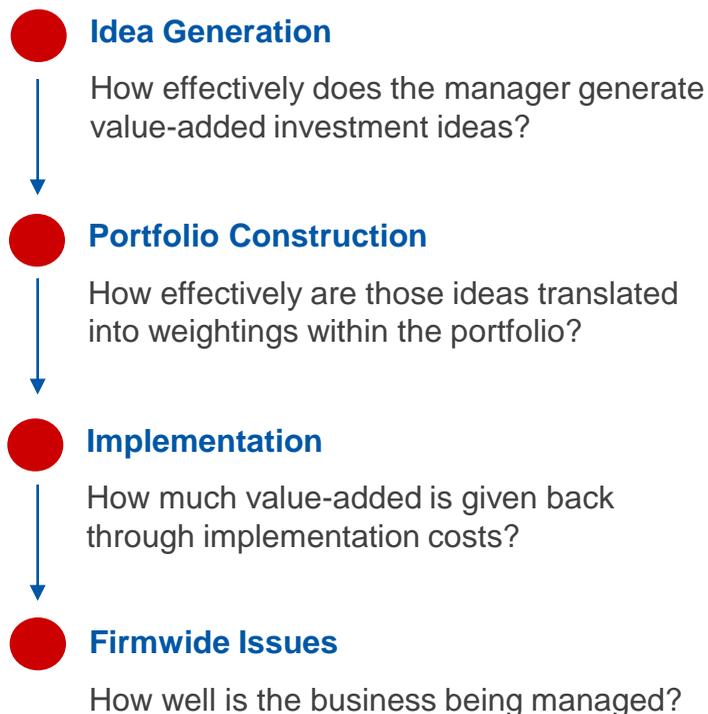
- Some larger institutional investors can manage part of their portfolios 'in-house' at the fraction of the cost of hiring an external manager.

A: Index replication means that you definitely hold 'losing' names.

A: Scorecards are useful indicators, but our analysis and subsequent conclusions should factor in the long-term as well the short and intermediate-term performance of managers and their respective benchmarks.

Active vs. Passive Management

Manager Research – Alpha opportunities still exist through Manager Selection

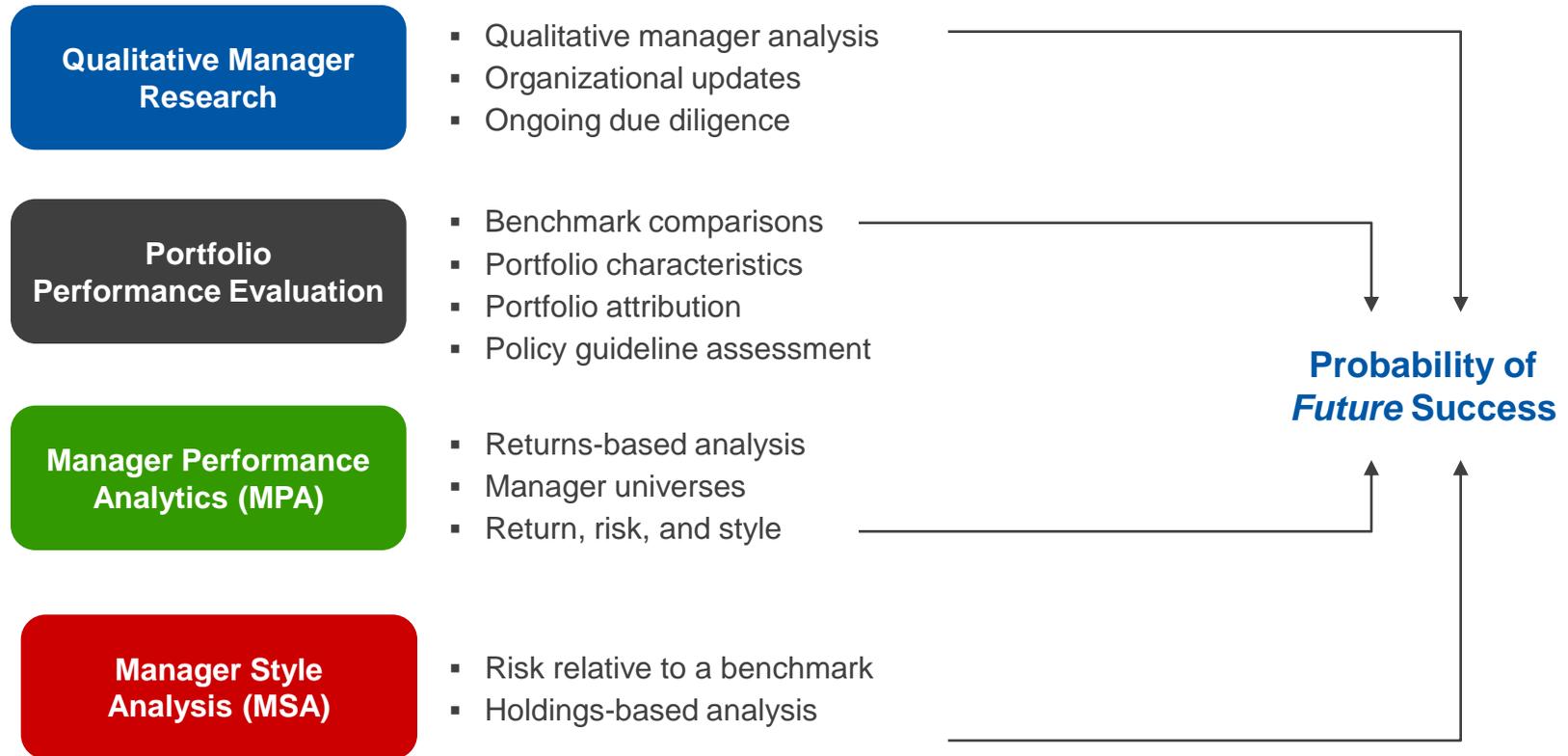


<u> Mercer Rating (Risk-Adjusted) </u>	
A, A-	Above average prospects for outperformance
B+, B, B-	Average prospects for outperformance
C	Below average prospects for outperformance
N	Not rated

Note: All ratings are reviewed at least once, every six months

Active vs. Passive Management

Manager Research – Alpha opportunities still exist through Manager Selection

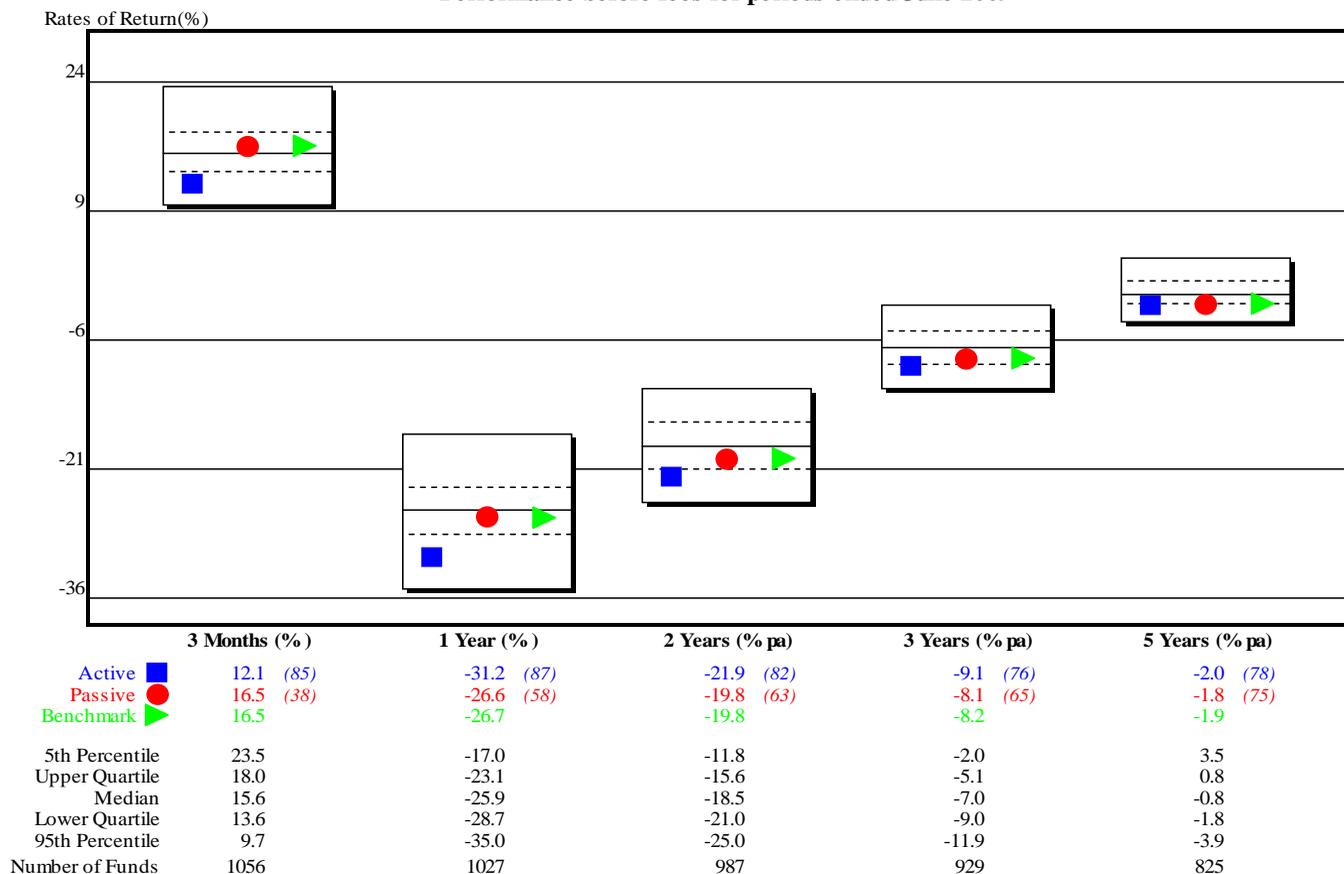


Active vs. Passive Management

Empirical Evidence Alpha opportunities still exist through Manager Selection

In weaker markets (for example, early 2009), less skillful active managers may fail to outperform the benchmark (while the index manager will approximate the benchmark's returns)

Equity Active vs. Passive
 Comparison with the Mercer US Equity Large Cap Equity Universe
 Performance before fees for periods ended June 2009



Created on 27 Jul 2009

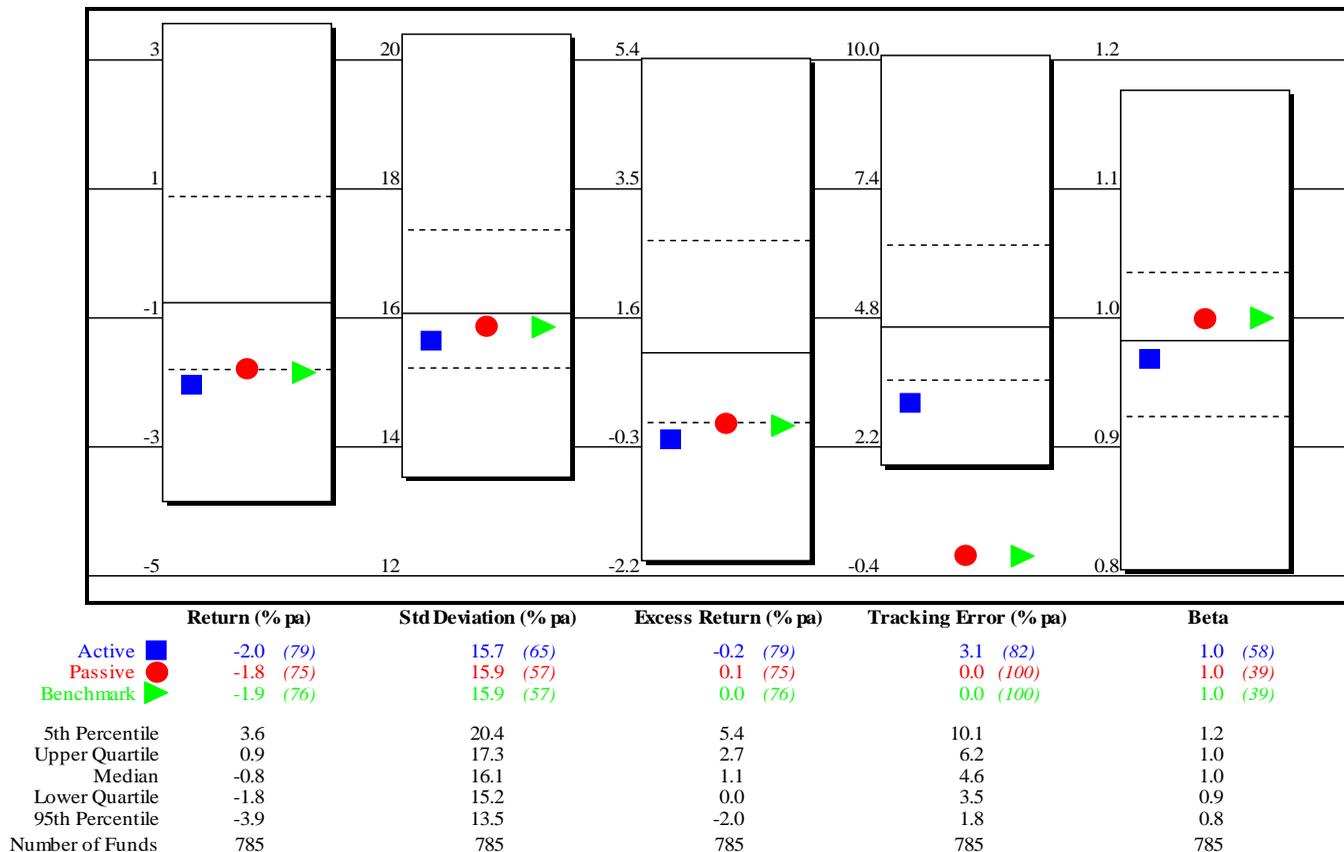
Active vs. Passive Management

Empirical Evidence Alpha opportunities still exist through Manager Selection

As expected the passive manager will have a similar risk and return profile as the benchmark while the active manager will have a more aggressive profile (due to a higher tracking error)

Equity Active vs. Passive

Comparison with the Mercer US Equity Large Cap Equity Universe
Risk and Return Characteristics (calculated monthly) versus Benchmark for the period from Jul 2004 to Jun 2009



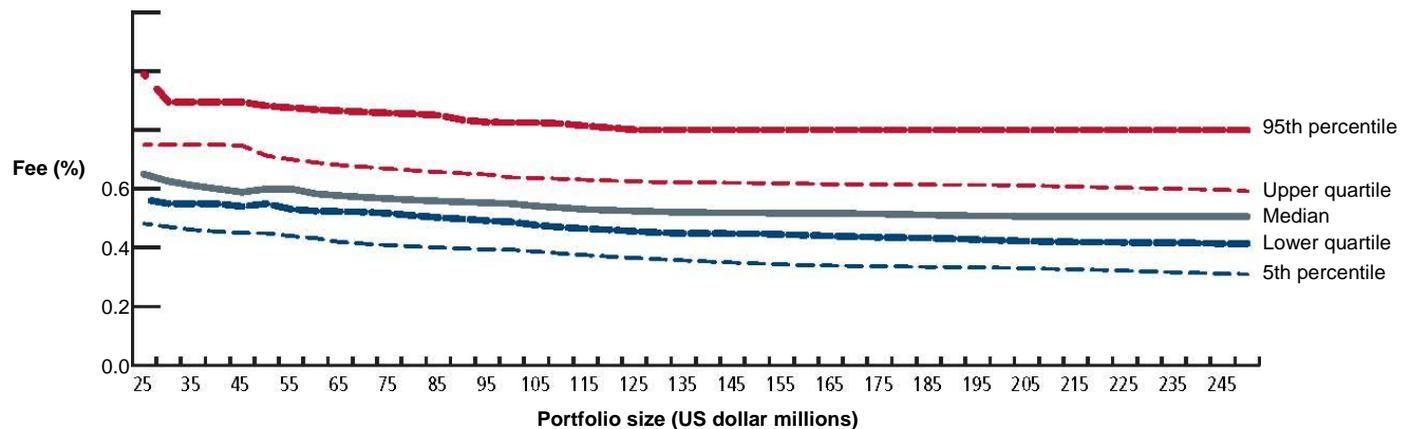
Created on 27 Jul 2009

Active vs. Passive Management

Fee Savings can = more alpha

US dollar	25M	50M	75M	100M	150M	200M	250M	Indicative 500M
95th percentile	0.99	0.88	0.86	0.83	0.8	0.8	0.8	0.45
Upper quartile	0.75	0.71	0.67	0.64	0.62	0.61	0.59	
Median	0.65	0.6	0.57	0.55	0.52	0.51	0.51	Indicative 1Bn
Lower quartile	0.56	0.55	0.52	0.49	0.45	0.43	0.41	0.17
5th percentile	0.48	0.45	0.41	0.39	0.35	0.33	0.31	
Sample size	63	79	79	80	80	80	81	
% funds raising fees from 2006	5%	7%	11%	9%	9%	11%	13%	
% funds reducing fees from 2006	16%	16%	18%	18%	18%	18%	18%	

US Equity – Large Cap Core/All Cap – Alpha (Segregated)



Given the fees stated above and, based on Mercer's experience, some larger Institutional Investors can manage part of their total portfolios 'in-house' at the fraction of the cost of hiring different external managers. This is particularly true for the more efficient and plain vanilla asset classes

Active vs. Passive Management

Index replication = holding names / Active = tactical & strategic positioning

Recent commentary provided to Mercer by an investment manager

(the following paragraphs contain product specific / client-neutral information)

- The global economic and market crisis has created opportunities for us to invest in high quality companies with strong balance sheets at extremely attractive valuations.
- We are currently overweight the materials, producer durables, energy and healthcare sectors because we have found attractive companies within these sectors.
- We continue to underweight financial services firms because we feel there are still credit quality issues for many of the small banks.
- We continue to underweight the consumer discretionary sector, although we have made some selective additions within this area of the market.
- We have increased our holdings of early cyclical companies within the technology and industrial sectors, which we feel will benefit as economic activity starts to improve.

Based on their perceived market, sector or company outlooks, active managers will look for opportunities

Active managers may wish to make defensive bets on a sector to limit a portfolio's exposure to perceived potential losses from this sector

Active bets (if rewarded)
= alpha over the benchmark

Active vs. Passive Management

Enhanced Indexing – Is This Hybrid Approach The Best of Both Worlds?

- Enhanced Index Funds (EIFs) are a combination of passive and active management styles.
- Actively managed portfolios may be highly volatile and substantially beat or underperform the benchmark over any given measurement period. Conversely, a passively managed portfolio will seek to replicate the benchmark's performance. This means a passively managed strategy will hold the same 'winning' names and the same 'losing' names that are in the index.
- Enhanced Indexing aims to combine a controlled amount of active management or tracking error with an indexing strategy.
- A typical Enhanced Index strategy will look to create a portfolio with style, sector, risk, and capitalization characteristics that are similar to an underlying benchmark.
- An Enhanced Index manager may try to add extra value through stock selection, small active bets and cost-conscious portfolio implementation.

Active vs. Passive Management

Active Management (Potential Advantages & Disadvantages)

Advantages

- Expert analysis – Seasoned managers make informed decisions based on experience, judgement, and prevailing market trends.
- Possibility of higher-than-index returns – Managers aim to beat the performance of the index, which means they strive for higher returns than the index delivers.
- Defensive measures – Managers can make changes if they believe the market may take a downturn. As an example, in the fixed income portfolio an active manager can easily adjust their duration whereas a passive manager must imitate the index.

Disadvantages

- Higher fees and operating expenses.
- Mistakes may happen – There is always the risk that managers may make unwise choices on behalf of investors, which could reduce returns.
- Style issues may interfere with performance – At any given time, a manager's style may be in or out of favor with the market, which could reduce returns.

Active vs. Passive Management

Passive Management (Potential Advantages & Disadvantages)

Advantages

- Low operating expenses.
- Market performance – Investors can be assured that index funds will perform on par with the indexes.
- There is no action required by the fund – There is no decision-making required by the manager or the investor as the portfolio closely replicates the characteristics of the index.

Disadvantages

- Performance is dictated by the index – Investors must be satisfied with market returns because that is the best any index fund can and should produce.
- A lack of control – Managers cannot take action. Index fund managers are usually prohibited from using defensive measures, such as moving out of stocks, if the manager thinks stock prices are going to decline.
- Bonds purchased in an indexed portfolio are held through all yield curve changes – So, if the yield curve becomes inverted and 2-Year bonds offer a higher yield than 5-Year bonds, the indexed portfolio cannot take advantage of the more attractive risk/return relationship of the 2-Year bond without exceeding its stated target tracking error target versus the benchmark.

Active vs. Passive Management

Enhanced Indexing (Potential Advantages & Disadvantages)

Advantages

- Ability to carefully manage position sizes or allocation to a index or sector
- EIFs have discretion over the timing of market entries and exits
- EIFs have the potential to avoid certain securities which are prone to underperformance
- Enhanced Index strategies can utilize leverage

Disadvantages

- EIFs are riskier than plain vanilla index strategies.
- Fees – EIFs will cost more than regular index funds.
- Manager selection is important - Like their actively managed cousins, EIFs will have different costs and performance track records
- Risk of losing capital because of ineffective fund management

Active vs. Passive Management

Conclusions

- There are advantages and disadvantages to using both active and passive strategies.
- It is important that the debate of Active vs. Passive management should not be taken out of the context of an investors' goals and objectives.
- Fees are important – high fees may mean the difference between beating the market and approximating the return of the index. Institutional investors such as the BWC have the advantage of being large and benefitting from lower fees.
- Manager selection and the value-added by a consultant are key elements of the 'Active vs Passive' debate.
- A portfolio structuring analysis should be performed to determine the appropriate utilization of active and passive strategies within a portfolio.
- For Large institutional investors, exposure to alternative asset classes or strategies may be desired, required or consistent with expected time horizon, risk tolerance and risk profile of their plan – these alternative asset classes will be actively managed in the majority of cases.



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12-month Investment Committee Calendar

Date	March	Notes
3/25/2010	<ol style="list-style-type: none"> 1. Speciality Funds (MIF, PWRP) Asset Allocation Analysis report and recommendations, possible vote on asset allocation 2. Investment Consultant contract renewal, possible vote 3. Transition Activity Update (in CIO Report) 4. Mercer education session, Active Investment Management, first review 	
Date	April	
4/29/2010	<ol style="list-style-type: none"> 1. Transition Activity Update (in CIO Report) 2. Mercer education session, Active Investment Management, second review 	
Date	May	
5/27/2010	<ol style="list-style-type: none"> 1. Investment Consultant Performance Report 1Q10 2. Transition Activity Update (in CIO Report) 3. Possible education session, topic to be determined 	
Date	June	
6/17/2010	<ol style="list-style-type: none"> 1. BlackRock organization update (in CIO Report) 	
Date	July	
7/28/2010		
Date	August	
8/26/2010	<ol style="list-style-type: none"> 1. BWC Investment Division Goals FY2011 2. Investment Consultant Performance Report 2Q10 3. Specialty Funds (SIEGF) Asset Allocation Analysis report and recommendation, first review, possible vote on asset allocation 	

12-month Investment Committee Calendar

Date	September	Notes
9/23/2010	<ol style="list-style-type: none"> 1. Brokerage Activity Fiscal Year 2010 summary report 2. BlackRock ACWlxUS common trust fund update (in CIO Report) 	
Date	October	
10/21/2010	<ol style="list-style-type: none"> 1. Investment class performance/value annual report (ORC4121.12(F)(12)], possible vote 	
Date	November	
11/18/2010	<ol style="list-style-type: none"> 1. Investment Consultant Performance Report 3Q10 2. Custodian Fiscal Year 2010 Annual Review 	
Date	December	
12/15/2010		
Date	January	
Date	February	
	<ol style="list-style-type: none"> 1. Investment Consultant Performance Report 4Q10 	

Draft Calendar For Active/Passive Management Topics

April 2010

- Passive/Active investment management discussion, (continued)
- Mercer Active investment manager database performance results

May 2010

- Pros/Cons of active/passive management by SIF asset classes, including cost analysis
- Introduction to alternate approaches to active management

June 2010

- Introduction to MWBE manager universe and manager selection approaches by other public funds

July 2010

- MWBE investment manager selection approach (continued)

Submitted by: Bruce Dunn
March 23, 2010
Revised: March 24, 2010